639

DEVOILENERGY CORPORATION

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

July 25, 1996

Certified Mail No. Z 737 086 299

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 2040 South Pacheco Santa Fe, NM 88505

9 9 5

RE:

Proposed Denton SWD #4 Section 12-T15S-R37E Lea County, New Mexico

Gentlemen:

Concerning the referenced, enclosed please find our Application for Authorization to Inject and one copy of same. A copy of this submittal is being sent to the OCD office in Hobbs.

Also enclosed is a copy of each letter of notification, sent by certified mail, to the offset operators and the surface owner.

Please direct inquiries concerning this matter to Ernie Buttross, Jr., at (405) 235-3611, X4509.

Yours truly,

DEVON ENERGY CORPORATION (NEVADA)

Candace R. Graham

Ms. Candace R. Graham

Engineering Tech

/cg

Enclosures

copy: NMOCD, Hobbs

APPLICA	ATION FOR AUTHORIZATION TO INJECT
I.	Purpose: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval? yes no
II.	Operator: Devon Energy Corporation (Nevada)
	Address: 20 North Broadway, Suite 1500, Oklahoma City, Oklahoma 73102-8260
	Contact party: Mr. Ernie Buttross Phone: 405-235-3611
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? x yes no no no no no no no no
٧.	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, 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 source known to be immediately underlying the injection interval.
· IX.	Describe the proposed stimulation program, if any.
х.	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 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: E.L. Buttross, Jr. Title District Engineer
	Signature: E.Z. B. Jirre J. Date: July 25, 1996
subm	he information required under Sections VI, VIII, X, and XI above has been previously itted, it need not be duplicated and resubmitted. Please show the date and circumstance he earlier submittal.

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

- 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.

DENTON SWD #4 (B.C. DICKINSON "B" #4) 330' FWL & 2310' FNL SECTION 12-T15S-R37E LEA COUNTY, NEW MEXICO

III. PROPOSED SALTWATER DISPOSAL WELL DATA:

<u>A.</u>

SURFACE CASING: 13 3/8"-48 #/FT SET @ 369', CEMENT TO SURFACE W/ 400 SX.

INTERMEDIATE CASING: 9 5/8"-36 & 40 #/FT. SET @ 4750', CEMENTED TO +/- 620' W/ 3000 SX

CASING PATCH @ 620', TESTED @ 500 PSI.

PRODUCTION CASING: 7"-23, 26 & 29 #/FT. LINER - TOP @ 4609', SET @ 9525', CEMENTED W/ 225 SX.

T.O.C. @ 8200'

TOTAL DEPTH: 11,375' (PLUGBACK DEPTH 10,500')

TUBING: 4 1/2"-11.6 #/FT., J-55, W/ TUBOSCOPE TK-70 PLASTIC COATING

PACKER: NICKLE PLATED BAKER LOCKSET PACKER W/ ON-OFF TOOL AND PROFILE

NIPPLE, SET @ +/- 9450'

В.

INJECTION FORMATION: PENNSYLVANIAN

FIELD: DENTON

INJECTION INTERVAL: PENNSYLVANIAN 9525-10500'

ORIGINAL WELL PURPOSE: WOLFCAMP OIL WELL

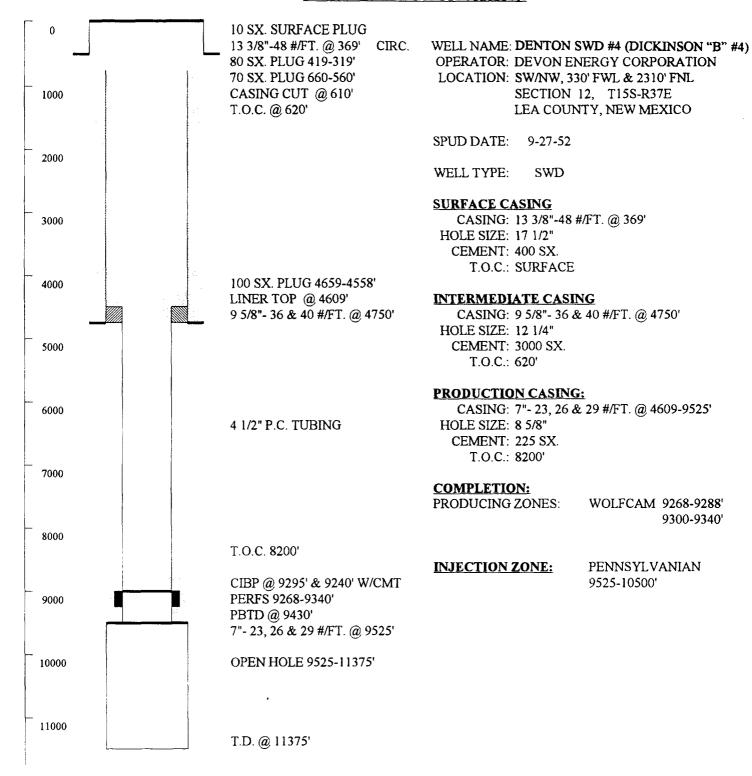
OTHER PERFORATED INTERVALS: WOLFCAMP 9268-9288' & 9300-9340' (WILL BE SQUEEZED OFF)

