

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 ☐		5. LEASE DESIGNATION AND SERIAL NO. LC 063458	
b. TYPE OF WELL OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☒		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR CONTINENTAL OIL COMPANY		7. UNIT AGREEMENT NAME NMFU	
3. ADDRESS OF OPERATOR P.O. BOX 460 HOBBS, N.M.		8. FARM OR LEASE NAME WARREN UNIT	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1980' FSL + 660' FEL At proposed prod. zone SAME		9. WELL NO. 70	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT WARREN BLINBRY + TUBB	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SEC. 26, T20S, R-38E	
16. NO. OF ACRES IN LEASE 1920		12. COUNTY OR PARISH LEA	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE NM.	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		20. ROTARY OR CABLE TOOLS ROTARY	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3557.7' GR		22. APPROX. DATE WORK WILL START* 2-19-79	
23. PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12 1/4"	9 5/8"	32.3#	1600'
8 3/4"	7"	23# + 26#	6900'
		QUANTITY OF CEMENT	
		600 sk circ	
		1425 sk circ	

It is proposed to drill a straight hole to a TD of 6900' and complete as a dual Blinbry + Tubb oil well.

SEE ATTACHMENT FOR 10 point well plan.

SEE ATTACHED FOR 13 point SURFACE Use Plan.

RECEIVED

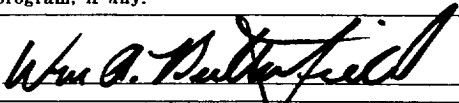
FEB 5 1979

U. S. GEOLOGICAL SURVEY
HOBBS, NEW MEXICO

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



TITLE

ADMINISTRATIVE SUPERVISOR

DATE 2-5-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

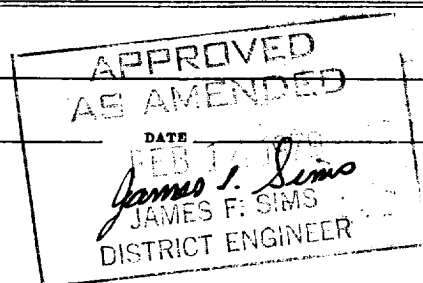
APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

USGS - 6
NMFU - 4
JFB REL -
FILE -
VMS -

*See Instructions On Reverse Side



ATTACHMENT TO FORM 9-331 C
APPLICATION FOR PERMIT TO DRILL

Continental Oil Company
Warren Unit Nos. 70-74
T-20S, R-38E
Lea County, New Mexico

1. The geologic name of the surface formation is Quaternary Sand.
2. The estimated tops of important geologic markers are shown on the attached Proposed Well Plan.
3. The estimated depths at which anticipated water, oil, gas or other mineral-bearing formations to be encountered are shown on attached Proposed Well Plan.
4. The proposed casing program is as follows:

0' - 1600'	9 5/8", 32.3#, H-40, ST&C	
0' - 5800'	7", 23#, K-55, ST&C	
5800' - 6900'	7", 26#, K-55, ST&C	
5. A drawing of an API Series 900 Blowout Preventer Specification is attached. Pipe rams and blinds will be checked to 1,000 PSI for 30 minutes when BOP is installed. BOP will be checked when casing string is set and operated daily for checks.
6. The proposed mud program is as follows:

0' - 1600'	8.5 - 9.0 ppg	spud mud
1600' - 6900'	9.0 - 10.0 pg	saltwater gel
7. The auxiliary equipment to be used is:
 - (1) kelly cocks
 - (2) floats at the bit
8. It is proposed to run GR CAL CNL FCD PDC logs at selected intervals, as shown on the attached Proposed Well Plan.
9. No abnormal pressures or temperatures are expected to be encountered in this well.
10. The anticipated starting date for the first well is February 12, 1979, with a duration of approximately 21 days for each well.

PEB:vjk

PROPOSED WELL PLAN OUTLINE

WELL NAME: Warren Unit No. 70

COUNTY: Lea

LOCATION: 1980' FSL & 660' FSL
Sec. 26 T-20S, R-38E

STATE: New Mexico

[illegible]

WELL NAME Warren Unit No. 70 FIELD NMFU DATE 1-5-79
 AFE NO. ELEV. GRD KB PROPOSED TO 6900'
 LOCATION (SURF.) 1980' TSL & 260' FSL OF SEC -25 T -20S R -38E
 COUNTY Lea STATE New Mexico SPACING 40 Acres

LOCATION (BOTTOM HOLE)

GEOLOGICAL ESTIMATES

<u>ZONE</u>	<u>TOP</u>	<u>THICKNESS</u>	<u>CONTENT</u>	<u>ZONE</u>	<u>TOP</u>	<u>THICKNESS</u>	<u>CO.</u>
Rustler Anhy.	1570'						
Salado Salt	1660'						
Tansill Anhy.	2730'						
Yates S.S.	2870'						
San Andres dolo.	4260'						
Glorieta S.S.	5550'						
Blaine dolo.	6035'		O & G				
Tubb S.S.	6530'		O & G				
Drinkard dolo.	6800'						

<u>CORING NO.</u>	<u>TYPE</u>	<u>HORIZON</u>	<u>INTERVAL FROM-TO</u>	<u>FOOTAGE</u>	<u>REMARKS</u>
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None

Samples: None

DRILL STEM TESTSWATER SHUT OFF TESTS

<u>NUMBER</u>	<u>HORIZON</u>	<u>NUMBER</u>	<u>HORIZON</u>	<u>NUMBER</u>	<u>HORIZON</u>	<u>NUMBER</u>	<u>HORIZON</u>
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None

WELL SURVEYS (List types by code numbers as follows: Directional and/or Deviation (1) Deflection (2) Caliper (3) Temperature (4) Electrical (5) Radio active (6) Geograph (7) Photoclinometer (8) Mudlogging (9) Other (10) and name of that type.)

<u>DEPTH POINTS</u>	<u>TYPE</u>	<u>HOLE SIZE</u>	<u>REMARKS</u>
0-TD	Geograph Deflection		
2600'-TD	GR-CNL-FDC DLL-Cal-Rxo	8 3/4"	2" & 5" (Pull caliper to surf. csg. shoe)
5400'-TD	Dipmeter PDC	8 3/4" Inside Csg.	

