Hondo Oil & Gas Company

Box 2208 Roswell, New Mexico 88202 (505)625-8700





JUL 3 1 1989

July 27, 1989

OIL CONSERVATION DIV. SANTA FE

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

RE: Application for permit to convert to Water Injection H. E. West "A" Well No. 14
720' FSL & 1980' FEL, Section 4, T17S, R31E
Eddy County, New Mexico

Gentlemen:

Please find enclosed Hondo Oil & Gas Company's application for permit to convert the above captioned well into a water injection well.

Copies have been submitted to the surface owner, the offset operators and the NMOCD district office in Artesia.

If you should have any questions, please contact Ron Brown at 505/625-6735.

Sincerely,

Lisa Bohannon

Engineering Technician

RANCU

/1b

Encl.

Hondo Oil & Gas Company

Box 2208 Roswell, New Mexico 88202 (505)625-8700



July 27, 1989

Bureau of Land Management P.O. Box 1778 Carlsbad, NM 88220

RE: Application for permit to convert to Water Injection H.E. West "A" Well No. 14
720' FSL & 1980' FEL, Section 4, T17S, R31E
Eddy County, New Mexico

Gentlemen:

According to the Oil Conservation Division Rule 701, a copy of any injection well permit application must be sent to the offset operators and surface owner. Enclosed is a copy of our application for administrative approval to convert the above captioned well to a water injection well.

If you should have any questions, please contact Ron Brown at 505/625-6735.

Sincerely,

Lisa Bohannon

Engineering Technician

sa Bohannen

LB/jw

Encl.

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING **SANTA FE, NEW MEXICO 87501**

APPLICATION	FOR	AUTHORIZATION	10	INJECT	

APPLIC	ATION FOR AUTHORIZATION TO INJECT							
ı.	Purpose: Secondary Recovery Pressure Maintenance Disposal Storage Application qualifies for administrative approval? X yes no							
11.	Operator: Hondo Oil & Gas Company							
	Address: P. O. Box 2208, Roswell, NM 88202							
	Contact party: Ron Brown Phone: (505)625-6735							
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 X no If yes, give the Division order number authorizing the project X 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.). 							
V111.	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							

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

or any other hydrologic connection between the disposal zone and any underground

XIV. Certification ·

source of drinking water.

I	nereby c	ertir	' y '	tnat the i	information	submitted	WICH	tnis	abbiication	15	true	ana	correct
tc	the bes	tof	mу	knowledge	e and belief	· •			•				
	_	_			•				Dotroloum	Ena.	incor		

Name: _	Ron Brown		Title	Petroleum Engineer
Signatus	re: ROU	Brown bu RB	Date	7/27/89
	 		···	

* 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. Copies of well logs have been submitted.

ITEM:

III. Well Data

- A. (1) Well Name: H.E. West "A" #14 720' FSL & 1980' FEL Section 4, T17S, R31E Eddy County, New Mexico
 - (2) Casing Data: (Also see Exhibit "B".)

Surface Casing:

 $8\ 5/8$ " csg set @ 542' in a 12 1/4" hole, cemented with 350 sx. TOC @ surface (cmt circ).

Production Casing:

5 1/2" csg set @ 3935' in a 7 7/8" hole, cemented with 1900 sx. TOC @ surface (cmt circ).

- (3) <u>Injection Tubing</u>:
 2 3/8", 4.7#, 8rd EUE, plastic coated tbg, set @ + 3160'.
- (4) <u>Packer</u>: Packer set @ + 3160'.
- B. (1) Injection Formation:

The injection formation will be the Grayburg San Andres.

(2) Injection Interval:

The injection interval is to be from 3214-3826'.

(3) Original Purpose of Well:

This well was originally drilled, completed and tested in the Grayburg San Andres as a producer through perforations 3214-3467' 3492-3678' and 3709-3863' (CIBP set @ 3828').

(4) Added Perforated Intervals: (Also see Exhibit "B".)

None

(5) Higher/Lower Oil Zones:

The top of the Seven Rivers is $@ \pm 2300$ ' and there is no lower oil zone.

V. Map:

See Exhibit "A".

VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #16

Location: 660' FSL & 660 FWL, (M) Section 3, T17S, R31E

Completion Date: 8/58

Surface Casing: 10 3/4" set @ 765', cemented with 75 sx.

