HIGHLAND PRODUCTION COMPANY

REC ,ED

'91 NO. 4 HM 8 54

October 31, 1991

Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 78501

Attention: David Catanach

Re: SWD Well Application Highland Federal Well No. 1 Lea County, New Mexico

Dear Mr. Catanach:

Per our telephone conversation of this date, please find enclosed copies of certified/return receipt cards and the affidavit of publication, proof of notification of SWD application. Please advise of any additional information needed to process our application for approval of our Highland Federal Well No. 1 as a salt water disposal well.

Thank you for your cooperation in this matter.

Yours very truly,

HIGHLAND PRODUCTION COMPANY

Miling: J. Mance

/Johnnye L. Nance Corporate Secretary

JLN:sf

Enclosure

AFFIDAVIT OF PUBLICATION

State of New Mexico, County of Lea.

I. Kathi Bearden

of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs. New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period

of_

One weeks. Beginning with the issue dated

Sept. 19, 19 91 and ending with the issue dated

Sept. 19 . 19 91

General Manager

Sworn and subscribed to before

me this day of Notary Public.

My Commission expires_____

., 19<u>95</u> (Seal)

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

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LEGAL NOTICE September 19, 1991 Highland Production Company, 810 N. Dixle Bivd., Suite 202, Odessa, Texas 79761 has made application for authorization to dispose of salt water in the Ramsey Sand Formation, Highland Federal Well No. 1, located in the SW/4 SE/4 Section 8, T-26-S, R-32-E, Lea County, New Mexico. Written comments relating to this application as filed will be accepted by the Oil Conservation Division, P.O. Box 2088, Santa Fe, New Mexico 87501 for a fifteen day period following this notice. i Ş

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		5 DOMESTIC RETURN RECEIPT	PS Form 3811, Apr. 1989 + U.S.G.P.O. 1989-238-815
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	noco Inc.	P 444 407 774 Type of Service:	Amoco Production Company P. O. Box 3092
(Eura charge)		4. Article Number	3. Article Addressed to:
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ENERG	STATE OF NEW MEXICO OIL CONSERVATION DIVISION FORM C-108 Y AND MINERALS DEPARTMENT POST OFFICE BUILDING STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501
APPLICA	TION FOR AUTHORIZATION TO INJECT 33.33
I.	Purpose: Secondary Recovery Pressure Maintenance I Disposal Storage Application qualifies for administrative approval? yes no
п.	Operator: <u>Highland Production Company</u>
	Address: 810 N. Dixie Blvd., Suite 202, Odessa, Texas 79761-2838
	Contact party: Marvin L. Smith Phone: 915/332-0275
111.	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 If yes, give the Division order number authorizing the project
۷.	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:
	 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 geological data on the injection zone including appropriate lithologic detail, geological name, thicknass, 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 source 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.)
* XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if avai ^l able 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 source 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: Marvin L. Smith Title President
	Signature: //////
submi	e information required under Sections VI, VIII, X, and XI above has been previously tted, it need not be duplicated and resubmitted. Please show the date and circumstance e earlier submittal.

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DISTRIBUTION. Ariginal and one copy to Santa Fe with one copy to the appropriate Division

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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 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.

VII Highland Federal Proposed Operation

Proposed average injection volume 500 BPD - Maximum 600 BPD. System will be a closed type. Proposed average injection pressure 900 lbs. - Maximum 1700 lbs. Water Analysis from wells we will take water from, are the wells producing from the Ramsey Formation in the North Mason and East Mason Fields. This water is now being disposed of in disposal wells in Section

9 and Section 19, T-26-S, R-32-E, Lea County, New Mexico.

VIII The Ramsey Sand in the Highland Federal Well No. 1 is mostly sand with some shale and lime. The Ramsey is approximately 58' to 60' thick to Ford shale 4420' to 4478-80'. There is some redbed water in the area - one well approximately 2¹/₂ miles southeast and one well approximately 2 miles southwest. The next water is in the Rustler approximately 1200' and this water is brackish.

- IX No stimulation is planned.
- X Logs have been filed at the Hobbs office when completed.
- XI No fresh water wells are located closer than two miles of this location.
- XII We can find no evidence that an open fault exist in this area or that any fresh water is in the formations down to the Rustler except for small amounts in the redbeds in some areas.

