Form 3160-3 (November 1983)

SUBMIT IN ! LICATE\*

DATE 10-16-91

(Other instructions on

30-115-2686.	5,(
Budget Bureau No. 1004-0136 Expires August 31, 1985	C/A

(formerly 9-331C)		ED STATES	reverse si	de)	Expires August	31, 1985	
	DEPARTMENT	OF THE INT	ERIOR	Ī	5. LEASE DESIGNATION	AND SERIAL NO	
;	BUREAU OF	LAND MANAGEM	IENT		NM-77018		
APPLICATION	FOR PERMIT T	O DRILL, DEI	PEN, OR PLUG B	ACK	6. IF INDIAN, ALLOTTE	OR TRIBE NAM	
a. TYPE OF WORK	rit ≅ine ( e e e e	DEEPEN 🗆	PLUG BAC	CK 🗆	7. UNIT AGREEMENT N	AME	
b. TYPE OF WELL	18 18 S.S.		SINGLE X TENTE	9 🗔 🖯	S. FARM OR LEASE NAI		
WELL W	ELL CTREE	×	ZONE ZONE		PECOS VALLEY		
,	COLLINS &	WARE, INC.	00113	1991  -	9. WELL NO.	<del>'</del>	
. ADDRESS OF OPERATOR	00221113 0	1711(2, 1110)	0.65		1		
	600 W. ILLINOIS	, SUITE 701,	MIDLANDAR TEXAS	79701	10. FIELD AND POOL, C	WILDCATUN	
. LOCATION OF WELL (R. At surface	eport location-clearly and	in accordance with a	y State requirements.*)	*	RUSTLER BLU	JFF ATOKA	
me surrace	534' FNL	AND 1414' FWI	OF SECTION 7		11. SEC., T., R., M., OR AND SURVEY OR AN	BLK.	
At proposed prod. zon		SEC.7, T.24 S					
4. DISTANCE IN MILES	AND DIRECTION FROM NEAR	EST TOWN OR POST OF	w.c		12. COUNTY OR PARISH	13. STATE	
3 MILES	EAST-NORTHEAST	OF MALAGA, NI	EW MEXICO		EDDY	NEW MEX	
5. DISTANCE FROM PROPO LOCATION TO NEAREST	SED*		NO. OF ACRES IN LEASE		ACRES ASSIGNED		
PROPERTY OR LEASE I	INE, FT.	98'	80	TO TH.	319.36		
8. DISTANCE FROM PROP	OSED LOCATION®	19	. PROPOSED DEPTH	20. ROTAR	ROTARY OR CABLE TOOLS		
TO NEAREST WELL, D OR APPLIED FOR, ON TH	IS LEASE, FT.		12,300'	R0	TARY		
1. ELEVATIONS (Show who	ether DF, RT, GR, etc.)	2976.7' GR			UPON APPROVA		
3.	······································		AND CEMENTING PROGRAM	<u> </u>	<u> </u>		
CIED OF TOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	1	QUANTITY OF CEME!	NT.	
17-1/2"	13-3/8"	48#	650'	SUFF	ICIENT TO CIRC		
12-1/4"	9-5/8"	36#	2650'		ICIENT TO CIRC		
8-1/2"	7"	26#	10,600'		SACKS (tieback	)	
6-1/8"	4-1/2" LINER	11.6#	10,300'-12,300		CACKC	111-1	
1A	FTER SETTING PRO ND STIMULATED AS EE ATTACHED FOR:	NECESSARY. SUPPLEMENTAI	NG, PAY ZONE WILL _ DRILLING DATA	BE PERI	11.	25-91	
		BOP SKETCH SURFACE USE	AND OPERATIONS PE	_AN		,	
	PPLICATION HAS E		NMOCD FOR APPROVAL	OF TH	IS		
N ABOVE SPACE DESCRIBE cone. If proposal is to preventer program if an 14.	drill or deepen directional	roposal is to deepen by, give pertinent da	or plug back, give data on pr ta on subsurface locations an Agent	esent produ d measured	ctive zone and propose and true vertical depth	as. Give blowe	
(This space for Fede	ral or State office use)	•					

APPROVED BY \_ APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

\*See Instructions On Reverse Side

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.