FUEL AND WATER (SOURCE)

PROPOSED WELL PLAN

WELL NAME <u>Warren Unit No. 70</u>		FIELD <u>NMFU</u>	
<u>ATTACHMENT</u>	<u>NO.</u>	<u>REQUIRED</u>	<u>NOT REQUIRED</u>
CASING CENTRALIZERS, SCRATCHERS	_____	<u>X</u>	_____
CEMENTING	_____	<u>X</u>	_____
MUD PROGRAM	_____	<u>X</u>	_____
WELL PLAN OUTLINE	_____	<u>X</u>	_____
PORE PRESSURE - FRAC GRADIENT	_____	_____	_____
PROJECTED PROGRESS	_____	_____	_____
CROSS SECTION OR WELL COURSE	_____	_____	_____
HYDRAULICS PROGRAM	_____	_____	_____
BIT PROGRAM	_____	_____	_____
VENDER USAGE LIST	_____	_____	_____

DRILLING AND COMPLETION PROCEDURE

- (1) 0-1600' Drill 12 1/4" hole. Set and cement 9 5/8" surface casing. WOC-18 hours. Pressure test to 1000 psi for 30 minutes. Drill out.
- (2) 1600'-6900' Drill 8 3/4" hole. Pressure test shoe to 300#. Drill to TD. Run OH logs. Set and cement 7" OD production casing. WOC-18 hours. Pressure test to 1000# for 30 minutes.
- (3) Detailed completion procedure to be prepared from OH log analysis. Anticipate sand frac on Blinbry and Tubb zones.

CASING, CENTRALIZERS & SCRATCHERS

LIST TYPE OF STRING BY CODE LETTERS, i.e. CONDUCTOR (C); SURFACE (S); INTERMEDIATE (I); PRODUCTION (P); LINER (L); PERFORATIONS (PP)

TYPE OF STRINGS & INTERVAL (FT)		OD	ID	WT PER FT	GRADE	THREAD	AMT	WT. IN AIR, WT. IN MUD		REMARKS
								1000 LBS	1000 LBS	
FROM-TO										
(S) 0-1600'		9 5/8"	8.845"	32.3#	H-40	STC	1600'	51.7	44.7	
(P) 0-5800'		7"	6.241"	23.0#	K-55	STC	5800'	133.4	113.4	
(P) 5800'-6900'		7"	6.151"	26.0#	K-55	STC	1100'	28.6	24.3	Sand blast & ruff- te 600' csg. across pay sections

TYPE OF STRING	CENTRALIZERS		SCRATCHER		OTHER ACCESSORY EQUIPMENT		REMARKS
	INTERVAL		NO. INTERVAL		(SUCH AS DEGASSERS, MUD, CENTRIFUGE		
	NO. FROM-TO	NO. FROM-TO	NO. FROM-TO	NO. FROM-TO	FLOAT COLLARS, ETC. - SPECIFY)		
(S) Surface	(4) 2 ea. on bottom two jts.	(13) One every 15' from shoe to 200' from shoe	Guide shoe & float collar				
	(9) One every 4 jts. to surface						
(P) Production	(4) 2 ea. on bottom two joints	(33) One every 15' from 5950'- 6200' & from 6450'-6700'	Float shoe & float collar				
	(8) One every 3 jts. to 5900'						

MUD PROGRAM

<u>DEPTH INTERVAL</u> <u>FROM-TO</u>	<u>WEIGHT</u> <u>LBS/CAL</u>	<u>TYPE</u>	<u>OIL %</u>	<u>PH</u>	<u>WATER LOSS</u> <u>(CC)</u>	<u>VIS. (sec.)</u>	<u>YIELD</u> <u>POINT</u>	<u>THINNING</u> <u>AGENTS</u>	<u>WATER LOSS</u> <u>AGENTS</u>
0-1600'	8.5-9.0	Spud	--	9.0+	--	--	--	--	--
1600'-6900'	9.0-10.0	Salt Water Gel	--	9.0-10.0	10-12+	35-40	--	--	--

REMARKS

- (1) Below 1600', drill w/saturated brine to keep hole enlargement to a minimum
- (2) Add gelling agent as required to carry cuttings
- (3) Pressure surges should be kept to a minimum below 1600'
- (4) Condition mud to reduce water loss 100' above Blinbry marker

