23526956

SWD

9/1/00

788

BASS ENTERPRISES PRODUCTION CO.

6 DESTA DRIVE, SUITE 3700 P.O. BOX 2760 MIDLAND, TEXAS 79702

AUG 17

July 27, 2000

(915) 683-2277

FAX (915) 687-0329

Re:

Notice of Application for

Authorization to Convert to SWD

Hudson Federal #1

Eddy County, New Mexico

File: 400-WF: 007@HF#1.SWD

Lori Wrotenberry Oil Conservation Division 2040 Pacheco Street Santa Fe, New Mexico 87505

Dear Ms. Wrotenberry:

Enclosed please find Bass Enterprises Production Co.'s <u>Application for Authorization to Convert</u> for disposal purposes only into the Hudson Federal #1, located in Section 1, T23S-R30E, Eddy County, New Mexico.

If additional information is required, please contact Kent Adams at the letterhead address.

Sincerely

John R. Smitherman

Division Production Manager

JRS:tlw Attachment

. ---

State of New Mexico	Oil Conservation Division	Form C-108
Energy, Minerals and Natural	2040 Pacheco St	Revised 7-1-81
Resources Department	Santa Fe, NM 87505	

APPLICATION FOR AUTHORIZATION TO INJECTION

1.	FURFUSE:	Secondary Recovery	Pressure Maintenance	XDisposal	Storage				
	Application qualifi	es for administrative approval?	Yes	No					
II.	OPERATOR:	Bass Er	nterprises Production Co.						
	ADDRESS: P. O. Box 2760, Midland, Texas 79702-2760								
	CONTACT PART	TY: Kent Ad	lams	PHONE:	(915) 683-2277				
III.	WELL DATA:	Complete the data required be attached if necessary.	on the reverse side of this form for e	ach well processed for injection	. Additional sheets ma				
IV.	Is this an expansi	on of an existing project:	YesXNo						
V.		at identifies all wells and leases wection well. This circle identifies the	vithin two miles of any proposed inject e well's area of review.	ion well with a one-half mile rad	dius circle drawn around				
VI.	Attach a tabulation include a descrip illustrating all plug	tion of each well's type, construc	ecord within the area of review which tion, date drilled, location, depth, reco	penetrate the proposed injection ord of completion, and a schem	n zone. Such data shal latic of any plugged wel				
VII.	Attach data on the	e proposed operation, including:							
	2. Whe 3. Prop 4. Sour wate 5. If in	ether the system is open or closed; losed average and maximum injection roes and an appropriate analysis of the arrivers of the disposal purposes in the disposal purposes in the disposal zone	ate and volume of fluids to be injected; on pressure; of injection fluid and compatibility with nto a zone not productive of oil or ga e formation water (may be measured of	as at or within one mile of the	proposed well, attach a				
É*VIII.	geologic name,	and depth to bottom of all und 10,000 mg/1 or less) overlying t	zone including appropriate lithologic of lerground sources of drinking water the proposed injection zone as well as	(aquifers containing waters wit	th total dissolved solids				
IX.	Describe the prop	osed stimulation program, if any.							
*X.	Attach appropriate	e logging and test data on the well.	(If well logs have been filed with the Div	ision, they need not be resubmitte	ed).				
*XI.	Attach a chemical disposal well show	al analysis of fresh water from twing location of wells and dates san	wo or more fresh water wells (if avail nples were taken.	able and producing) within one	mile of any injection o				
XII.	Applicants for disevidence of open	sposal wells must make an affirm faults or any other hydrologic conne	native statement that they have examir action between the disposal zone and an	ned available geologic and engir y underground source of drinking	neering data and find no gwater.				
XIII.	Applicants must o	complete the "Proof of Notice" section	on the reverse side of this form.						
XIV.	Certification: I he	reby certify that the information sub	omitted with this application is true and c	orrect to the best of my knowledg	e and belief.				
NAME	<u></u>	Tami Wilber	TITL	.E: Production Cle	erk				
		Λ_{α} , Λ_{α}	DATE:	7/26/00					

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 with 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

