Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-043-20500

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
JACK A. COLE

3. ADDRESS OF OPERATOR
P.O. Box 191 Farmington, N.M. 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1850'FSL, 790'FWL
At proposed prod. zone
Same

5. LEASE DESIGNATION AND SERIAL NO.
Contract No. 358

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Chacon Amigos

9. WELL NO.
101

10. FIELD AND POOL, OR WILDCAT
Undes ~~Chacon~~ Dakota ~~Assoc~~.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 7-T22N-R2W N.M.P.M.

12. COUNTY OR PARISH
Sandoval

13. STATE
N.M.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
32 miles Northwest of Cuba, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
790'

16. NO. OF ACRES IN LEASE
2546

17. NO. OF ACRES ASSIGNED TO THIS WELL
160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
3500'

19. PROPOSED DEPTH
7150'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
7243'GL, 7256'DF, 7257'KB

22. APPROX. DATE WORK WILL START*
9-15-80

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24.0	250'	250 sacks - to surface
7-7/8"	4-1/2"	10.50 & 11.60	7150'	370 sacks - 140 sacks 2 stages

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

This action is subject to administrative appeal pursuant to 30 CFR 290.

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FARMINGTON, N. M.

All producing intervals in Dakota Formation will be perforated and stimulated as necessary.

EXHIBITS

"A"-Location and Elevation Plat
"B"-Ten Point Compliance Program
"C"-Blowout Preventer Diagram
"D"-Multi-Point Requirements of A.P.D.
"E"-Access Road to Location
"F"-Radius Map of Field
"G"-Drill Rig Layout
"H"-Fracturing Program Layout

The gas for this well is committed.

The SW/4 Section 7 is dedicated to this well

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SEP 24 1980
OIL CON. COM.
DIST. 3

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
FOR: JACK A. COLE ORIGINAL SIGNED BY EWELL N. WALSH
SIGNED Ewell N. Walsh, P.E. TITLE President, Walsh Engineering & Production Corp. DATE 8-13-80

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:
for

*See Instructions On Reverse Side

NMOCC

EXHIBIT A

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
JACK A. COLE	CHACON-AMIGOS	101

Unit Letter	Section	Township	Range	County
L	7	22N	2W	Sandoval

Actual Footage Location of Well:
1850 feet from the South line and 790 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
7243	Dakota	~~Chacon Dakota Associated~~ Undes	160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

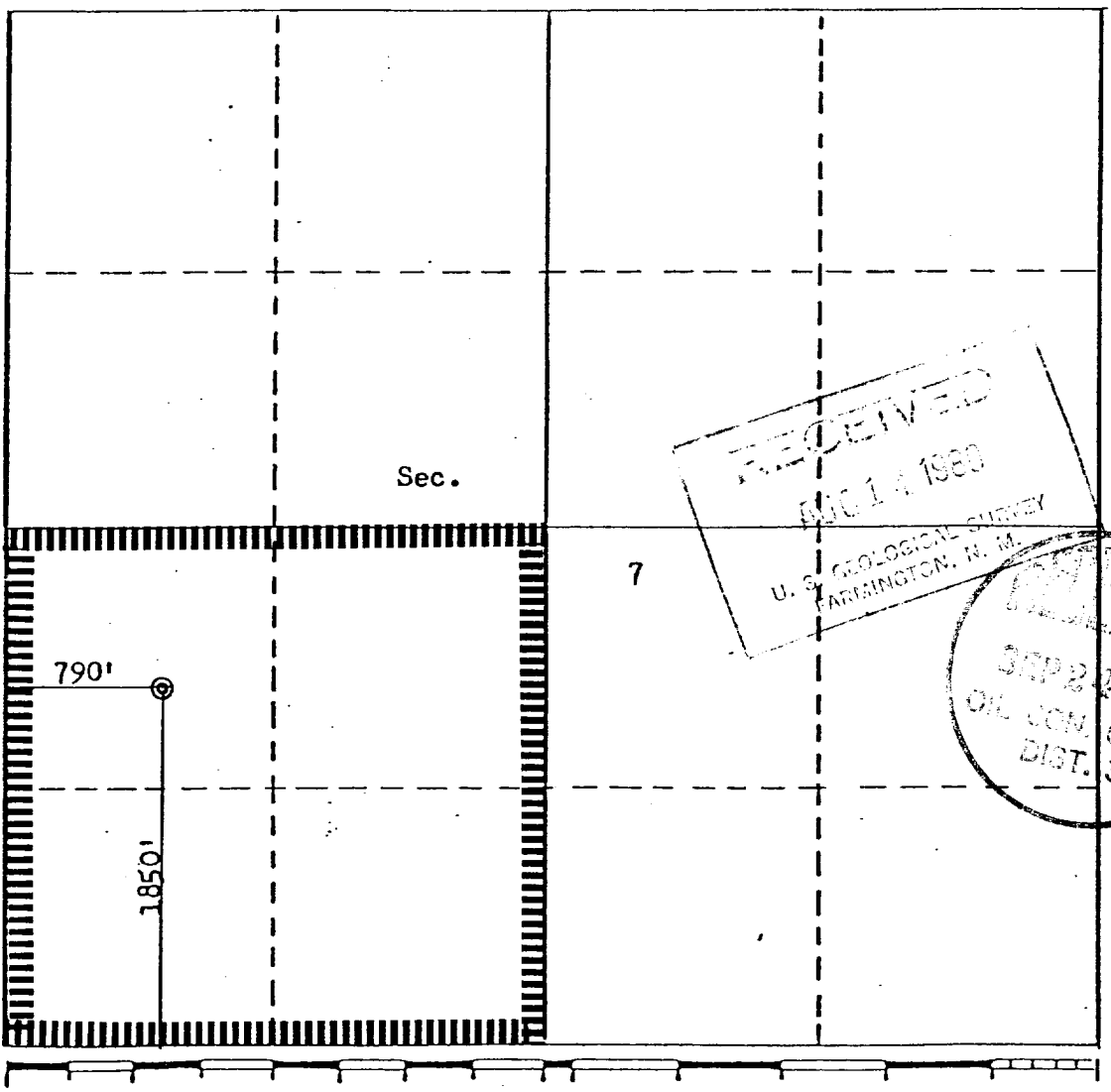
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, 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 communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



