

Hondo Oil & Gas Company

7/26
1989

RECEIVED

JUL 26 1989

OIL CONSERVATION DIV.
SANTA FE

July 26, 1989

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. 11
1980' FNL & 1980' FEL, Section 3, 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,



Layne Collis
Engineering Technician

LC/jw

Encl.

Hondo Oil & Gas Company

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



July 26, 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. 11
1980' FNL & 1980' FEL, Section 3, 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,

A handwritten signature in cursive script that reads "Layne Collis".

Layne Collis
Engineering Technician

LC/jw

Encl.

Hondo Oil & Gas Company

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



July 26, 1989

Kennedy Oil Company
P.O. Box 47
Mayhill, NM 88339

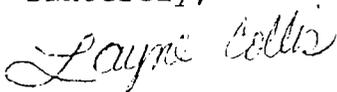
RE: Application for permit to convert to Water Injection
H.E. West "B" Well No. 18
660 FSL & 1980' FEL, Section 3, T17S, R31E
Eddy County, New Mexico

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,



Layne Collis
Engineering Technician

LC/jw

Encl.

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? yes no
- II. Operator: Hondo Oil & Gas Company
Address: P. O. Box 2208, Roswell, New Mexico 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? 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 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: Ron Brown Title Petroleum Engineer
Signature: _____ Date: July 25, 1989

* 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.

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.

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
SUPPLEMENTAL INFORMATION
H.E. WEST "A" WELL NO. 11

ITEM:

III. Well Data

- A. (1) Well Name: H.E. West "A" #11
1980' FNL & 1980' FEL
Section 3, T17S, R31E
Eddy County, New Mexico
- (2) Casing Data:
- Surface Casing:
8 5/8", 24#, set @ 817', cemented with 100 sx.
- Production Casing:
5 1/2", 14#, set @ 3500', cemented with 100 sx.
- (3) Injection Tubing:
2" fiberglass set @ 3389'
- (4) Packer:
Packer set @ 3389'.
- B. (1) Injection Formation:
Grayburg San Andres
- (2) Injection Interval:
Injection will be through new perforations 3439-3973'.

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
Page 2

(3) Original Purpose of Well:

This well was drilled, completed and tested through Grayburg San Andres perforations 3445-3452'. (Perforations were squeezed 10-8-81.) Hondo recently perforated this well from 3812-3973', 3602-3749' and 3439-3570'.

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

There will be no new perforations needed to convert to WIW.

(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".

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
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VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "A" #13

Location: 900' FNL & 2310' FWL, Section 3, T17S, R31E

Spud Date: 10-11-64

Completion Date: 10-31-74

Surface Casing: 8 5/8", 24#, set @ 555', cemented with 220 sx.

Production Casing: 4 1/2", 9.5#, set @ 3700', cemented with 320 sx.

Total Depth: 3700'

Completion: Completed as a WIW in the Grayburg San Andres through perforations 3419-3686'. May 3, 1982 squeezed perforations 3419-28'.

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "A" #15

Location: 660' FNL & 330' FEL, Section 3, T17S, R31E

Spud Date: 11-22-88

Completion Date: 1-6-89

Surface Casing: 8 5/8", 24#, set @ 685', cemented with 450 sx.

Production Casing: 5 1/2", 17#, set @ 4090', cemented with 1300 sx.

Total Depth: 4090'

Completion: Well completed as a producer in the Grayburg San Andres through perforations 3479-4046'. Hondo plans to convert to a WIW.

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
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VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "A" #8

Location: 1980' FNL & 660' FWL, Section 3, T17S, R31E

Spud Date: 8-5-55

Completion Date: 9-18-55

Surface Casing: 8 5/8", 24#, set @ 763', cemented with 100 sx.

Production Casing: 5 1/2", 14#, set @ 3246', cemented with 200 sx.

Liner: We plan on running a 4" liner from 3095-3948'.

Total Depth: 3901' (present) 3948' (proposed)

Completion: Well completed as a producer in the Grayburg San Andres through OH 3386-3398'. On August 27, 1962, well was converted to WIW. August 11, 1963, the well was deepened to a depth of 3901', started re-injecting with an OH of 3246-3901'. On February 25, 1965, well plugged back to 3750' with a sand bridge plug. Well was P&A'd 4-23-82.

