

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY36-043-20434
5. LEASE DESIGNATION AND SERIAL NO.NM 25307 ~~25307~~

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Natani

9. WELL NO.

2

10. FIELD AND POOL OR WILDCAT

Wildcat (hacra)
Unnamed11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

Sec 12, T21N, R6W

12. COUNTY OR PARISH

Sandoval

13. STATE

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

Northwest Exploration Co.

3. ADDRESS OF OPERATOR

P.O. Box 90 Farmington, New Mexico 87401

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

At surface 1680' & 1710' FWL

At proposed prod. zone

Same

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

15. DISTANCE FROM PROPOSED*

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

1680'

16. NO. OF ACRES IN LEASE

160

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

1800'

20. ROTARY OR CABLE TOOLS

Rotary

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

7053 Gr

22. APPROX. DATE WORK WILL START*

Sept. 25, 1979

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 SK
8 3/4	4 1/2	10.5#	1800'	to be determined at T.D.

It is proposed to drill this well to total depth using a water base mud. A B.O.P. will be installed after surface casing has been run and cemented.

All subsequent operations will be conducted through the B.O.P.

The NW/4 of Sec 12 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

M. Turnbaugh
M. Turnbaugh

TITLE

Assoc. Drilling Engineer

DATE

9/7/79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

All distances must be from the outer boundaries of the Section.

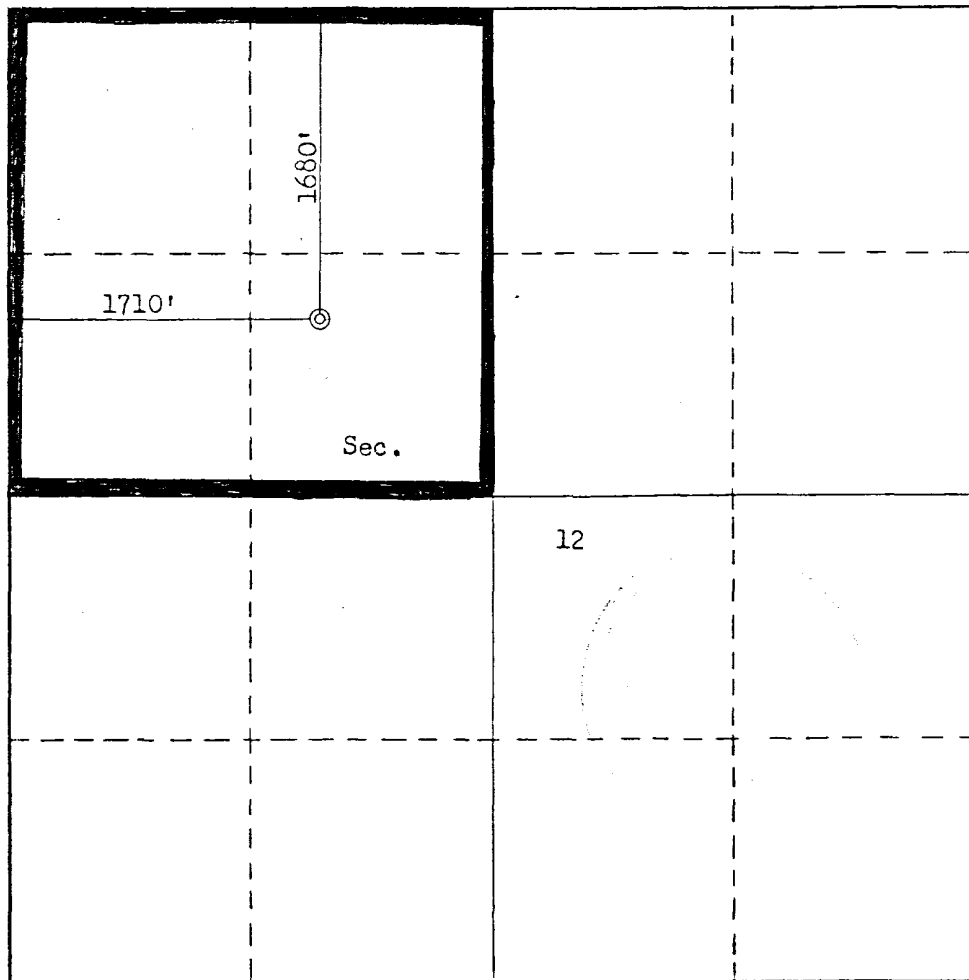
Operator NORTHWEST EXPLORATION COMPANY		Lease NATANI		Well No. 2
Unit Letter F	Section 12	Township 21N	Range 6W	County SANDOVAL
Actual Footage Location of Well: 1680 feet from the North line and 1710 feet from the West line				
Ground Level Elev. 7053	Producing Formation Chacra	Pool Wildcat Unnamed	Dedicated 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.

