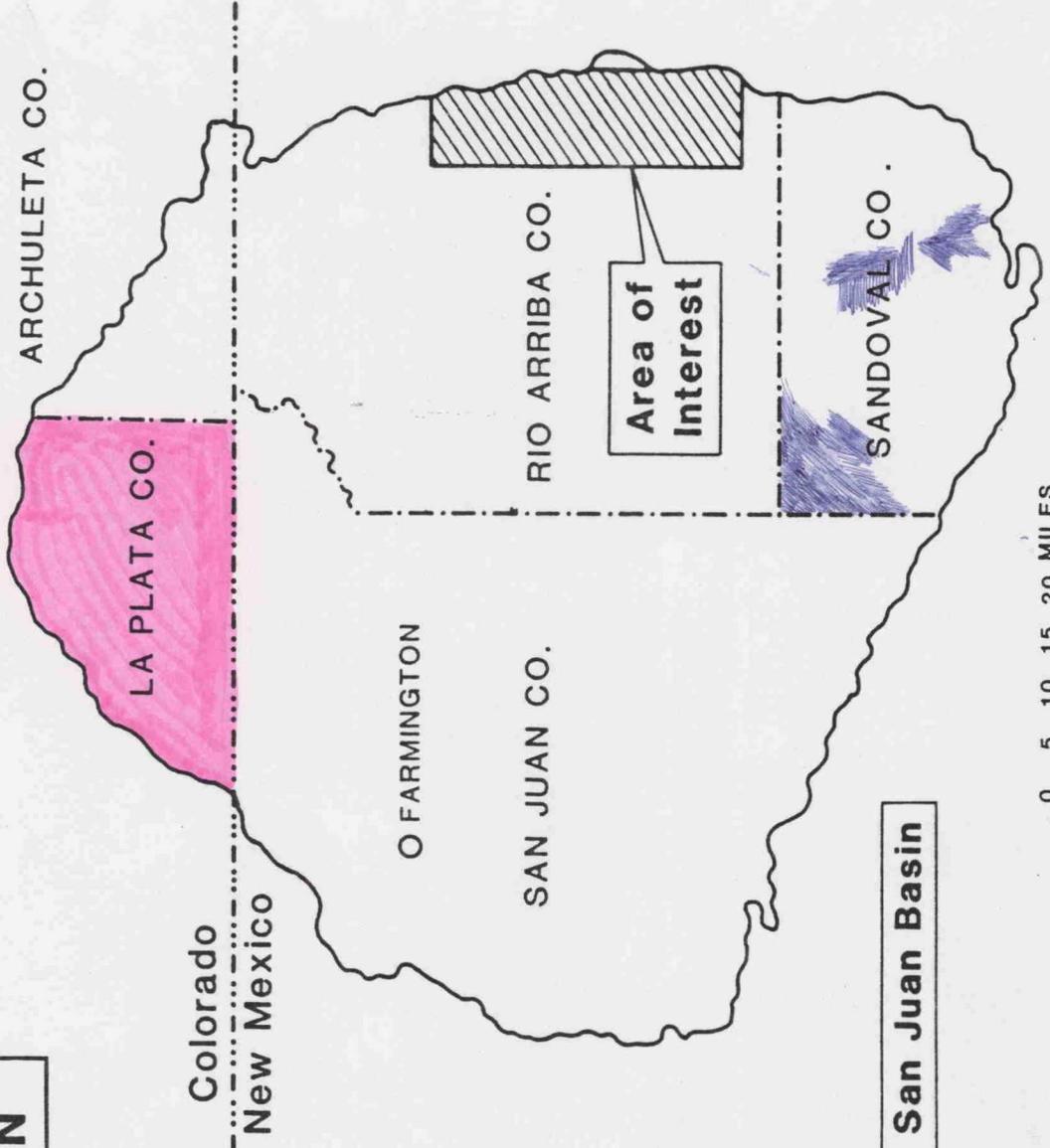
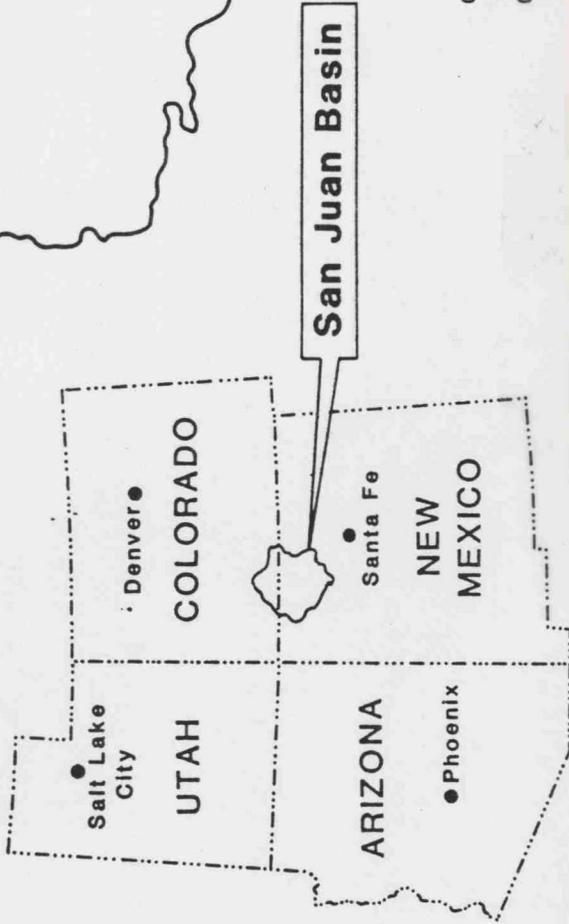
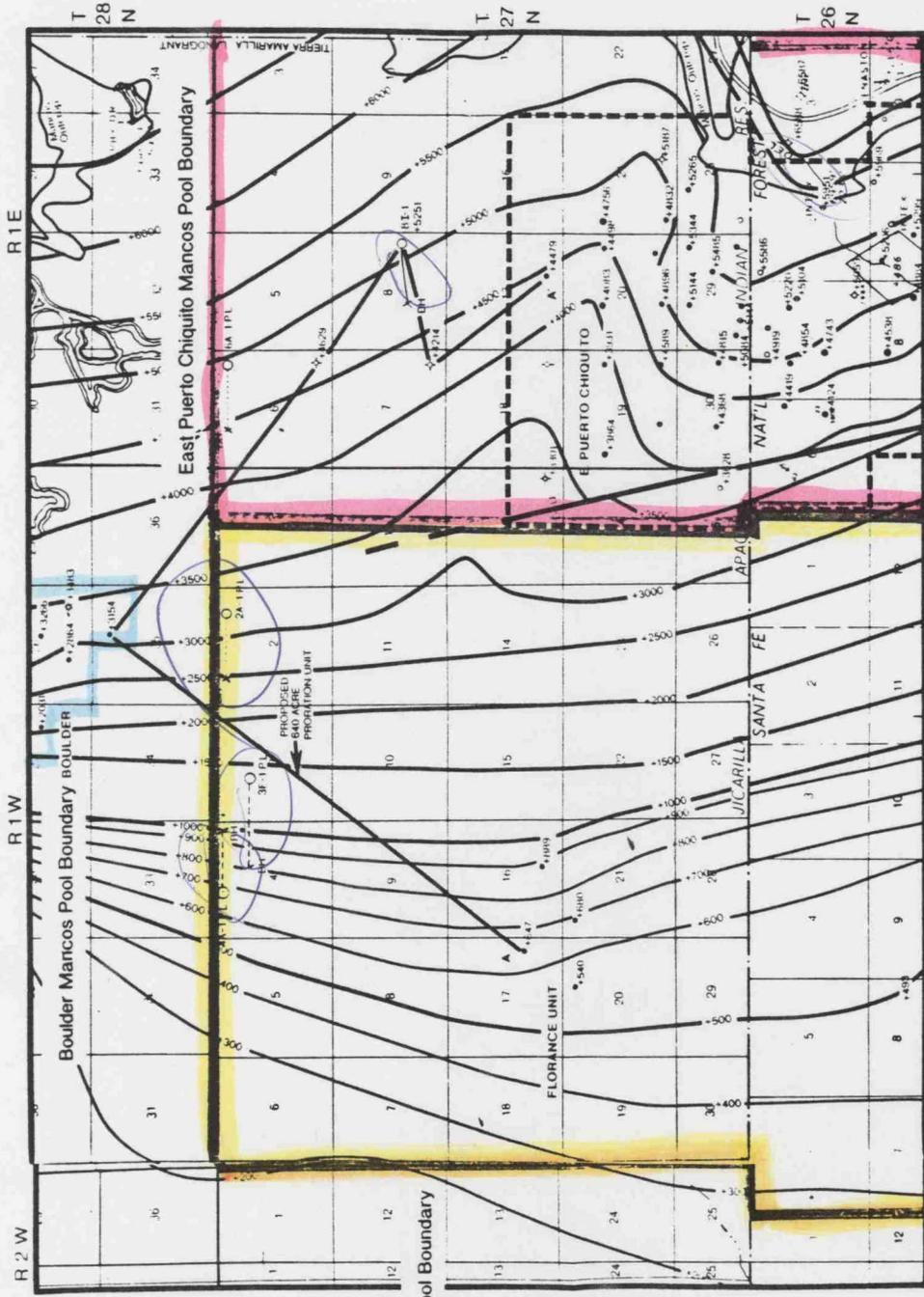


**SAN JUAN BASIN**

BEFORE EXAMINER STOGNER  
OIL CONSERVATION DIVISION  
AM. HUNTER EXHIBIT NO. L-1  
CASE NO. 10506



*American Hunter Exhibits  
L-1 through L-8  
Complete Set*

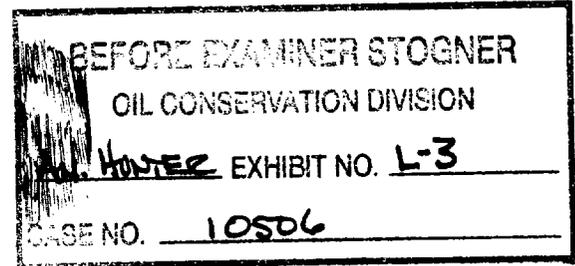


<b>american hunter</b>	
STRUCTURE MAP	
Top Niobrara (A) Zone	
NE San Juan Basin	
New Mexico State University	
SCALE: 1" = 400'	DATE: 1/19/81
DRAWN BY: Doyan Roper	ENCL. NO.