Hondo Oil & Gas Co. plans to re-enter, deepen to a depth of 3948', run a liner and perforate this well to convert to a WIW.

Operator: Hondo Oil & Gas Company

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

Location: 1980' FNL & 660' FEL, Section 3, T17S, R31E

Spud Date: 3-18-61

Completion Date: 5-23-61

Surface Casing: 8 5/8", 24#, set @ 840', cemented with 100 sx.

Production Casing: 4 1/2", 9.5#, set @ 3760', cemented with 200 sx.

Total Depth: 3760'

Completion: Completed in the Grayburg San Andres through perforations 3709-3544'. Well was SI May 1971. On 5-1-81, the well was P&A'd.

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
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VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #23

Location: 1980' FSL & 1980' FWL, Section 3, T17S, R31E

Spud Date: 7-26-59

Completion Date: 9-10-59

Surface Casing: 8 5/8", 24#, set @ 797', cemented with 100 sx.

Production Casing: 5", 11.5#, set @ 3455', cemented with 100 sx.

Total Depth: 3456 (original) 3557' (present)

Completion: Completed as a Grayburg San Andres through perforations 3413-21' and 3429-35'. In March, 1964, deepened well to 3557' and perfed 3374-84' with OH interval 3456-3557'. Well converted to dual injection 3-27-64. Well had a leak in the 5" csg, csg found to be in very poor condition and stuck @ 1260'. Well P&A'd 4-27-82.

We plan to drill another well named H.E. West #23, 50' west of this well.

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #18

Location: 650' FSL & 1980' FEL, (N) Section 3, T17S, R31E

Completion Date: 12/58

Surface Casing: 10 3/4" set @ 797', cemented with 100 sx.

Production Casing: 5 1/2" set @ 3725', cemented with 100 sx.

Total Depth: 3996'

Completion: Completed in the Grayburg San Andres as a producer from perforations 3393-3401', 3430-3435', 3443-3448' and 3456-3464'. Added perforations from 3523-3537', 3540-3548' and 3555-3560'. Deepened and converted to injection through existing perforations and new perforations from 3386-3705' and OH 3725-3994'.

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
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VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #37

Location: 1980' FSL & 1980' FEL, Section 3, T17S, R31E

Spud Date: 11-12-88

Completion Date: 12-23-88

Surface Casing: 8 5/8", 24#, set @ 627', cemented with 400 sx.

Production Casing: 5 1/2", 17#, set @ 4082', cemented with 1350 sx.

Total Depth: 4082'

Completion: Completed as a producer in the Grayburg San Andres through perforations 3911-4009', 3653-3881' and 3410-3614'.

Operator: Hondo Oil & Gas Company

Well Name: H.E. West "B" #26

Location: 1980' FSL & 660' FEL, Section 3, T17S, R31E

Spud Date: 1-12-61

Completion Date: 3-17-61

Surface Casing: 8 5/8", 24#, set @ 845', cemented with 100 sx.

Production Casing: 4 1/2", 9.5#, set @ 3757', cemented with 100 sx.

Total Depth: 3757'

Completion: Completed as a producer in the Grayburg San Andres through perforations 3714-3734'. On 3-21-66 set a CIBP @ 3690' and converted well to a WIW through perforations 3422-3579'.

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
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VI. Wells in Area of Review:

Operator: Hondo Oil & Gas Company

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

Location: 1980' FNL & 1980' FWL, Section 3, T17S, R31E

Spud Date: 12-4-88

Completion Date: 1-12-89

Surface Casing: 8 5/8", 24#, set @ 644', cemented with 400 sx.

Production Casing: 5 1/2", 17#, set @ 4076', cemented with 1250 sx.

Total Depth: 4076'

Completion: Completed as a producer in the Grayburg San Andres through perforations 3415-3953'.

