

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Navajo Tribal

30-095-23841

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK  
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

2. TYPE OF WELL  
OIL WELL ☒ GAS WELL ☐ OTHER ☐  
SINGLE ZONE ☐ MULTIPLE ZONE ☐

3. NAME OF OPERATOR  
Odessa Natural Corporation Att: John Strojek

4. ADDRESS OF OPERATOR  
P.O. Box 3908; Odessa, Texas 79760

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface  
2310' FSL, 2310' FWL  
At proposed prod. zone  
Same

6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE

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

8. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR ABANDONED, ON THIS LEASE, FT. APPROX. 6800'

9. ELEVATIONS (Show whether OF, RT, GR, etc.) Dry Hole  
5371' G.L., 5384' D.F., 5385' K.B.

10. PROPOSED CASING AND CEMENTING PROGRAM

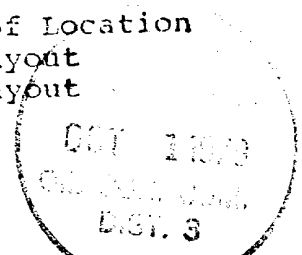
SIZE OF HOLE	SIZE OF CASING	WELL DEPTH	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24.0	300'	350 Sacks to surface
7-7/8"	5-1/2"	15.50	4725'	725 Sacks

It is proposed to drill this well with rotary tools, using water base mud as circulating medium, through the Dakota Formation. Possible productive zones encountered will be completed. Production casing will be cemented in such a manner to protect possible producing zones and water sands.

Exhibits Attached

- A. Location and Elevation Plat
- B. 10 point compliance program
- C. Blowout Preventer Diagram
- D. Multi-Point Requirements for A.P.D.
- E. Access Road to Location
- F. Radius Map of Location
- G. Drill Pad Layout
- H. Drill Rig Layout

The NE/4SW/4 of Section 2 is dedicated to this well  
The gas from this well is committed.



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.

11. For: Odessa Natural Corporation President, Walsh Engineering

ORIGINAL SIGNED BY  
Ewell N. Watson, P.E.  
(This space for Federal or State office use)

TITLE & Production Corp. DATE Sept. 24, 1973

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE

oh Frank

nmocce

All distances must be from the corner boundaries of the Section

Operator <b>ODESSA NATURAL CORPORATION</b>		Lease <b>DUNCAN-NAVAJO 2</b>		Well No. <b>1</b>
Well Letter <b>K</b>	Section <b>2</b>	Township <b>26N</b>	Range <b>17W</b>	County <b>San Juan</b>
Actual Footage Location of Well:				
<b>2310</b>	feet from the <b>South</b>	Line and	<b>2310</b>	feet from the <b>West</b>
Ground Level Elev. <b>5371</b>	Producing Formation <b>Dakota</b>	Pool <b>Wilcogat</b>	Dedicated Acreage: <b>40</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.

For: Odessa Natural Corp  
ORIGINAL SIGNED BY

Name **EWELL N. WALSH**

**Ewell N. Walsh, P.E.**

Position

**President**

Company **Walsh Engineering & Production Corp.**

Date

**Sept. 24, 1979**

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 22, 1979**

Registered Professional Engineer and/or Land Surveyor

**Fred B. Ferrer Jr.**

Certificate No. **3950**

**NEW MEXICO**

EXHIBIT "B"

TEN-POINT COMPLIANCE PROGRAM  
OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C  
ODESSA NATURAL CORPORATION  
Duncan Navajo 2, No. 1  
2310' FSL, 2310' FWL,  
Sec. 2-T26N-R17W  
San Juan County, New Mexico

1. The Geologic Surface Formation

The surface formation is Lewis Shale

2. Estimated Tops of Important Geologic Markers

Cliff House	453'	Greenhorn	4296'
Menefee	626'	Graneros	4358'
Point Lookout	2320'	Dakota	4400'
Gallup	3466'	Morrison	4616'

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

453' - 670' Water	3466' - 3670', Oil & Gas or Water
2320' - 2520' Water	4400' - 4620', Oil & 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	8-5/8"	24# K-55 8 round ST&C	New
7-7/8"	300'-4725'	4425	5-1/2"	15.55, K-55, 8 Rd New ST&C	New

Completion Program

Surface - 8-5/8": 350 Sacks Class "B", 2%  $\text{CaCl}_2$  & 1/4 lb. Flocele per sack.