DEPTHS AND NAMES OF OTHER OIL & GAS ZONES

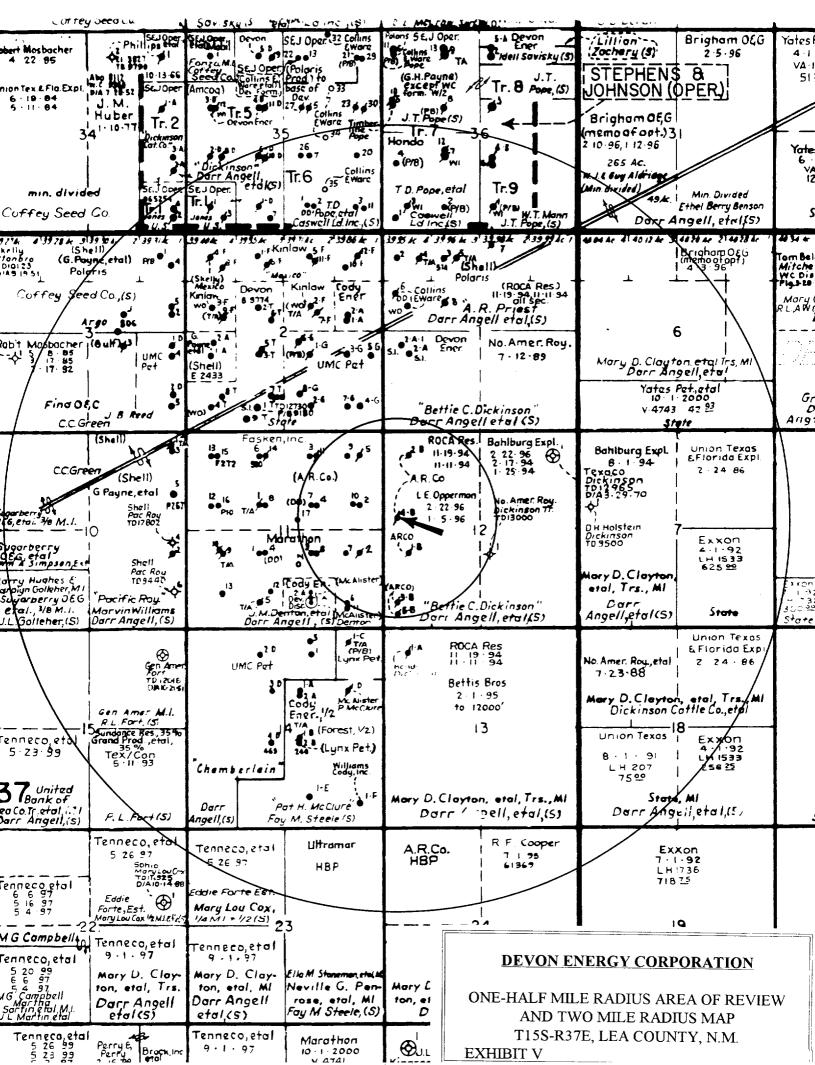
IN THE AREA:

WOLFCAMP - +/-9100' DEVONIAN - +/-12200'

PRESENT WELL CONFIGURATION



				<u> </u>					
				PROPOSE	n Dispos	AL WELL CO	NEICHD	ATION	
				IKOTOSE	טט זמוע עו	AL WELL CO	TIGUN	ATION	
0						-			
<u> </u>			13 3/8"-48	#/FT. @ 36	CIRC.	WELL NAME	DENTO	N SWD #4	
							(DICKIN	ISON "B" #4)
			T.O.C. @ 6	520'		OPERATOR:			
1000						LOCATION:			
								N 12, T159	
								UNTY, NEW	
						SPUD DATE:			
2000									
						WELL TYPE:	SWD		
						SURFACE CA	ASING		
3000						CASING:	13 3/8"-4	48 #/FT. @ 30	59'
							17 1/2"		
						CEMENT:	400 SX.		
			TIEBACK	7" CASING	TO SURF	T.O.C.:	SURFAC	CE	
4000			AND CEM	ENT TO SU	RFACE				
			LINER TO	P @ 4609'		INTERMEDI	ATE CA	SING	
			9 5/8"- 36	& 40 #/FT. (@ 4750'			6 & 40 #/FT.	@ 4750'
						HOLE SIZE:	12 1/4"		
5000						CEMENT:	3000 SX		
						T.O.C.:	620'		
								_	
						PRODUCTIO			
6000						CASING:		6 & 29 #/FT.	@ 4609-9
			4 1/2" P.C.	TUBING		 	8 5/8"		
						CEMENT:	225 SX.		
						T.O.C.:	8200'		
7000									
						COMPLETIC			
						PRODUCING	ZONES:		P
				,				9268-9288'	
8000							-	9300-9340'	
			T.O.C. 820	0'					
						INJECTION	ZONE:	PENNSYLV	
								9525-10500	
9000				68-9340' - S					
				& 29 #/FT. (
,			NICKEL P	LATED PA	CKER @ 94	450'			
10000			OPEN HO	LE 9525-11:	375'				
	<u> </u>	/	PLUG BA	CK TO 1050	00'	<u> </u>			
					ļ	 			-
11000			m P C 1	2751					!
)			T.D. @ 11	375'					1



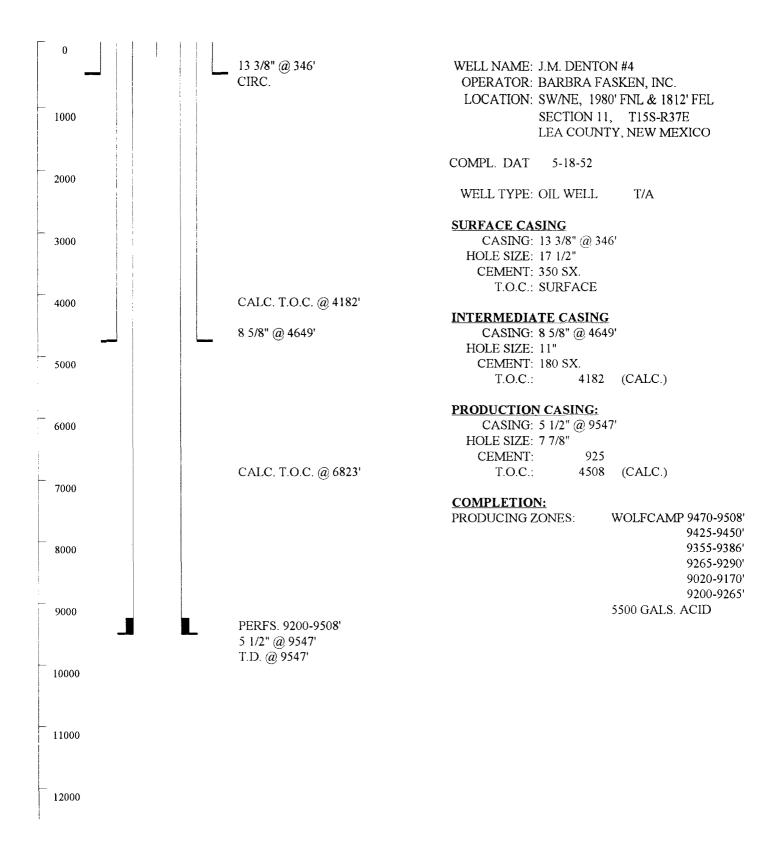
DENTON SWD #4 (B.C. DICKINSON "B" #4) 330' FWL & 2310' FNL SECTION 12-T15S-R37E LEA COUNTY, NEW MEXICO

THE FOLLOWING WELLS ARE IN THE ONE-HALF MILE RADIUS OF REVIEW.