Operator: Kennedy Oil Company

Well Name: Tidewater State #3

Location: 1977' FNL & 660' FWL, Section 2, T17S, R31E

Spud Date: 12-30-60

Completion Date: 1-21-61

Surface Casing: 8 5/8", 24#, set @ 361'

Production Casing: 5 1/2", 15.5#, set @ 3752'

Total Depth: 3795'

Completion: Completed as a producer in the Grayburg San Andres through perforations 3489-3750'

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
Page 8

VI. Wells in Area of Review:

Operator: Repollo

Well Name: H.E. West #1

Location: 660' FNL & 1980' FWL, Section 3, T17S, R31E

Completion Date: 9-20-46

Surface Casing: 10" set @ 815', cemented with 75 sx.

Production Casing: 8 1/4" set @ 2885', no cement recorded

Total Depth: 3690'

Completion: Well P&A'd (Information obtained from NMOCD-Artesia.
Not enough information available to complete a well-
bore sketch.)

Operator: Repollo

Well Name: H.E. West #3

Location: 660' FNL & 330' FFL, Section 3, T17S, R31E

Completion Date: 7-39

Surface Casing: 8" set @ 895', cemented with 50 sx

Production Casing: 6 5/8" set @ 3670', cemented with 200 sx.

Total Depth: 4483'

Completion: Well P&A'd (Information obtained from NMOCD-Artesia.
Not enough information available to complete a well-
bore sketch.)

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
Page 9

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 3439-3973'. 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:

Perforations 3812-3973' acidized with 3000 gal 15% NeFe acid and 6000 gals CRA acid.

Perforations 3602-3749' acidized with 3000 gal 15% NeFe acid. Frac'd with 25,000 gal 30# cross-linked with 40,000# 20-40 sand.

Perforations 3439-3570' acidized with 3000 gal 15% NeFe acid. Frac'd with 25,000 gal 30# cross-linked with 40,000# 20-40 sand

X. Well Logs:

Copies of the current well logs are attached.

HONDO OIL & GAS COMPANY
APPLICATION FOR AUTHORITY TO INJECT
H.E. WEST "A" WELL NO. 11
Page 10

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:

Kennedy Oil Company
P.O. Box 47
Mayhill, NM 88339

Affidavit of Publication

Copy of Publication

No. 12853

STATE OF NEW MEXICO,
County of Eddy:

Gary D. Scott being duly sworn, says: That he is the Publisher 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 the State of New Mexico for 1 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 \$ has been made.

Subscribed and sworn to before me this 26th day

of July 19, 89

Barbara Ann Brown
Notary Public, Eddy County, New Mexico

My Commission expires September 23, 1991

LEGAL NOTICE

Hondo Oil & Gas Company has applied for authority to convert the H. E. West "A" Well No. 11, located 1980' FNL & 1980' FEL, Section 3, T-17S, R-31E, Eddy County, New Mexico, into a water injection well. Water produced from the Keel West plus make-up water from the Keel West fresh water system will be injected into the Grayburg San Andres formation from 3415-3953'. The maximum daily injection rate will be 200 BWPD with a maximum pressure of 2200 psi.

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 of this notice.

