

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.

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

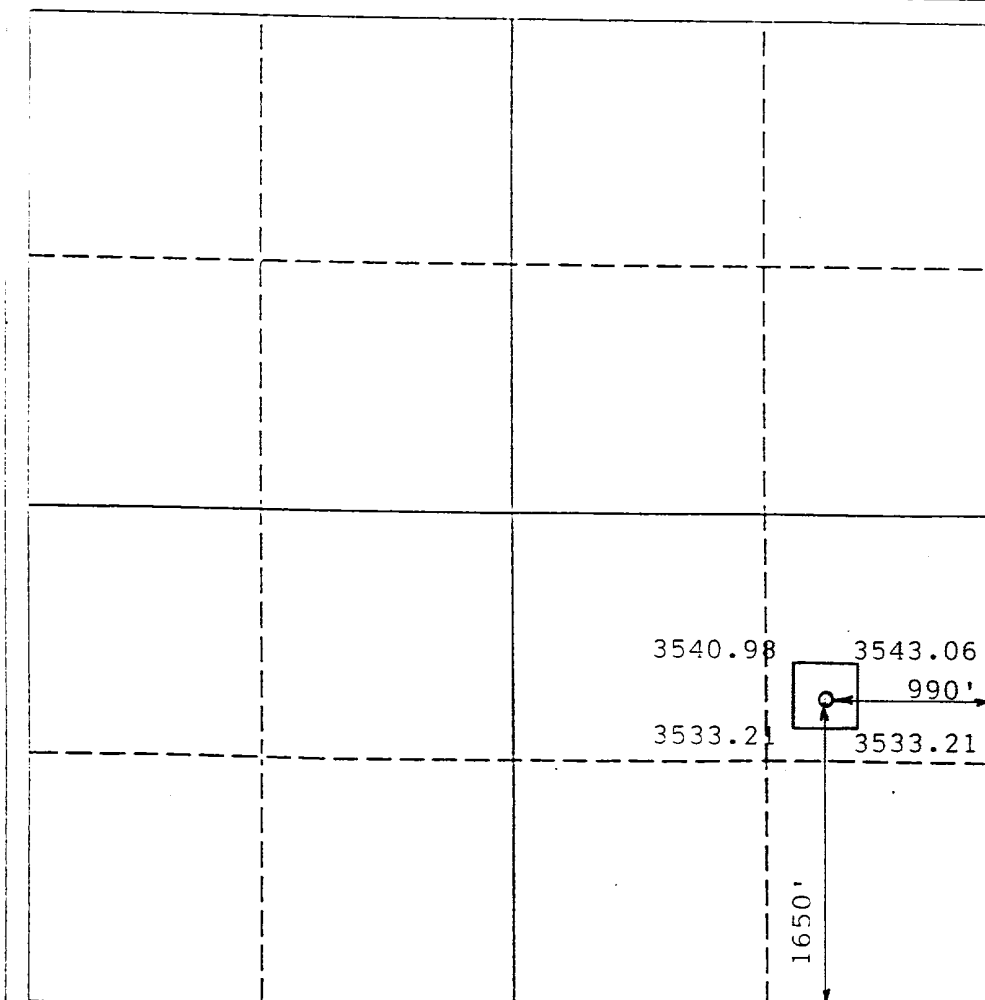
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Hanson Operating Company			Lease Comanche Federal		Well No. 1
Unit Letter I	Section 12	Township 11 South	Range 25 East	County Chaves	
Actual Footage Location of Well: 1650 feet from the South line and 990 feet from the East line					
Ground level Elev. 3542		Producing Formation San Andres/Glorieta	Pool Wildcat	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation _____
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____
No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

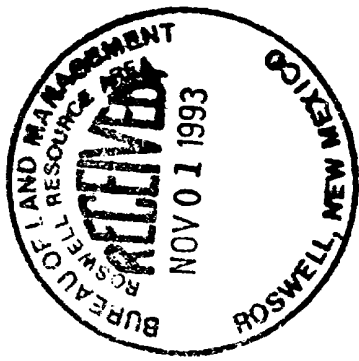
Signature
P. R. Patton
Printed Name
Agent for
Position
Hanson Operating Co.
Company
11/1/93
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
September 21, 1993
Signature & Seal of **P. R. Patton**
Professional Surveyor

