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	Lease	Well No.
Alpha Twenty One Production Company	El Paso Justis Federal	2

Unit Letter	Section	Township	Range	County
P	11	25 South	37 East	Lea

Actual Footage Location of Well:
330 feet from the South line and 660 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage
3118.3	Seven Rivers - Queen	Langlie Mattix	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

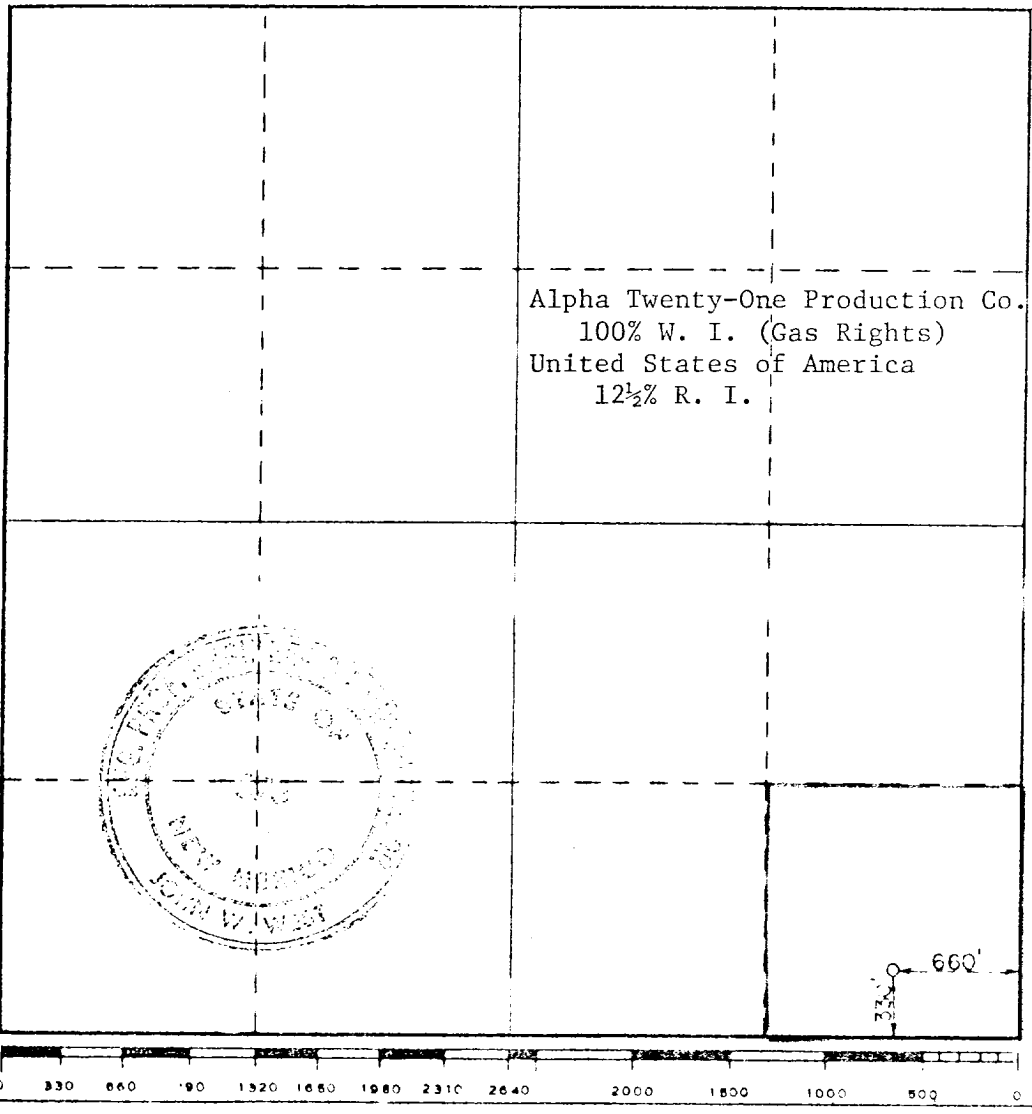
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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: Tommy Phipps

