

APPLICATION OF GEORGE L. BUCKLES COMPANY FOR A
WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO

CASE NO. 2867 - JULY 24, 1963

NAME OF FIELD - Langlie-Mattix

LOCATION - Knight Lease - Being the W/2 of the SE/4 of Section 22,
and the E/2 of the SE/4 of Section 21, T-24-S, R-37-E,
and containing 160 acres, more or less

RESERVOIR - Queen Sand

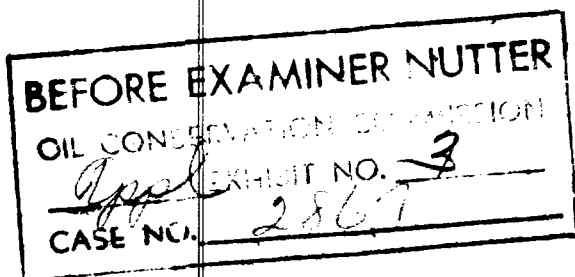
PRESENT STATUS
OF THE LEASE -

The lease now has four producing oil wells
operated by pumping units with electric power. Current
production is 39 barrels of oil per day and no water.
Average total depth of wells 3,500 feet. Casing setting
on present wells averages 3,260 feet. Accumulated oil
production from the lease was 752,894 barrels at July 1,
1963. Gravity of oil is 36° API.

PLAN OF
DEVELOPMENT -

The plan is to drill nine water injection wells.
One well is to be drilled in the center of the lease, one
well in each corner of the lease and one well on each side
of the lease. All line injection wells are to be drilled as
close to the lease line as possible but on the Knight lease.

The plan is to drill the center well first with cable
tools. Surface casing will be set through all encountered



fresh water zones and cemented to the surface. The Rustler salt water is expected to be encountered at approximately 1,100 feet. It will be tested for possible flood water use.

All oil and gas zones will be tested to determine the proper casing setting for the injection wells. If conditions encountered are favorable, the plan is to set the long string of casing at or near the top of the oil bearing zones and complete open hole. If any conditions are encountered that would appear detrimental to an open hole completion, the plan is to set through and selectively perforate. Such conditions might be the presence of possible thief zones or shale streaks that may swell upon contact with water.

The other injection wells will be drilled with rotary tools and casing settings will be dictated by information gathered in drilling the first well. Some type of log will be run in each well for correlation purposes.

