## COPY TO CAR &

30-025-27149

Form 9-331 C (May 1963)	DEPARTMEN	OGICAL SURVE	Y	SUBMIT IN TRI (Other instruct reverse sid	ions on e)	NM OS	NO. 42-R1425.
APPLICATION	FOR PERMIT	TO DRILL, L	$\frac{1}{2}$		<u></u>		
1a. TYPE OF WORK DRIL		DEEPEN	]	PLUG BAC	К 🗌 🛛	7. UNIT AGRIEMENT N	A <b>X E</b>
b. TYPE OF WELL OIL GAN WELL WE WE	S OTHER		SINGLE ZONE	X MULTIPL ZONE	.E	8. FARM OF LEASE PA Elliott, F 9. WELL NO.	
	FROLEUM, INC					9. WELL NO.	
3. ADDRESS OF OPERATOR 4835 LBJ 1 4. LOCATION OF WELL (Re	Freeway, Sui	te 525 - I nd in accordance wit	Dallas, h any State rec	Texas 752 uirements.*)	234	10. FIELD AND FOOL, O Wantz	DR WILDCAT
At survace	and 2310 <sup>°</sup> FNI					11. SEC., T., R., M., OR AND SURVEY OF A	BLK. RKA
At proposed prod. zono		ب				Sec. 9, T	2 <b>1</b> S-R38E
14. DISTANCE IN MILES A	THE PROPERTY AND	CAREST TOWN OR POS	T OFFICE*			12. COUNTY OR PARISE	the second se
	ortheast of			0		Lea	N.M.
15. DISTANCE FROM PROPO	SED	Hunrice, in	16. NO. OF A	RES IN LEASE		OF ACRES ASSIGNED HIS WELL	
LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig	INE. FT.	330' FWL	604	.25		40	
18 DIGTONCE FROM PROP	OSED LOCATION*		19. PROPOSED		20. ROTA	BY OR CABLE TOOLS	
TO NEAREST WELL, DI OR APPLIED FOR, ON TH	RILLING, COMPLETED, IS LEASE, FT.	-0-	7,9	00	F	Rotary 22. APPROX. DATE W	OPE WILL STARTS
21. ELEVATIONS (Show whe 3568.5' G			Ē	ECEI	VEL	111	1, 1980
23.		PROPOSED CASI	NG AND CEM	ENTING PROGRA	M ₩20		
SIZE OF HOLE	SIZE OF CASING	WEIGHT PERF	00T S	TTING DEPTH	pou	QUANTITY OF CEMI	INT
$\frac{14-3/4}{14-3/4}$	11-3/4			400' 000		200	
11	8-5/8			HES. NEW 7	1 <del>641613</del>	850	
7-7/8	4-1/2			900, 120, 1		450	
Please see	the follow	ing attach	ments:				

- Surveyors Plat 1.
- Multi-purpose surface use and Operations Plan and Maps. 2.
- 10 Point Drilling Program. 3.
- B.O.P. Schematic 4.
- Archaeological Survey
  Surface Agreement by Landowner and Operator.

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. 

STONED W. P. alma	V.P. Operations	Date October 8, 1980
This space for Federal or State office use)		
PERMIT NO		NOV 0 1 1980
APPROVED BY CONDITIONS OF APPROVAL, IF ANY :	(1P) i:	

## NEW EXICO OIL CONSERVATION COMMISSION WELL LUCATION AND ACREAGE DEDICATION FLAT

Form C-122 Supersedes C-128 Effective 1-1-65

		All distances must be from	the suter boundaries o	st the section	
-perator		· L	ra se		Well No.
QUAN	AH PETROLEUM	CORPORATION	Elliott	Federal "A"	1
I'nit Letter	Section	Township	Range	County	
E	9	21 South	38 East	Le	a <b>a</b>
Actual Footage Loc	1	Li boach	JULASC		. u
2310		Nowth	220	11 •	
		North line and		et from the West	11110
Ground Level Elev.	Producing For		ol .		Dedicated Acreage:
3568.5	/	150			-10 Acres
1 Outline th	a acreage dedica	ited to the subject well	by colored pencil	or hachure marks	on the plat below
1. Outline th	te deledare douted	ited to the subject went	b) colored penetr	or allengie marko	on the plat below.
interest an	nd royalty).				hip thereof (both as to working
	communitization, 1	initization, force-pooling.	etc?		ts of all owners been consoli-
this form i	f necessary.)				communitization, unitization,
					been approved by the Commis-
		s. unti a non-stangard g	, enameting bu	en intercoro, nus	been approved by the Commis-
sion.					
					CERTIFICATION
	1				CERTICATION
			i		
			1	1 he	reby certify that the information con-
	l			tain	ed herein is true and complete to the
	I				of my knowledge and belief.
-0			ł		
2310	1				
~ ~	1			Name	
		·			
			1		P. Oliver
	•		ł	Ponitio	
	ł		I	Vic	ce President-Operations
	1		1	Compa	лу ,
	1		1	Qua	nah Petroleum, Inc.
	1		1	Date	
O <del>-</del> — 330 <sup>°</sup>	1		1	10-	-21-80
	•		I		21-80
			OF NEW H	show note unde ist	emby certify that the well location on on this plat was plotted from field is of actual surveys made by me or or my supervision, and that the some irue and correct to the best of my viedge and belief.
	1		L. JONES	Date S	iurveyed
	1		3640	21	September 29, 1980
	1		The states		wred Professional Engineer
	1		THE LAND SUP		Land Surveyor
			<u>_</u>		alect of free
			······································		3640

QUANAH PETROLEUM, INC.