M. Turnbaugh

Name **M. Turnbaugh**

Assoc. Drilling Engineer

Position

Northwest Exploration Co.

Company

September 7, 1979

Date

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.

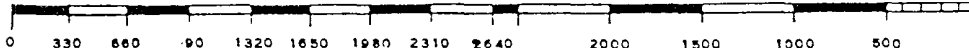
Date Surveyed

September 7, 1979

Registered Professional Engineer and/or Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certified **3950** **B. KERR, JR.**



OPERATIONS PLAN

I. WELL NAME: Natani #2

LOCATION: 1680' FNL & 1710' FWL
Sec. 12, T21N, R6W

FIELD: Unnamed

LEASE NUMBER: NM-25307

NM-21453

ELEVATION: 7053' GR.

II. GEOLOGY:

A. Formation Tops:

Chacra 1650'

Total Depth 1800'

B. Logging Program: Dual Induction & Neutron Density at total depth.

C. Coring Program: None

D. Natural Gauges: Gauge at 1650' and at depth. Gauge any noticable increases in gas flow at depths other than those noted above. Record all gauges on daily drilling report and tower reports.

III. DRILLING:

A. BOP: Blind rams and pipe rams, 10', 900 series, double gate, rated at 3000 psi.

B. Mud Program:

a) Spud mud: Water, Lime, and Gel.

b) Surface to 1800 (T.D.)

Viscosity: 32-38 sec/qt

Weight: 8.8-9.2 #/gal. Ph: 8.5-9.5

Water loss: 8-20 cc.

IV. MATERIALS:

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
12 1/4"	300'	9 5/8"	32.3# H-40
8 3/4"	1800'	4 1/2"	10.5# K-55

B. Float Equipment:

Surface - 9 5/8" Larkin guide shoe

Production - 4 1/2" geyser shoe, flapper type float collar

C. Tubing: 1750' of 2 3/8" 4.7#, J-55, 8 RD EUE tubing with a common seating nipple above bottom joint.

D. Well Head Equipment: Gray Tool Company drawing No. E-5533, or equivalent. Well head representative to set slips on intermediate and production strings.

V. CEMENTING:

- A. Surface Casing: 9 5/8" - Use 100 sks of Class "B" cement with 1/4# gel flake per sk and 3% calcium chloride, (100% excess to circulate 9 5/8" casing). WOC 12 hrs. Test to 600 PSI for 30 Minutes.
- B. Production Casing: 4 1/2' - Precede cement with 40 bbl of water mixed with 4 sks gel. Cement with 260 sks of Class "B" cement with 8% gel, 12 1/2# fine gilsonite per sks and 0.4% HR-4. Tail in with 100 sks of Class "B" cement with 1/4% fine tuf-plug per sk and 0.4% HR-4 per sk.

MJT/djb

NORTHWEST PIPELINE CORPORATION

MULTI- POINT SURFACE USE PLAN

for the Natani

Well Number #2

1. Existing Roads: See attached topographic map. All existing roads used, shall be maintained in a serviceable condition at all times during the drilling operation.
2. Planned Access Roads: See attached topographic map. Maximum grade is approximately 1%. The road surface will not exceed twenty feet in width. Upon completion of drilling operations the access road will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary. All activities will be confined to the access road and drill pad.
3. Location of Existing Wells: See attached topographic map.
4. Location of Tank Batteries; Production Facilities; and Production; Gathering and Service lines: See attached topographic map for locations of existing and proposed gas gathering lines.
5. Location and Type of Water Supply: Water needed for the drilling operation will be hauled from private sources.
6. Source of Construction Materials: No additional materials will be needed.
7. Methods for Handling Waste Disposal: All garbage, debris, and trash will be buried at least three feet deep. A portable toilet will be supplied for human waste. After drilling operations have been completed the reserve pit will be fenced and the liquid portion will be allowed to evaporate before the location is cleaned up and leveled. The earthen pits will not be located on natural drainages and will be constructed in such a manner so that they will not leak. Any evaporator pit containing toxic liquids will be fenced.
8. Ancillary Facilities: There will be no camps or airstrips associated with the drilling of this well.
9. Well Site Layout: See attached location layout sheet. There will be a drainage ditch above the cut slope.
10. Plans for Restoration of the Surface: Upon completion of drilling, the location will be cleaned, and leveled so that no cut or fill banks will be steeper than 3:1.

All of the area disturbed in connection with the drill site will be seeded as close as possible for any above ground equipment while still allowing for access to the equipment. Seeding will be done within one year after drilling is completed and during the period from July 1 through September 15. Seeding will be done with seed Mixture specified by land use authorities.

All equipment above ground will be painted a non-glare, non-reflective, non-chalking color that simulates the natural color of the site.