BARBRA FASKEN, INC. DENTON #2 SE/NE	SECTION 11-T15S-R37E
BARBRA FASKEN, INC. DENTON #4 SW/NI	E SECTION 11-T15S-R37E
PHILLIPS PETROLEUM CO. DENTON #5 NE/NE	SECTION 11-T15S-R37E
BARBRA FASKEN, INC. DENTON #7 SW/NI	E SECTION 11-T15S-R37E
BARBRA FASKEN, INC. DENTON #9 NE/NE	SECTION 11-T15S-R37E
BARBRA FASKEN, INC. DENTON #10 SE/NE	SECTION 11-T15S-R37E
BARBRA FASKEN, INC. DENTON #17 SW/NI	E SECTION 11-T15S-R37E
MARATHON OIL CO. J.M. DENTON #2 NE/SE	SECTION 11-T15S-R37E
MARATHON OIL CO. DENTON #3 NW/SI	E SECTION 11-T15S-R37E
MARATHON OIL CO. J.M. DENTON #6 SE/SE	SECTION 11-T15S-R37E
MARATHON OIL CO. J.M. DENTON #7 NE/SE	SECTION 11-T15S-R37E
MARATHON OIL CO. J.M. DENTON #8 NW/SI	E SECTION 11-T15S-R37E
ATLANTIC RICHFIELD CO. B.C. DICKINSON "B" #1 SW/SI	W SECTION 12-T15S-R37E
ATLANTIC RICHFIELD CO. B.C. DICKINSON "B" #2 NW/N	W SECTION 12-T15S-R37E
	W SECTION 12-T15S-R37E
	W SECTION 12-T15S-R37E
BETTIS-BOYLE-STOVALL DICKINSON TRUST #1 NW/S	E SECTION 12-T15S-R37E

INCLUDED IS A WELLBORE SKEMATIC FOR EACH WELL WITH SPECIFIC DATA AS IT RELATES TO EACH WELL.

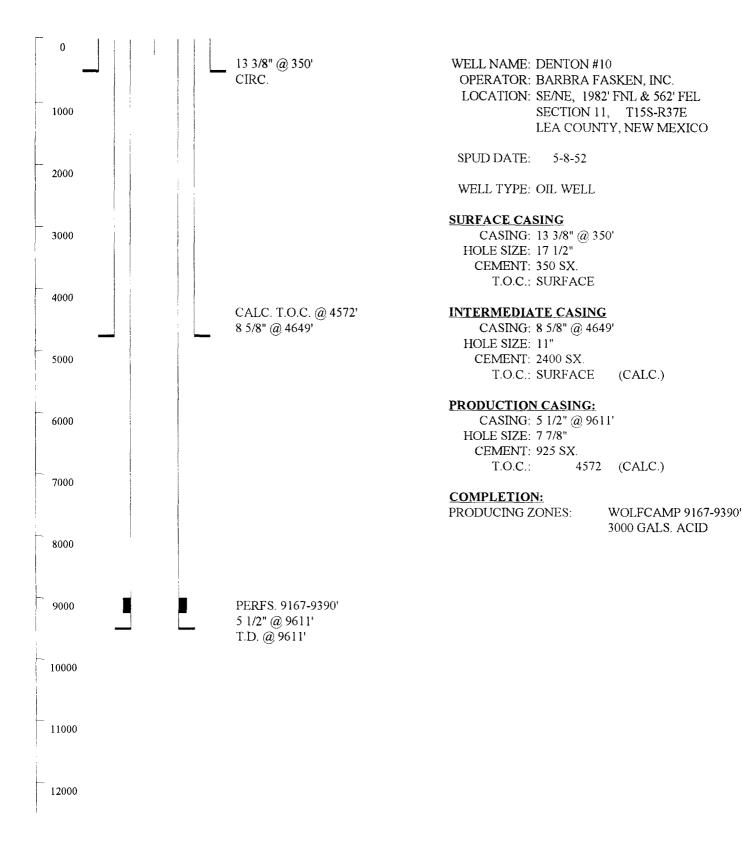
	13 3/8"@ 328'	WELL NAME: DENTON #	2
	CIRC.	OPERATOR: BARBRA F	ASKEN, INC.
		LOCATION: SE/NE, 1979	9' FNL & 66 2 FEL
1000			1, T15S-R37E
			TY, NEW MEXICO
			,
		SPUD DATE: 5-28-51	
2000			
		WELL TYPE: OIL WELL	
		SURFACE CASING	
3000		CASING: 13 3/8"@ 32	28'
		HOLE SIZE: 17 1/2'	
		CEMENT: 350 SX.	
4000		T.O.C.: SURFACE	
4000		INTERMEDIATE CASIN	c
	8 5/8" @ 4653'	CASING: 8 5/8" @ 46	
		HOLE SIZE: 11'	
5000		CEMENT: 3150 SX.	
		T.O.C.: SURFACE	(CALC.)
			,
		PRODUCTION CASING:	
6000		CASING: 5 1/2" @ 12	772'
		HOLE SIZE: 7 7/8"	
		CEMENT: 1130 SX.	
		T.O.C.: 6617	(CALC.)
7000			
		COMPLETION:	DELICO HANG 18580 18680
		PRODUCING ZONES:	DEVONIAN 12530-12630
- 2000			12730-12750 6500 GALS. ACID
8000			6300 GALS. ACID
9000			
10000			
<u> </u>			
11000			
12000			
12000			
	PERFS. 12530-12630' & 1273-12750'		
	5 1/2" @ 12772'		
13000	T.D. @ 12772'		
	1.2. 6. 12. 12		