Certificate No.
8112



DRILLING PLAN
To Accompany
APPLICATION FOR PERMIT TO DRILL

HANSON OPERATING COMPANY
COMMANCHE FEDERAL WELL #1
1650 FSL, 990 FEL, SEC.12, T11S, R25E NMPM
Chaves County, NM

In conjunction with Form 3160-3, Application for Permit to Drill, Hanson operating Company submits the following items of pertinent information in accordance with Onshore Oil & Gas Order Nos. 1 & 2, and with all other applicable federal and state regulations.

1. Estimated Tops of Geologic Markers

The surface geologic formation is undifferentiated Artesia Group formations of Permian age. The estimated tops of geologic markers are as follows:

FORMATION	DEPTH	SUBSEA
Artesia Group	0	3542
San Andres	650	2892
Glorieta	1600	1942

2. The estimated depths at which water, oil, or gas formations are expected to be encountered:

A. Fresh Water

May be found within the Artesia Group at a depth of less than 100 feet; deeper waters are not usable for livestock due to high mineralizations, principally salt and sulfate. It will be protected with 13-3/8" casing set at 250 feet and cemented to surface, as per NMOC regulations. Waters anticipated to be encountered as evidenced by nearby boreholes are:

35-70	1 BWPH
150-160	2 BWPH
190-205	15BWPH
1000	Too much to bail
1020-30	Heavy flow of sulfur water

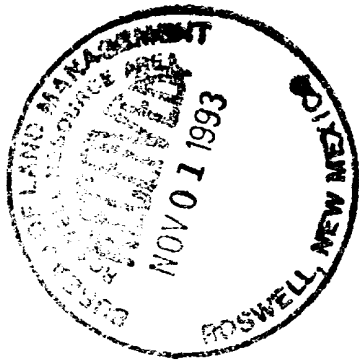
B. Oil or Gas:

Formation	Hydrocarbon	Depth
San Andres	Oil	1100
Glorieta	Oil	1600

Potentially productive horizons to be protected by 5-1/2" production casing with cement extending to surface.

3. Pressure Control Equipment

See Exhibit "B" for Description and test pressures; Refer to Exhibit "A" for testing schedule.



4. Proposed Casing and Cementing Program:

See Form 3160-3 and Exhibit "A", "Summarized Drilling Procedure".

5. Mud Program:

Interval: 0-1650' Drill hole with air / airfoam rotary drilling equipment, mud not required
option 1100-TD' Drill with Cable Tool, Utilise freshwater as required to maintain proper
drilling action -- mud not required for cable tool hole except to maintain
drilling action.

6. Testing, Logging, and Coring Programs:

DSTs: Not applicable to air rotary / cable tool operations

Mud Logging: Samples will be collected 0-TD; no hotwire / chromatograph equipment will
be used.

Electric / Radioactive Logging:

Open Hole Logs:

GRN-Caliper-DLL -- From TD to base of casing

Cased Hole Logs

GRN -- From top of open hole logged interval to surface

Temperature -- as needed to establish TOC

Coring:

No Coring is planned at this time.

7. Abnormal Pressures, Temperatures, or other Hazards:

Lost Circulation Zones: Zones of lost circulation are not anticipated and are not applicable
to cable tool or rotary air drilling in the ordinary course of concerns

High Pressure Zones: Above normal pressures are not anticipated.

Projected Pressure Gradients are:

Interval	Gradient	Est. Max. BHP
Surface to 1600'	0.433 psi/ft	693 psi

Hydrogen Sulphide Gas: Hydrogen sulphide is not believed to be a problem in the San Andres
formation, even though it is a known sour gas crude. Appropriate
precautions common to the cable tool drilling procedures utilized in the
drilling of the San Andres in this area will be taken.

