

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐2. NAME OF OPERATOR John H. Hill, individually and Gordon L. Llewellyn,  
as Trustee for Johannah Hope Hill and John Henry Hill, Jr.3. ADDRESS OF OPERATOR Suite 140 Campbell Centre, 8350 North Central  
Expressway, Dallas, Texas 75206

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

At surface

812' FSL &amp; 804' FEL (SE SE)

At proposed prod. zone

(Dakota)

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

5.5 miles Northeast of La Plata, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

804'

16. NO. OF ACRES IN LEASE

2510.69

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

2640+

19. PROPOSED DEPTH

7000'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5925' GR

22. APPROX. DATE WORK WILL START\*

December 30, 1979

23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" new	36# H-40 ST&C	300'	230sx Class B w/additives
7-7/8"	5-1/2" new	15.5# K-55 ST&C	7,000'	200sx-Set stage tool 100' below MV-Cement suff. to cover MV- If req. set stage tool 100' below PC, w/suff. cement to cover Ojo Alamo

- 1) Drill 12-1/4" hole and set 9-5/8" surface casing to 300' with good returns.
- 2) Log B.O.P. checks in daily drill reports and drill 7-7/8" hole to 7,000'.
- 3) Run tests if warranted and run 5-1/2" casing if productive.
- 4) Run logs as needed, and perforate and stimulate as needed.

## EXHIBITS ATTACHED:

- "A" Location & Elevation Plat
- "B" The Ten-Point Compliance Program
- "C" The Blowout Preventer Diagram
- "D" The Multi-Point Requirements for A.P.D.
- "E" Access Road Map to Location
- "F" Radius Map of Field
- "G" Drill Pad Layout, Cut-Fill Cross-Section & Production Facilities

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.

SIGNED

JOHN H. HILL

TITLE

GORDON L. LLEWELLYN, as Trustee for

DATE

(This space for Federal or State office use)

Johannah Hope Hill and John Henry Hill, Jr.

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NMOCC

\*See Instructions On Reverse Side

5. LEASE DESIGNATION AND SERIAL NO.

SF-078818 A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

N/A

7. UNIT AGREEMENT NAME

N/A

8. FARM OR LEASE NAME

USA

9. WELL NO.

#1

10. FIELD AND POOL, OR WILDCAT

Basin Dakota

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

E/2 Section 24,

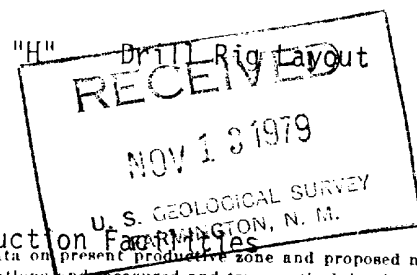
T-32-N, R-13-W, NMPM

12. COUNTY OR PARISH

13. STATE

San Juan

New Mexico



NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-120  
Effective 1-1-65

EXHIBIT "A"

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

Location & Elevation Plat

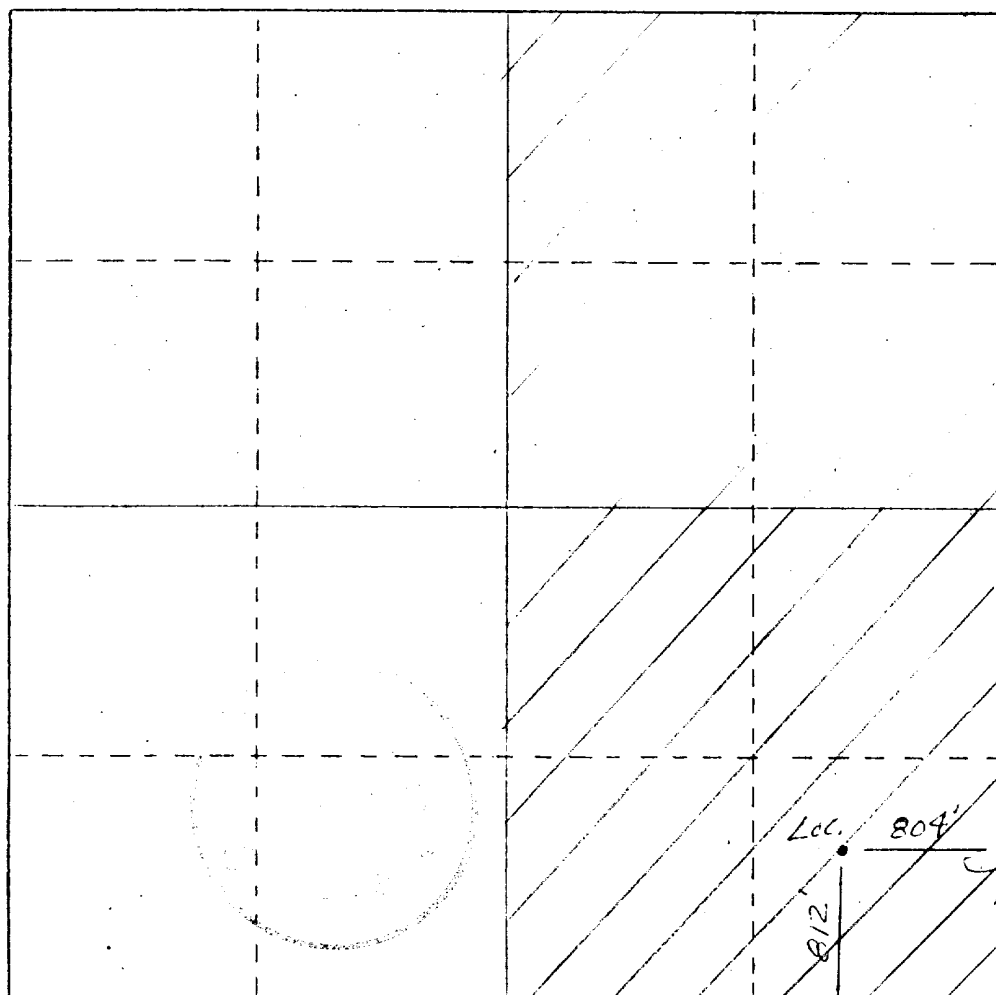
Operator <b>John H. Hill &amp; Gordon L. Llewellyn</b>		Lease <b>(SF-078818 A) USA</b>		Well No. <b>#1 <del>USA</del></b>	
Tract Letter <b>P</b>	Section <b>24</b>	Township <b>32N</b>	Range <b>13W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>812</b> feet from the <b>South</b> line and <b>804</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5925'</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.



