DEVELOPMENT PLAN FOR SURFACE USE

Northwest Federal No. 1-A

Consolidated Oil & Gas, Inc. - Operator

Jicarilla Apache Tribal Contract #119 SW SE Sec. 7, T26N, R4W Rio Arriba County, New Mexico

1. Existing Roads

See enclosed topographic map (Exhibit 1) which shows existing improved and unimproved roads. The town of Lindrith is located approximately 34 miles southeast.

2. Planned Access Roads

See Enclosed topographic map. Approximately 560' of 12' wide new road construction will be required for this location.

3. Location of Existing Wells

See enclosed topographic map

4. Location of Existing and/or Proposed Facilities

See enclosed topographic map showing location of wells and facilities operated by Consolidated Oil & Gas, Inc. If production is encountered, the tank battery and other required producing equipment will be located per attached completion plat. (Exhibit 2)

5. Location and Type of Water Supply

Water for drilling will be trucked approximately 1-1/2 miles from water hole in Tapacito Creek.

6. Source of Construction Materials

No additional construction material will be required.

7. Methods of Handling Waste Disposal

All waste material will be contained by earthen and steel pits. Earthen pits will be subsequently backfilled and buried. A portable chemical toilet will be furnished for drilling personnel.

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8. Ancillary Facilities

No separate drill campsites are proposed -

9. Wellsite Layout

The drilling site location will be graded and will approximate 200×250 with natural drainage to the south. Care will be taken while grading to control erosion. A 2' cut will be required on the north side of the wellsite. See attached drillsite layout. (Exhibit 3)

10. Plans for Restroation of Surface

- A. Following drilling and completion operations, all equipment and material not needed for operations will be removed. Pits containing fluid will be fenced until filled with any additional pits filled and the location cleaned of all trash and junk.
- B. After abandonment, any special rehabilitation and/or revegetation requirements (reseed with seed mixture No. 2) will be complied with and accomplished as expeditiously as possible. All pits should be filled and leveled within 90 days after abandonment.

11. Other Information

The location is in a valley between two sandrock bluffs with a dry wash running just south of the location. The sandy clay soil has sagebrush and gramma vegetation with the land used for grazing. The surface is owned by the Indians. There are no occupied dwellings nearby.

12. Operator's Representative

Consolidated Oil & Gas, Inc. Owen B. Whitenburg Senior Drilling Engineer Farmington, New Mexico Phone (505) 325-7509

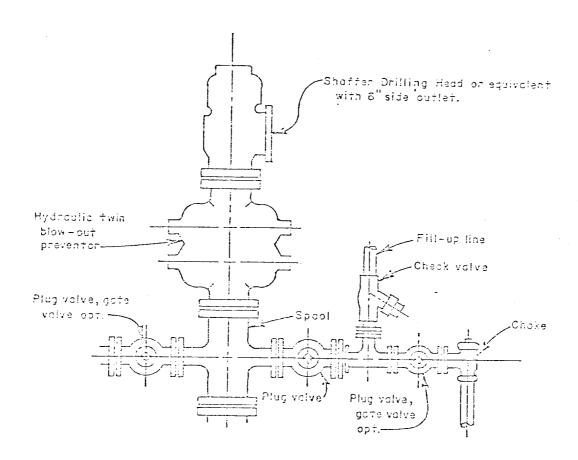
13. Certification

I hereby certify that I, or persons under my direct supervision, 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 Consolidated Oil & Gas, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