8. Anticipated Starting Date:

As soon as possible.



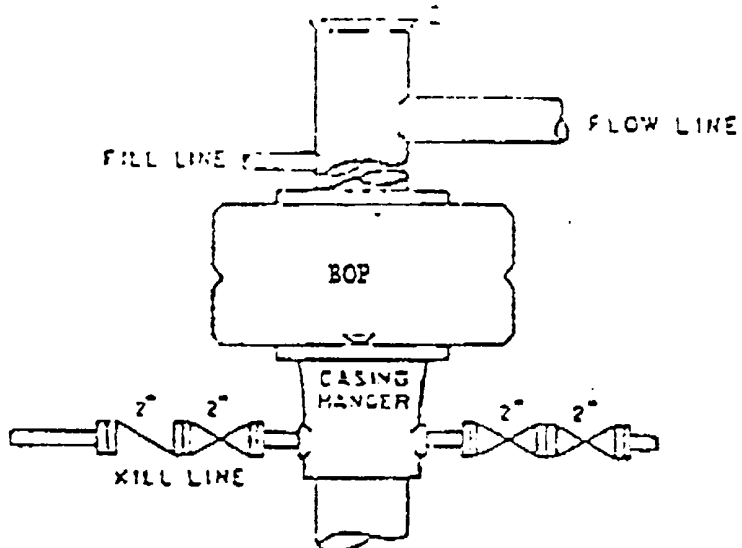
EXHIBIT "A"
To Accompany
APPLICATION FOR PERMIT TO DRILL

HANSON OPERATING COMPANY
COMANCHE FEDERAL WELL No.1
1650 FSL 990 FEL, SEC.12, T11S, R25E NMPM
Chaves County, NM

SUMMARIZED DRILLING PROCEDURE

- 0-250 Drill 17½" hole to 250 ft. Utilising air / air foam and rotary tools. Run 13-3/8" OD casing, circulate bottoms up, and cement to surface. Should cement not circulate, run temperature survey and 1" to surface. WOC 12 hrs. or until cement reaches F'c=500psi.
- 250-1080 Drill 12½" hole to 1080 ft, Utilising air / air foam and rotary tools. Run temporary 8-5/8" OD casing from surface to 1080 ft, mudded in place to control water. Nipple up 13-3/8 x 8-5/8 casing hanger and BOP stack on 8-5/8" casing. Test to Rated WP. Test BOP daily.
- 1080-1650 Drill 7-7/8" hole to 1650 (TD), utilising air / air foam and rotary tools. (optionally, drill with cable tools and cable tool type BOP). Condition hole for running electric logs. At completion of logging, remove temporary casing, run 5-1/2" casing to TD, and circulate cement to surface. WOC 24 hrs and begin completion operations.

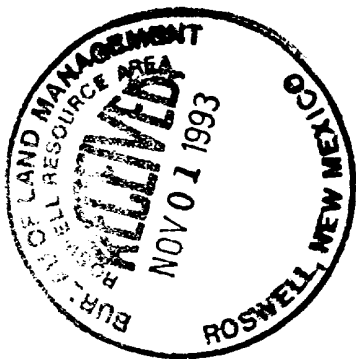




ANNULAR BOP STACK

PRESSURE 1000#

EXHIBIT "E"
Hanson Operating Company
Comanche Federal Well No. 1
Unit I, Sec.12, T11S, R25E
NMPM, Chaves County, NM



SURFACE USE PLAN
To Accompany
APPLICATION FOR PERMIT TO DRILL

HANSON OPERATING COMPANY
COMANCHE FEDERAL WELL No. 1
1650 FSL & 990 FEL, SEC.12, T11S, R25E, NMPM
CHAVES COUNTY, NEW MEXICO

1. EXISTING ROADS

A. REGIONAL MAP

Exhibit "C" is a portion of the New Mexico State Highway Department Quadrangle No. 94, "Hagerman", showing the regional road network and access from the nearest Federal Highways.

