

CASE 5977: BTA OIL PRODUCERS FOR A
/ DUAL COMPLETION AND SALT WATER DISPOSAL
LEA COUNTY, NEW MEXICO

Case Number

5977

Application

Transcripts.

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 6, 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of BTA Oil Producers for a
dual completion and salt water disposal,
Lea County, New Mexico.

CASE
5977

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Conservation Commission: Lynn Teschendorf, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant: Jason W. Kellahin, Esq.
KELLAHIN & FOX
Attorneys at Law
500 Don Gaspar
Santa Fe, New Mexico

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General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

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1 MR. NUTTER: We will call Case Number 5977.

2 MS. TESCHENDORF: Case 5977, application of BTA Oil
3 Producers for a dual completion and salt water disposal,
4 Lea County, New Mexico.

5 MR. KELLAHIN: If the Examiner please, Jason Kellahin
6 Kellahin and Fox, appearing for the applicant and we have one
7 witness to be sworn.

8 (THEREUPON, the witness was duly sworn.)

9
10 STEVE SALMON

11 called as a witness, having been first duly sworn, was examined
12 and testified as follows:

13
14 DIRECT EXAMINATION

15 BY MR. KELLAHIN:

16 Q. Would you state your name, please?

17 A. My name is Steve Salmon.

18 Q. Would you spell that, please?

19 A. S-a-l-m-o-n.

20 Q. And by whom are you employed and in what position,
21 Mr. Salmon?

22 A. By BTA Oil Producers as a Petroleum Engineer.

23 Q. Have you ever testified before the Oil Conservation
24 Commission or one of its Examiners?

25 A. No, I have not.

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1 Q For the benefit of the Examiner and on the record
2 would you briefly outline your education and experience as a
3 petroleum engineer?

4 A Yes, I received a Bachelor of Science degree in
5 Civil Engineering from Texas Tech in Lubbock, Texas, in
6 January of 1966. I was employed by Amoco Production Company
7 which was at that time called Pan American Petroleum, until
8 March of 1971 as a Petroleum Engineer. I have been employed
9 by BTA Oil Producers as a Petroleum Engineer since March of
10 1971.

11 Q Where have you worked, Mr. Salmon?

12 A With BTA I have worked in Midland. With Pan American
13 or Amoco, depending on what you want to call them, I worked
14 in Brownfield, Odessa, Midland and Fort Worth.

15 Q Was part of your work in New Mexico?

16 A Yes, my work with BTA covers both Texas and New Mexico.

17 Q Does it include the area involved in this application?

18 A Yes.

19 MR. KELLAHIN: Are the witness' qualifications
20 acceptable?

21 MR. NUTTER: Yes, they are.

22 Q (Mr. Kellahin continuing.) Mr. Salmon, what does
23 the applicant propose in Case Number 5977?

24 A Well, we are requesting that the Conservation
25 Commission approve our application to dispose of produced

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1 water from the BTA 7608 JV-P Hagood Well No. 1 down the nine
2 and five-eighths inch, thirteen and three-eighths inch casing
3 annulus for a six months period commencing with the date of
4 pipeline connection. The producing interval in this well is
5 the Pennsylvanian formation from thirteen thousand eight
6 hundred and sixty-five to fifteen thousand eight hundred and
7 forty-seven feet. The water will be injected into the Delaware
8 from five thousand and fifty to six thousand five hundred and
9 fifty-five feet.

10 Q Now what you are going to do is inject water
11 produced from the same well?

12 A Right, we will inject the water produced from this
13 well down the annulus.

14 Q What is the current status of the well?

15 A It is currently shut in pending pipeline connection.
16 The potential test indicates that the well will have an
17 initial producing rate of one and a half million cubic feet
18 of gas per day, fourteen barrels of oil, plus three hundred
19 and forty barrels of water per day. The annular disposal is
20 needed to allow BTA to test this well for a six months
21 evaluation period.

22 Q Now have you prepared an exhibit that shows the
23 area and the wells surrounding the Hagood No. 1?

24 A Yes, I have. Exhibit One is a map of the area
25 using the scale one inch equals four thousand feet. BTA's

1 Hagood No. 1 is shown by the red dot in Section 25, Township
2 26 South, Range 35 East, Lea County, New Mexico.

3 This well was drilled on a Federal unit which is
4 outlined in yellow. A circle with a two-mile radius is shown
5 around the well. There are no other producers inside of this
6 circle. There are several Delaware dry hole tests that are
7 included in this area.

8 The nearest well that penetrated the Pennsylvanian
9 formation is about two and a half miles to the northeast, up
10 in the very corner of the map in Section 17, the Exxon South
11 Lea Unit, which was a dry hole.

12 Q. Now you are going to dispose in the Delaware
13 formation, have those Delaware wells been plugged and
14 abandoned?

15 A. Yes, they have been plugged and abandoned and they
16 were drilled to the Delaware with no shows reported on the
17 scout card. The only casing run was three hundred to three
18 hundred and fifty feet of surface casing and the oil string
19 was not run in them.

20 Q. Now have you prepared a log showing the proposed
21 disposal zone?

22 A. Yes, I have. This is Exhibit Two and the proposed
23 zone is from five thousand and fifty to six thousand five
24 hundred and fifty-five feet. It has several porous zones
25 which are colored green on the logs, which will accept water.

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1 Q And that has been marked on the exhibit?

2 A Yes, it is on the exhibit, the porosity zones are
3 colored green.

4 Q Now is this disposal zone productive of oil, gas or
5 fresh water?

6 A No, it isn't. As mentioned before, there are
7 several Delaware tests within the two-mile radius. None of
8 these were completed as producers and according to the scout
9 cards they encountered no shows. The top porosity zone in the
10 Delaware in our Hagood No. 1 was drill stem tested recovering
11 formation water with no shows.

12 Exhibit Three is a water analysis of the water
13 recovered on this drill stem test, showing it to be unfit
14 for general use and Exhibit Four, just for comparison, is a
15 copy of the produced water from our Hagood Well No. 1.

16 Q That would be water from the Pennsylvanian formation?

17 A Right, water from the Pennsylvanian production.

18 Q Is it potable water?

19 A No, it isn't.

20 Q Have you made a determination as to whether there
21 is any fresh water production in the vicinity of this well
22 and if so, at what depth?

23 A Yes, I have. Fresh water production will not be
24 encountered below seven hundred and ten feet which is the
25 top of the anhydrite marked on this log.

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1 I talked with Monty Beckham the surface owner and he
2 does have some fresh water wells in the vicinity and these are
3 bottomed as deep as six hundred feet.

4 Q Now, will your proposed disposal system protect this
5 fresh water?

6 A Yes, it will. Exhibit Five is a wellbore sketch of
7 the Hagood Well No. 1. We will be disposing of the water
8 from five thousand and fifty feet which is the bottom of the
9 thirteen and three-eighths inch casing in the well, to six
10 thousand five hundred and fifty-five feet which is the top of
11 the cement on the outside of the nine and five-eighths inch
12 casing which will be the open hole. The shallow fresh water
13 zones will be protected by the thirteen and three-eighths inch
14 casing which is bottomed at five thousand and fifty feet, by
15 the twenty inch casing which is bottomed at nine hundred
16 feet and cement was circulated on both strings of pipe so we
17 feel that this will adequately protect the fresh water.

