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& SHERIDAN, P.A.

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SUITE I - 110 NORTH GUADALUPE

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SANTA FE, NEW MEXICO 87504-2208

TELEPHONE: (505) 988-4421

TELECOPIER: (505) 983-6043

July 28, 1992

**HAND-DELIVERED**

**RECEIVED**

William J. LeMay, Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
State Land Office Building  
Santa Fe, New Mexico 87503

JULY 28 1992

OIL CONSERVATION DIVISION

10534

**Re: In the Matter of the Application of American Hunter Exploration, Ltd., for a pressure maintenance project Rio Arriba County, New Mexico**

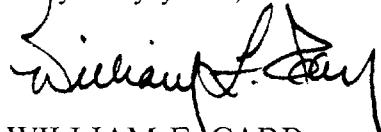
Dear Mr. LeMay:

Enclosed are two copies of Division Form C-108 in the above-referenced matter. American Hunter Exploration, Ltd. requests that this case be included on the August 20, 1992 Examiner hearing docket.

By copy of this letter, we are sending a complete copy of this application to the Division's District Office in Aztec, New Mexico.

Your attention to this matter is appreciated.

Very truly yours,



WILLIAM F. CARR

WFC:sg  
Enclosures

cc w/enclosure:      Oil Conservation Division  
                            District III  
                            1000 Rio Brazos Rd.  
                            Aztec, New Mexico 87410  
                            Attention: Mr. F.T. Chavez

Mr. Jim Artindale  
Chief Exploitation Engineer  
American Hunter Exploration, Ltd.  
410 Seventeenth Street, Suite 1200  
Denver, Colorado 80202

RECEIVED

Case 10111-28 1992

## APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?
- II. Operator: American Hunter Exploration
- Address: 410 Seventeenth St., Suite 1200 Denver, CO 80202
- Contact party: Jim Artindale Phone: (403) 260-1981
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project?  yes  no  
If yes, give the Division order number authorizing the project \_\_\_\_\_.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Jim Artindale Title: Chief Exploitation Engineer

Signature: Jim Artindale Date: July 24, 1992

- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining material, and setting depth.
  - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
- (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

**NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.**

**NOTICE:** Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

**AMERICAN HUNTER WEST PUERTO CHIQUITO  
MANCOS GAS INJECTION SCHEME**

**APPLICATION FOR AUTHORIZATION TO INJECT  
DATA SUPPORTING OCD FORM C-108**

**I. Purpose:** Pressure Maintenance

Application qualifies for administrative approval? No

**II. Operator:** American Hunter Exploration

Address: 410 Seventeenth St., Suite 1200, Denver, CO, 80202

Contact Party: Jim Artindale Phone: (403) 260-1981

**III. Well Data (see also Injection Well Data Sheet)**

Lease Name: Jicarilla 2A (Serial No. 701-90-0001)

Well Number: #1 (API No. 30-039-25118)

Location: Sec. 2, T27N R1W

Footage Location: refer to Injection Well Data Sheet

Surface Casing Size: 10 3/4" K-55

Surface Casing Weight: 40.5 lb/ft

Surface Casing Depth: 250'

Surface Casing Hole Size: 13 3/4"

Surface Casing Top of Cement: Surface

Top Determined By: Full Returns

Production Casing Size: 7 5/8" L-80

Production Casing Weight: 26.4 & 29.7 lb/ft

Production Casing Depth: 4569' MD

Production Casing Hole Size: 9 7/8"

Production Casing Top of Cement: 330'

Top Determined By: Temperature Log

Liner Size: 5 1/2"

Top of Liner: 4218' MD

Bottom of Liner: 6625' MD

Liner Top of Cement: Was Not Cemented

Tubing Size: 2 7/8"

Tubing Depth Set: 5739' MD

Tubing Lining Material: L-80 tubing-no added lining

Packer Set Depth: Tubing anchor set at 3975'MD

Name of Injection Formation: Niobrara Member of the Mancos

Pool: West Puerto Chiquito

Injection Interval: 5324'MD (4542'TVD) to 6632'MD (4854'TVD)

372'FNL 2032'FEL to 620'FNL 3277'FEL

Preperforated liner, uncemented

Proposed injection well was drilled as a test of the fractured Niobrara interval. The well is currently an uneconomic well.

There are no other perforated intervals for other formations in the wellbore of the proposed injection well.

There are no other Stratigraphically deeper or shallower oil and gas producing formations in the area. The 'C' zone of the Niobrara is a minor contributor to the production of the Boulder Field to the North.

IV. Is this an expansion of an existing project? NO

V. A map which identifies all wells and leases within two miles of the proposed injection well and "area of review" is attached.

VI. The only well within the area of review is the proposed injection well. A well summary sheet and an injection well data sheet are attached for this well.

## VII Proposed Operations

Fluid to be injected: Solution Gas from the Mancos

Average Daily Rate: 600 to 800 mcfd

Maximum Daily Rate: 1500 mcfd

The system is a closed system.

Average injection Pressure: 600 to 800 psia  
Maximum injection pressure: 1200 psia

The injection fluid will be solution gas from a offsetting well producing from the same formation.

## VIII Geologic Data

Lithology: Fractured, calcareous very fine grained sandstone interbedded with calcareous shales.

Geologic Name: Niobrara Member of the Mancos Formation

Gross Reservoir Thickness: Approximately 110' vertically

Depth of Reservoir: MPP 5470'MD or 4570'TVD

To the best of the operators knowledge, there are no known wells which supply drinking water within the area of review. Additionally, the operator is unaware of any shallower or deeper water aquifers present within the regional area. The operator believes that the overlying Upper Mancos shale serves as a seal for both the oil present in the reservoir and any gas injected into the reservoir.

IX. No stimulation program is planned at this time.

X. Logging Information: Previously submitted  
Test Data: Copies of pressure tests are attached.

## INJECTION WELD DATA SHEET 1

SHEET 1

WELL NAME American Hunter Exploration: Jicarilla 2A

WELL NO. #1 Surface: 442' FNL: 1177' FEL: 372' ENL: 2,032' FEEL: SECTION TOWNSHIP: Section 2 RANGE: T27N R1W

SchematicTabular DataSurface Casing

Size 10 3/4" Cemented with 350 sx.  
 Top At Surface feet determined by Full Returns  
 Hole size 14 3/4"

Intermediate Casing

Size 7 5/8" Cemented with 1242 sx.  
 Top 330 MD feet determined by Temp. Log  
 Hole size 9 7/8"

Long string Liner

Size 5 1/2" Cemented with Not Cemented  
 Top 4218' MD feet determined by Survey/Pipe Tally  
 Hole size 6 3/4"  
 Total depth 6632' MD

Injection interval

Perforated or open-hole, indicate which) 5324 MD feet to 6632 MD feet

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2 7/8" lined with no additional lining (material) set in a

tubing anchor (brand and model) packer at 3975 feet

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation Mancos Niobrara
2. Name of Field or Pool (if applicable) West Puerto Chiquito Mancos

3. Is this a new well drilled for injection?  Yes  No

If no, for what purpose was the well originally drilled? To test fracture production  
potential from the Mancos

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used)

Not perforated in any other zones

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. This zone is the stratigraphically shallowest oil and gas producing

zone in the area.

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

**Surface Location:**

- 442' FNL 1177' FEL

**Bottomhole Location:**

- 620' FNL 3277' FEL

**Spud Date:**

- 09/29/91

**Surface Casing:**

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

**Intermediate Drilling History:**

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

**Final Drilling History:**

- Drilled 6  $\frac{3}{4}$ " 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 at 0600 hrs. on 06/27/92. Began by running bottomhole pressure buildup.
- Pump well to 07/17/92.

**CONFIDENTIAL**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE.

Form approved.  
Budget Bureau No. 1004-0127  
Expires August 31, 1985

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

#13  
Instructions on  
reverse side

5. LEASE DESIGNATION AND SERIAL NO.  
701-90-0001

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Jicarilla Apache

7. UNIT AGREEMENT NAME  
N/A

8. FARM OR LEASE NAME  
Jicarilla 2A

9. WELL NO.  
#1 (API No. 30-039-25118)

10. FIELD AND POOL, OR WILDCAT  
W. Puerto Chiquito Mancos

11. SEC., T., R., M., OR BLOCK AND SURVEY  
OR AREA  
Sec. 2 T27N R1W

1. TYPE OF WELL.  
DRI.  WELL  MAN. WELL  DRY  Other \_\_\_\_\_

2. TYPE OF COMPLETION:  
NEW  WHIL.  WHIL.  DPP.  DPP.  Other \_\_\_\_\_  
WHIL.  WHIL.  DPP.  DPP.  Other \_\_\_\_\_

3. NAME OF OPERATOR  
American Hunter Exploration Ltd.

4. ADDRESS OF OPERATOR  
410 17th Street, Suite 1220, Denver, CO 80202

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 442' FNL, 1177' FEI

At top prod. Interval reported below 372' FNL, 2,032' FEI

At total depth (BHL) 620' FNL, 3277' FEI

14. PERMIT NO. DATE ISSUED

15. DATE SPUNCHED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DE. A.S. AT. GR. ETC.)\* 19. ELEV. Casinghead  
09/29/91 10/28/91 02/02/92 (new oil) 7236' KB 7217' G.L.

20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL.,  
HOW MANY? 23. INTERVALS DRILLED BY ROTARY TOOLS CABLE TOOLS  
6632' MD 4254' TVD 6632' MD 4854' TVD X

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

Mancos Niobrara "A" 5324' MD (4542' TVD) to 6632' MD (4854' TVD)

25. TYPE ELECTRIC AND OTHER LOGS RUN  
Dual Induction, LS Sonic-G.R. from KOP 3796' to surface 26. WAS WELL CORED  
No

27. Casing Record (Report all strings set in well)

CASING SIZE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
10 3/4" K-55	40.5	250'	13 3/4"	Surface 350 Sacks	
7 5/8" L-80	26.4 & 29.7	4569'	9 7/8"	330', Temp. Log. 1242 Sacks	

28. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
5 1/2"	4218'	6625'	Not Cemented		2 7/8"	5739'	N/A

31. PERFORATION RECORD (Interval, size and number)

Open hole completion with pre-perforated liner. Liner perforated from 4559' to 6625' MD (TD).

32. ADD. SHOT, FRACTURE CEMENT SQUEEZE ETC.  
DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED  
INITIAL

33. PRODUCTION

DATE FIRST PRODUCTION 02/02/92 PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Pumping WELL STATUS (Producing or shut-in) Producing

DATE OF TEST 02/03/92 HOURS TESTED 24 CHG. SIZE N/A PROOF'N. FOR TEST PERIOD OIL—SSL 45 GAS—MCT. 140 WATER—SSL 20 GAS/OIL RATIO 3111

FLOW, TUBING PRESSURE N/A CASING PRESSURE CALCULATED 24-HOUR RATE OIL—SSL 45 GAS—MCT. 140 WATER—SSL 20 OIL GRAVITY-API (CORR.) 36

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Used for fuel and vented.