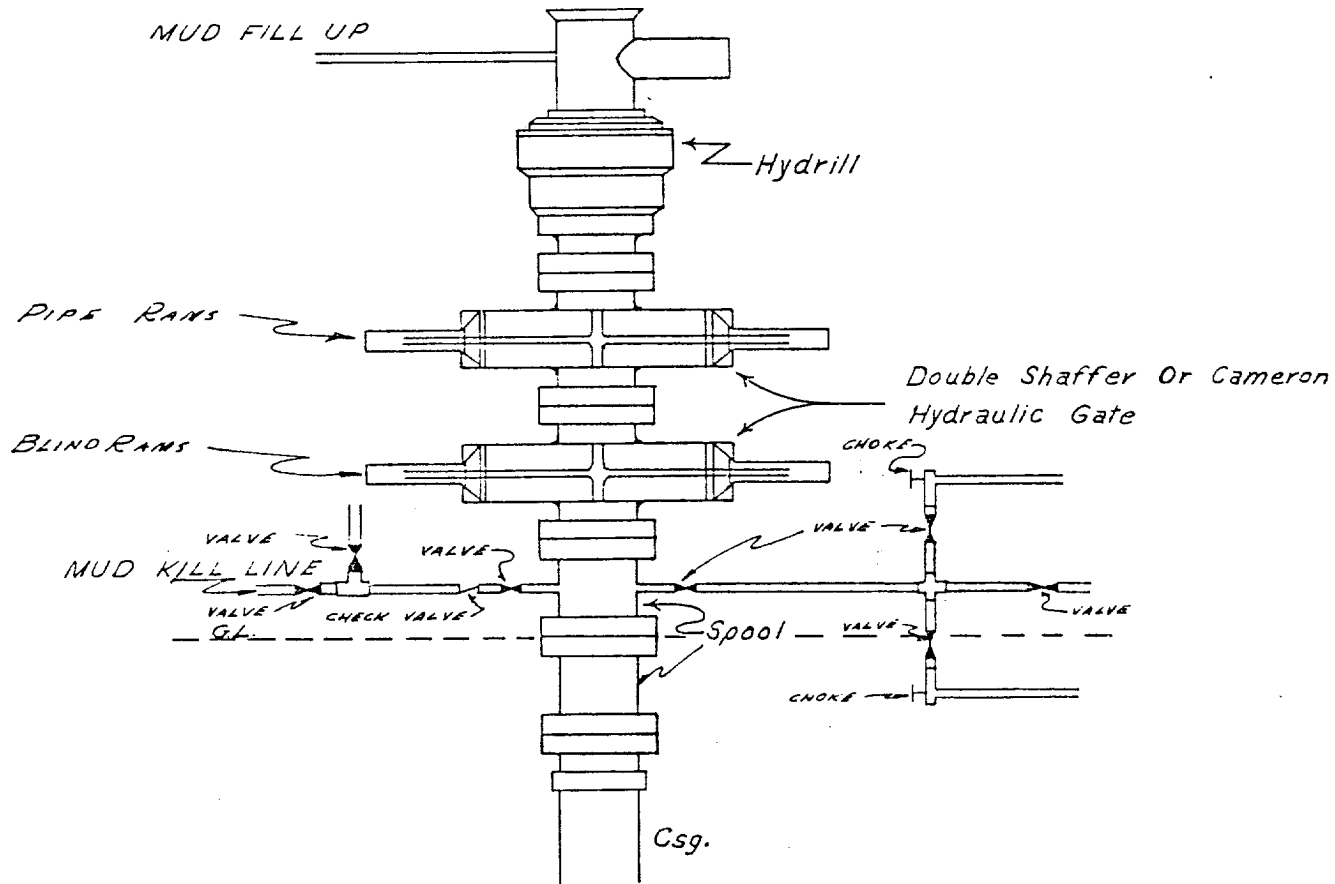
CEMENT

TYPE OF STRING INTERVAL (FT) FROM-TO TYPE MIX	GEL%	SALT%	CaCl ₂	SLURRY WEIGHT LB./GAL	SLURRY YIELD OF/SKX	TOTAL AMT. REQUIRED SKX/CF	FILL UP	BHT	SIZE	REMARKS
(S) 0-1600' Class "C" 4% (Lead)	--	--	2%	13.3	1.88	400/752	Circ.	85°F	12 1/4"	100% Excess Add 1/4#/sx flocele if lost circ. occurs
Class "C" -- (Tail-in)	--	--	2%	14.8	1.32	200/264	--			
(P) 0-6900' 1st Stg. Class "C" 4% (Lead)		3#/sx	--	13.3	1.88	275/517	To DV Tool @ 4000'	110°F	8 3/4"	100% Excess Add 1/4#/sx flocele if lost circ. occurs
Class "C" -- (Tail-in)		3#/sx	--	14.8	1.32	300/396	--			
2nd Stg. - DV Tool @ 4000' Lite-Nate --		18%	--	13.3	1.93	950/1834	Circ.	95°F	8 3/4"	200% Excess Add 1/4#/sx flocele if lost circ. occurs

REMARKS

- (1) Lab test slurry for production casing
- (2) Condition mud to have low plastic viscosity and yield strength
- (3) Precede cement w/500 gal. mud flush
- (4) Utilize top and bottom plugs. Pump top plug down w/TFW
- (5) Reciprocate casing while cementing
- (6) Recalculate cement volumes from OH caliper logs

CONTINENTAL OIL COMPANY
Blow-out Preventer Specifications



NOTE:

API SERIES 900

Manual and Hydraulic controls with closing unit no less than 75' from well head.
Remote controls on rig floor.

DUE TO SUBSTRUCTURE CLEARANCE,
HYDRILL MAY OR MAY NOT BE USED.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

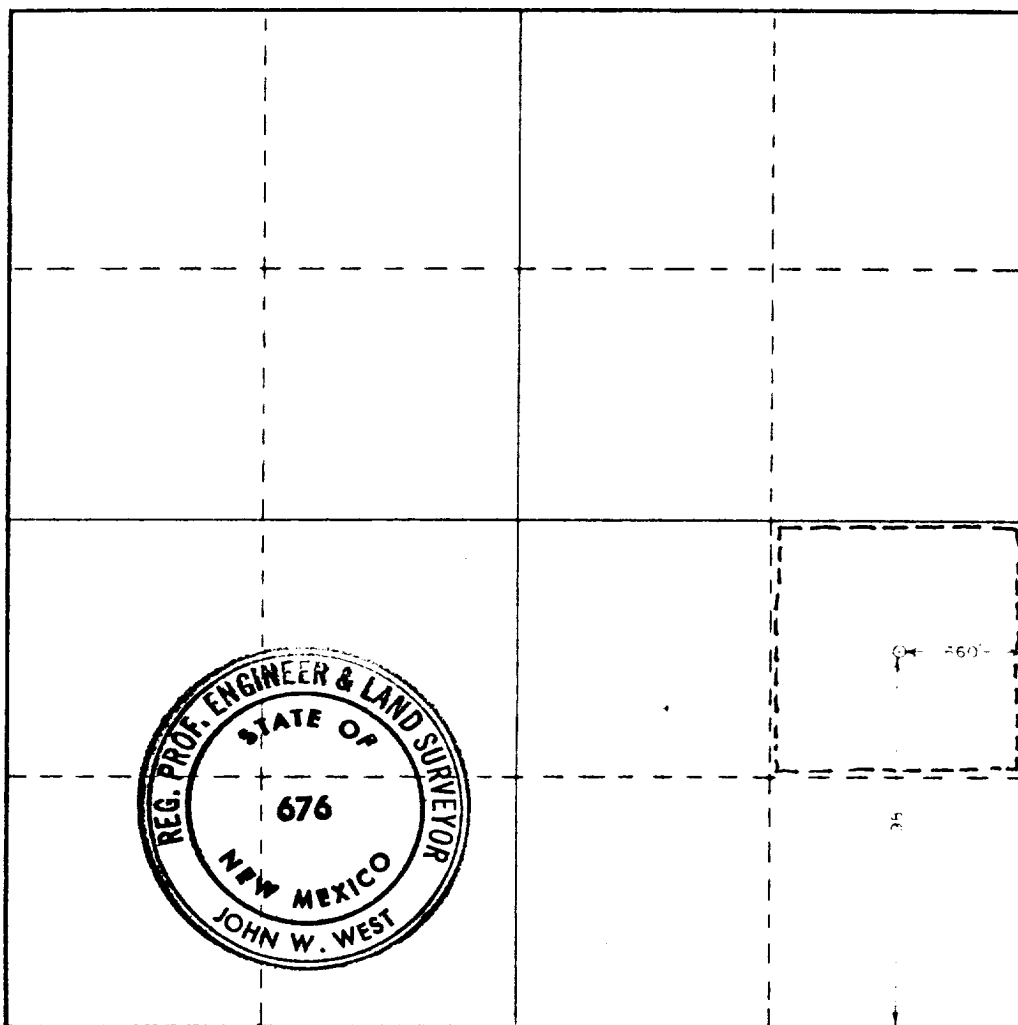
Operator Continental Oil Co.		Lease Warren Unit		Well No. 70
Tract Letter 1	Section 26	Township 20 South	Range 08 East	County Lea
Actual Footage Location of Well: 1930 feet from the South line and 660 feet from the East line				
Ground Level Elev. 3557.7	Producing Formation BLUEBRY + TUBB	Pool NMFU	Dedicated Acreage: 40 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.



CERTIFICATION

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

Name
John W. West
Position
ADMINISTRATIVE SUPERVISOR
Company
CONTINENTAL OIL COMPANY
Date
FEBRUARY 2, 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
January 11, 1979
Registered Professional Engineer and/or Land Surveyor
John W. West
Certificate No. **John W. West 676**
Ronald J. Eidson 3239

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

SURFACE USE PLAN
Continental Oil Company
Warren Unit No. 70
Sec. 26, T-20S, R-38E
Lea County, New Mexico

The plan is to accompany "Application for Permit to Drill" the subject well. The following is a discussion of pertinent information concerning possible effect which the proposed drilling of the well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so all contractors and sub-contractors will be aware of all items of this plan.