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FARMINGTON, N. M.

SEP 22 1980
OIL CON. COM.
DIST. 3

CERTIFICATION

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

FOR: JACK A. COLE

Name: ORIGINAL SIGNED BY EWELL N. WALSH
Ewell N. Walsh, P.E.

Position: President

Company: Walsh Engineering & Production Corporation

Date: August 13, 1980

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: August 12, 1980

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No. 3950

REGISTERED LAND SURVEYOR
STATE OF NEW MEXICO
FRED B. KERR, JR.

EXHIBIT "B"

TEN-POINT COMPLIANCE PROGRAM

OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C

JACK A. COLE
CHACON AMIGOS NO. 101
1850'FSL, 790'FWL, SECTION 7-T22N-R2W
Sandoval County, New Mexico

1. The Geologic Surface Formation

Nacimento

2. Estimated Tops of Important Geologic Markers

Ojo Alamo	2292'	Point Lookout	4732'
Pictured Cliffs	2652'	Gallup	5762'
Chacra	3447'	Graneros	6817'
Cliff House	4152'	Dakota	6852'

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

Ojo Alamo	2298', Water
Pictured Cliffs	2652', Gas
Gallup	5762', Minor Gas & Oil
Dakota	6852', Gas & Oil

4. The Proposed Casing Program

Hole Size	Interval	Section Length	Size (OD)	Weight, Grade and Joint	New or Used
12¼"	0'-250'	250'	8-5/8"	24# K-55 8 round ST&C	New
7-7/8"	0'-6050'	6050'	4½"	10.50# K-55 8 round ST&C	New
7-7/8"	6050'-7150'	1200'	4½"	11.60# K-55 8 round ST&C	New

Cement Program

Surface - 8-5/8": Sacks Class "B", 3% $CaCl_2$ & 1/4 lb. Floccle per sack.

Production - 4½" " First Stage - 500 gallons Mud Flush followed by 370 sacks 50/50 Pozmix, (2% Gel) with 6¼ lbs. Gilsonite and 6 lb. salt per sack. Calculated top of cement at 5550'.

Second Stage -500 gallons Mud Flush followed by 140 sacks 65/35 Pozmix (12% Gel), with 6¼ lbs. Gilsonite followed by 50 sacks Class "B" Neat Cement. Stage Tool at 2900' Calculated top of ciment at 2100'.

Third Stage -

5. The Operator's Minimum Specifications for Pressure Control

EXHIBIT "C" is a schematic diagram of the blowout preventer equipment. The BOP's will be hydraulically tested to the full working pressure after nippling up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period, as will blind rams each time pipe is pulled out of the hole. Such checks of BOP will be noted on daily drilling reports.

Accessories to BOP will include floor safety valve, and choke manifold with pressure rating equivalent to the BOP stack.

6. The Type and Characteristics of the Proposed Circulating Muds

Mud system will be gel-chemical with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil in the surface. Heavier muds will be on location to be added if pressure requires.

Interval	Type	Weight/Gal.	Viscosity (Sec.)	Water Loss	Additives
0-250'	Gel Water	9.0	50	-	Lime
250'-T.D.	10% Oil Base	8.8-9.2	42	4.0	Gel, Thinner, CMC, Oil

7. The Auxiliary Equipment to be Used

(a) A float will be used at the bit.

(b) The mud system will be monitored visually.

(c) A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly is not in the string.