TEST WITNESSED BY  
Mr. Doyle Post

35. LIST OF ATTACHMENTS

1. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE

Senior Geologist

DATE

06/22/92

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 16 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

PULL VICKINIA CIR. IN LINTON RIO

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);

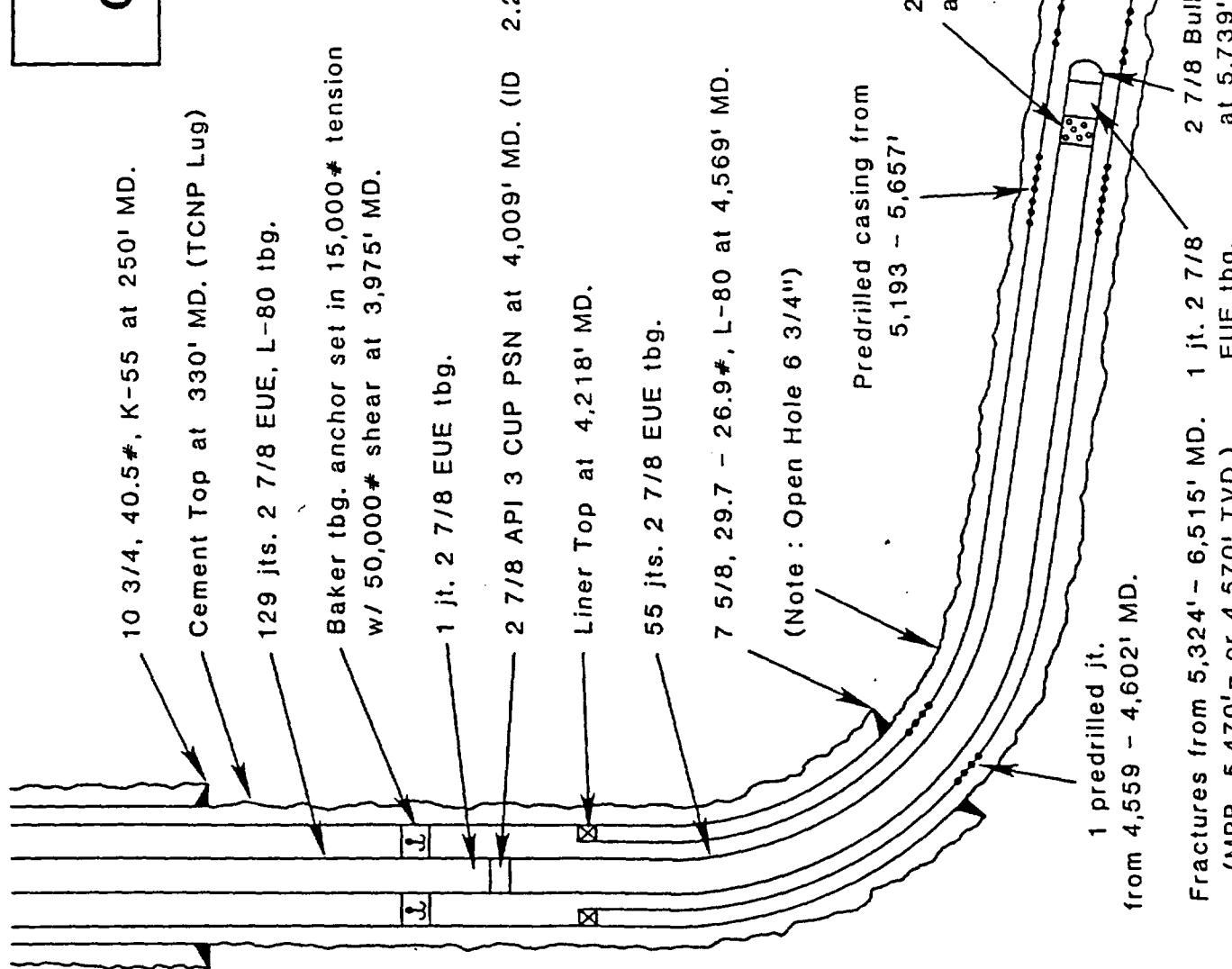
38. GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME		MEAS. DEPTH " TOP	TRUE VERT. DEPTH
				MEAS. DEPTH	" TOP		
Mancos	5324' MD	5641' MD	Fractured sills, very fine grained sandstones and shales.	Point Lookout		2932'	2932'
Niobrara A			No Cores or DST's	Mancos		3155'	3155'
				Niobrara A		4348'	4286'
				Niobrara B		4520'	4399'
				Niobrara B		4920'	4480'
				Niobrara A Sand		5668'	4609'

#13

**AHEL JICARILLA 2A - 1**  
**COMPLETION DIAGRAM**

BEFORE EXAMINER STOGNER  
 OIL CONSERVATION DIVISION  
Att. Hunter EXHIBIT NO. L-4  
 CASE NO. 10506



Section 5 Report  
Appropriate District Office  
**DISTRICT I**  
P.O. Box 1810, Hobbs, NM 88240

**DISTRICT II**  
P.O. Drawer DD, Adensia, NM 88210

**DISTRICT III**  
1000 Rio Grande Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Dept.

Form 1-104  
Revised 1-1-89  
See Instructions  
at Bottom of Page

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

### REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

#13

#### I. Operator

American Hunter Exploration, Ltd.

Well API No.

30-039-25118

#### Address

410 17th Street, Suite 1220, Denver, CO 80202

#### Reason(s) for Filing (Check proper box)

New Well

Change in Transporter of:

Recompletion

Oil

Dry Gas

Change in Operator

Casinghead Gas

Condensate

If change of operator give name  
and address of previous operator

Other (Please explain)

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#### II. DESCRIPTION OF WELL AND LEASE

Lease Name	Well No.	Pool Name, Including Formation	Kind of Lease	Lease No.
Jicarilla 2A	#1	West Puerto Chiquito Mancos	State, Federal or MXX	701-90-0001
Location Surface Location: 412' FNLT, 177' FEL				
Bottom Hole Unit Letter A : 620	Feet from the North Line and 3277	Feet from the East Line		
Location: Section 2 Township 27N Range 1W, NM/M, Rio Arriba County				

#### III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent) P.O. Box 159; Bloomfield, NM 87413
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)

If well produces oil or liquids, give location of tanks.	Unit A	Sec. 2	Twp. 27N	Rge. 1W	Is gas actually connected? No	When?
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If this production is commingled with that from any other lease or pool, give commingling order number:

#### IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well X	Workover	Deepen	Plug Back	Same Rev?	Diff Rev?
Date Spudded 9/29/91	Due Compl. Ready to Prod. 2/02/92		Total Depth 6632' MD (4854' TVD)			P.B.T.D.	6632' MD (4854' TVD)	
Elevations (DF, RAB, RT, GR, etc.) 7236' KB 7217' G.L.	Name of Producing Formation Mancos		Top Oil/Gas Pay 5324' MD (4542' TVD)			Tubing Depth 5739' MD (4627' TVD)		
Perforations Open hole completion with pre-perforated liner. Liner perforated from 4559' MD to 6625' MD (TD).						Depth Casing Shoe 6625' MD (4852' TVD)		

#### TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
13 3/4"	10 3/4"	250' MD	350 sacks
9 7/8"	7 5/8"	4569' MD	1242 Sacks
6 3/4"	5 1/2" Liner	4210' MD to 6625' MD	Not cemented
	2 7/8" Tubing	5739' MD	-----

#### V. TEST DATA AND REQUEST FOR ALLOWABLE

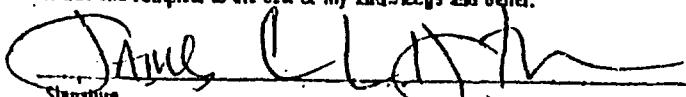
OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)	Date First New Oil Run To Tank 02/02/92	Date of Test 02/03/92	Producing Method (Flow, pump, gas lift, etc.) Pump
Length of Test 24 hours	Tubing Pressure not available	Casing Pressure 30 psi	Choke Size not available
Actual Prod During Test 65 bbls	Oil - Bbls. 45	Water - Bbls. 20	Gas - MCF 140

#### CAS WELL

Actual Prod Test - MCF/D	Length of Test	Oil, Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

#### VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

  
Signature James C. Lister Senior Geologist

Pilot Name 06/22/92 Title (303) 025-5212  
Date Telephone No.

#### OIL CONSERVATION DIVISION

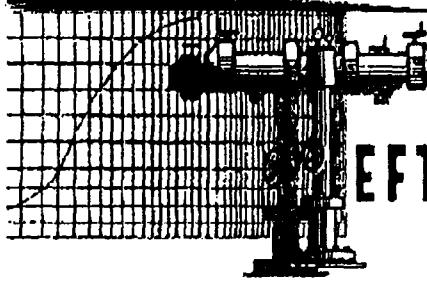
Date Approved \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- All sections of this form must be filled out for allowable on new and recompleted wells.
- Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- Separate Form C-104 must be filed for each pool in multiply completed wells.



# TEFTELLER, INC.

reservoir engineering data

P. O. Box 1198  
Farmington, New Mexico 87499  
(505) 325-1731

FARMINGTON, NEW MEXICO / MIDLAND, TEXAS  
GRAND JUNCTION, COLORADO

Farmington Fax (505) 325-1148  
Midland Fax (915) 682-5329  
Grand Junction Fax (303) 241-7634

June 30, 1992

American Hunter Exploration, Ltd.  
410 17th, Suite 1220  
Denver, CO 80202

Attention: Mr. Jim Lister

Subject: Pressure Observation  
Jicarilla 2A No. 1  
Rio Arriba County, New Mexico  
Our File No. 2-23839-O

Dear Mr. Lister:

Attached hereto are the results of a bottomhole pressure observation which was conducted on the above captioned well June 27 through June 28, 1992.

The data presented are in tabular and graphical form.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please do not hesitate to contact us.

Sincerely,

TEFTELLER, INC.

Neil Testeller

NT/lw

lcc: Mr. Norm Schonhoffer  
American Hunter Exploration, Ltd.  
435 4th Ave. SW  
Calgary, Alberta T2P 3A8

*Serving the Rocky Mountain Area & Permian Basin Area*

**TEFTELLER, INC.**

**RESERVOIR ENGINEERING DATA AND PRODUCTIVITY ENHANCEMENT SERVICES**  
**MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO**