B. NARRATIVE ACCESS DIRECTIONS

From Roswell, New Mexico, travel east on U.S. 380 a distance of 7.5 Mi.; Immediately east of the Pecos River Bridge, turn South on Chaves County road "River Road" and travel a distance of 6.8 mi.; Turn north on an unpaved lease road and travel 0.3 miles to the wellsite. Exhibits "C" and "D" are maps illustrating this narrative.

C. SITE MAP

Exhibit "D" is a reproduction of a portion of the U.S.G.S. 7.5' Topographic Quadrangles "Comanche Spring" and "Bottomless Lakes", showing the wellsite and access roads as staked.

D. ROAD MAINTENANCE

All roads shall be maintained in a condition equal to or better than that which existed prior to the start of construction.

2. PLANNED ACCESS ROADS

Approximately 185 feet of new access road will be constructed on lease; Off-lease rights of way are being obtained from the surface landowner.

A. The access road will be crowned and ditched to a 14'-0" wide travel surface with a 30' right-of-way.

B. Gradient on all roads will be less than 5.00%.

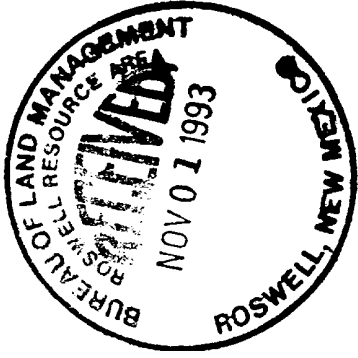
C. Turnouts will be constructed at intervals not exceeding 1000 feet; the exact location of which will be as dictated by topography to provide optimal sight distance.

D. Road will be surfaced with a minimum of 4" of caliche, obtained as described in Article 6.

E. Centerline for the new access road has been flagged; earthwork will be as required by field conditions.

F. No culverts will be required.

G. No cattleguards or fence crossings will be required.



3. LOCATION OF EXISTING WELLS WITHIN ONE MILE RADIUS AREA OF CONCERN

- A. Water Wells: None
- B. Disposal Wells: None
- C. Drilling Wells: None at this time
- D. Producing Wells: none, refer to Exhibits "D" and "E"
- E. Abandoned Wells: Several, as shown on Exhibits "D" and "E"

4. LOCATION OF PRODUCTION FACILITIES

Upon completion of a producing well the Operator will furnish maps and diagrams showing ON WELL PAD facilities and OFF WELL PAD facilities as proposed along with a SUNDRY NOTICE prior to construction of these facilities.

5. LOCATION AND TYPE OF WATER SUPPLY

Both Fresh Water and Brine will be purchased on location from a licensed commercial water hauling firm who both owns the water and who has transported same by truck over the designated access route. Applicant has no intent to either appropriate waters of the State of New Mexico or to acquire any interest in or control over any source of the drilling water purchased from commercial suppliers of those products.

6. SOURCE OF CONSTRUCTION MATERIALS

Caliche will be obtained from a private pit located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 13, T11S, R25E, NMPM.

7. METHOD OF WASTE DISPOSAL

A. Solid Waste:

- 1. Drill cuttings will be disposed of in the reserve pit.
- 2. Trash, waste paper, and garbage will be disposed of in a dumpster located on the wellpad and serviced by a commercial disposal company.
- 3. Salt, starch, bentonite gel, and other related chemicals will be stored in the manufacturer's containers until used; unused and/or damaged containers will be removed from the wellsite.

B. Liquid Waste:

- 1. Human waste will be trucked from the site by the contractor providing the rented portable Chemical Toilet maintained onsite for the rig crews. Trailers onsite with bathrooms will utilise holding tanks which will be serviced by the above firm.
- 2. Drilling Fluid will be allowed to evaporate in the reserve pit until the pit is dry enough to backfill.
- 3. Water produced during testing of the well will be disposed of in the reserve pit, where it will evaporate.



4. Oil produced during testing of the well will be stored in test tanks until sold and hauled from the site

8. ANCILLARY FACILITIES

No facilities will be constructed at this time.