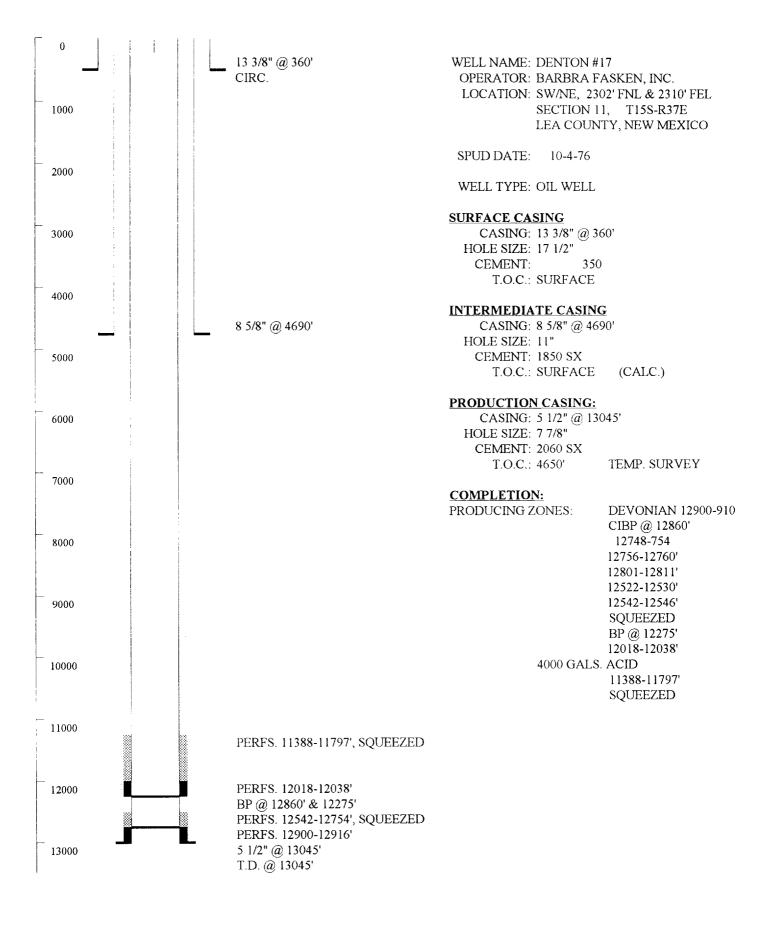


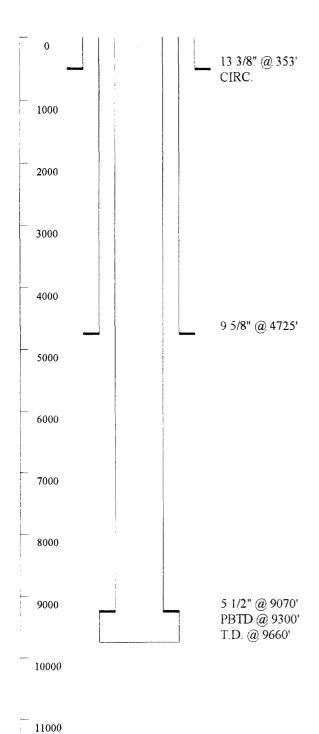
100	0	13 3/8" @ 349' CIRC.	WELL NAME: OPERATOR: LOCATION:	PHILLIPS PE	ETROLEUM FNL & 662' 1, T15S-R3	FEL 7E
						MICO
200	0		SPUD DATE:	5-25-52	4-28-93	
			WELL TYPE:	OIL WELL	T.A.	
300	0		HOLE SIZE: CEMENT:	13 3/8" @ 34 17 1/2' 380 SX.	9'	
400	0	CALC. T.O.C. @ 4059'	T.O.C.:	SURFACE		
100		8 5/8" @ 4647'	INTERMEDIA CASING: HOLE SIZE:	8 5/8" @ 464		
500	0		CEMENT:		(CALC.)	
600	0		PRODUCTION CASING: HOLE SIZE: CEMENT:	N CASING: 5 1/2" @ 950 7 7/8" 1000 SX.	6'	
700	00		T.O.C.:	4059	(CALC.)	
			PRODUCING Z		WOLFCAM	P 9345-9415' 9415-9440'
800	0				1000 GALS.	9225-9315'
900	0	CIBP @ 9157' W/35' CEMENT	MAAQL DATQL DADSL		9470-9495'	SQUEEZED
100		PERFS 9225-9315', 9345-9415', 9415-9 5 1/2" @ 9506' T.D. @ 9506'	7440, 9470-9499			
110	00					
120	00					

0	13 3/8" @ 364'	WELL NAME:	DENTON #	7
1000	CIRC.	OPERATOR:	BARBRA FA SW/NE, 198 SECTION 1	
2000		SPUD DATE:	11-5-51	
2000		WELL TYPE:	OIL WELL	
3000		HOLE SIZE:	13 3/8" @ 36 17 1/2"	54'
4000		CEMENT: T.O.C.:	350 SX. SURFACE	
	8 5/8" @ 4657'		8 5/8" @ 465	
5000		HOLE SIZE: CEMENT: T.O.C.:		(CALC.)
6000		PRODUCTIO CASING: HOLE SIZE: CEMENT:	5 1/2" @ 120 7 7/8"	595'
7000	CALC. T.O.C. @ 6839'	T.O.C.:	6839	(CALC.)
8000		PRODUCING 2		DEVONIAN 12640-1267 500 GALS. ACID 5000 GALS. ACID 12590-12610' 3500 GALS. ACID
9000				3500 GALS. ACID
10000				
11000	T.D. @ 11375'			
12000 	PERFS 12590-12610' PERFS. 12640-12670' PLUGGED W/	12 SX.		
13000	5 1/2" @ 12695' T.D. @ 12695'			

0	13 3/8" @ 350'	WELL NAME: DENTON	
	CIRC.	OPERATOR: BARBRA : LOCATION: NE/NE, 66	
1000		SECTION	11, T15S-R37E
		LEA COU	NTY, NEW MEXICO
2000		SPUD DATE: 11-30-52	
2000	CALC. TO.C. @ 2308'	WELL TYPE: OIL WELL	
		SURFACE CASING	
3000		CASING: 13 3/8" @ HOLE SIZE: 17 1/2"	350'
		CEMENT: 350 SX.	
-		T.O.C.: SURFACE	
4000		INTERMEDIATE CASIN	1G
	8 5/8" @ 4655'	CASING: 8 5/8" @ 4	
		HOLE SIZE: 11"	
5000		CEMENT: 2400 SX.	
		T.O.C.: SURFACE	(CALC.)
		PRODUCTION CASING	
6000		CASING: 5 1/2" @ 1	2778'
		HOLE SIZE: 7 7/8"	
		CEMENT: 1160 SX. T.O.C.: 645	9 (CALC.)
7000		1.0.0	(e. <u>E.</u> e.,
		COMPLETION:	
		PRODUCING ZONES:	DEVONIAN 12745-12770 12630-12745
8000			12105-12342
0000			1000 GALS. ACID
			10000 GALS. ACID
9000			
9000			
10000			
10000			
- 11000			
11000			
12000	DEDEC 10105 102401		
12000	PERFS. 12105-12342' B.P. @ 12403'		
	PERFS. 12630-12745' & 12745-12770'		
	5 1/2" @ 12778'		
13000	T.D. @ 12778'		







12000

WELL NAME: J.M. DENTON #2 OPERATOR: MARATHON OIL CO.

LOCATION: NE/SE, 1980' FSL & 660' FEL

SECTION 11, T15S-R37E LEA COUNTY, NEW MEXICO

SPUD DATE: 4-4-50

WELL TYPE: OIL WELL

SURFACE CASING

CASING: 13 3/8" @ 353' HOLE SIZE: 17 1/2" CEMENT: 350 SX. T.O.C.: SURFACE

INTERMEDIATE CASING

CASING: 9 5/8" @ 4725'

HOLE SIZE: 12 1/4" CEMENT: 2000 SX.

