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DEVON ENERGY PRODUCTION COMPANY, L.P.

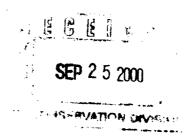
20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260 Telephone: (405) 235-3611 Fax: (405) 552-4667

September 19, 2000

Certified Mail: Z 068 589 827

New Mexico Oil Conservation Division Mr. Mark Ashley 2040 South Pacheco Street Santa Fe, NM 87505

Re: Application For Authorization To Inject Grayburg-Jackson Waterflood Project Eddy County, NM



Dear Sir:

Enclosed are two copies of the "Application For Authority To Inject" covering the J.L. Keel "B" #2 and the J.L. Keel "B" #3 wells located in Section 8-T17S-R31E, Eddy County, NM. These wells have previously been approved under Administrative Order No. WFX-713 dated May 19, 1997. However, due to time and budget constraints the conversion/workover was deferred until a later date.

Please direct any questions regarding this application to the undersigned at (405)552-4528.

Sincerely,

Devon Energy Production Company, L.P.

Charles H. Carleton

Sr. Engineering Technician

/chc

enclosures

APPLICATION FOR AUTHORIZATION TO INJECT

✓ I.	PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? Yes No
υп.	OPERATOR: Devon Energy Production Company, L.P.
	ADDRESS: 20 N. Broadway, Suite 1500 Oklahoma City, OK 73102-8260
	CONTACT PARTY: Mr. Willian M. Greenlees, P.E. PHONE: (405) 552-81
/ ш.	WELL DATA: Complete the data required on the reverse side of this form for each well processed for injection. Addition sheets may be attached if necessary.
UIV.	Is this an expansion of an existing project: X Yes No If yes, give the Division order number authorizing the project R-2268
/ v .	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radiu 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 wel 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, 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/1 or less) overlying the proposed injection zone as well a 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.)
* XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mil 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 engineerin data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any undergroun source of drinking water.
XШ.	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 m knowledge and belief.
	NAME: Mr. William M. Greenlees, P.E. TITLE perations Engineering Advisor
	SIGNATURE:
k	If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not b resubmitted. Please show the date and circumstance of the earlier submittal.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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, PO Box 2088, Santa Fe, NM 87504-2088 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.

DEVON ENERGY PRODUCTION COMPANY, L.P. APPLICATION FOR AUTHORITY TO INJECT GRAYBURG-JACKSON WATERFLOOD

III Well Data:

- A. (1) J.L. Keel "B" #2 660'FSL & 660'FWL Section 8-T17S-R31E Eddy County, NM
 - (2) Surface Casing: 8 5/8" 28# @ 524'. Set with 75 sxs. TOC @ 330'(calculated) Hole Size = 11"(estimated)

Production Casing: 7" 24# @ 2850'. Set with 100 sxs. TOC @ 1920'(calculated) Hole Size = 7 7/8"(estimated)

Liner:

4 1/2" 9.5# @ 2752'- 3618'. Set with 104 sxs. TOC @ liner top. Hole Size = 6 1/4" (estimated)

- (3) Tubing will be 2 3/8" 4.7# J-55 EUE 8rd (IPC) set at 2650'.
- (4) 7" Baker Lock-Set tension packer set at 2650'.
- B. (1) The injection formation will be the Grayburg/San Andres in the Grayburg-Jackson Field.
 - (2) Water injection will be through perforations 2735'- 3620'(OA). **The injection interval is** 2735'- 3620'.
 - (3) This well was originally drilled and completed as a Grayburg/San Andres oil well, but was later converted to a water injection well injecting into the Grayburg/San Andres formation.
 - (4) Additional perforations may be added in the 2735'- 3620' interval.
 - (5) The top of the Seven Rivers formation is at approximately 2300', there are no known lower oil zones

TD @ 3620'

DEVON ENERGY CORPORATION WELLBORE SCHEMATIC WELL NAME: J.L. KEEL "B" #2 FIELD: GRAYBURG-JACKSON LOCATION: 660' FSL & 660' FWL, SEC 8-T17S-R31E COUNTY: EDDY STATE: NM ELEVATION: GL=3708'; KB=UNK SPUD DATE: 07/15/44 COMP DATE: 10/16/44 PREPARED BY: C.H. CARLETON DATE: 03/27/00 API#: 30-015-05103 **DEPTH** SIZE WEIGHT **GRADE THREAD** HOLE SIZE CASING: 0' - 524' 8 5/8" 28# CASING: 0' - 2850' 7" 24# J-55 ST&C CASING: 2752' - 3618' 4 1/2" 9.5# TUBING: 0' - 2650' 2 3/8" 4.7# J-55 EUE 8rd TUBING: CURRENT **PROPOSED OPERATOR: DEVON ENERGY CORPORATION (NEVADA)** 8 5/8" CASING @ 524' W/75 SXS. TOC @ 330' (calculated) INJECTION INTERVAL: 2735'- 3620' BAKER MODEL "LOC-SET" PACKER @ 2650' 7" CASING @ 2850' W/100 SXS. TOC @ 1920' (calculated) PERFORATIONS: 2735'- 3620' (OA) PBTD @ 3616' 4 1/2" LINER @ 2752'- 3618' W/104 SXS. TD @ 3620'