1. Existing Roads

- A. The proposed well site is 1980' FSL and 660' FEL of Section 26, T-20S, R-38E, Lea County, New Mexico.
- B. Exhibit "A" is a portion of a New Mexico road map showing existing black top roads. Directions to the location (outlined in red on map) are as follows: From the Stanolind road south of Hobbs, travel 9.6 miles south on Highway 18 and turn east on the lease road opposite Conoco's red, white and blue cattleguard. Follow the lease road two locations east and turn north to Warren Unit No. 46. The proposed well site is 2640' east of Warren Unit No. 46.
- C,D,E. Access roads are shown on Exhibits "B" & "C".
- F. No improvement or maintenance are anticipated for the existing roads.

2. Planned Access Roads

- A. Width and Length: New road required will be 12' wide and 1320' long. This new road is labeled and coded on Exhibits "B" and "C". (staked)
- B. Turnouts: One
- C. Drainage Design: New road will have a drop of 6" from center line on each side.
- D. Culverts, Cuts and Fills: None required.
- E. Surfacing Material: Six inches of caliche, bladed, waterbed, and compacted.
- F. Gates, Cattleguards, Fences: No new gates required.
- G. The proposed road is staked.

3. Location of Existing Wells

See Exhibit "C".

4. Location of Existing and/or Proposed Facilities

- A. Tank Batteries: No new tank batteries are required. See attached Exhibit "C" for existing tank batteries.
- B. Producing Facilities: No new producing facilities are required.
- C. Oil Gathering Lines: Flowlines will lay, not buried, on the surface along the road right-of-way.
- D. Other Lines: Electrical power lines will be constructed alongside the road at 330' spans. See attached Exhibit "E" for route.
- E. Rehabilitation: Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location. Rehabilitation of the surface is planned to be completed within 45 days from commencement.

5. Water Supply

Water will be hauled from Eunice, New Mexico.

6. Source of Construction Materials

Caliche will be hauled from an existing pit in the SE/4 Sec. 15, T-20S, R-38E. See Exhibit "C".

7. Methods for Handling Waste Disposal

Waste Disposal: Well cuttings will be disposed in reserve pit. Barrel trash containers to be in accessible locations within drill site area during drilling and completion procedures. All detrimental waste will be hauled away, burned or buried with a minimum cover of 24" of dirt. See Exhibit "D" for location of pits. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. Any produced water will be collected in tanks until hauled to an approved disposal system, or separate disposal applications will be submitted to the survey for appropriate approval.

8. Ancillary Facilities

None

9. Well Site Layout

Exhibit "D" shows the relative location and dimensions of the well pad, mud pit, reserve pit, etc. The reserve pit will be lined with plastic. The pad and pits are staked.

10. Plans for Restoration of Surface

Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 45 days from commencement.

11. Other Information

- A. Terrain: flat
- B. Soil: sandy
- C. Vegetation: grass, shinnery
- D. Surface Use: grazing
- E. Ponds and Streams: None within one mile
- F. Water Wells: None within one mile
- G. Residences and Buildings: None within one mile
- H. Arroyos, Canyons, Etc.: None
- I. Well Sign: Sign identifying and locating well will be maintained at drill site with the spudding of the well.
- J. Open Pits: All pits containing mud or other liquids will be fenced.
- K. Archaeological Resources: None observed

12. Operator's Representative

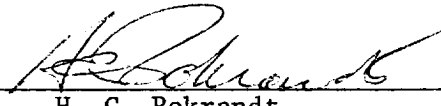
Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

Production and Drilling
W. D. Cates or H. C. Pokrandt
1001 North Turner
Hobbs, New Mexico 88240
Phone: 393-4141

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 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 Continental Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

2/2/79
Date


H. C. Pokrandt
Production Superintendent

PEB:vjk

District Engineer
U. S. Geological Survey

Gentlemen:

Re: WARREN UNIT No. 70

This refers to the attached Form 9-331C, Application to Drill, Deepen or Plugback. The undersigned hereby states that he has personally notified Mrs. Kilgen Sims, the owner of the surface land on which the work is to be conducted, of the nature and extent of the work to be done including construction on the well site and pertinent roads thereto. The undersigned further states tht the parties have been unable to agree upon the proper compensation for damage to the surface estate and that therefore, it is proposed to proceed with the work and that negotiations will continue in an attempt to arrive at a mutually agreeable compensation. In the event the parties are unable to agree the matter will be finally determined by arbitration or litigation.

It has been agreed, subject to change at that time, that upon abandonment of operations the roads shall be (ripped or ~~left intact~~) and the pad shall be (ripped or ~~left intact~~).