8. The Testing, Logging and Coring Programs to be Followed

(a) DST - None

(b) Logging - ISF 250'-T.D. CNL-FDC 2200'-2800' and 5500'-T.D.

(c) Coring - None

9. Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected is 3100psig.

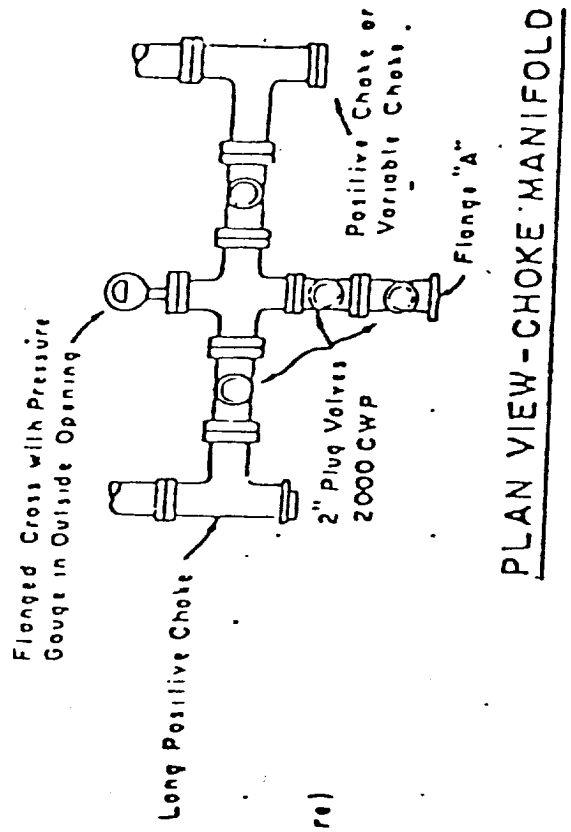
No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

10. Anticipated Starting Date and Duration of the Operations

The anticipated starting date is set for September 15,1980 or as soon as possible after examination and approval of drilling requirements. Operations should be completed within Ten days.

Blowout Preventer
Diagram

JACK A. COLE
CHACON AMIGOS NO. 101
1850'FSL, 790'FWL, SECTION 7-T22N-R2W
Sandoval County, New Mexico