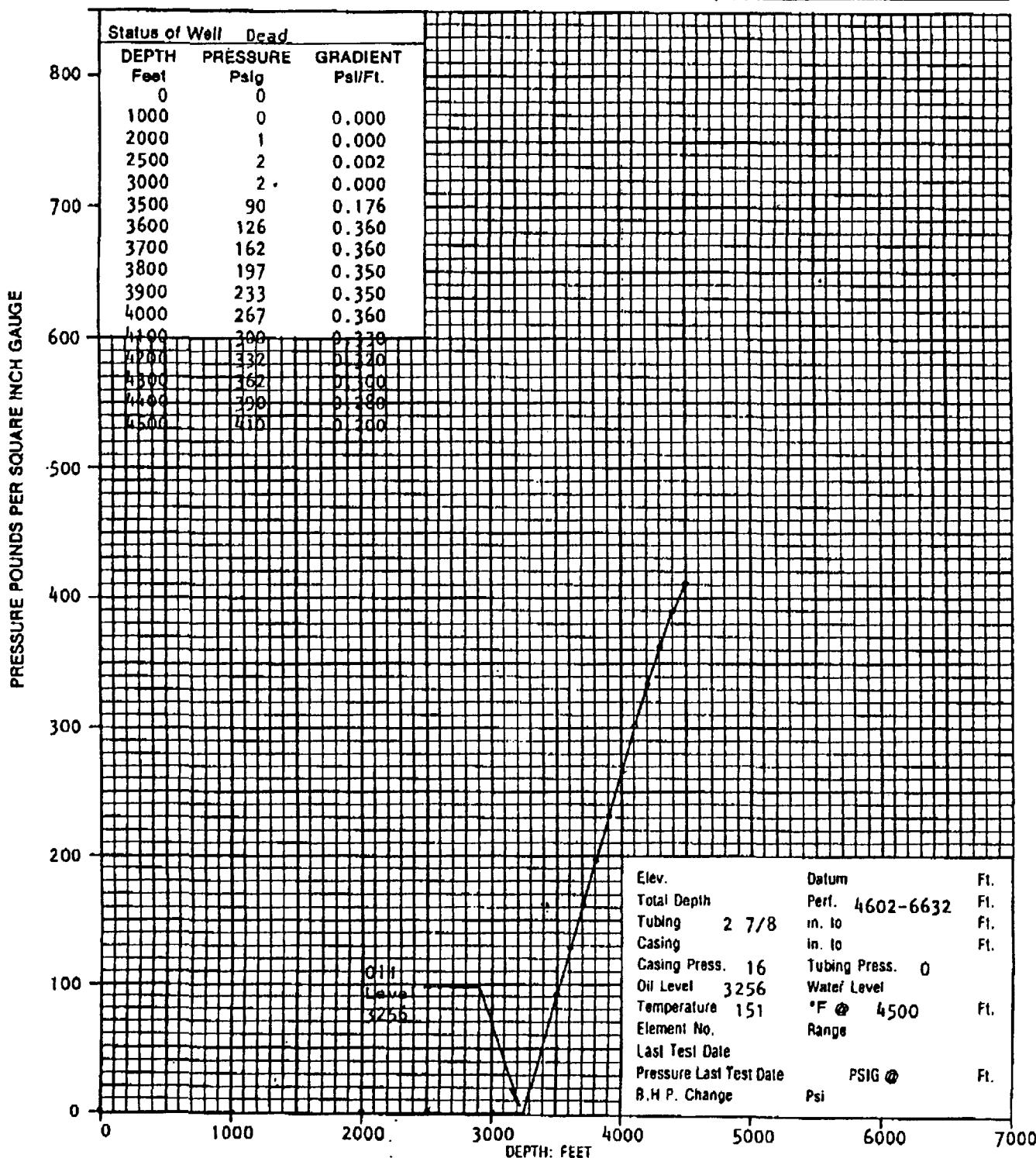
**CHRONOLOGICAL PRESSURE AND PRODUCTION DATA**

1992 DATE	STATUS OF WELL	TIME	ELAPSED TIME		WELLHEAD PRESSURE		BHP @ 4500' PSIG
			HRS	MIN	TBG	CSG	
6-27	Arrived on location, casing and tubing open	13:30					
	Rigged up tandem instruments						
	Master valve leaking (replaced)	13:45					
	Shut well in	14:00					
	Instrument in lubricator	14:00					
	Gradient traverse to 4500' making 20 minute stops				0	16	
	Instrument @ 4500'	19:00					410.0
		19:30	0	30			410.0
		20:00	1	00			410.5
		20:30	1	30			411.0
		21:00	2	00			411.0
		22:00	3	00			411.5
		23:00	4	00			412.0
6-28		00:00	5	00			412.4
		01:00	6	00			412.4
		02:00	7	00			413.0
		03:00	8	00			413.0
		04:00	9	00			413.5
		05:00	10	00			414.0
		06:00	11	00			415.0
		07:00	12	00			415.5
		08:00	13	00	TSTM	175	415.5
	Instrument off bottom						



Page 2 of 2  
File 2-23839-0

Company AMERICAN HUNTER EXPLORATION LTD Lease JICARILLA 2-A Well No. 1  
Field  County RIO ARIBA State NEW MEXICO  
Formation MANCUS Test Date JUNE 27, 1992



2A-1  
JUNE 28, 1992

MD	TVD	PRESS (psig)	CORRECTED TVD	GRAD psi/ft
1000'	1000'	0		0
2000	1998	1		.001
2500	2497	2		.002
3000	2993	2		.0
3500	3490	90		.177
3600	3590	126		.360
3700	3689	162		.364
3800	3788	197		.353
3900	3888	233		.360
4000	3987	267		.343
4100	4083	300		.343
4200	4173	332		.356
4300	4257	362		.357
4400	4332	390		.373
4500	4389	410		.350

Press. @ 4600' TVD = (4600-4389) .36 + 415.5 = 491.5 PSIG

G-1

DWIGHT'S HOTLINE - Drilling History 27-28N-1W

Copyright 1989

Original Drill

IP

C

Co

St

State : NEW MEXICO  
Mfg Merid No R-960552-0  
Issued: 01/01/78

County: RIO ARRIBA

Original Drill

IP

C

Co

Field : BOLDER Mtn  
Open: TAYLOR LLOYD B  
DEA: 12/08/62 00 DRY

Last Info: 05/22/83

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62  
Lease:

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62  
Lease:

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62  
Lease:

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62  
Lease:

IP

C

aa State Records aa

Elev: 7307 DF  
Formation Record

IP

C

Plane : 5679-5718  
5742-5747  
5752-5762  
5784-5788

Log Tops  
Hancos  
Gallup

IP

C

Perf: 1 5679-5718 w/2 SPF - frac w/2400 bbls 0  
Casing: 9 5/8 x 135 - 7 3/8 4656 w/150 - 4 1/2 In 1hr 4706-5791  
Tubing: 2 3/8 x 5780  
Journals: PCA - 10/20/64

aa Shell Oil Date aa

Elev: 7307 DF  
Formation Record

IP

C

Casing: 9 5/8 cased 8 120 w/150, 7 cmtd 8  
4956 ft/150; 4 liner @ 4706. Hancos  
5791 Packer @ 5614 Log Tops Depth Datum  
4600 2707

Journals: 10/03/62 Loc: 10/10/62 3355-D-1  
10/17/62 4750-Drill 10/22/62 6117  
Preparing to run Liner. Hole  
bridging @ 6117 Preparing to run Liner. Hole  
cleaning out. 4 in Liner 4706-5791 ft.  
Packer @ 6117 Liner. Creek Jet perf. 5679-5718 ft. 5742-5757 ft.  
5752-5762 ft. 5784-5788 ft with 91,000  
gallons oil. Breakdown pressure 0 lb/inch. Infection rate 47 barrels per  
min flowing through casing. 11/20/62 6117 Putting on pump.  
11/2/63 6117 Putting on pump. 12/19/62  
6117 testing on pump. Recovered all tool oil. 05/06/63 6117 Shut In.  
05/01/63 6117 preparing to shoot 3000 ft oil in hole. 05/09/63  
6117 Swabbing. Fluid level 1800 ft in hole. Swabbed 30 barrels load  
oil in 12 hrs. 05/14/63 6117 Shut In. Re-0il fractured 5679-5718  
with 16,800 gallons oil. Breakdown pressure 400-0 lb. 06/03/63 6117  
Pumping 5 Barrels oil/day. 07/16/63 6117 Shut In. Pulled rock and

Printed 12/30/89

TBN 15965

MM -- continued ..

Page 1

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DWIGHT'S HOTLINE - Drilling History 27-28N-1W

Copyright 1989

Original Drill

IP

C

State : NEW MEXICO  
Mfg Merid No R-960552-0  
Issued: 01/01/78

County: RIO ARRIBA

Original Drill

IP

C

Field : BOLDER Mtn

Original Drill

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62

IP

C

Hall-Fortz & BURSH #1  
Ftg: 1650 ftl 1980 fei  
Obj: 5500 test  
Prod well,  
Speed: 10/02/62  
TD: 6110

Permit: 10/03/62

IP

C

Printed 12/30/89

TBN 15965

MM

Page 2



F-25

## Dwight's Hotline - Drilling History

27-28N-1W

#3

Copyright 1969

Original Drill

See Me

State: NEW MEXICO M Merid H R-960533-0  
County: RIO ARIBA Oper: FOOTZ & BURSH CONSTRUCT  
Field: BOLDER MAN Prod Well:Last Info: 12/28/69  
Elev: 7230 Df  
Formation Record

11/30/69

Elev: 7230 Df  
API 30-039-07230  
Elev: 7230 DfElev: 7230 Df  
Datum: 3896  
Calc: 3334  
Depth: 4460  
Hancoe: 2710Well: BAYLESS-MICHAM #2  
Ftg: 1650 ft. 450 f.t.  
Obj: 5800 Gallup  
Prod Well:  
Spud: 10/22/61 Contr: THOMAS WHIGMAN  
T.D.: 5370  
P.R.:44 State Record 44  
IP: 1 76 BOPD grav 35, 1 BHP  
PZone: 4350-4150  
5050-5020  
5020-5060  
5080-5090  
5310-5315  
Perfo: 4820-5106  
Casing: 9 5/8 @ 100 w/100 - 5 1/2 @ 4884 w/300  
Jouml: PEA - 8/29/69 SL 11/22/68  
AA Small Oil Date AAElev: 7230 Df  
Formation Record  
Log Tops Depth Calc  
Hancoe: 1150 Datum 3896  
4460 3334  
Gallup: 3440 3790  
3855 3375  
4976 2254IP: 1 P 76 BOP/24 hrs Grav 35.5 deg  
PZone: 4885-5370 (Gallup)  
Casing: 9 5/8 cased @ 100 w/100, 5 1/2  
cuted @ 4885 w/100, 4 1/2 liner  
Gallup: 8 4967- 5370; 2 @ 8000  
Jouml: 10/15/61 Loc: 10/25/61 609 Dc 19, 11/01/61 2901 Drg with mud.  
11/08/61 401 D-19. Ran Log at 4450 ft. 11/15/61 5370 Preparing to Fracture. 11/20/61 5370 Testing on pump. 011 fractured at 4885-5370 ft (open hole) with 84 000 gallons oil. IP 1900-2050 1b. IR 31 barrels per min. Pumped 60 barrels. Recovered 100% oil. Pumped oil down 12/13/61 5370 Testing on pump. Recovered 100% oil. Pumped 45-50 barrels oil/day. T.P. Pumped 76 barrels oil/day based on 24 hr test. gravity 35.5 deg. Producing through open hole. Gallup formation. Interval 4885-5370 ft. Re-Spud 10/15-62. BP 5200 ft Grav formation. Interval 22/4820-5106 w/44-100 gal. oil. BOP 2000 1b. Put back on pump.

G- 3

## DwIGHT'S HOTLINE - Drilling History 27-28N-1W

Copyright 1989

Original Drill ne se

State : NEW MEXICO NM Herid No R-960554-0

Issued: 01/01/72

County: RIO ARRIBA Open: FOUTZ &amp; BURSUM CONSTRUCT

Field : BOLDER MAN

Date: 11/20/62 00 DRY

Spud: 10/24/62 Contr:

TD: 5459

Last Info: 05/22/83 UN

IP: 22 BOPP API: 30-039 Elev: 7333 DF

PZone : 5321-5363 Log Top:

5380-5458 Pictured Cliff

5425-5451 Ledge

Perfo : 5321-5331 W/2 SFR - Prec w/2137 Measured

Point Lookout

Hances

Gallup

Casing: 9 5/8 @ 120 w/100 - 7 1/2 @ 4476

w/150

Journl: PEA - 6/5/64

\*\* Shell Oil Data AA

IP : P 22 bbls oil 24 hr test Grav 32

PZone : 5250-5459 (Gallup)

Casing: 9 5/8 cased @ 115 w/100 - 7 cased @ 4476 w/150; 4 1/2 @ 4450-5459

slotted.