DRILLING OPERATIONS PLAN

ELLIOTT FEDERAL #2

SECTION 9, T21S, R38E

330' FWL 2310' FNL

ELEVATION: 3568.5 G. L.

1. Geologic Name of Surface: Tertiary

Salt	1630	Glorieta	5590
Salt (base)	2900	Tubb	6670
San Andres	4315	Abo	7310
Jan marca			

2. Estimated Tops of Important Geologic Markers.

Salt	1630	Glorieta	5590
Salt (base)	2900	Tubb	6670
San Andres	4315	Abo	7310

3. Estimated Tops of Anticipated Water, Oil, Gas or other Mineral Bearing Formations.

San	Andres	4315	(oil)
Abo		7310	(oil)

4a. The Proposed Casing Program.

<u>Hole Size</u>	Casing O.D.	Grade	Weight	Setting Depth	New or Used
14-3/4"	11-3/4"	As ava	ilable	400'	N
11"	8-5/8"	K-55	24#	1650'	N
7-7/8"	4-1/2"	K-55	10.5#	1600 *	N
7-7/8"	4-1/2"	K-55	11.6#	3000'	N
7-7/8"	4-1/2"	K-55	10.5#	<b>7</b> 000'	N
7-7/8"	4-1/2"	K-55	11.6#	<b>79</b> 00'	N

4b. Cementing Program, Including Types, Amounts and Additives. The 11-3/4" casing will be cemented to surface with 200 sacks of Class "C" cement with 23 CaCl<sub>2</sub> - W.O.C. time, 8 hours. The 8 5/8" casing will be cemented to surface with approximately 650 sacks of Class "C" cement with 4% gel, 1/4 lb/bbl. flocele and 2% Ca Cl<sub>2</sub>, tailed by 200 "C" with 2% Ca Cl<sub>2</sub> - W.O.C. time, 12 hours.

The 4 1/2'' production casing will be cemented with 450 sacks 50/50 Pox-Mix "H" with 10% salt.

5. B.O.P. Specifications and Testing (See attached Schematic for size and pressure rating.)

One annular BOP (Hydril) and dual ram type BOP with pipe rams and blind rams. All equipment to have a 3,000# or better working pressure. The accumulator to close and open all components of the BOP stack without operating pump. Blind and pipe rams will be tested to 3000 psi and the annular preventer to 1500 psi before drilling out.

6. Mud Program.

Run a low solids, non-dispersed mud utilizing lime to flocculate gel.

As long as possible, mix sweeps 4-6 hours before pumping.

Utilize a desander to control weight and minimize water used and cut mud costs.

Do not add oil, diesel, Soltex or Bentonite extenders to  $\overline{mud}$ .

Do not mix mud additives for water loss control.

Most of all, exercise prudent judgment on materials added, i.e., if you don't need it, don't add it.

For lost circulation: DO NOT pre-treat with LCM for circulation loss. In the event we do lose circulation, utilize the information available to you to decide your plan of action.

Mud weights will not exceed 9.8 ppg and will be less if water conditions will permit.

Materials planned for use in mud system are gel, caustic soda, lime and soda ash. Dick's mud seal and cottonseed hulls shall be used to control any possible lost circulation 7a. Type of Drilling Tools and Auxiliary Equipment.

A drilling rate recorder, calibrated to record drilling time for each one foot interval will be used.

A kelly cock will be used, a TIW safety value and inside BOP will be available on the rig floor. A float value will be used at the bit.

The mud system will be monitored by use of manually placed floats and markers.

7b. Deviation Control.

Deviation will be monitored by wireline surveys, every 500' on surface hole and on bit trips thereafter. A maximum dogleg severity of  $1 \frac{1}{2}$  per hundred feet will be maintained with a maximum of 7° at total depth.

8. Sample, Logging, Testing and Coring Program.

Drill cutting samples will be taken every 10 feet from 3500' to total depth.

A guard foroxo and a density neutron log will be run from the base of the surface casing to total depth.

Drill stem tests and cores will be at the discretion of the wellsite geologist. Possible DST's may be run in the San Andres and Abo formations.

9. Anticipated Abnormal Pressure and Other Problems.

Normal pressure gradients are expected and no hydrogen sulfide or other potential hazards are expected.

10. Anticipated Starting Date and Duration.

The anticipated starting date, pending approval, will be December 1, 1980, due to rig availability and lease commitments. The duration will be approximately three weeks.

ON THE PERMANAN

NOV 1 8 1980