Production Casing: 5 1/2" set @ 3673', cemented with 100 sx.

Total Depth: 3978'

<u>Completion</u>: Completed in the Grayburg San Andres as a producer

from perforations 3370-3384' and 3570-3578'. Added perforations from 3333-3341', 3394-3397, 3439-3497' and 3501-3520'. Deepened, ran liner and converted to injection through perforations 3892-3961', 3546-

3742' and 3333-3523'.

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #12

Location: 1980' FNL & 1980' FEL, (G) Section 9, T17S, R31E

Completion Date: 9/56

Surface Casing: 9 5/8" csg set @ 668', cemented with 100 sx.

Intermediate Casing: 7" csg set @ 3158', cemented with 200 sx.

Production Casing: 5" csg set @ 3864', cemented with 500 sx.

Total Depth: 3864'

Completion: Completed in the Grayburg San Andres as a producer

from OH 3139-3744'. Deepened, ran 5" csg and converted to injection through perforations 3260-3330'

3350-3633' adn 3676-3830' (CIBP set @ 3660').

VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "A" #4

Location: 1980' FNL & 1980' FEL, (G) Section 4, T17S, R31E

Completion Date: 9/54

Surface Casing: 8 5/8" set @ 706', cemented with 100 sx.

Production Casing: 7" set @ 3169', cemented with 200 sx.

Liner: $4 \frac{1}{2}$ " set from 3068-3841', cemented with 95 sx.

Total Depth: 3842'

Completion: Completed in thr Grayburg as a producer from the OH interval 3326-3336'. Deepened well, ran 4 1/2" liner and converted to dual injector through perforations from 3331-3822'. Converted to triple injector with the addition of perforations from 3242-3398'. Returned to single injector through 3242-3822'.

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #27

Location: 660' FSL & 1980' FWL, Section 4, T17S, R31E

Completion Date: Original: P&A'd 8-61 Re-Entry: 2-64

Surface Casing: 13 3/8" set @ 650', cemented with 740 sx.

Production Casing: 9 5/8" set @ 3800', cemented with 1300 sx.

Total Depth: 12,860'

<u>Completion</u>: Drilled as a dry hole to a depth of 12,860' and plugged back to 3700'. Re-entered, cleaned out to 3922' and plugged back to 3885' and completed in the Grayburg San Andres as a producer from perforations 3180-3546' and OH 3800-3885'.

VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #11

Location: 1980' FSL & 1980' FWL, Section 4, T17S, R31E

Completion Date: 2/54

Surface Casing: 8 5/8" set @ 683', cemented with 100 sx.

Production Casing: 7" set @ 3146', cemented with 200 sx.

Liner: 4 1/2" set from 3071-3574', cemented with 540 sx.

Total Depth: 3574'

Completion: Completed in the Grayburg San Andres as a producer

from the OH interval 3146-3574'. Converted to

injector through OH. Ran 4 1/2" liner and converted to dual injector with the addition of perforations from 3206-3566'. Returned to single injection through

existing perforations.

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #9

Location: 660' FSL & 660' FWL, Section 4, T17S, R31E

Completion Date: 6/52

Surface Casing: 8 5/8" set @ 684', cemented with 100 sx.

Production Casing: 7" set @ 3089', cemented with 200 sx.

Liner: 5" set from 3000-3780', cemented with 125 sx.

Total Depth: 3780'

Completion: Completed in the Grayburg San Andres as a producer in

the OH interval 3198-3423'. Deepened, ran 5" liner, and converted to injection through perforations 3158-3729'.

VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "A" #6

Location: 2005' FNL & 660' FWL, Section 4, T17S, R31E

Spud Date: 1-2-55

Completion Date: 2-6-55

Surface Casing: 8 5/8", 24#, set @ 740', cemented with 100 sx.

Production Casing: 7", 17 & 20#, set @ 3220', cemented with 200 sx.

Total Depth: 3870'

Completion: Completed as a producer in the Grayburg San Andres

through OH. On Jul7 29, 1963, the hole was deepened

to 3870' with OH from 3220-3870'.