PLAN VIEW - CHOKE MANIFOLD

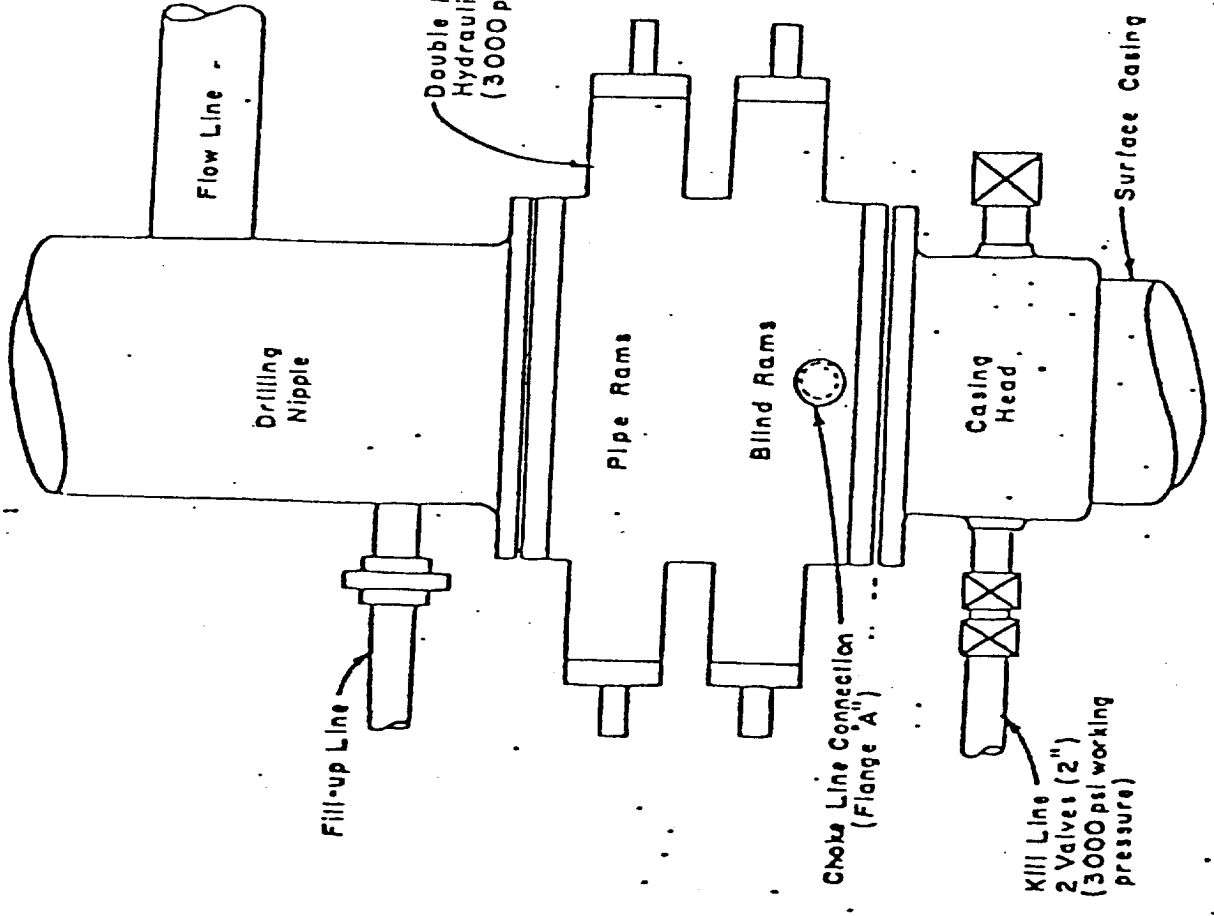


EXHIBIT "D"

MULTI-POINT REQUIREMENTS TO ACCOMPANY A.P.D.

Attached to Form 9-331C

JACK A. COLE
CHACON AMIGOS NO. 101
1850'FSL, 790'FWL, SECTION 7-T22N-R2W
Sandoval County, New Mexico

1. Existing Roads

A. The proposed well site and elevation plat is shown as EXHIBIT "A".

B. Directions: South on Highway 44 from Bloomfield, New Mexico - 65 miles. Turn left on State Road 537 (Dulce Road) - 3¼ miles. Turn right on dirt road (Jicarilla J-20) - 5 miles. Turn right at road fork - 2½ miles, turn left (Jicarilla J-22) - 3 miles. Turn right 1/4 mile. Turn left 1/2 mile. Turn right 1½ miles to location.

C. All roads to location are indicated by dotted strip tape on Exhibit "E". Existing roads will be improved.

D. Exploratory wells, existing roads: N/A

E. Development wells, existing roads: See Exhibit "E"

F. Improvement and maintenance: Existing roads need no improvement. Access road will be improved and maintenance will be performed as required.

2. Planned Access Roads

Exhibit "E" Access road, 1/2 mile, will have maximum width of 20'. No turnouts, no culverts, no gates, cattle guards or fence cuts. Surfacing material will be native soil.

3. Location of Existing Wells

For all existing wells within one mile radius of development well, see EXHIBIT "F".

(1) There are no water wells within a one mile radius of this location.

(2) There is one abandoned well in this one mile radius.

(3) There are no temporarily abandoned wells.

(4) There are no disposal wells.

(5) There are no wells presently being drilled.

(6) There are 2 producing wells within this one mile radius.

(7) There are no shut-in wells.

(8) There are no injection wells.

(9) There are no monitoring or observation wells for other uses.

4. Location of Existing and/or Proposed Facilities

A. Within one mile radius of location, the following existing facilities are owned or controlled by lessee/operator:

(1) Tank Batteries: None

(2) Production Facilities: None

(3) Oil Gathering Lines: None

(4) Gas Gathering Lines: None

(5) Injection Lines: None

(6) Disposal Lines: None

B. If production is obtained, new facilities will be as follows:

(1) All production facilities will be located on the pad.

(2) All well flow lines will be buried and will be on the well site and battery site.

(3) Drill pad will be 300 feet long and 155 feet wide.

(4) No construction materials for battery site and pad will be necessary.

(5) Any necessary pits will be fenced and flagged to protect livestock and wildlife.

(6) Rehabilitation whether well is productive or dry, will be made on all unused arcas in accordance withBIA stipulations.

5. Location and Type of Water Source

A. The source of water will be NW/4, Section 15-T23N-R3W

B. Water will be transported by truck over existing roadways.

C. No water well is to be drilled on this lease.

6. Construction Materials

A. No construction materials are needed for drilling and access roads into the drilling location unless production is obtained. The surface soil materials will be sufficient or will be provided by the Dirt Contractor as needed.

B. No construction materials will be taken off Federal or Indian Lands.

C. All surface soil materials for construction of access roads are sufficient.

D. All major access roads presently exist as shown on EXHIBIT "E".

7. Handling of Waste Materials and Disposal

(1) Drill cuttings will be buried in the reserve pit and covered.

(2) Drilling fluids will be handled in the reserve pit.

(3) Any fluids provided during drilling test or while making production test will be collected in a test tank. If a test tank is not available during drilling, fluids will be handled in reserve pit. Any spills of oil, gas, salt waters or other noxious fluids will be cleaned up and removed.

(4) Chemical facilities will be provided for human waste.

(5) Garbage and non-flammable waste and salts and other chemicals produced during drilling or testing will be handled in trash pit. Flammable waste will be disposed of in burn pit. Drill fluids, water drilling mud and tailings will be kept in reserve pit, as shown on EXHIBIT " G". Reserve pit will be fenced on three sides and the fourth side fenced upon removal of the rig.