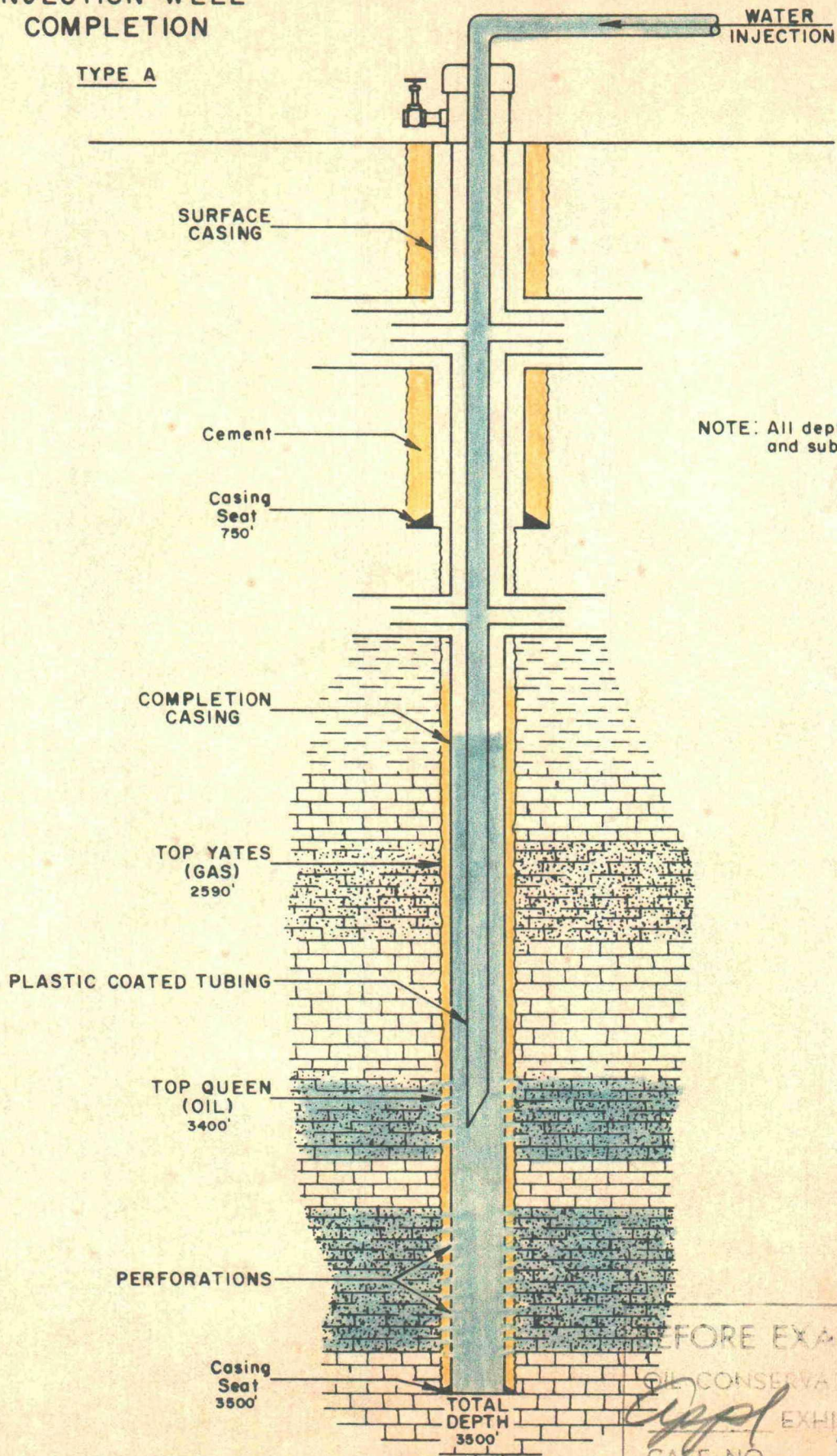
Initial injection rates are expected to be 300 barrels per well per day. Later rates will be dictated by performance and proration.

Plans are to build a water plant capable of furnishing water for all of the nine injection wells.