-----  
E PUERTO CHIQUITO  
UNIT BOUNDARY

**BEFORE EXAMINER STOGNER**  
**OIL CONSERVATION DIVISION**  
**AVL HUNTER EXHIBIT NO. L-2**  
**CASE NO. 105D4**

**WELL SUMMARY**  
**AMERICAN HUNTER EXPLORATION LTD.**  
**JICARILLA 2-A #1**  
**ne ne section 2 T27N R1W**



**Surface Location:**

- 442' FNL 1177' FEL

**Spud Date:**

- 09/29/91

**Surface Casing:**

- Drilled 14 3/4" hole to 250'.
- Set 10 3/4" surface casing on 09/30/91.

**Intermediate Drilling History:**

- Drilled 9 7/8" hole to 3796' MD (3784'TVD) and ran Dual Induction, L.S. Sonic - G.R. logs.
- Drilled ahead with 9 7/8" hole to 4569' MD (4415'TVD) and ran 7 5/8" intermediate casing on 10/14/91.

**Final Drilling History:**

- Drilled 6 3/4" hole to 5324' MD (4542'TVD) (372'FNL, 2,032'FEL), began to lose oil, experienced bit torque and temporarily lost sample returns.
- Continued drilling to 6632' MD (4854'TVD) through several more zones of bit torques and losses of oil to the formation.
- TD'd well on 10/28/91 at 6632' MD (620'FNL, 3,277'FEL).

## Completion History:

- Ran pre-perforated 5 1/2" liner to TD 6632' MD (4854'TVD) on 10/28/91.
- Placed alternating pre-perf'd/blank liner with perfs beginning at 4559' MD to TD 6625' MD (Gross Interval).
- Moved in completion rig on 11/07/91.
- Begin swabbing on 11/09/91. SITP 0 psi. SICP 15 psi.
- Ran Amerada pressure recorders with 360 hour clocks and shut in for build-up tests on 11/20/91.
- Rigged up pumping unit from 11/24/91 to 11/26/91.
- Began pumping well on 12/12/91.
- Continue pumping well. First new oil pumped on 02/02/92, corresponding to date of completion.
- Pumped until 02/10/92, when weather forced shut-in.
- Pumped for three day test 05/20/92 to 05/23/92. Shut-in well again due to road conditions.
- Began OCD-authorized commerciality and reservoir test on 06/28/92. Began by running bottomhole pressure buildup.
- Pump well to present date.

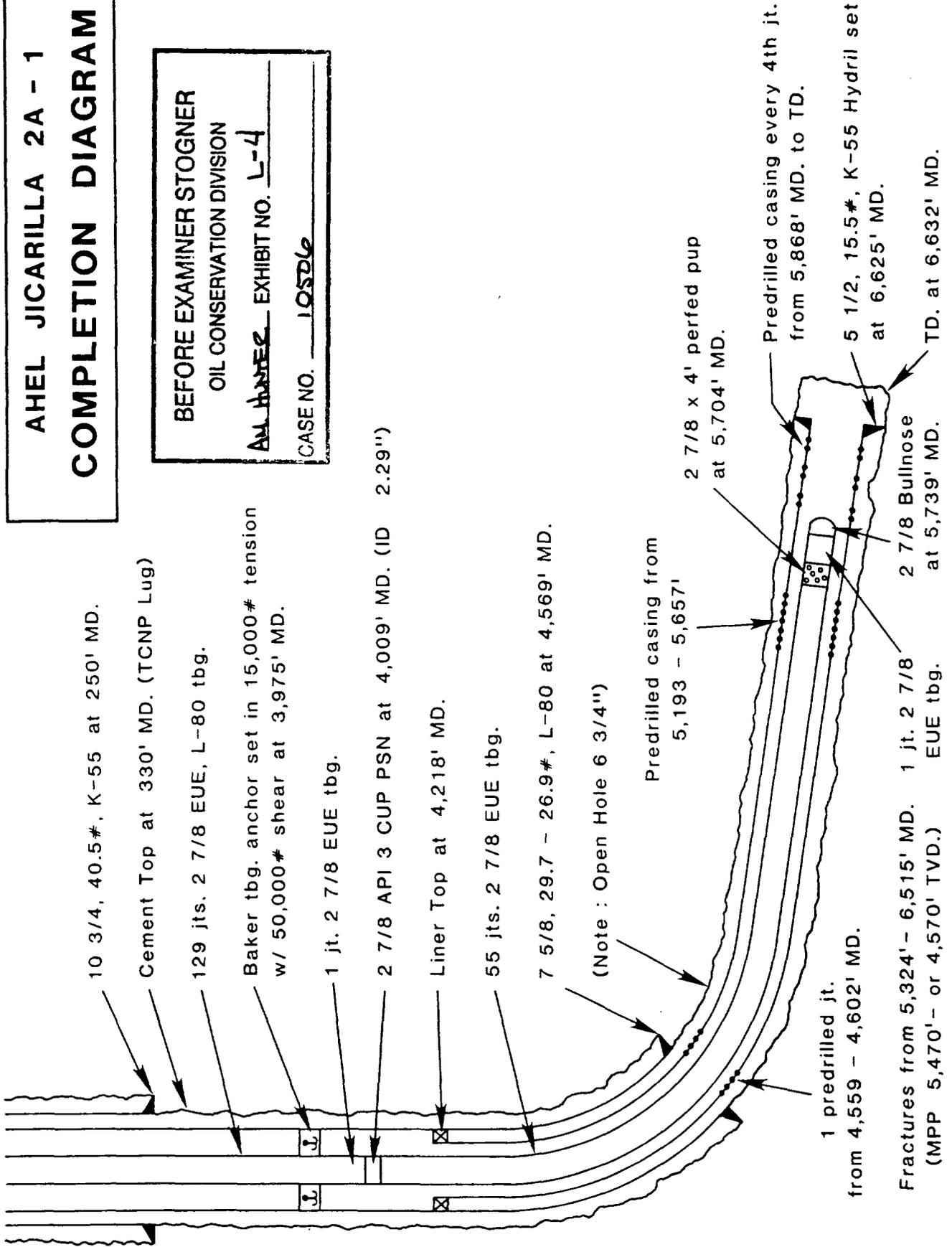
AHEL JICARILLA 2A - 1

COMPLETION DIAGRAM

BEFORE EXAMINER STOGNER  
OIL CONSERVATION DIVISION

AM. HANDEZ EXHIBIT NO. L-4

CASE NO. 10526



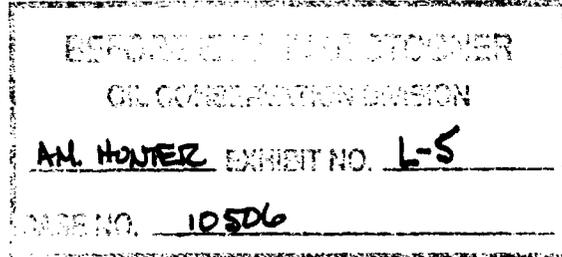
WELL SUMMARY  
AMERICAN HUNTER EXPLORATION LTD.  
JICARILLA 3-F #1  
se nw section 3 T27N R1W

Surface Location:

- 1845' FNL 1900' FWL

Spud Date:

- 11/28/91



Surface Casing:

- Drilled 14 3/4" hole to 375'.
- Set 10 3/4" surface casing on 11/29/91

Intermediate Drilling History:

- Drilled 9 7/8" hole to 5870' MD (5798'TVD) (1812'FNL, 2662'FEL) and ran Dual Induction, Borehole Compensated Sonic and Dual Dipmeter Tool Logs on 12/17/91.
- Drilled ahead with 9 7/8" hole to 6729' MD (6509'TVD) (1786'FNL, 2244'FEL) and ran 7 5/8" intermediate casing on 12/24/91.

Final Drilling History:

- Drilled 6 3/4" hole to 6952' MD (6587'TVD) where wellbore began to take oil.
- Drilled to 7486' MD (6654'TVD) and lost 1/3 returns. Acquired more oil and drilled ahead to 7862' MD (6688'TVD) where oil was being lost continuously to the wellbore. Lost 430 BBLs Oil in one 6 1/2 hr. period. (Loss rate in excess of 1500 BOPD)
- TD'd well on 01/02/92 at 7862' MD due to lost circulation, inability to clean hole and increasing hole drag.

## Completion History:

- Ran pre-perforated 5 1/2" liner to TD 7837' MD (6686'TVD) on 01/02/92.
- Placed alternating pre-perf'd/blank from 6917' MD (6579'TVD) to TD 7862' MD (6688'TVD).
- Moved in completion rig on 01/18/92.
- Ran bottomhole pressure measurements with Amerada Recorders on 01/21/92.
- Ran 2 7/8" tubing to 7819' MD (6685'TVD) and rigged up to swab on 01/24/92.
- Swab until 01/27/92, whereupon well began to flow with swabs.
- Shut well in on 02/01/92 for pressure build-up.
- Rigged up pumping unit from 02/04/92 to 02/06/92, whereupon completion rig was released.
- Waited on pump parts and field production personnel until 02/16/92, whereupon pumping operations first began.
- Pumped until 02/24/92 when first new oil was produced. This is the date of first production and date of completion.

EARLY WELL BEHAVIOR  
COMPLETION HISTORY DETAILS  
AMERICAN HUNTER EXPLORATION LTD.  
JICARILLA 3-F #1  
se nw section 3 T27N R1W