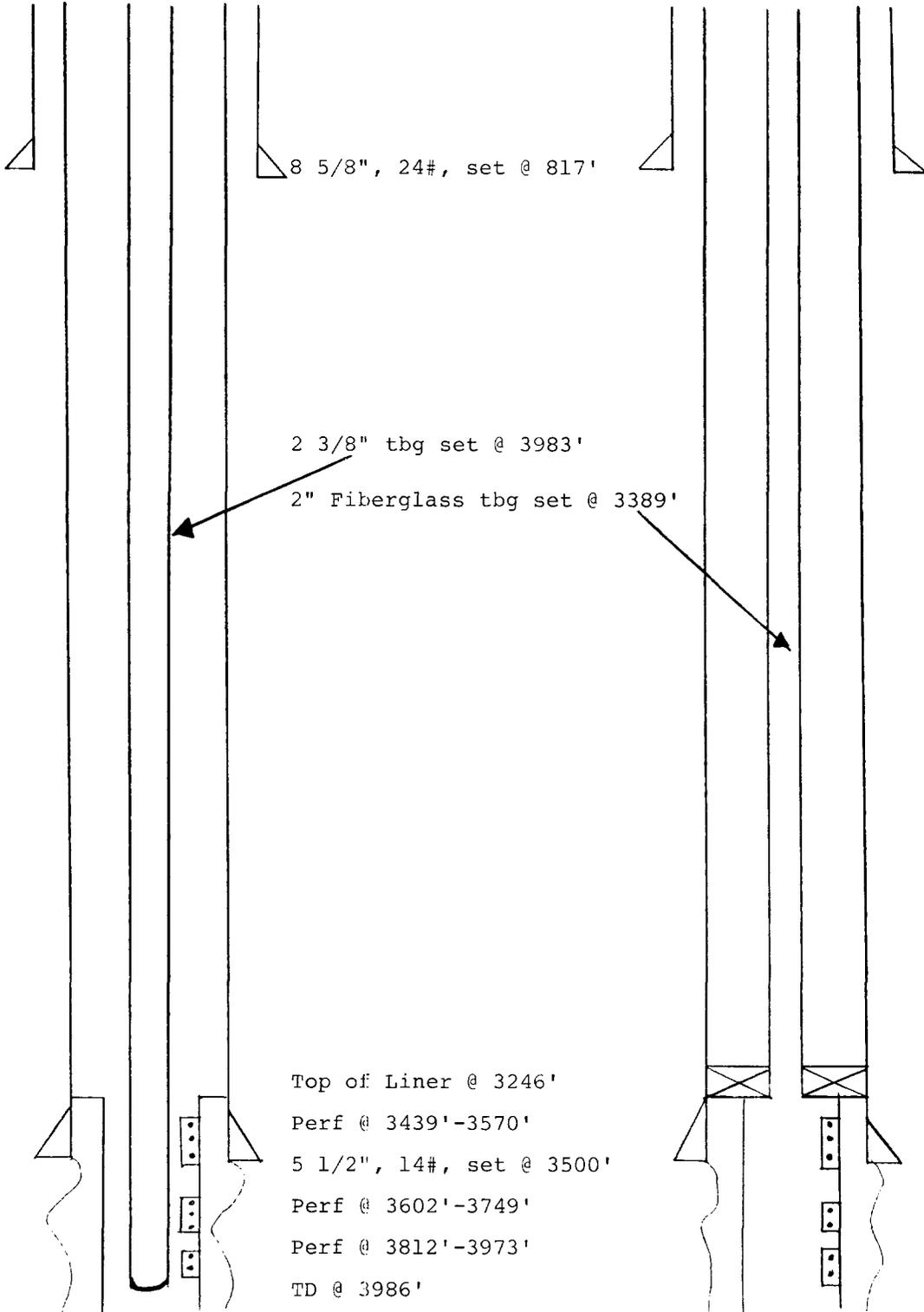
Ron Brown
Petroleum Engineer
Hondo Oil & Gas Company
P.O. Box 2208
Roswell, New Mexico 88202
(505) 625-8760
Published in the Artesia Daily Press, Artesia, N.M. July 26, 1989.

