

Mark K. Mosley
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

November 25, 1981

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

Attention Mr. R. L. Stamets

Gentlemen:



Convert Queen "B" Well No. 36 to Salt Water Disposal

Conoco Inc respectfully requests authority to convert the Baish "B" Well No. 36 from a shut-in oil well in the Wolfcamp Formation, with no potential for producing, to an active salt water disposal well in the lower Wolfcamp Formation. The subject well is located 554' FNL & 554' FWL of Section 28, T-17S, R-32E, Lea County, New Mexico. This conversion is necessitated by the high cost of trucking water from the MCA Unit at times when injection wells are "back-flowed" or when other conditions result in the accumulation of surplus water from the MCA Unit Waterflood operations under which the presence of oxygen in the water make it unfit for re-injection into the system. The water to be disposed into Well No. 36 will be of higher quality than the Wolfcamp Formation water, as shown by the attached water analyses. There are no known sources of underground drinking water in the area of this application.

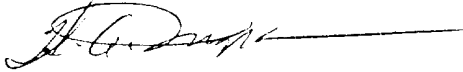
The average daily injection rate will be less than 500 BWPD with a maximum of 1000 BWPD. It is anticipated that initially the water will be injected on a vacuum, however it is requested that a maximum pressure of 2000# be approved, which is below the accepted .2# per foot of depth. Injection will be confined to the lower Wolfcamp through perfs 9965' - 10,040'. The nearest producing well in the Wolfcamp Formation is more than a mile to the northeast. The six producing Baish Wolfcamp wells (see Exhibit) produce from the upper Wolfcamp at depths from 9732' to 9896' which is about 69' high structurally to the proposed disposal well. No other wells within 1/2 mile radius of Baish B No. 36 have penetrated the Wolfcamp Formation.

Any existing perforations will be squeezed and 5 1/2" casing will be pressure tested and re-squeezed if necessary. After re-perforating desired injection intervals 9965' - 10,040', well will be acidized with 3000 gallons of 15% acid in three stages using 400 gallons of temporary blocking agent consisting of 400# rock salt, 400# benzoic acid flakes, and 20# guar gum gel mixed in 400 gallons of 10#/gallons brine at maximum pressure of 2000 psi.

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Administrative approval is requested as provided by Order No. R-6702, Rule 701, Paragraph D. If such approval cannot be granted, it is respectfully requested that this case be set for Examiner Hearing on the earliest available docket.

Very truly yours,



for M.K. Mosley

HAI:rej
CC:
Cities Service Oil Company
P.O. Box 1919
Midland, Texas 79701

PED Oil Corporation
P.O. Drawer 3547
Midland, Texas 79702

Kirby Exploration Company
Box 1745
1717 St. James Street
Houston, Texas 77001

Tom Kellahin - Santa Fe
Vic Lyon - Houston



Mark K. Mosley
Division Manager
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Hobbs Division
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Conoco Inc.
P.O. Box 460
726 E. Michigan
Hobbs, NM 88240
(505) 393-4141

December 1, 1981

PED Oil Corporation
P.O. Drawer 3547
Midland, Texas 79702

ATTENTION: Mr. Rodger Edge

Gentlemen:

Convert to SWD, Queen "B" Well No. 36, Section 28, T-17S, R-32E,
Lea County, New Mexico

Conoco Inc. is making application to the New Mexico Oil Conservation Division to convert to saltwater disposal its Queen "B" Well No. 36, located 554' FN & WL of Section 28, T-17S, R-32E, Lea County, N.M. We intend to dispose of water into the lower Wolfcamp Formation. Your company operates a well almost two miles away, which apparently produced from the lower Wolfcamp and is shown on the attached plat. Also attached for your information are details concerning our application, including NMOCD Form C-108, and attachments.

We would appreciate your waiver of any objections to our proposed conversion by signing below and returning one copy of this letter ballot in the enclosed envelope, to the attention of Mr. H. A. Ingram.