Copies of this application have been sent to Exxon Corporation, 25 Desta Drive, Midland, Texas 79705 and ETC., C/O Edgar T. Cravey, 1902 South Park, Pecos, Texas 79772.

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HALLIBURTON DIVISION LABORATORY HALLIBURTON SERVICES MIDLAND DIVISION HOBBS, NEW MEXICO 88240

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LABORATORY WATER ANALYSIS

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County_lev	Field EAst	MASON	_Source_Z	TANK BIery
	Amoco Federal #1	Exxon Feder	,#	Russell
Resistivity		.056 @ 70°		
Specific Gravity		1.160		1.160
рН	5.0	5.9		6.2
Calcium (Ca)	22,800	22,850		_22,800*MPL
Magnesium (Mg)	3540	3400	<u> </u>	3430
Chlorides (Cl)	143,000	148,000		148,500
Sulfates (SO ₄)	Light	Light		Light
Bicarbonates (HCO ₃)		12		12
Soluble Iron (Fe)	Light	Light		Light
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Remarks: * Exxor) NE/401 Lea 160	Ederal#1 SET4 Section 8, T. wty N.M.	26-5, R-37-	F	*Milligrams per liter
	Respectful	ly submitted,	· · · · · · · · · · · · · · · · · · ·	
Analyst: cc:				N COMPANY

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.

Well Data Sheet

Well Name EXXON Federal #1 Operator E.TC. OilCo Location <u>SE/SE</u> Date drilled 10-6-81 Type Well 4 Surface Casing -8/8-58 Cement 400 SX Size hole 1219 Drilled 12 set 4399 Oil String 2 Cement 50 5X Size hole Perforations Open Hole 4399 2000 gal Frac



Well Data Sheet Well Name EXXON est No. 1 Hig KINDUCTION Operator R-32-E Lea B. SE/4 Sec 8 T-26-5 KE/ 40 Locat Date drilled ise Type Well -8 Surface Casing Ate 50.5AC Cement 550 34C - ALMAN Size hole _____ Oil String 5/2 Set A 4436 Cement 900 5X Size hol Perforations- Open Hole 4436 Treat 4500 gal gelled Lease Prode 2500 Los Sam

Well Data Sheet Well Name ANDCO Federer (#) Operator-H1961 Tion ANN 8. T-26-5, R-32-E, Lea Location Nin/4 0 11 1-9-8 Date drilled -Type Well 040 Surface Casing Cement _____550 114 SX CIPC JAC Size hole _____ 0il String 52 At Cement 900 240 Size hole Perforations Open Hole -44 Treat 4500 gel gelied Lease Orude 2500 Los SANT

INJECTION WELL DATA SHEET AND Yor. Highland Federal <u>۲۲۲۲.</u> SE 1005 NO Schematic Tabular Data Surface Casing 85/4 Cemented with <u>600</u> Size 85/8 639 TOC CIRCULAted 90 street determined by 51947 1214 Hole Hole size 12:14 Set 1050 CEMENT Intermediate Casing NONC Circula te a By Sight Cemented with _ sx. feet determined by TOC D. 8 1050 Hole size Ho/e Long string 5/2. C59 Top Cepent 1483 Cemented with 701 5 12 Size TOC 14841 feet determined by Temperture Hole size 4407 Total depth Injection interval 4407 4430 indicate feet to open-hole, which) 23/8' TUDING Packer Set 43 +3' 1 TD. 5/2 Czg 4407' Open Hole 4430' T.D. lined with Scotch 1-34 (material) set in a Tubing size 4343 packer at feet and model? rand (or describe any other casing-tubing seal). Other Data 1. Name of the injection formation RAMSey Delivare FAST MAJON 2. Name of Field or Pool (if applicable) X No Is this a new well drilled for injection? /____ Yes 3. O, If no, for what purpose was the well originally drilled? ____ Has the well ever been perforated in any other zone(s)? List all such perforated intervals 4 and give plugging detail (sacks of cement or bridge plug(s) used) _ Give the depth to and name of any overlying and/or underlyimg oil or gas zones (pools) in 5. this area. ONC