Journl: 10/24/62 Spud 10-23-62. 10/30/62 2447 Drilg. 11/06/62 3550 Drilg.  
 11/14/62 3593 D-10. Oil show at 3593 ft. 11/20/62 3435 Running  
 bottom hole pressure test. Open hole packer at 5250 ft. 1772/62  
 2068 ft. Prepare to penetrate. 12/05/62 Deviation: 3 1/2 degree at  
 2068 ft. 4 1/2 at 2210. 5 at 2312. 5 1/2 at 2390. 6 at 2550. 6 1/2 at  
 2635. 7 at 2610. 7 1/2 at 2930. 8 at 3010. 9 1/4 at 3690. 10 1/4 at  
 4700. 11 1/2 at 4900. 12 1/2 at 5000. 13 at 5331. Fractured with  
 89-755 gallons crude oil at 4016.5410 ft. breakdown pressure 2400.  
 shut in pressure 1000. injection rate 42 1/2 barrels/min. Rigging  
 up pump. 12/12/62 Pumped 80 barrels load oil. 24 hrs. 01/09/63 Pumped  
 fractured 5250-5454. Open hole packer at 5150 ft. 01/23/63 Pumped  
 estimated 20 barrels oil. Recovered load oil. 02/06/63 Shut  
 down. Weather. 03/05/63 testing on pump. pumped 15 barrels oil/day.

Printed 12/30/89 TBN 15966 NM -- continued .. Page 1

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## DwIGHT'S HOTLINE - Drilling History 27-28N-1W

Copyright 1989

Original Drill ne se

State : NEW MEXICO NM Herid No R-960554-0

Issued: 01/01/72

County: RIO ARRIBA Open: FOUTZ &amp; BURSUM CONSTRUCT

Field : BOLDER MAN

Date: 11/20/62 00 DRY

Spud: 10/24/62 Contr:

TD: 5459

Last Info: 05/22/83 UN

IP: 22 BOPP API: 30-039 Elev: 7333 DF

PZone : 5321-5363 Log Top:

5380-5458 Pictured Cliff

5425-5451 Ledge

Perfo : 5321-5331 W/2 SFR - Prec w/2137 Measured

Point Lookout

Hances

Gallup

Casing: 9 5/8 @ 120 w/100 - 7 1/2 @ 4476

w/150

Journl: PEA - 6/5/64

\*\* Shell Oil Data AA

IP : P 22 bbls oil 24 hr test Grav 32

PZone : 5250-5459 (Gallup)

Casing: 9 5/8 cased @ 115 w/100 - 7 cased @ 4476 w/150; 4 1/2 @ 4450-5459

slotted.

03/21/63 Shut down 06/12/63 Pumped 5 barrels oil/day. I.P. Pumped  
 22 barrels oil/day based on 24 hr test. 32 deg Grav. Prod. Pumping  
 through open hole at Gallup formation. Interval 5250-5459 ft.

Formation Record

IP	Elev: 7333 DF
Log Top:	Calc Depth
Death Depth	Bottom Calc Depth
5250	2113

IP : P 22 bbls oil 24 hr test Grav 32

PZone : 5250-5459 (Gallup)

Casing: 9 5/8 cased @ 115 w/100 - 7 cased @ 4476 w/150; 4 1/2 @ 4450-5459

Journl: 10/24/62 Spud 10-23-62. 10/30/62 2447 Drilg. 11/06/62 3550 Drilg.  
 11/14/62 3593 D-10. Oil show at 3593 ft. 11/20/62 3435 Running  
 bottom hole pressure test. Open hole packer at 5250 ft. 1772/62  
 2068 ft. Prepare to penetrate. 12/05/62 Deviation: 3 1/2 degree at  
 2068 ft. 4 1/2 at 2210. 5 at 2312. 5 1/2 at 2390. 6 at 2550. 6 1/2 at  
 2635. 7 at 2610. 7 1/2 at 2930. 8 at 3010. 9 1/4 at 3690. 10 1/4 at  
 4700. 11 1/2 at 4900. 12 1/2 at 5000. 13 at 5331. Fractured with  
 89-755 gallons crude oil at 4016.5410 ft. breakdown pressure 2400.  
 shut in pressure 1000. injection rate 42 1/2 barrels/min. Rigging  
 up pump. 12/12/62 Pumped 80 barrels load oil. 24 hrs. 01/09/63 Pumped  
 fractured 5250-5454. Open hole packer at 5150 ft. 01/23/63 Pumped  
 estimated 20 barrels oil. Recovered load oil. 02/06/63 Shut  
 down. Weather. 03/05/63 testing on pump. pumped 15 barrels oil/day.

Printed 12/30/89 TBN 15966 NM

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DWIGHT'S HOTLINE - Drilling History

26-28N-1W

DWIGHT'S HOTLINE - Drilling History

26-28N-1W

Copyright 1989 Original Drill No. ne  
State : NEW MEXICO Mt Merid Ht R-95082-0 Issued: 01/01/78  
County: RIO ARRIBA Open: STANDARD OIL PROD CO  
Field : BOLDER MAN Comp: 07/18/62 00 OIL  
Well: JICARILLA APACHE #2 Ftg: 660 ftl 310 ftl  
Oil: 4000 Gallup Prod: well,  
Spud: 07/05/62 Contr: PB: 3950  
TD: 3951

Op Ad : P.O. Box 460609, Houston TX 77056-8609  
AA State Records #4

IP : 80 BOPD grav 32 Log Top Depth Calc  
PZone : 3568-3951 Lewis 206 6912  
Perf: 3734-3980 Point Lookout 2350 4798  
Hance 3500-3951 OH Gallup 2766 4182  
Hancock 3716 3432

Casing: 9 5/8 @ 136 w/100 - 5 1/2 @ 3500 w/1755 - 4 @ 3950  
Journals /Chevron Oil Co. /Jicarilla Tribal. Shut In gas well. To Recomp-  
9/27/74. Memo A 9/14/71

\*\* AA Shell Oil Data #4  
IP : P 256 bbls oil/day based on 80 Log Tops Depth Calc  
bbls oil/1/2 hrs gravity 32 Point Lookout Datum 4798

PZone : 3502-3951 (Gallup) Elevation Record  
Casing: 9 5/8 catd 9 137 w/100! S 1/2 catd 9 3502 w/1751 4 1/2 liner @ 3332-  
3950 set, slotted 3890, set 2 @ 3725, set  
Journals: 07/11/62 Loc. 07/18/62 3710 Drilg. Spud 7-2-62. Stopped dusting at  
3568 ft in Gallup. Blew estimated 40 barrels oil/hr. Flow estimated  
1750/1000 barrels oil/15 hrs. 07/25/62 3951 Having on rotary tools.  
08/01/62 3951 Id. Shut in. Deviation 10 degrees at td. COMPLETED 7-  
31-62. I.P. Pumped 256 barrels oil/day based on 80 barrels oil/7  
1/2 hrs. gravity 33 deg. Producing through open hole at Gallup  
formation. interval 3502-3951.

Copyright 1989 Original Drill No. ne  
State : NEW MEXICO Mt Merid Ht R-95083-0 Issued: 01/01/78  
County: RIO ARRIBA Open: STANDARD OIL PROD CO  
Field : BOLDER MAN Comp: 03/05/63 00 OIL  
Well: JICARILLA 4-26 #1 Ftg: 660 ftl 330 ftl  
Oil: 4500 Gallup Prod: well,  
Spud: 02/04/62 Contr: ASPEN DRG.  
TD: 4798 Elevation Record  
IP : 9 BOPD grav 32, 3 BHPD Log Top Depth Calc  
PZone : 3635-4668 Lewis 6912 6933  
4668-4798 Point Lookout 3145 4659  
Perf: 4500-4550 w/1 SPF - free w/1400 bbls 0  
Core: 4550-4666  
Log: 14-71. TIES

Elev: 7242 Depth Datum  
Formation Record  
IP : P 9 BOPD 3 bbls per 24 hr Log Top Depth Calc  
32 deg Grav Lewis 883 6359  
PZone : 4400-4510 (Gallup) Point Lookout 3148 4094  
Casing: 8 5/8 catd 9 110 w/100! S 1/2  
catd 9 4000 w/200! 4 1/2 liner @ 4330-  
4510 slotted w/354-4510. set 2 @ 4001, set  
Journals: 01/10/62 Loc. 02/07/62 110 waiting on cement. Spud 2-4-62. 02/14/62  
1900-01/62 3100 Drilg. 9 deg deviation at 3100 ft. 02/28/62  
421-01/62 4555 Prepare to core. 03/14/62 4582 Cng. Core  
41 4560-66. Recovered 5 ft sh. pyrite. good cut. trace fluorescence.

F-18

DWIGHT'S HOTLINE - Drilling History

26-28N-1W

Copyright 1989 Original Drill No. ne  
State : NEW MEXICO Mt Merid Ht R-95083-0 Issued: 01/01/78  
County: RIO ARRIBA Open: STANDARD OIL PROD CO  
Field : BOLDER MAN Comp: 03/05/63 00 OIL  
Well: JICARILLA 4-26 #1 Ftg: 660 ftl 330 ftl  
Oil: 4500 Gallup Prod: well,  
Spud: 02/04/62 Contr: ASPEN DRG.  
TD: 4798 Elevation Record  
IP : 9 BOPD 3 bbls per 24 hr Log Top Depth Calc  
32 deg Grav Lewis 883 6359  
PZone : 4400-4510 (Gallup) Point Lookout 3148 4094  
Casing: 8 5/8 catd 9 110 w/100! S 1/2  
catd 9 4000 w/200! 4 1/2 liner @ 4330-  
4510 slotted w/354-4510. set 2 @ 4001, set  
Journals: 01/10/62 Loc. 02/07/62 110 waiting on cement. Spud 2-4-62. 02/14/62  
1900-01/62 3100 Drilg. 9 deg deviation at 3100 ft. 02/28/62  
421-01/62 4555 Prepare to core. 03/14/62 4582 Cng. Core  
41 4560-66. Recovered 5 ft sh. pyrite. good cut. trace fluorescence.

*F-19***DWIGHT'S HOTLINE - Drilling History****26-28N-14**

Copyright 1989 Original Drill

W.M. Merial No R-954685-0

Issued: 01/01/78

Recall No.