18 Q What kind of pressure do you anticipate on your
19 injection in the annulus?

20 A We anticipate that the injection pressure would be
21 very low. We did run a short term injection test on the well
22 and this is summarized in Exhibit Six. The injection pressure
23 was only a hundred and fifty psi with a rate of four thousand
24 three hundred and twenty barrels per day and this was over ten
25 times the proposed injection rate of three hundred and forty

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1 barrels per day and we feel that the pressure will be very low,
2 close to vacuum if not on vacuum.

3 Q Now, the water is somewhat corrosive?

4 A Yes, the water will be corrosive and we will be
5 treating the water with TRET-O-LITE W-45. This is a combination
6 scale and corrosion inhibitor. This chemical will prevent
7 any significant corrosion of the casings during the six
8 months period.

9 Q How do you spell that TRET-O-LITE?

10 A T-R-E-T-O-L-I-T-E.

11 Q Will you use coupons or anything of that nature?

12 A We will run some coupons and periodically check them
13 and if the casing, you know, if we find that this chemical is
14 not doing what it is supposed to then we would go to a
15 different chemical company and get a different one but this
16 chemical is an amine filming corrosion inhibitor and this type
17 of inhibitor is generally very effective.

18 Q Now, aren't there any alternative methods of
19 disposing of this salt water?

20 A There are but we don't feel like any of them are
21 very feasible for the well at this time. The most obvious
22 alternative would be to have the water hauled away and disposed
23 of. The lowest bid we could get on this was forty-nine cents
24 a barrel which at three hundred and forty barrels of water per
25 day would cost us approximately five thousand dollars a month

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1 or thirty thousand dollars for six months.

2 If the water production and possibly also the gas
3 production drop off on the well to where it is a substantially
4 lower water rate which very well could happen, this may be
5 the alternative that we go to at the end of the six months
6 test period.

7 Another alternative would be to either drill a
8 Delaware disposal well or to reenter one of the plugged
9 shallow wells. However, we aren't sure how good this well is
10 going to hold up. This would be an expensive operation and
11 at this time it is really not justified for this type of well.

12 Q Now, you are only asking for a six months period on
13 this disposal system, is that correct?

14 A That is correct.

15 Q What is your reason for that?

16 A Well, we feel like in six months from when the
17 well goes on the pipeline that we can get an adequate
18 evaluation on the well. If the gas production holds up to
19 about one and a half million a day during the six month
20 period and the water rate maintains this then we could afford
21 to spend somemore money to drill a Delaware well or reenter
22 one of these dry holes. If the water production and gas
23 production both drop off at the end of the six months period
24 possibly the hauling charges at that time would be nil and
25 we wouldn't have to go to a more expensive method.

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1 Q In your opinion would the proposed completion of this
2 well for disposal as you have planned fully protect all fresh
3 water zones?

4 A Yes, it would. We feel that the two strings of
5 casing, both of which have cement circulated on them, would
6 adequately protect the fresh water zones.

7 Q Now, would this disposal system cause any loss of
8 hydrocarbons, oil or gas?

9 A No, it will not. The Delaware as shown on our deep
10 drill stem test which is shown marked on the log recovered
11 water with no shows whatsoever and we will not be putting it
12 into a zone that would cause any loss of hydrocarbons.

13 Q Were Exhibits One through Six prepared by you or
14 under your supervision?

15 A Yes, they were.

16 MR. KELLAHIN: At this time we offer Exhibits One
17 through Six inclusive.

18 MR. NUTTER: Exhibits One through Six will be
19 admitted into evidence.

20 (THEREUPON, BTA Exhibits One through
21 Six were admitted into evidence.)

22 MR. KELLAHIN: That completes our case, Mr. Nutter.

23

24

CROSS EXAMINATION

25

BY MR. NUTTER:

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1 Q Mr. Salmon, why is the well shut in at the present
2 time?

3 A We are waiting on our pipeline connection. The
4 gas company has not shown any enthusiasm for getting this
5 well connected due to its low rate and really the question of
6 how well it will hold up, which we do too and to even get the
7 line on the pipeline we are having to lay four hundred yards
8 of line, they won't lay that much line to connect it.

9 Q When do you anticipate the well would be put on
10 production?

11 A We anticipate that it will be in the second half
12 of this month.

13 Q So you are anticipating a connection in the near
14 future?

15 A Yes, the pipeline is progressing and the pipeline
16 company gave us a date of July 15th but knowing that they
17 usually run late, it would probably be the second half of
18 this month.

19 Q Who, by the way, will be the purchaser?

20 A It's Metro Gas Pipeline of America.

21 Q And you are asking for temporary authority of six
22 months from date of connection?

23 A Right, at the end of six months we feel that the
24 well will be evaluated, either we will have to go to some
25 more expensive method or the problem may take care of itself.

1 MR. NUTTER: Are there any further questions of
2 Mr. Salmon? He may be excused.

3 (THEREUPON, the witness was excused.)

4 MR. NUTTER: Do you have anything further,
5 Mr. Kellahin?

6 MR. KELLAHIN: That's all we have, Mr. Nutter.

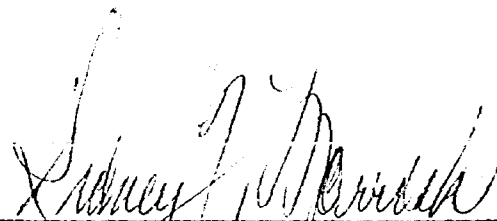
7 MR. NUTTER: Does anyone have anything they wish to
8 offer in Case Number 5977? We will take the case under
9 advisement.

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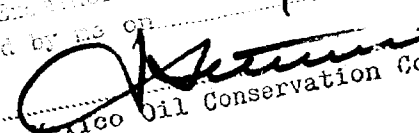
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REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter,
do hereby certify that the foregoing and attached Transcript
of Hearing before the New Mexico Oil Conservation Commission
was reported by me, and the same is a true and correct record
of the said proceedings to the best of my knowledge, skill and
ability.


Sidney F. Morrish, C.S.R.

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Phone (505) 982-9212

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner's hearing of Case No. 5977.
heard by me on 7/6, 1977.

New Mexico Oil Conservation Commission

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5977
Order No. R-5491

APPLICATION OF BTA OIL PRODUCERS
FOR A DUAL COMPLETION AND SALT WATER
DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 6, 1977,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 19th day of July, 1977, the Commission, a
quorum being present, having considered the testimony, the
record, and the recommendations of the Examiner, and being
fully advised in the premises,

FINDS:

(1) That due public notice having been given as required
by law, the Commission has jurisdiction of this cause and the
subject matter thereof.