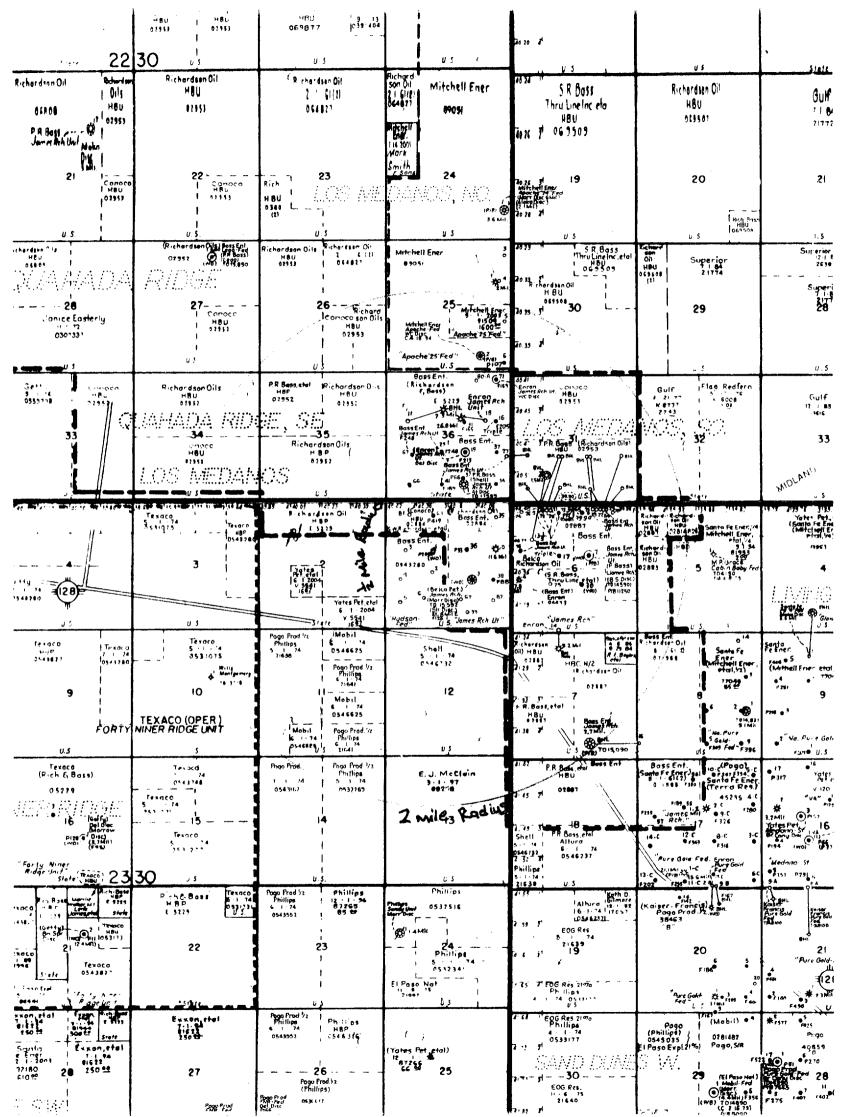
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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, NM 87504-2088 within 15 days.

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

OFFSET WELL DATA SECTION VI, FORM C-108 ATTACHMENT "D"



PROPOSED OPERATION DATA

Section VII, Form C-108 Attachment "E"

 Proposed daily rate and volume of fluids to be injected

a. average daily rate of injection:

2000 bbls

b. maximum daily rate of injection:

3000 bbls

2. Type of system:

System will be closed.

3. Proposed injection pressure:

a. Average:

600

b. Maximum:

800

4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than re-injected produced water.

Produced water from Atoka and Delaware formations will be injected.

Chemical analysis attached hereto as Attachment "E1"

5. Chemical analysis of the disposal zone formation water.

Not Available

GEOLOGICAL DATA

Section VIII, Form C-108 Attachment F

Lithologic Detail: Sand, Shale, Lime sequences

Geological name: Bell Canyon/Upper Cherry Canyon Delaware Mountain Group

Thickness: 785'

Depth: 4040-4825'

The Rustler formation is a known source of fresh water throughout this geographic area. Average depth of Rustler is 200-400 feet. No sources of fresh water are known to exist below the proposed disposal zone.

PROPOSED STIMULATION PROGRAM

Section IX, Form C-108 Attachment "G"

Intervals will be perforated with 4 JSPF and treated with approximately 16,000 gallons 15% NEFE acid. If necessary to establish injection, a small fracture treatment will be pumped.

LOGGING AND TEST DATA

Section X, Form C-108 Attachment "H"

Logs already filed with Division.