State: NEW MEXICO

Permit:

Elev:

County: RIO ARriba

089/03/62

7215 DR

Field: BULLER MAN

Coopl:

000

Prod Well

06/25/88

010

Open: STANDARD OIL PROG CO

Levi Info: 06/25/88

Elev:

7202 DR

Spud:

09/03/62

Contr:

Tb:

4552

Prl: 4552

Hall, JICARILLA 4-26-91  
Ft 9185 Fnl 1810 Fml  
Prod Well  
Spud: 09/04/62  
Contr: ASPEN DRILL

IP: 143 8080 grav 32

PZone: 3196-4158  
Perf: 1 w/1 SPFCasing: 8 5/8" 179 wt/1000 - 5 1/2" 8 3005  
wt/125 - 4 in Lur 4093-4081

Tubing: 2 3/8" 8 4086

PZone: 3405-4124 (Gallup)

IP: 1 P 143 wb/1000 24 hr gravity 32.  
5 degCasing: 8 5/8 catd 8 137 wt/1000 5 1/2 catd 8 3805 wt/140 4 liner 8 3735-4312  
set, slotted 403-4155 and 4219-4281 2 8 4280, setJournl: 08/29/62 Loc: 09/12/62 2397 Dril: Spud 9-2-62. 09/19/62 4250 Running  
1000. Cut decking at 4093 ft. Jowl of oil. 09/26/62 1250 16" Plug  
4312 ft. Hoving in rotary tools. Open hole crew jet 2 shot/foot  
at 4049-4124. Hole caved. 10/10/62 Flowing. Oil fractured open hole  
at 3805-4312 with 63,000 gallons oil. Injection rate 27 barrels/min.  
Flowed 20 barrel load oil. 17 hrs. Pumped 61 barrels load oil/day.  
Recovered load oil. COMPLETED 10-29-62. I.P. Pumped 143 barrels  
oil/day based on 24 hr test. Gravity 32.5 degrees. Producing  
through open hole at Gallup formation. Interval 3605-4321 ft.*F-20***DWIGHT'S HOTLINE - Drilling History****26-28N-14**

Copyright 1989 Original Drill

W.M. Merial No R-954685-0

Recall No.:  
Issued: 01/01/78  
Permit:  
Elev:Depth:  
Datum:

State: NEW MEXICO

Permit:

Elev:

7215 DR

County: RIO ARriba

Permit:

Elev:

7215 DR

Field: BULLER MAN

Permit:

Elev:

7215 DR

Spud:

09/03/62

Contr:

Tb:

Prl: 4312

Formation Record

IP: 143 8080 grav 32

Log Tops Depth Datum Calc

PZone: 3196-4158

Lewis sh Point Lookout

Perf: 1 w/1 SPF

Hancoe Gallup

Casing: 8 5/8" 179 wt/1000 - 5 1/2" 8 3005  
wt/125 - 4 in Lur 4093-4081

Elev: 7215 DR

IP: 1 P 143 wb/1000 24 hr gravity 32.  
5 deg

Log Tops Depth Datum Calc

PZone: 3405-4124 (Gallup)

Hancoe

Casing: 8 5/8 catd 8 137 wt/1000 5 1/2 catd 8 3805 wt/140 4 liner 8 3735-4312

Elev: 7215 DR

Journl: 08/29/62 Loc: 09/12/62 2397 Dril: Spud 9-2-62. 09/19/62 4250 Running  
1000. Cut decking at 4093 ft. Jowl of oil. 09/26/62 1250 16" Plug  
4312 ft. Hoving in rotary tools. Open hole crew jet 2 shot/foot  
at 4049-4124. Hole caved. 10/10/62 Flowing. Oil fractured open hole  
at 3805-4312 with 63,000 gallons oil. Injection rate 27 barrels/min.  
Flowed 20 barrel load oil. 17 hrs. Pumped 61 barrels load oil/day.  
Recovered load oil. COMPLETED 10-29-62. I.P. Pumped 143 barrels  
oil/day based on 24 hr test. Gravity 32.5 degrees. Producing  
through open hole at Gallup formation. Interval 3605-4321 ft.

7215 DR

#6

Hall, JICARILLA 4-26-91  
Ft 9185 Fnl 1810 Fml  
Prod Well  
Spud: 09/04/62  
Contr: ASPEN DRILL  
Tb: 4552  
Casing: 8 5/8" 179 wt/1000 - 5 1/2" 8 3005  
wt/125 - 4 in Lur 4093-4081  
Tubing: 2 3/8" 8 4086  
PZone: 3196-4158  
Perf: 1 w/1 SPF  
Casing: 8 5/8" 179 wt/1000 - 5 1/2" 8 3005  
wt/125 - 4 in Lur 4093-4081  
Tubing: 2 3/8" 8 4086  
PZone: 3405-4124 (Gallup)  
IP: 1 P 143 wb/1000 24 hr gravity 32.  
5 deg  
Casing: 8 5/8 catd 8 137 wt/1000 5 1/2 catd 8 3805 wt/140 4 liner 8 3735-4312  
set, slotted 403-4155 and 4219-4281 2 8 4280, set  
Journl: 08/29/62 Loc: 09/12/62 2397 Dril: Spud 9-2-62. 09/19/62 4250 Running  
1000. Cut decking at 4093 ft. Jowl of oil. 09/26/62 1250 16" Plug  
4312 ft. Hoving in rotary tools. Open hole crew jet 2 shot/foot  
at 4049-4124. Hole caved. 10/10/62 Flowing. Oil fractured open hole  
at 3805-4312 with 63,000 gallons oil. Injection rate 27 barrels/min.  
Flowed 20 barrel load oil. 17 hrs. Pumped 61 barrels load oil/day.  
Recovered load oil. COMPLETED 10-29-62. I.P. Pumped 143 barrels  
oil/day based on 24 hr test. Gravity 32.5 degrees. Producing  
through open hole at Gallup formation. Interval 3605-4321 ft.

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F-22

## DWIGHT'S HOTLINE - Drilling History

26-28N-JW

Copyright 1989 Original Drill MW \*\*  
 State : NEW MEXICO Mt Merid Ht R-95485-0 Issued: 01/01/78

County: RIO ARIBA Open: STANDARD OIL CO  
 Field : BOLDER MAN Comp: 08/19/62 DO OIL

Hall-JICARILLA 4-26 #3 Last Info: 06/25/88  
 Ftg: 2310 ftl 2310 ftl API 30-039  
 Obj: 3600 Gallop Permit: 07/25/62 Elev: 7242 GL  
 Prod: Well Lease:

Saudi: 07/29/62 Contr: GREAT WESTERN  
 TD: 4120 PB:

Op Ad : P.O. Box 460609, Houston TX 77056-8609  
 AA State Records AA

Elev: 7242 GL Formation Record  
 IP : 120 BOPD grav 32 Log Tops Depth Calc  
 PZone : 3862-4120 Point Lookout Datum  
 Perfe : 3872-4058 perf'd liner - none Log Tops Depth Calc  
 Casing: 9 5/8 @ 136 w/100 - 5 1/2 @ 3460 w/175 - 4 In liner 3372-4058  
 Journal: Chevron Oil Co. /Jic Tribal 210 BOP. Jlc 4-26 #3  
 AA Shell Oil Data AA

Elev: 7242 GL Formation Record  
 IP : 8 MCFPD Log Tops Depth Calc  
 PZone : 3711-3928 Point Lookout Datum  
 Casing: 9 5/4 @ 137 w/100-7 @ 3464 w/150  
 Tubing: 2 3/8 @ 3394  
 Journal: NR to repair Hall 4/15/82. Shut in gas well. Hess A 9/14/71. /Chevron  
 AA Shell Oil Data AA

Elev: 7242 GL Formation Record  
 IP : 130 BOPD grav 32 Log Tops Depth Calc  
 PZone : 3862-4120 Point Lookout Datum  
 Perfe : 3872-4058 perf'd liner - none Log Tops Depth Calc  
 Casing: 9 5/8 @ 136 w/100 - 5 1/2 @ 3460 w/175 - 4 In liner 3372-4058  
 Journal: 07/25/62 Loc. 08/21/62 1379 Drill. Spud 7-18-62. 08/08/62 2762 Drig.  
 Lost circulation. 08/15/62 3460 Drill. 08/22/62 4120 waiting on  
 cable tools. Stopped dusting at 3862 ft. flow oil estimated 10  
 barrels/hr. at 3862 ft. Drilled with air below 3460 ft. COMPLETED 8-  
 27-62. I.P. Flowed 540 barrels oil/day based on 120 barrel oil/hr  
 1/2 hr. 24/62 in et. Gravity 32 degrees. GOR 355; FPP 120 lb.  
 producing through open hole at Gallop formation. Interval 3460-4120.

## DWIGHT'S HOTLINE - Drilling History

26-28N-1A

Copyright 1989 Original Drill MW \*\*  
 State : NEW MEXICO Mt Merid Ht R-95487-0 Issued: 01/01/78

County: RIO ARIBA Open: STANDARD OIL CO  
 Field : BOLDER Contr: GREAT WESTERN  
 TD: 3933 PB:

Notes : (Plugged & abandoned June 1985)  
 AA State Records AA

Elev: 7196 DF Formation Record  
 IP : 8 MCFPD Log Tops Depth Calc  
 PZone : 3711-3928 Point Lookout Datum  
 Casing: 9 5/4 @ 137 w/100-7 @ 3464 w/150  
 Tubing: 2 3/8 @ 3394  
 Journal: NR to repair Hall 4/15/82. Shut in gas well. Hess A 9/14/71. /Chevron  
 AA Shell Oil Data AA

Elev: 7196 DF Formation Record  
 IP : 300 MCF SITP 650 Log Tops Depth Calc  
 PZone : 3711-3928 Point Lookout Datum  
 Casing: 9 5/8 @ 137 w/100-7 catd 8 Iñamco's  
 Journal: 08/29/62 1230 Drig. Spud 8-25-62. 08/05/62 3464 waiting on cement.  
 good gas show. 09/19/62 3393 ft. 10/10/62 testing. Gauged 2-4 MCF  
 3/4 in. ckt. 10/10/62 gauged 3000 MCF 1 barrel load oil/gal.  
 10/22/62 Shut in SITP 650. 02/27/63 Shut in. Shut in gas well  
 shut in indefinitely. COMPLETED 1-27-63 Shut in gas well. Gas cap  
 in Boulder Field. Gauged 3000 MCF. SITP 650

G- 5

## DWAIGHT'S HOTLINE - Drilling History

35-28N-1W

## DWAIGHT'S HOTLINE - Drilling History

35-28N-1W

Copyright 1989

Original Drill

NW NE

Issued: 01/01/78

Leased:

01/01/78

Towed:

01/01/78

State : NEW MEXICO  
NM Merit # R-SH4888-0  
County: RIO ARRIBA  
Field : BOLDER MAN  
Leasee: STANDARD OIL CO  
Comp: 10/03/62 00  
Oil:Last Info: 06/25/88  
API: 30-039  
Elev: 7198 ftState : NEW MEXICO  
NM Merit # R-SH4888-0  
County: RIO ARRIBA  
Field : BOLDER MAN  
Leasee: GREAT WESTERN  
PB: 4300  
Oil:Last Info: 06/25/88  
API: 30-039  
Elev: 7198 ftDi  
Co  
St  
Co  
Co  
Fl.  
Fl.  
Fl.Well: JICARILLA APACHE #7  
Ftgs: 660 ftl 2310 ftl  
Oil: 4300 Gallon  
Prod. well:Penalty: 09/14/62  
Leasee:  
Comp: 10/03/62 00  
Oil:Last Info: 06/25/88  
API: 30-039  
Elev: 7198 ftWell: JICARILLA APACHE #7  
Ftgs: 660 ftl 2310 ftl  
Oil: 4300 Gallon  
Prod. well:Penalty: 09/14/62  
Leasee:  
Comp: 10/03/62 00  
Oil:Last Info: 06/25/88  
API: 30-039  
Elev: 7198 ftDi  
Co  
St  
Co  
Co  
Fl.  
Fl.  
Fl.Spud: 09/14/62  
ID: 4394  
AA State Records AAElev: 7198 ft  
Formation Record  
Depth Datum  
502 6696  
2699 4499  
3190 3108  
4094 3194Spud: 09/14/62  
ID: 4394  
Contr: GREAT WESTERN  
PB: 4300  
Oil:Survey. Shut down. Dr/10/10/63 Having a workover rig. 05/01/63 Pumped  
load pulled liner and fractured 3950-4187 with 42,000 gallons oil.  
3000 gallons petro gel and 1500 lb Walnut Hulls, no breakdown.  
Injection rate 40 barrels/min Recovered (measured) 477 barrels load.  
Oil in 4 days. 05/09/63 Pumping load oil. Recovered all load oil. I.Pumped 33 barrels oil & 8 barrels water/day based on 24 hr  
test. Grav 32 deg. GOR 1185:1. Producing through open hole at  
Hances Gallup formation. Interval 3959-4187 ft.Di  
Co  
St  
Co  
Co  
Fl.  
Fl.  
Fl.Spud: 09/14/62  
ID: 4394  
IP: 37 BOPD Grav 32. 8 API  
Plane: 40PH-4394  
Perfs: 40HS-4396 w/1 SPF-free w/1500  
Bbls Lease oilCasing: 9 5/8 x 132 w/90-7 @ 3959 w/125  
Tubing: 2 3/8 x 4250  
Journals: Chevron Oil Co. /Jicarilla. Set pump 1/26/61. Back on Production  
8/20/61. Standard of Tex.AA Shell Oil Data AA  
Elev: 7198 ft  
Formation Record  
Depth Datum  
3190 4008IP: P 37 bbls oil/day & 8 bbls GOR 1185:1  
Plane: 40PH-4394  
Perf Zone: 40HS-4396 w/1500  
Bbls Lease oilLog Tops  
Calc  
Depth Datum  
3190 4008  
PZones: 3959-4187 (Hances)  
  
Casing: 9 5/8 set @ 134 w/90-7 spud @ 3959 w/125. 5 lnr @ 3760-4387 set.  
slotted 4031-96, 4226-4355. 2 3/8 x 4305. set  
Journals: 09/12/62 Loc: 09/14/62 2550 Dr-10. 09/26/62 3959 Waiting on cement.  
10/03/62 4394 Setting on completion tools. Mud drilled 3959-4184.  
10/04/62 4394 10' Plug 4387 ft. Putting on Pump. Creek Jet open.  
hole 2' shorter/foot at 40HS-55. 4063-60, 4114-66, 4126-62, 4146-56,  
4166-70, 4181-85, 4192-90, 4226-95, 4270-80.  
4281-4308, 4312-46. Hole caved to 4160 ft. Cleared out to 4381 ft.  
5' liner 3760-4387 set. slotted 4031-96 and 4226-4355. 011.  
fractured open hole 3959-4387 with 63,000 gallons oil; breakdown  
pressure 1900. injection rate 33 barrels/min. 10/22/62 Pumping load  
oil. Pumped 50 barrels load oil/day. 11/27/62 Testing on pump.  
Pumped 12 barrels load oil/day. trace wt. 12/12/62 Shut in. Pumped  
12 barrels load oil & 1 barrel water/day. 01/06/63 Ram open holeLog Tops  
Calc  
Depth Datum  
3190 4008  
PZones: 3959-4187 (Hances)Log Tops  
Calc  
Depth Datum  
3190 4008  
PZones: 3959-4187 (Hances)Log Tops  
Calc  
Depth Datum  
3190 4008  
PZones: 3959-4187 (Hances)Di  
Co  
St  
Co  
Co  
Fl.  
Fl.  
Fl.

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Printed 12/30/89 TBN 15967 NM

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G- 6

## DWAIGHT'S HOTLINE - Drilling History

35-28N-1W

Di  
Co  
St  
Co  
Co  
Fl.  
Fl.  
Fl.Well: JICARILLA APACHE #7  
Ftgs: 660 ftl 2310 ftl  
Oil: 4300 Gallon  
Prod. well:Penalty: 09/14/62  
Leasee:  
Comp: 10/03/62 00  
Oil:Last Info: 06/25/88  
API: 30-039  
Elev: 7198 ftDi  
Co  
St  
Co  
Co  
Fl.  
Fl.  
Fl.Well: JICARILLA APACHE #7  
Ftgs: 660 ftl 2310 ftl  
Oil: 4300 Gallon  
Prod. well:Penalty: 09/14/62  
Leasee:  
Comp: 10/03/62 00  
Oil:Last Info: 06/25/88  
API: 30-039  
Elev: 7198 ftDi  
Co  
St  
Co  
Co  
Fl.  
Fl.  
Fl.

Printed 12/30/89 TBN 15967 NM



F. HEL 3F-1 3-27v-1

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	TOP MEAS. DEPTH	TRUE VERT. DEPTH
Mancos	6952' MD	7862' MD	Fractured siltstone, very fine grained sandstones and shale	Point Lookout	5166'	5102'
Niobrara 'B'				Mancos	5338'	5271'
				Niobrara 'A'	6670'	6479'
				Niobrara 'B'	6952'	6587'

(21#)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE.

FOR APPROVED  
OMB NO. 1004-0137  
Expires: December 31, 1991

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1. TYPE OF WELL: OIL  GAS  DRY  Other \_\_\_\_\_

2. TYPE OF COMPLETION:

NEW  WORK  OVER  DEEPEN  PLUG  BACK  DIFF.  CENTR.  Other \_\_\_\_\_

3. NAME OF OPERATOR

AMERICAN HUNTER EXPLORATION LTD.

4. ADDRESS AND TELEPHONE NO.

410 - 17th Street; Suite 1220; Denver, Colorado 80202

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 460' FNL & 650' FEL (NENE) Section 6-T27N-R1E

At top prod. interval reported below

At total depth 485.5' FNL & 3358.4' FEL  
NWNN Section 6-T27N-R1E

14. PERMIT NO.

DATE ISSUED

10/28/91

15. DATE SPUDDED

16. DATE T.D. REACHED

17. DATE COMPL. (Ready to prod.)

18. ELEVATIONS (OF. RKS. ET. GE. ETC.)\*

13. STATE

11/04/91

11/24/91

n/a

7177GR, 7196KB

NEW MEXICO

20. TOTAL DEPTH, MD & TVD

21. PLUG, BACK T.D., MD & TVD

22. IF MULTIPLE COMPL.,  
HOW MANY\*

23. INTERVALS  
DRILLED BY

ROTARY TOOLS

CABLE TOOLS

5026MD, 2728TVD

1700TVD

→

0-T.D.

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

n/a

25. WAS DIRECTIONAL  
SURVEY MADE

YES

26. TYPE ELECTRIC AND OTHER LOGS RUN

DUAL INDUCTION, SONIC, GAMMA RAY, CALIPER

27. WAS WELL CORED

NO

28.

CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
10 3/4"	40.5	329	14 3/4"	TO SURFACE	NONE
7 5/8"	29	2426	9 7/8"	560sx 65/35 POZMIX 225sx 'G'	NONE

29.

LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACK CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (Interval, size and number)

OPEN HOLE FROM 2426' to 5026' MD.

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.\*

PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			WELL STATUS (Producing or shut-in)			
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	WATER-OIL RATIO

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

ACCEPTED AND RECORDED

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

APR 24 1992

SIGNED B. THISTLE

TITLE DRILLING TECHNOLOGIST

DATE April 9, 1992

\*See Instructions and Spaces for Additional Data on Reverse Side) BY GMN

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OPERATOR

AHEL 6A-1 6-27n-1e

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries);

GEOLOGIC MARKERS

38.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
CLIFF HOUSE	668	713	33% Ø
MENESEE	713	903	31% Ø
POINT LOOKOUT	903	1118	24% Ø

CONFIRMED

NAME	MEAS. DEPTH	TOP	
		TRUE DEPTH	VERT. DEPTH
LEWIS	SURFACE	SURFACE	
CLIFF HOUSE	668'	671'	
MENESEE	713'	716'	
POINT LOOKOUT	903'	908'	
MANCOS	1118'	1124'	
KOP	1719'	1732'	
NIOBRAVA	2140'	2107'	
GRAY ZONE	2218'	2170'	
A ZONE	2426'	2302'	
B ZONE	2582'	2397'	
TOTAL DEPTH	5026'	2727'	

(#14)

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DWIGHT'S HOTLINE - Drilling History 6-27N-1E

Copyright 1989 Original Drill c se se  
State : NEW MEXICO NM Merid NW R-960304-0 Issued: 01/01/78

County: RIO ARRIBA Operator: BENSON MONTIN GREER DRILL  
Field : PUERTO CHIQUITO MAN

Well: JICARILLA #16-6  
Frg: 660' Rel 660' Rel  
Obj: 3100' Gallup  
Prod Well:  
Spud: 08/01/63 Contr:  
Tb: 3299 PB: 3225

Leet Info: 05/22/63  
Permit: 07/30/63 API 30-019  
Leasee:  
Lev: 7240 KB

Op Ad: 221 Petroleum Center Bldg., Farmington NM 87401  
Elev: 7240 KB  
AA State Records 44 Formation Record  
M2Zone: 2500-3156 (Gallup) Log Tops Depth Datum  
Perfes: 2096-3156 w/1 SFR - frac w/77710 (Gallup) 2500 Calc  
Gas oil 80000 lb 20/40 sed  
20000 lb 10/40 sed  
Core: None  
Logos: ESI  
Casing: 10 3/4" @ 107 w/60 - 7 @ 2419 w/150 - 5 1/2" in liner 2069-3296  
Tubing: 2 3/8" @ 3100  
Journals: PEA - 6/3/65

AA Shell Oil Data AA  
Casing: 10 3/4" cmtd @ 107 w/60; 7 cmtd @ 2069-3299 w/100  
Journals: 07/02/63 Loc: 08/26/63 107 Waiting on cement. Spud 7/11/63 - 10/3/63  
Wait at 107 ft with 80' sacks. 08/20/63 104' 7 brdg. 08/27/63 2440  
Waiting on cable tools. 7 in cmtd at 2439 ft with 150' sacks.  
hrs at 2581 ft. Build 8 gallons fluid, 50' oil and 50' wtr.  
Na/11/63 2800 Drill. Shut down at 2610 ft for 4 hrs, boiled 4  
gallons H2O, rainbow show of oil, shut down at 2650 ft for 4 hours,  
boiled 2 1/2 gallons H2O, rainbow show of oil, shut down at 2715 ft  
for 4 hrs, boiled 3 gallons H2O, no show, shut down 2800 ft for 4  
hrs, boiled 2 1/2 gallons H2O, rainbow show of oil; shut down at  
2875 ft for 4 hrs, boiled 2 1/2 gallons H2O, rainbow show of oil;

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#15

DWIGHT'S HOTLINE - Drilling History 6-27N-1E

Copyright 1989 Original Drill c se se  
State : NEW MEXICO NM Merid NW R-960304-0 Issued: 01/01/78

County: RIO ARRIBA Operator: BENSON MONTIN GREER DRILL  
Field : PUERTO CHIQUITO MAN