(2) That the applicant, BTA Oil Producers, seeks authority
to complete its JV-P Hagood Well No. 1, located in Unit B of
Section 25, Township 26 South, Range 35 East, NMPM, Lea County,
New Mexico, as a dual completion in such a manner as to
produce gas from the Pennsylvanian formation through 3 1/2-inch
tubing within the production casing and to dispose of produced
salt water down the 9 5/8-inch and 13 3/8-inch production/
intermediate casing annulus into the Delaware formation through
the open-hole interval from 5,050 feet to approximately 6,555
feet.

(3) That the applicant proposes to utilize said well for
annular disposal of salt water for a temporary period not to
exceed six months to permit production and evaluation of the
Pennsylvanian producing zone.

-2-

Case No. 5977

Order No. R-5491

(4) That said JV-P Hagood Well No. 1 is far removed from the main producing area of Southeast New Mexico and normally available salt water disposal facilities.

(5) That the applicant will treat the injected water to prevent corrosion and conduct coupon surveys to detect corrosion.

(6) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(7) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, BTA Oil Producers, is hereby authorized to complete its JV-P Hagood Well No. 1, located in Unit B of Section 25, Township 26 South, Range 35 East, NMPM, Lea County, New Mexico, as a dual completion to produce gas from the Pennsylvanian formation through 3 1/2-inch tubing within the production casing and to dispose of produced salt water through the 9 5/8-inch and 13 3/8-inch casing/casing annulus into the Delaware formation through the open-hole interval from 5,050 feet to approximately 6,555 feet.

(2) That the applicant shall treat the injected water to prevent corrosion and shall conduct coupon surveys to detect corrosion.

(3) That the well shall be equipped with a pop-off valve or in some other acceptable manner so as to limit wellhead injection pressures to no more than 1,000 psi.

(4) That the operator shall immediately notify the supervisor of the Commission's district office at Hobbs of the failure of the injection well in any manner, the leakage of water from or around said well, or any other evidence of migration of water from the injection zone, and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(5) That the applicant shall promptly notify the supervisor of the Commission's district office at Hobbs of the date of first injection.

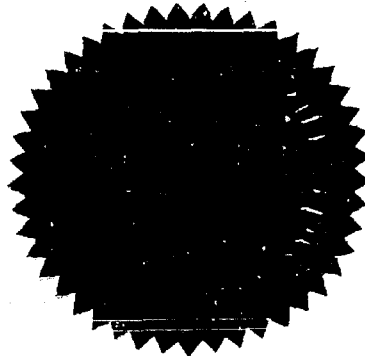
(6) That this order shall expire six months following the date of first injection.

-3-

Case No. 5977
Order No. R-5491

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Phil R. Lucero
PHIL R. LUCERO, Chairman

Emery C. Arnold
EMERY C. ARNOLD, Member

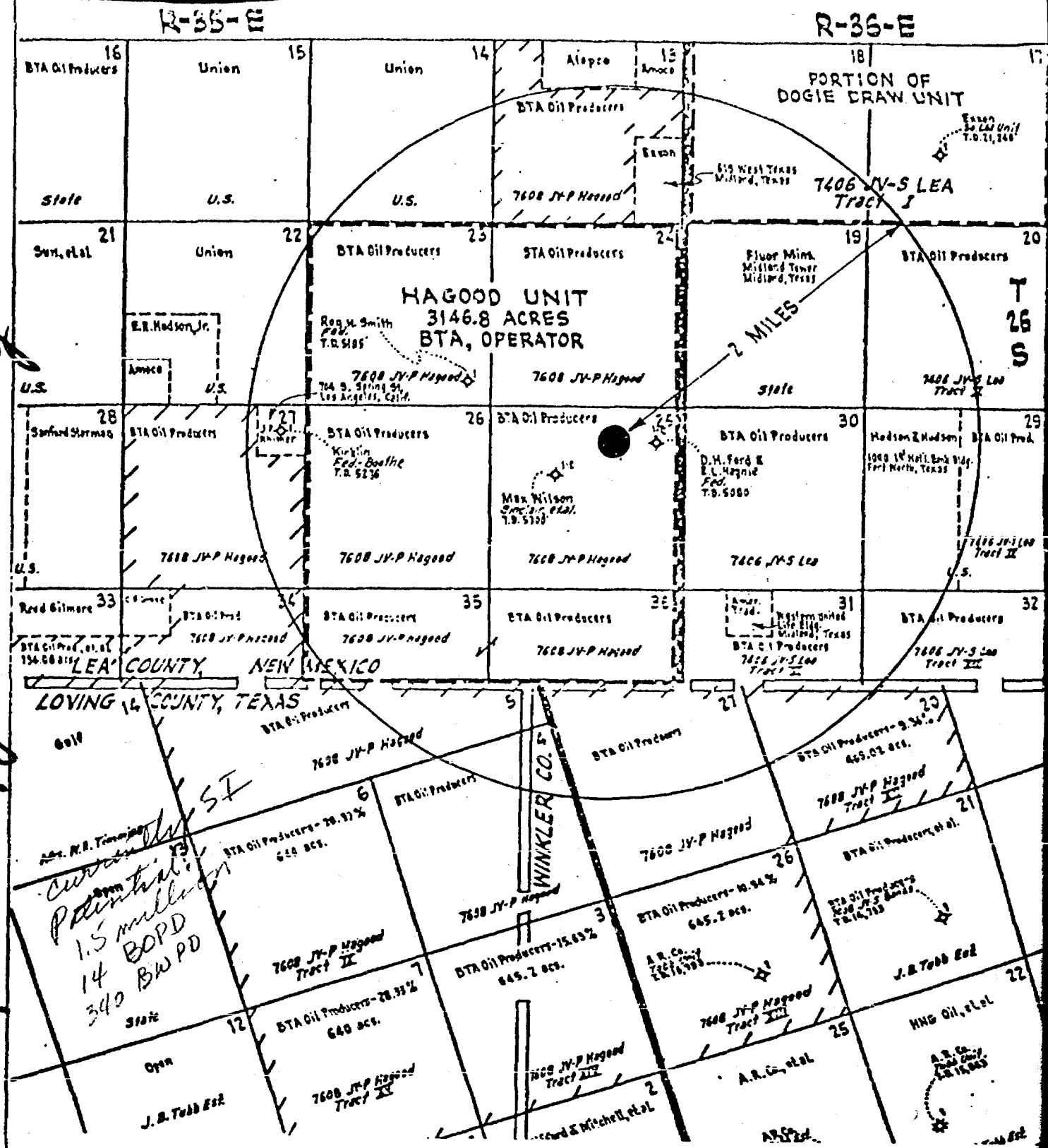
Joe D. Ramey
JOE D. RAMEY, Member & Secretary