CHEMICAL ANALYSIS OF FRESH WATER

Section XI, Form C-108 Attachment "I"

 Mills Ranch Fresh Water Supply Well Section 6, T23S-R31E Water Analysis Attached

Martin Water Laboratories, Inc. P. O. BOX 1468 WATER CONSULTANTS SINCE 1953 709 W. INCIAN MONAHANS, TEXAS 79756 BACTERIAL AND CHEMICAL ANALYSES MICLAND, TEXAS 7 PH. 943-3234 OR 563-1040 PHONE 683-452 March 4, 1981 Mr. Jack Gevecker Bass Enterprises Production Co. P. O. Box 2760 Midland, TX Subject: Recommendations relative to analysis #38114 (3-4-81), Delaware and Atoka waters in Eddy Co., New Mexico. Dear Mr. Gevecker: The attached analyses were carafully studied for possible incompatibilities between the Atoka and Delaware. It is our understanding that the objective is to inject the Atoka water into the Delaware interval, which is much less significant than attempting to combine the waters on the surface. The only incompatibility encountered is that the Atoka water is carrying a soluble iron and the Delaware water from Big Edd; Unit #49 contains sulfide, therefore resulting in an iron sulfide precipitation. However, the water from well #49 is considered unusual and normally we would expect a "sweet" water from the Delaware such as from well #47. However, we question that this incompatibility is sufficient to prevent the injection of the Atoka water into the Delaware interval. Therefore, in general, we feel that the incompatibility suggested above is not sufficient to prevent the mixing of these two waters by injecting Atoka into the Delaware interval. We have encountered no evidence of any other condition of concern. Yours very truly,

WCM/sb

Attachment El

DRAFT To: Mr. Kent Adams Bass Enterprises Production Co. Lease: **COMPANY FIELD** County: SURVEY SEC BLK Raw water - taken from Mills Water Station. No. 1 No. 2 No. 3 No. 4 **REMARKS:** 1.0032 Specific Gravity @ 60°F. pH When Sampled pH When Received 7.35 Bicarbonate, as HC03 178 Supersaturation, as CaC03 Undersaturation, as CaC03 2,000 Total Hardness, as CaC03 640 Calcium, as Ca 97 Magnesium, as Mg Sodium and/or Potassium 248 1,840 Sulfate, as SO4 341 Chloride, as Cl

Iron, as Fe Barium, as Ba Turbidity Color, as Pt

Total Solids, Calc. Temperature, °F. Carbon Dioxide, Calc. Dissolved Oxygen

Hydrogen Sulfide

Suspended Oil Filtrable Solids, mg/l Volume Filtered, ml

Resistivity, ohms/m @ 77°F.

Laboratory No.

Sample Received 7-25-00

Results Reported

Mills Water Station

Results Reported As Milligrams Per Liter

Additional Determinations & Remarks

We are not familiar with the specific objectives involved concerning this analysis, but please contact us if we can be of any assistance in regard to interpretation of results.

0.08

3,345

0.0

2.30

AFFIRMATIVE STATEMENT

Section XII, Form C-108 Attachment "J"

