

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
Northwest Exploration Company

3. ADDRESS OF OPERATOR
P.O. Box 90 - Farmington, N.M. 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 1160' FEL & 930' FSL
At proposed prod. zone

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 930'

16. NO. OF ACRES IN LEASE 680

17. NO. OF ACRES ASSIGNED TO THIS WELL 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NA

19. PROPOSED DEPTH 3800'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6985' GR

22. APPROX. DATE WORK WILL START* July 1, 1979

5. LEASE DESIGNATION AND SERIAL NO.
NM 25804

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Natani

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat M.V.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 11, T21N, R6W

12. COUNTY OR PARISH
Sandoval

13. STATE
N.M.

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	32.3	300'	100 sks.
8 3/4"	4 1/2"	10.5	3740'	210 sks.

Selectively perforate and stimulate the Point Lookout formation.

A BOP will be installed after the surface casing has been run and cemented. All subsequent operations will be conducted through the BOP.

The SE/4 of Section 11 is dedicated to this well.

Gas is dedicated.



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 S. Katigis TITLE Production Engineer DATE 5/31/79
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE JUN 5 1979

CONDITIONS OF APPROVAL, IF ANY:

U. S. GEOLOGICAL SURVEY

*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.

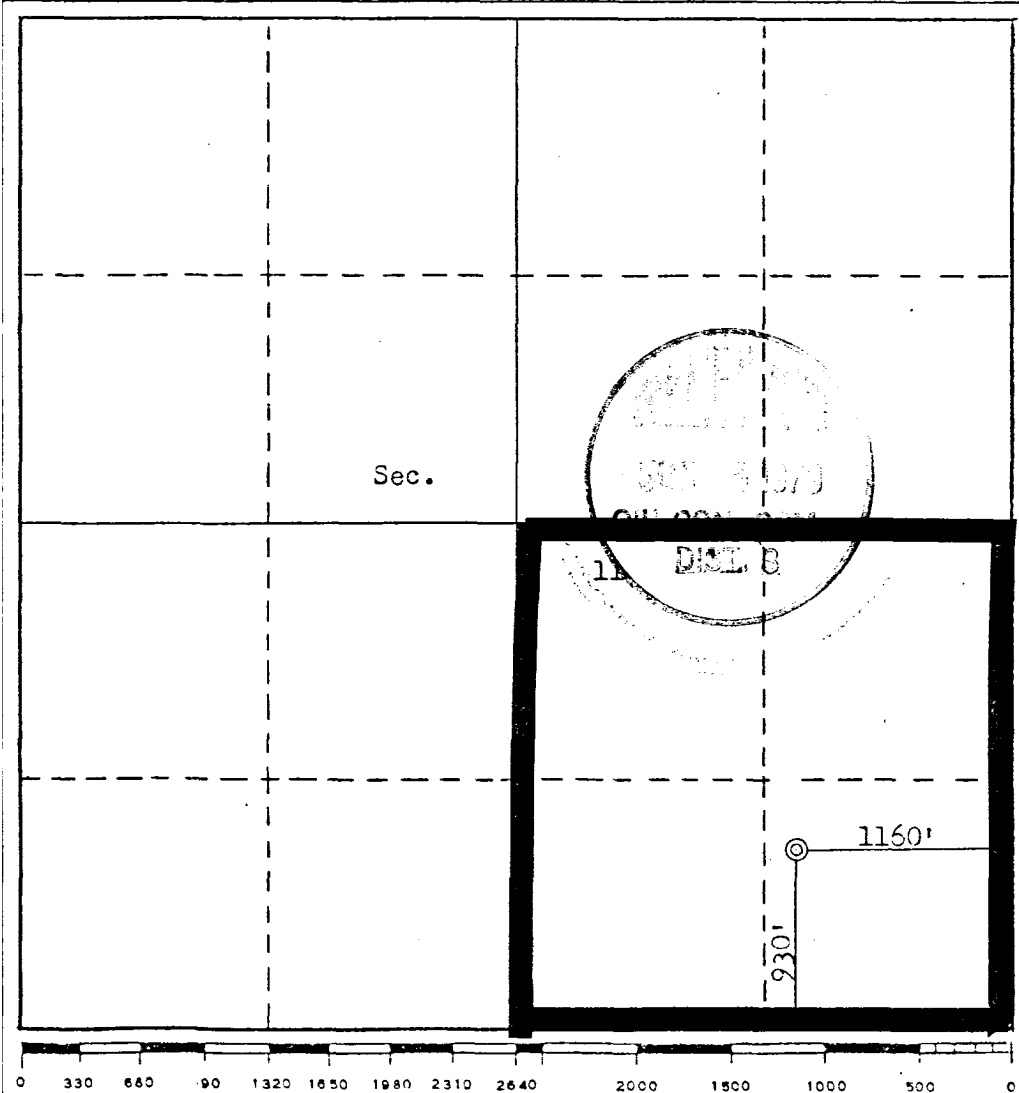
Operator NORTHWEST EXPLORATION COMPANY			Lease NATANI		Well No. 1
Unit Letter P	Section 11	Township 21N	Range 6W	County SANDOVAL	
Actual Footage Location of Well: 930 feet from the South line and 1160 feet from the East line					
Ground Level Elev. 6985	Producing Formation Point Lookout		Pool Wildcat	Dedicated Acreage: 160 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	<i>S. Katirgis</i> S. Katirgis
Position	Production Engineer
Company	Northwest Exploration Co.
Date	5/31/79
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	February 22, 1979
Registered Professional Engineer and/or Land Surveyor <i>Fred B. Kerr, Jr.</i> Fred B. Kerr, Jr.	
Certificate No.	3958