T.O.C.: SURFACE (CALC.)

PRODUCTION CASING:

CASING: 5 1/2" @ 9070'

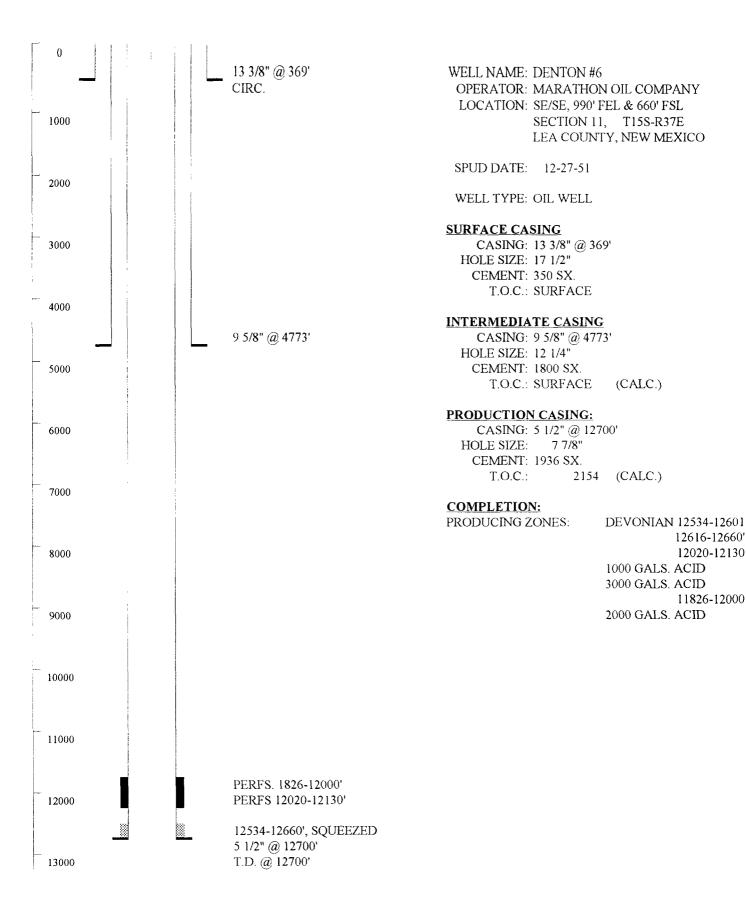
HOLE SIZE: 7 7/8" CEMENT: 1700 SX.

T.O.C.: SURFACE (CALC.)

COMPLETION:

PRODUCING ZONES: WOLFCAMP 9070-9300'

0	_ 13 3/8" @ 371' CIRC.	LOCATION: NW/S	ATHON OIL COMPANY E, 1980' FEL & 1980' FSL
1000		LEA (ION 11, T15S-R37E COUNTY, NEW MEXICO
2000	CALC. T.O.C. @ 2272'	SPUD DATE: 8-2 WELL TYPE: OIL V	
3000		SURFACE CASING CASING: 13 3/8 HOLE SIZE: 17 1/2 CEMENT: 350 S)." X.
4000		T.O.C.: SURF	
5000	9 5/8"@ 4749'	CASING: 9 5/8" HOLE SIZE: 12 1/4 CEMENT: 2000 : T.O.C.: SURF	SX.
6000		PRODUCTION CAS CASING: 5 1/2" HOLE SIZE: 7 7/8" CEMENT: 1807	(@ 12115' SX
7000		T.O.C.: COMPLETION:	2272 (CALC.)
8000		PRODUCING ZONES	5: DEVONIAN 11916-12044 5000 GALS. ACID 11608-11866' 13000 GALS. ACID
9000			
10000			
11000			
	PERFS 11608-11866'		
12000	PERFS. 11916-12044' 5 1/2" @ 12115' T.D. @ 12115'		



	13 3/8" @ 369'	WELL NAME: J.M. DENTO	ON #7
	CIRC.	OPERATOR: MARATHO	
		LOCATION: NE/SE, 990	
1000	CALC. T.O.C. @ 437'		l, T15S-R37E
		LEA COUN	TY, NEW MEXICO
		SPUD DATE: 12-29-51	
2000		01 0D D111B. 12 27 31	
		WELL TYPE: OIL WELL	
		CEIDEA CE CACINO	
3000		SURFACE CASING CASING: 13 3/8" (2) 36	59'
		HOLE SIZE: 17 7/8"	
		CEMENT: 350 SX.	
		T.O.C.: SURFACE	(CALC.)
4000		INTERMEDIATE CASINO	3
	9 5/8" @ 4747'	CASING: 9 5/8"@ 474	
		HOLE SIZE: 12 1/4"	
5000		CEMENT: 1800 SX.	(CALC)
		T.O.C.: 437	(CALC.)
		PRODUCTION CASING:	
6000		CASING: 5 1/2" @ 12	700'
		HOLE SIZE: 8 3/4"	
		CEMENT: 991 SX T.O.C.: 7302	(CALC.)
7000		1.0.0 7302	(Crific.)
		COMPLETION:	
		PRODUCING ZONES:	DEVONIAN 12547-12607
8000			12629-12671' 12145-12240'
3000			3000 GALS. ACID
			11972-12067 SQUEEZED
9000			
10000			
11000			
	PERFS 11972-12067', SQUEEZED		
12000	PERFS. 12145-12240'		
	PERFS 12547-12607'		
1	PERFS 12629-12671'		
	5 1/2" @ 12700'		
13000	5 1/2" @ 12700' T.D. @ 12700'		
13000	5 1/2" @ 12700' T.D. @ 12700'		

	0				13 3/8" @ 371' CIRC.
	1000				
	2000				
	3000				CALC. T.O.C. @ 3324'
:	4000		نو منده داده د		9 5/8" @ 4765'
-	5000			_	
-	6000				
I .	7000				
	8000				
	9000			-	PERFS 9064-9207' 5 1/2" @ 9316' T.D. @ 9318'
	10000	ı			
	11000	ı			
	12000	ı			

WELL NAME: J.M. DENTON #8
OPERATOR: MARATHON OIL CO.