(6) After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location. Any dangerous open pit will be fenced during drilling and kept closed until such time as the pit is leveled.

8. Ancillary Facilities

No air strip, camp or other facilities will be built during drilling of this well.

9. Well Site Layout

(1) EXHIBIT "G" is the Drill Pad Layout.

Topsoil, if removal required, will be stockpiled per specifications determined at time of pre-drill inspection.

(2) EXHIBIT "G" is a plan diagram of the proposed rig and equipment reserve pit, burn and trash pit, pipe racks and mud tanks. No permanent living facilities are planned. There will be a trailer on site.

(3) The reserve pits will not be lined. Steel mud tanks may be used during drilling operations.

10. Plans for Restoration

(1) Backfilling, leveling and contouring are planned as soon as all pits have dried. Waste disposal and spoils materials will be buried or hauled away immediately after drilling is completed. If production is obtained, the unused area will be restored as soon as possible.

(2) The soil banked material, if removal required, will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula provided by the BIA

(3) Three sides of the reserve pit will be fenced during drilling operations. Prior to rig release, the reserve pit will be fenced on the fourth side to prevent livestock or wildlife from becoming entrapped; and the fencing will be maintained until leveling and cleanup is accomplished.

(4) The rehabilitation operations will begin as soon as possible after the drilling rig is removed. Removal of oil or other adverse substances will begin immediately or area will be flagged and fenced. Other cleanup will be done as needed. Planting and revegetation is considered best from July 15 to September 15, unless requested otherwise.

11. Other Information

(1) Soil - Sandy,Clayey, Loam
Vegetation - Sage, Smake Weed, Rabbit Brush, and Squirrel tail.

(2) The primary surface use is for grazing. The surface is owned by the Jicarilla Indian Tribe.

(3) The closest live water is the None

The closest occupied dwellings - 4 miles

There are no known archaeological, historical, or cultural heritages that will be disturbed by this drilling.

(4) Restrictions: Operator must have all rights from surface to base of Dakota.

(5) Drilling is planned for on or about September 15, 1980 Operations should be completed within 20 days.

12. Lessee's or Operator's Representative

Ewell N. Walsh, P.E. President
Walsh Engineering & Production Corporation
P. O. Box 254
Farmington, New Mexico 87401
Telephone: (505) 327-4892, 24 hrs.

13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently 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 JACK A. COLE and its contractors and subcontractors in coformity with this plan and the terms and conditions under which it is approved.

ORIGINAL SIGNED BY
EWELL N. WALSH

August 13, 1980
Date

Ewell N. Walsh, P.E.
President
Walsh Engineering & Production Corp.