TITLE .

Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies

### 

Form C-102 Revised 1-1-29

### OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

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

Onemakor					Lease				Well No.	
COLL:	INS &	WARE	INC.			COS VALL	EY "7"		1	
Unit Letter	Section	<u> </u>	Township	27 501171	Range 20	EAST		County ED	DY	
C	1	/		24 SOUTH		ER31	NMPM	<u></u>		
Actual Footage Lo 534.			NORTH	line and	1414		feet from	me WES	ST line	
Ground level Elev.		om the Produc	ing Formation	line and	Pool		rea mour		Dedicated Acres	St:
2976.7		••••	ATO	KΑ	UNDES.	RUSTLE	R BLUFF AT	OKA	319.36	Acres
	se the acr	eage dedica	sed to the subje	ct well by colored per			at below.			
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		ne lease of o ce-pooling,		ship is dedicated to the	s well, have use					
	Yes		XX No	If answer is "yes" ty	pe of consolidat		BE COMMUNI			
shin form	_ :/	******		escriptions which have						
No allo	wable will	be assigne	d to the well u	til all interests have b	een consolidate	(by communi	tization, unitization	, forced-poolis	ng, or otherwise)	
or until	a non-star	ndard unit,	eliminating suc	n interest, has been ap	proved by the L	A ATEROOF				
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### SUPPLEMENTAL DRILLING DATA

## COLLINS & WARE, INC. PECOS VALLEY 7 WELL NO.1

1. SURFACE FORMATION: Quaternary.

### 2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Base Salt	2550'	Strawn	11,700'
Delaware	2800'	Atoka	11,950'
Bone Springs	6500'	Lower Atoka	11,950'
Wolfcamp	9400'		

### 3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Atoka

Gas

### 4. PROPOSED CASING AND CEMENTING PROGRAM:

13-3/8" 48# H-40 STC casing to be set at 650 feet in 17-1/2" hole. Casing to be cemented with 550 sacks of Class "C" with 2% CaCl. Cement to circulate.

9-5/8" 36# K-55 STC casing to be set at 2650 feet in 12-1/4" hole. Casing to be cemented with 600 sacks of Light cement tailed in with 200 sacks of Class "C". Cement to circulate.

7" 26# K-55 STC and S-95 LTC casing to be set at 10,600 feet in 8-1/2" hole. Casing to be cemented with 600 sacks of Light cement tailed in with 200 sacks of Class "H". Cement to tie back.

4-1/2" 11.6# S-95 LTC liner to be set in interval 10,300 feet to 12,300' in 6-1/8" hole. Liner to be cemented with 250 sacks. Cement to circulate liner.

### 5. PRESSURE CONTROL EQUIPMENT:

Sketches of planned BOP stacks are attached.

### 6. CIRCULATING MEDIUM:

Surface to 650 feet: Fresh water spud mud. Viscosity 30 to 36 as

as required for hole cleaning.

650 feet to 2650 feet: Brine conditioned as necessary for control of

viscosity. Weight 9.5 to 10. pH 9 to 10.

Viscosity 32 to 38.

2650 feet to 10,600 feet: Fresh water-cut brine. Weight 8.8 to 10.

Viscosity 28 to 32. pH 9 to 10.

10,600 feet to T.D.: Water base drilling fluid conditioned as

necessary for control of viscosity, pH, and water-loss. Weight 9.4 to 10. Viscosity 38 to 45. pH 9 to 10. Filtrate 6 to 15.

The circulation system is to be a closed system with no reserve pit. A plastic lined pit, approximately 30'x 40', is planned for disposal of drill cuttings. The cuttings pit is to be deep enough to allow covering the cuttings with a plastic cover and 18" of dirt.

### 7. AUXILIARY EQUIPMENT:

Geolograph from surface to total depth.

Mud logging trailer in use below 4500 feet.

### 8. TESTING, LOGGING, AND CORING PROGRAMS:

Drill stem tests will be made when well data indicates a test is warranted.