CERTIFICATION

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

*George Lapaseotes*  
Name **George Lapaseotes**

**V. Pres. Powers Elevation**  
Position

**Agent Consultant for**

Company **John H. Hill & Gordon L. Llewellyn**

Date **November 1, 1979**

I hereby certify that the well location shown on this plat was obtained 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.

**10-26-79**

Date Surveyed *Mark C. Edwards*

Registered Professional Engineer and/or Land Surveyor

**6857**

Certificate No.

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

EXHIBIT "B"  
TEN-POINT COMPLIANCE PROGRAM  
OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C  
John H. Hill & Gordon L. Llewellyn  
USA #1  
SE SE Sec. 24 T32N R13W  
812' FSL & 804' FEL  
San Juan County, New Mexico

1. The Geologic Surface Formation

The surface formation is the Wasatch.

2. Estimated Tops of Important Geologic Markers

Base of Ojo Alamo/ Top of Kirtland Shale	790'
Pictured Cliffs	2,198'
Lewis	2,396'
Cliff House	3,746'
Menefee	3,895'
Point Lookout	4,616'
Gallup	5,935'
Greenhorn	6,577'
Graneros	6,632'
Dakota	6,683'
Total Depth	7,000'

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

Base of Ojo Alamo	790'	Water
Pictured Cliffs	2,198'	Possibly gas
Dakota	6,683'	Gas

4. The Proposed Casing Program

HOLE SIZE	INTERVAL	SECTION LENGTH	SIZE (OD)	WEIGHT, GRADE & JOINT	NEW OR USED
12 1/4"	0-300'	300'	9 5/8"	36# H-40 ST&C	New
7 7/8"	0-7,000'	7,000'	5 1/2"	15.5# K-55 ST&C	New

Cement Program

- (a) Surface Casing: Cement with 230 sacks Class "B" with 1/4#/sack flocele, and 2% CaCl<sub>2</sub>.
- (b) Production Casing: 1st Stage: Cement with approximately 200 sacks. Set stage tool 100 feet below Mesaverde.  
2nd Stage: Cement sufficiently to cover the Mesaverde. If required, set stage tool 100' below Pictured Cliffs, with sufficient cement to cover Ojo Alamo.

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 nipping 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 a kelly cock, floor safety valve, drill string BOP 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 fresh water-gel-chemical with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil on the surface. Heavier muds will be on location to be added if pressure requires.

INTERVAL	TYPE/REMARKS	WEIGHT #/gal.	VISCOSITY-sec./qt.	FLUID LOSS cc
0-300'	Gel, lime	-----	45±	N.C.
300'-4,500'	Water, floc.	-----	45±	N.C.
4,500'-7,000'	Gel, water	8.8-9.0	as required	10

7. The Auxiliary Equipment to be Used

- (a) A kelly cock will be kept in the string.
- (b) A float will be used at the bit.
- (c) Neither a mud logging unit nor a gas detecting device will be monitoring the system.