DEVON ENERGY PRODUCTION COMPANY, L.P. APPLICATION FOR AUTHORITY TO INJECT GRAYBURG-JACKSON WATERFLOOD

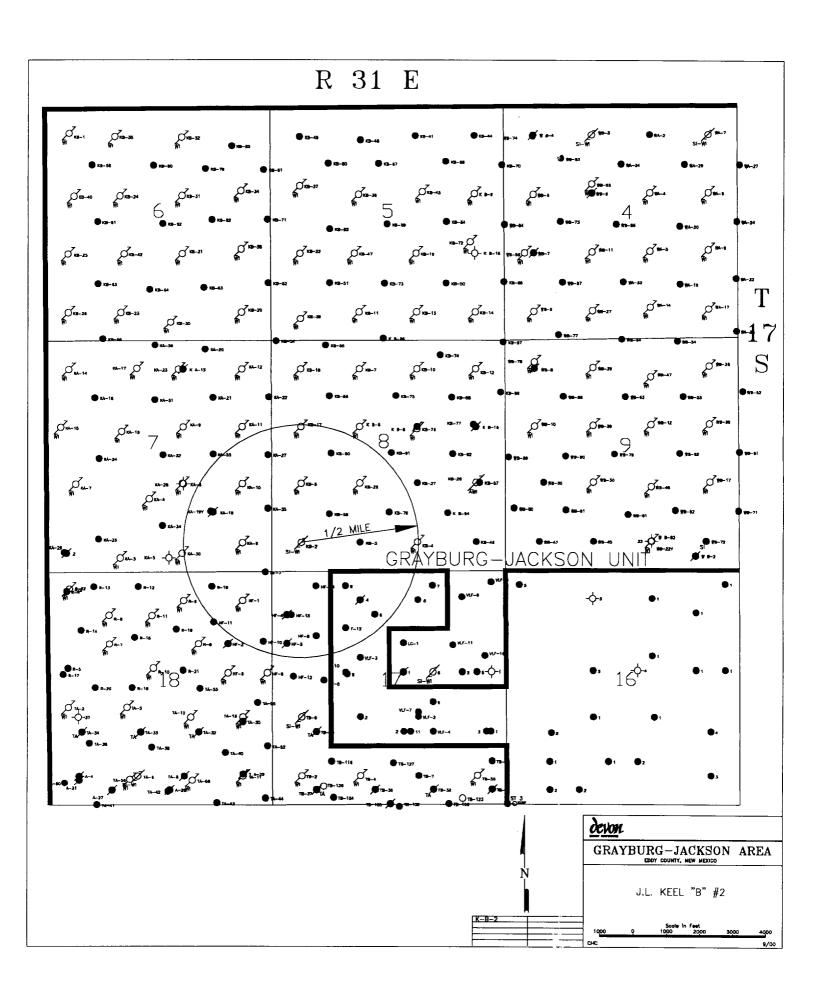
III Well Data:

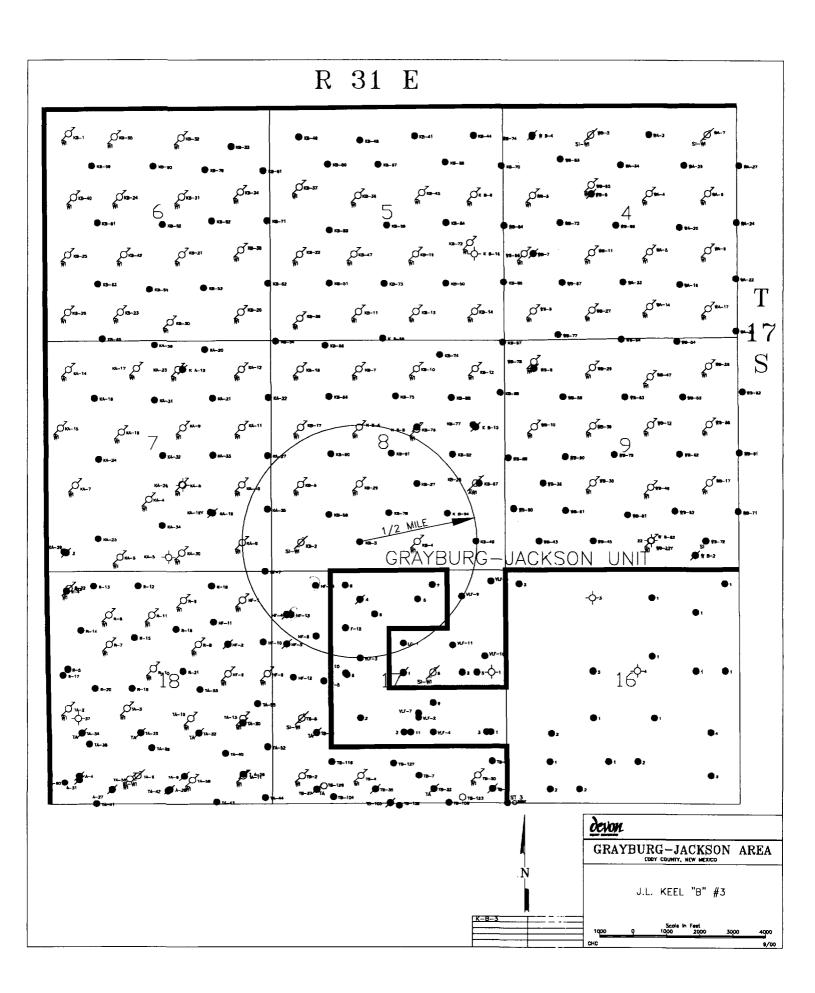
- A. (1) J.L. Keel "B" #3 660'FSL & 1980'FWL Section 8-T17S-R31E Eddy County, NM
 - (2) Surface Casing: 8 5/8" 28# @ 518'. Set with 50 sxs. TOC @ 390'(calculated) Hole Size = 11"(estimated)