January 11, 1978 Date

D. T. Stogner, Jr

Chief Drilling and Production Engineer

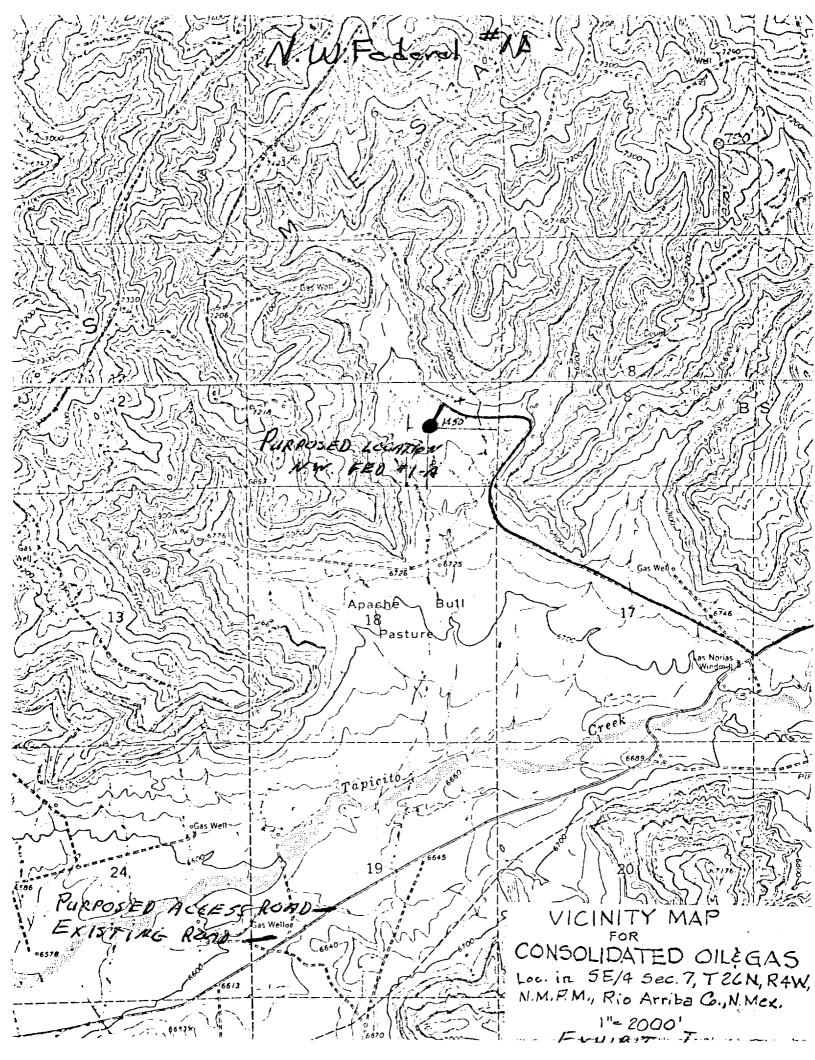


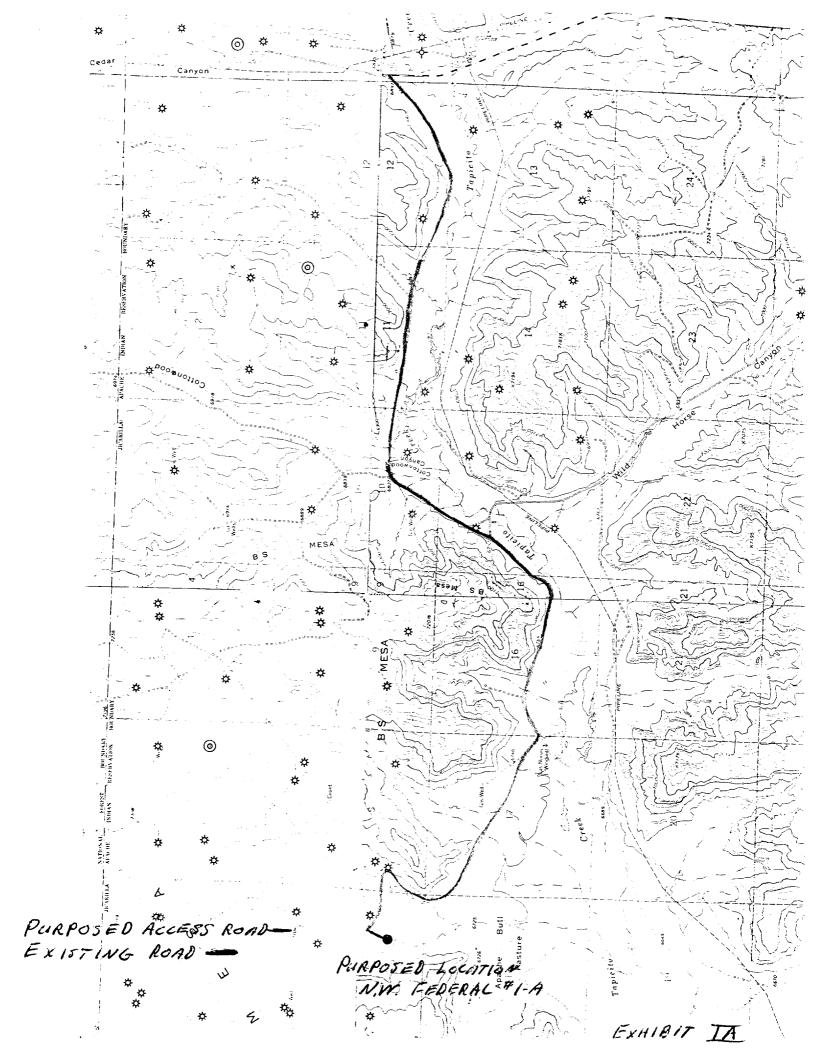
DIAGRAMI A

NORTHWEST FEDERAL NO. 1-A

SWASEA SEC 7, T-2GN R-4W

RIO ARRIBA, NM

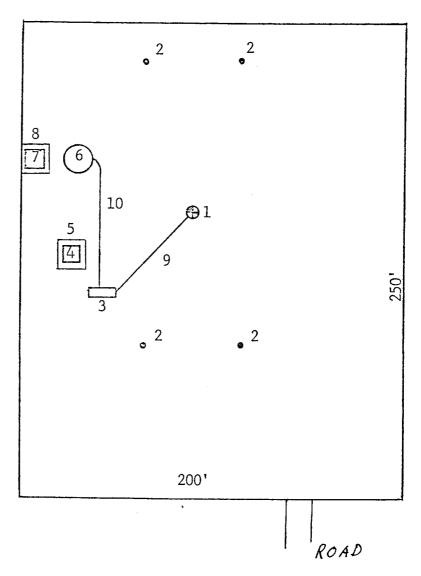




NORTHWEST FEDERAL NO.1-A &W/4 SE/4 SEC. 7, T-26N R-4W RIO ARRIBA, NM

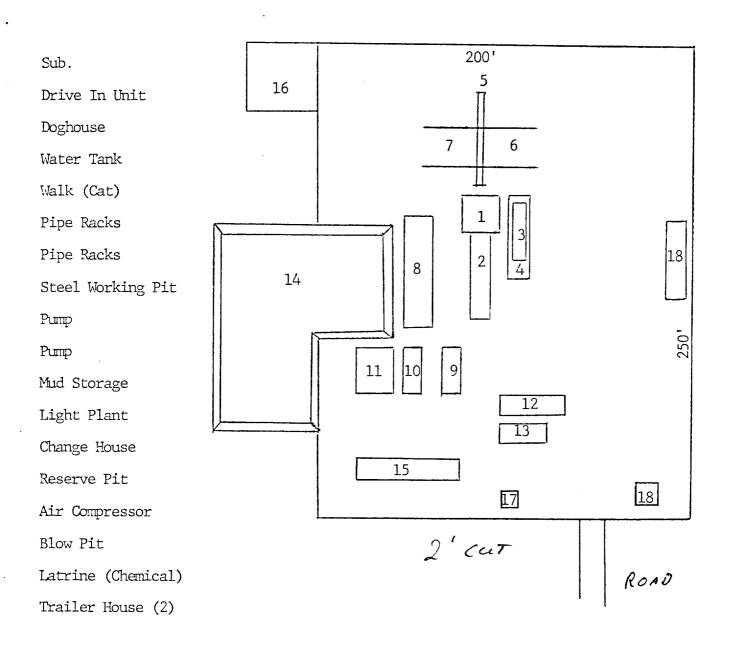


- 1. Well
- 2. Dead Men
- 3. Prod. Unit
- 4. Water Pit
- 5. Fence
- 6. 300-Bbl. Oil Tank
- 7. Water Pit
- 3. Fence
- 9. 2" Buried Flow Line
- 0. $1\frac{1}{2}$ 0il Line



1" equals 50'





1" equals 50'



Consolidated Oil & Gas, Inc.

LINCOLN TOWER BUILDING 1860 LINCOLN STREET DENVER, COLORADO 80295 (303) 861-5252

January 11, 1978

U. S. GeologicalSurvey P. O. Box 1809 Durango, Colorado 81301

> Re: Application for Permit to Drill Northwest Federal #1-A Rio Arriba County, New Mexico

Gentlemen:

Following is the information requested in NTL-6 to accompany the permit to drill:

- 1. Location: 1190' FSL and 1450' FEL Section 7, T26N, R4W NMPM Rio Arriba County, New Mexico
- 2. Elevation of Unprepared Ground: 6770'
- 3. Geologic Name of Surface Formation: San Jose