- (d) 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's are anticipated in the Tensleep horizon, the primary objective.
- (b) The logging program will consist of an IES and a GR-Neutron Density over selected intervals. Other logs will be determined at well site to best evaluate any shows.
- (c) No coring is anticipated
- (d) Stimulation procedures will be determined after evaluation of logs, If treatment is indicated, appropriate Sundry Notice will be submitted.

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.

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 December 30, 1979, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 30 days after spudding the well and drilling to casing point.

Blowout Preventer  
Diagram

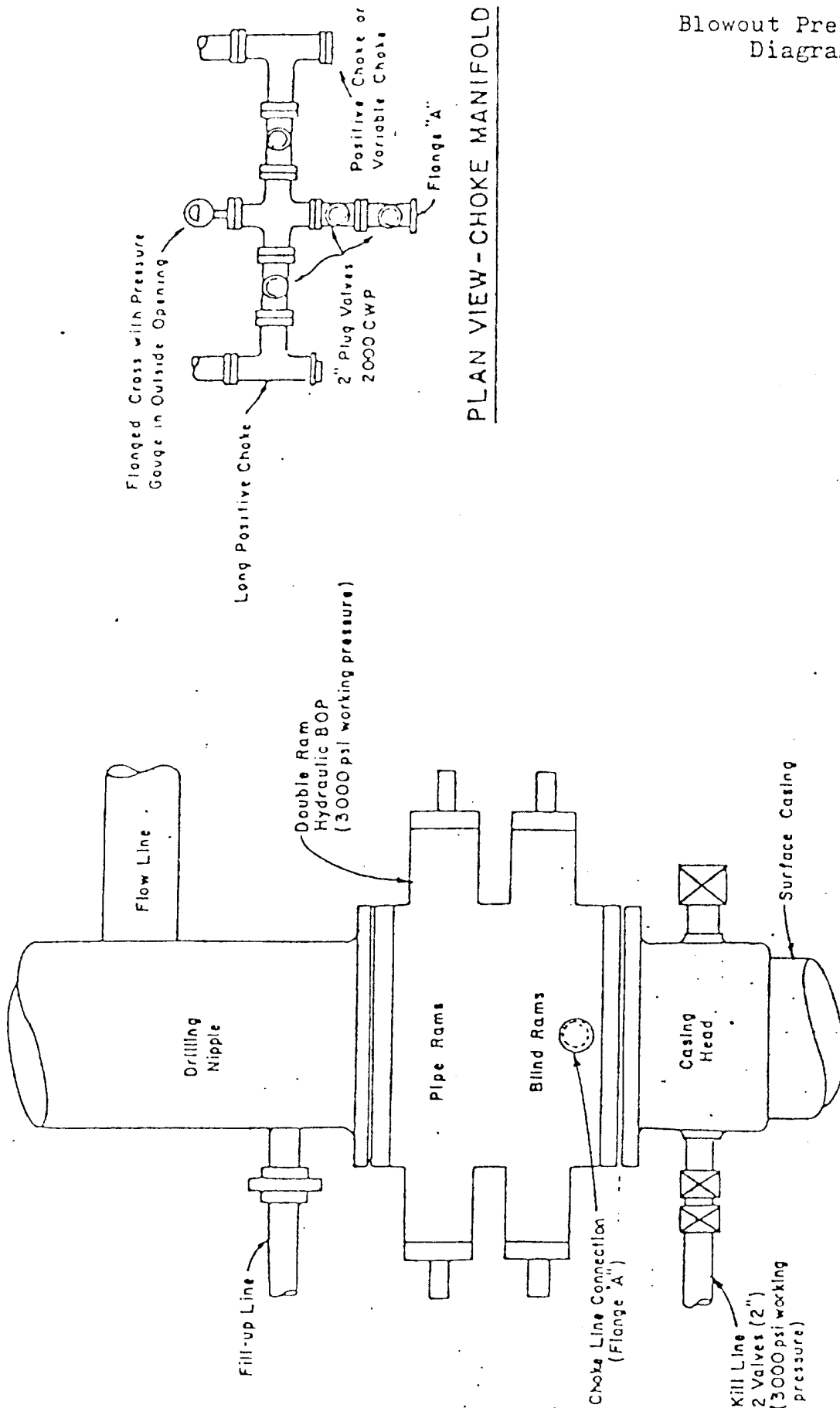


EXHIBIT "D"

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

Attached to Form 9-331C  
John H. Hill & Gordon L. Llewellyn  
USA #1  
SE SE Sec. 24 T32N R13W  
812' FSL & 804' FEL  
San Juan County, New Mexico

1. Existing Roads

- A. The proposed well site and elevation plat is shown as EXHIBIT "A".
- B. The distance from La Plata School at La Plata, New Mexico is 5.5 miles. Proceed East on Highway #173 for 0.8 mile, thence North and East on oil field road for 4.2 miles to existing location in SE-NE of Sec. 25, thence North on new access road for 0.5 mile to well site, as shown on EXHIBIT "E".
- C. All roads to location are color-coded on EXHIBIT "E". An access road 0.5 mile from the existing gravel road will be required, as shown on EXHIBIT "E".
- D. N/A
- E. This is a development well. All existing roads within a one-mile radius are shown on EXHIBIT "E".
- F. The existing roads need no improvement. Maintenance will be performed as required.