Intermediate Casing: 7" 24# @ 2930'. Set with 100 sxs. TOC @ 2000'(calculated) Hole Size = 7 7/8"(estimated)

Production Casing: 4 1/2" 11.6# J-55 LT&C @ 3630'. TOC @ surface. Hole Size = 6 1/4"

- (3) Tubing will be 2 3/8" 4.7# J-55 EUE 8rd (IPC) set at 2700'.
- (4) 4 1/2" Baker AD-1 tension packer set at 2700'.
- B. (1) The injection formation will be the Grayburg/San Andres in the Grayburg-Jackson Field.
 - (2) Water injection will be through perforations 2775'- 3630'(OA). **The injection interval is** 2775'- 3630'.
- (3) This well was originally drilled and completed as an oil well, producing from the Grayburg/San Andres formation.
 - (4) Additional perforations may be added in the 2775'- 3630' interval.
 - (5) The top of the Seven Rivers formation is at approximately 2300', there are no known lower oil zones





WELL LISTING "AREA OF REVIEW" GRAYBURG-JACKSON FIELD

WELL NAME	LOCATION	OPERATOR	STATUS	REMARKS
Foster #9	17-T17S-R31E	Devon Energy Corp.	Producer	
Hudson Federal #1	18-T17S-R31E	Devon Energy Corp.	WIW	
Hudson Federal #3	17-T17S-R31E	Devon Energy Corp.	P&A'd	
Hudson Federal #4	17-T17S-R31E	Devon Energy Corp.	P&A'd	
Hudson Federal #7	18-T17S-R31E	Devon Energy Corp.	Producer	
Hudson Federal #8	17-T17S-R31E	Devon Energy Corp.	Producer	
Hudson Federal #10	18-T17S-R31E	Devon Energy Corp.	Producer	
Hudson Federal #11	18-T17S-R31E	Devon Energy Corp.	Producer	
Hudson Federal #13	17-T17S-R31E	Devon Energy Corp.	Producer	
Hudson Federal #14	17-T17S-R31E	Devon Energy Corp.	Producer	
Keel "A" #6	7-T17S-R31E	Devon Energy Corp.	wiw	
Keel "A" #10	7-T17S-R31E	Devon Energy Corp.	wiw	
Keel "A" #19	7-T17S-R31E	Devon Energy Corp.	P&A'd	
Keel "A" #19Y	7-T17S-R31E	Devon Energy Corp.	Producer	
Keel "A" #27	7-T17S-R31E	Devon Energy Corp.	Producer	
Keel "A" #30	7-T17S-R31E	Devon Energy Corp.	wiw	
Keel "A" #35	7-T17S-R31E	Devon Energy Corp.	Producer	
Keel "B" #2	8-T17S-R31E	Devon Energy Corp.	Shutin WIW	Re-activate Injector
Keel "B" #3	8-T17S-R31E	Devon Energy Corp.	Producer	Convert To Water Injector
Keel "B" #4	8-T17S-R31E	Devon Energy Corp.	wiw	
Keel "B" #5	8-T17S-R31E	Devon Energy Corp.	wiw	
Keel "B" #6	8-T17S-R31E	Devon Energy Corp.	wiw	
Keel "B" #17	8-T17S-R31E	Devon Energy Corp.	wiw	
Keel "B" #27	8-T17S-R31E	Devon Energy Corp.	Producer	
Keel "B" #29	8-T17S-R31E	Devon Energy Corp.	wiw	
Keel "B" #46	8-T17S-R31E	Devon Energy Corp.	Producer	
Keel "B" #58	8-T17S-R31E	Devon Energy Corp.	Producer	
Keel "B" #78	8-T17S-R31E	Devon Energy Corp.	Producer	
Keel "B" #90	8-T17S-R31E	Devon Energy Corp.	Producer	
Keel "B" #91	8-T17S-R31E	Devon Energy Corp.	Producer	
Keel "B" #94	8-T17S-R31E	Devon Energy Corp.	Producer	
Last Chance Federal #1	17-T17S-R31E	Devon Energy Corp.	Inactive Oil	
Russell #18	18-T17S-R31E	Devon Energy Corp.	Producer	
		OUTSIDE OPERATED		
Foster-Eddy Federal #3	17-T17S-R31E	Marbob Energy Corp.	Active Oil	
Foster-Eddy Federal #4	17-1173-R31E	Oryx Energy Company	P&A'd	
Foster-Eddy Federal #5	17-T17S-R31E	Marbob Energy Corp.	Active Oil	
Foster-Eddy Federal #6	17-T17S-R31E	Marbob Energy Corp.	Active Oil	
Foster-Eddy Federal #7	17-T17S-R31E	Marbob Energy Corp.	Active Oil	
Foster-Eddy Federal #8	17-T17S-R31E	Marbob Energy Corp.	Active Oil	

