

UNITED STATES  
DEPARTMENT OF THE INTERIOR

## GEOLOGICAL SURVEY

## 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

NAPECO, INC.

## 3. ADDRESS OF OPERATOR

P. O. Box 283 - Houston, Texas 77001

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

At surface

660' FSL &amp; 2180' FEL

At proposed prod. zone

660' FSL &amp; 2180' FEL

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

8 1/2 miles south Loco Hills, N.M.

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

660'

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

1350'

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

GR 3404.2

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" K55LTC	54.5#	550'	525 sac class C plus 2% cal.
12 1/4"	9 5/8" K55LTC	36#	3400'	1000 sac class C w/50 light pos mix + 4% gel. + 2% cal. + 1/4# per sac celo flac + 5# per sac colite + 10% salt. Tail in w/300 sac Class C + 2% cal.
8 1/2"	5 1/2" K55LTC & N80LTC	15.5# 17#	11700'	350 sac Class H + 2/10% D65 + 5 lb. per sac potassium chloride + 14 gal. per sac D102.

BOP & Hydrill 10" (see attachment) test pipe rams & hydrill daily, blind rams on trips. Install pit leveller, flow sensor & gas separator & yellow jacket by 9200' (just above T/Wolfcamp). Drill surf. hole w/fresh wtr., intermediate hole w/brine wtr., set 8 5/8" into top on Andres, drill out 8 5/8" w/fresh wtr. to 9200', displace w/3% KCl wtr. (8.8 to 9.0 # wt., no. w.l.) to 11,100', inc. to 5% KCl, 10 or less w.l. 9.2 to 9.5 # wt., 32 to 34 vis. (sufficient control BHP) no abnormal high press. or hydrogen sulphide gas anticipated. Drillstem test pos. prod. zones no coring, electric logs run to T.D. Fresh water zone anticipated @ 225', water flood

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

*R. L. Heisch*

TITLE Agent

DATE

December 5, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

1-17-79

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

## Instructions

**General:** This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

**Item 1:** If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 14:** Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

**Items 15 and 18:** If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

**Item 22:** Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

zone (Queen) 2450' to 3050', gas zone in Morrow, no other minerals expected.

### Est. Tops:

Rustler Anhy	400
Base Salt	1200
Queen	2475
Base N. Benson Pay	3050
San Andres	3400
Base Delaware	4590
1st BS Sand	7100
3rd BS Sand	8750
Wolfcampian	9278
U. Penn	10150
Strawn	10578
Atoka	10800
Morrow Lime	11258
U. Morrow Clastic	11388
Base Morrow	11668



# United States Department of the Interior

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GEOLOGICAL SURVEY  
P. O. Box 26124  
Albuquerque, New Mexico 87125

JAN 18 1979

JAN 17 1979

O. C. C.  
ARTESIA, OFFICE

NAPECO, Inc.  
Post Office Box 283  
Houston, Texas 77001

NAPECO, INC.  
Benson Deep Unit No. 1  
660 FSL 2180 FEL Sec. 33, T18S, R30E  
Eddy County Lease No. NM-27276

Above Data Required on Well Sign

Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well in the Secretary's Oil-Potash Area to a depth of 11,700 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should be not less than 8" x 5" in size and each page should identify the well.
4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate sandstone brown (Federal Standard Color No. 595A, color 20318 or 30318).
5. Before drilling below the 9-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
6. A kelly cock will be installed and maintained in operable condition.
7. After setting the 9-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.

8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
  - (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
9. Notify the Survey in sufficient time to witness the cementing of the 9-5/8" casing.
10. Cement behind the 13-3/8" and 9-5/8" casing must be circulated.

Sincerely yours,

(ORIG. SGD.) JAMES W. SUTHERLAND

Area Oil and Gas Supervisor

Enclosure

cc:  
Regional Manager, Denver  
Mining Branch (2)  
BLM, Roswell (w/cy Notice)  
✓NMOCD, Artesia (2 w/2 cys Notice)  
Artesia  
Roswell (w/cy Notice)  
Area Potash  
Area Chrono.