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "A" #9

Location: 1980' FSL & 660' FEL, Section 4, T17S, R31E

Spud Date: 10-19-55

Completion Date: 12-2-55

Surface Casing: 8 5/8", 24#, set @ 716', cemented with 100 sx.

Production Casing: 7", 20#, set @ 3198', cemented with 200 sx.

Total Depth: 3868'

Completion: Completed as a producer in the Grayburg San Andres

through OH 3198-3375'. On September 20, 1962, converted to WIW. In August, 1963, the hole was deepened to 3868' with OH 3198-3868'. February 25, 1965, well was plugged back to 3700' with sand bridge plug. Well

P&A'd 4-26-82.

Hondo Oil & Gas Company is planning to re-enter, deepen to a depth of 3964', set 5" csg from 3000-3964' and

convert to injection through new perforations.

VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "A" #5

Location: 1980' FSL & 1980' FEL, Section 4, T17S, R31E

Spud Date: 10-20-54

Completion Date: 12-24-54

Surface Casing: 8 5/8", 24#, set @ 695', cemented with 100 sx.

Production Casing: 7", 20#, set @ 3169', cemented with 200 sx.

Total Depth: 3650'

Completion: Completed as a producer in the Grayburg San Andres

through OH.

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #28

Location: 660' FNL & 660' FEL, (A) Section 9, T17S, R31E

Completion Date: 12-63

Surface Casing: 8 5/8" set @ 550', cemented with 240 sx.

Production Casing: 5 1/2" set @ 3850', cemented with 300 sx.

Total Depth: 3850'

Completion: Completed in the Grayburg San Andres as an injector

through perforations 3289-3849'. Added new perfor-

ations from 3270-3823'.

VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B #29

Location: 660' FNL & 1980' FWL, (C) Section 9, T17S, R31E

Completion Date: 1-64

Surface Casing: 8 5/8" set @ 559', cemented with 240 sx.

Production Casing: 5 1/2" set @ 3810', cemented with 300 sx.

Total Depth: 3810'

Completion: Completed in the Grayburg San Andres as a producer from

perforations 3232-3804'. Plugged back with a CIBP set @ 3600' and converted to injection through existing perforations. Added new perforations from 3224-3800'.

VII. Proposed Operations Data:

- (1) Average daily injection rate 150 BWPD Maximum daily injection rate 200 BWPD
- (2) Type of system closed
- (3) Average injection pressure 1900 psi Maximum injection pressure - 2200 psi
- (4) Source of injection water water produced from the Keel West plus make-up water from the Keel West fresh water system.

VIII. Geological Data:

The proposed injection zone is in the Grayburg San Andres from 3214-3826'. 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. Also, there are no known underground sources of drinking water overlying or underlying the proposed injection zone.

IX. Stimulation Program:

Acidized 3709-3863' with 4000 gal 15% NeFe acid and frac'd 3709-3863' with 50,000 gal cross-linked gel + 136,500# 20-40 sand. Acidized 3492-3678' with 4000 gal 15% NeFe acid and frac'd with 50,000 gal 30# cross-linked gel + 129,000# 20-40 sand. Acidized 3214-3467' with 6000 gal 15% NeFe acid and frac'd with 80,000 gal 30# cross-linked gel + 160,000# 20-40 sand.

X. Well Logs:

Copies of the current well logs are attached.

XI. Chemical Analysis of Fresh Water:

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

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

SURFACE OWNER:

Federal land.

OFFSET OPERATOR:

None

Affidavit of Publication

Nο	12856	

STATE OF NEW MEXICO, County of Eddy:

