

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY30-025-26721
5. LEASE DESIGNATION AND SERIAL NO.

LC 054667

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

El Paso Tom Federal

9. WELL NO.

3

10. FIELD AND POOL, OR WILDCAT

Langlie Mattix (D)

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREASection 33, T-25-S,
R-37-E, NMPM

12. COUNTY OR PARISH 13. STATE

Lea

New Mexico

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Alpha Twenty-One Production Company

3. ADDRESS OF OPERATOR

2100 First National Bank Building, Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1650 FWL & 1650 FNL, Section 33

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

NW corner of Lease borders SE corner of City limits, Jal, N.M.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 330 feet

16. NO. OF ACRES IN LEASE

440

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

475'

19. PROPOSED DEPTH

3300'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3001 G.L. (3011 RKB)

22. APPROX. DATE WORK WILL START*

04-01-80

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
15	13 3/8	33	30	20 (circulate)
12 1/4	8 5/8	28	400	400 (circulate)
7 7/8	5 1/2	17	3300	600 (circulate)

A 10 3/4-inch 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 BOP system,

NOTE: For other necessary BOP data required with the APD, see the attached drilling prognosis.

RECEIVED

JAN 23 1980

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

Tommy Phipps

TITLE Executive Vice President

DATE 01-18-80

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ACTING DISTRICT ENGINEER

*See Instructions On Reverse Side

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

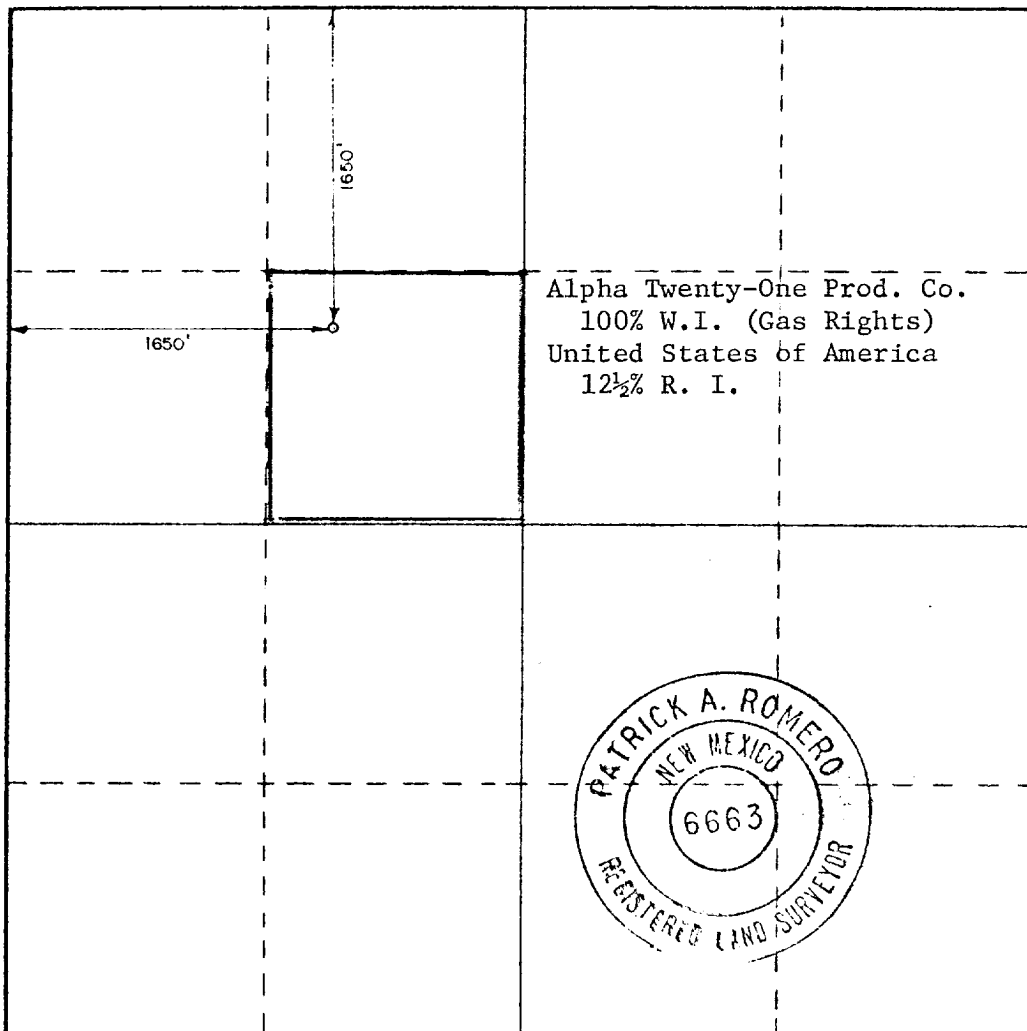
Operator Alpha Twenty One Production Company		Lease El Paso Tom Federal		Well No. 3
Unit Letter F	Section 33	Township 25 South	Range 37 East	County Lea
Actual Footage Location of Well: 1650 feet from the North line and 1650 feet from the West line				
Ground Level Elev. 3001	Producing Formation Seven Rivers - Queen		Pool Langlie Mattix	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.