Legal 12853

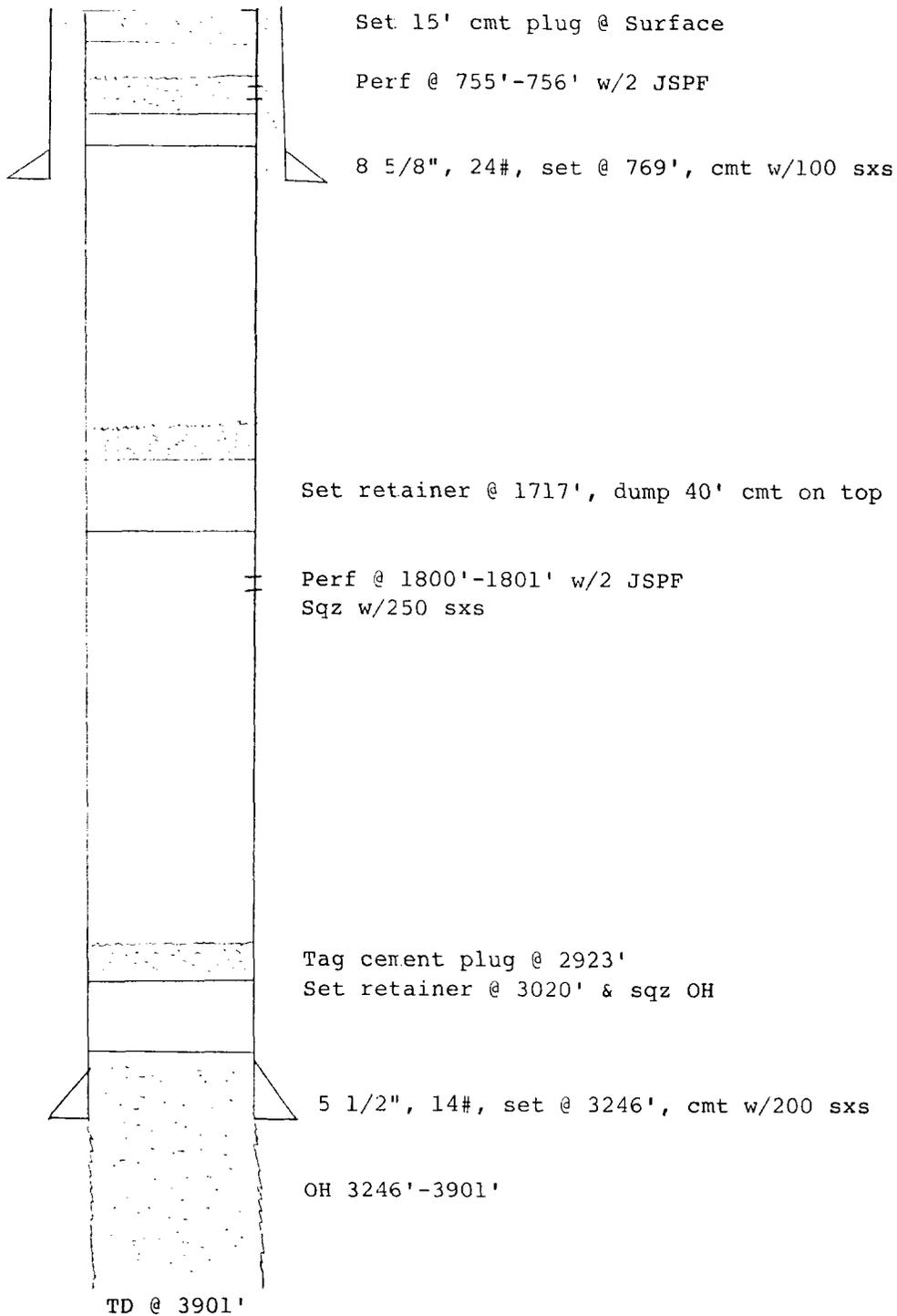
HONDO OIL & GAS COMPANY
H. E. West "A" #11
1980' FWL & 1980' FEL
Section 3, T-17S, R-31E
Eddy County, New Mexico