Production - 5-1/2": First Stage - 375 sacks 50/50 Pozmix, 2% Gel 6-1/4 lbs. Gilsonite/sack  
Second Stage - Stage tool 150' below T/Mancos - 300 sacks 65/35 Pozmix, 12% gel, 6-1/4 lbs. Gilsonite/sack followed by 50 sacks Class "B" Neat

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 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 on the surface. Heavier muds will be on location to be added if pressure requires.

<u>Interval</u>	<u>Type</u>	<u>Weight/Gal.</u>	<u>Viscosity (Sec.)</u>	<u>Water Loss</u>	<u>Additives</u>
0 - 300'	gel-line	8.5 - 9.0	45	NC	lime
300' - 4725'	Water-Benex	8.7 - 8.8	32-	NC	CMC, Thinner
	or Low Solids	8.7 - 8.8	36	10	

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) Possible Dst's, Gallup and Dakota Interval.
- (b) The logging program will consist of IES, Surface to T.D.  
CNL-FDC, TD - 3400', Caliper to surface
- (c) No Coring is anticipated

9. Any Anticipated Abnormal Pressures or Temperatures

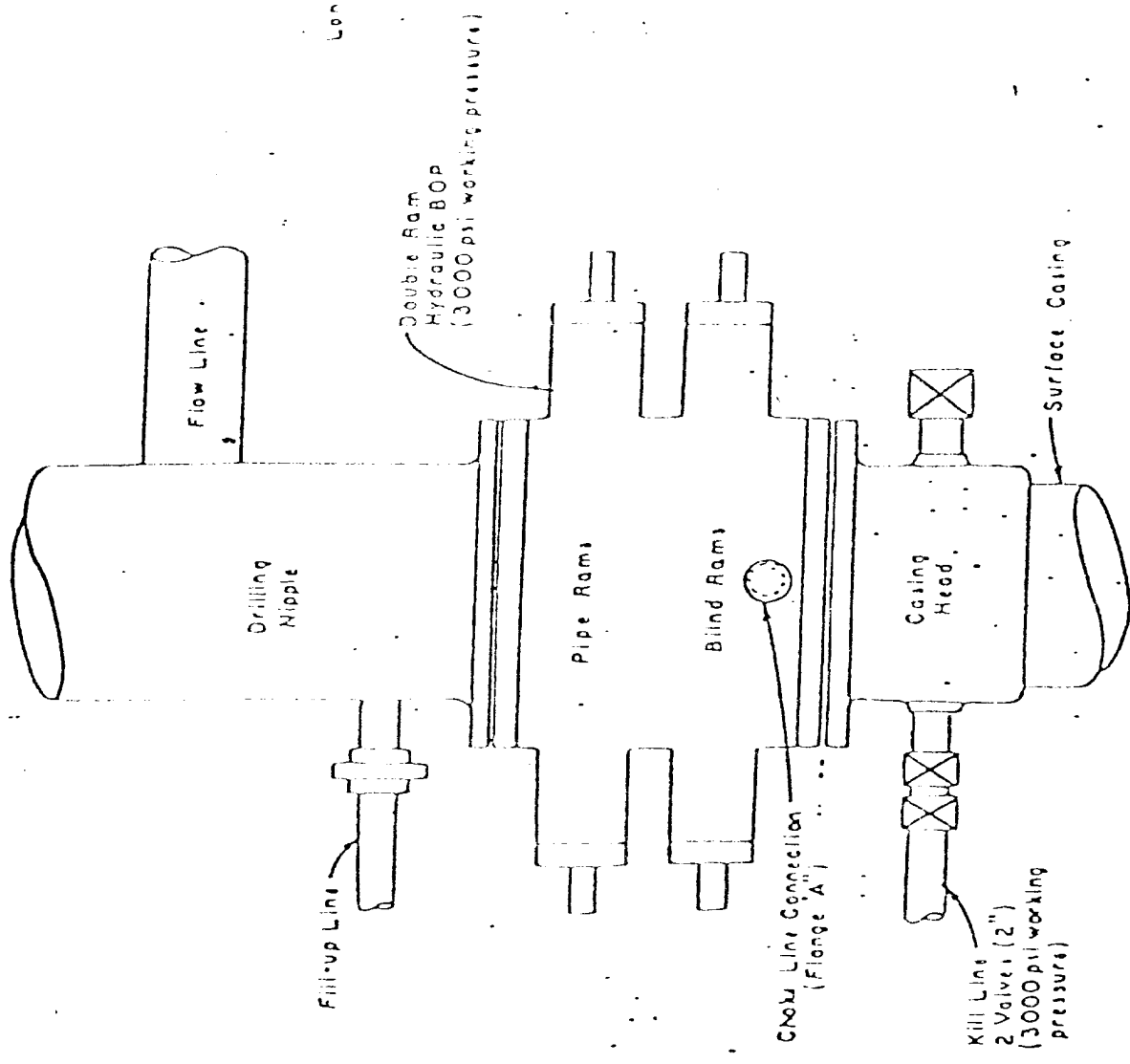
No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. Bottom hole pressure expected is 1500#.