9. WELLSITE LAYOUT

- A. Exhibit "F" shows the proposed wellsite layout.
- B. Reserve pits and trailer locations are as indicated
- C. Earthen pits (reserve pit) excavated below pad grade will be used for final separation of suspended drill cuttings.
- D. Pits are to be lined with a plastic liner which will extend beyond the crest a minimum of 2 ft. and will be anchored with earth in the standard industry practice.
- E. The reserve pit will be fenced on three sides with a four strand barbwire fence during drilling and completion; after drilling operations cease the remaining side will be fenced. The fence will be removed when the reserve pit is backfilled.
- F. A birdproof netting will be maintained over the reserve pit immediately following the cessation of drilling operations and remaining until the pit is backfilled.

10. SURFACE RESTORATION

- A. Rehabilitation and restoration of the location and reserve pit will start in a timely manner upon the cessation of drilling operations.
- B. The reserve pit shall be allowed to dry, and then backfilled. The area will be leveled and reshaped to eliminate erosion while maintaining the general topography of the preconstruction landform. Revegetation will be in accordance with BLM recommendations.
- C. Wellpad and access road will be recontoured and revegetated according to BLM recommendations in effect at the time of plugging the well.

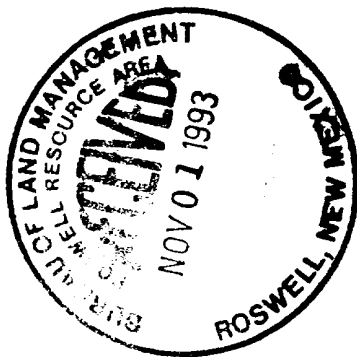
11. OTHER INFORMATION

A. Cultural Resources

Subsequent to performing a Class I Cultural Resource Investigation, a Class III Cultural Resource Investigation has been conducted by Archaeological Survey Consultants on the wellsite and new access road. The report of that investigation will be submitted under separate cover.

B. Development

Land surface affected by this application is Public Domain under the surface management auspices of the Bureau of Land Management. The nearest building is a ranch house about one mile to the southwest. Other than fences, powerlines, and pipelines, there are no other improvements in the area.



C. Existing Land Use

The only evident land use other than Oil & Gas Production at this time is for Livestock Grazing. The mineral leases which are the subject of this application are in BLM Allotment Number 5059. The Permittee under that allotment is:

Charles P. Wilson Telephone (505) 624-0343
P.O. Box 1534
Roswell, NM 88202-1534

D. Landform and Vegetation

Soiltype as identified by the Soil Conservation Service and published in "Soil Survey of Chaves County, New Mexico, Southern Part" is "Holloman Gypsum land complex, 3 to 5 percent slopes" a very shallow (9" or less) pale brown calcareous, moderately alkaline oam overlying massive bedded gypsum. Vegetation on the site consists of three-awn, burrograss, tobosa, gyp muhly, broom-snake-weed, javelina bush, and mesquite.

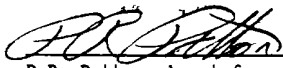
12. OPERATOR'S REPRESENTATIVE

Project Coordinator

Mr. David Sweeney (505) 622-7330
Hanson Operating Company
P.O. Box 1515
Roswell, NM 88202

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge true and correct; and that the work associated with the operations proposed herein will be performed by the applicant and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