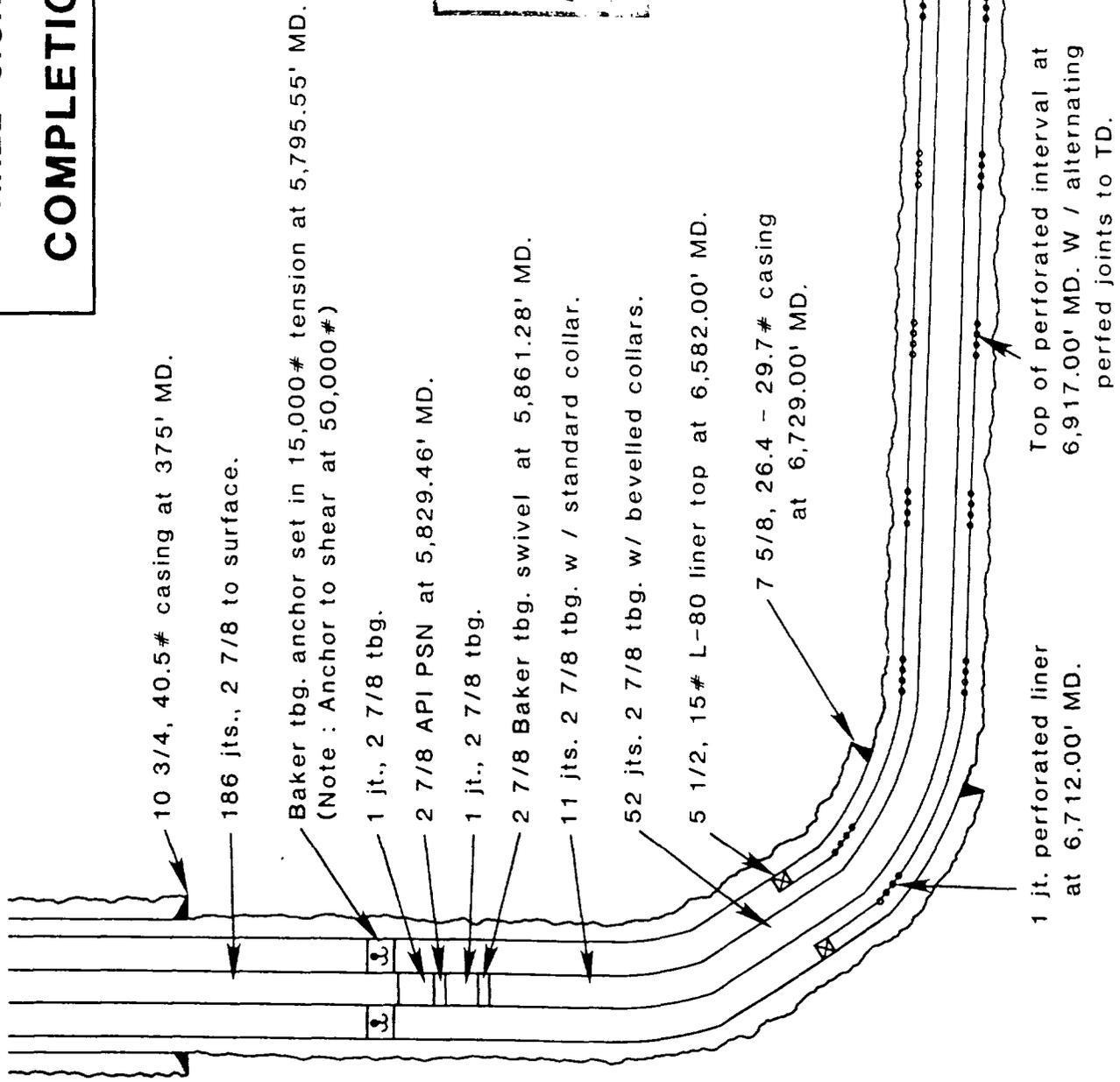
BEFORE EXAMINER STOGNER OIL CONSERVATION DIVISION <u>AM. HUNTER</u> EXHIBIT NO. <u>L-6</u> CASE NO. <u>10506</u>
---

- 01/18/92 - Rig up Completion Equipment
- 01/19/92 - Retrieve bridge plug at 3939' MD and well began to flow oil and gas (possibly some nitrogen). Flowed 37.5 BO. Shut down for night.
- 01/20/92 - Bleed of wellhead pressure. Pump 60 BO down annulus and 25 BO down tubing. Well went on slight vacuum. Run in hole with 2000 psi Amerada Recorders with 24 hour clocks. Make 5 minute stops at surface, 1500', 3000', 4500', 6000'. Land recorders at 6500' for overnight buildup.
- 01/21-23/92 - Pull recorders and repeat 5 minute stops as above (see Recorder Exhibit "A"). Attempted to run tubing, but tubing became stuck below tubing anchor. Removed tubing and anchor.
- 01/24/92 - Successfully run bottomhole production assembly and begin swabbing. Initial fluid level at 2000' MD, final fluid level at 2800' MD. **Testing period begins.**
- 01/25/92 - Continue swabbing. Initial fluid level at 3450' MD. While swabbing, several of the swab runs recovered no fluid. Separately, the tubing and annulus went on vacuum. Shut-in tubing and casing pressure too small to measure.
- 01/26/92 - Continue swabbing. Annulus on slight vacuum all day. Recovered 23 barrels of very viscous sediment-oil emulsion indicating that tubing, liner and fractures may be plugged with drilling by-product. Initial fluid level at 3680' MD, final fluid level at 3200' MD. Shut-in tubing pressure too small to measure and shut-in casing pressure on slight vacuum.

- 01/27/92 - While continuing to swab, well began to flow. Well flowed small amounts (~10 bbls) of oil approximately three times. Shut-in tubing pressure 100 psi and shut-in casing pressure on slight vacuum. Initial fluid level at 2950' MD and final fluid level at 3000' MD.
- 01/28/92 - Continued same operations and well continued to flow small amounts of oil in between swabs. Shut-in tubing pressure 150 psi, shut-in casing pressure 16 psi. Initial fluid level at 3000' MD and final fluid level at 3000' MD. Left well open to tanks overnight and allowed it to flow fluid in slugs.
- 01/29/92 - Well flowed 330 barrels of oil to tanks in 24 hr. period through 2" line with no choke. Flowing tubing pressure 35 psi and shut-in casing pressure 130 psi.
- 01/30/92 - Well flowed 350 barrels of oil to tanks in 24 hrs. Flowing tubing pressure 30 psi, shut-in casing pressure 180 psi.
- 01/31/92 - Well flowed 345 barrels of oil in 24 hrs. Flowing tubing pressure 36 psi, shut-in casing pressure 200 psi.
- 02/01/92 - Well flowed 335 barrels of oil in 24 hrs. Flowing tubing pressure 40 psi, shut-in casing pressure 230 psi. Rig up wireline equipment and run 2000 psi Amerada recorders with 72 hour clocks. Shut well in for pressure build-up.
- 02/04/92 - Shut-in tubing pressure 66 psi, shut-in casing pressure 245 psi. Pull recorders (see Recorder Exhibit "B").
- 02/05-06/92 - Pumped 10 barrels of heated oil down tubing to clear wax build-up. Rig up pumping equipment.
- 02/16/92 - Begin pumping well. (See Production Exhibit "A")

**AHEL JICARILLA 3F - 1**

**COMPLETION DIAGRAM**



**BEFORE EXAMINER STOGNER**  
**OIL CONSERVATION DIVISION**  
**AM. HUNTER EXHIBIT NO. L-7**  
**CASE NO. 1P5D6**

**STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 10476

IN THE MATTER OF THE APPLICATION  
OF AMERICAN HUNTER EXPLORATION, LTD.  
FOR AN EXCEPTION TO THE PROVISIONS  
OF THE DIVISION'S NO-FLARE RULE 306;  
CANCELLATION OF OVERPRODUCTION OR,  
IN THE ALTERNATIVE, SPECIAL PROVISIONS  
GOVERNING OVERPRODUCTION; AND THE ADOPTION  
OF SPECIAL OPERATING PROCEDURES,  
RIO ARRIBA COUNTY, NEW MEXICO.

**AFFIDAVIT OF MAILING**

William F. Carr, being duly sworn, states that on June 17, 1992 he mailed a copy of the Application of American Hunter Exploration, Ltd., for an exception to the provisions of the Division's No-Flare Rule 306; cancellation of overproduction or, in the alternative, Special provisions governing overproduction; and the adoption of Special Operating Procedures, Rio Arriba County, New Mexico with letter(s) setting forth the hearing date, by certified mail, return receipt requested, to the following parties:

Jicarilla Apache Tribe  
Post Office Box 507  
Dulce, New Mexico 87528  
Attn: Thurman Velarde  
Oil & Gas Administrator

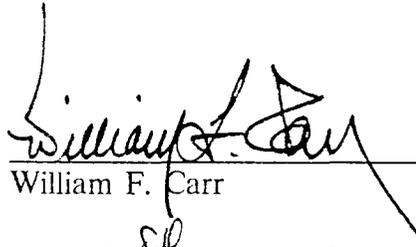
<b>BEFORE EXAMINER STOGNER OIL CONSERVATION DIVISION</b>
<b>AH. HUNTER EXHIBIT NO. L-8</b>
<b>CASE NO. 10476</b>

Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico 87401  
Attn: John Keller

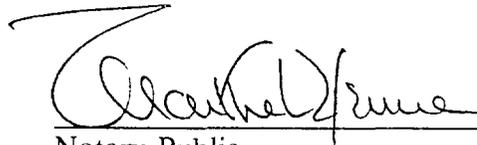
Apache Jicarilla Agency  
Bureau of Indian Affairs  
Post Office Box 167  
Dulce, New Mexico 87528

Benson-Montin-Greer Drilling Corp.  
227 Petroleum Center Building  
Farmington, New Mexico 87401  
Attn: Mr. Albert R. Greer, President

Further Affiant sayeth naught.

  
\_\_\_\_\_  
William F. Carr

SUBSCRIBED AND SWORN to before me this 8th day of July, 1992.

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

August 19, 1995

CAMPBELL, CARR, BERGE

& SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
WILLIAM P. SLATTERY

PATRICIA A. MATTHEWS  
MICHAEL H. FELDEWERT

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE (505) 988-4421  
TELECOPIER (505) 983-6043

June 17, 1992

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Jicarilla Apache Tribe  
Post Office Box 507  
Dulce, New Mexico 87528  
Attn: Thurman Velarde  
Oil & Gas Administrator

Re: Application of American Hunter Exploration, Ltd. for an exception to the provisions of the Division's No-Flare Rule 306; cancellation of overproduction or, in the alternative, special provisions governing overproduction; and the adoption of special operating procedures, Rio Arriba County, New Mexico

Gentlemen:

This letter is to advise you that American Hunter Exploration, Ltd., has filed the enclosed application with the New Mexico Oil Conservation Division seeking an order exempting its Jicarilla 3F 1 Well from No-Flare Rule 306, cancellation of overproduced status of this well or, in the alternative, adoption of special provisions governing the computation of this well's overproduced status, and establishment of a reasonable time within which said overproduction shall be made up, and adopting special operating procedures for this well which is located in the SE/4 NW/4 of Section 3, Township 27 North, Range 1 West, N.M.P.M., Rio Arriba County, New Mexico.

This application has been set for hearing before an Examiner of the Oil Conservation Division on July 9, 1992. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging this matter at a later date.

Jicarilla Apache Tribe  
Attn: Thurman Velarde  
June 17, 1992  
Page 2

Parties appearing in cases have been requested by the Division (Memorandum 2-90) to file a Prehearing Statement substantially in the form prescribed by the Division. Prehearing statements should be filed by 4:00 o'clock p.m. on the Friday before a scheduled hearing.

Very truly yours,



WILLIAM F. CARR  
ATTORNEY FOR AMERICAN HUNTER EXPLORATION, LTD.  
WFC:mlh  
Enc.