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 October 15, 79 or as soon as possible after examination and approval of drilling requirements. Operations should be completed within Ten days.

EXHIBIT "C"  
ODESSA NATURAL CORPORATI  
DUNCAN NAVAJO2, NO. 1



Flanged Cross with Pressure Gauge in Outside Opening

Long Positive Choke

2" Plug Valve  
2000 CWP

Positive  
Variable

Flange "C"

PLAN VIEW - CHOKES MANIFOLD

EXHIBIT "D"

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

Attached to Form 9-331C  
Odessa Natural Corporation  
Duncan Navajo 2, No. 1  
2310'FSL, 2310'FWL  
Section 2-T26N-R17W  
San Juan County, New Mexico

1. Existing Roads

- A. The proposed well site and elevation plat is shown as EXHIBIT "A".
- B. South from Shiprock, New Mexico, on Highway 666 approximately 22 miles, left on existing road  $5\frac{1}{2}$  miles, left on existing road  $3\frac{1}{2}$  miles, right  $\frac{1}{2}$  mile to location.
- C. All roads to location are indicated by dotted strip tape on Exhibit "E". Existing roads will be improved
- D. This is an exploratory well. Existing roads are indicated on Exhibit "E"
- E. N/A
- F. The existing roads will be bladed only to improve surface

2. Planned Access Roads

Existing roads will be bladed only to improve surface.

3. Location of Existing Wells

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

- (1) There are no water wells within a two mile radius of this location.
- (2) There is one abandoned well in this two 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 NO 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) 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 150 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.



- C. Reclamation, whether well is productive or dry, will be made on all unused areas in accordance with BIA stipulations.

5. Location and Type of Water Source

- A. The source of water will be water well in Tocito Dome Field
- 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 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 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 " ". The trash and/or 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 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 as staked, with elevations by Kerr Land Surveying of Farmington, New Mexico.

Topsoil  
will be stockpiled per BIA specifications determined at time of pre-drill inspection.

- (2) EXHIBIT " " 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.

- (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 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) 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 Spring, 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, sage-brush, native grass and some Cedar trees. There are livestock and rabbits in the area. The topography is sloping Westerly.
- (2) The primary surface use is for grazing. The surface is owned by the
- (3) The closest live water is the Chaco Wash, 4 miles East of the location.

The closest occupied dwellings - None

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 Mesa Verde.
- (5) Drilling is planned for on or about Oct 15, 1979. Operations should be completed within 10 days.