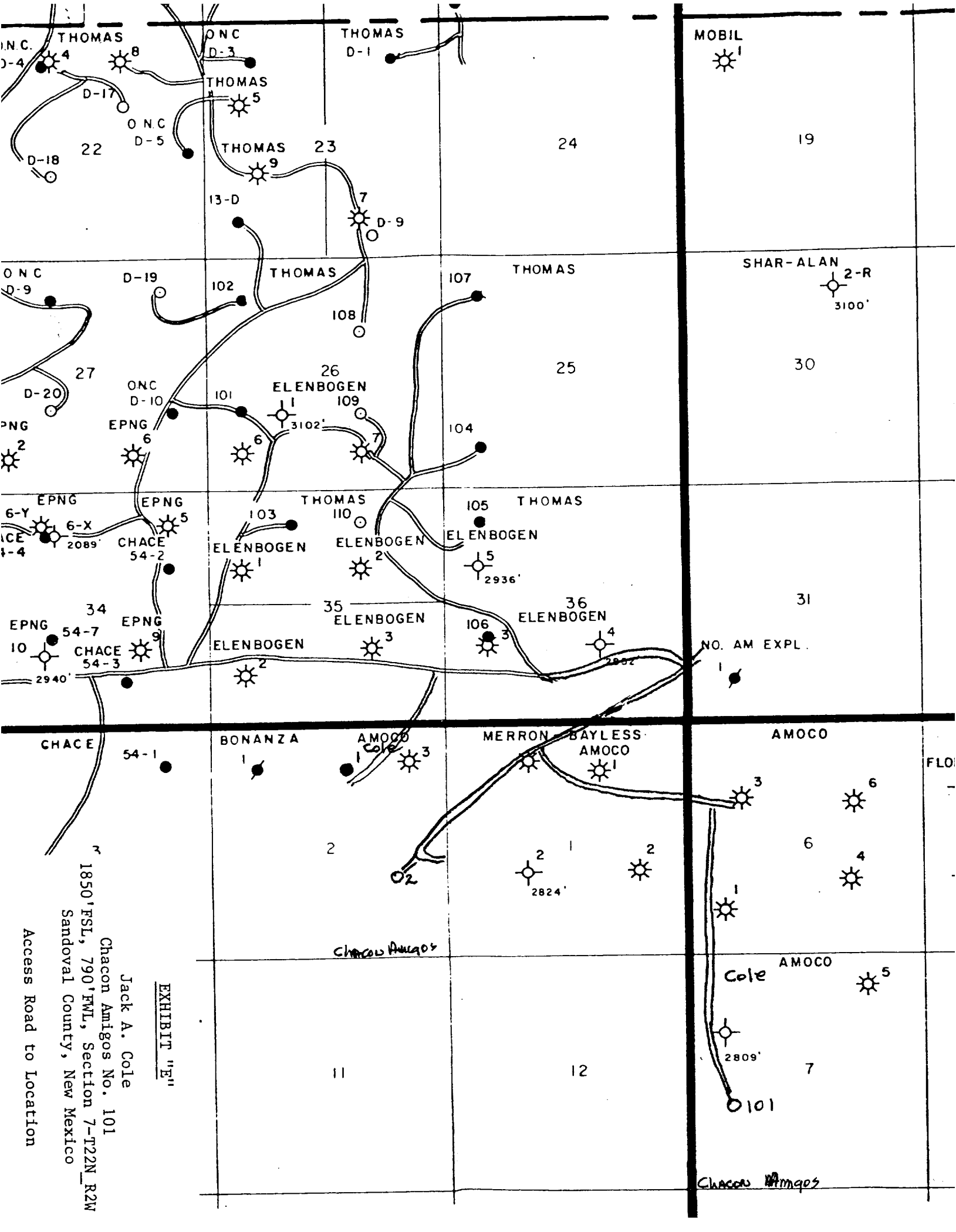


EXHIBIT "E"

Jack A. Cole
Chacon Amigos No. 101
1850'FSL, 790'FWL, Section 7-T22N-R2W
Sandoval County, New Mexico