2. Planned Access Roads

Map showing all necessary access roads to be constructed or reconstructed is shown as EXHIBIT "E" for the following:

- (1) The maximum width of the running surface of the 0.5 mile of access road, extending beyond the existing oil field road will be 18'.
- (2) The grade will be 8% (eight percent) or less.
- (3) No turn outs are planned.

- (4) Appropriate water bars will be constructed to assure drainage off location to conform with the natural drainage pattern.
- (5) No culverts are needed. No major cuts or fills are anticipated along access road during drilling operation.
- (6) Surfacing materials will be native soil.
- (7) No gates, cattle guards, or fence cuts are needed.
- (8) The new access road to be constructed was staked and centerline flagged, as shown on EXHIBIT "E".

3. Location of Existing Wells

For all existing wells within a 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 3 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 a 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 the well is productive, new facilities will be as follows:
- (1) Production facilities will be located on solid ground of cut area of drill pad, as shown on EXHIBIT "G".
  - (2) All well flow lines will be buried and will be on the well site and battery site.
  - (3) Facilities will be 300 feet long and 150 feet wide.
  - (4) All construction materials for battery site and pad will be obtained from site. No additional material from outside sources is anticipated.
  - (5) Any necessary pits will be fenced and flagged to protect livestock and wildlife.
- C. Rehabilitation, whether well is productive or dry, will be made on all unused areas in accordance with B.L.M. stipulations.

5. Location and Type of Water Supply

- A. The source of water will be the La Plata River 0.2 mile East of La Plata Shcool, as shown on EXHIBIT "E".
- 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 or constructing access roads into the drilling location unless well is productive. The surface soil materials will be sufficient or will be purchased from Dirt Contractor as needed.
- B. No construction materials will be taken off Federal land.
- 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.
- (2) Drilling fluids will be handled in the reserve pit.

- (3) Any fluids produced 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 water or other noxious fluids will be cleaned up and removed.
- (4) Chemical facilities will be provided for human waste.
- (5) Garbage, waste, salts and other chemicals produced during drilling or testing will be handled in trash/burn pit. Drill fluids, water, drilling mud and tailings will be kept in reserve pit, as shown on EXHIBIT "H". The trash/burn pit will be totally enclosed with small mesh wire to prevent wind scattering trash before being burned or buried. 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 the pit has dried and is filled.

#### 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 as staked, with elevations, by Powers Elevation of Durango, Colorado. Cuts and fills have been drafted to visualize the planned cut across the location spot and the deepest part of the pad. Topsoil will be stockpiled per BLM specifications determined at time of pre-drill inspection.
- (2) EXHIBIT "H" is a plan diagram of the proposed rig and equipment, reserve pit, trash/burn pit, pipe racks and mud tanks. No permanent living facilities are planned. There will be a trailer on site.
- (3) EXHIBIT "G" is a diagram showing the proposed production facilities layout.
- (4) 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 will be spread over the area. Revegetation will be accomplished by planting mixed grasses as per formula provided by the BLM. Revegetation is recommended for road area, as well as around drill pad.
- (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 are accomplished.
- (4) If any oil is on the pits and is not immediately removed after operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with wire mesh.
- (5) The rehabilitation operations will begin immediately 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 in Fall, 1980, unless requested otherwise.

11. Other Information

- (1) The soil is a sandy-clay loam. No distinguishing geological features are present. The area is covered with cactus, cheat grass, native grass, miner sage brush and a few cedar trees. There are livestock, rabbits and deer in the area. The topography is gently sloping Southeasterly.
- (2) The primary surface use is for grazing. The surface is owned by the U.S. Government.
- (3) The closest live water is the La Plata River, 0.2 mile East of La Plata School, as shown on EXHIBIT "E".  
  
The closest occupied dwellings are farms located along existing oil field road, approximately 1.5 miles Southwest of location, as shown on EXHIBIT "E".  
  
There are no known archaeological, historical, or cultural heritages that will be disturbed by this drilling.
- (4) There are no reported restrictions or reservations noted on the oil and gas lease.
- (5) Drilling is planned for on or about December 30, 1979. It is anticipated that the casing point will be reached within 30 days after commencement of drilling.