P-106 677 404

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)

Sent to Jicarilla Apache Tribe Attn: Thurman Velarde	
Street and No. Post Office Box 507	
P.O. State and ZIP Code Dulce, New Mexico 87528	
Postage	S
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	S
Postmark or Date June 17, 1992	

PS Form 3800, June 1985

**SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.**  
Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this 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 the following services are available. Consult postmaster for fees and check boxes for additional services requested.  
1.  Show to whom delivered, date, and addressee's address. (Extra charge)  
2.  Restricted Delivery (Extra charge)

3. Article Addressed to: Jicarilla Apache Tribe Post Office Box 507 Dulce, New Mexico 87528 Attn: Thurman Velarde Oil & Gas Administrator	4. Article Number P 106 677 404
5. Signature - Address X	Type of Service: <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> COD <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
6. Signature - Agent X Thurman Velarde	8. Addressee's Address (ONLY if requested and fee paid)
7. Date of Delivery 6/19/92	

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-665 DOMESTIC RETURN RECEIPT

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
MARK F. SHERIDAN  
WILLIAM P. SLATTERY

PATRICIA A. MATTHEWS  
MICHAEL H. FELDEWERT

JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
SUITE 1 - 110 NORTH GUADALUPE  
POST OFFICE BOX 2208  
SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE (505) 988-4421  
TELECOPIER (505) 983-6043

June 17, 1992

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico 87401  
Attn: John Keller

Re: Application of American Hunter Exploration, Ltd. for an exception to the provisions of the Division's No-Flare Rule 306; cancellation of overproduction or, in the alternative, special provisions governing overproduction; and the adoption of special operating procedures, Rio Arriba County, New Mexico

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Bureau of Land Management

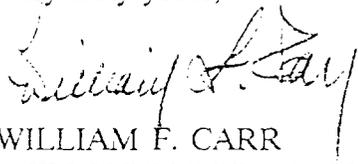
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June 17, 1992

Page 2

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Very truly yours,

A handwritten signature in cursive script, appearing to read "William F. Carr".

WILLIAM F. CARR

ATTORNEY FOR AMERICAN HUNTER EXPLORATION, LTD.

WFC:mlh

Enc.

P-106 677 405

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)

Sent to Bureau of Land Management Attn: John Keller	
Street and No 1235 La Plata Highway	
P.O., State and ZIP Code Farmington, NM 87401	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date  June 17, 1992	

PS Form 3800, June 1985

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this 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 the following services are available. Consult postmaster for fees and check boxes for additional services requested.

1.  Show to whom delivered, date, and addressee's address. 2.  Restricted Delivery (Extra charge)

3. Article Addressed to:  
Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico 87401  
Attn: John Keller

4. Article Number  
P 106 677 405

Type of Service:  
 Registered  
 Certified  
 Express Mail  
 Insured  
 COD  
 Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address  
 *John Keller*

6. Signature - Agent

7. Date of Delivery  
*6/17/92*

8. Addressee's Address (ONLY if requested and fee paid)

CAMPBELL, CARR, BERGE  
& SHERIDAN, P.A.  
LAWYERS

MICHAEL B. CAMPBELL  
WILLIAM F. CARR  
BRADFORD C. BERGE  
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JACK M. CAMPBELL  
OF COUNSEL

JEFFERSON PLACE  
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SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE (505) 988-4421  
TELECOPIER (505) 983-6043

June 17, 1992

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Apache Jicarilla Agency  
Bureau of Indian Affairs  
Post Office Box 167  
Dulce, New Mexico 87528

Re: Application of American Hunter Exploration, Ltd. for an exception to the provisions of the Division's No-Flare Rule 306; cancellation of overproduction or, in the alternative, special provisions governing overproduction; and the adoption of special operating procedures, Rio Arriba County, New Mexico

Gentlemen:

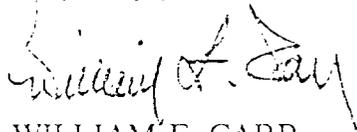
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Apache Jicarilla Agency  
Bureau of Indian Affairs  
June 17, 1992  
Page 2

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WILLIAM F. CARR  
ATTORNEY FOR AMERICAN HUNTER EXPLORATION, LTD.  
WFC:mlh  
Enc.

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 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this 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 the following services are available. Consult postmaster for (post and check boxes) for additional services requested.  
 1.  Show to whom delivered, date, and addressee's address. 2.  Restricted Delivery (Extra charge)

3. Article Addressed to:  
 Apache Jicarilla Agency  
 Bureau of Indian Affairs  
 Post Office Box 167  
 Dulce, New Mexico 87528

4. Article Number  
 P 106 677 406

Type of Service:  
 Registered  
 Certified  
 Express Mail  
 Insured  
 COD  
 Return Receipt for Merchandise

8. Addressee's Address (ONLY if requested and fee paid)  
 Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address  
 X

6. Signature - Agent  
 X *Agent Hennis*

7. Date of Delivery  
*06/19/92*

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-885 DOMESTIC RETURN RECEIPT

P-106 677 406

RECEIPT FOR CERTIFIED MAIL  
 NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

Sent to Apache Jicarilla Agency Bureau of Indian Affairs	
Street and No. Post Office Box 167	
P.O. State and ZIP Code Dulce, New Mexico 87528	
Postage	S
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	S
Postmark or Date June 17, 1992	

PS Form 3800, June 1985

CAMPBELL, CARR, BERGE

& SHERIDAN, P.A.

LAWYERS

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BRADFORD C. BERGE  
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JEFFERSON PLACE  
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SANTA FE, NEW MEXICO 87504-2208  
TELEPHONE (505) 988-4421  
TELECOPIER (505) 983-8043

June 17, 1992

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Benson-Montin-Greer Drilling Corp.  
221 Petroleum Center Building  
Farmington, New Mexico 87401  
Attn: Mr. Albert R. Greer

Re: Application of American Hunter Exploration, Ltd. for an exception to the provisions of the Division's No-Flare Rule 306; cancellation of overproduction or, in the alternative, special provisions governing overproduction; and the adoption of special operating procedures, Rio Arriba County, New Mexico

Gentlemen:

This letter is to advise you that American Hunter Exploration, Ltd., has filed the enclosed application with the New Mexico Oil Conservation Division seeking an order exempting its Jicarilla 3F 1 Well from No-Flare Rule 306, cancellation of overproduced status of this well or, in the alternative, adoption of special provisions governing the computation of this well's overproduced status, and establishment of a reasonable time within which said overproduction shall be made up, and adopting special operating procedures for this well which is located in the SE/4 NW/4 of Section 3, Township 27 North, Range 1 West, N.M.P.M., Rio Arriba County, New Mexico.

This application has been set for hearing before an Examiner of the Oil Conservation Division on July 9, 1992. You are not required to attend this hearing, but as an owner of an interest that may be affected by this application you may appear and present testimony. Failure to appear at that time and become a party of record will preclude you from challenging this matter at a later date.

Benson-Montin-Greer Drilling Corp.

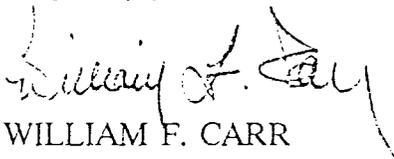
Attn: Mr. Albert R. Greer

June 17, 1992

Page 2

Parties appearing in cases have been requested by the Division (Memorandum 2-90) to file a Prehearing Statement substantially in the form prescribed by the Division. Prehearing statements should be filed by 4:00 o'clock p.m. on the Friday before a scheduled hearing.

Very truly yours,

A handwritten signature in cursive script, appearing to read "William F. Carr". The signature is written in dark ink and is positioned above the typed name.

WILLIAM F. CARR

ATTORNEY FOR AMERICAN HUNTER EXPLORATION, LTD.

WFC:mlh

Enc.

P-106 677 407

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)

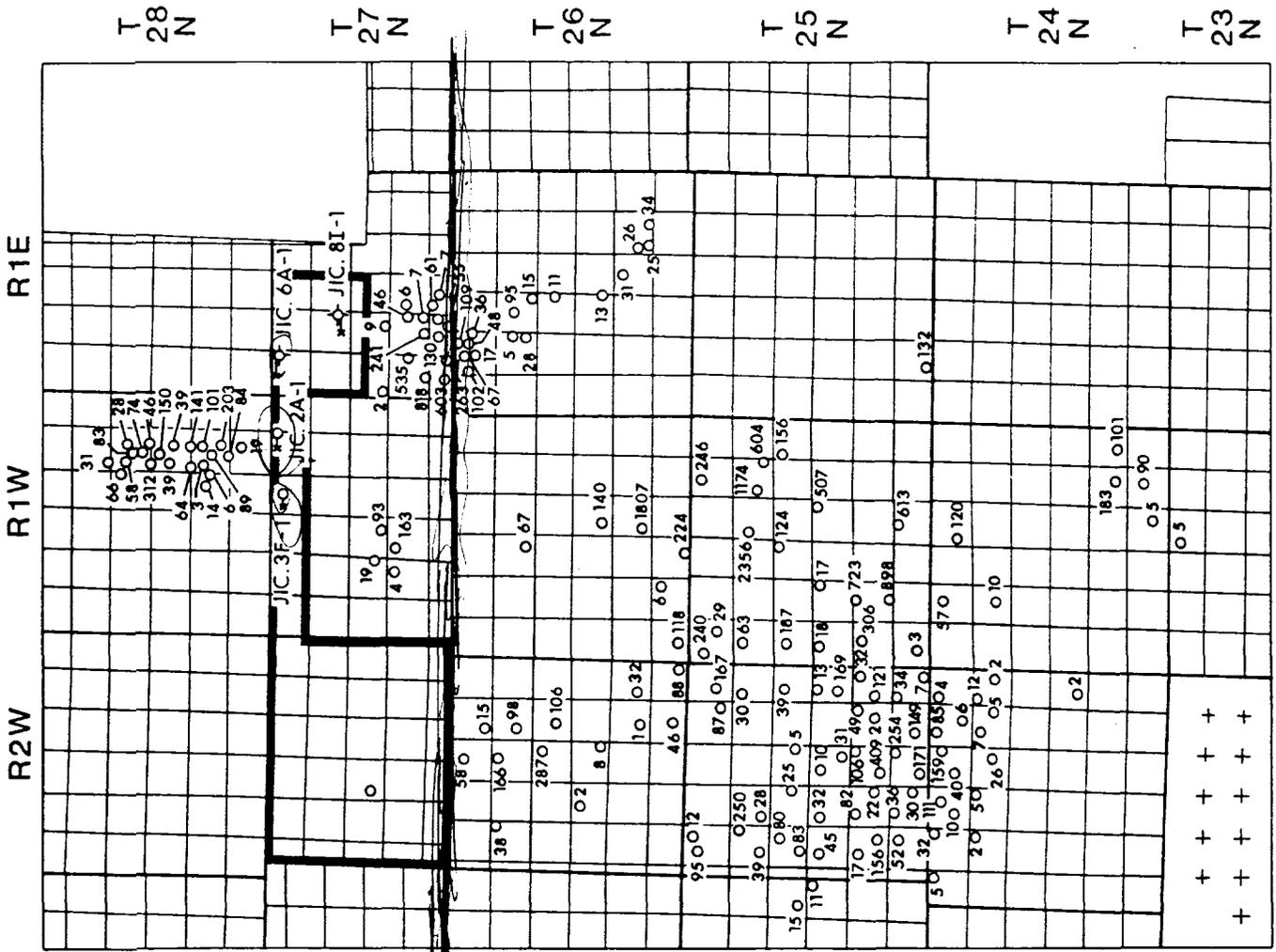
Sent to Benson-Montin-Greer Drilling Corp.	
Street and No Attn: Albert R. Greer 221 Petroleum Center Bldg.	
P.O., State and ZIP Code Farmington, NM 87401	
Postage	S
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	S
Postmark or Date  June 17, 1992	