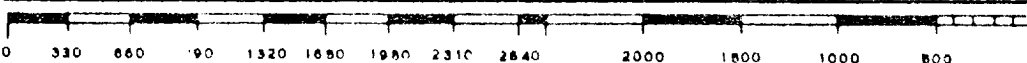
Name
Tommy Phipps
Position
Executive Vice President
Company
Alpha Twenty-One Prod. Co.
Date
1-18-80

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
12-27-1979

Registered Professional Engineer and/or Land Surveyor

Certificate No. **JOHN W. WEST 878**
PATRICK A. ROMERO 6663
Ronald J. Eidson 3239



DRILLING PROGNOSIS

I. Well Identification:

Lease Name: El Paso Tom Federal

Well No.: 3

Location: 1650 FWL & 1650 FNL Section 33

T-25-S, R-37-E

County: Lea

State: New Mexico

Elevations: 3001 G. L. (3011 RKB)

II. Drilling Objective:

Zone: Seven Rivers - Queen

Total Depth: 3300

Pool Name: Langlie Mattix

Productive Interval: 3020-3250

III. Formation Tops:

Zone	Tops		Gross Interval Drilled	Probable Fluid Production
	Drilling Depth	Subsea Depth		
<u>Rustler Anhydrite</u>	<u>920</u>	<u>+2081</u>	<u>230</u>	
<u>Salado Salt</u>	<u>1150</u>	<u>+1851</u>	<u>1240</u>	
<u>Tansil</u>	<u>2390</u>	<u>+ 611</u>	<u>150</u>	
<u>Yates</u>	<u>2540</u>	<u>+ 461</u>	<u>300</u>	
<u>Seven Rivers</u>	<u>2840</u>	<u>+ 161</u>	<u>280</u>	<u>Hydrocarbons</u>
<u>Queen</u>	<u>3120</u>	<u>- 119</u>	<u>180</u>	<u>Hydrocarbons</u>
<u>TOTAL DEPTH</u>	<u>3300</u>	<u>- 299</u>	<u>3300</u>	<u>---</u>

IV. Hole Size:

<u>Hole</u>	<u>Bit Size</u>	<u>T.D.</u>	<u>Gross Interval</u>
Conductor	<u>15</u>	<u>40</u>	<u>40</u>
Surface	<u>12 1/4</u>	<u>400</u>	<u>360</u>
Production	<u>7 7/8</u>	<u>3300</u>	<u>2500</u>

V. Casing Program:

A. Casing Design

<u>String</u>	<u>O.D.</u>	<u>Casing Size</u>		<u>Threads</u>	<u>Amount</u>	<u>Cond.</u>
		<u>Wt.</u>	<u>Grade</u>			
Conductor	13 3/8	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	3300	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 2500, 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 2600.

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 Econolite 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 cement containing 18% salt and 2% gel and 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-foot 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 wellsite geologist,
they shall be delivered weekly 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. - 2200
Guard - Forxo	T.D. - 2200	T. D. - 2200

Cased-Hole Logs

Log	Interval	
	2" = 100'	5" = 100'
GRN-CCL	T.D. - 2200	T.D. - 2200

Log Distribution

Company	No. 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