It is planned that electric logs will include GR-CNL-Density logs and GR-DLL logs.

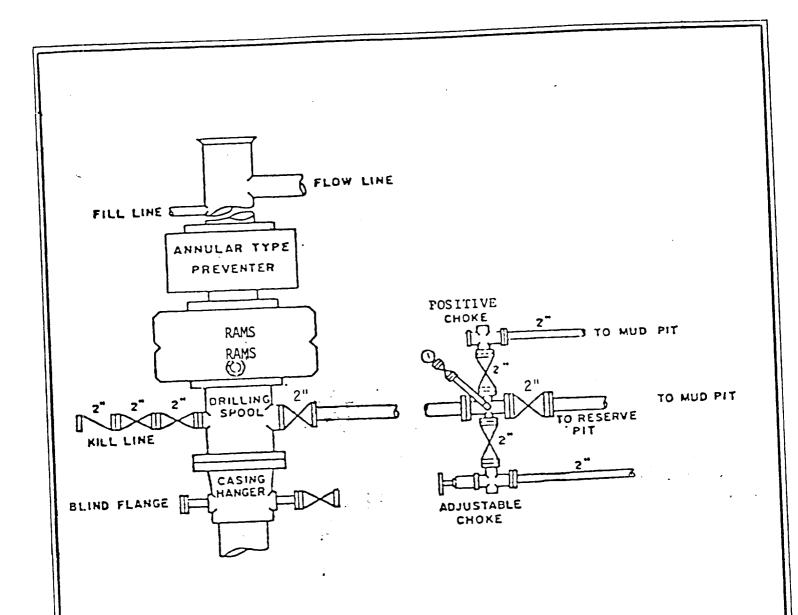
No coring is planned.

### 9. ABNORMAL PRESSURES AND TEMPERATURES:

None anticipated.

### 10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 65 days.

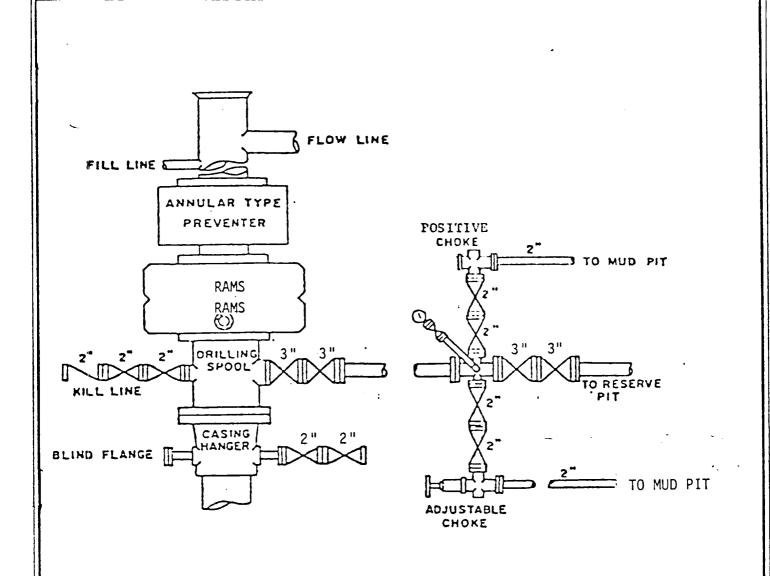


BOP STACK

3000 PSI WORKING PRESSURE

DEPTH INTERVAL

WHILE DRILLING 12-1/4" HOLE



### BOP STACK

5000 PSI WORKING PRESSURE

IN USE WHILE DRILLING BELOW 9-5/8" CASING SEAT

BOP ARRANGEMENT

### SURFACE USE AND OPERATIONS PLAN

### FOR

# COLLINS & WARE, INC. PECOS VALLEY 7 WELL NO.1 534'FNL & 1414'FWL SEC.7, T.24 S., R.29 E. EDDY COUNTY, NEW MEXICO

LOCATED: 3 miles east-northeast of Malaga, New Mexico.

FEDERAL LEASE NUMBER: NM-77018.

LEASE DATE: September 1, 1988.