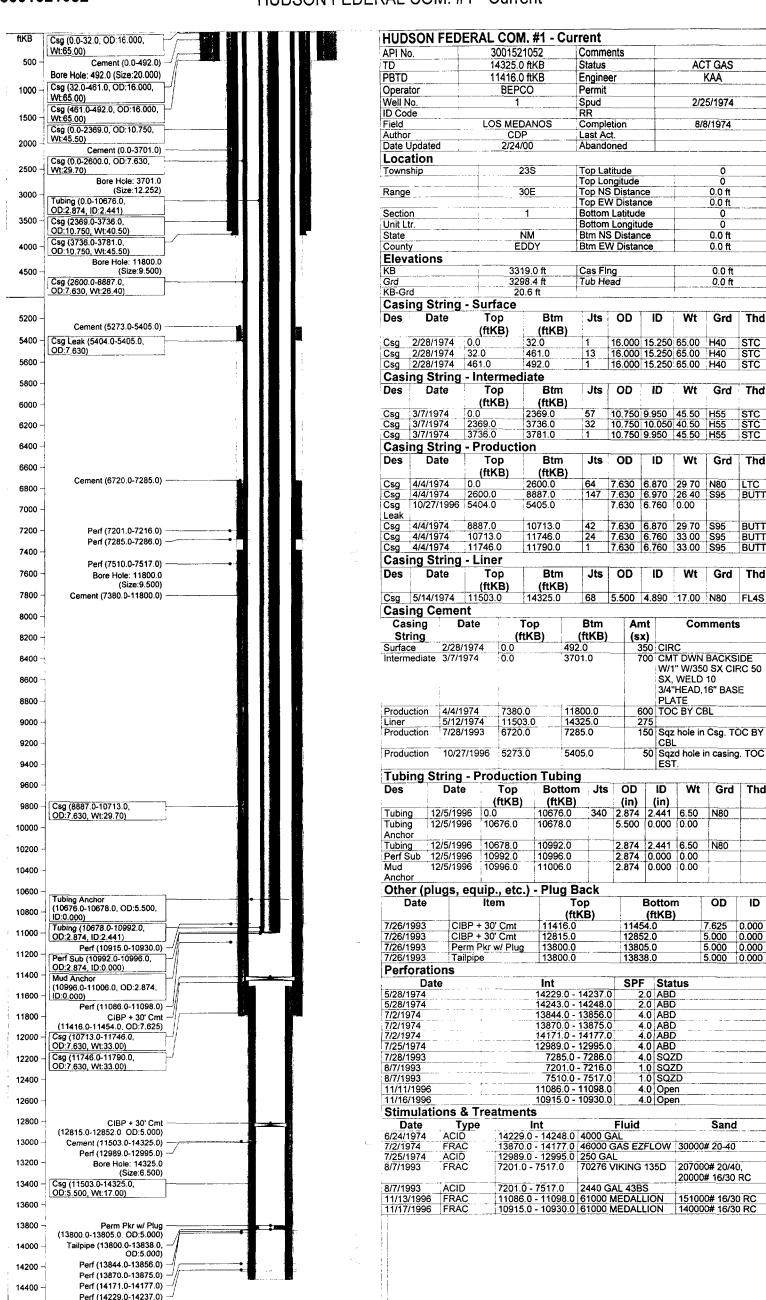
Applicant hereby affirms that he has examined the available geologic and engineering data and finds no evidence of open faults or other hydrologic connection between the disposal zone and any underground source of drinking water.