Very truly yours,

M. K. Mosley
by HAI:rej

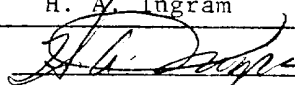
Approved this 7 day of Dec, 1981

PED Oil Corporation

By

Rodger P. Edge

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: Conoco Inc.
Address: P.O. Box 460, Hobbs, New Mexico 88240
Contact party: H. A. Ingram Phone: (505)393-4141
- 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? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.
- V. 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:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
 2. Whether the system is open or closed;
 3. Proposed average and maximum injection pressure;
 4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
 5. 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.
- * 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 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: H. A. Ingram Title Conservation Coordinator
Signature:  Date: October 30, 1981
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

CC: NMOCD - Hobbs

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division 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, 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.

Following appeared in Hobbs News-Sun on
October 19, 1981

**LEGAL NOTICE
OCTOBER 19, 1981
CONVERT WELL TO
SALT WATER
DISPOSAL**

Conoco Inc., 726 E.
Michigan, P.O. Box 460,
Hobbs, New Mexico, Phone
(505) 393-4141, M. K. Mosley,
Division Manager of
Production, intends to
convert to salt water
disposal its Baish B Well No.
36, located 554' FNL & 554'
FWL of Section 28, T-17S, R-
32E, Lea County, New
Mexico. Water will be
disposed into the lower
Wolfcamp Formation at a
depth of 9965' to 10,040',
using surface pressures
ranging from 0 to 2000 psi,
average injection rate of 500
BWPD, maximum rate
approximately 1,000 BWPD.
Interested parties must file
objections or requests for
hearing with the Oil Con-
servation Division, P.O. Box
2088, Santa Fe, New Mexico
87501, within 15 days.

NOTE: The name was changed on regulatory records from Baish B
to Queen B. Well number and location are same as above.

BAISH WOLF CAMP POOL
ACTIVE WELLS

OPERATOR	WELL NO.	U	S	T	R	PERFS.		JUL., '81	
						FROM	TO	BOPD	BWPD
CONOCO	BAISH-A 12	A	21	17 S	32 E	9826	9832	7	NR
	BAISH-A 13	E	22	17 S	32 E	9797	9873	8	5
	BAISH-B 1	C	22	17 S	32 E	9808	9860	14	4
	HUDSON 1	M	15	17 S	32 E	9732	9878	16	NR
	HUDSON 1	K	15	17 S	32 E	9747	9813	5	NR
PET. EXPL. DEV.	HUDSON 1	O	15	17 S	32 E	10,674	10,808	3	2
SUBJECT WELL	QUEEN 36	D	28	17 S	32 E	9955	10040	PROPOSED	SND