S E A L

dr/

- CASE 5977: Application of BTA Oil Producers for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its JV-P Hagood Well No. 1 located in Unit B of Section 25, Township 26 South, Range 35 East, Lea County, New Mexico, in such a manner as to produce gas from the Pennsylvanian formation thru tubing in the production casing and to dispose of produced salt water down the production/intermediate casing annulus into the Delaware formation thru the open-hole interval from 5050 feet to approximately 6555 feet.
- CASE 5978: Application of BTA Oil Producers for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a Pennsylvanian Gas Pool for its Hagood Well No. 1 located in Section 25, Township 26 South, Range 35 East, Lea County, New Mexico, and the promulgation of special rules therefor, including a provision for 640-acre spacing and proration units.
- CASE 5979: Application of Texas Pacific Oil Company, Inc., for non-standard gas proration units, simultaneous dedication and unorthodox locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the following non-standard gas proration units on its State "A" A/C-2 Lease in Township 22 South, Range 36 East, Jalrat Gas Pool, Lea County, New Mexico:
- a 480-acre unit comprising the N/2, W/2 SW/4, and E/2 SE/4 of Section 11 to be simultaneously dedicated to Wells Nos. 14, 36 and 42 located at unorthodox locations in Units B, M, and E, respectively, of said Section 11; a 160-acre unit comprising the E/2 SW/4 and the W/2 SE/4 of Section 11 to be dedicated to Well No. 62 to be drilled at an unorthodox location in Unit K of said Section 11; a 160-acre unit comprising the NW/4 of Section 9 to be dedicated to Well No. 63 to be drilled at an unorthodox location in Unit C of said Section 9; a 160-acre unit comprising the NE/4 of Section 9 to be dedicated to Well No. 40 located at a standard location in Unit A of said Section 9.
- CASE 5980: Application of Ken Blackford, et al., for a non-standard gas proration unit and an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas proration unit comprising the N/2 NW/4, SW/4 NW/4 and NW/4 SW/4 of Section 24, Township 29 North, Range 12 West, Fulcher Kutz-Pictured Cliffs Pool, San Juan County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the North line and 1980 feet from the West line of said Section 24.
- CASE 5981: Application of W. A. Monerief, Jr., for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of an oil pool for Upper-Pennsylvanian production for his State Well No. 1 located in Unit E of Section 26, Township 16 South, Range 33 East, Lea County, New Mexico, and the promulgation of special rules therefor, including a provision for 80-acre spacing.

sub div authority for 6 mos. only.



LEGEND

- 7608 JV-P HAGOOD, No. 1
- * PRODUCING GAS WELL
- ◇ DRY HOLE

BEFORE EXAMINER NUTTER

BTA EXHIBIT NO. 1

CASE NO. 5977

SCALE: 1" = 4000'

DATE: 6-27-77

BTA OIL PRODUCERS EXHIBIT 1

7608 JV-P HAGOOD, No. 1

ANNULAR DISPOSAL

CASE No 5977

P. O. BOX 1468
PHONE 943-3234 OR 563-1040
MONAHANS, TEXAS 79756

Martin Water Laboratories, Inc.
EXHIBIT 3
CASE 5977
RESULT OF WATER ANALYSES

408 W. ILLINOIS
MIDLAND, TEXAS 79701
PHONE 683-4521

TO: Mr. Steve Salmon
104 S. Pecos, Midland, TX

LABORATORY NO. 97577
SAMPLE RECEIVED 5-15-76
RESULTS REPORTED 9-15-76

COMPANY BTA Oil Producers LEASE Haygood #1
FIELD OR POOL Wildcat
SECTION BLOCK SURVEY COUNTY Lea STATE New Mexico

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Pit sample.
NO. 2 Recovered water - sampler.
NO. 3
NO. 4

REMARKS: DST #1

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0032	1.2015		
pH When Sampled				
pH When Received	8.8	6.8		
Bicarbonate as HCO ₃	5	93		
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	760	91,500		
Calcium as Ca	224	31,200		
Magnesium as Mg	49	3,281		
Sodium and/or Potassium	428	81,504		
Sulfate as SO ₄	924	231		
Chloride as Cl	497	190,331		
Iron as Fe	0.48	31.2		
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	2,141	306,640		
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0	0.0		
Resistivity, ohms/m at 77° F.	3.00	0.045		
Suspended Oil				
Filtrable Solids, as mg/l				
Volume Filtered, ml				
Carbonate, as CO ₃	14	0		

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks The above results clearly show all the recovered water is natural connate water from a Delaware interval.

Form No. 3

BEFORE EXAMINER NOTIFIER
OIL CONSERVATION COMMISSION
BTA EXHIBIT NO. 3
CASE NO. 5977

Waylan C. Martin, M. A.

P. O. BOX 1468
MONAHAN, TEXAS 79756
PHONE 943-3234 OR 563-1040

EXHIBIT 4
CASE 5977
Martin Water Laboratories, Inc.

RECEIVED MAY 11 1977

408 W. ILLINOIS
MIDLAND, TEXAS 79701
PHONE 683-4521

RESULT OF WATER ANALYSES

TO: Mr. C. R. Pearson
104 South Pecos, Midland, TX
LABORATORY NO. 57724
SAMPLE RECEIVED 5-9-77
RESULTS REPORTED 5-9-77

COMPANY BTA Oil Producers
FIELD OR POOL Wildcat
SECTION BLOCK SURVEY COUNTY Lea STATE NM
SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Recovered water - taken from Hagood #1 separator, 5-8-77
NO. 2
NO. 3
NO. 4

REMARKS: Penn - Atoka

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0328			
pH When Sampled				
pH When Received	7.0			
Bicarbonate as HCO ₃	1,000			
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	8,600			
Calcium as Ca	2,880			
Magnesium as Mg	340			
Sodium and/or Potassium	13,057			
Sulfate as SO ₄	592			
Chloride as Cl	25,212			
Iron as Fe	72.0			
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	43,081			
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0			
Resistivity, ohms/m at 77° F.	0.185			
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
BTA EXHIBIT NO. 4
CASE NO. 5977