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
FOSTER, V.L. #9	660'FNL & 990'FEL SEC 17-T17S-R31E EDDY COUNTY, NM	8/22/97	10/10/97	OIL PRODUCER	3814'/3768'	8 5/8" @ 477' W/375 SXS. CEMENT TO SURFACE. 12.5 1/2" @ 3813' W/1475 SXS. CEMENT TO SURFACE. PERFORATE: 2934'- 3580'(OA)
HUDSON FEDERAL #1	660'FNL & 660'FEL SEC 18-T17S-R31E EDDY COUNTY, NM	1/24/39	5/20/39	OIL PRODUCER	3533'/3533'	8 5/8" @ 570' W/50 SXS 7" @ 2795' W/100 SXS OPEN HOLE COMPLETION: 2795'- 3533' IP=40 BOPD
			8/10/67 1/18/71 12/17/80	WATER INJECTOR OIL PRODUCER		CONVERTED TO A WATER INJECTION WIELL RETURN TO OIL PRODUCTION PLUGGED & ABANDONED
			3/15/97	WATER INJECTOR	3535'/3490'	RE-ENTER AND CLEANOUT WELLBORE TO 3535' 4 1/2" @ 3534' W/450 SXS. CEMENT TO SURFACE. PERFORATE: 2768'- 3469'(OA) - CONVERT TO WATER INJECTION WELL
HUDSON FEDERAL #3	1650'FNL & 330'FWL SEC 17-T17S-R31E EDDY COUNTY, NM	4/4/41	6/14/41	OIL PRODUCER	3497'/3497'	8 1/4" @ 636' W/50 SXS 7" @ 2780' W/100 SXS OPEN HOLE COMPLETION: 2780'- 3497' IP=100 BOPD
HUDSON FEDERAL #4	990'FNL & 330'FWL SEC 17-T17S-R31E EDDY COUNTY, NM	11/8/41	1/21/42	OIL PRODUCER	3500'/3500'	8 1/4" @ 636' W/120 SXS 7" @ 2803' W/100 SXS OPEN HOLE COMPLETION: 2803'- 3500'
			4/19/79 11/25/97 1/31/98			PLUGGED & ABANDONED ATTEMPT TO RE-ENTER AND CONVERT TO WATER INJECTION WELL PLUGGED & ABANDONED
HUDSON FEDERAL #7	10'FNL & 150'FEL SEC 18-T17S-R31E EDDY COUNTY, NM	5/19/96	6/24/96	OIL PRODUCER	3835/3788'	8 5/8" @ 434' W/500 SXS. CEMENT TO SURFACE. 5 1/2" @ 3834' W/900 SXS. CEMENT TO SURFACE. PERFORATE: 2855'- 3479'(OA) - 51 HOLES: IP=96 BOPD

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LOCATION	0.00				
430'FSL & 2013'FEL	8/21/95	8/29/95	OIL PRODUCER	3765'/3719'	13 3/8" @ 459' W/700 SXS. CEMENT TO SURFACE.
SEC 7-T17S-R31E EDDY COUNTY, NM					5 1/2" @ 3764' W/875 SXS. CEMENT TO SURFACE. PERFORATE: 2754'- 3619'(OA)
		12/12/95			SET CIBP @ 3347' - RETURN TO PRODUCTION
			WATER INJECTOR		DRILL OUT CIBP AND PUSH TO 3698'
					CONVERT TO A WATER INJECTION WELL
		6/8/98		3765/3310'	SET CIBP @ 3310' PERFORATE: 2809'- 3073'(OA) - RETURN TO INJECTION
SEC 7-T17S-R31E		;			5 1/2" @ 4059' W/1500 SXS. CEMENT TO SURFACE.
EDDY COUNTY, NM					PERFORATE: 2841'- 3613'(OA)
					IP=125 BOPD
660'FSL & 660'FWL	7/15/44	10/13/44	OIL PRODUCER	3482'/3482'	8 5/8" @ 524' W/75 SXS
EDDY COUNTY, NM					OPEN HOLE COMPLETION: 2850'- 3485'
					IP=40 BOPD
		4/3/66	WATER INJECTOR	3620'/3616'	DEEPENED OPEN HOLE TO 3620'
		·			PERFORATE: 2914'- 3555'(OA)
					CONVERT TO A WATER INJECTION WELL
660'FSL & 1980'FWL	10/30/44	1/12/45	OIL PRODUCER	3490'/3490'	8 5/8" @ 518' W/50 SXS
SEC 8-T17S-R31E					7" @ 2930' W/100 SXS
.,					IP=24 BOPD
		9/1/66		3630'/3630'	DEEPENED OPEN HOLE TO 3630' - RETURN TO PRODUCTION
_	.,				
	430'FSL & 2013'FEL SEC 7-T17S-R31E EDDY COUNTY, NM 1430'FSL & 90'FEL SEC 7-T17S-R31E EDDY COUNTY, NM 660'FSL & 660'FWL SEC 8-T17S-R31E EDDY COUNTY, NM 660'FSL & 1980'FWL SEC 8-T17S-R31E EDDY COUNTY, NM	<u> </u>	M 12/1/95 8/29/95 M 12/12/95 9/11/96 6/8/98 M 10/11/95 11/1/95 M 10/30/44 1/12/45 M 9/1/66	M 12/195 8/29/95 V 12/12/95 9/11/96 V 6/8/98 M 10/11/95 11/1/95 V 11/1/95 V 11/1/95 V 11/12/45 V 10/30/44 1/12/45 V 9/1/66	NM 12/195 8/29/95 OIL PRODUCER 3765/3719' 12/12/95 9/11/96 WATER INJECTOR 3765/3347' 9/11/96 WATER INJECTOR 3765/3310' 10/11/95 11/1/95 OIL PRODUCER 4060/4011' NM 4/3/66 WATER INJECTOR 3482/3482' NM 9/1/66 OIL PRODUCER 3490/3490' NM 9/1/66 OIL PRODUCER 3490/3490' NM 9/1/66 OIL PRODUCER 3490/3430'