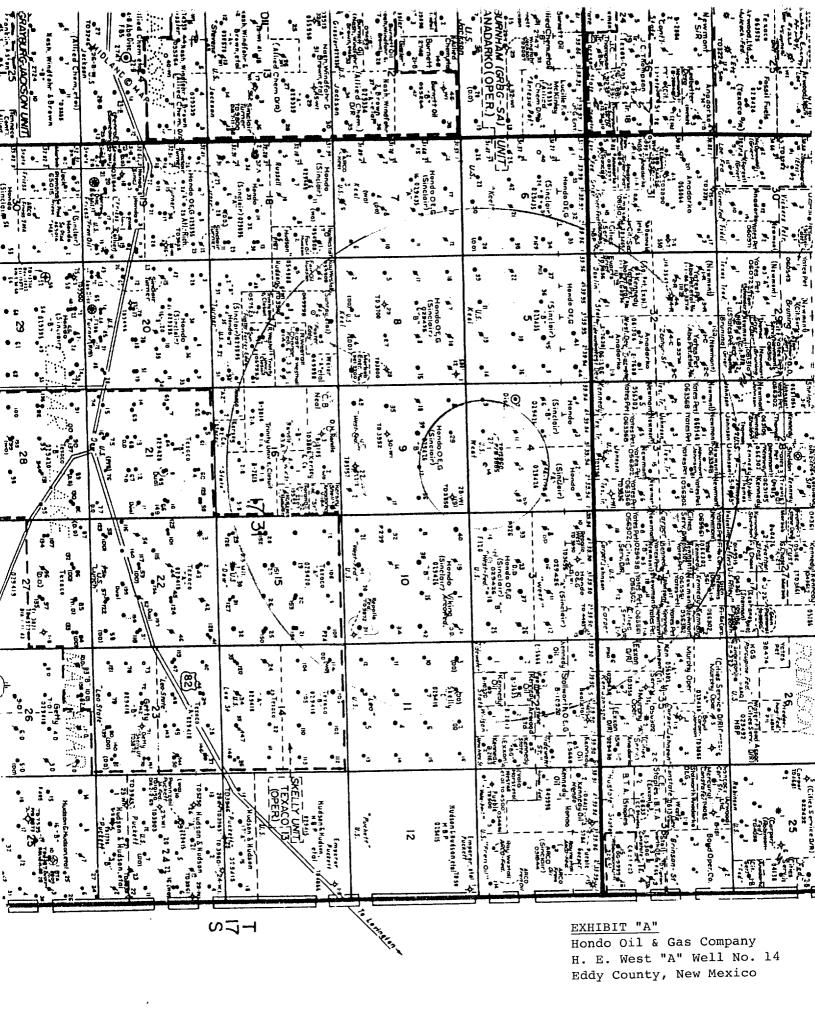
Gary D. Scott being duly
sworn, says: That he is thePublisher of The
Artesia Daily Press, a daily newspaper of general circulation,
published in English at Artesia, said county and state, and that
the hereto attached Legal Notice
was published in a regular and entire issue of the said Artesia
Daily Press, a daily newspaper duly qualified for that purpose
within the meaning of Chapter 167 of the 1937 Session Laws of
days the State of New Mexico for1 consecutive weeks on
the same day as follows:
First Publication July 26, 1989
Second Publication
Third Publication
Fourth Publication
and that payment therefore in the amount/of/3
has been made.
Subscribed and sworn to before me this 26th day
7.1
ofJuly, 19_89
Notary Public, Eddy County, New Mexico
My Commission expires September 23, 1991

Copy of Publication

LEGAL NOTICE

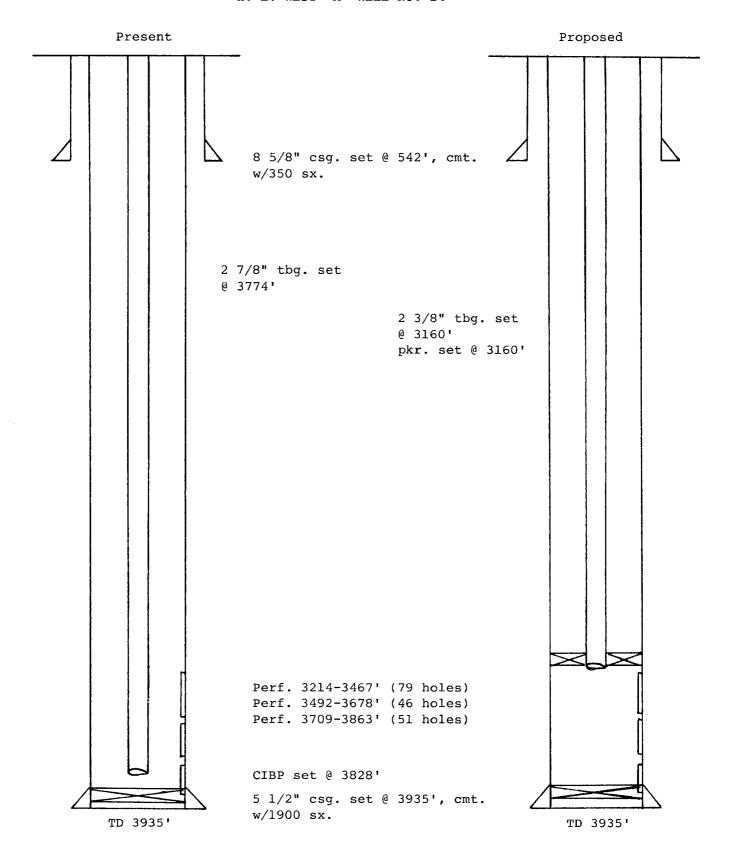
Hondo Oil & Ges Company has applied for subority to convert the H. K. West "A" Well No. 14, Josated 720' FSL & 1980 FM. Section 4, T-17S, R. 31K. Bally County, New Mestics, makes water injections of the County of