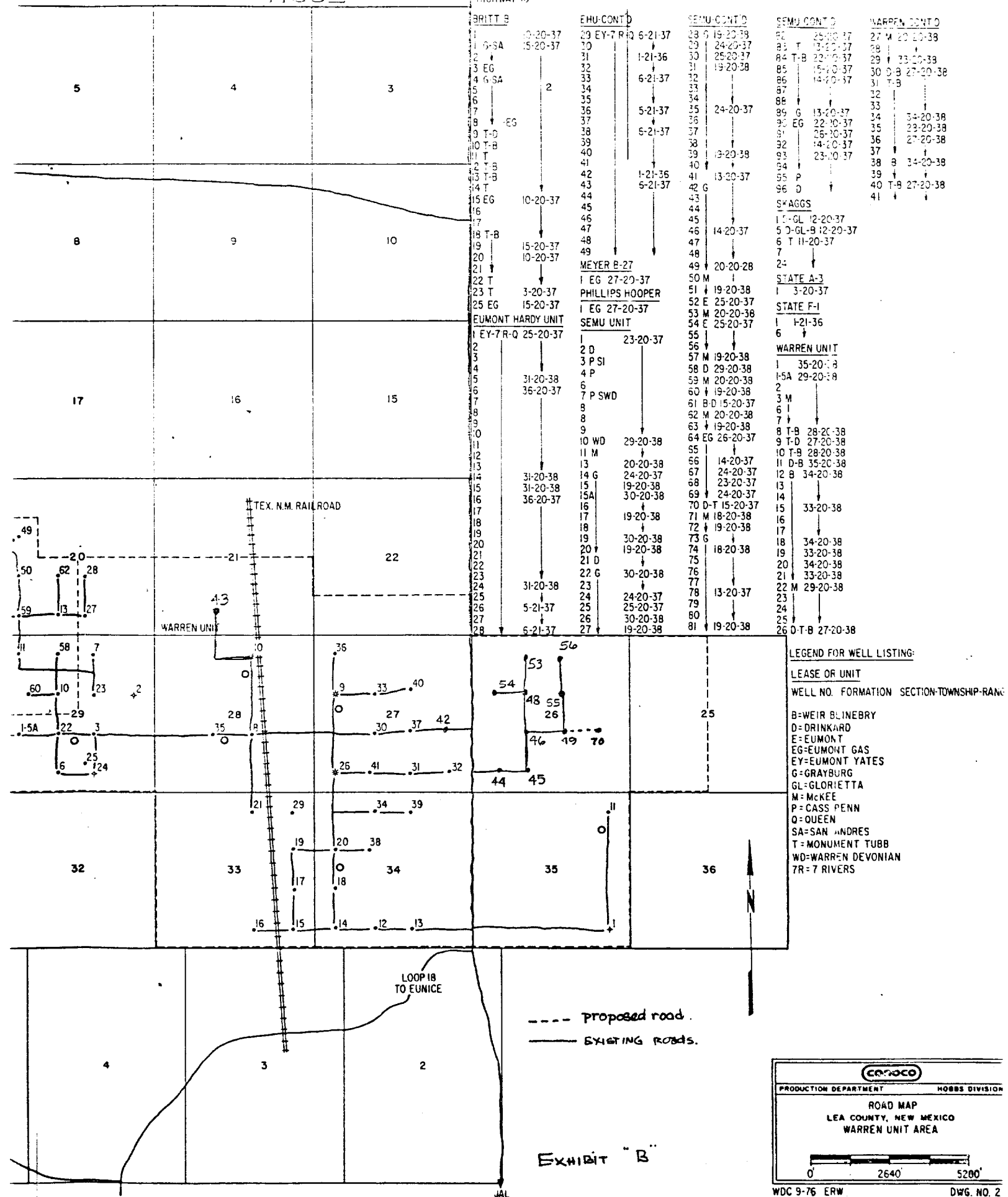


STATE OF NEW MEXICO
COUNTY OF LEA

Subscribed and sworn to before me this 5th day of February, 1979


Notary Public

My commission expires 2-20-81

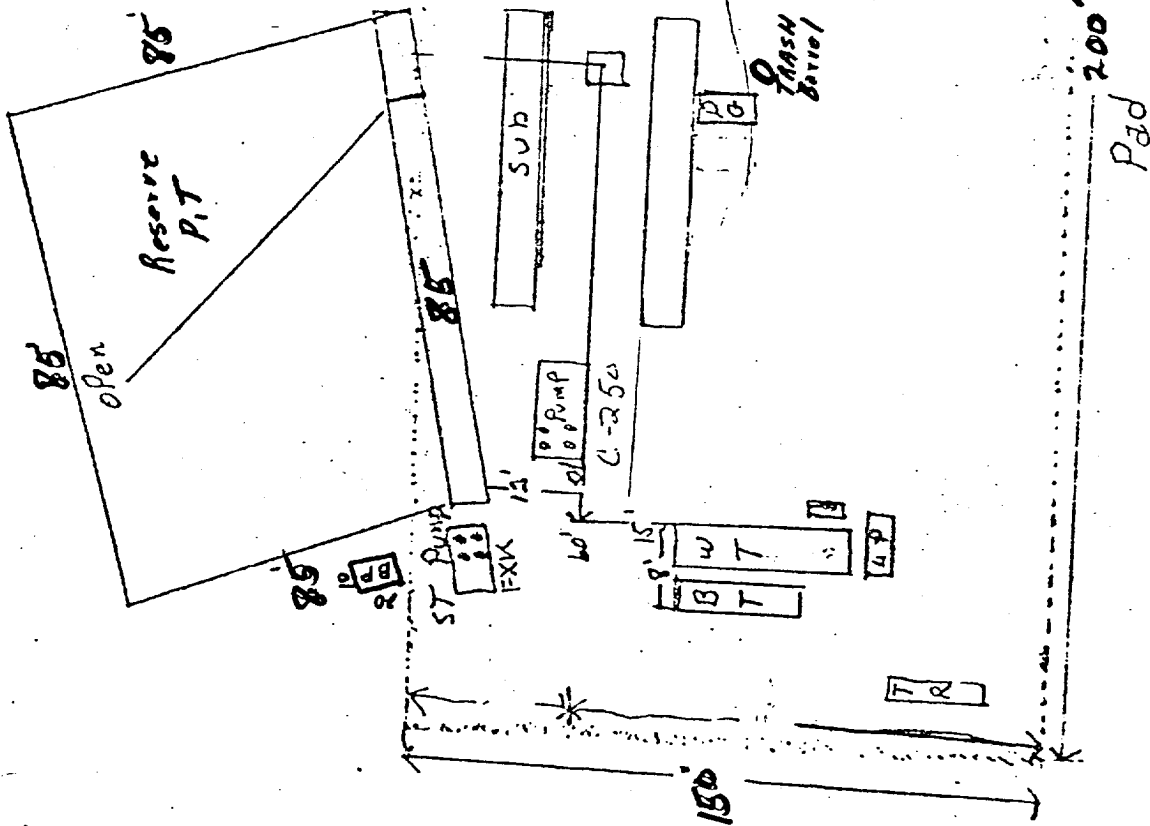


Hondo Rig #1

U-15

2-Waukesha NK

Lee C. Moor 129'



Continental Oil Co.