11. Other Information: If, during operations, any historic or prehistoric ruin, monument or site, or any object of antiquity is discovered, then work will be suspended and the discovery will be reported to the District Manager of the BLM.

When drilling with gas, the line used to discharge and burn off the gas will be located so as not to damage vegetation in the area, and if necessary an earthen screen will be constructed to protect the vegetation. All liquids from the line will be contained at the site unless otherwise specified by the surface agency's representative.

12. Operator's Representative: M. J. Turnbaugh, P.O. Box 90, Farmington, New Mexico 87401 Phone: 327-5351 Extension 115.

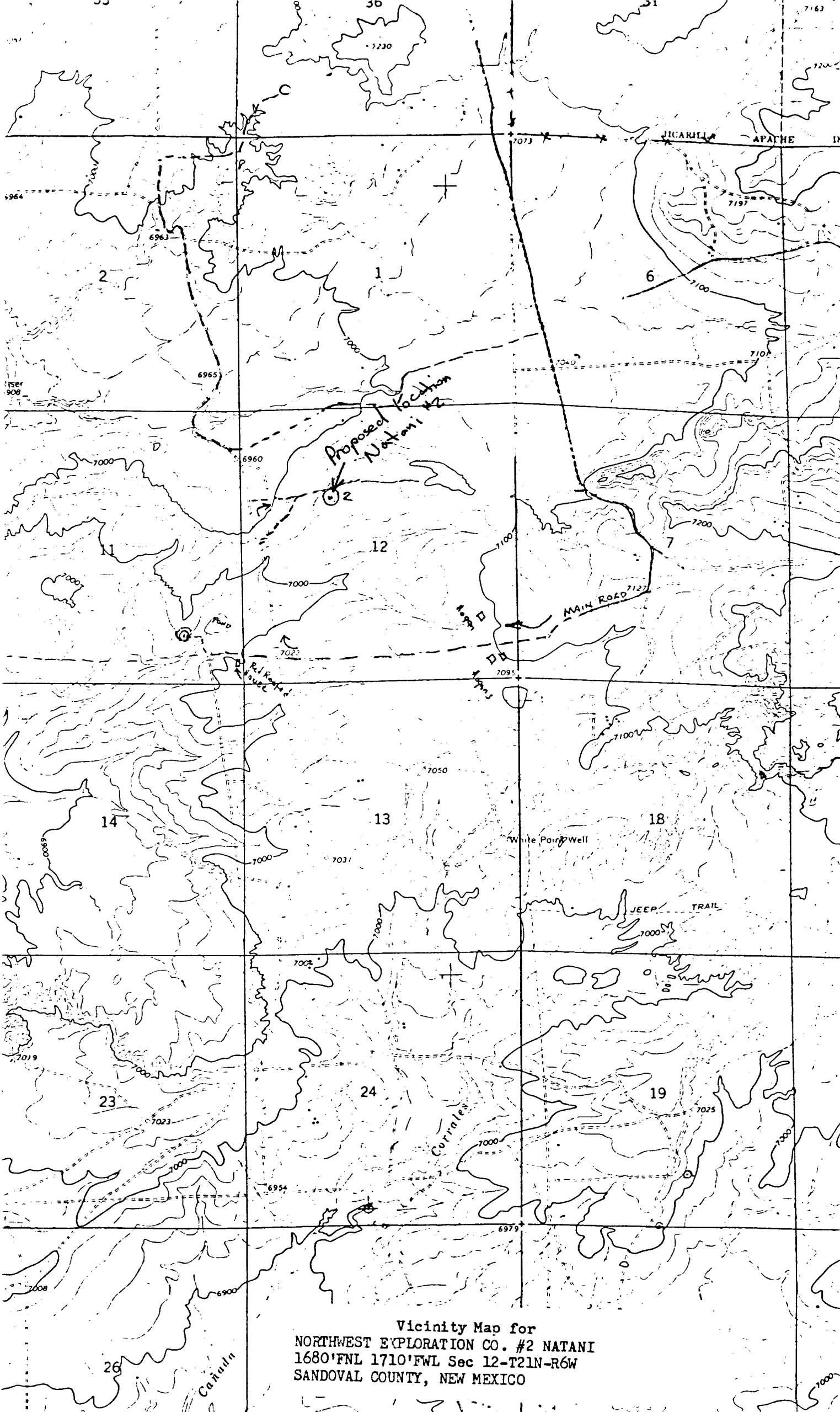
13. Certification:

I hereby certify that I have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will be performed by Northwest Pipeline Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

September 7, 1979
Date

M. J. Turnbaugh
M. Turnbaugh
Assoc. Drilling Engineer

MJT/skw



Vicinity Map for
NORTHWEST EXPLORATION CO. #2 NATANI
1680'FNL 1710'FWL Sec 12-T21N-R6W
SANDOVAL COUNTY, NEW MEXICO