PS Form 3800, June 1985

PS Form 3811, Mar. 1988 \* U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

<b>3. Article Addressed to:</b> Benson-Montin-Greer Drilling Corp. 221 Petroleum Center Building Farmington, New Mexico 87401 Attn: Albert R. Greer, President		<b>4. Article Number</b> P 106 677407	
<b>5. Signature - Address</b> X		<b>Type of Service:</b> <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> COD <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.	
<b>6. Signature - Agent</b> X <i>Carol Williams</i>		<b>8. Addressee's Address (ONLY if requested and fee paid)</b>	
<b>7. Date of Delivery</b> <i>6-19</i>			

**SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.**  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this 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 the following services are available. Consult postmaster for fees and check boxes for additional services requested.  
1.  Show to whom delivered, date, and addressee's address. 2.  Restricted Delivery (Extra charge)



**CUMULATIVE OIL PRODUCTION  
AS OF JUNE 1990**

**MANCOS OIL WELLS  
BOULDER, GAVILAN &  
PUERTO CHIQUITO FIELDS**

**BEFORE EXAMINER STOGNER  
OIL CONSERVATION DIVISION**

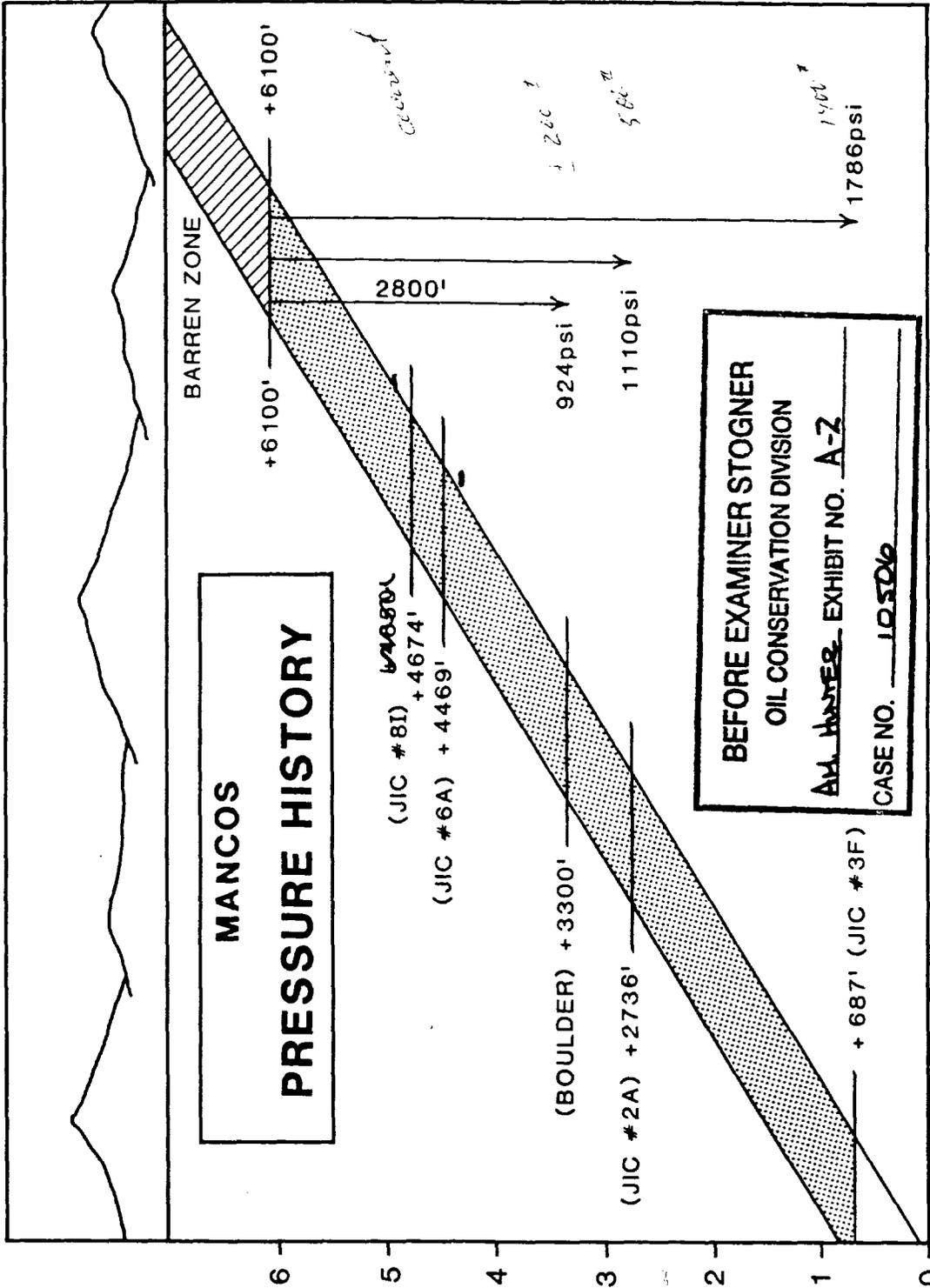
**AM. HUNTER EXHIBIT NO. A-1**

**CASE NO. 10506**

**RICHMOND ACREAGE**

**Cumulative Oil Production ( MBO )**

*American Hunter Exhibits  
A-1 through A-10  
Complete set*



*Handwritten signatures and notes:*  
 [Signature]  
 [Signature]  
 [Signature]