EXHIBIT

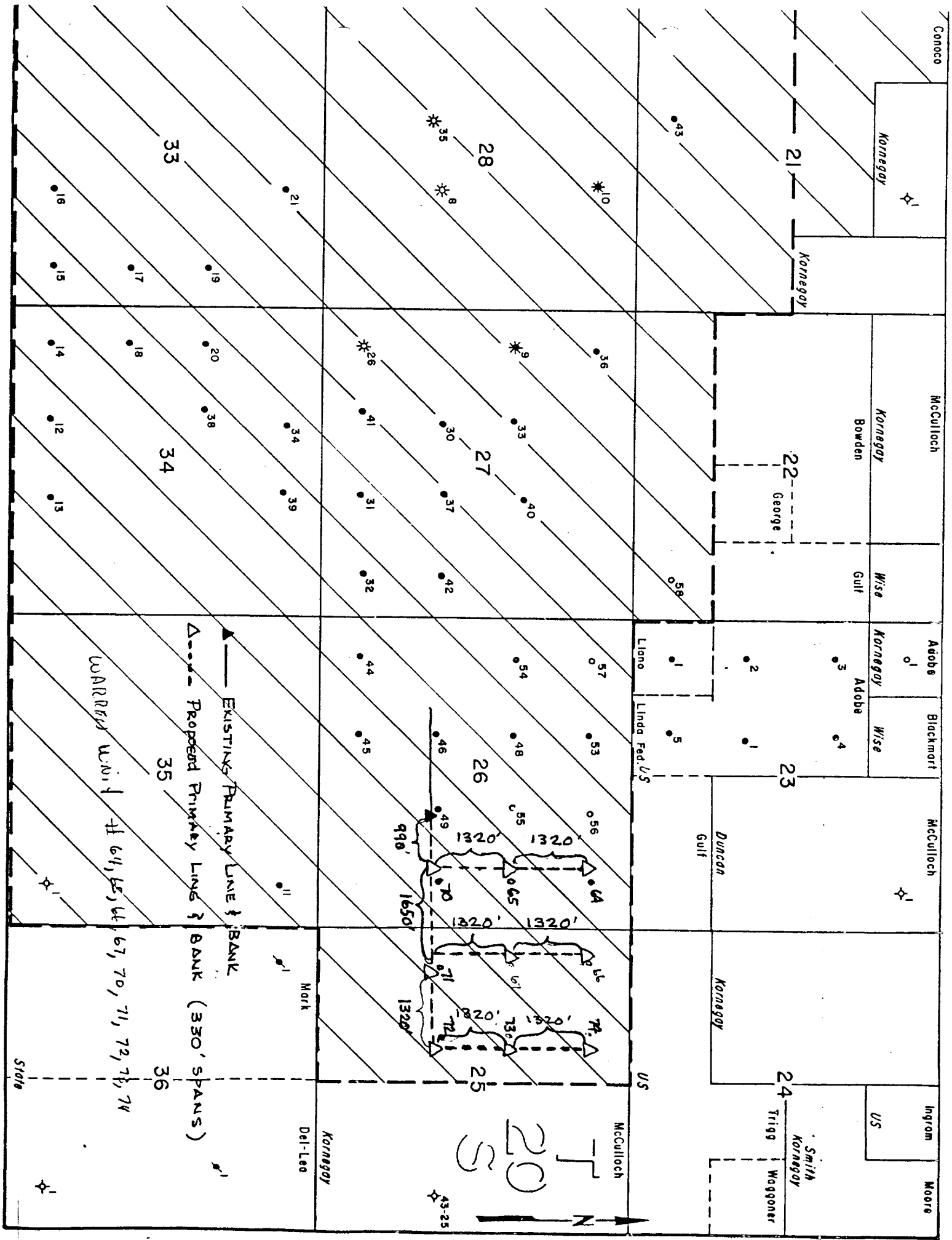
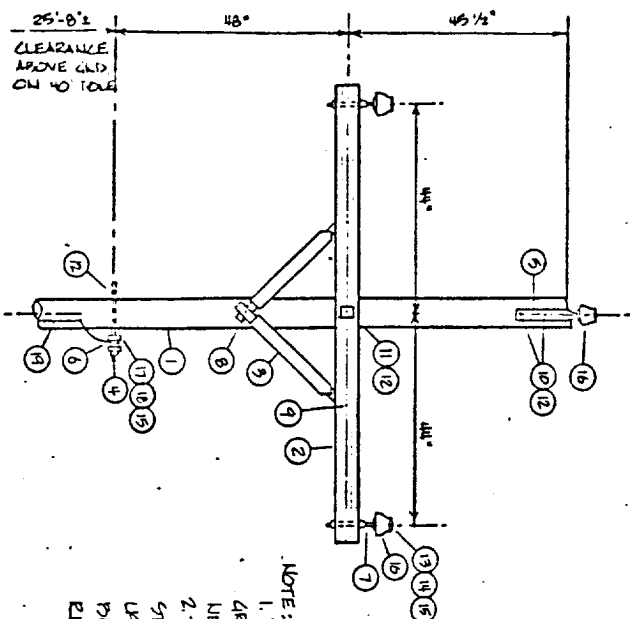


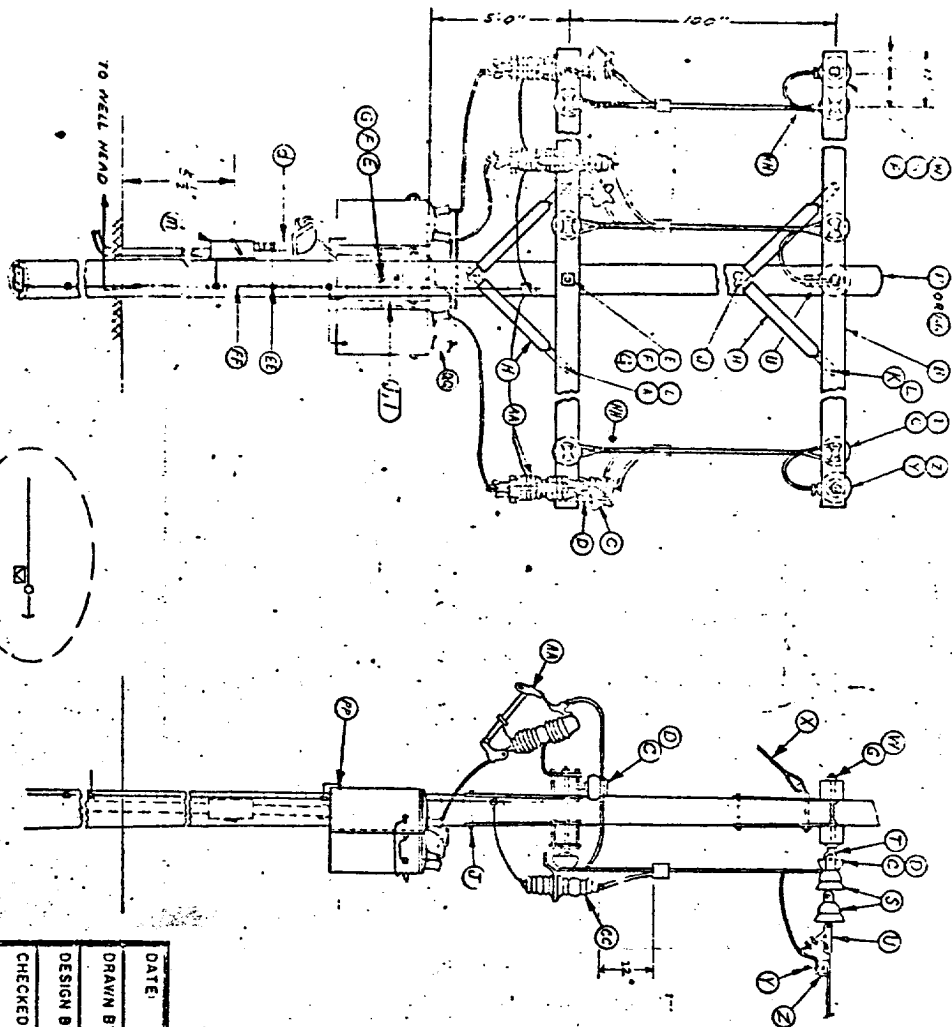
EXHIBIT E



NOTE:
1. DO NOT INSTALL
GROUND WIRE FAST
NEUTRAL CONDUCTOR
2. THIS CONSTRUCTION
STANDARD TO BE
USED ON ALL LINES
BUILT ON NATIONAL
RESOURCE LANDS