 Date 11/1/93
P.R. Patton, Agent for applicant



NEW MEXICO STATE HIGHWAY DEPARTMENT
PLANNING AND PROGRAMMING
FEDERAL HIGHWAY ADMINISTRATION

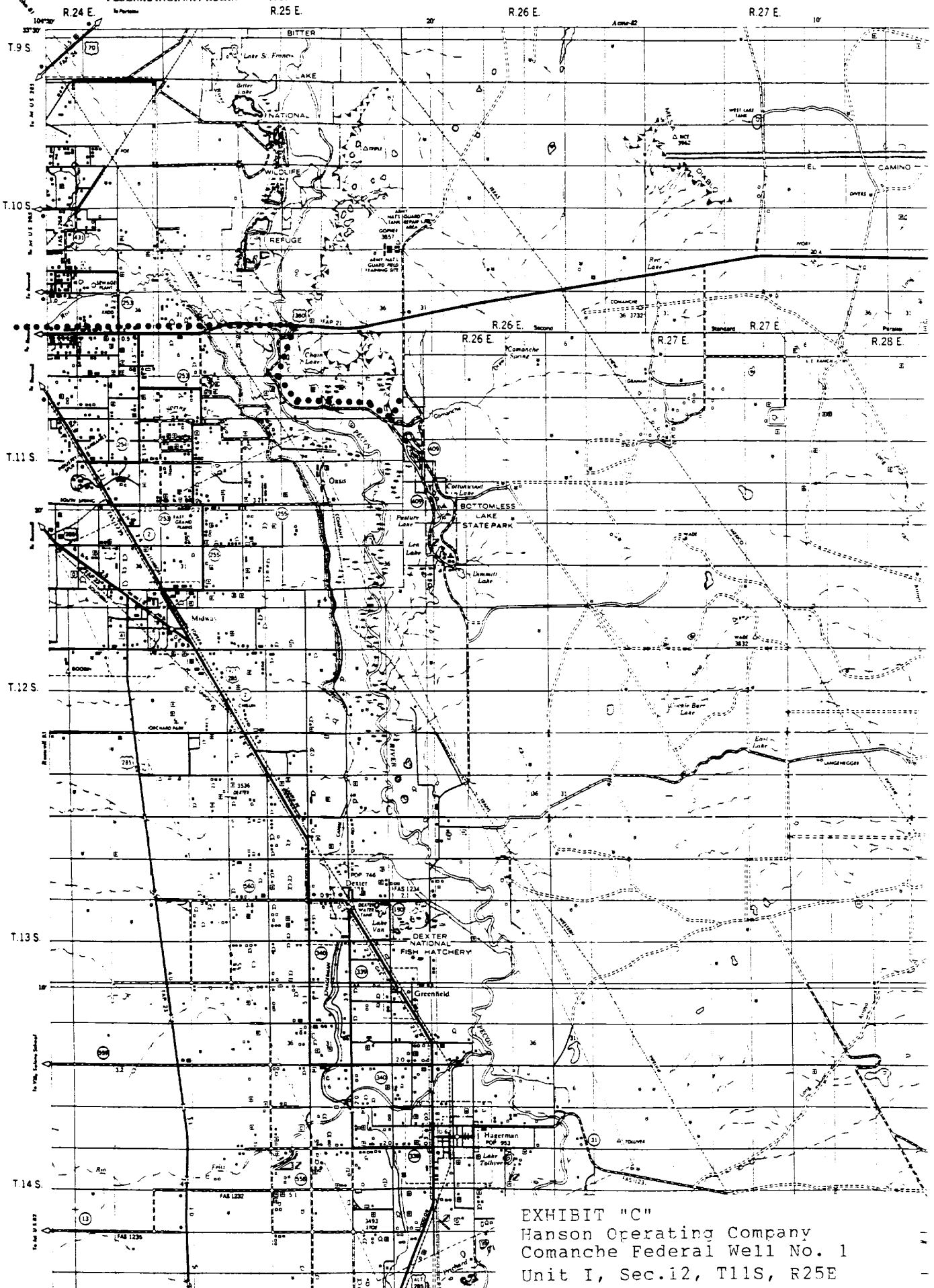
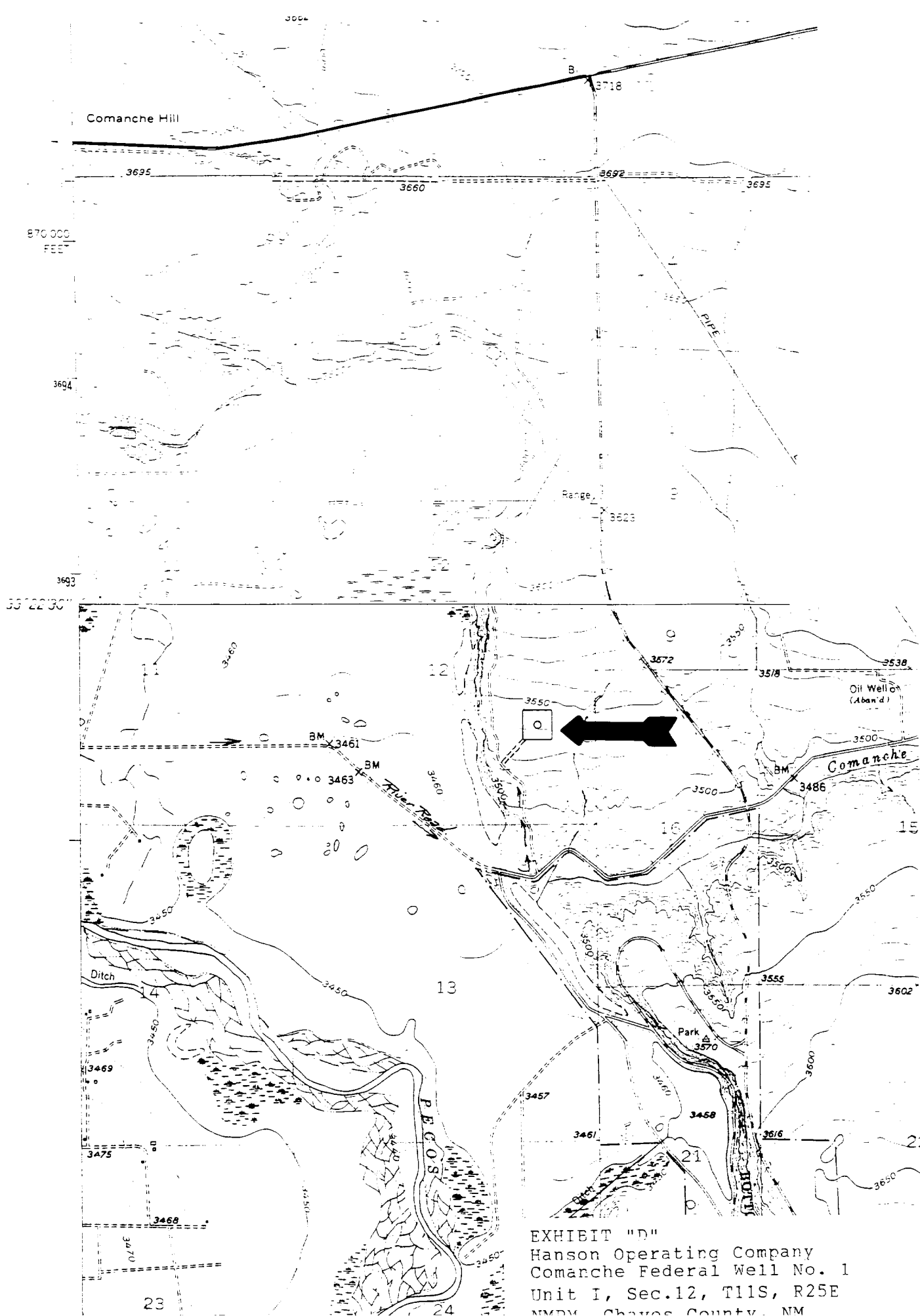
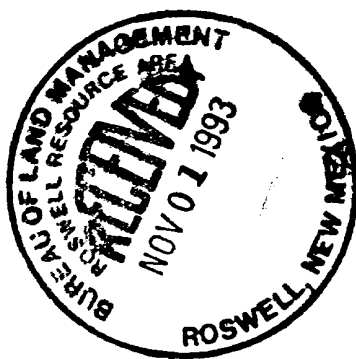