Position: Executive Vice President

Company: Alpha Twenty-One Production Co

Date: 01-23-80

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: 1-16-1980

Registered Professional Engineer and/or Land Surveyor

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6663
Ronald J. Eidson 3239

DRILLING PROGNOSIS

I. Well Identification

Lease Name: El Paso Justis Federal

Well No.: 2

Location: 330 FSL & 660 FEL Section 11, T-25-S, R-37-E

County: Lea

State: New Mexico

Elevations: 3118 G. L. (3128 RKB)

II. Drilling Objective:

Zone: Seven Rivers - Queen

Total Depth: 3600

Pool Name: Langlie Mattix

Productive Interval: 2950-3500

III. Formation Tops:

Zone	Tops		Gross Interval Drilled	Probable Fluid Production
	Drilling Depth	Subsea Depth		
Ogallala (Surface)	- - -	- - -	- - -	- - -
Santa Rosa	245	+2873	265	
Dewey Red Beds	510	+2608	380	
Rustler Anhydrite	890	+2228	100	
Salado Salt	990	+2128	1210	
Tansil	2220	+898	150	
Yates	2350	+768	250	Hydrocarbons
Seven Rivers	2600	+518	450	Hydrocarbons
Queen	3050	+68	550	Hydrocarbons
Total Depth	3600	-482	3600	- - - -

IV. Hole Size

Hole	Bit Size	T. D.	Gross Interval
Conductor	15	40	40
Surface	12 1/4	400	360
Production	7 7/8	3600	2640

V. Casing Program:

A. Casing Design

String	Casing Size					
	O. D.	Wt.	Grade	Threads	Amount	Cond.
Conductor	12 3/4	33	B	8 Rd	30	New
Surface	8 5/8	28	B	8 Rd	400	New
Production	5 1/2	17.0	J-55	8 Rd	3600	New

B. Float Equipment:

Surface Casing: 8 5/8-inch guide-shoe and 8 5/8-inch insert float.

Production Casing: 5 1/2-inch guide-shoe and 5 1/2-inch float collar with automatic fill.

C. Centralizers:

Surface Casing: One Centralizer at the float collar and one centralizer two joints above float collar.

Production Casing: Run a total of 8 centralizers. Place one centralizer at the guide shoe and one centralizer at the float collar with the remaining being placed 80 to 90 feet apart or every other joint.

D. Wellhead Equipment:

Larkin 8 5/8 x 5 1/2 Fig 92 Casinghead. Larkin 5 1/2 x 2 3/8 Type TH tubinghead complete with slips and bell nipple.

VI. Mud Program

A. Surface Hole:

Drill surface hole with a fresh-water gel (approximately 8.5 lb/gal) while maintaining a high enough viscosity to adequately clean hole.

Add paper as needed to control excess seepage.

Before drilling below surface pipe, jet cuttings out of working pit into reserve pit and then switch from circulating through working pit to circulating through reserve pit.

B. Production Hole:

Before entering salt section, switch mud system to a saturated salt system (10.1 lb/gal). At 2200', switch back out of reserve pit and back into working pit. Also, at this point, start adding starch and brine gel to lower water loss and raise viscosity.

The mud shall have a water loss of 10 cc/30 min and a viscosity of 34 to 36 sec. before reaching 2350' (top of Yates).

In order to protect the drill string, sufficient lime shall be added to the mud to maintain a safe PH level.

VII. Cementing Program

A. Surface Pipe:

Cement surface pipe with approximately 400 sacks (or as required) of API Class-C cement containing 2% Calcium Chloride. Before resuming drilling operations, allow cement to set for a sufficient time to gain a 500-psi compressive strength (18 hours). Also, before drilling plug, the pipe shall be tested to 700 psi for 30 minutes.

B. Production String:

Cement long string with approximately 350 sacks API Class-C cement containing 3% Halliburton Enconolite mixed to a slurry weight of 11.3 lb/gal followed by 250 sacks of a 50-50 blend of Pozmix "A"

and API Class-C containing 18% salt and 2% gel . . having a slurry weight of 14.1 lb/gal. Pump 30 barrels of water ahead of the cement to help remove the mud filter cake.