- 4. Type Drilling Tools: Rotary
- 5. Proposed Drilling Depth: 5970'
- 6. Estimated Tops of Geologic Markers: Pictured Cliff 3528' Cliff House 5155'; Pt. Lookout 5667'
- 7. Estimated Depths at Which Anticipated Gas or Oil Bearing
 Formations Expected: Pictured Cliff 3528'; Cliff House 5155'
 Pt. Lookout 5667'
- 8. Casing Program and Setting Depth:

	Size	Weight	Grade	Condition	Setting Depth
Surface	10-3/4''	40.5#	H-40	New	300'
Intermediate	7 5/8''	26.4#	K-55	New	3830'
Liner	4 1/2''	10.5#	K-55	New	5970'

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9. Casing Setting Depth and Cementing:

- a. Surface casing will be set at 300'. Cement will be circulated to surface with approximately 300 sx. neat cement containing 2% CaCl₂.
- b. Intermediate casing will be set to approximately 300' below the top of the Pictured Cliff or approximately 3830'. Cement will be 150 sx. 65/25 Pozmix containing 12% gel followed by 100 sx. neat containing 2% CaCl₂.
- c. Liner will be set to total depth of approximately 200' using estimated 200 sx. 50/50 Pozmix containing 4% gel and some lost circulation material (Tuf-plug or Gilsonite).

Note: Volume of cement to be determined after running Caliper log.

- 10. Pressure Control Equipment: See attached diagram "A"
- 11. <u>Circulating Media:</u> 0-300' fresh water spud mud; 300-3830' fresh water low solid mud with following properties:

Viscosity 32-38 sec., water loss 20-6 cc, weight 8.5-9.0 ppg. with heavier weights if required by well conditions; 3830'-5970' air or gas with conversion to mud of above characteristics if hole becomes wet.

12. Testing, Logging and Coring Programs:

- a. Open hole logs will be run prior to running intermediate casing and prodcution liner.
- b. Coring is not planned.
- 13. Abnormal Pressure or Temperature and Hydrogen Sulfide Gas:

We do not anticipate abnormal pressure, temperature, or hydrogen sulfide gas; however, remote control blowout preventer as shown on attached diagram "A" will be installed.

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- 14. Anticipated Starting Date: Drilling operations should start shortly April 15, 1978
- 15. Other Facets of the Proposed Operations: None

Your very truly,

CONSOLIDATED OIL & GAS, INC.

D.T. Stogne. fg.
D. T. Stogner, Jr.
Chief Drilling and Production Engineer

DTS; sve Attach.