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PROPERTY OR LEASE (Also to nearest dr)	LINE, FT. lg. unit line, if any)	660'		160		10 11	160			
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OR APPLIED FOR, ON TH		2640'		8400'			ROTARY			
21. ELEVATIONS (Show wh	hether DF, RT, GR, etc.)						22. APPROX. D.	ATE WOR	K WILL	START*
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23.		PROPOSED CASI	G AND	CEMENTING	PROGRAM	M				
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SEE FOLLOWING ATTACHMENTS:

- 1. SURVEYORS PLAT
- 2. MULTI-PURPOSE SURFACE USE AND OPERATIONS PLAN W/MAPS
- 3. 10-POINT DRILLING PROGRAM
- 4. BOP SCHEMATIC
- 5. ARCHAEOLOGICAL SURVEY

GAS NOT DEDICH TED.

βD 2 6 198

OIL & OAS U.S. GEOLOGICAL SURVEY ROSWELL, KEW 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	Towrence TIT	Duly. Supt.	DATE 4-2-82
(This space for	Federal or State office use)	(TD b
PERMIT NO		APPROVAL DATE	Posted De book
APPROVED BY	(Orig. Sgd.) GEORGE H. STEWAR		API + 3-82
CONDITIONS OF A	PROVAL, IF ANY :		
	APR 10 (262		
	FOR		
	JAVAUS A. GULLIAM DISTICUT SUPERVISOR		

N MEXICO OIL CONSERVATION COMMISS. WELL LOCATION AND ACREAGE DEDICATION PLAT

OUANAH PETROLEUM CORPORATION Louse C Well Ne. Init Letter Section Township Bange County 13 26 South 27 Last Eddy		All distances must be fr	om the outer boundaries of	the Section.	
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3121.2' Dotting the acteuge dedicated to the well, outline each and identify the ownership thereof (both as to working interest and result). 2. If more than one leave is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and result). 3. If more than one leave of different ownership is dedicated to the well, have the interests of all owners been consolidated for the communitization. unitization, inter-pooling, etc? 1. Ves No 1. 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, tereat-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. 660 - Q CERTIFICATION 1. hareby certify that the information constant and tract descriptions which have actually been consolidated (by communitization, unitization, tereater is the base of more description and the actual of the commission. 660 - Q Image: the communitization description and the communitization description and the communitization description and the communitization. 660 - Q Image: transmitted to the communitization. 660 - Q Image: transmitted to the communitization. 660 - Q Image: transmitted to the communited ton the communitization.			660 teet	trom the West	line
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QUANAH PETROLEUM, INC. PRILLING OPERATIONS PLAN HAY FEDERAL C WELL NO. 1 Section 13, T26S, R27E 1980' FSL and 660' FWL ELEVATION: 3121.2' GL EDDY COUNTY, NEW MEXICO

1. Geologic Name of Surface: Castile

Salt	1300	Brushy Canyon	4390
Salt (Base)	1870	Bone Spring	6065
Delaware Lime	2315	Third Bone Spring	8755
Delaware Sand	2370	Wolfcamp Shale	9090
Cherry Canyon	3210	-	

2. Estimated Tops of Important Geologic Markers.

Salt	1300	Brushy Canyon	4390
Salt (Base)	1870	Bone Spring	6065
Delaware Lime	2315	Third Bone Spring	8755
Delaware Sand	2370	Wolfcamp Shale	9090
Cherry Canyon	3210	-	

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

Delaware Sand	2370 (oil)	Bone Spring	6065 (oil)
Cherry Canyon	3210 (oi1)	Third Bone Spring Sand	8755 (oil)
Brushy Canyon	4390 (oil)	Wolfcamp Shale	9090 (oil)

4a. The Proposed Casing Program.

Hole Size	Casing O.D.	Grade	Weight	Setting Depth	New or Used
14-3/4"	11-3/4"	As ava	ailable	500 '	New
11"	8-5/8"	K-55	24#	2400 '	New
7-7/8"	4-1/2"	K-55	11.6#	1000'	New
7-7/8"	4-1/2"	K-55	10.5#	6200 '	New
7-7/8"	4-1/2"	K-55	11.6#	8500 '	New

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 2% CaCl₂ - 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% CaCl₂, tailed by 200 C with 2% CaCl₂ - W.O.C. time, 12 hours.

The 4-1/2" production casing will be cemented with 450 sacks 50/50 Poz-Mix H with 10% salt, tailed with 200 sacks Class H.

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 Cl₂, tailed by 200 "C" with 2% Ca Cl₂ - 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, tailed w/200 sx Class H.

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 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: <u>DO NOT</u> 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 10.0 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 cottenseed 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 valve and inside BOP will be available on the rig floor. A float valve 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 $1 \frac{1}{2^{\circ}}$ 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 April 6, 1982 due to rig availability. The duration will be approximately four weeks.

E	Exhibit (?	۲, .			
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INSHIP 26 SOUTH, RANGE 27 EAST, N.M.P.M.



EXHIBIT "C"

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QUANAH PETROLEUM, INC. HAYS FEDERAL "C" #1 SECTION 13, T26S, R27E EDDY COUNTY, NEW MEXICO QUANAH PETROLEUM, INC. HAY FEDERAL "G" NO. 1 SEC. 13 - T26S - R27E EDDY COUNTY, NEW MEXICO



All preventers are rated 3000 psi working pressure.

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