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
J.L. KEEL "B" #4	660'FSL & 1980'FEL	2/8/45	5/10/45	OIL PRODUCER	3279'/3279'	8 5/8" @ 543' W/60 SXS
	SEC 8-T17S-R31E					7" @ 2897' W/100 SXS
	EDDY COUNTY, NM					OPEN HOLE COMPLETION: 2897- 3279'
			5/16/66	WATER INJECTOR	3730'/3715'	DEEPENED OPEN HOLE TO 3730'
						4 1/2" LINER @ 2818'- 3728' W/180 SXS
						PERFORATE: 3004'- 3682'(OA)
						CONVERT TO A WATER INJECTION WELL
			7/29/89			PERFORATE: 2978'- 3666'(OA) - RETURN TO INJECTION
J.L. KEEL "B" #5	1980'FSL & 660'FWL	12/28/50	3/5/51	OIL PRODUCER	3200'/3169'	8 5/8" @ 557' W/100 SXS
	SEC 8-T17S-R31E					7" @ 2802' W/206 SXS
	EDDY COUNTY, NM					OPEN HOLE COMPLETION: 2802'- 3200'
			6/18/55		3650'/3650'	DEEDENED OPEN HOLE TO 3650' - RETURN TO PRODUCTION
			9/26/70		3650'/3504'	PLUG BACK OPEN HOLE TO 3504' - RETURN TO PRODUCTION
			9/9/96	WATER INJECTOR	3650'/3594'	CLEAN OUT OPEN HOLE TO TD
						4 1/2" @ 3649' W/300 SXS. TOC @ 880'(CB!.)
						CONVERT TO A WATER INJECTION WELL
J.L. KEEL "B" #6	1980'FNL & 1980'FWL	3/19/51	5/6/51	OIL PRODUCER	3023'/3023'	10 3/4" @ 556' W/200 SXS
	SEC 8-T17S-R31E					7" @ 2856' W/200 SXS
	EDDY COUNTY, NM					OPEN HOLE COMPLETION: 2856'- 3023'
			8/24/54		3400'/3400'	DEEPENED OPEN HOLE TO 3400' - RETURN TO PRODUCTION
			5/4/64		3680'/3680'	DEEPENED OPEN HOLE TO 3680' - RETURN TO PRODUCTION
			7/3/95	WATER INJECTOR	3800'/3756'	DEEPENED OPEN HOLE TO 3800'
						4 1/2" @ 3798' W/475 SXS. CEMENT TO SURFACE.
						CONVERT TO A WATER INJECTION WELL
			12/21/98		3800'/3510'	SET CIBP @ 3510' - RETURN TO INJECTION
					_	

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
J.L. KEEL "B" #17	1980'FNL & 660'FWL	10/8/52	11/30/52	OIL PRODUCER	3286'/3286'	8 5/8" @ 568' W/100 SXS
	SEC 8-T17S-R31E EDDY COUNTY, NM					7" @ 2839' W/200 SXS OPEN HOLE COMPLETION: 2839'- 3286' IP=45 BOPD
			12/7/64	WATER INJECTOR	3615'/3613'	DEEPENED OPEN HOLE TO 3615' 4 1/2" @ 3615' W/325 SXS
						PERFORATE: 2965'- 3601'(OA)
			8/14/95			PERFORATE: 2828'- 3396'(OA) - RETURN TO WATER INJECTION
J.L. KEEL "B" #27	1980'FSL & 1980'FEL	10/3/64	11/9/64	OIL PRODUCER	3725'/3725'	8 5/8" @ 560' W/370 SXS. CEMENT TO SURFACE.
	EDDY COUNTY, NM					PERFORATE: 3064'- 3724'(OA)
			12/19/96			PERFORATE: 2952- 3508'(OA) - RETURN TO PRODUCTION
J.L. KEEL "B" #29	1980'FSL & 1980'FWL	10/28/64	11/19/64	WATER INJECTOR	3700'/3697'	8 5/8" @ 555' W/220 SXS. CEMENT TO SURFACE.
	EDDY COUNTY, NM					PERFORATE: 2996'- 3660'(OA)
			1/4/99		3700'/3510'	SET CIBP @ 3510' PERFORATE: 2956'- 3374'(OA) - RETURN TO INJECTION
J.L. KEEL "B" #46	660'FSL & 660'FEL SEC 8-T17S-R31E	4/23/89	5/31/89	OIL PRODUCER	3751′3655'	8 5/8" @ 387' W/300 SXS. CEMENT TO SURFACE. 5 1/2" @ 3751' W/1700 SXS. CEMENT TO SURFACE.
	EDDY COUNTY, NM					PERFORATE: 3050'- 3674'(OA) SET CIBP @ 3655' IP=116 BOPD
J.L. KEEL "B" #58	1300'FSL & 1290'FWL SEC 8-T17S-R31E	1/10/95	3/12/95	OIL PRODUCER	4020'/3973'	8 5/8" @ 463' W/500 SXS. CEMENT TO SURFACE. 5 1/2" @ 4020' W/1075 SXS. CEMENT TO SURFACE.
	COOM					IP=31 BOPD