EXHIBIT "C"
Hanson Operating Company
Comanche Federal Well No. 1
Unit I, Sec.12, T11S, R25E









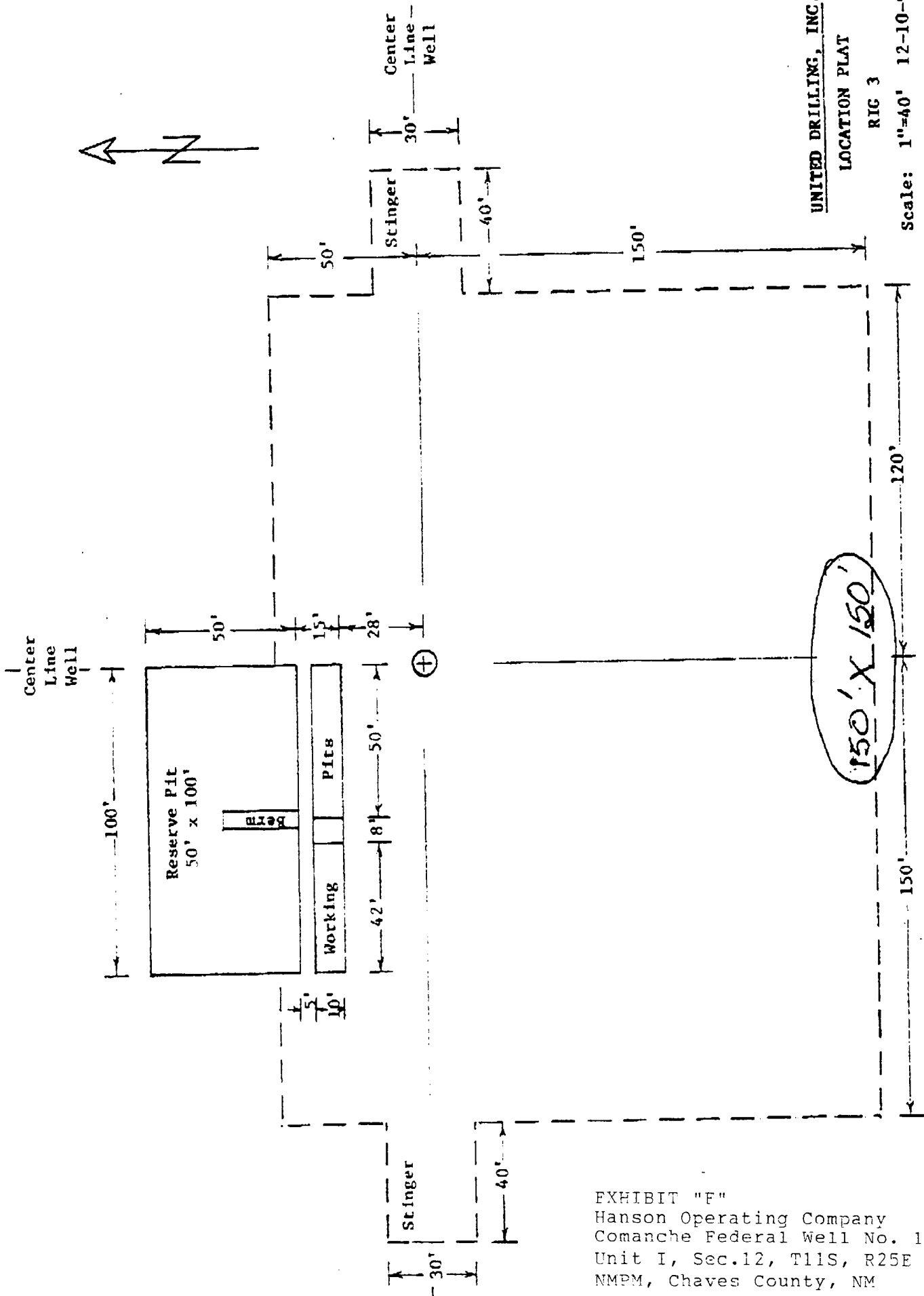


EXHIBIT "F"
Hanson Operating Company
Comanche Federal Well No. 1
Unit I, Sec.12, T11S, R25E
NMPPM, Chaves County, NM