12. Lessee's or Operator's Representative

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

13. Certification

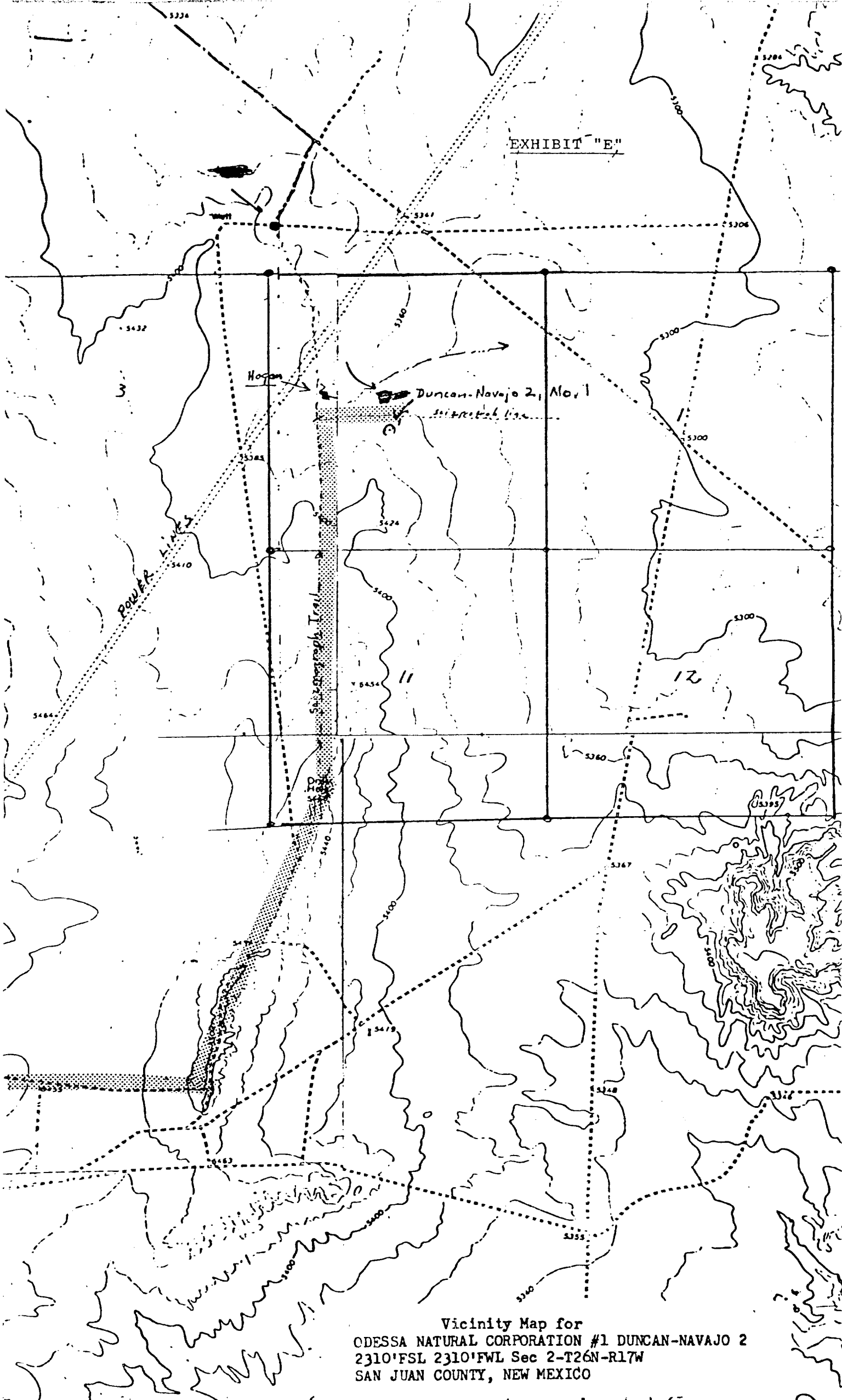
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Getty Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

ORIGINAL SIGNED BY  
EWELL N. WALSH

Sept. 24, 1979  
Date

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

EXHIBIT "E"



Vicinity Map for  
ODESSA NATURAL CORPORATION #1 DUNCAN-NAVAJO 2  
2310'FSL 2310'FWL Sec 2-T26N-R17W  
SAN JUAN COUNTY, NEW MEXICO

EXHIBIT "F"