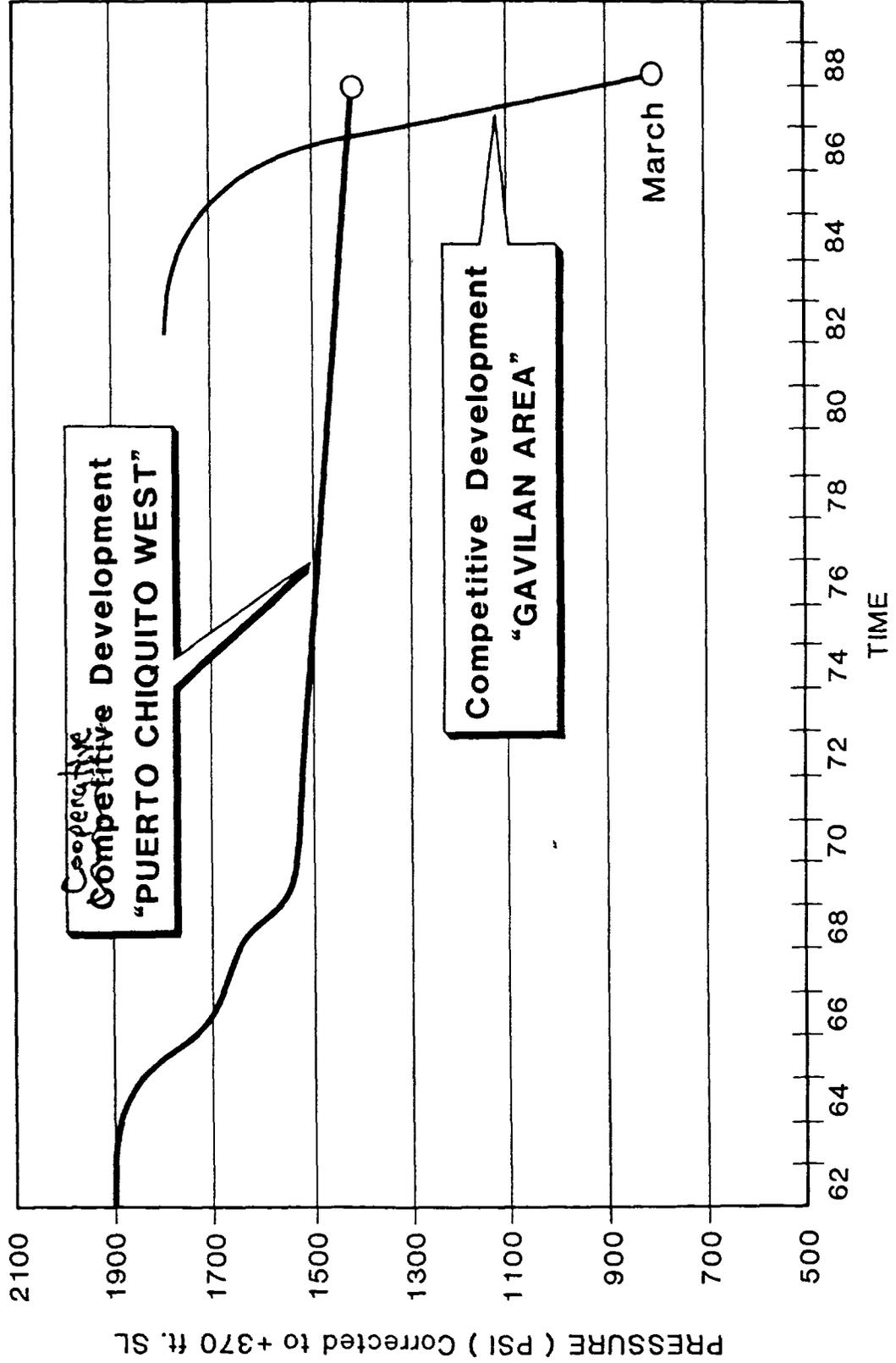
BEFORE EXAMINER STOGNER

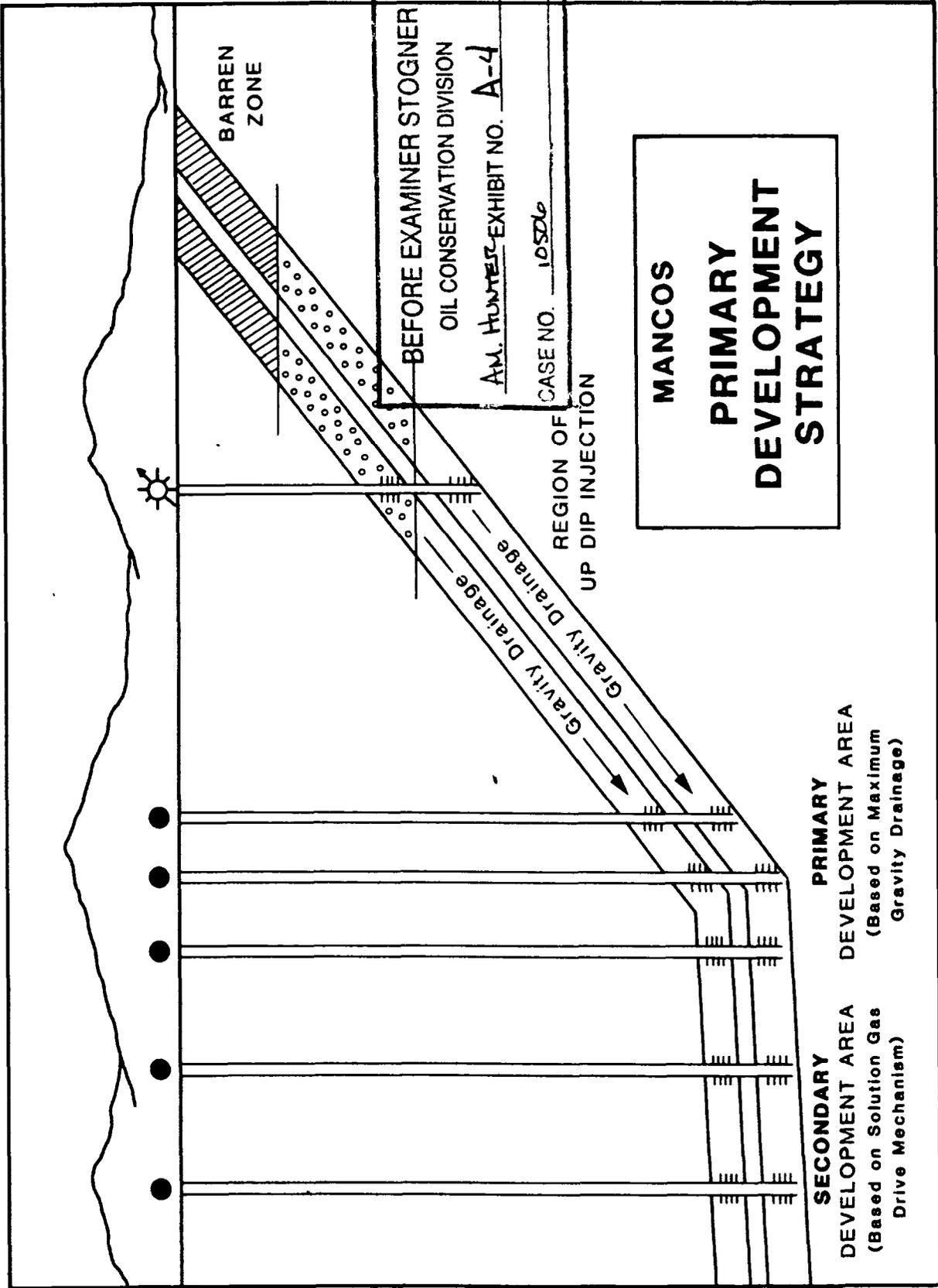
OIL CONSERVATION DIVISION

AM. HAZARD EXHIBIT NO. A-3

CASE NO. 10526

# COMPARISON OF RESERVOIR PRESSURES





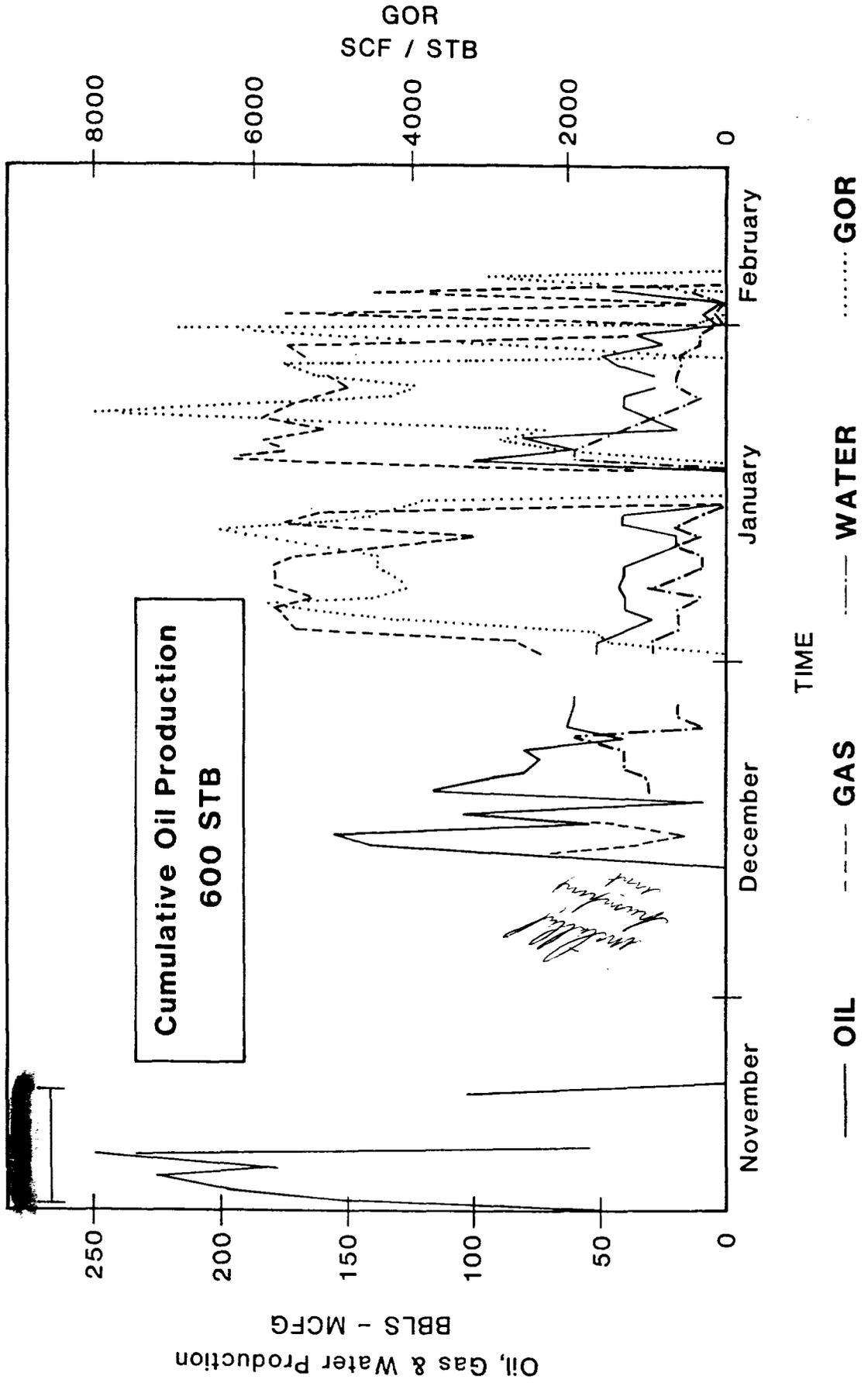
BEFORE EXAMINER STOGNER  
OIL CONSERVATION DIVISION