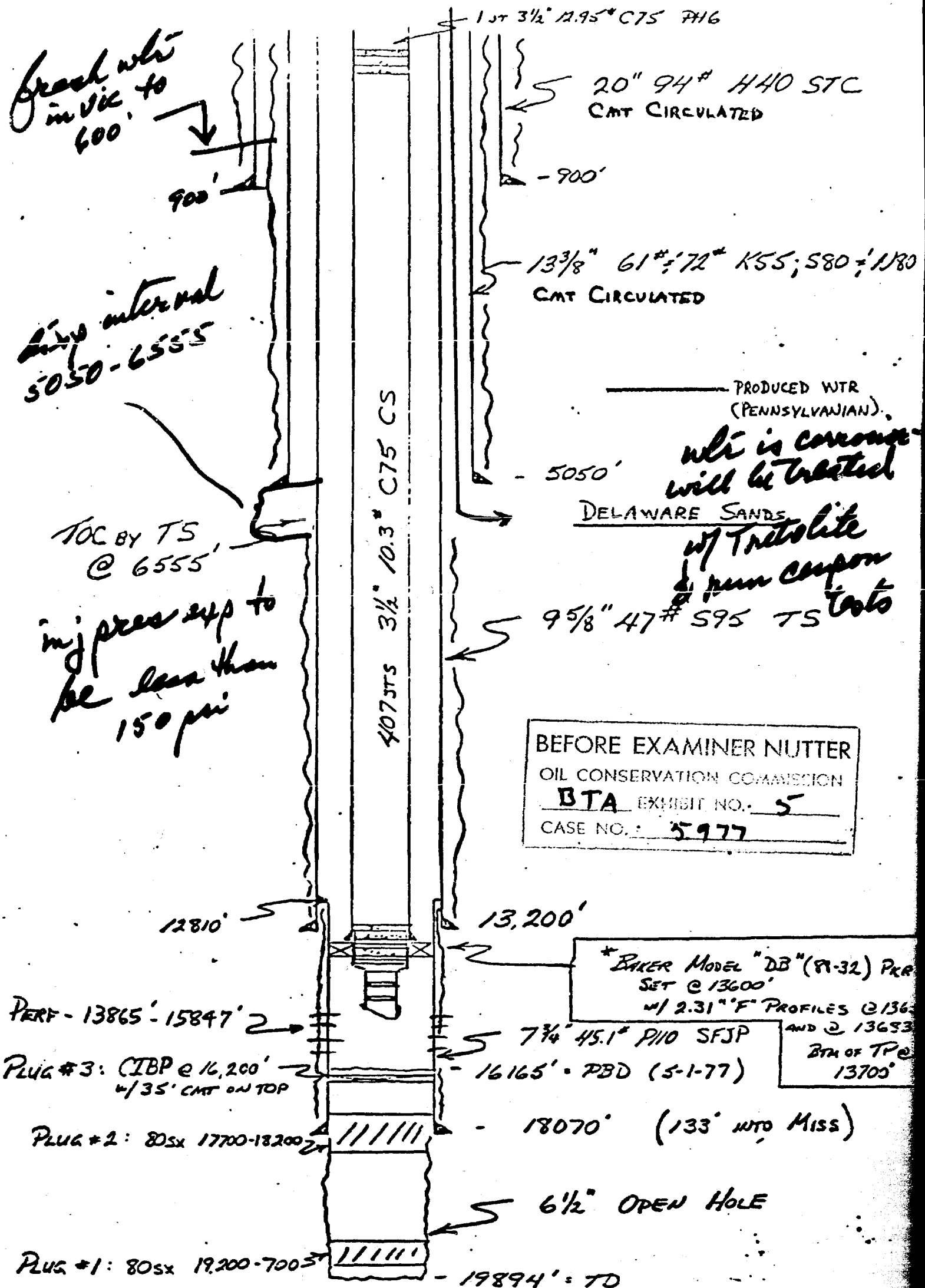
Results Reported As Milligrams Per Liter

Additional Determinations And Remarks We have no records of Atoka in the general area but as we check on the characteristics in outlying areas of the Delaware Basin, we find some distinct similarity between this water and these other records of Atoka. Therefore, though the stability is somewhat limited due to the lack of records in the immediate area, we are inclined to suspect with some degree of confidence that this is likely mostly Atoka water.

Form No. 3

By
Waylan C. Martin, M. A.

CASE 5977 EXHIBIT 5
 PROPOSED ANNULAR INJECTION
 7608 JV-P HAGOOD No. 1 -



* SEE BAKER DRAWING FOR DETAIL

5/2/77

EXHIBIT NO. 6
CASE 5977
RATE TEST

RATE
BPM

RATE
BPD

PRESSURE
PSI

Pump 9 barrels to load hole

3	4320	150
4	5760	250
5	7200	350

ISDP 0 psi

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
BTA EXHIBIT NO. 6
CASE NO. 5977

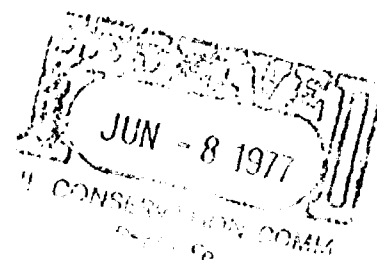


(Case 5977)

PARTNERS
CARLTON BEAL
CARLTON BEAL, JR.
BARRY BEAL
SPENCER BEAL

BTA OIL PRODUCERS

104 SOUTH PECOS
MIDLAND, TEXAS 79701
AC 915-682-3753



June 6, 1977

Re: Hearing Confirmation - Annular Disposal
Wildcat Pool (Pennsylvanian)
7608 JV-P Hagood, Well #1
Unit Ltr. -B-, 1980' FEL & 990' FNL
Sec. 25, Twp 26-S, Rge 35-E
Lea County, New Mexico

OIL CONSERVATION COMMISSION
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. C. G. Ulvog

Gentlemen:

Pursuant to our conversation June 3, 1977, BTA Oil Producers hereby confirms July 6, 1977 as the hearing date for the subject well.

Yours very truly,

Bob K. Newland

BOB K. NEWLAND
For BTA Oil Producers

BKN/dh



PARTNERS
CARLTON BEAL
CARLTON BEAL, JR.
BARRY BEAL
SPENCER BEAL

BTA OIL PRODUCERS

104 SOUTH PECOS
MIDLAND, TEXAS 79701
AC 915-682-3753

May 31, 1977

Re: Application for annular disposal
BTA - 7608 JV-P Hagood Well #1
Wildcat Pool
Unit Ltr. -B-, Sec. 25, Twp 26-S, Rge 35-E
Lea County, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey

Gentlemen:

BTA Oil Producers respectfully request the Oil Conservation Commission to consider and administratively approve annular disposal for the subject well. This request is for a six month period commencing with the date of connection, to evaluate the economics of the well. The well is currently shut in pending pipeline connection. Prior to shut-in, the well tested approximately 1.65 MMCF/PD and 350 barrels of water from the Pennsylvanian zone.

XL Transportation Co., 113 N. 3rd, Hobbs, New Mexico, quoted the low bid of 49 cents per barrel hauling fee. BTA's salt water trucking charge will be in excess of \$5000 per month. Approval of this application by the Oil Conservation Commission and the United States Geological Survey will result in savings in excess of \$30,000 with no loss of pipe integrity. BTA proposes to treat the produced water (Pennsylvanian) prior to injection with Tretolite WF-45, a combination scale and corrosion inhibitor. Injection pressure shall be approximately 300 psi. Disposal shall be in the Delaware sands between 5050 and 6555 feet as noted on the attached application for injection. The 20" and 13-3/8" casing strings are cemented to the surface.

If a hearing is necessary, please schedule as soon as possible.