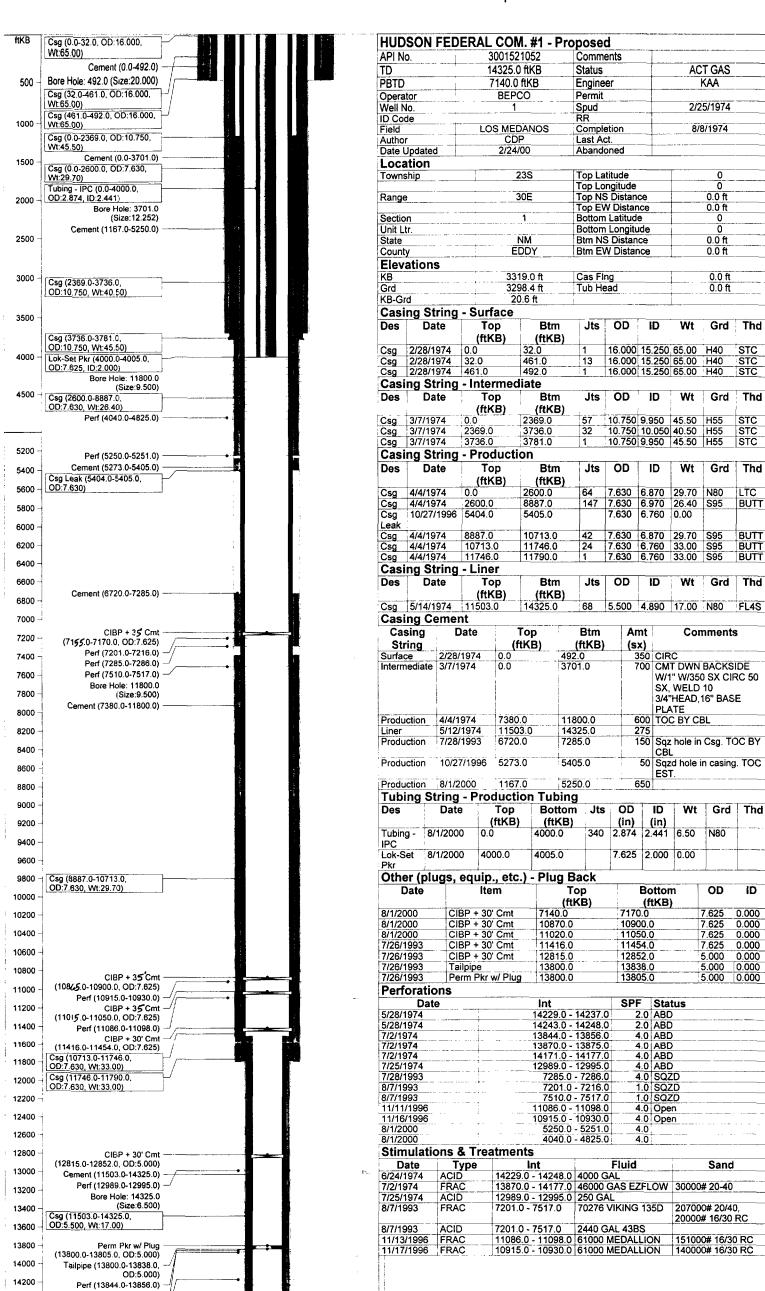
INJECTION WELL DATA SHEET

LEASE Hudson Federal	1 23S 30E SECTION TOWNSHIP RANGE	Well Construction Data		Cemented with 350 sx.	feet determined by <u>circ</u>	2		" Cemented with 700 sx.	feet determined by tag w/1" tbg & circ	1/4 "		to be cemented with 650 sx.	feet determined by <u>CBL (to be run)</u>	<u>'2</u> "	14,235'		feet to 4825 feet
Bass Enterprises Production Co.	FOOTAGE LOCATION	Mei	Surface Casing	Size 16	TOC Surface	Hole Size 20	<u>Intermediate Casing</u>	Size 10-3/4	TOC Surface	Hole Size 12-1/4	Long String	Size 7-5/8	TOC 1167' (planned)	Hole Size 9-1/2	Total Depth 14.2	<u>Injection Interval</u>	4040 feet to 4825
OPERATOR: Bass Enter	WELL NO.	Schematic	SEE ATTACHED														

INJECTION WELL DATA SHEET

Tubin	Tubing Size	2-7/8	" lined with	plastic coating (type of Internal coating)	set in a
į	Baker Mode	Baker Model A-3 Lok Set	packer at	3850	feet.
Other	type of tubing	Other type of tubing/casing seal if applicable	applicable		
Other Data	Data				
~ .	Is this a new	ls this a new well drilled for injection?	r injection?	Yes	oN X
	If no, for wh	at purpose was	If no, for what purpose was the well originally drilled?		Oil Production
5	Name of the	Name of the Injection Formation.	nation.	Delaware	
က်	Name of Fie	Name of Field or Pool (if applicable)	pplicable)	Quahada Ridge	
4.	Has the wel give pluggin	l ever been pei ig detail, i.e., s	Has the well ever been perforated in any other zone(s)? L give plugging detail, i.e., sacks of cement or plug(s) used.	ist all su	uch perforated intervals and See Attached Sketch
	Morrow		44-14,248', Perr	13,844-14,248', Perm Pkr @ 13,800' w/ blanking plug	lug
	Atoka		89-12,995', CIBI	12,989-12,995', CIBP @ 12,815' w/ 30' cement	
	Dela	Delaware 7,20	1-7,517', squee:	7,201-7,517', squeezed w/ CIBP @ 7170' w/ 35' cement	ment
	Wolf	Wolfcamp 11,0	86-11098', CIBF	11,086-11098', CIBP @ 11,000 w/ 35' cement	
	Bone	Bone Spring 10,9	15-10,930, CIBF	10,915-10,930, CIBP @ 10,900' w/ 30' cement	
5.		mes and depth	s of any over or	Give the names and depths of any over or underlying oil or gas zones (pools) in this area	ools) in this area.
	Los	Los Medanos (Bone Spring)	e Spring)	10,900′	
	Los	Los Medanos (Wolfcamp)	fcamp)	11,100′	
	Los	Los Medanos (Atoka)	(a)	13,000′	
	Los	Los Medanos (Morrow)	.ow)	13,850′	





Form 3160-5 (November 1994)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM	APPROVED
------	----------