Once top plug is bumped, pressure test casing to 1500 psi.

The total specified cement volume of 600 sacks provides for an excess that should be sufficient to bring the cement top back to the surface. Before the cement job is actually performed, the required cement volume will be checked against the open hole caliper log to determine the actual amount of cement necessary to bring the cement back to the surface.

VIII. Formation Evaluation:

A. Drilling Rate:

1. The drilling rate shall be monitored with a geolograph from the surface to total depth.

2. As part of their farmout agreement, El Paso Natural Gas Company requires that the penetration rate be tabulated in 10-feet increments over the entire hole.

B. Well cutting Samples:

One set of well cutting samples shall be gathered every 10 feet from the surface to total depth. Each sample is to be cleaned, bagged, and tagged and then grouped into bundles of ten samples per bundle with one bundle representing each 100-feet drilled. After the drill cuttings have been reviewed by the well geologist, they shall be delivered to Midland Sample Cut, 704 S. Pecos Street, Midland, Texas.

C. Mud Logging: None

D. Drill-Stem Testing: None

E. Coring: None

F. Well Logging:

Open-Hole Logs

Log	Interval	
	2" = 100'	5" = 100'
CDL-Neutron-GR	T.D. - Surface	T. D. - 2000'
Guard-Forxo	T. D. - 2000'	T. D. - 2000'

Cased-Hole Logs

Log	Interval	
	2" = 100'	5" = 100'
GRN-CCL	T.D. - 2000'	T.D. - 2000'

Log Distribution

Company	Number of Copies	
	Field Prints	Final Prints
Alpha Twenty-One Production Company 2100 First National Bank Building Midland, Texas 79701	8	8
United States Geological Survey P. O. Box 1157 Hobbs, New Mexico 88240	0	6
Mr. O. L. Dilworth El Paso Natural Gas Company 1800 Wilco Building Midland, Texas 79701	3	3

IX. Blowout Preventer System:

A 10 3/4 2000-psi rotating head will be used while drilling the surface hole. Before drilling out from under the surface pipe, the well will be equipped with a 3000-Psi 10-inch series 900 double-ram hydraulic preventer. The blowout preventer shall be used through the running of the production string.

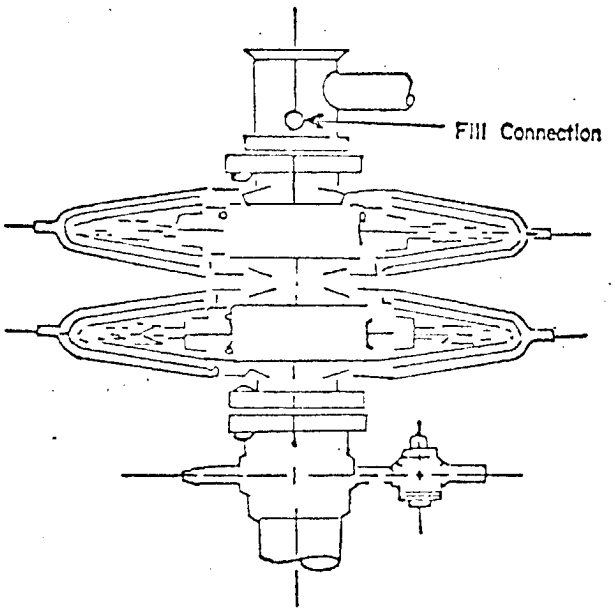
Attached is a diagram of the required BOP system.

X. Hazardous Zones

None anticipated.

XI. Duration of Operations:

The total elapsed time required for drilling and completing the subject well is expected to be 30 days.



Shaffer Type E Series 900 Hydraulic B.O.P.

3000 PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

Series 900 Flanges, or Better.

Note: B.O.P system will meet the conditions of drilling approval required by the U.S.G.S. District Office in Hobbs, New Mexico.

SE ROTARY TABLE

Flow line will have to be made to fit UNDER Rotary.