BEFORE EXAMINER NUTTER
OIL AND GAS FIELD NO. _____
CASE NO. _____

TYPICAL INJECTION WELL COMPLETION

TYPE A



BEFORE EXAMINER NUTTER

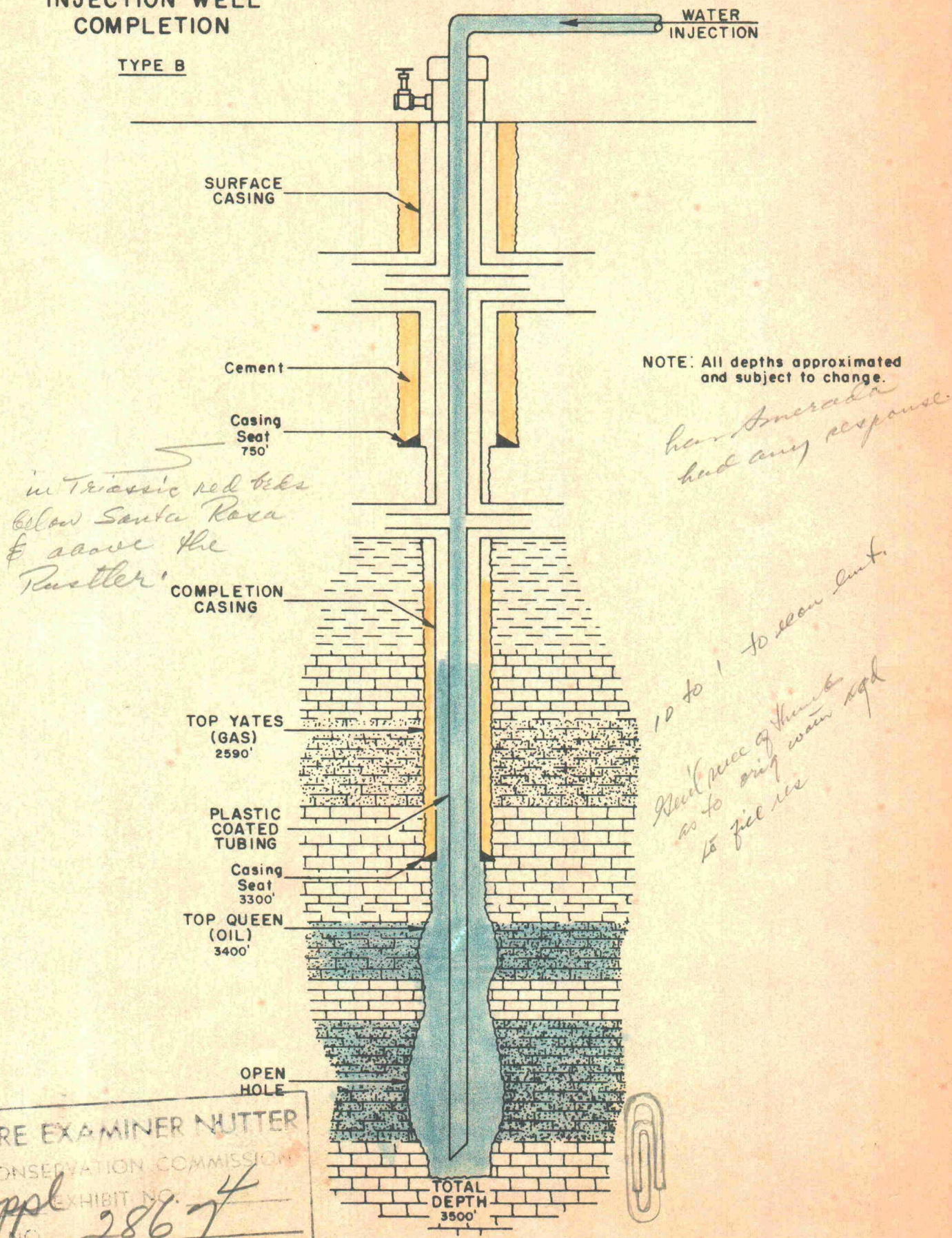
OIL CONSERVATION COMMISSION

EXHIBIT NO. 3

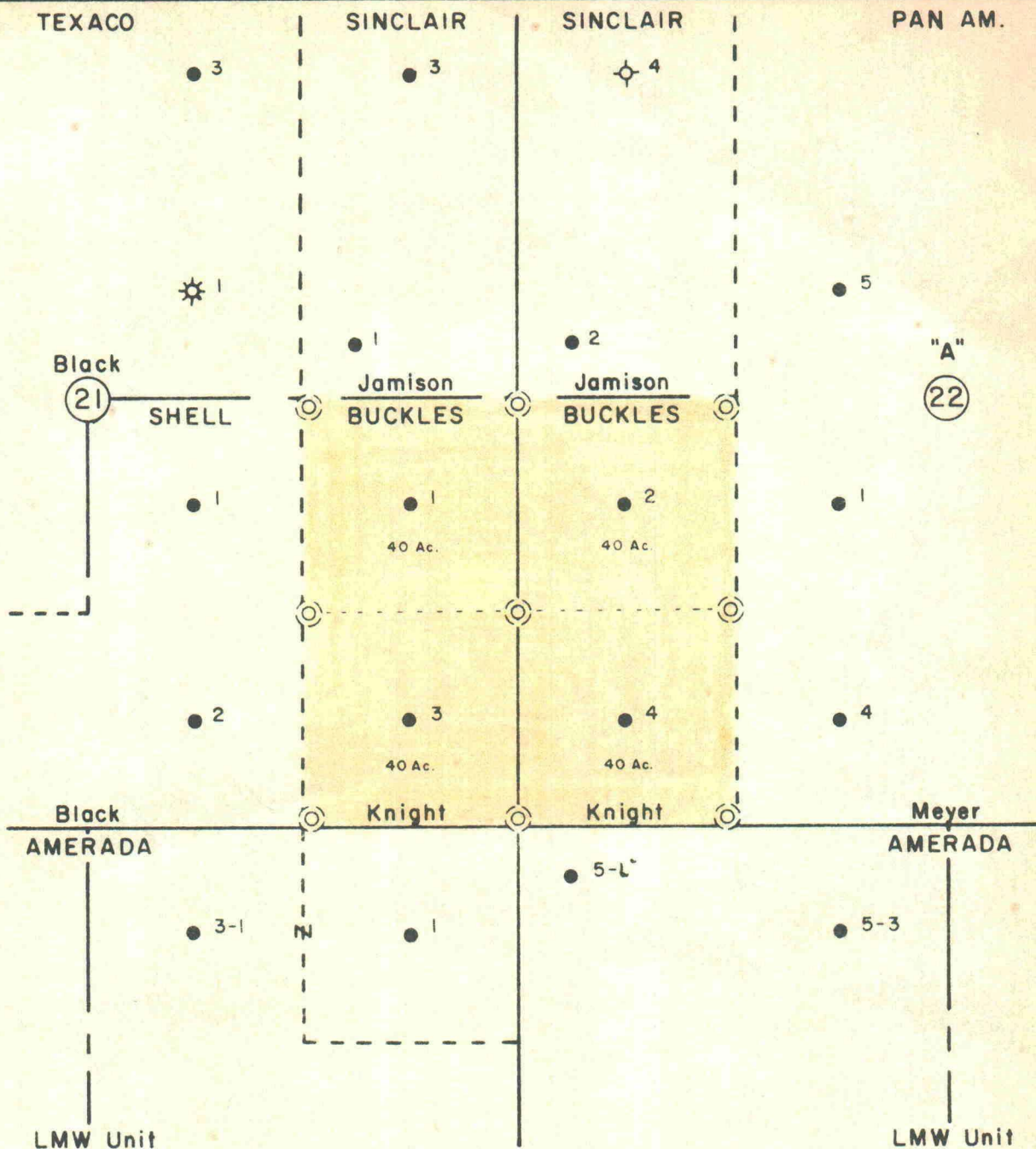
CASE NO. 2867

TYPICAL INJECTION WELL COMPLETION

TYPE B



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Appl EXHIBIT NO. 28674
CASE NO.



SCALE: 1" = 1000'

- PRODUCTION WELL
- PROPOSED PRODUCTION WELL
- ⊙ INJECTION WELL
- ⊙ PROPOSED INJECTION WELL
- ☼ GAS WELL
- ⊗ ABANDONED WELL
- ⊕ DRY HOLE

Prepared By:
GEORGE L. BUCKLES CO.

GEORGE L. BUCKLES COMPANY LEASES
160 ACRES MORE OR LESS
LANGLIE-MATTIX FIELD

Case 2867
SECTIONS 21 & 22,
T24S, R37E,
LEA COUNTY, NEW MEX.



- PRODUCTION WELL
- PROPOSED PRODUCTION WELL
- ⊙ INJECTION WELL
- ⊙ PROPOSED INJECTION WELL
- ★ GAS WELL
- ◆ ABANDONED WELL
- ⊕ DRY HOLE