Yours very truly,

Bob K. Newland

BOB K. NEWLAND
For BTA Oil Producers

BKN/dh

Attachments: C-108, Plat, Sundry Reports
Diagrammatic sketch of well
Log & Water Analysis

cc: Oil Conservation Commission
District I
Hobbs, New Mexico 88240
Attention: Mr. Jerry Sexton

Case 5977

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR BTA OIL PRODUCERS		ADDRESS 104 South Pecos Midland, Texas 79701	
LEASE NAME 7608 JV-P Hagood	WELL NO. 1	FIELD Wildcat	COUNTY Lea
LOCATION UNIT LETTER -B- WELL IS LOCATED 1980 FEET FROM THE East LINE AND 990 FEET FROM THE North LINE, SECTION 25 TOWNSHIP 26-S RANGE 35-E NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING					
See Attachment					
INTERMEDIATE					
LONG STRING					
TUBING					
			NAME, MODEL AND DEPTH OF TUBING PACKER N/A		
NAME OF PROPOSED INJECTION FORMATION Delaware Sands			TOP OF FORMATION 4998'		BOTTOM OF FORMATION 9068'
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Annulus		PERFORATIONS OR OPEN HOLES Annular Open Hole		PROPOSED INTERVAL(S) OF INJECTION 5050' - 6555'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Gas		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? Yes	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH 13,865' - 15,847' Baker Model "DB" Pkr set @ 13,600' & CIBP @ 16,200' w/35sx Cmt on top					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 710'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 12,581'		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 13,851'	
ANTICIPATED DAILY INJECTION VOLUME (BBL'S.) 350	MINIMUM 300	MAXIMUM 600	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure	APPROX. PRESSURE (PSI) 300
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE -			WATER TO BE DISPOSED OF Yes		NATURAL WATER IN DISPOSAL ZONE Yes
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mr. Monty Beckham, P. O. Box 1203, Jal, New Mexico 88252			LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL None		
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? Yes		SURFACE OWNER Yes		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL N/A	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) Yes		PLAT OF AREA Yes		ELECTRICAL LOG Yes	
				THE NEW MEXICO STATE ENGINEER Yes	
				DIAGRAMMATIC SKETCH OF WELL Yes	

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

<i>Bob Newland</i>	Bob Newland	Regulatory Supervisor	5/25/77
(Signature)		(Title)	(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well, not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

Case 5977

Attachment - Form C-108
BTA OIL PRODUCERS

Name of String	Size	Setting Depth	Sacks Cement	Top of Cement	Top Determined By
Surface Casing	20"	900'	1150	Circ	-
Surface Casing	13-3/8"	5050'	13700	Circ	-
Intermediate	9-5/8"	13200'	3125	6555'	T S
Liner	7-3/4"	12810' - 18070'	-	-	-
Tubing	3-1/2"	13600'	-	-	-

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPlicate
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424.
5. LEASE DESIGNATION AND SERIAL NO.

NM-12281-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER	7. UNIT AGREEMENT
2. NAME OF OPERATOR	Hagood Unit
3. ADDRESS OF OPERATOR	8. FARM OR LEASE NAME
BTA OIL PRODUCERS	7608 JV-P Hagood
104 South Pecos Midland, Texas 79701	9. WELL NO.
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface	1
1980' FEL & 990' FNL	10. FIELD AND POOL, OR WILDCAT
	Wildcat
	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
	Sec. 25, 26-S, 35-E
14. PERMIT NO.	12. COUNTY OR PARISH
	Lea
15. ELEVATIONS (Show whether DF, ST, GR, etc.)	13. STATE
2959' GL	New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>	Spud & Casing	<input checked="" type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	REPAIRING WELL	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	ABANDONMENT*	<input type="checkbox"/>
(Other)	<input type="checkbox"/>	(Other)	<input type="checkbox"/>

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

8/11/76 Spudded 3:00 A.M. Drlg 26" Hole in Sand & Gravel.

8/17/76 Cmt'd 20" OD 94# H-40 ST&C Csg. @900' w/950sx C1-C & 200sx C1-H-. Cmt Circulated, WOC.

8/18/76 Tested 20" & BOP's w/1500psi for 30 min. OK. Drlg ahead.

9/10/76 Cmt'd 13-3/8" 61,68&72# csg @5050' w/13,500sx C1-C- & 200sx C1-H-. Circ. 83sx. WOC.

9/12/76 Tested 13-3/8" & BOP's w/1500 psi for 30 min. OK.

9/15/76 DST #1 from 5050' to 5170'. Salt Wtr. sampler @50 psi recovered 2000cc salt wtr 215,000 ppm chloride.

9/16/76 Drlg Ahead.

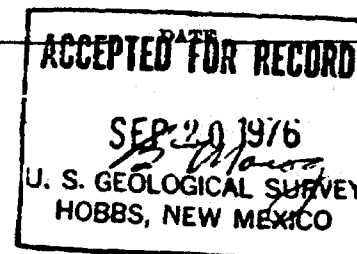
18. I hereby certify that the foregoing is true and correct

SIGNED Bob Newland Bob Newland TITLE Regulatory Supervisor DATE 9/17/76

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRI. DATE:
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1-24
5. LEASE DESIGNATION AND SERIAL

NM-12281-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER	7. UNIT AGREEMENT NAME Hagood Unit
2. NAME OF OPERATOR BTA OIL PRODUCERS	8. FARM OR LEASE NAME 7608 JV-P Hagood
3. ADDRESS OF OPERATOR 104 South Pecos Midland, Texas 79701	9. WELL NO. 1
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface 1980' FEL & 990' FNL	10. FIELD AND POOL, OR WILDCAT Wildcat
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, AT, CR, etc.) 2959' GL
	11. SEC., T., R., M., OR PLK. AND SURVEY OR AREA Sec. 25, 26-S, 35-E
	12. COUNTY OR PARISH Lea
	13. STATE New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Casing</u> <input checked="" type="checkbox"/>	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

9/18/76 Drlg 12 1/4" hole in lime & sand.10/31/76 Cmt'd 9 5/8" csg. @ 13200'. Cmt'd w/2625 sx Class C, tailed in w/500 sx Class H. WOC.11/1/76 Tested 9 5/8" & BOP w/1500 psi for 30 min. O.K.11/2/76 Drlg 8 1/2" hole in shale.12/1/76 Finished DST #2 from 13,850' to 13,961'.12/2/76 Drlg ahead.

18. I hereby certify that the foregoing is true and correct

SIGNED Bob Newland Bob NewlandTITLE Regulatory SupervisorDATE 12-28-76

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

ACCEPTED FOR RECORD

DATE

JAN 3 1977
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

*See Instructions on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN DUPLICATE
(Other copies to be
submitted to)Form approved.
Budget Bureau No. 42-R14-1

Case 5977

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a well.
Use "APPLICATION FOR PERMIT" for such proposals.)FORM 9-331 IS REQUIRED
IN QUINTUPLICATE

1. <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER	7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR	Hagood Unit
3. ADDRESS OF OPERATOR	7608 JV-P Hagood
104 South Pecos Midland, Texas 79701	9. WELL NO.
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. See also space 17 below.) At surface	1
1980' FEL & 990' FNL	10. FIELD AND POOL, OR WILDCAT
	Wildcat
	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
	Sec. 25, 26-S, 35-E
14. PERMIT NO.	12. COUNTY OR PARISH
	Lea
15. ELEVATIONS (Show whether DF, RT, GS, etc.)	13. STATE
2959' GL	New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Liner

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROMISED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

3/27/77 Drlg 8 1/2" hole in lime & shale.