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
J.L. KEEL "B" #78	1330'FSL & 2616'FEL SEC 8-T17S-R31E EDDY COUNTY, NM	6/27/95	7/22/95	OIL PRODUCER	4155'/4107'	8 5/8" @ 426' W/350 SXS. CEMENT TO SURFACE. 5 1/2" @ 4154' W/1450 SXS. CEMENT TO SURFACE. PERFORATE: 2902'- 3791'(OA) IP≃56 BOPD
J.L. KEEL "B" #90	2575'FNL & 1335'FWL SEC 8-T17S-R31E EDDY COUNTY, NM	3/18/95	4/22/95	OIL PRODUCER	4055/4015	8 5/8" @ 475' W/325 SXS. CEMENT TO SURFACE. 5 1/2" @ 4054' W/1150 SXS. CEMENT TO SURFACE. PERFORATE: 2886'- 3644'(OA) IP=87 BOPD
J.L. KEEL "B" #91	2664'FSL & 2562'FEL SEC 8-T17S-R31E EDDY COUNTY, NM	5/15/95	6/22/95	OIL PRODUCER	4069'/4022'	8 5/8" @ 466' W/500 SXS. CEMENT TO SURFACE. 5 1/2" @ 4068' W/1075 SXS. CEMENT TO SURFACE. PERFORATE: 2969'- 3964'(OA)
J.L. KEEL "B" #94	1309'FSL & 1299'FEL SEC 8-T17S-R31E EDDY COUNTY, NM	7/6/95	7/29/95	OIL PRODUCER	4220'/4171'	8 5/8" @ 468' W/350 SXS. CEMENT TO SURFACE. 5 1/2" @ 4219' W/1800 SXS. CEMENT TO SURFACE. PERFORATE: 2975'- 3878'(OA) IP=140 BOPD
LAST CHANCE FEDERAL #1	1650'FNL & 2310'FEL SEC 17-T17S-R31E EDDY COUNTY, NM	4/5/83	7/10/83	OIL PRODUCER	3620'/3612'	8 5/8" @ 574' W/400 SXS 5 1/2" @ 3612' W/1000 SXS PERFORATE: 2806'- 3600'(OA) IP=10 BOPD
RUSSELL, C.A. #18	330'FNL & 1350'FEL SEC 18-T17S-R31E EDDY COUNTY, NM	2/5/96	3/15/96	OIL PRODUCER	3800'/3751'	13 3/8" @ 306' W/925 SXS. CEMENT TO SURFACE. 5 1/2" @ 3799' W/1500 SXS. CEMENT TO SURFACE. PERFORATE: 2808'- 3737'(OA) IP=158 BOPD

WELL NAME	LOCATION	SPUD DATE	COMP DATE	WELL TYPE	DEPTH/PBTD	COMPLETION RECORD
FOSTER-EDDY FEDERAL #3 Marbob Energy Corporation	1980'FNL & 1980'FWL SEC 17-T17S-R31E	4/1/43	6/20/43	OIL PRODUCER	3520'3520'	8 5/8" @ 543' W/50 SXS 7" @ 2913' W/100 SXS
	EUDT COON IT, NW					IP=80 BOPD
FOSTER-EDDY FEDERAL #4	660'FNL & 1980'FWL	8/22/43	1/21/44	OIL PRODUCER	3505/3505'	8 1/2" @ 532' W/50 SXS
Oryx Energy Company	SEC 17-T17S-R31E					7" @ 2908' W/100 SXS
	EDDY COUNTY, NM					OPEN HOLE COMPLETION: 2908'- 3505' IP=50 BOPD
			9/11/82			PLUGGED & ABANDONED
FOSTER-EDDY FEDERAL #5	660'FNL & 1980'FEL	1/27/44	4/30/44	OIL PRODUCER	3592'/3592'	8 5/8" @ 560' W/50 SXS
Marbob Energy Corporation	EDDY COUNTY, NM					7" @ 2964' W/125 SXS OPEN HOLE COMPLETION: 2964'- 3592' IP=50 BOPD
FOSTER-EDDY FEDERAL #6	990'FNL & 2310'FWL	5/5/89	7/6/89	OIL PRODUCER	5540'/5514'	8 5/8" @ 474' W/400 SXS
	EDDY COUNTY, NM					PERFORATE: 3090'- 3478'(OA)
						IP=88 BOPD
FOSTER-EDDY FEDERAL #7	330'FNL & 1650'FEL	11/15/90	1/2/91	OIL PRODUCER	5540'/5520'	8 5/8" @ 464' W/300 SXS
	EDDY COUNTY, NM					PERFORATE: 2977'- 3836'(OA)
						P=42 BOPD
FOSTER-EDDY FEDERAL #8	330'FNL & 1650'FWL	9/13/89	12/5/89	OIL PRODUCER	6035'/4875'	8 5/8" @ 462' W/300 SXS 5 1/2" @ 6022' W/3400 SXS
•	EDDY COUNTY, NM					PERFORATE: 2888'- 3813'(OA) IP=70 BOPD

DEVON ENERGY CORPORATION WELLBORE SCHEMATIC WELL NAME: HUDSON FEDERAL #3 FIELD: GRAYBURG-JACKSON LOCATION: 1650'FNL & 330'FWL, SEC 17-T17S-R31E COUNTY: EDDY STATE: NM ELEVATION: GL=3710'; KB=UNK SPUD DATE: 04/04/41 COMP DATE: 06/14/41 DATE: 02/19/99 API#: 30-015-05179 PREPARED BY: C.H. CARLETON DEPTH SIZE WEIGHT **GRADE** THREAD **HOLE SIZE** 8 1/4" CASING: 0' - 636' CASING: 0' - 2780' 7" CASING: **TUBING:** TUBING: **CURRENT PROPOSED OPERATOR: DEVON ENERGY CORPORATION(NEVADA) DATE PLUGGED: 02/18/99** CEMENT PLUG: 0'- 50' WITH 30 SXS **CEMENT PLUG: 476'- 686' WITH 90 SXS** 8 1/4" CASING SET @ 636'. CMT'D W/50 SXS. TOC @ 460'(calculated) PERFORATED 4 HOLES @ 686' CEMENT RETAINER @ 1271'. PUMP 136 SXS CEMENT BELOW RETAINER PERFORATED 4 HOLES @ 1300' PERFORATED 4 HOLES @ 1400' NOTE: 9.5ppg MUD SPOTTED BETWEEN CEMENT PLUGS CEMENT RETAINER @ 2542'. PUMP 225 SXS CEMENT BELOW REATINER 7" CASING SET @ 2780'. CMT'D W/100 SXS. TOC @ 1460'(calculated) OPEN HOLE COMPLETION: 2780'- 3497' TD @ 3497'