A.H. ~~HAYES~~ EXHIBIT NO. A-5

CASE NO. 10506

# AHEL JICARILLA 2-A

## Oil, Gas and Water Production GOR



BEFORE EXAMINER STOGNER

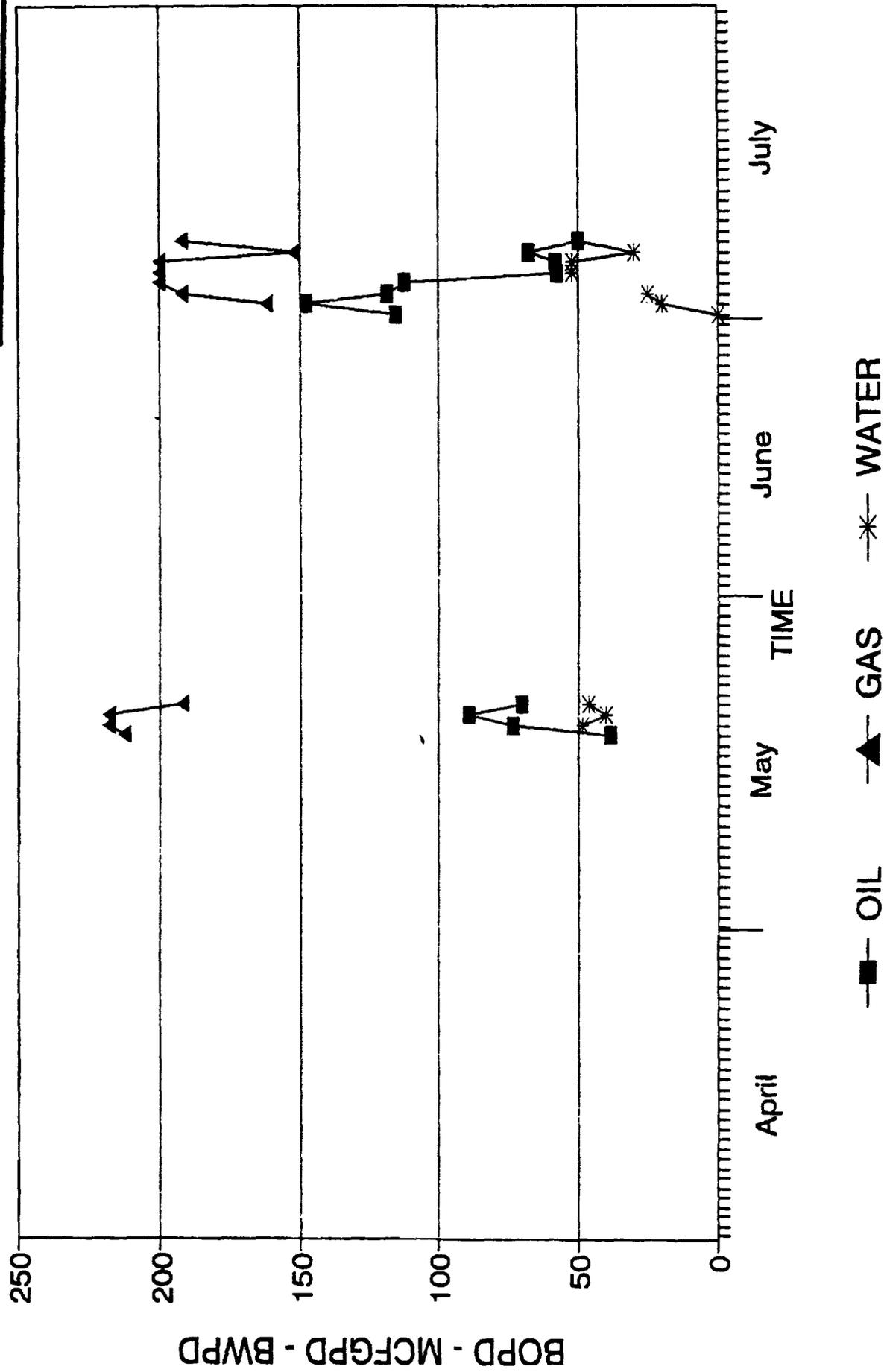
OIL CONSERVATION DIVISION

AM. HUNTERS EXHIBIT NO. A-6

CASE NO. 10,506

# AHEL JICARILLA 2-A

## Oil, Gas and Water Production



■ OIL ▲ GAS \* WATER

BEFORE EXAMINER STOGNER  
OIL CONSERVATION DIVISION

Am. ~~HUBER~~ EXHIBIT NO. **A-7**

CASE NO. 105D6



**JIC. # 3F - 1 PUMPING UNIT**

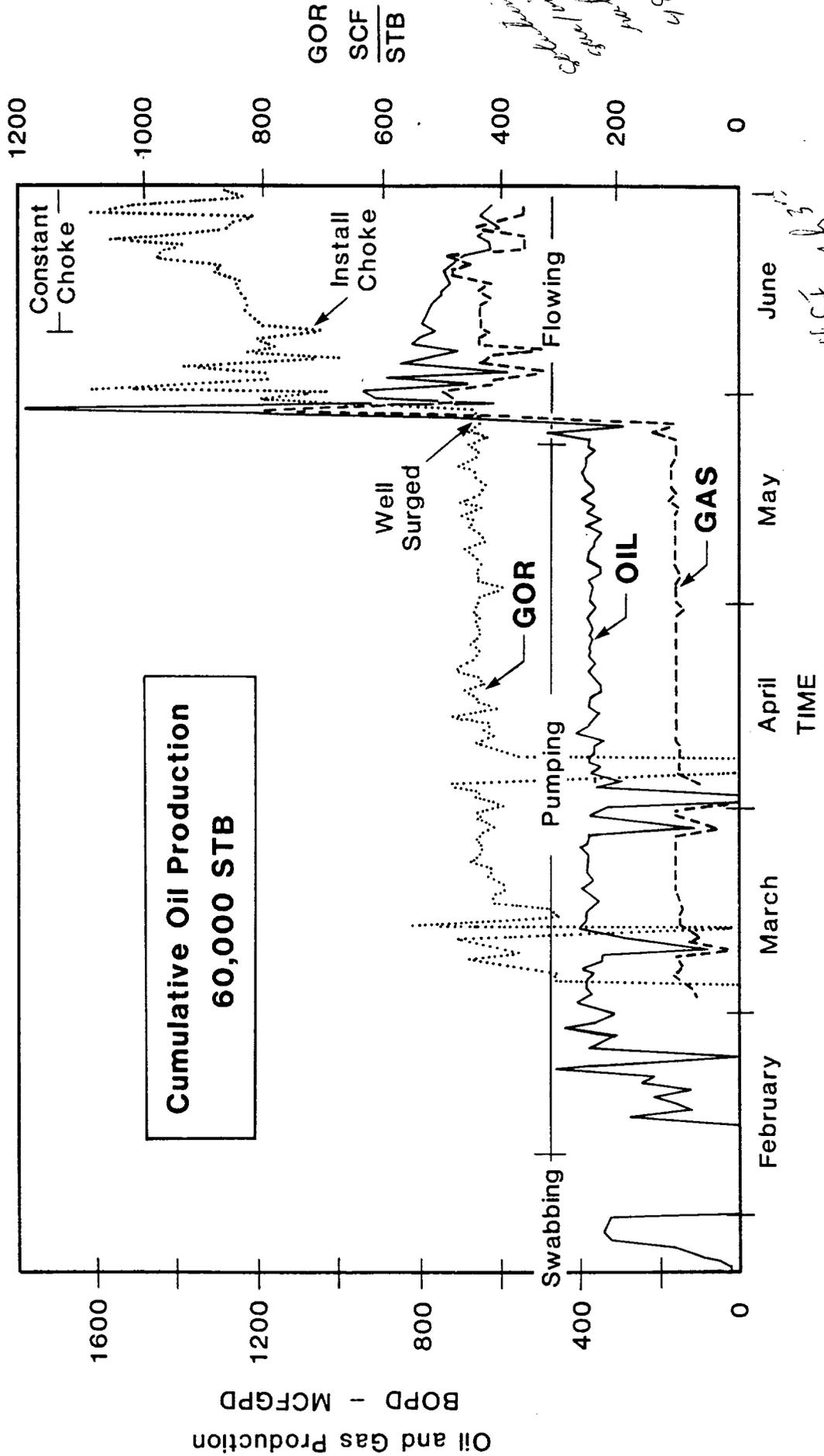
*current conditions  
in main flow  
- 69C BOPD  
- 1600 MCF/Day*

# AHEL JICARILLA 3-F

## Oil and Gas Production

### GOR

BEFORE EXAMINER STOGNER  
OIL CONSERVATION DIVISION  
AHL ~~HANDLER~~ EXHIBIT NO. A-8  
CASE NO. 10506



*Flowing  
GOR 1500*

*GOR (SCF/STB)  
1500  
Flowing*



# american hunter

May 1, 1992

VIA FAX: (505) 327-2922

U.S. Department of the Interior  
Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico 87401

BEFORE EXAMINER STOGNER	
OIL CONSERVATION DIVISION	
AH. HUNTER	EXHIBIT NO. A-10
CASE NO.	10506

Attention: Duane Spencer

Gentlemen:

**RE: Venting Gas  
JICARILLA 3F-1 WELL  
Township 27 North, Range 1 West  
Section 3: SE/4NW/4  
RIO ARRIBA COUNTY, New Mexico**

American Hunter Exploration Ltd. ("AHEL"), as operator of the referenced 3F-1 well, hereby requests authorization from the U.S. Department of the Interior, BLM (Farmington office) and the New Mexico State Oil Conservation Division (Aztec Office) to continue to flare gas at a reasonable rate consistent with the current production for the following reasons:

1. The 3F-1 well represents a major new extension to the productive Mancos trend which successfully ties in the Puerto Chiquito Field with the Boulder Field.
2. The 3F-1 well is an extremely prolific well, capable of far exceeding present production. AHEL has elected to restrict production on this well on an interim basis (at a rate 50% of the allowable rate) in order to establish the stabilized capabilities of the Mancos gravity drainage system as well as to minimize the amount of gas flared until such time as future development plans have been established.
3. There are no existing facilities which we could economically tie this well into to conserve gas. Subject to continued drilling success on future plans might include the collection and reinjection of produced gas for pressure maintenance.

.../2

U.S. Department of the Interior  
Page 2  
May 1, 1992

4. At present, we are negotiating with the **JICARILLA APACHE TRIBE** to establish an effective development program for the Mancos in this area which includes several more wells this summer. It is hoped that following this drilling season, which will provide additional successful wells, a more clear response can be made concerning the feasibility of gas conservation.

In summary, AHEL would like to be able to continue to produce this well and flare the associated gas at a rate no higher than that which corresponds to 800 bbl/day and an associated gas/oil ratio of 2000 (which is equivalent to the base gas/oil ratio for the West Puerto Chiquito Field).

Jim Artindale, Chief Exploitation Engineer, plans on being in the Farmington area next Thursday (May 7) and Friday morning (May 8) and will be available to meet with you to address any additional concerns you may have. Please contact me at (403) 260-1738 to arrange a convenient meeting time.

Yours very truly,

**AMERICAN HUNTER EXPLORATION LTD.**



**D.L. Bowman**  
Vice President

KI/JA/ljp

cc: NMCCD - Ernie Busch (Aztec) FAX: (505) 334-6170  
Jim Artindale  
Jeff Kirn - Denver  
Bud Whiting - Dulce

# american hunter

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May 13, 1992

U.S. Department of the Interior  
Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico  
U.S.A.  
87401

Attention: Duane Spencer

Gentlemen:

**RE: Casinghead Gas Venting  
Jicarilla 3F-1 Well  
Township 27, North Range 1 West  
Section 3: SE/4 NW/4  
Rio Arriba County, New Mexico**

Further to our application of May 1, 1992 and subsequent telephone conversation we wish to clarify the following points:

1. **Volume of Gas Being Flared:** Historical stabilized production from this well over the past two months reflects an average oil production of 370 BOPD with gas production in the order of 162 mcf/d for a producing GOR of 438 SCF/bbl.
2. **Gas Conservation/Utilization:** Presently the nearest connection to an existing gas conservation system is about 5 miles south of this well. As part of the longer term planning for this American Hunter project (should development be economically attractive and contingent upon agreements with the Jicarilla tribe) we are carefully examining our need to conserve gas through reinjection into the reservoir to assist the gravity drainage mechanism. Alternatively we are examining the prospect of gas sales once additional drilling confirms that we have a project. To this end we are consulting with Al Greer whose gas gathering system is nearest to our exploration project.

... /2

Mr. Duane Spencer  
May 13, 1992  
Page 2

In summary we are suggesting that it is premature by one to two years to enter into any formal gas conservation arrangement since we have no option readily available to this orphan well and we don't have sufficient data or basis to design either an injection system or a gas gathering system.

We therefore respectfully request that American Hunter be allowed to continue to vent gas at the current level in the interim, until we are able to present you, in the near future, with a proposal to conserve all gas associated with an extended, defined project.

Yours very truly,

AMERICAN HUNTER EXPLORATION LTD.