LOCATION: NW/SE, 1880' FEL 7 1980' FSL

SECTION 11, T15S-R37E LEA COUNTY, NEW MEXICO

SPUD DATE: 7-6-52

WELL TYPE: OIL WELL

SURFACE CASING

CASING: 13 3/8" @ 371' HOLE SIZE: 17 1/2" CEMENT: 350 SX. T.O.C.: SURFACE

INTERMEDIATE CASING

CASING: 9 5/8" @ 4765' HOLE SIZE: 12 1/4' CEMENT: 1800 SX.

T.O.C.: SURFACE (CALC.)

PRODUCTION CASING:

CASING: 5 1/2" @ 9316' HOLE SIZE: 7 7/8" CEMENT: 1100 SX.

T.O.C.: 3324 (CALC.)

COMPLETION:

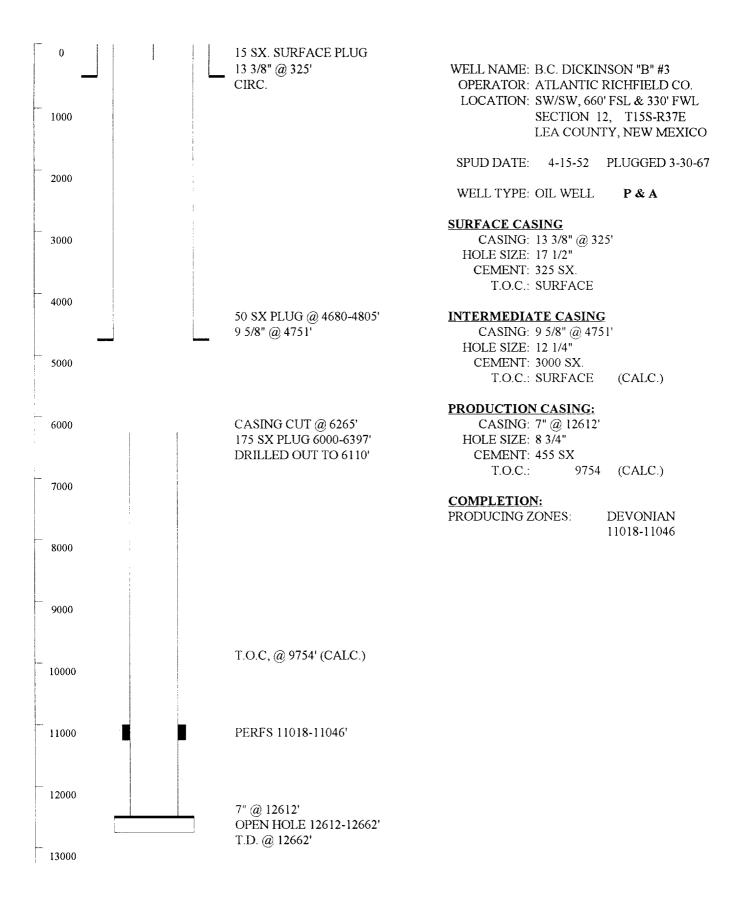
PRODUCING ZONES: WOLFCAMP 9064-9207'

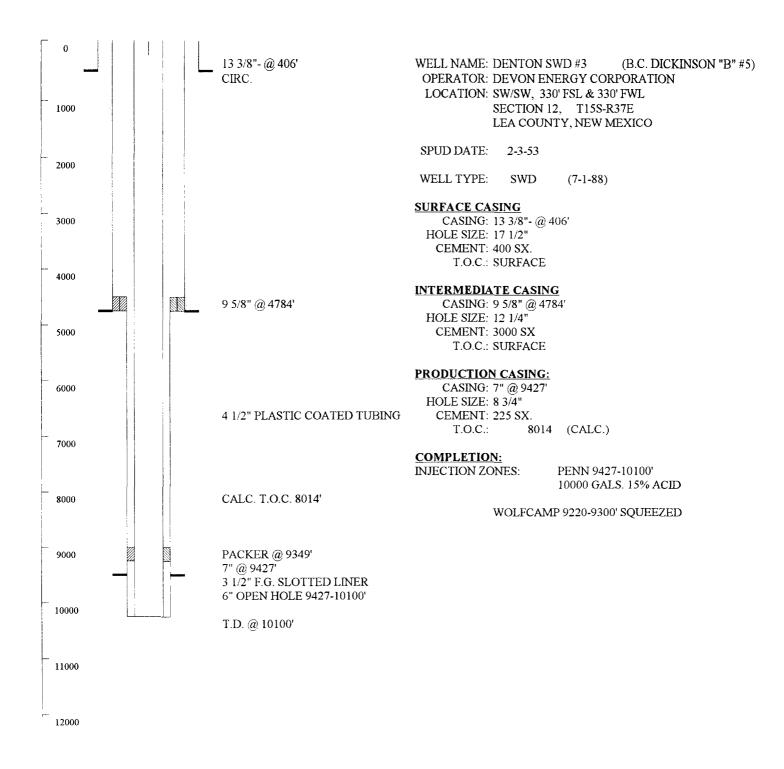
9750 GALS. ACID

1000		20 SX SURFACE PLUG 13 3/8" - 48 #/FT. @ 325' CIRC.		ATLANTIC SW/SW, 193 SECTION 1	NSON "B" #1 RICHFIELD CO. 80' FSL & 660' FWL 2, T15S-R37E ITY, NEW MEXICO
2000		PLUGGED W' 9#/GAL. MUD	SPUD DATE: WELL TYPE:		PLUGGED 1-27-72 P & A
3000			SURFACE CA CASING: HOLE SIZE: CEMENT:	ASING 13 3/8" - 48 17 1/2" 450 SX.	#/FT. @ 325'
4000	·		INTERMEDIA		
5000		9 5/8" - 36 & 40 #/FT. @ 4607' 40 SX @ CASING SHOE CUT CASING @ 5015' 40 SX "H" -HALF IN & HALF OUT	HOLE SIZE: CEMENT:	12 1/4"	& 40 #/FT. @ 4607'
6000		TEMP. SURVEY T.O.C. @ 6275'	HOLE SIZE: CEMENT:	7" @ 9416' 8 3/4" 750 SX.	
7000			T.O.C.:		RVEY T.O.C. @ 6275'
8000			PRODUCING 2		WOLFCAMP 9395-9414' 3000 GALS. ACID 9268-9316' 2500 GALS. ACID 5000 GALS. ACID 10000 GALS. ACID
9000		CIBP @ 9230 W/ 20' CEMENT PERFS. 9395-9414' 9268-9316'			10000 GALS. ACID
10000		7" @ 9416' T.D. @ 9416'			