OPERATIONS PLAN

Natani #1

May 31, 1979

I. LOCATION: SE/4 SE/4 Sec. 11, T21N, R6W

ELEVATION: 6985' GR

FIELD: Wildcat

II. GEOLOGY:

A. Formation Tops:	Depth:
Ojo Alamo	651'
Pictured Cliffs	1164'
Cliff House	1563'
Menefee	2641'
Point Lookout	3506'
Total Depth	3800'

B. Logging Program: DIL & CNL-FDC.

C. Coring Program: None

III. DRILLING:

A. Anticipated starting date and duration of activities: July 1, 1979 - 2 weeks.

B. BOP: Blind rams and pipe rams, 10", 900 series, double gate, rated at 3000 PSI.

C. Mud Program:

- a) Spud Mud: Water, lime and gel.
- b) Surface to 3800'.
 - Viscosity: 32-38 sec/qt.
 - Weight: 8.8-9.2 #/gal.
 - Water Loss: 8-20 cc
 - Ph: 8.5-9.5

IV. MATERIALS:

A. Casing Program:

<u>Hole Size</u>	<u>Depth O.H.</u>	<u>Casing Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>
12 1/4"	200'	9 5/8"	32.3# H-40	200'
8 3/4"	3800'	4 1/2"	10.5# K-55	3800'

B. Float Equipment:

- a) Surface casing: 9 5/8" - B & W reg. pattern Shoe.
- b) Liner: 4 1/2" - Regular pattern guide & differential fill float collar.

C. Tubing Program: 3600' of 2 3/8", 4.7#, EUE K-55 tubing with seating nipple on top of bottom joint. Expendable check valve on bottom.

D. Well Head Equipment: Gray well head. Gray representative to set slips and make cut off.

V. CEMENTING:

A. Surface Casing: 9 5/8" - Use 125 sacks of Class "B" with 1/4# gel flake per sack and 3% CaCl (100% excess to circulate). WOC 12 hours. Test surface casing to 600 PSI for 30 minutes.

C. Production: 4 1/2" - To be determined at total depth.

SK/ch