Access Road to Location

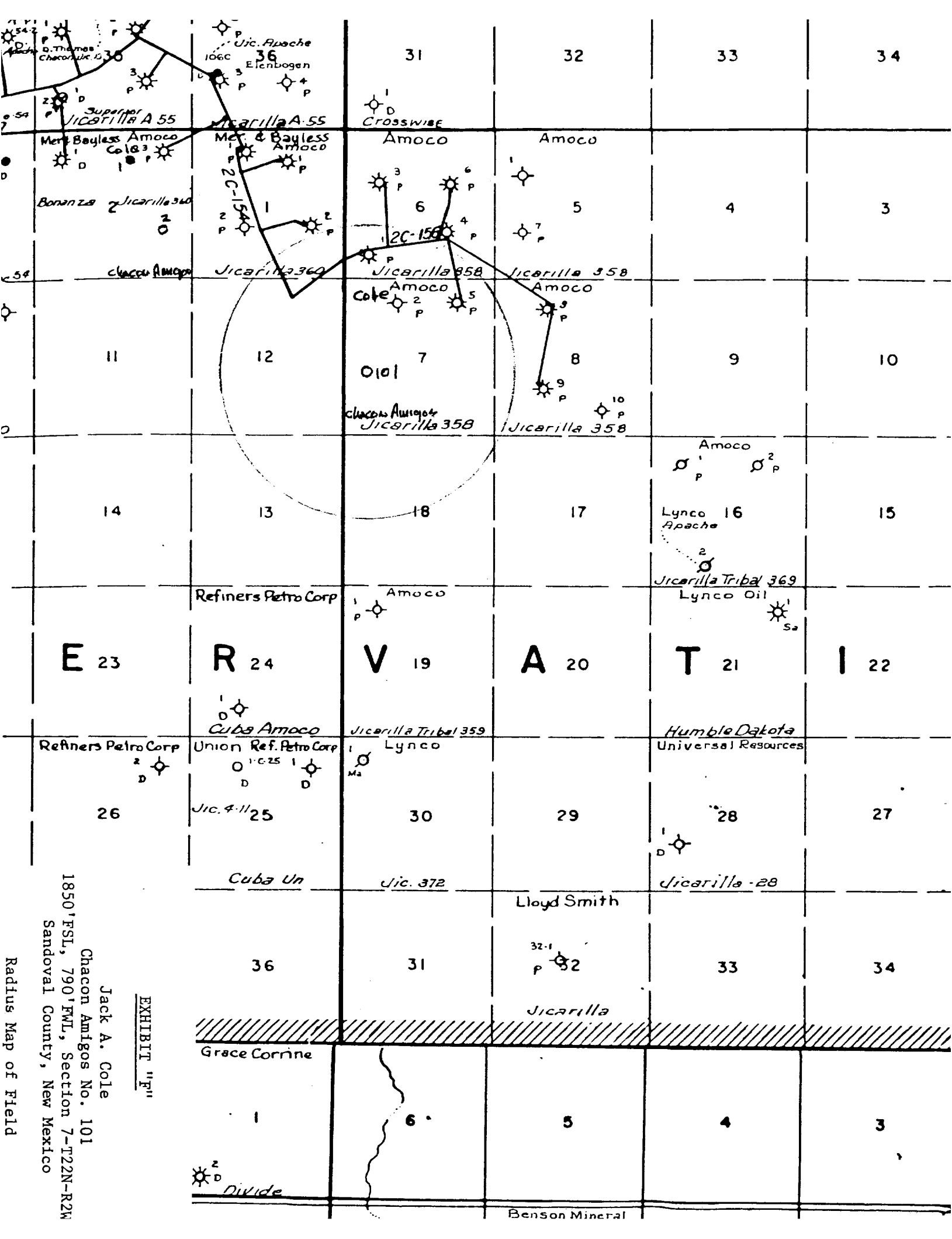


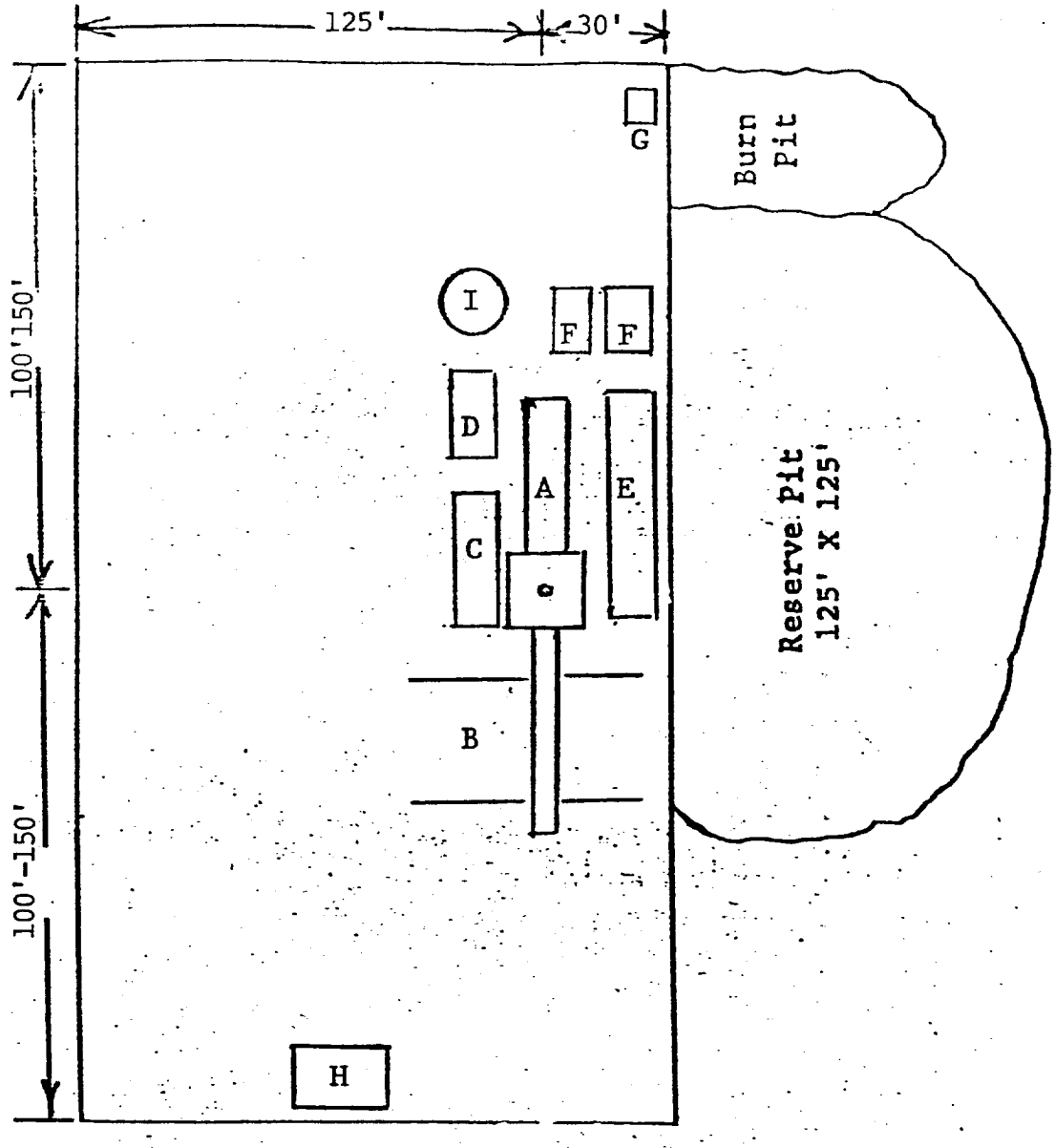
EXHIBIT "F"