20 SX SURFACE PLUG 13 3/8"-48 #/FT. @ 307' WELL NAME: B.C DICKINSON "B" #2 CIRC. OPERATOR: ATLANTIC RICHFIELD CO. LOCATION: NW/NW, 660' FNL & 660' FWL SECTION 12, T15S-R37E 1000 LEA COUNTY, NEW MEXICO 9 #/GAL. MUD IN HOLE SPUD DATE: 2-7-51 PLUGGED 6-30-70 2000 WELL TYPE: OIL WELL P & A **SURFACE CASING** CASING: 13 3/8"-48 #/FT. @ 307' 3000 HOLE SIZE: 17 1/2" CEMENT: 375 SX. T.O.C.: SURFACE 4000 50 SX PLUG 4670-4810' **INTERMEDIATE CASING** 9 5/8"- 36 & 40 #/FT. @ 4725' CASING: 9 5/8"- 36 & 40 #/FT. @ 4725' CASING CUT @ 4788' HOLE SIZE: 12 1/4" 5000 10 SX @ STUB CEMENT: 3000 SX. T.O.C.: SURFACE (CALC.) **PRODUCTION CASING:** CASING: 7"- 23 & 26 #/FT. @ 9507' 6000 HOLE SIZE: 8 3/4" CEMENT: 600 SX. T.O.C.: +/- 5000' 7000 **COMPLETION:** PRODUCING ZONES: WOLF CAMP 9345-9363' 10000 GALS. ACID 8000 40 SX. 9180-9380' 9000 PERFS 9345-9363' & 9371-9403' 7"- 23 & 26 #/FT. @ 9507' T.D. @ 9522' 10000 11000 12000

9371-9403'





1000	10 SX. @ SURFACE 35 SX. @ 401' 13 3/8"-48, 54.5 & 68 #/FT. @ 399' CIRC.	WELL NAME: DICKINSON TRUST #1 OPERATOR: BETTIS-BOYLE-STOVALL LOCATION: NW/SE, 1980' FSL & 2310' FEL SECTION 12, T15S-R37E LEA COUNTY, NEW MEXICO
2000	35 SX. @ 2145'	SPUD DATE: 7-11-87 WELL TYPE: D & A 9-8-87
3000		SURFACE CASING CASING: 13 3/8"-48, 54.5 & 68 #/FT. @ 399' HOLE SIZE: 17 1/2" CEMENT: 450 SX T.O.C.: SURFACE
4000		INTERMEDIATE CASING
5000	35 SX. @ 4766' 8 5/8"- 24 & 32 #/FT. @ 4771' CIRC.	CASING: 8 5/8"- 24 & 32 #/FT. @ 4771' HOLE SIZE: 11" CEMENT: 2150 SX T.O.C.: SURFACE
6000		PRODUCTION INTERVAL: T.D.: 13000' HOLE SIZE: 7 7/8"
7000	35 SX. @ 7511'	COMPLETION: TESTED DEVONIAN - HIGH WATER CUT
8000		
9000	35 SX. @ 9352'	
10000	35 SX. @ 10138'	
11000	35 SX. @ 11382'	
12000	35 SX. @ 12568'	
13000	T.D. @ 13000'	

DENTON SWD #4 (B.C. DICKINSON "B" #4) 330' FWL & 2310' FNL SECTION 12-T15S-R37E LEA COUNTY, NEW MEXICO

VII. PROPOSED OPERATION:

VOLUME OF FLUID TO BE INJECTED: AVERAGE DAILY RATE 10,000 BWPD

MAXIMUM DAILY RATE 15,000 BWPD

SYSTEM TYPE: CLOSED

INJECTION PRESSURE: AVERAGE INJECTION PRESSURE 1000 PSI

MAXIMUM INJECTION PRESSURE 1500 PSI

WATER SOURCE: PRODUCED DEVONIAN AND WOLFCAMP WATER FROM WELLS IN THE

DENTON FIELD

PRODUCED WATER ANALYSIS:	STATE "T" #8 WOLFCAMP		STATE "T" #3 DEVONIAN
TOTAL HARDNESS	286.00	me/l	246.00 me/l
CALCIUM	4,200.00	mg/l	4,640.00 mg/l
MAGNESIUM	927.20	mg/l	170.00 mg/l
IRON	5.00	mg/l	15.00 mg/l
SODIUM	37,418.47	mg/l	23,738.53 mg/l
CHLORIDE	66,000.00	mg/l	44,000.00 mg/l
SULFATE	2,050.00	mg/l	1,750.00 mg/l
CARBONATE	0.00	mg/l	0.00 mg/l
BICARBONATE	689.30	mg/l	115.90 mg/l
CARBON DIOXIDE	71.30	mg/l	35.60 mg/l
HYDROGEN SULFIDE	250.00	mg/l	100.00 mg/l
рН	6.90		6.60
SPECIFIC GRAVITY	1.05		1.05
TDS	111,290.00	PPM	74,448.10 PPM

DISPOSAL ZONE WATER ANALYSIS IS NOT AVAILABLE

DENTON SWD #4 (B.C. DICKINSON "B" #4) 330' FWL & 2310' FNL SECTION 12-T15S-R37E LEA COUNTY, NEW MEXICO

VIII. GEOLOGICAL DATA:

GEOLOGICAL NAME: PENNSYLVANIAN

LITHOLOGICAL DETAIL: PRIMARILY DOLOMITE AND LIMESTONE INTERBEDDED WITH

SMALL AMOUNTS OF SHALE.

FORMATION TOP: 9500'

THICKNESS: 1000'

GEOLOGICAL DATA OF DRINKING

WATER ZONE: FRESH WATER IN THE AREA IS SHALLOW SURFACE WATER

USED FOR DOMESTIC PURPOSES AND LIVESTOCK WATERING.

DENTON SWD #4 (B.C. DICKINSON "B" #4)
330' FWL & 2310' FNL
SECTION 12-T15S-R37E
LEA COUNTY, NEW MEXICO

IX. PROPOSED STIMULATION PROGRAM:

ACID STIMULATION: THE INJECTION ZONE WILL BE ACIDIZED WITH 10,000 GALLONS OF 20%

HCL NE ACID. ROCK SALT WILL BE USED AS A DIVERTING AGENT.

X. LOGGING AND TEST DATA: THIS WELL WAS DRILLED IN 1952. LOGS AND TEST DATA HAVE BEEN

SUBMITTED TO THE COMMISSION.