12. Lessee's or Operator's Representative

George Lapaseotes  
Agent Consultant for  
John H. Hill & Gordon L. Llewellyn  
600 South Cherry Street  
Suite 1201  
Denver, Colorado 80222  
Phone (303) 321-2217

John H. Hill & Gordon L. Llewellyn  
Suite 140 Campbell Centre  
8350 N. Central Expressway  
Dallas, Texas 75206  
Phone (214) 692-7021

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 John H. Hill & Gordon L. Llewellyn and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Date 11-9-79


  
George Lapaseotes  
Agent Consultant for  
John H. Hill & Gordon L. Llewellyn

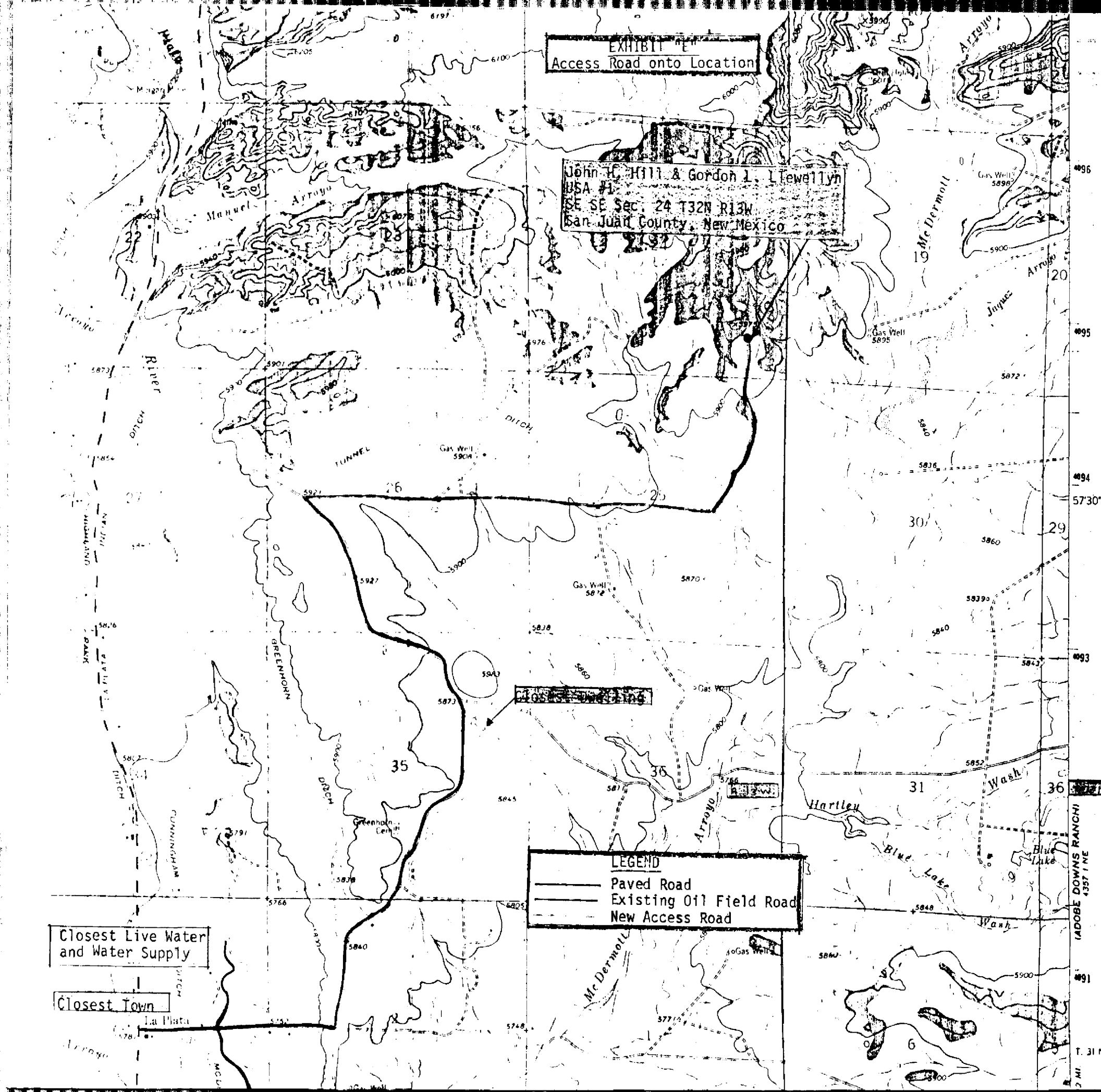
EXHIBIT "E"  
Access Road onto Location

John H. Hill & Gordon L. Llewellyn  
USA #1  
SE SE Sec. 24 T32N R13W  
San Juan County, New Mexico

Closest Live Water and Water Supply

Closest Town

LEGEND  
— Paved Road  
— Existing Oil Field Road  
— New Access Road



R 13 W

10'