DEVON ENERGY CORPORATION WELLBORE SCHEMATIC WELL NAME: HUDSON FEDERAL #4 FIELD: GRAYBURG-JACKSON LOCATION: 990'FNL & 330'FWL, SEC 17-T17S-R31E COUNTY: EDDY STATE: NM ELEVATION: GL=3721'; KB=UNK SPUD DATE: 11/07/41 COMP DATE: 02/01/42 API#: 30-015-05180 PREPARED BY: C.H. CARLETON DATE: 03/07/00 **DEPTH** SIZE WEIGHT **GRADE** THREAD HOLE SIZE 0' - 649' CASING: 8 5/8" 28# CASING: 0' - 2803' 20# CASING: TUBING: TUBING: CURRENT **PROPOSED OPERATOR: DEVON ENERGY CORPORATION(NEVADA)** DATE PLUGGED: 01/31/98 CEMENT PLUG: 0'- 50' WITH 10 SXS 8 5/8" CASING @ 649' W/50 SXS. TOC @ 410'(calculated) CEMENT PLUG: 685'- 880' WITH 20 SXS CEMENT RETAINER @ 1250', PUMP 115 SXS BELOW & CAP WITH 10 SXS CEMENT RETAINER @ 2516', PUMP 140 SXS BELOW & CAP WITH 10 SXS 7" CASING @ 2803' W/100 SXS. TOC @ 1480'(calculated) OPEN HOLE COMPLETION: 2803'- 3500' TD @ 3500'

DEVON ENERGY CORPORATION WELLBORE SCHEMATIC WELL NAME: J.L. KEEL "A" #19 FIELD: GRAYBURG-JACKSON LOCATION: 1350'FSL & 1320'FEL, SEC 7-T17S-R31E COUNTY: EDDY STATE: NM ELEVATION: GL=3798'; KB=3810' SPUD DATE: 08/15/94 COMP DATE: 11/24/94 API#: 30-015-28040 PREPARED BY: C.H. CARLETON DATE: 03/07/96 **DEPTH** SIZE WEIGHT **GRADE THREAD HOLE SIZE** CASING: 0' - 519' 8 5/8" 24# J-55 ST&C 12 1/4" CASING: 0' - 1047' 4 1/2" 11.6# J-55 LT&C 7 7/8" CASING: TUBING: 673' - 1056' 2 3/8" 4.7# J-55 EUE 8rd TUBING: **CURRENT PROPOSED OPERATOR: DEVON ENERGY CORPORATION(NEVADA)** DATE PLUGGED: 09/22/95 8 5/8" CASING, SET W/305 SXS. TOC @ SURFACE. CIBP @ 611', CAP WITH CEMENT TO SURFACE. PERFORATIONS: 660'- 700' (80 HOLES) TOP OF STUCK TUBING @ 673'. PERFORATIONS: 860'- 880' (40 HOLES) PERFORATIONS: 940'- 970' (60 HOLES) 4 1/2" CASING SET W/1150 SXS. TOC @ 75' (TEMP SURVEY). BOTTOM OF STUCK TUBING @ 1056'. OPEN HOLE COMPLETION: 1047'- 1375'

TD @ 1375'

DEVON ENERGY CORPORATION WELLBORE SCHEMATIC WELL NAME: FOSTER-EDDY FEDERAL #4 FIELD: GRAYBURG-JACKSON LOCATION: 660'FNL & 1980'FWL, SEC 17-T17S-R31E COUNTY: EDDY STATE: NM ELEVATION: GL=UNK; KB=UNK; DF=3710' SPUD DATE: 08/22/43 COMP DATE: 01/11/44 API#: 30-015-05195 PREPARED BY: C.H. CARLETON DATE: 04/23/96 **DEPTH** SIZE WEIGHT **GRADE THREAD** HOLE SIZE CASING: 0' - 525' 8 5/8" 28# CASING: 0' - 2908' 7" 24# CASING: **TUBING** TUBING: CURRENT **PROPOSED OPERATOR: ORYX ENERGY COMPANY** DATE PLUGGED: 09/11/82 CEMENT PLUG: 0'- 80' CEMENT RETAINER @ 310', PUMP 100 SXS BELOW RETAINER. 8 5/8" CASING @ 525' W/50 SXS. TOC @ 290' (calculated) PERFORATE 7" CASING @ 550'- 551' CEMENT RETAINER @ 1018', PUMP 100 SXS BELOW & CAP W/10 SXS. PERFORATE 7" CASING @ 1350'-1351' CIBP @ 2850', CAP WITH 7 SXS. BAKER "AD-1" PACKER @ 2869' 7" CASING @ 2908' W/100 SXS. TOC @ 1980' (calculated) OPEN HOLE COMPLETION: 2908'- 3505' TD @ 3505'

DEVON ENERGY PRODUCTION COMPANY, L.P. APPLICATION FOR AUTHORITY TO INJECT GRAYBURG-JACKSON WATERFLOOD

VII Proposed Operation Data:

- Average daily injection rates 500 BWPD
 Maximum daily injection rates 600 BWPD
- (2) Type of injection system closed system
- (3) Average injection pressure 2000 psig Maximum injection pressures - 2500 psig
- (4) Injection water will be reinjected produced water, plus makeup water from the Keel West fresh water system.
- (5) N/A

VIII Geological Data:

The proposed injection zone is in the Grayburg/San Andres formation from 2735'- 3630'. The Grayburg formation consists primarily of quartz sand with cementation. The San Andres formation consists primarily of dolomite with intermingled stringers of quartz sand with dolomite cementation.