JUL. 81

LOCATION

FIELD

Wa⁻ tanks

WATER ANALYSIS

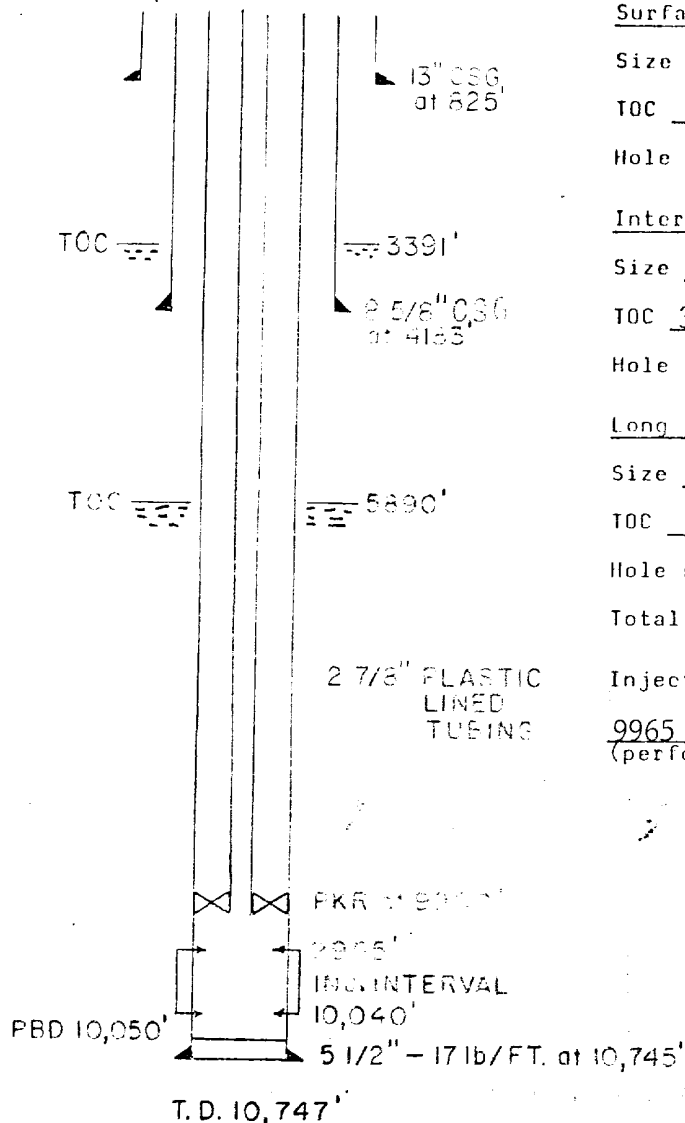
(Ca ⁺⁺)	mg/L	meq/L	mg/L	meq/L	mg/L	meq/L
(Mg ⁺⁺)	972		680		1507	124
(Na ⁺) Calc.	2360		2000		1723	86
(Na ⁺) Calc.	52.298		34.704		20.655	898
(CO ₃ ⁼)	0		0		0	
(HCO ₃ ⁼)	1220		481		915	15
(SO ₄ ⁼)	4400		3900		1050	21.8
(Cl ⁻)	50.000		33.000		38.000	1071
H ₂ S	STRONG		STR		1190	69.8
IRON (Free)	11		14		3.8	
PH @ °F	7.6		7.4		6.25	
Sp. Gr. @ °F					1.04	
O ₂ (Free)	4				9.3	
CaCO ₃ S.I.	1.4		.9		-1.6	
CaSO ₄ S.I.	neg		neg		-1.9	
BY.... DATED	Champion 5-1-81	Champion 5-1-81	CRD	10-19-81		
	Baish A	Baish B	MCA	BIT 2		

WOLF CAMP WATER
SAMPLE - ZONE
TO BE DISPOSED
INTO

MCA UNIT (G-SA)
WATER TO BE
INJECTED

OPERATOR Conoco, Inc.	LEASE Baish "B"			
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP	RANGE
36	554' ENL, 554' FWL	28	17S	32E

Schematic



Tabular Data

Surface Casing

Size 13 " Cemented with 175 sx.TOC SFC. feet determined by _____

Hole size _____

Intermediate Casing

Size 8-5/8" " Cemented with 200 sx.TOC 3391 feet determined by temperature survey.

Hole size _____

Long string

Size 5-1/2" " Cemented with 1100 sx.TOC 5890 feet determined by temperature survey.

Hole size _____

Total depth 10747'

Injection interval

9965 feet to 10,040 feet
(perforated or open-hole, indicate which)Tubing size 2-7/8" lined with plastic (material) set in aBaker Model "R" Packer packer at 9900 feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

- Name of the injection formation Lower Wolfcamp
- Name of field or Pool (if applicable) Baish-Maljamar-Pearsall
- Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? To produce oil and gas from the Pennsylvanian formation.
- Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) Perforated from 8914' - 9980' and squeezed w/400 sx. perforated 6653'-6690'; and squeezed w/50 sx. Perforated at 5825', and pumped 275 sx. perforated 5335'-5502', and squeezed w/200 sx. perforated 5378' - 5428', did not squeeze. TA in 1949.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. at 9732' Wolfcamp Formation; at 8900' - ABO Formation
at 11,636' - Strawn Formation