SAN JUAN

EXHIBIT "F"  
Radius Map of Field

John H. Hill & Gordon L. Llewellyn  
USA #1  
SE SE Sec. 24 T32N R13W  
San Juan County, New Mexico

T  
32  
N

17

ONE-MILE RADIUS

SO. UN  
2  
5846'  
6983'

LA PLATA

LA PLATA RIVER

PAN AMER.  
C1  
5751'  
6791'

LEGEND

- |                       |                      |
|-----------------------|----------------------|
| ○ LOCATION            | ✱ ABANDONED OIL WELL |
| ✱ DRY HOLE            | ⊙ GAS WELL           |
| ● OIL WELL            | ✱ ABANDONED GAS WELL |
| △ TRIANGULATION POINT | ☼ WATER WELL         |

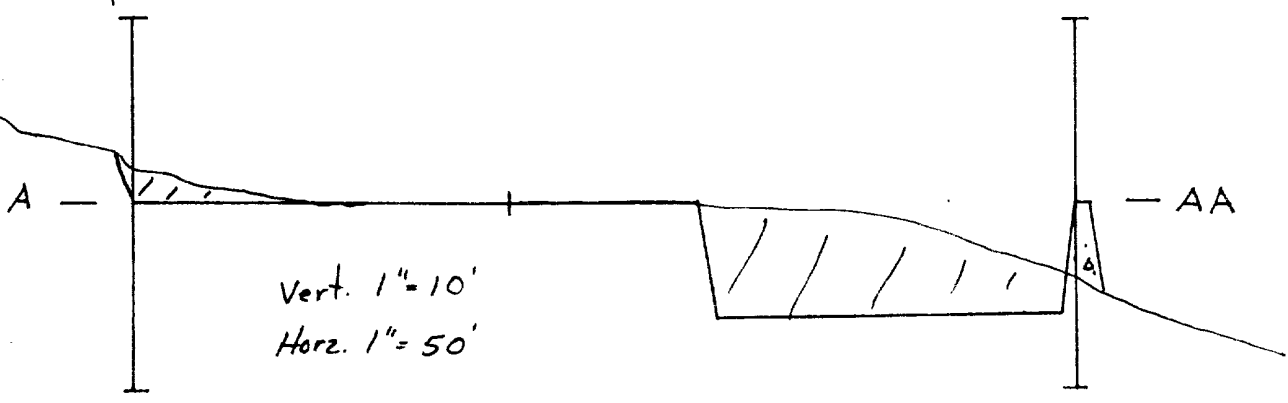
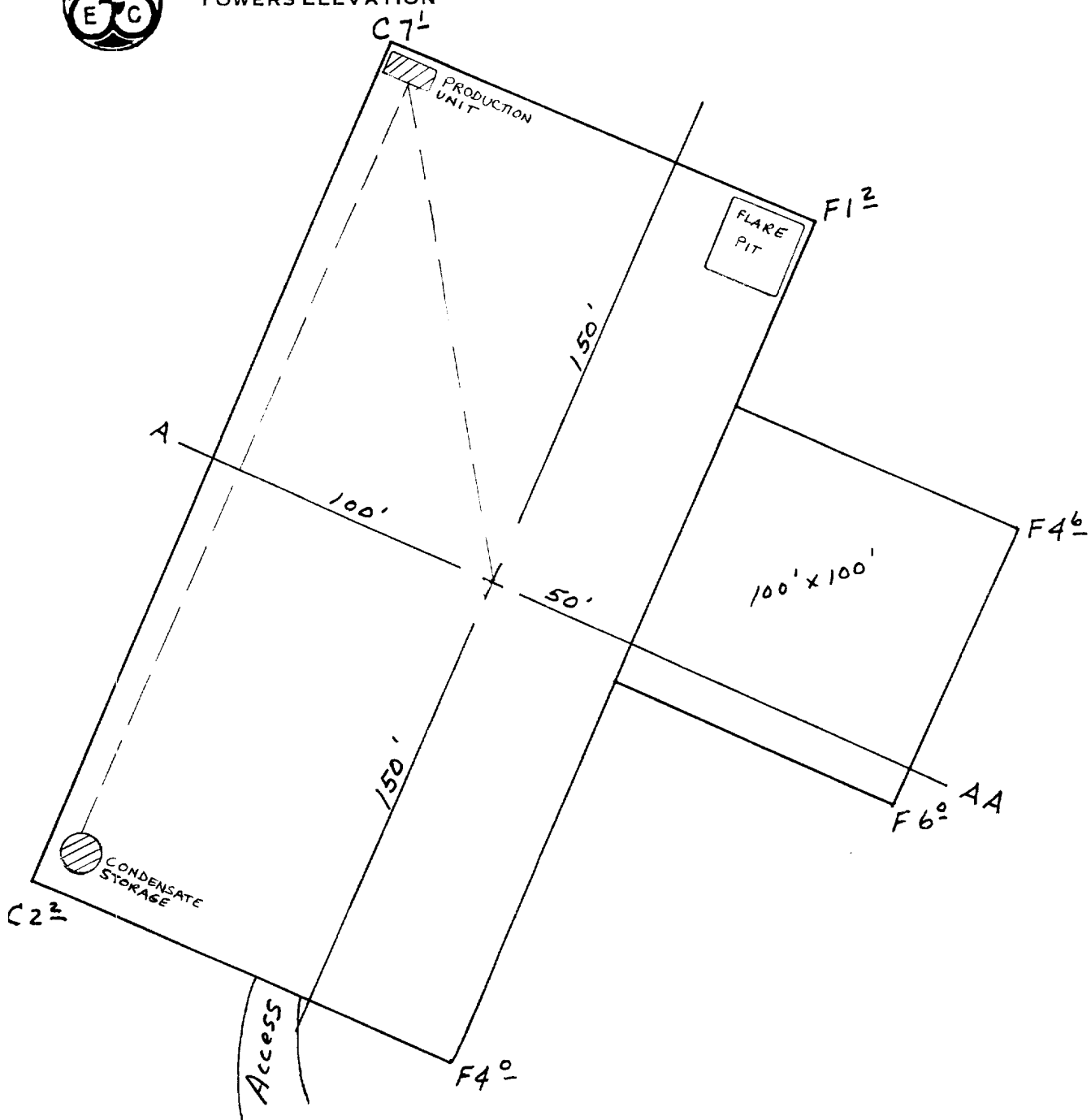
HILL & LOWERY  
USA, #1  
812' FSL 804 FEL  
24- T32N- R13W  
San Juan, Co. N.Mex.  
POWERS ELEVATION