MATERIALS					
ITEM	DESCRIPTION	READ	ITEM	DESCRIPTION	READ
1	POLE, 40'	1	17	NEUTRAL CONDUCTOR	-
2	CROSSARM, 3/4" x 4 1/2" x 8'	1	18	ARMOR. ROD	1
3	PLATE, WOOD	2	19	POLE GROUND WIRE, #6 AL.	50
4	STUD BOLT	1			
5	BIDGE PIN, 1/2"	1			
6	SPECC. INSULATOR	1			
7	STEEL PIN, 3/8" x 5"	2			
8	LAG SCREW, 1/2" x 4"	2			
9	CARBIDE POLT, 3/8" x 4 1/2"	2			
10	MACHINE POLT, 3/8" x 10"	2			
11	MACHINE POLT, 3/8" x 14"	2			
12	WASHER, 2 1/2" DIA.	5			
13	PHASE CONDUCTOR	-			
14	ARMOR. ROD	5			
15	THE WIRE, #6 AL.	1			
16	PIN INSULATOR, 4 KV	3			

DATE: 7-15-71	TITLE: PRIMARY IN LINE POLE
DRAWN BY: J. Morrill	12,500 VOLT ACER
DESIGN BY:	
CHECKED BY: SK	PRODUCTION DEPT. (CONOCO) HOBBS DIVISION
APPROVED BY: SK	JOB:
SCALE: NONE	DATE: 7-26



ITEM	QTY	REF
A	4	
B	5	
C	3	
D	3	
E	24	
F	12	
G	4	
H	4	
I	4	
J	4	
K	4	
L	4	
M	4	
N	4	
O	4	
P	4	
Q	4	
R	4	
S	4	
T	4	
U	4	
V	4	
W	4	
X	4	
Y	4	
Z	4	
AA	4	
AB	4	
AC	4	
AD	4	
AE	4	
AF	4	
AG	4	
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CN	4	
CO	4	
CP	4	
CQ	4	
CR	4	
CS	4	
CT	4	
CU	4	
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ITEM	DESCRIPTION	A. B. CHANCE NO.	JOSLYN NO.	OTHER MFRS. NO.	NO. SUB.
A	35' class 6 creosoted pine pole				
B	3 1/2" x 4 1/2" x 8' treated crossarm				
C	4" h density wet process porcelain pin insulator		463		
D	5/4" x 5" forged steel pin w/sq. washer, nut, & locknut	881			
E	5/8" x 12" machine bolt w/ nut (or length req'd)	881/2			
F	2 1/4" x 2 1/4" x 3/16" x 11/16" hole sq. washer	681/2			
G	3/8" F locknut	35/2			
H	1/4" x 1 1/4" x 28" flat crossarm brace	71/8			
I	1/2" x 4" F2 Fetter Drive Long Screw	508754			
J	3/8" x 4 1/2" carriage bolt w/ Nut	8634/2			
K	3/8" F locknut	35/0			
L	Preforated Aluminum Alloy Armor Rods, size req'd				
M	4" wire 46 strong alum. alloy			KEARNEY-3102-600	X
N	Heavy Insulator (extension link)				
O	35' class 5 creosoted pine pole				
P	Aluminum double tab Squeeze on Connector for AL SR, Aluminum, or Copper-size req'd	66100		KEARNEY SERIES "B1"	X
Q	6" Suspension Insulator	6502			
R	3/4" standard oval eye Nut				
S	Primary head and clamp		44050		
T	5/8" x 18" (or length req'd) Double Armring Bolt w/4 sq. nuts	8868			
U	Further detail - see dwg No. ES-10 for specs.				
V	Hot Line Clamp	51520AGP		KEARNEY	X
W	Squeeze on basket, size required				

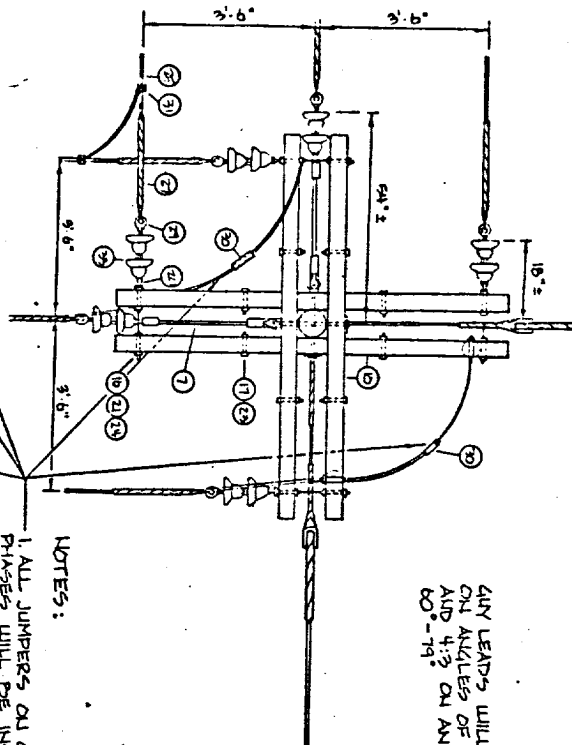
DATE: 12-27-71	TITLE: DESCRIPTION OF MATERIALS	
DRAWN BY: E. WINTER		
DESIGN BY:		
CHECKED BY:		
APPROVED BY:		
SCALE: NONE	JOB: ELEC SPECS	DRAWING NO: ES-1
	PRODUCTION DEPT. HOBBS DIVISION	SHEET 1 OF 3

IT	DESCRIPTION	A. B. QUANCE NO.	JOSLYN NO.	OTHER MFRS. NO.	NO SUB.
1	Primary output - 100 amp, 15 KV, 16000 amp int. cap.	F2X1015G			X
2	General purpose 100 bolt clamp	UC310AGP			
3	Lighting arrester, 10 KV				
4	15 phase oil switch, 14.4 KV				
5	Split bolt connector, size req'd				
6	Grounding spec. acc. def. No. ES-11 & ES-1A, Note 3				
7	35, class 4 crossbar plate pole				
8	Aluminum deadend preforms for ACSR, size req'd				
9	30' class 6, elevated pine pole				
10	CS-1A - Note 3				
11	Ground connector, motor				
12	600 V, secondary lightning arrester single phase				
13	Greenfield type 1P liquid-tight flexible steel				
14	conduits, size req'd, w/ necessary liquid-tight				
15	connectors, size req'd, w/ necessary liquid-tight				
16	req'd size 1/8 fitting & cover & gasket				
17	transformer tank grounding terminal				
18	Bird guards (insulating boots on transformer bushings)				

DATE: 12-27-71	TITLE: DESCRIPTION MATERIAL	
DRAWN BY: E. WINTER	CCNOCO	
DESIGN BY:	PRODUCTION DEPT.	HOBBS DIVISION
CHECKED BY:	JOB:	ES-1
APPROVED BY:	AEC SPECS	SHEET 2 OF 3
SCALE: NONE		