**N MEXICO OIL CONSERVATION COMMISS**  
**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 <b>NAPECO, INC.</b>			Lease <b>Benson Deep</b>		Well No. <b>1</b>
Unit Letter <b>O</b>	Section <b>33</b>	Township <b>18 South</b>	Range <b>30 East</b>	County <b>Eddy</b>	
Actual Footage Location of Well: <b>660</b> feet from the <b>South</b> line and <b>2180</b> feet from the <b>East</b> line					
Ground Level Elev. <b>3404.2</b>	Producing Formation <b>Morrow</b>	Pool <b>Wildcat</b>		Dedicated Acreage: <b>320</b> Acres	

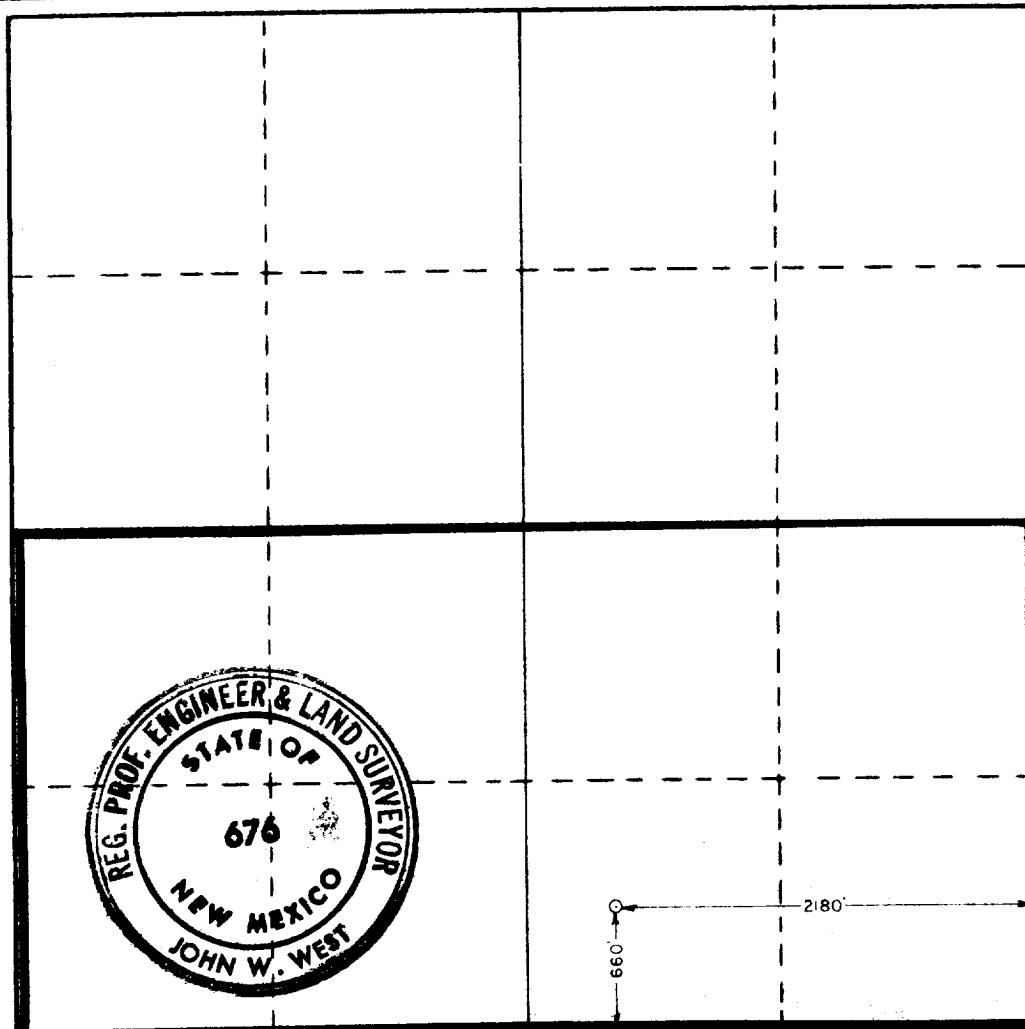
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is 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.

**RECEIVED**  
**DEC 6 1978**  
**U.S. GEOLOGICAL SURVEY**  
**ARTESIA, NEW MEXICO**



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name *R. L. Hensley*  
 Position *Agent*  
 Company **NAPECO, INC.**  
 Date **November 21, 1978**

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 **November 4, 1978**  
 Registered Professional Engineer and/or Land Surveyor

*John W. West*  
 Certificate No. **John W. West 676**  
**Ronald J. Eidson 3239**