Surface formation is Cretaceous and has no known source of drinking water. Additionally, there are no known underground sources of drinking water overlying or underlying the proposed injection interval.

IX Stimulation Program:

The proposed injection interval will be acidized with 15% NEFE acid prior to initial injection.

X Well Logs:

Copies of current well logs are on file with Oil Conservation Department, or, can be sumitted upon completion of well.

DEVON ENERGY PRODUCTION COMPANY, L.P. APPLICATION FOR AUTHORITY TO INJECT GRAYBURG-JACKSON WATERFLOOD

XI Chemical Analysis of Fresh Water:

There are no known producing fresh water wells within one mile of a proposed injection well.

XII Affirmative Statement of Open Faults:

Upon examination of the available geologic and engineering data, no evidence of open faults or any other hydraulic connection between the disposal zone and any underground source of drinking water was found.

XIII "Proof of Notice" and "Proof of Publication":

The Bureau of Land Management is the surface owner. They have been notified by letter with a copy of our application.

Devon Energy Operating Corporation operates the Grayburg-Jackson Unit in sections 3, 4, 5, 6, 7, 8, 9, 10, 17, 18, 19, 20, 29 & 30-T17S-R31E. Offset operators in the "area of review" are as follows:

(1) Marbob Energy Corporation P.O. Box 227 Artesia, NM 88210

The above operator was provided a letter by certified mail. Proof of notice is attached.

"Proof of Publication" from the Carlsbad Current-Argus is attached.



20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260 Telephone:405/235-3611 FAX 405/552-4550

September 5, 2000

Certified Mail Z 068 589 826

Marbob Energy Corporation P.O. Box 227 Artesia, NM 88210

RE: Devon Energy Corporation Grayburg-Jackson Waterflood Project Keel "B" #2 and Keel "B" #3 Section 8-T17S-R31E Eddy County, NM

Gentlemen:

Please consider this letter as official notification that Devon Energy Corporation is in the process of filing an application to convert one producing well to water injection and reactivate one shutin water injection well in the above referenced section. Our records indicate that you are an offset operator. As an offset operator you must be notified by Devon and you must file any objections or requests for hearings of administrative applications with the Oil Conservation Division of New Mexico within fifteen (15) days of receiving this notification.

Please direct any questions regarding this matter to the undersigned at 405/552-8194.

. =====

PS Form **3811**, December 1994

William M. Greenlees P. F.

Devon Energy Corporation

William M. Greenlees, P.E. Operations Engineering Advisor

/chc

xc: Well File

Sincerely,

, se side?	SENDER: Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b. Print your name and address on the reverse of this form so that we	can return this	I also wish to rec following service: extra fee):	s (for an
the reverse	card to you. Attach this form to the front of the mailpiece, or on the back if space permit. Write "Return Receipt Requested" on the mailpiece below the article The Return Receipt will show to whom the article was delivered and delivered.	e number.	Addresse Restricte Consult postmas	d Delivery
completed on	3. Article Addressed to: MARBOB ENERGY CORPORATION	4a. Article N Z O6 4b. Service	8 589 87	
ADDRESS com	P.O. BOX 227 ARTESIA, NM 88210	☐ Register	Mail ceipt for Merchandise	Certified Insured COD
our RETURN	5. Received By: (Print Name) MIST(6. Signature: (Addressee or Agent)	8. Addresse and fee is	e's Address (Only s paid)	if requested

102595-98-B-0229

Domestic Return Receipt

Affidavit of Publication

State of New Mexico, County of Eddy, ss.

Amy McKay	
being first duly sworn, on oath says:	,
That she is Busin of the Carlsbad Current-Argus, a not daily at the City of Carlsbad, in said or of New Mexico and of general paid circuty; that the same is a duly qualified n laws of the State wherein legal notices may be published; that the printed no was published in the regular and ennewspaper and not in supplement the follows, to wit:	ewspaper published punty of Eddy, state salation in said coun- ewspaper under the and advertisements tice attached hereto tire edition of said
September 9	2000
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That the cost of publication is \$and that payment thereof has been material assessed as court costs. Subscribed and sworth and sworth assessed as court costs.	de and will be
day of Olfrank	les 2000 Doporte
My commission expires	25/03 ary Public
Nota	ny rubne

September 9, 2000

Notice is hereby given that Devon Energy Corporation is applying to the New Mexico Oil Conservation Division to convert one producing well to water injection and reactivate one shutin injection well for secondary recovery purposes in:

Section 8 of T17S - R31E, Eddy County, NM

The intended purpose of these wells is to inject produced waters into the Grayburg/San Andres Formations to enhance oil production through secondary recovery. Maximum injection rates of 600 bwpd and a maximum pressure of 2500 psig are expected.

Interested parties must file objections or requests for hearing within 15 days to the following commission:

State fo New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87501

William M. Greenlees P.E. Operations Engineering Advisor Devon Energy Corporation 20 North Broadway, Suite 1500 Oklahoma City, OK 73102 (405) 552-8194