Odessa Natural Corp.  
Duncan Navajo 2, No. 1

R17W

Navajo Tract 4

Navajo Tract 4

VALVE NO. 3  
M.P. 20+672

Location

DAVIS

Conoco Navajo

N

A

I

D

N

Navajo Tract 4  
Texaco

23 5 ON

24 Meter Run

EXHIBIT "G"  
ODESSA NATURAL CORPORATION  
DUNCAN NAVAJO 2, NO. 1

LOCATION LAYOUT

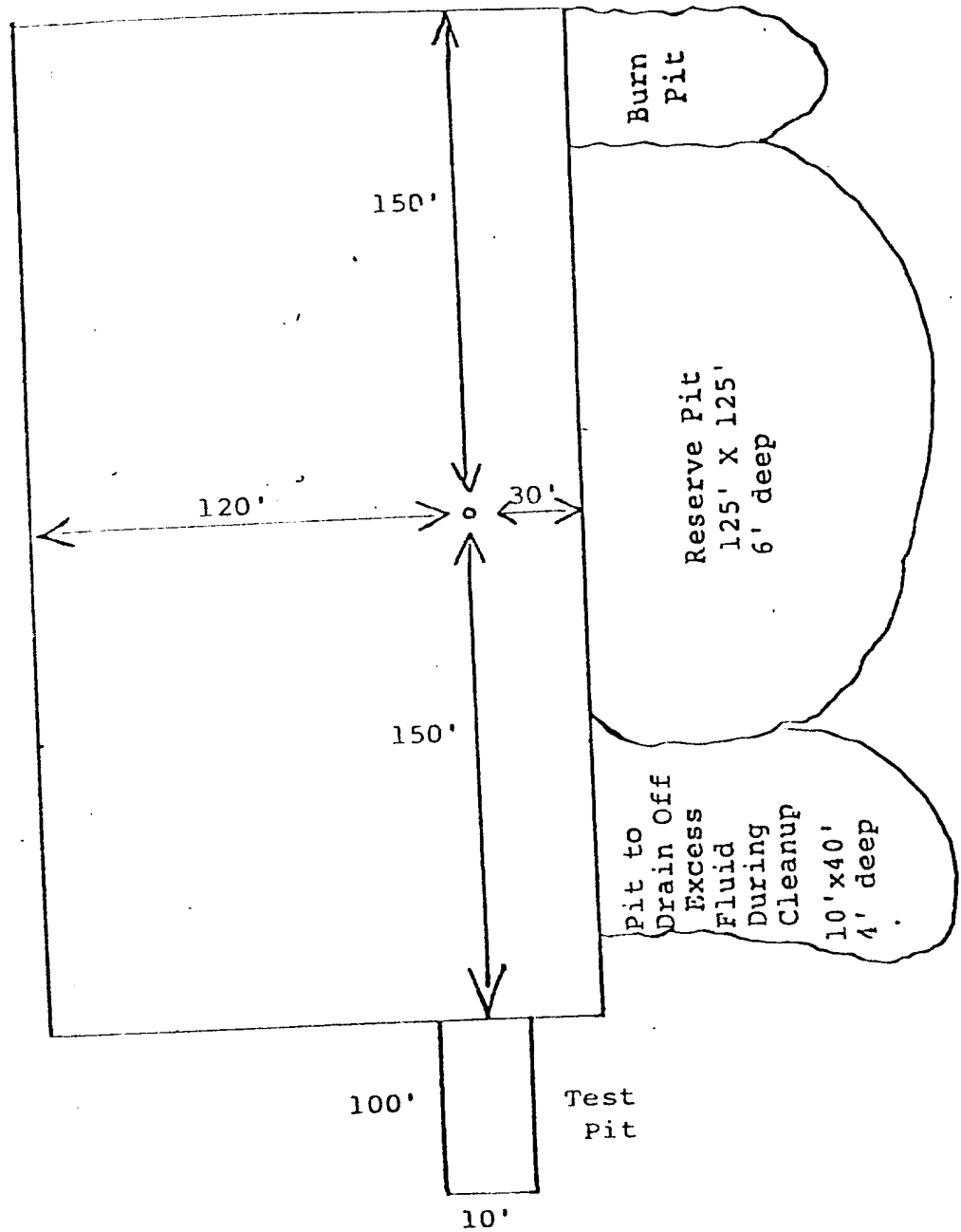


EXHIBIT 'H'  
Drill Rig Layout