EXHIBIT "G"  
Drill Pad Layout,  
Production Facilities  
& Cut-Fill Cross-Section



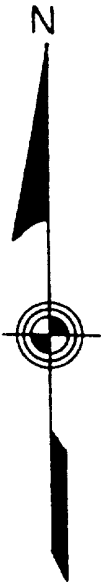
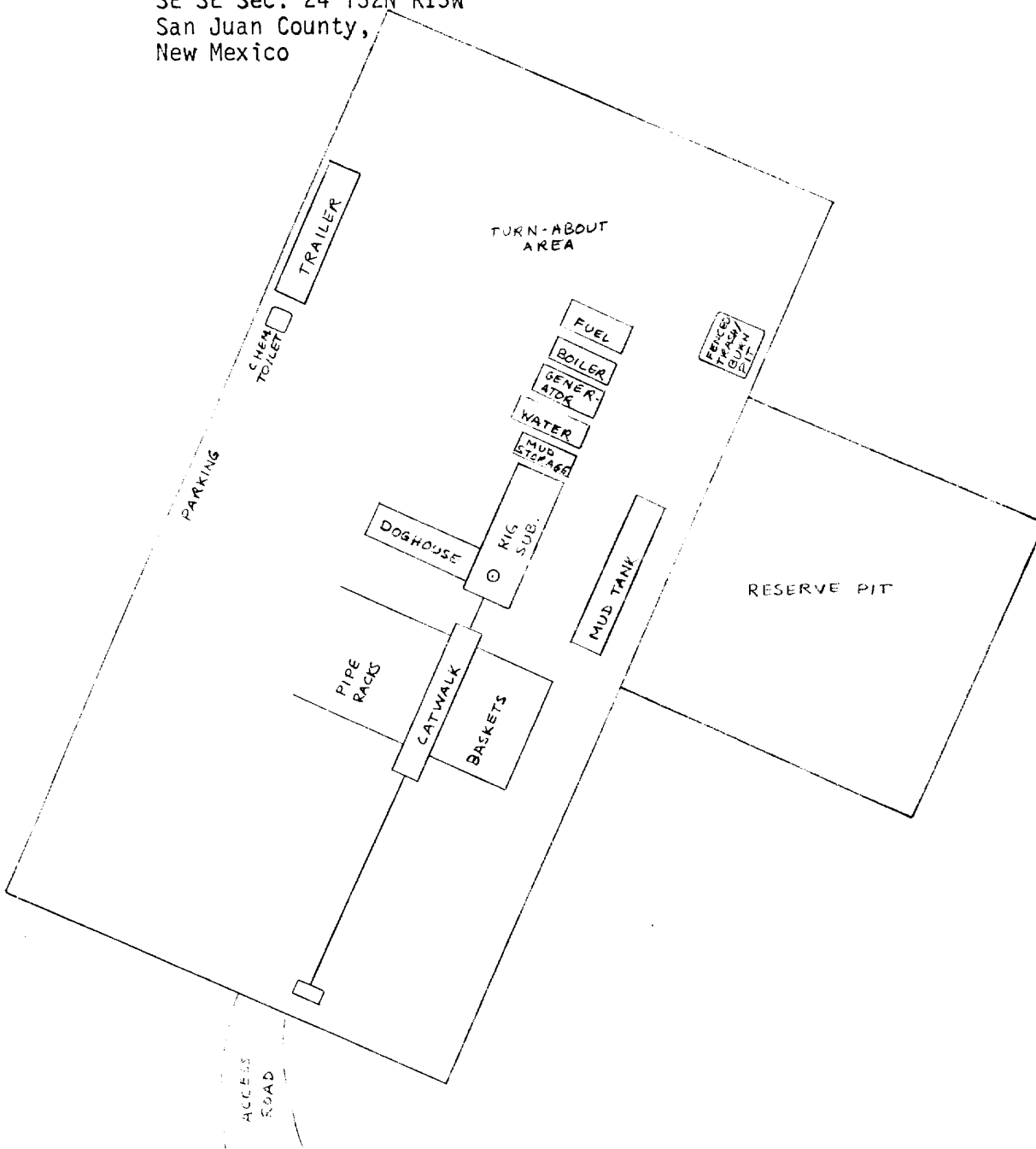
Scale 1"=5'