SENDER: Complete Items 1 and 2 when additional se	\$195. 13.45		
Put your address in the "RETURN TO" Space on the reversard from being returned to you. The return receipt feed delivered to and the date of delivery. For additional fees the postmaster for fees and check box(es) for additional service(1. It is shown to whom delivered, date, and addressee's address.			
1/Extra charge)†	4. Article Number		
Bureau of Land	1663 391 996		
Bureau of Land Management P.O. Box 1778	Type of Service: Registered Insured Certified COD Express Mall		
Carlsbad, NM 88000	Always obtain signature of addressee or agent and DATE DELIVERED.	4. 4. 4.	
5. Signature - Addressee	8. Addressee's Address (ONLY if requested and fee paid)		
X 6. Signature — Agent			
X 7. Date of Delivery			
7. Date of Delivery			
PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268	DOMESTIC RETURN RECEIPT	• !	
+ _	A STATE OF THE STA		+
SENDER: Complete Items 1 and 2 when additional a	ervices are desired, and complete isems 3		
Put your address in the "RETURN TO" Space on the reve card from being returned to you. The return receipt fee	will provide you the name of the person		
delivered to and the date of delivery. For additional fees to postrylester for fees and check box(es) for additional service. Description of the date of delivered, date, and addressee's	the following services are available. Consult (s) requested. See 2. Bestricted Delivery. †(Extra charge)†		사학 (1) 1880년 1980년 - 1982년 - 1
3. Article Addressed to:	4. Article Number		
MOCD	Type of Service:		
P.O. Drawer DD	Registered Insured Certified COD Express Mail		
Artesia, NM 88210	Always obtain signature of addressee or agent and DATE DELIVERED.		
5. Signature - Addressee	8. Addressee's Address (ONLY if		
X 6. Signature — Agent	requested and fee paid		
X			. The state of the
7. Date of Delivery		1	
PS Form 3811, Mar. 1987 * U.S.Q.P.O. 1987-178-268	DOMESTIC RETURN RECEIPT		
+, , , .		+	
SENDER: Complete Items 1 and 2 when additional and 4.	services are desired, and complete items 3	1	
Put your address in the "RETURN TO" Space on the recard from being returned to you. The return receipt fedelivered to and the date of delivery. For additional service, postmaster for fees and check box(es) for additional services. Show to whom delivered, date, and addressee's addre	e will provide you the name of the person the following services are available, Consult e(s) requested. BEST 2. Bestricted Delivery	1	
3. Article Addressed to:	↑ (Extra charge)↑ 4. Article Number	- ;;	
Oil Conservation Division	P663 397 995 Type of Service:	↓ ;	
P.O. Box 2088	Registered Insured COD	:	
Senta Fe, NM 87501	Always obtain signature of addressee	-	
5 Signature Addresses	or agent and <u>DATE DELIVERED</u> .] :	
5. Signature — Addressee	8. Addressee's Address (ONLY if requested and fee paid)		* - * *
6. Signature — Agent X			
7. Date of Delivery			
1	i	1	



H. E. West "A" Well No. 14 Eddy County, New Mexico

H. E. WEST "A" WELL NO. 14



HONDO OIL & GAS COMPANY
H. E. WEST "A" #9
1980' FSL & 660' FEL
Section 4, T-175, R-31E