3/30/77 Ran 7 3/4" 46.1# P-110 SFJP liner as follows:

Halliburton Float Shoe	1.85'
2 jts.	75.86'
Halliburton Float Shoe	1.61'
1 jt.	39.54'
TIW landing collar	.85'
130 jts.	5134.99'
TIW hanger	5.61'
Total length	5260.31'
Drill Pipe	12809.69'
Liner Set @	18070.00'
Float collar	17992.00'
Landing Collar	17951.00'
Top of Liner	12810.00'

FORM 9-331 IS REQUIRED
IN QUINTUPLICATE

18. I hereby certify that the foregoing is true and correct

SIGNED Bob Newland Bob NewlandTITLE Regulatory SupervisorDATE 4-1-77

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

ACCEPTED FOR RECORD

DATE APR 4 1977
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

*See Instructions on Reverse Side

RECEIVED MAY 7 1977

Form 9-331
(May 1963)UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPlicate:
Other Instructions on Re-
verse SideForm approved:
Budget Bureau No. 42-11-01

5. LEASE DESIGNATION AND SERIAL NO.

NM-12281-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals.)1. ☐ OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

BTA OIL PRODUCERS

3. ADDRESS OF OPERATOR

104 South Pecos Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface

1980' FEL & 990' FNL

7. UNIT AGREEMENT NAME

Hagood Unit

8. FIELD OR LEASE NAME

7608 JV-F Hagood

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREA

Sec. 25, 26-S, 35-E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GA, etc.)

2959'

12. COUNTY OR PARISH

Lea

13. STATE

New Mexico

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) P & A 6 1/2" Hole

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.) *

TD 19,894'

Cmt plug (80 sx) Set from 19,200' to 19,700'

Cmt plug (80 sx) Set from 17,700' to 18,200'

CIBP set @ 16,200' w/35' cmt Cap (75 sx)

18. I hereby certify that the foregoing is true and correct

SIGNED Bob Newland Bob Newland TITLE Regulatory SupervisorDATE 5/3/77

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____

ACCEPTED FOR RECORD

DATE

MAY 5 1977
U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

*See Instructions on Reverse Side

TO: _____

LABORATORY NO. _____

SAMPLE RECEIVED _____

RESULTS REPORTED _____

COMPANY _____ LEASE Hagedorn - 3/8/77
FIELD OR POOL _____
SECTION _____ BLOCK _____ SURVEY _____ COUNTY _____ STATE _____
SOURCE OF SAMPLE AND DATE TAKEN: _____

NO. 1 _____

NO. 2 _____

NO. 3 _____

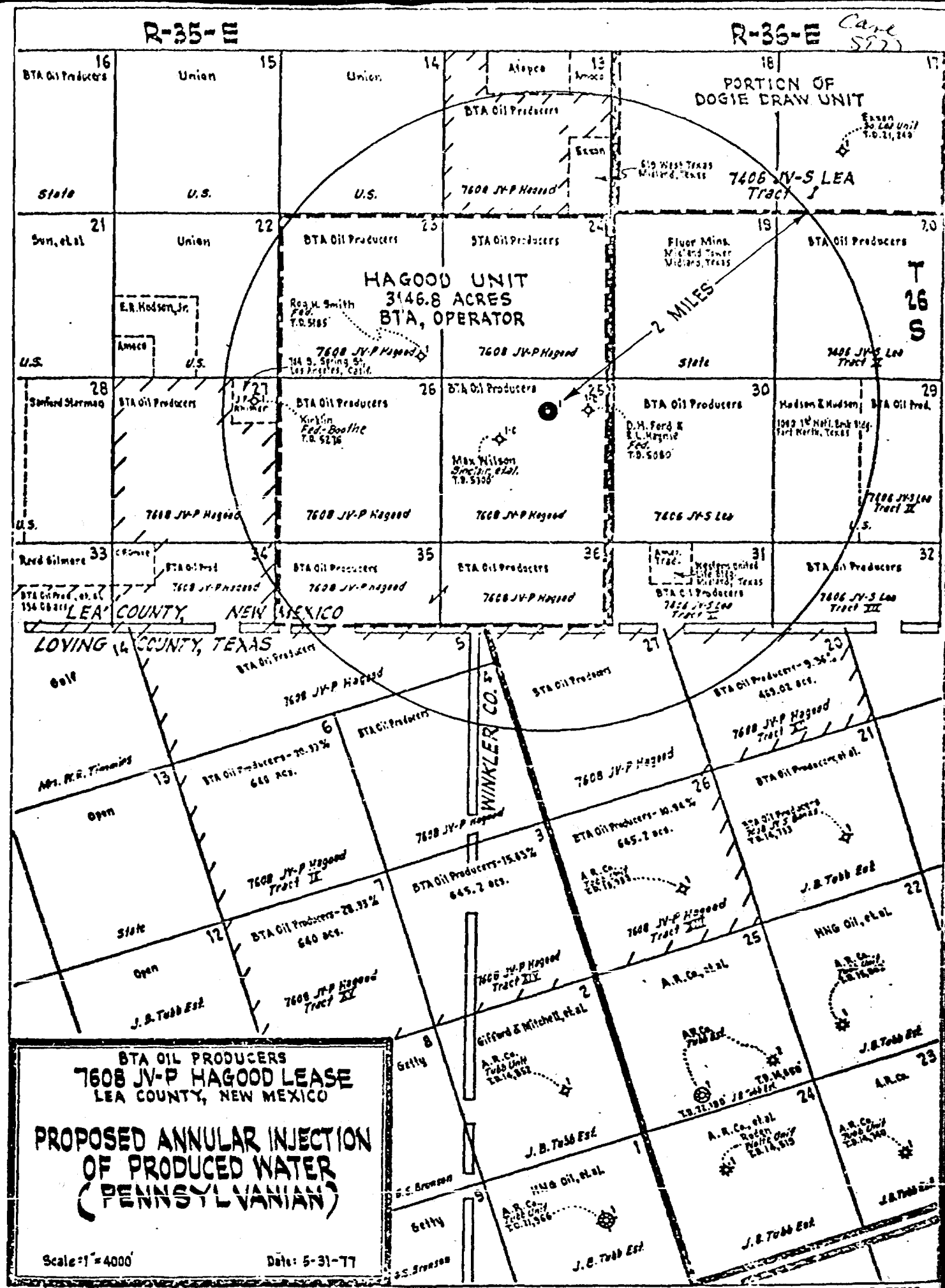
NO. 4 _____

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES					
		NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	✓	1.0328			
pH When Sampled					
pH When Received	✓	7.0			
Bicarbonate as HCO ₃	✓	1000			
Supersaturation as CaCO ₃					
Undersaturation as CaCO ₃					
Total Hardness as CaCO ₃	✓	8600			
Calcium as Ca	✓	2880			
Magnesium as Mg	✓	340			
Sodium and/or Potassium	✓	13,057			
Sulfate as SO ₄	✓	592			
Chloride as Cl	✓	25,212			
Iron as Fe	✓	72			
Barium as Ba					
Turbidity, Electric					
Color as Pt					
Total Solids, Calculated	✓	43,081			
Temperature °F.					
Carbon Dioxide, Calculated					
Dissolved Oxygen, Winkler					
Hydrogen Sulfide	✓	-0-			
Resistivity, ohms/m at 77° F.	✓	.185			
Suspended Oil					
Filtrable Solids as mg/l					
Volume Filtered, ml					