ACRES IN LEASE: 80.

LESSEE: Santa Fe Energy.

SURFACE OWNERSHIP: City of Carlsbad.

POOL: Wildcat.

POOL RULES: Statewide Rules. 320 acre spacing for deep gas.

EXHIBITS: A. Road Map

B. Plat Showing Existing Wells

C. Drilling Rig Layout

D. Topo Plat

### 1. EXISTING ROADS:

A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. Point "A" on the plat is on US 285 on the north side of Malaga, New Mexico, where a paved road (Eddy County 720) goes eastwest. To go to the proposed well site from this point, exit US 285 to the east and go east 0.8 mile and then north 1 mile to where the paved road turns east. Also see Exhibit "D". Turn east and go easterly 2.1 miles, crossing the Pecos River at 0.6 mile, to arrive at the junction of Eddy County roads 745 and 788. Turn onto Eddy 788 and go southeast 0.1 mile to where a caliche road goes to the right (south). Turn onto the caliche road and go 0.7 mile to arrive at the proposed well site.

### 2. PLANNED ACCESS ROAD:

A. Existing road will be used for access, as indicated on Exhibit "D". No new road will be needed.

### 3. LOCATION OF EXISTING WELLS:

A. Existing wells in the area are shown on Exhibit "B".

### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Necessary production facilities for this proposed well will be located on the well pad.

### 5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is not planned that a water well will be drilled. Water necessary for drilling operations will be purchased and trucked to the well site, or will be moved to the well site by temporary pipeline laid on the ground alongside existing roads.

### 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Sufficient material for construction work should be available on-site. However, if additional material should be needed, it will be taken from an existing caliche pit on privately owned land in the  $SE_4$  of Section 1, T.24 S., R.28 E., Eddy County, New Mexico.

### 7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in a plastic lined cuttings disposal pit.
  - B. Drilling fluids will be hauled away to an approved disposal site.
- C. Water produced during tests will be stored in tanks and hauled to an approved disposal site.
  - D. Oil produced during tests will be stored in test tanks until sold.
- E. Trash, waste paper, garbage, and junk will be contained to prevent scattering by the wind and will be removed and deposited in an approved sanitary land fill.

### 8. ANCILLARY FACILITIES:

A. None necessary.

### 9. WELL SITE LAYOUT:

- A. Exhibit "C" shows the well pad dimensions and the relative location of major drilling rig components.
- B. The purpose of the cuttings pit shown on the plat is described in Section 6 of the SUPPLEMENTAL DRILLING DATA.

### 10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed and the well site will be cleaned.

When the well is plugged and abandoned, all equipment and other material will be removed and the well location will be cleaned. Surface rehabilitation will be the same that the Bureau of Land Management would require for Federal land of similar use and quality.

### 11. OTHER INFORMATION:

A. <u>Topography</u>: The land surface in the area is gently undulating. Land slope in the immediate area of the well site is to the north, west, and south toward Harroun Lake. Regionally, drainage is to the west and south to the Pecos River.

- B. Soil: Top Soil in the area of the well site is a gravelly loam.
- C. Flora and Fauna: The vegetative cover is moderate and includes mesquite, cat claw, javelina bush, yucca, weeds, and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: Harroun Lake is in the immediate area of the proposed well site. The lake is normally dry but may contain water after rains. The Pecos River at its nearest point is about 0.8 mile southwest.
- E. Residences and Other Structures: The nearest occupied dwelling is about a mile distant.
- F. Archaeological, Historical, and Cultural Sites: None observed in the area. However, an archaeological reconnaissance is to be made and a report furnished.
  - G. Land Use: Oil and gas production, grazing, and wildlife habitat.
  - H. Surface Ownership: City of Carlsbad.