ITEM	DESCRIPTION	A. B. QUANCE NO.	JOSLYN NO.	OTHER MENS. NO.	NO. SUB.
a	double upset bolt w/eq. nut, round washer, and cotter key on short end, sq. nut and NF locknut on long end, 15 1/8" long (for length required.)	7828			
b	3" process porcelain secondary spool insulator,		4101		
d	required size conduit w/ servicehead(s) & req'd size & rated insulated conductors. Ref. DWG ES-18 note: provide clamp and ground conduit parallel groove clamp, size req'd			BURBY SERIES "UC"	
e	secondary insulator clevis for 4" insulator	4510			
f	3/8" thimble nut	5512			
h	3/8" x 12" (or length req'd) straight thimbleye bolt w/eq. nut			ALUMA-FORM 6M3-6	X
j	transformer cluster mount bracket (small)			ALUMA-FORM 15M3-6	X
1	transformer cluster mount bracket (large)				
m	req'd also raintight disconnect & fuses, 3-phase, 600 V. Ref. DWG. No. ES-19	X-16			
n	16" cross plate anchor (or size req'd)	88/35			
q	8-way expanding anchor (size req'd)		10101		
t	4" brown glaze wet process porcelain secondary spool insulator	5317 (NOT 5500EP)			
u	3/8" x 7" thimbleye anchor rod w/nut (use twineye if req'd - Change No. 5317)				
22	3/8" high strength guy strand, (10,800 lb.)				
23	preferred guy rclp for 3/8" guy strand	5010			
24	3" x 10" angle thimbleye bolt w/nut	6825 1/2			X
25	3" x 1/4" x 11/16" hole curved washer				
26	6" - guy clamp w/3-1/2" bolts				
27	redline size strain insulator				
28	servicing sleeve for 3/8" guy strand	6454			
29	3/15" x 2-1/2" x 7" lift plate	7887			X
30	pole bottom ground plate (may use butt-wrap if desired)				
31	ground connection (See DWG. ES-12)				
32	wet process porcelain secondary spool insulator, 3" - white glaze				
33	wet process porcelain secondary spool insulator, 4" - white glaze				

DATE: 12-27-71		TITLE: DESCRIPTION MATERIALS	
DRAWN BY: E. WINTER		CONOCO HOBBS DIVISION PRODUCTION DEPT. JOB: ELEC SPECS DRAWING NO: ES-1 SHEET 3 OF 5	
DESIGN BY:			
CHECKED BY:			
APPROVED BY:			
SCALE: NONE			

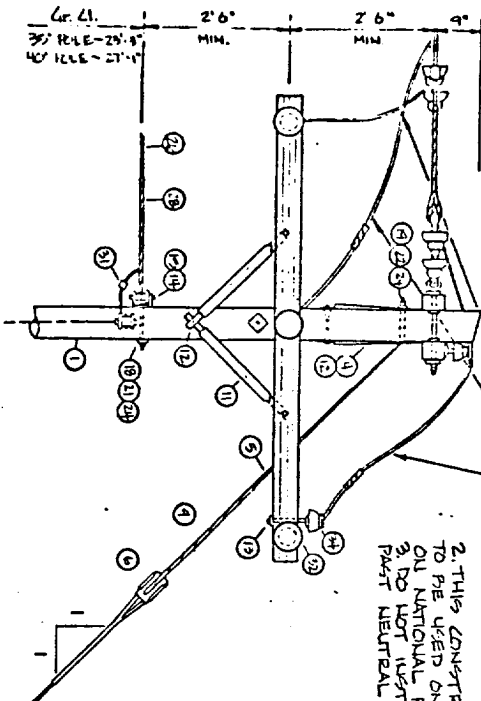


ANY LEADS WILL BE 1:1 ON ANGLES OF 80°-100° AND 4:3 ON ANGLES OF 60°-79°

NOTES:

1. ALL JUMBERS ON CONDUCTOR PHASES WILL BE INSULATED TYPE WIRE.

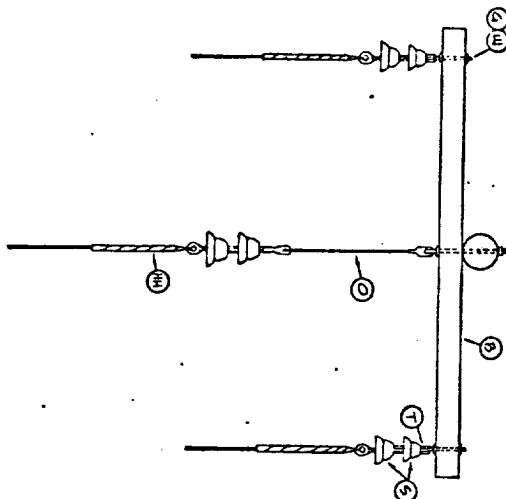
2. THIS CONSTRUCTION STANDARD TO BE USED ON ALL LINES PAULT ON NATIONAL RESOURCE LANDS. 3. DO NOT INSTALL GROUND WIRE PAUT NEUTRAL CONDUCTOR.



MATERIALS

ITEM	DESCRIPTION	QUANTITY
1	POLE, 8" LENGTH, CLASS 7	1
2	ANCHOR, 8" x 17"	2
3	ANY ATTACHMENT, 173A	2
4	ANY ATTACHMENT, 173A	2
5	ANY ATTACHMENT, 173A	2
6	ANY INSULATOR, 1005	2
7	ANY INSULATOR, 1005	2
8	CLAMP, 3" x 1/2"	2
9	ANY CLAMP, 3" x 1/2"	2
10	ANY CLAMP, 3" x 1/2"	2
11	ANY CLAMP, 3" x 1/2"	2
12	ANY CLAMP, 3" x 1/2"	2
13	ANY CLAMP, 3" x 1/2"	2
14	ANY CLAMP, 3" x 1/2"	2
15	ANY CLAMP, 3" x 1/2"	2
16	ANY CLAMP, 3" x 1/2"	2
17	ANY CLAMP, 3" x 1/2"	2
18	ANY CLAMP, 3" x 1/2"	2
19	ANY CLAMP, 3" x 1/2"	2
20	ANY CLAMP, 3" x 1/2"	2
21	ANY CLAMP, 3" x 1/2"	2
22	ANY CLAMP, 3" x 1/2"	2
23	ANY CLAMP, 3" x 1/2"	2
24	ANY CLAMP, 3" x 1/2"	2

DATE: 7-15-77	TITLE: PRIMARY ANGLE STRUCTURE 60°-90° 12,500 VOLT ASGR
DRAWN BY: mortill	
DESIGN BY: SY	
CHECKED BY: SY	
APPROVED BY: SY	
SCALE: NONE	
PRODUCTION DEPT. CONOCO	
JOB: ELEC. SPECS.	
DRAWING NO: ES-27	



ITEM	QTY
B	1
U	3
HH	3
O	1
S	6
T	2
W	3

NOTE:
FOR MATERIALS, SEE
DRUGS, ES-1

DATE: 7-15-71		TITLE: EPOXY INSULATOR (EXTENSION LINK)	
DRAWN BY: L. MORTILLI		PRODUCTION DEPT. CONOCO	
DESIGN BY:		HOBBS DIVISION	
CHECKED BY: SK		JOB: ELEL. SPELH	
APPROVED BY: SK		DRAWING NO. ES-28	
SCALE: 1/2" = 1"			