DENTON SWD #4 (B.C. DICKINSON "B" #4) 330' FWL & 2310' FNL SECTION 12-T15S-R37E LEA COUNTY, NEW MEXICO

XI. ANALYSIS OF FRESH WATER WELLS:

MR. JOHNNY HERNANDEZ AT THE NEW MEXICO STATE ENGINEERS DISTRICT II OFFICE PROVIDED THE FOLLOWING DATA ON FRESH WATER WELLS IN THE AREA. FRESH WATER IN THE AREA IS SHALLOW SURFACE WATER USED FOR DOMESTIC PURPOSES AND LIVESTOCK WATERING.

OWNER	DRILLED	LOCATION	DEPTH, FT. SAMPLED	CHLORIDES
J.M. DENTON	10-26-79	SECTION 11 - T15S-R37E	80	32
J.M. DENTON	10-3-84	SECTION 11 - T15S-R37E	80 11/84	41
DICKINSON RANCH	12-7-79	SECTION 12 - T15S-R37E	120	16
DICKINSON RANCH	10-3-84	SECTION 12 - T15S-R37E	120 11/84	46
DICKINSON RANCH	7-9-90	SECTION 12 - T15S-R37E	120 11/90	148

DENTON SWD #4 (B.C. DICKINSON "B" #4) 330' FWL & 2310' FNL SECTION 12-T15S-R37E LEA COUNTY, NEW MEXICO

XII. COMMUNICATION WITH SOURCES OF DRINKING WATER:

AFTER EXAMINING ALL AVAILABLE GEOLOGICAL AND ENGINEERING DATA, WE FIND NO EVIDENCE OF OPEN FAULTS OR ANY OTHER HYDROLOGIC CONNECTION BETWEEN THE INJECTION ZONE AND ANY UNDERGROUND SOURCE OF DRINKING WATER.

AFFIDAVIT OF POBLICATION

State of New Mexico, County of Lea.

I, Kathi Bearden
Publisher
of the Hobbs Daily News-Sun, a daily newspaper published at Hobbs, New Mexico, do sclemnly 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
l. weeks. Eeginning with the issue dated
July 16 1996 and ending with the issue dates
<u>July 16</u> 1998
Halisher Sworn and subscribed to before
me this day of
Notary Public.
My Commission expires August 29, 1929

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.

(Seal)

LEGAL NOTICE July 16, 1996 PUBLIC NOTICE APPLICATION FOR WATER DISPOSAL

Notice is horoby given that Devon Energy Corporation (Nevada) is applying to the New Mexico Oil Conservation Division for administrative approval and authority to inject salt water into the B.C. Dickinson "8" #4 (Denton SWD #4) located 2310' FNL and 330' FWL, Section 12-T15S-F137!", Lea County, New Maxima.

The purpose of the water injection well is to dispose of saltwater produced from the Denton Wollcamp and Denton Devunian fields as currently designated by the Oil Conservation Division and as may be extended by additional drilling.

Water will be injected into the Pennsylvanian formation at an interval between 9,525' to 10,500'. The maximum injection rate and pressure are expected to be 15,000 BWPD and 1500 psi, respectfully.

Any Interested parties may file objections or requests for hearing within 15 days to the Oil Conservation Division, 2040 South Pachaco St., Santa Pe, New Muxico 87505-5472.

By: Emio Buttross District Engineer Devon Energy Corporation (Nevada) 20 North Broadway, Sulle 1500 Oklahoma City, Oklahoma 73102 404-552-4509

14678

FORM C-108 ATTACHMENT XIII, NOTICE

DEVON ENERGY CORPORATION

DENTON SWD #4 (D.C. DICKINSON "B" #4) 330' FWL & 2310' FNL SECTION 12-T15S-R37E LEA COUNTY, NEW MEXICO

A COPY OF THIS APPLICATION HAS BEEN FURNISHED BY CERTIFIED MAIL TO THE SURFACE OWNER AND TO EACH LEASE HOLD OPERATOR WITHIN ONE-HALF MILE OF THE PROPOSED SALT WATER DISPOSAL WELL.

AS FOLLOWS:

SURFACE OWNER: MR. DARR ANGELL

P.O. BOX 190 LOVINGTON, NM

OFFSET OPERATORS: MARATHON OIL COMPANY

P.O. BOX 552

MIDLAND, TX 79702

FASKEN OIL & RANCH INTERESTS

BARBRA FASKEN

303 W. WALL AVE., SUITE 1900 MIDLAND, TX 79701-5116

PHILLIPS PETROLEUM 4001 PEMBROOK ODESSA, TX 79762

UMC PETROLEUM CORPORATION 1201 LOUISIANA, SUITE 1400 HOUSTON, TX 77002-5603

CODY ENERGY, INC.

7555 EAST HAMPDEN AVE., SUITE 600

DENVER, CO 80231



Telephone 405/235-3611 FAX 405/552-4550

July 25, 1996

Certified Mail No. Z 737 086 293

MR. DARR ANGELL
P.O. BOX 190
LOVINGTON, NM 88260-0190

RE:

Proposed Denton SWD #4

Section 12-T15S-R37E Lea County, New Mexico

Gentlemen:

Concerning the referenced, enclosed please find a copy of our Application for Authorization to Inject.

Please direct inquiries concerning this matter to Ernie Buttross, Jr., at (405) 235-3611, X4509.

Yours truly,

DEVON ENERGY CORPORATION (NEVADA)

Candace R. Straham

Ms. Candace R. Graham

Engineering Tech

/cg

Enclosures

copy: NMOCD, Hobbs

NMOCD, Santa Fe

Telephone 405/235-3611 FAX 405/552-4550

July 25, 1996

Certified Mail No. Z 737 086 294

MARATHON OIL CO. P.O. BOX 552 MIDLAND, TX 79702

RE:

Proposed Denton SWD #4

Section 12-T15S-R37E Lea County, New Mexico

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July 25, 1996

Certified Mail No. Z 737 086 295

FASKEN OIL & RANCH INTERESTS BARBRA FASKEN 303 W. WALL AVE., STE 1900 MIDLAND, TX 79701-5116

RE:

Proposed Denton SWD #4 Section 12-T15S-R37E Lea County, New Mexico

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July 25, 1996

Certified Mail No. Z 737 086 297

UMC PETROLEUM CORPORATION 1201 LOUISIANA, STE 1400 HOUSTON, TX 77002-5603

RE:

Proposed Denton SWD #4

Section 12-T15S-R37E Lea County, New Mexico

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NMOCD, Santa Fe



Telephone 405/235-3611 FAX 405/552-4550

July 25, 1996

Certified Mail No. Z 737 086 298

CODY ENERGY, INC. **7555 E. HAMPDEN AVE., STE 600** DENVER, CO 80231

RE:

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Section 12-T15S-R37E Lea County, New Mexico

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