### 12. OPERATOR'S REPRESENTATIVE:

Jim O'Briant O'Briant Engineering P. O. Box 10487 Midland, Texas 79702 Phone: 915-683-5511

### 13. CERTIFICATION:

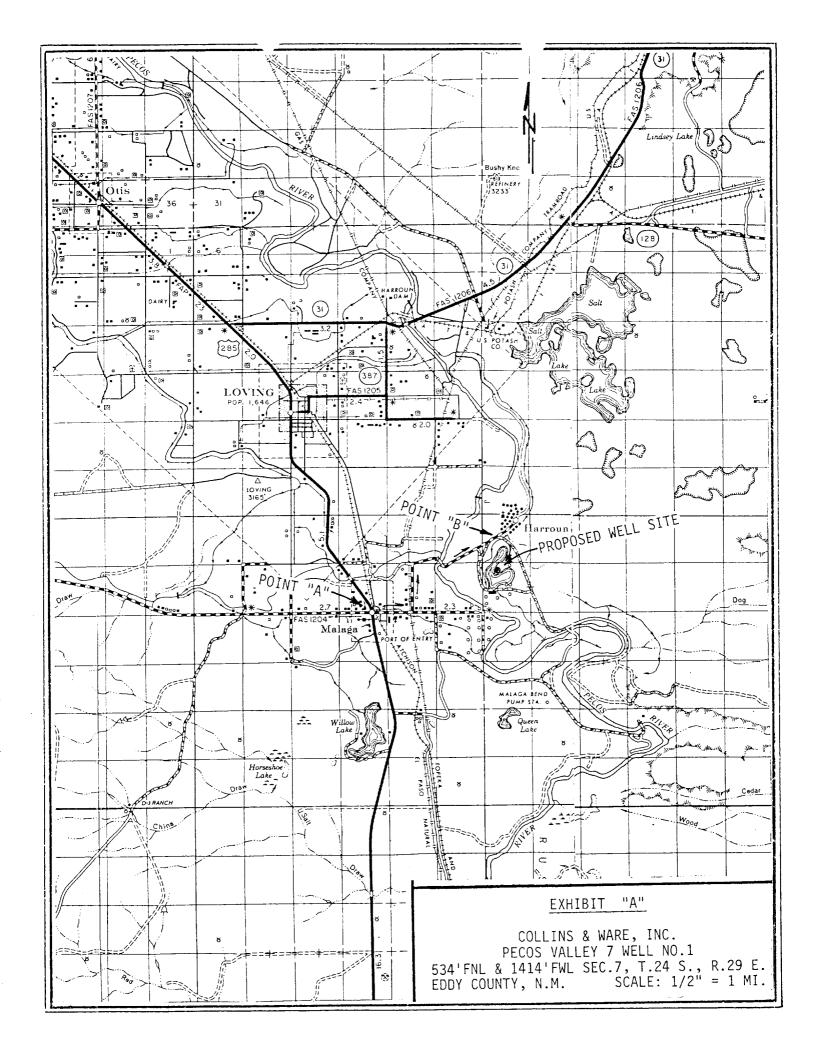
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Collins & Ware, Inc. and its contractors and sub-contractors 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.