Budget Bureau No. 1004-0135 Expires July 31, 1996

5.	Loaso	Sorial	No.	

SUNDRY NOTICES	AND REPORTS ON	WELLS		NMNM 054328	30 (A)
Do not use this form for papers abandoned well. Use Form				6. If Indian, Al	lottee or Tribe Name
SUBMIT IN TRIPLICATE -	Other instructions on	reverse side		7. If Unit or Ca	A/Agreement, Name and/or No.
1. Type of Well Oil Gas X Other 2. Name of Operator Bass Enterprises Production Co.		Conve	ert to SWD		eral Com #1
3a. Address		. Phone No. (include area	code)	9. API Well No 30-015-210	
P.O. Box 2760, Midland, TX 79702-2 4. Location of Well (Footage, Sec., T. R., M., or Survey Description)		15) 683-2277		10. Field and P	ool, or Exploratory Area
1830' FNL & 1980' FWL Section 1, T23S-R30E		OPY		11. County or I	
12. CHECK APPROPRI	ATE BOX(ES) TO IND	NATURE OF NO	TICE, REPORT,	OR OTHER DA	TA
TYPE OF SUBMISSION		TYP	E OF ACTION		
Subsequent Report Final Abandonment Notice 13. Describe Proposed or Coommpleted Operation (clearly lift the proposal is to deepen directionally or recompact the Bond under which the work will be perfollowing completion of the involved operations. If testing has been completed. Final Abandonment Number of the final site is ready for final inspection. Bass Enterprises Production Co. read Attachments: Application for authorization	elete horizontally, give subsurformed or provide the Bond the operation results in a notices shall be filed only a l.) requests authoriza	rface locations and measure No. on file with BLM/I nultiple completion or recepter all requirements, incl	Recomplet Recomplet Temporari Water Disp g date of any proceed and true vertical Required sumpletion in a net- uding reclamation	ly Abandon posal posed work and cal depths of all beequent reports switches with the control of the control o	pertinent markers and zones, shall be filed within 30 days in 3160-4 shall be filed once
14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Tami Wilber		Title Produc	tion Clerk		
THIS	S SPACE FOR FEDER		ICE USE		
Approved by		Title		Da	te
Conditions of approval, if any, are attached. Approval of certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations thereon	those rights in the subject				

Affidavit of Publication

State of New Mexico, County of Eddy, ss.

	Amy McKay	
一种学家	being first duly sworn, on oath says:	The state of the s
Survey C	- 45	$(x_i - x_i^{\alpha_i}) = e^{\alpha_i} - e^{\alpha_i}$
Aş a	That <u>she</u> is <u>Busi</u>	
	of the Carlsbad Current-Argus, a n-daily at the City of Carlsbad, in said c	
	of New Mexico and of general paid circu	
Jist g	ty; that the same is a duly qualified n	ewspaper under the
	laws of the State wherein legal notices	
	may be published; that the printed no was published in the regular and en	
1917 1917	newspaper and not in supplement the	
ંક્રેક ક્રંત્	follows, to wit:	tage the same and a second second
	_August 4	2000
	August 5	
	August 6	
		,
tive		
•	That the cost of publication is \$	
v	and that payment thereof has been ma	ade and will be
	assessed as court costs.	$\mathcal{O}\mathcal{A}\mathcal{U}_{\alpha}$.
Ans.	Milly	HINNY
	Subscribed and swo	rn to before me this
	day of My	t. 2000,
	Honain	le Moporte
	My commission expires5/	⁷ 25/03
	Try Commission Capites	ary Public

August 4, 5, 6, 2000

NOTICE OF APPLICA-TION FOR SALT WATER DICHOSAL WELL PERMIT

Bass Enterprises Production Company has applied to the New Mexico Oil Conservation division for a permit to dispose of produced salt water of error oil and gas veste into porous format per ductive of oil or gas.

The applicant proposes to dispose of produced water or other oil and gas waste into the Hudson Federal #1 (Delaware Formation). The proposed disposal well is located 35 miles southeast of C a r l s b a d d., New Mexico in Section 1, T23S-R30E, Eddy County, New Mexico. The produced salt water will be disposed at a subsurface depth of 4040-4825.

Any questions concerning this application should be directed to John Smitherman, Division Production Manager, Bass Enterprises Production Co.. P.O. Box 2760, Midland, Texas 79702-2760.

Interested parties must file objections or requests for hearing with the Oil Conservation Division, 2040 Pacheco Sireer, Santa Fe, New Mexico 87505 within 15 days.