PRESENT

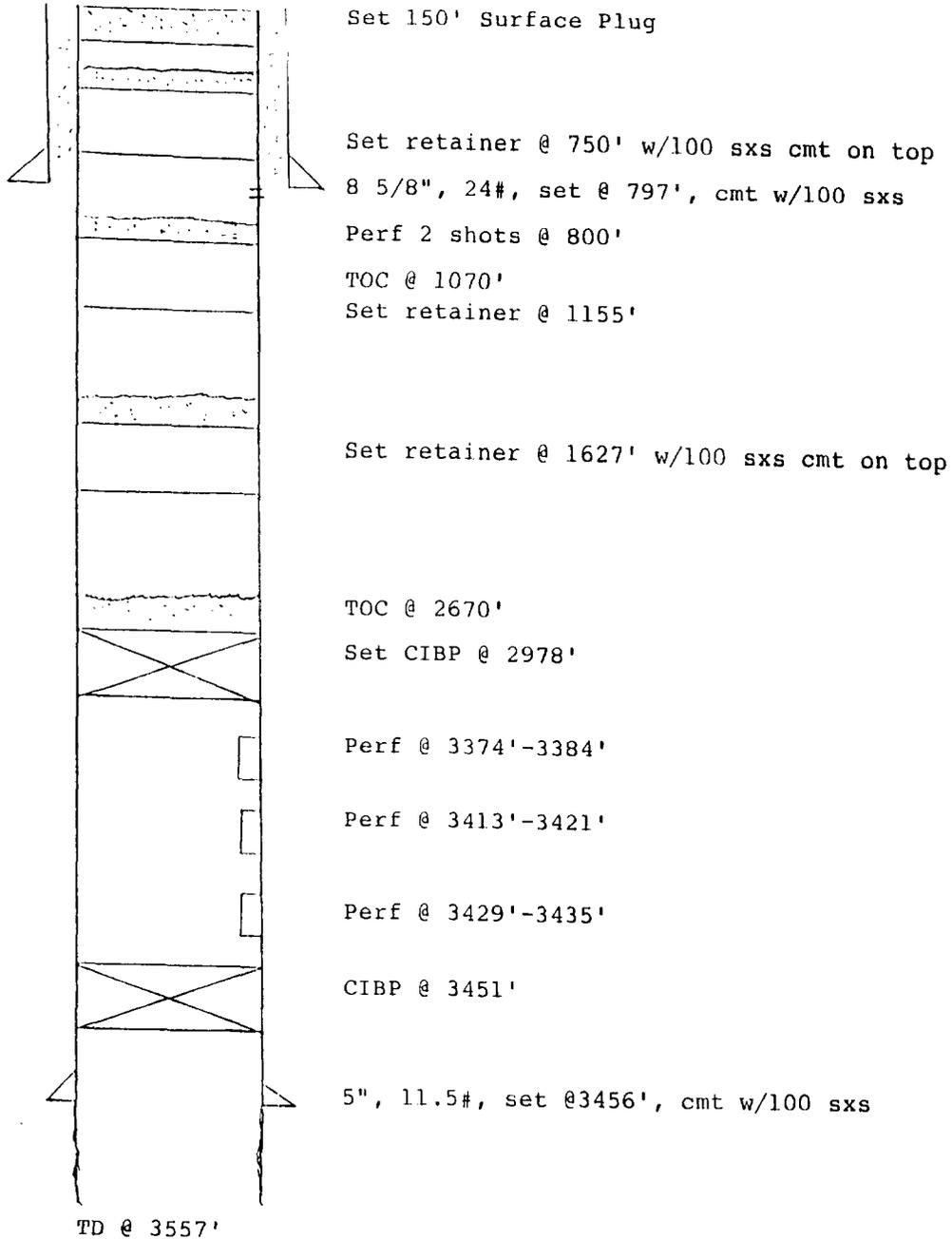
PROPOSED



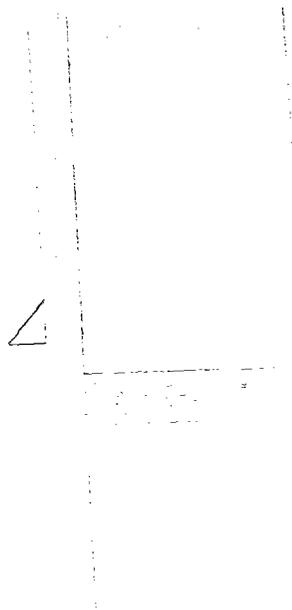
HONDO OIL & GAS COMPANY
H. E. West "A" #8
1980' FNL & 660' FWL
Section 3, T-17S, R-31E
Eddy County, New Mexico



HONDO OIL & GAS COMPANY
H. E. WEST "B" #23
1980' FNL & 1980' FWL
Section 3, T-17S, R-31E



HONDO OIL & GAS COMPANY
H. E. WEST "A" #12
1980' FNL & 660' FEL
Section 3, T-17S, R-31E
Eddy County, New Mexico



Surface plug from 0-90'

8 5/8", 24#, set @ 840', cmt w/100 sxs
20 sxs cmt @ 939'

Perf 4 1/2" csg @ 1916' w/3 shots;
sqz'd w/250 sxs Class "C"

2 3/8", 4.7# tbg set @ ?

Perf 3544-3550'

Perf 3572-3580'

Perf 3709-3715

4 1/2", 9.5#, set @ 3760', cmt w/200 sxs

HONDO OIL & GAS COMPANY
H. E. WEST "A" #12
1980' FNL & 660' FEL
Section 3, T-17S, R-31E
Eddy County, New Mexico