A PORTION OF THE:
LANGLIE-MATTIX FIELD
 LEA COUNTY, NEW MEXICO

SCALE: 2" = 1 Mile

Prepared By:
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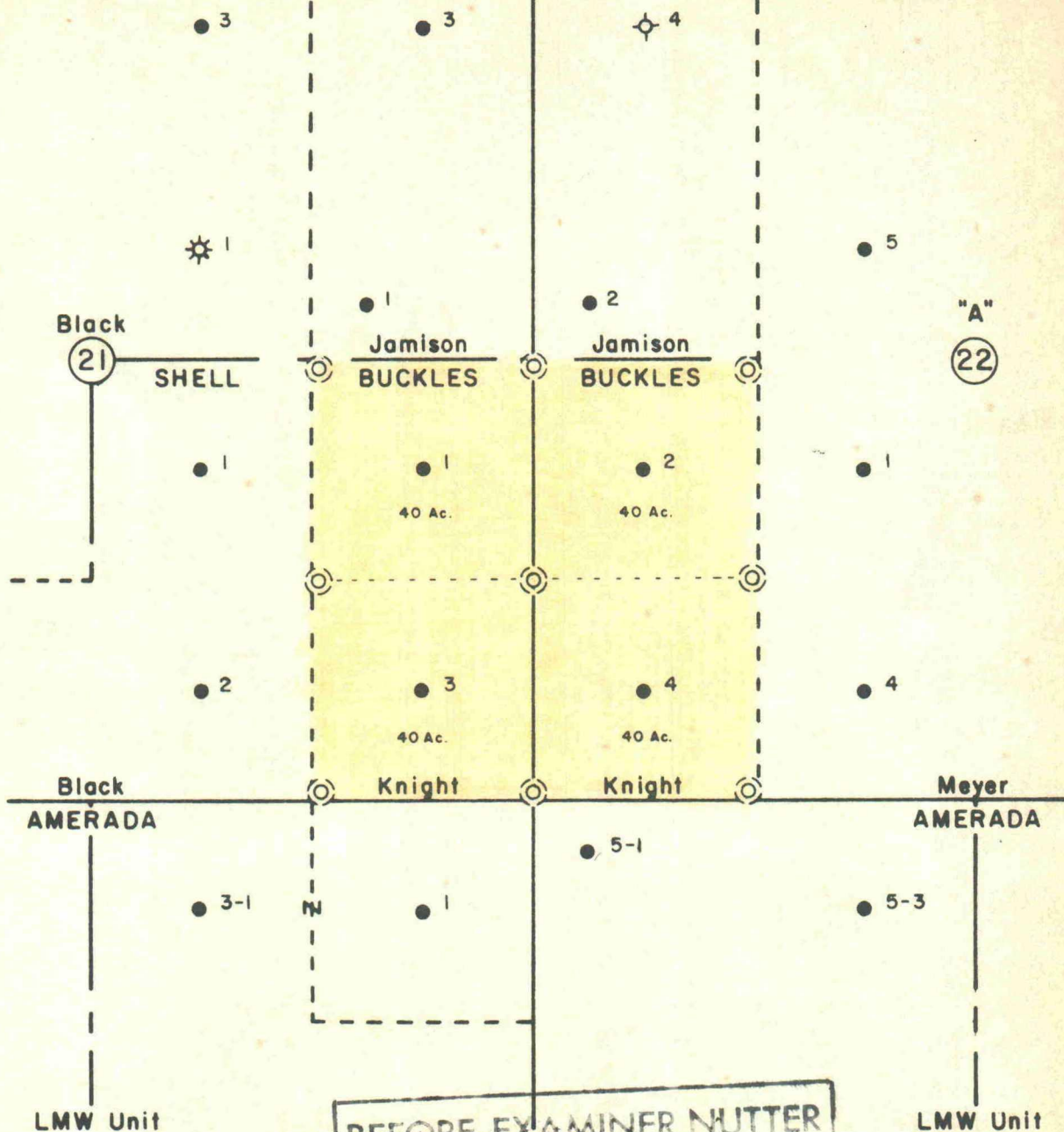
Case 2867

TEXACO

SINCLAIR

SINCLAIR

PAN AM.



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
April EXHIBIT NO. *2*
CASE NO. *2867*



SCALE: 1" = 1000'

- PRODUCTION WELL
- PROPOSED PRODUCTION WELL
- ⊙ INJECTION WELL
- ⊙ PROPOSED INJECTION WELL
- ☆ GAS WELL
- ✕ ABANDONED WELL
- ⊕ DRY HOLE

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