Jack A. Cole
Chacon Amigos No. 101
1850'FSL, 790'FWL, Section 7-T22N-R2W
Sandoval County, New Mexico

Radius Map of Field

EXHIBIT "G"

Drill Rig Layout
JACK A. COLE
CHACON AMIGOS NO. 101
1850'FSL, 790'FWL, Section 7-T22N-R2W
Sandoval County, New Mexico

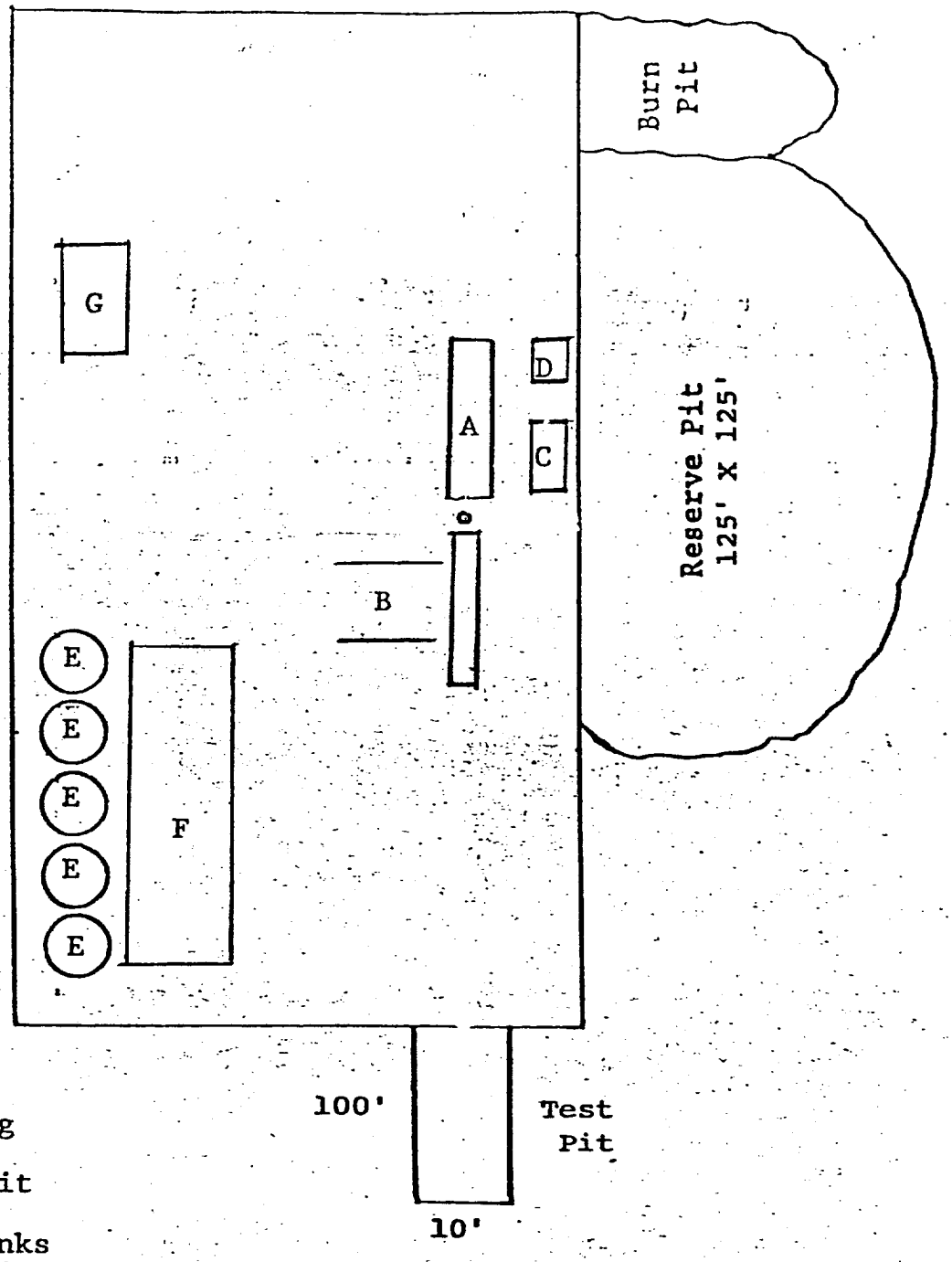


A - Rig
B - Piperacks
C - Doghouse and Water Tank
D - Fuel
E - Mud Pit
F - Pumps
G - Toilet
H - Trailer House
I - Oil Storage

Walsh ENGINEERING & PRODUCTION

EXHIBIT "H"

Fracturing Program
Layout
JACK A. COLE
CHACON AMIGOS NO.101
1850'FSL, 790'FWL, Section 7-T22N-R2W
Sandoval County, New Mexico



A - Completion Rig
B - Pipe Racks
C - Circulating Pit
D - Pump
E - Frac Water Tanks
F - Area Frac Equipment
G - Trailer House

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