Well: JICARILLA #16-6  
Frg: 660' Rel 660' Rel  
Obj: 3100' Gallup  
Prod well:  
Spud: 08/01/63 Contr:  
Tb: 3299 PB: 3225

shut down at 2335 ft for 24 hrs, bailed 8 gallons H2O, rainbow show  
of oil; shut down at 2950 ft for 4 hrs, bailed 1 1/2 gallons mud,

rainbow show of oil. 09/17/63 3299 Drilg cement. Shut down at 3100  
ft for 4 hrs, bailed 3/4 gallon mud, shut down at 3220 ft for 4  
hrs, bailed 2 9 gallons mud. 09/27/63 3299 Idl. 5 1/2" in liner cmtd  
2069-3299 ft with 100' sacks. 11/02/63 3299 Plug 3225 ft. Waiting on  
pump. Spotted 500 gallons mud cut acid. Perforated 1 shot/ft. 3156  
ft, 3160 ft, 3162 ft, 3164 ft, 2668 ft, 2692 ft, 2690 ft, 2642  
ft, 2714 ft, 2716 ft, 2646 ft, 2644 ft, 2646 ft, 2696 ft, 2606 ft. Sed oil fractured  
2692 ft - 3166 ft with 72 710 gallons oil, 100,000 lb ad T.R. 58  
barrels per min. 7/21/64 3299 Plug 3225 ft. Testing on  
pump. Pumped 79 barrels load oil in 24 hrs. 12/17/64 3299 Plug 3225  
ft. Testing on pump. Pumped 15 barrels load oil 1/day.  
01/21/65 3299 Plug 3225 ft. Shut down. Pumped 2 days, no recovery.  
1113 barrels load oil left in hole.

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#15

DWIGHT'S HOTLINE - Drilling History 21-27N-1E

Copyright 1989 Original Drill c se se  
State : NEW MEXICO NM Merid NW R-960306-0 Issued: 01/01/78

County: RIO ARRIBA Operator: BENSON MONTIN GREER DRILL  
Field : PUERTO CHIQUITO MAN

Well: JICARILLA #16-6  
Frg: 660' Rel 660' Rel  
Obj: 3100' Gallup  
Prod well:  
Spud: 08/01/63 Contr:  
Tb: 3299 PB: 3225

shut down at 2335 ft for 24 hrs, bailed 8 gallons H2O, rainbow show  
of oil; shut down at 2950 ft for 4 hrs, bailed 1 1/2 gallons mud,

rainbow show of oil. 09/17/63 3299 Drilg cement. Shut down at 3100  
ft for 4 hrs, bailed 3/4 gallon mud, shut down at 3220 ft for 4  
hrs, bailed 2 9 gallons mud. 09/27/63 3299 Idl. 5 1/2" in liner cmtd  
2069-3299 ft with 100' sacks. 11/02/63 3299 Plug 3225 ft. Waiting on  
pump. Spotted 500 gallons mud cut acid. Perforated 1 shot/ft. 3156  
ft, 3160 ft, 3162 ft, 3164 ft, 2668 ft, 2692 ft, 2690 ft, 2642  
ft, 2714 ft, 2716 ft, 2646 ft, 2644 ft, 2646 ft, 2696 ft, 2606 ft. Sed oil fractured  
2692 ft - 3166 ft with 72 710 gallons oil, 100,000 lb ad T.R. 58  
barrels per min. 7/21/64 3299 Plug 3225 ft. Testing on  
pump. Pumped 79 barrels load oil in 24 hrs. 12/17/64 3299 Plug 3225  
ft. Testing on pump. Pumped 15 barrels load oil 1/day.  
01/21/65 3299 Plug 3225 ft. Shut down. Pumped 2 days, no recovery.  
1113 barrels load oil left in hole.

#15

DWIGHT'S HOTLINE - Drilling History 21-27N-1E

Copyright 1989 Original Drill c se se  
State : NEW MEXICO NM Merid NW R-960306-0 Issued: 01/01/78

County: RIO ARRIBA Operator: BENSON MONTIN GREER DRILL  
Field : PUERTO CHIQUITO MAN

Well: JICARILLA #16-6  
Frg: 660' Rel 660' Rel  
Obj: 3100' Gallup  
Prod well:  
Spud: 08/01/63 Contr:  
Tb: 3299 PB: 3225

shut down at 2335 ft for 24 hrs, bailed 8 gallons H2O, rainbow show  
of oil; shut down at 2950 ft for 4 hrs, bailed 1 1/2 gallons mud,

rainbow show of oil. 09/17/63 3299 Drilg cement. Shut down at 3100  
ft for 4 hrs, bailed 3/4 gallon mud, shut down at 3220 ft for 4  
hrs, bailed 2 9 gallons mud. 09/27/63 3299 Idl. 5 1/2" in liner cmtd  
2069-3299 ft with 100' sacks. 11/02/63 3299 Plug 3225 ft. Waiting on  
pump. Spotted 500 gallons mud cut acid. Perforated 1 shot/ft. 3156  
ft, 3160 ft, 3162 ft, 3164 ft, 2668 ft, 2692 ft, 2690 ft, 2642  
ft, 2714 ft, 2716 ft, 2646 ft, 2644 ft, 2646 ft, 2696 ft, 2606 ft. Sed oil fractured  
2692 ft - 3166 ft with 72 710 gallons oil, 100,000 lb ad T.R. 58  
barrels per min. 7/21/64 3299 Plug 3225 ft. Testing on  
pump. Pumped 79 barrels load oil in 24 hrs. 12/17/64 3299 Plug 3225  
ft. Testing on pump. Pumped 15 barrels load oil 1/day.  
01/21/65 3299 Plug 3225 ft. Shut down. Pumped 2 days, no recovery.  
1113 barrels load oil left in hole.

#15

DWIGHT'S HOTLINE - Drilling History 27-27N-1E

Copyright 1989 Original Drill c se se  
State : NEW MEXICO NM Merid NW R-960306-0 Issued: 01/01/78

County: RIO ARRIBA Operator: BENSON MONTIN GREER DRILL  
Field : PUERTO CHIQUITO MAN

Well: JICARILLA #16-6  
Frg: 660' Rel 660' Rel  
Obj: 3100' Gallup  
Prod well:  
Spud: 08/01/63 Contr:  
Tb: 3299 PB: 3225

shut down at 2335 ft for 24 hrs, bailed 8 gallons H2O, rainbow show  
of oil; shut down at 2950 ft for 4 hrs, bailed 1 1/2 gallons mud,

rainbow show of oil. 09/17/63 3299 Drilg cement. Shut down at 3100  
ft for 4 hrs, bailed 3/4 gallon mud, shut down at 3220 ft for 4  
hrs, bailed 2 9 gallons mud. 09/27/63 3299 Idl. 5 1/2" in liner cmtd  
2069-3299 ft with 100' sacks. 11/02/63 3299 Plug 3225 ft. Waiting on  
pump. Spotted 500 gallons mud cut acid. Perforated 1 shot/ft. 3156  
ft, 3160 ft, 3162 ft, 3164 ft, 2668 ft, 2692 ft, 2690 ft, 2642  
ft, 2714 ft, 2716 ft, 2646 ft, 2644 ft, 2646 ft, 2696 ft, 2606 ft. Sed oil fractured  
2692 ft - 3166 ft with 72 710 gallons oil, 100,000 lb ad T.R. 58  
barrels per min. 7/21/64 3299 Plug 3225 ft. Testing on  
pump. Pumped 79 barrels load oil in 24 hrs. 12/17/64 3299 Plug 3225  
ft. Testing on pump. Pumped 15 barrels load oil 1/day.  
01/21/65 3299 Plug 3225 ft. Shut down. Pumped 2 days, no recovery.  
1113 barrels load oil left in hole.

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**DWIGHT'S HOTLINE - Drilling History** 7-27N-1E

Copyright 1989 Original Drill No. 98  
State : NEW MEXICO NM Merid H# R-957279-0 Issued: 01/01/78  
County: RIO ARRIBA Oper: BENSON MONTIN GREER DRILL  
Field : PUERTO CHICUITO MAN TA: 01/19/87 DD SUSPENDED  
Well: APACHE #16-7 Test Info: 05/22/85  
Ftgr: 660' Rel: 660' Prod: 3000 Gallup Prod well:  
Obj: Lease: Elev: 7192 KB  
Prod well:  
Spud: 08/26/83 Contr: Own  
TD: 3612 PB:  
Op Ad : 221 Petroleum Center Bldg. Farmington NM 87401  
AA State Records AA  
Logs : IGR Formation Record Calc  
Casing: 10 5/8" @ 100' w/100' - 7 1/2" 250H Depth Datum  
w/150' Log Tops 1370 58.2  
Journal: PCA ICliff House 1795 53.9  
AA Shell Oil Date AA IManicos 2825 43.67  
Elev: 7192 KB ISanctee 3532 36.50  
Formation Record Calc  
Casing: 10 5/8" cmtd 100' w/100' 7 cmtd 8 Log Tops Depth Datum  
2804 w/150' Ithesaverde 1370 58.22  
Journal: 09/03/83 Loc: 09/09/63 2087 Drilg IManicos 1795 53.97  
Spud: 8-26-63 10-1/4" in cmtd IGallup 2825 43.67  
at 1000' ft with 100' socks. ISanctee 3532 36.50  
09/11/63 2087 Helitng On Cable tools.  
In cmtd at 2800' ft with 150' cable. Changed well number from "P-7". 11/06/63 2087 Ripping up  
cable tools. 11/20/63 3350 Dri with cable tools. 12/17/63 3612' TD.  
Shut down waiting on orders. No cores, logs or DST's. Shut down  
from 10-19-64 to 1-16-78 at TD of 3612 ft.

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**DWIGHT'S HOTLINE - Drilling History** 28-27N-1E

Copyright 1989 Original Drill No. 98  
State : NEW MEXICO NM Merid H# R-957293-0 Issued: 01/01/78

DWIGHT'S HOTLINE - Drilling History

28-27N-1E

Copyright 1989 Original Drill No. 98  
State : NEW MEXICO NM Merid H# R-957294-0 Issued: 01/01/78

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**DWIGHT'S HOTLINE - Drilling History** 11-27N-1E

Copyright 1989 Original Drill No. 98  
State : NEW MEXICO NM Merid H# R-40557-0 Issued: 10/3/88  
County: RIO ARRIBA Oper: DAUSEY A L  
Field : PUERTO CHICUITO E MAN TA: 01/16/87 DD SUSPENDED  
Well: EL VADO #2 Last Info: 09/02/88  
Ftgr: 1770 Rel: 970 Prod: Permit: 01/23/86  
Obj: 1500 Manicos Lease: Apt: 30-039-24055  
Prod well: Prod well: Elev: 7157 GR  
Spud: Contr: Stan  
TD: 1310 PB:  
Notes : (unable to collect further information from operator or state office)  
Journal: 1/1/88 WOCT  
1/22/88 WOCT  
6/14/87 drilled.  
5/11/88 state office has not been able to get information from  
operator.  
11/11/88 WOCT since October 1986.  
5/5/88 WOCT since October 1986.  
5/2/88 operations suspended, no further information available.