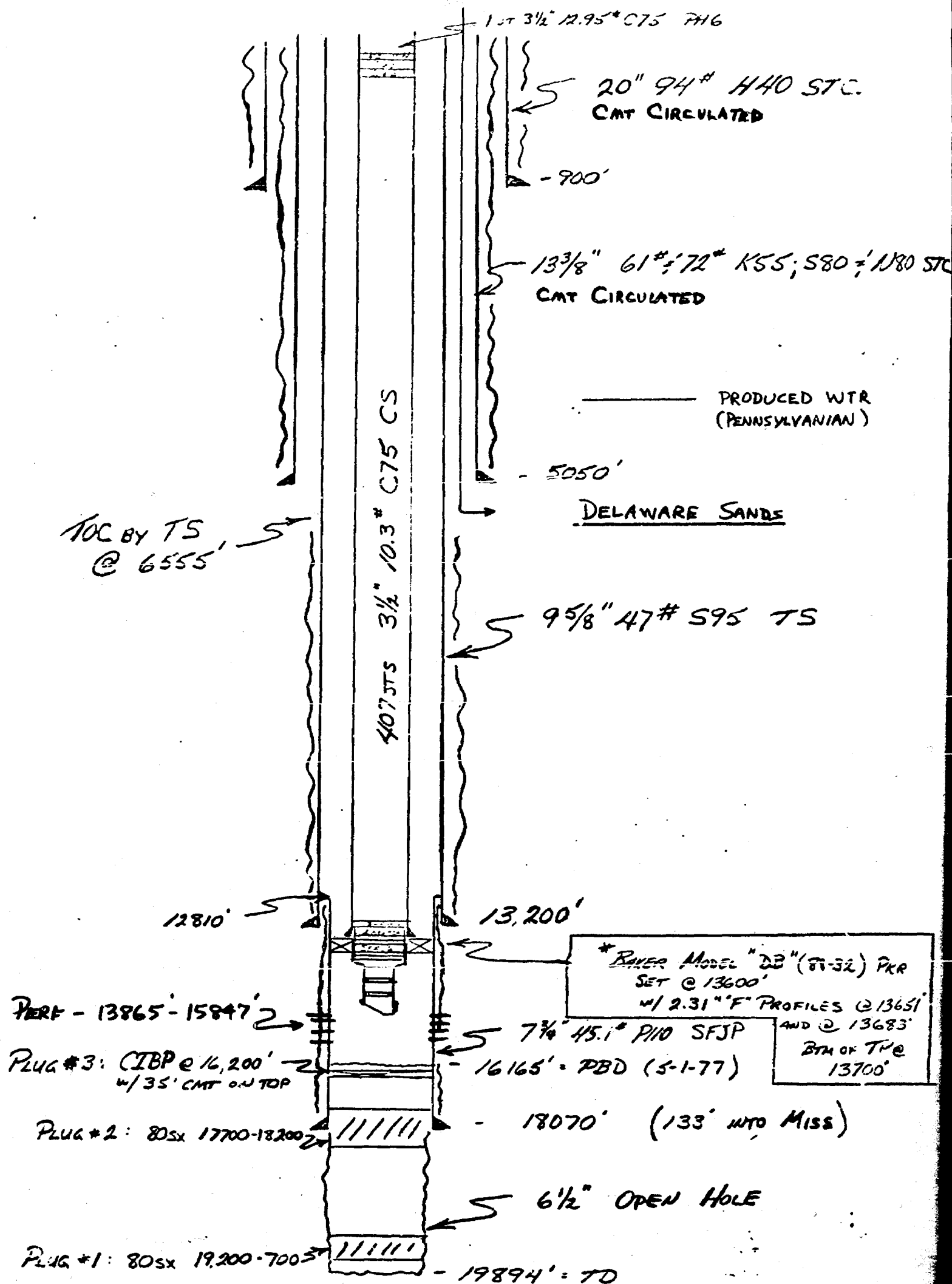
Results Reported As Milligrams Per Liter

Additional Determinations And Remarks



Case 5977

PROPOSED ANNULAR INJECTION 7608 JV-P HAGOOD No. 1 -



* SEE BAKER DRAWING FOR DETAIL

5/2/77

dr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5977Order No. R- 5491

APPLICATION OF BTA OIL PRODUCERS
FOR A DUAL COMPLETION AND SALT WATER
DISPOSAL, LEA COUNTY, NEW MEXICO.

*JS*ORDER OF THE COMMISSIONBY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 6,
19 77, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this day of July, 19 77, the Commission,
a quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, BTA Oil Producers, seeks authority
to complete its JV-P Hagood Well No. 1, located in Unit B of
Section 25, Township 26 South, Range 35 East, NM2M, Lea County,
New Mexico, as a dual completion in such a manner as to produce
gas from the Pennsylvanian formation through ^{3 1/2-inch} tubing within the
production casing and to dispose of produced salt water down the
9 5/8" x 13 3/8" production/intermediate
casing annulus into the Delaware formation through the open-hole
~~xxxx~~ interval from 5,050 feet to approximately 6,555 feet.

(3) That the applicant proposes to utilize said well for annular disposal of salt water for a temporary period not to exceed ~~one year~~ ^{Six months} to permit production and evaluation of the Pennsylvanian producing zone.

(4) That said JV-P Hagood Well No. 1 is far removed from the main producing area of Southeast New Mexico and normally available salt water disposal facilities.

(5) That the applicant will treat the injected water to prevent corrosion *and conduct coupon surveys to detect corrosion.*

(6) That the mechanics of the proposed dual completion are ~~feasible~~ feasible and in accord with good conservation practices.

(7) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, BTA Oil Producers, is hereby authorized to complete its JV-P Hagood Well No. 1, located in Unit B of Section 25, Township 26 South, Range 35 East, NMPM, Lea County, New Mexico, as a dual completion to produce gas from the Pennsylvanian formation through ^{3 1/2-inch} tubing within the production casing and to dispose of produced salt water through the ~~9~~ 5/8-inch and ~~13~~ 3/8-inch casing/casing annulus into the Delaware formation through the open-hole interval from 5,050 feet to approximately 6,555 feet.

(2) That the applicant shall treat the injected water to prevent corrosion *and shall conduct coupon surveys to detect corrosion.*

(3) That the well shall be equipped with a pop-off valve or in some other acceptable manner so as to limit wellhead injection pressures to no more than 1000 psi.

(4) That the operator shall immediately notify the supervisor of the Commission's district office at Hobbs of the failure of the injection well in any manner, the leakage of water from or around said well, or any other evidence of migration of water from the injection zone, and shall take such timely steps as may be necessary or required to correct such failure or leakage.

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(5) That the applicant shall promptly notify the supervisor of the Commission's district office at Hobbs of the date of first injection.

(6) That this order shall expire ^{Six}~~12~~ months following the date of first injection.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.