D.L. Bowman, P. Eng.  
Vice President

DLB/ljp

cc: NMOCD - Ernie Busch (Aztec), Fax. (506) 334-6170  
Jim Artindale  
Jeff Kirn, Denver  
Bud Whiting, Dulce



# canadian hunter

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NEW MEXICO OIL CONSERVATION DIVISION  
1000 Rio Brazos Road  
Aztec, New Mexico  
87410

June 12, 1992

Attention: Frank Chavez  
District Supervisor

## MANCOS JICARILLA 3F WELL RESPONSE TO STATE DIRECTIVE TO SUSPEND PRODUCTION

The Jicarilla 3F well was spudded on November 28, 1991 and was subsequently completed as a horizontal well in the Mancos formation early in 1992. Originally upon completion swabbing operations indicated that the well was not capable of production. It was discovered that a substantial amount of sludge ( a slurry of drilling fluid and ground up cuttings) had blocked the fractures. This sludge was able to be removed from the 3F well, however it is believed that this same problem has severely damaged the offsetting 2A well. Although the 3F well initially was capable of flowing following cleanup of the sludge, it appeared unable to sustain flow and subsequently a conventional pumping unit was installed. Evidence suggests the 3F well has very high permeability, and it had little problem producing at the capability of the pumping unit, which was approximately 350 - 390 bopd. Fluid levels taken while the 3F well was producing indicate the Jicarilla well has exceptional deliverability. The 3F well produced consistently at 380 - 400 bopd with associated gas of 170 - 180 mcf/d (GOR of 450) until May 29, 1992 at which time the well surged and began to flow again. Production was routed through the annulus in order to allow adequate control and has been restricted to 600 - 900 bopd since then. The GOR has risen to 830 scf/stb.

On May 1, 1992 a request was sent to the Bureau of Land Management, with a copy going to Mr. Ernie Busch of the New Mexico Oil Conservation Division requesting that American Hunter be allowed to continue to flare gas from the 3F location. At the request of the BLM, another letter dated May 13, 1992 was sent providing additional information. Once again a copy was sent to Mr. Ernie Busch. On June 3, 1992 American Hunter met with Mr. Al Greer to discuss his proposal to build a gas pipeline into the area. On June 4, 1992 American Hunter met with Mr. Duane Spencer of the BLM, who informed us that the

BLM was going to approve a 6 month testing period for the 3F well. On Friday, June 5, 1992 Mr. Ernie Busch informed American Hunter by telephone that the New Mexico Conservation Division was requesting that gas production be restricted to 30 mcf/d from the 3F well, which effectively shuts the well in. On Monday, June 8, 1992 I contacted Mr. Michael Stogner (Chief Engineer with the New Mexico Oil Conservation Commission) to review the situation. On Tuesday, June 9, 1992 Mr. Jeff Kim (American Hunter Denver Manager) met with Mr. Larry Van Ryan and Mr. Bill LeMay of the NMOCC. Following that meeting and subsequent to several other telephone conversations, Mr. Kim asked me to develop a recommendation relating to the continued production from the Jicarilla 3F well.

Having reviewed the history and performance of the Mancos wells within the Boulder, Puerto Chiquito and Gavilan fields in relation to the Jicarilla 3F well, the following observations seem appropriate.

There are 4 primary reasons why it is prudent to continue to produce the 3F location. First, continued production will provide critical additional information. The 3F well has certainly encountered the best fracture development within the Mancos north of the Puerto Chiquito fields. However the quantity of reserves associated with this fracture system is not known. In a letter dated June 11, 1992 Al Greer clearly cautioned us regarding this issue. Continued production in conjunction with appropriate testing will provide a great deal of critical information about the size of the reservoir. In addition, it should be noted that the 3F well is surrounded by wells which have produced significant amounts of water. Within the Boulder field, East Puerto Chiquito, the B-M-G wells directly to the south, as well as the American Hunter Jicarilla 2A well have all produced water. Currently the 3F well produces water free, but should it begin to cut water, its future deliverability and potential would be significantly reduced. We also know that the reservoir has been depleted, prior to the 3F well producing. The original reservoir pressure at 3F was 410 psi (23%) below the virgin pressure in the pool. We also know that a secondary gas cap was created by the Boulder production half way down the oil column. This was confirmed by the 2A well. In summary, there are many concerns associated with the future deliverability of the 3F well which justifies collecting as much production information as possible.

The second reason supporting continued production, is that the well is behaving like it's cleaning up and at this time every effort should be made to support this process. As mentioned previously, nearly 26 barrels of sludge were removed from this well before it would begin to produce. There is little doubt that it was severely damaged. Its recent

surge in production could be indicative of more of the fracture system opening up. Most completions engineers would agree that in order to maximize this natural process, production should not be suspended.

The third reason is that in the near term there are no adverse reservoir effects associated with producing the associated gas. In Mr. Greer's letter dated June 11, 1992 he reminded us that he produced the Canada Ojitos Unit wells for several years before commencing gas injection with no detriment. There really is no difference from a reservoir standpoint between venting the gas and selling the gas. I would like to point out however that American Hunter is very interested in the future possibility of gas injection, but this will require more wells, more information, and much more negotiation with the Tribe which still operates the odd numbered sections.

The fourth reason I would like to suggest is based on economics. Although we have begun working with Al Greer in earnest and haste to evaluate building a gas pipeline to the 3F well, we hope the State will appreciate the economics of the whole program. In order to find the one 3F well, it took a lot of seismic, 2 dry holes and one uneconomic well for a total cost of \$5 million. American Hunter plans on drilling 4-6 more wells this year in addition to shooting a significant amount of seismic. The production from the 3F well is critical in providing information and revenue necessary to the future program.

Knowing that there are several excellent reasons for continuing to produce the 3F wells, I also appreciate the States' position regarding its mandate to conserve gas. However the total amount of revenue that would be lost while a conservation plan is being developed and implemented is small compared to the lost revenue, information and momentum associated with severely restricting the 3F well. If it takes 6 months to implement a well thought out gas conservation scheme, the State, Tribe and American Hunter would lose only \$13,000, \$42,000, and \$71,000 respectively in revenue. However the equivalent loss of oil revenue for the 6 months would be \$288,000, \$950,000 and \$1,642,000 respectively.

In reviewing the progress of gas conservation, I would like to note the following. American Hunter is in active negotiations with Al Greer regarding building a gas line to our wells. This situation with the State certainly puts us at a great disadvantage in negotiations with Mr. Greer. American Hunter is also in the process of contacting other gas purchasers in the area. Although the Greer proposal seems convenient for the 3F well, it may turn out to be much more expensive in the long term because many of our future wells will be

drilled to the west. In addition, American Hunter has already contacted the Tribe about the Greer proposal. Their response thus far has been cautious and noncommittal. The economics of any gas line depend not only on the present gas rates, but fundamentally on the volume of reserves associated with the wells. At this time we don't have any reasonable idea as to this amount. But we do know that if the pipeline and compressor costs \$800,000 to \$1,000,000 to construct, at a solution GOR of 400 scf/stb there will have to be 2.5 million barrels of oil in contact with the wells in order to pay for the pipeline from the gas production. It should be remembered that 2 million barrels has already been produced updip from the Boulder field.

In conclusion, American Hunter believes it is responsible and prudent to allow the current level of production from the 3F well to continue but acknowledges that we need to work together with the State and BLM in order to optimize the information that can be obtained from this well. American Hunter would like to recommend the following proposal.

We will commit to evaluating the available options for gas conservation and will present that analysis to the State at a July hearing date.

If gas conservation is feasible and economic, American Hunter will commit to implementing it by September 1993. If possible, we will implement it by November 1992.

American Hunter will immediately initiate the following testing program. The pump and rods will be removed from the 2A well. Bottom hole pressure recorders will be run at 2A. We will ask BMG to remove the pump and rods at their O-16 location. Bottom hole pressure recorders will be run at the O-16 location.

The 3F well will be pulsed to establish interference in an east west direction with 2A and in a north south direction with the O-16 well. The 3F well will then be produced for 4-8 weeks while the pressure is recorded at 2A and O-16 to establish reservoir volumes between the locations. The production rate at 3F will then be varied to establish a relation between GOR and production rate. This issue was sharply debated during the West Puerto Chiquito/Gavilan hearings in the 1980s, and is of great significance to our reservoir development plans.

American Hunter, in turn, asks the State to grant us permission to continue producing the 3F well at a rate no higher than that which corresponds to 800 bopd

and an associated GOR of 2000 (which is equivalent to the base allowable and GOR for a standard proration unit in the West Puerto Chiquito field).

American Hunter will also notify the State in the event of any significant deviation or change in the production rate and associated GOR. If you have any questions please call either Mr. Jim Artindale at (403)260-1981 or Mr. Jim Lister at (303)825-5212.

Yours truly,

A handwritten signature in black ink that reads "Jim Artindale". The signature is written in a cursive style with a horizontal line above the first few letters.

Jim Artindale  
Chief Reservoir Engineer

cc. Larry Van Ryan

Jic 701-90-0001 (WC)  
3162.7-3 (019)

JUN 11 1992

Mr. D.L. Bowman  
American Hunter Exploration Ltd.  
700, 435 - 4th Ave. S.W.  
Calgary, Alberta T2P 3A8

Dear Mr. Bowman:

By letters dated May 1 and 13, 1992, you requested approval for long term venting from the Jicarilla 3F-1, SE $\frac{1}{4}$ NW $\frac{1}{4}$  Sec. 3, T. 27 N., R. 1 W., which is a newly completed horizontal well in the Mancos Formation. The Jicarilla 3F-1 has been averaging 370 BOPD and venting an average of 162 MCFD for a producing GOR of 438 SCF/Bbl. As you stated, you are requesting approval for additional venting to both gather additional data on oil production rates and it's corresponding GOR.

Your request for additional testing time for this well is hereby approved for six (6) months. This six (6) month time period is to start from the end of the initial 30-day test period you were granted. Our records show that first production occurred in March 1992. The six (6) month test period will therefore run from April through September 1992. At the end of the test period, you are required to submit data on the average daily oil production rate and GOR on a weekly basis, economic data on building a sales pipeline, and economic data on gas reinjection into one of your other wells.

Under provisions of 43 CFR 3165.3, you may request an Administrative Review of the orders described above. Such request, including all supporting documents, must be filed in writing within 20 business days of receipt of this notice and must be filed with the State Director, Bureau of Land Management, P. O. Box 27115, Santa Fe, New Mexico 87502-7115. Such request shall not result in a suspension of the order(s) unless the reviewing official so determines. Procedures governing appeals from instructions, orders or decisions are contained in 43 CFR 3165.4 and 43 CFR 4.400 et. seq.

If you have any questions concerning this matter, please call Duane Spencer at (505) 599-8950.

Sincerely,

/s/ Duane Spencer

For Mike Pool  
Area Manager

cc:  
BIA, Dulce  
NMOCD, Santa Fe, NM  
Well file  
3162.7-3  
AIRS  
Suspense (Duane)

019:DSpencer:jc:6/9/92:AMHUNTER