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**DWIGHT'S HOTLINE - Drilling History** 28-27N-1E

Copyright 1989 Original Drill No. 98  
State : NEW MEXICO NM Merid H# R-957294-0 Issued: 01/01/78

DWIGHT'S HOTLINE - Drilling History

28-27N-1E

Copyright 1989 Original Drill No. 98  
State : NEW MEXICO NM Merid H# R-957294-0 Issued: 01/01/78

K-4 Cum 2 MBD

DWIGHT'S HOTLINE - Drilling History	
Copyright 1989	Original Drill
State : NEW MEXICO	NM Herid NM R-957301-0
County: RIO ARriba	Oper: BENSON MONTIN GREER DRILL
Field : PUERTO CHICUITO E MAN	PEA: DM 2M/67 00
Hall-JUCARILLA 235 #1	Last Info: 04/07/88
FTG: 825 ft 495 ft	Copyright 1989
DB: 4600' test	State : NEW MEXICO
Prod well,	County: RIO ARriba
Spud: 08/23/66	Field : PUERTO CHICUITO W MAN
TD: 4988	PEA: DM 2M/67 00
Op Ad : 221 Petroleum Center Bldg. Farmington NM 87401.	Last Info: 04/07/88
Op Ad : 221 Petroleum Center Bldg. Farmington NM 87401.	Copyright 1989
Elev: 7132 GR	State : NEW MEXICO
Formation Record	County: RIO ARriba
IP 111 BOPD Grav 38	Field : PUERTO CHICUITO W MAN
IP 111 BOPD Grav 34, 3 MCFPD, 20	PEA: DM 2M/67 00
Blfd	Last Info: 04/07/88
Zone 1 3873-3943 (Mancos)	Copyright 1989
Perfo : 3873-3943 w/1 SPF - treat	State : NEW MEXICO
w/150000 lb w/ 2989 bbls crude	County: RIO ARriba
oil.	Field : PUERTO CHICUITO W MAN
Core : None	PEA: DM 2M/67 00
Log Top:	Last Info: 04/07/88
Cliff House	Copyright 1989
Mancos	State : NEW MEXICO
Gallup	County: RIO ARriba
Santee	Field : PUERTO CHICUITO W MAN
Greenhorn	PEA: DM 2M/67 00
Dakota	Last Info: 04/07/88
Core : None	Copyright 1989
Log : IES	State : NEW MEXICO
Ceiling: 10 3/4 @ 175 w/150 - 7 @ 3999 w/300 - 3 1/2 in bnr 4610-4908 - 5 1/2	County: RIO ARriba
In bnr 3965-4695	Field : PUERTO CHICUITO W MAN
Tubing: 2 7/8 @ 3793	PEA: DM 2M/67 00
Journals : JIC 235 #1	Last Info: 04/07/88

Reported to have  
water problems

K-5 Cum 91 MBD

DWIGHT'S HOTLINE - Drilling History	
Copyright 1989	Original Drill
State : NEW MEXICO	NM Herid NM R-957301-0
County: RIO ARriba	Oper: BENSON MONTIN GREER DRILL
Field : PUERTO CHICUITO W MAN	PEA: DM 2M/67 00
Hall-JUCARILLA 202 #1	Last Info: 04/07/88
FTG: 1085 ft 2052 ft	Copyright 1989
Obj: 7150 Mancos	State : NEW MEXICO
Prod well,	County: RIO ARriba
Spud: 03/24/67	Field : PUERTO CHICUITO W MAN
TD: 7626	PEA: DM 2M/67 00
Op Ad : 221 Petroleum Center Bldg. Farmington NM 87401.	Last Info: 04/07/88
Op Ad : 221 Petroleum Center Bldg. Farmington NM 87401.	Copyright 1989
Elev: 7132 GR	State : NEW MEXICO
Formation Record	County: RIO ARriba
IP 111 BOPD Grav 38	Field : PUERTO CHICUITO W MAN
IP 6959-7021 - SHF	PEA: DM 2M/67 00
Log : IES GR I FOL	Last Info: 04/07/88
Ceiling: 113 3/8 @ 335 w/450 - 7 5/8 8	Copyright 1989
Journals : JIC 235 #1	State : NEW MEXICO
Core : Shell Oil Date AA	County: RIO ARriba
Ceiling: 113-3/8 cuted @ 335 w/450	Field : PUERTO CHICUITO W MAN
Journals : JIC 235 #1	PEA: DM 2M/67 00
Abandon. No cores or DST's run.	Last Info: 04/07/88

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**DWIGHT'S HOTLINE - Drilling History** 17-27N-1E

Copyright 1989 Original Drill <sup>E 2M 30</sup> se se

State : NEW MEXICO 1# Herid H# R-957280-0 Issued: 01/01/78

County: RIO ARRIBA Oper: BENSON MONTIN GREER DRG

Field : PUERTO CHICUITO E MAN

Coopl: 06/13/63 00 Oil:

Well: JICARILLA 238 42 Last Info: 09/15/87

Ftg: 660 ft 1600 ft Permit: 07/2d/64 API 5D-015  
Ob: 4200 Sametree Lease:

Prod well: Prod well: Elev: 7054 ft

Spud: 10/10/62 Contr:

To: 2620 PB:

Plug 255 ft; swabbing and testing; Set plug on each test. 05/09/63 Op Ad: 221 Petroleum Center Bldg. Farmington NM 87401

Prepare to fracture load a hole with 50 barrels oil. Snubbed 55 barrels oil in 3 day from interval 17-1. 2506. 05/14/63 Testing on pump; tie red out bridge plug at 2506 ft. Spotted 500 gallons breakdown fluid. Id oil fractured open hole at 2506-2620 with 70,000 gallons oil and 80,000 psi ad break down pressure. 2050 psi injection rate 40 barrels/min. 05/15/63 2651 10 ft long 2620 ft. Pump. 05/28/63 1616 repairs. 06/05/63 2861 10 ft long 2620 ft. Idle, Repairs. 06/12/63 Testing on pump, pumping load oil. Recovered all load. 1.0. Pumped 24 barrels oil/day based on 2 hr test. 33 deg gravity. 1.0. Pumping through open hole at Gallup formation, interval 2506-2926 ft.

Printed in U.S.A. TIN 1576 NM

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J- 1

**DWIGHT'S HOTLINE - Drilling History** 18-27N-1E

Copyright 1989 Original Drill <sup>e se se</sup>

State : NEW MEXICO 1# Herid H# R-957281-0 Issued: 01/01/78

County: RIO ARRIBA Oper: BENSON MONTIN GREER DRG

Field : PUERTO CHICUITO MAN

Coopl: 06/13/63 00 Oil:

Well: JICARILLA 238 42 Last Info: 09/15/87

Ftg: 660 ft 1600 ft Permit: 07/2d/64 API 5D-015  
Ob: 4200 Sametree Lease:

Prod well: Prod well: Elev: 7054 ft

Spud: 10/10/62 Contr:

To: 2620 PB:

Op Ad: 221 Petroleum Center Bldg. Farmington NM 87401

44 State Records 44

Testing: 10 3/4 @ 99 M/1000

Journal: #416-18. PCA

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**DWIGHT'S HOTLINE - Drilling History** 29-27N-1E

Copyright 1989 Original Drill <sup>se se</sup>

State : NEW MEXICO 1# Herid H# R-957290-0 Issued: 01/01/78

County: RIO ARRIBA Oper: BAYLESS ROBERT L

Field : PUERTO CHICUITO E MAN

Coopl: 10/14/62 00 Oil:

Comp: 10/14/62 00 Oil:

12-11-BFTR 84

1 last Info: 12/25/81

**DWIGHT'S HOTLINE - Drilling History** 29-27N-1E

Copyright 1989 Original Drill <sup>se se</sup>

State : NEW MEXICO 1# Herid H# R-957298-0 Issued: 01/01/78

County: RIO ARRIBA Oper: BAYLESS ROBERT L

Field : PUERTO CHICUITO E MAN

Coopl: 05/10/63 00 Oil:

Comp: 05/10/62 00 Oil:

1 last Info: 12/25/81

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

W. THOMAS KELLAHIN\*

\*NEW MEXICO BOARD OF LEGAL SPECIALIZATION  
RECOGNIZED SPECIALIST IN THE AREA OF  
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

TELEPHONE (505) 982-4285  
TELEFAX (505) 982-2047

RECEIVED

OCT 26 1992

Mr. William J. LeMay  
Chairman  
Oil Conservation Commission  
310 Old Santa Fe Trail, Room 219  
Santa Fe, New Mexico 87501

OIL CONSERVATION DIVISION

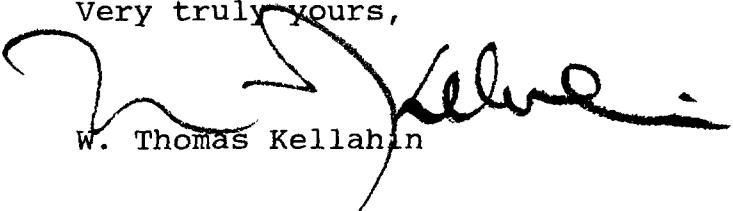
HAND DELIVERED

Re: REQUEST FOR HEARING DENOVO  
NMOCD CASE 10534  
Order No. R-9735  
Application of American Hunter  
Exploration Ltd for Pressure Maintenance  
Project, Rio Arriba County, N.M.

Dear Mr. LeMay:

On behalf of Benson-Montin-Greer Drilling Corporation, please find enclosed our request for a Hearing DeNovo of the referenced case before the New Mexico Oil Conservation Commission.

Very truly yours,

  
W. Thomas Kellahin

WTK/jcl  
Enclosures

cc: With Enclosures  
David R. Catanach, OCD-Hearing Examiner  
Robert G. Stovall, Esq.  
William F. Carr, Esq.  
James Bruce, Esq.  
Al Greer (BMG-Drilling Corp.)

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

RECEIVED

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

OCT 23 1992  
OIL CONSERVATION DIVISION

CASE NO. 10534  
Order No. R-9735

APPLICATION OF AMERICAN HUNTER  
EXPLORATION, LTD. FOR A PRESSURE  
MAINTENANCE PROJECT, RIO ARRIBA  
COUNTY, NEW MEXICO.

BENSON-MONTIN-GREER DRILLING CORPORATION'S  
REQUEST FOR A DE NOVO HEARING  
BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION

Comes now BENSON-MONTIN-GREER DRILLING CORPORATION,  
a party of record before the New Mexico Oil Conservation  
Division in Case 10534 and adversely affected by Division  
Order R-9735 entered September 23, 1992, by its attorneys  
Kellahin & Kellahin and pursuant to Section 70-2-13 NMSA-  
1978, hereby requests that the New Mexico Oil  
Conservation Commission hold a HEARING DENOVO in this  
matter.

Request of Benson-Montin-Greer  
Drilling Corp. for DeNovo Hearing  
Page 2

Respectfully Submitted:



W. Thomas Kellahin  
Kellahin & Kellahin  
P. O. Box 2265  
Santa Fe, New Mexico 87501  
(505) 982-4285  
ATTORNEYS FOR BENSON-MONTIN-  
GREER DRILLING CORPORATION

CERTIFICATE OF MAILING

I, W. Thomas Kellahin, hereby certify that on this  
23rd day of October, 1992 I provided a copy of the  
foregoing pleading by regular mail or hand delivery to  
all counsel of record in this matter.

  
W. Thomas Kellahin