POWERS ELEVATION  
John H. Hill & Gordon L. Llewellyn  
USA #1  
SE SE Sec. 24 T32N R13W  
San Juan County,  
New Mexico

EXHIBIT "H"  
Drill Rig Layout



SCALE 1"=50'





POWERS ELEVATION

OIL WELL ELEVATIONS AND LOCATIONS  
CHERRY CREEK PLAZA, SUITE 1201  
600 SOUTH CHERRY STREET  
DENVER, COLORADO 80222  
PHONE NO. 303/321-2217

November 9, 1979

U.S. Geological Survey  
Office of the District Engineer  
P.O. Box 959  
Farmington, New Mexico 87401

RE: Filing NTL-6 and A.P.D. Form 9-331C  
John H. Hill & Gordon L. Llewellyn  
USA #1  
SE SE Sec. 24 T32N R13W  
San Juan County, New Mexico

Gentlemen:

Enclosed are six copies of the NTL-6 program and A.P.D. Form 9-331C for the above captioned well location.

The archaeological report is not included with the NTL-6 report but will be forwarded to your office, and to the B.L.M. office, from our Archaeological Division in Eagle, Colorado.

Designation of Operator has been forwarded under separate cover by the operator.

We shall appreciate your earliest attention to this matter.

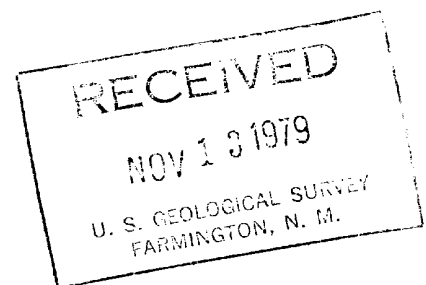
Very truly yours,

POWERS ELEVATION

*Connie L. Frailey*  
Connie L. Frailey

CLF:jrr  
Enclosures

cc: Gordon L. Llewellyn, Dallas, Texas  
Leon Wiederkehr, Austin, Texas  
Neale Edwards, Powers Elevation, Durango, Colorado  
Dirt Contractor



NMOC

Powers Elevation  
Suite 1201 Cherry Creek Plaza  
600 So. Cherry Street  
Denver, Colorado 80222

RE: Filing NTL-6 & A.P.D. Form 9-331C  
John H. Hill & Gordon L. Llewellyn  
USA #1  
SE SE Sec. 24 T32N R13W  
812'FSL & 804'FEL  
San Juan County, New Mexico

Gentlemen:

This is to confirm our understanding with you that Powers Elevation is authorized to act as our agent in the following capacities:

- A. In surveying, staking, and preparing and filing necessary applications, permits and compliance programs, including complete NTL-6 reports.
- B. In accepting on our behalf any changes to location, proposed facilities and/or surface use plan and compliance program requested at on-site inspections, when we are unable to have a Company representative present. Such changes will then be binding upon us or designated Operator.
- C. In performing the following rehabilitation work: None

Powers' responsibilities do not include supervision of drilling, completion or rehabilitation operations, except as specifically noted in "C" above.

John H. Hill and Gordon L. Llewellyn,  
as Trustee for Johannah Hope Hill  
and John Henry Hill, Jr.

Company

John H. Hill

Gordon L. Llewellyn, as Trustee for Johannah Hope  
Hill and John Henry Hill, Jr.

Date 11-1-79