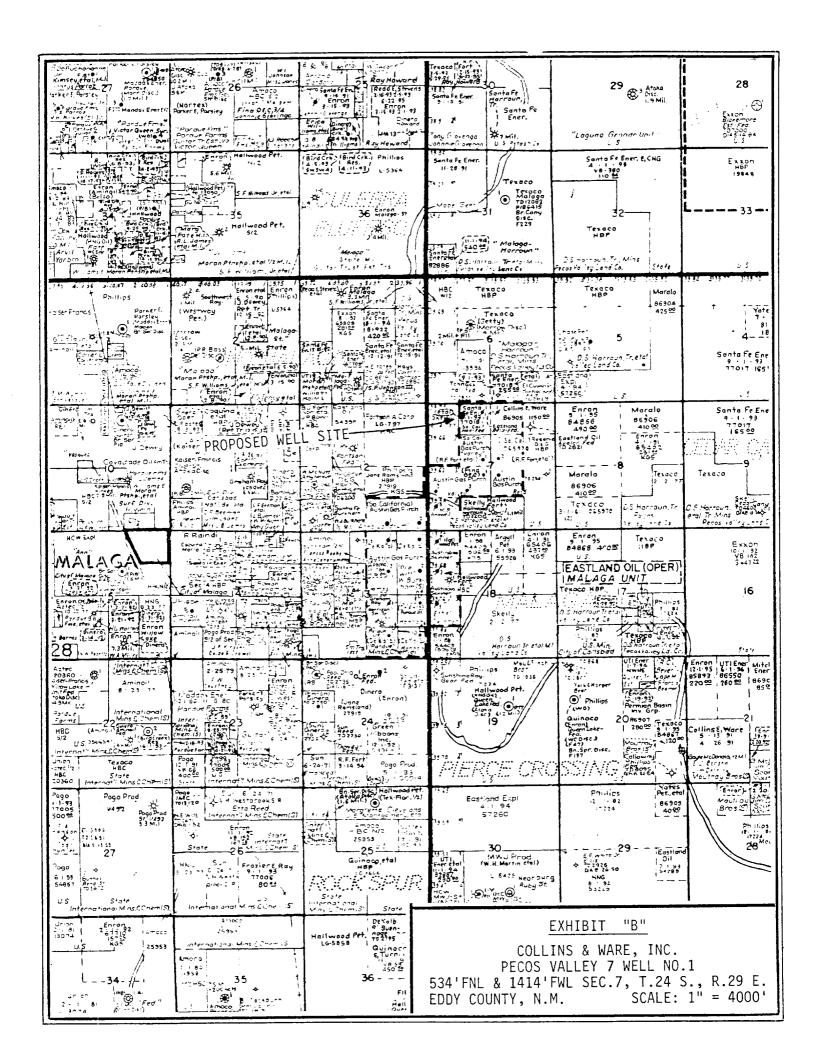
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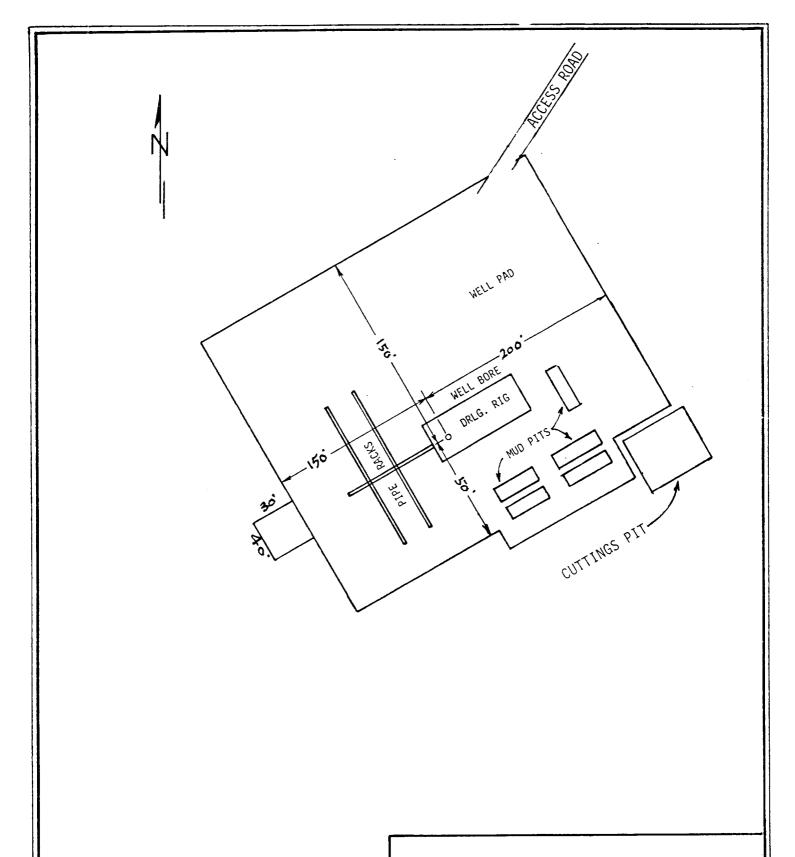
Date:

Arthur R. Brown, Agent for

COLLINS & WARE, INC.







## EXHIBIT "C"

COLLINS & WARE, INC.
PECOS VALLEY 7 WELL NO.1
DRILLING RIG LAYOUT
SCALE: None

