

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG \_\_\_\_\_ ELECTRIC LOGS \_\_\_\_\_ FILE X WATER SANDS \_\_\_\_\_ LOCATION INSPECTED OIL SUB. REPORT/abd.

DATE FILED 12-17-82

LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. \_\_\_\_\_

PUBLIC LEASE NO. U-13905

INDIAN \_\_\_\_\_

DRILLING APPROVED: 12-17-82

SPUDDED IN: \_\_\_\_\_

COMPLETED: \_\_\_\_\_ PUT TO PRODUCING: \_\_\_\_\_

INITIAL PRODUCTION: \_\_\_\_\_

GRAVITY A.P.I. \_\_\_\_\_

GOR: \_\_\_\_\_

PRODUCING ZONES: \_\_\_\_\_

TOTAL DEPTH: \_\_\_\_\_

WELL ELEVATION: 5320' GR

DATE ABANDONED: 12-28-84 2A well never drilled

FIELD: ~~UNDESIGNATED~~ monument Butte 3/86

UNIT: \_\_\_\_\_

COUNTY: DUCHESNE

WELL NO. NGC FED #33-21-H

API NO. 43-013-30729

LOCATION 2048' FT. FROM X (S) LINE,

2071'

FT. FROM (E) XX LINE,

NW SE

1/4 - 1/4 SEC. 21

TWP.	RGE.	SEC.	OPERATOR
------	------	------	----------

TWP.	RGE.	SEC.	OPERATOR
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<u>9S</u>	<u>17E</u>	<u>21</u>	<u>NATURAL GAS CORP OF CAL</u>
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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  
Natural Gas Corporation of California

3. ADDRESS OF OPERATOR  
85 South 200 East, Vernal, UT 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
At surface  
2071' FEL, 2048' FSL, Section 21, T.9S., R.17E. (NW $\frac{1}{4}$ SE $\frac{1}{4}$ )  
At proposed prod. zone

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)

16. NO. OF ACRES IN LEASE  
2440

17. NO. OF ACRES ASSIGNED TO THIS WELL  
40

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

19. PROPOSED DEPTH  
5800'

20. ROTARY OR CABLE TOOLS  
Rotary

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

5320' GR

22. APPROX. DATE WORK WILL START\*

March 15, 1983

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"	36#	300'	To surface
7-7/8"	5-1/2"	17#	TD	As required to protect the oil shale and producing zones.

See attached sheets for additional details.

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 Wm Ryan TITLE Petroleum Engineer DATE November 22, 1982  
W. A. Ryan

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY [Signature] TITLE E. W. Guynn  
District Oil & Gas Supervisor

cc: MMS; Div. of OG&M; Operations; CTClark; ERHenry

NOTICE OF APPROVAL CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

5. LEASE DESIGNATION AND SERIAL NO.  
U-13905 RECEIVED

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
DEC 17 1982

7. UNIT AGREEMENT NAME  
SALT LAKE CITY, UTAH

8. FARM OR LEASE NAME  
Federal

9. WELL NO.  
NGC 33-21-H

10. FIELD AND POOL, OR WILDCAT  
Pleasant Valley

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
Sec. 21, T.9S., R.17E.

12. COUNTY OR PARISH  
Duchesne

13. STATE  
Utah

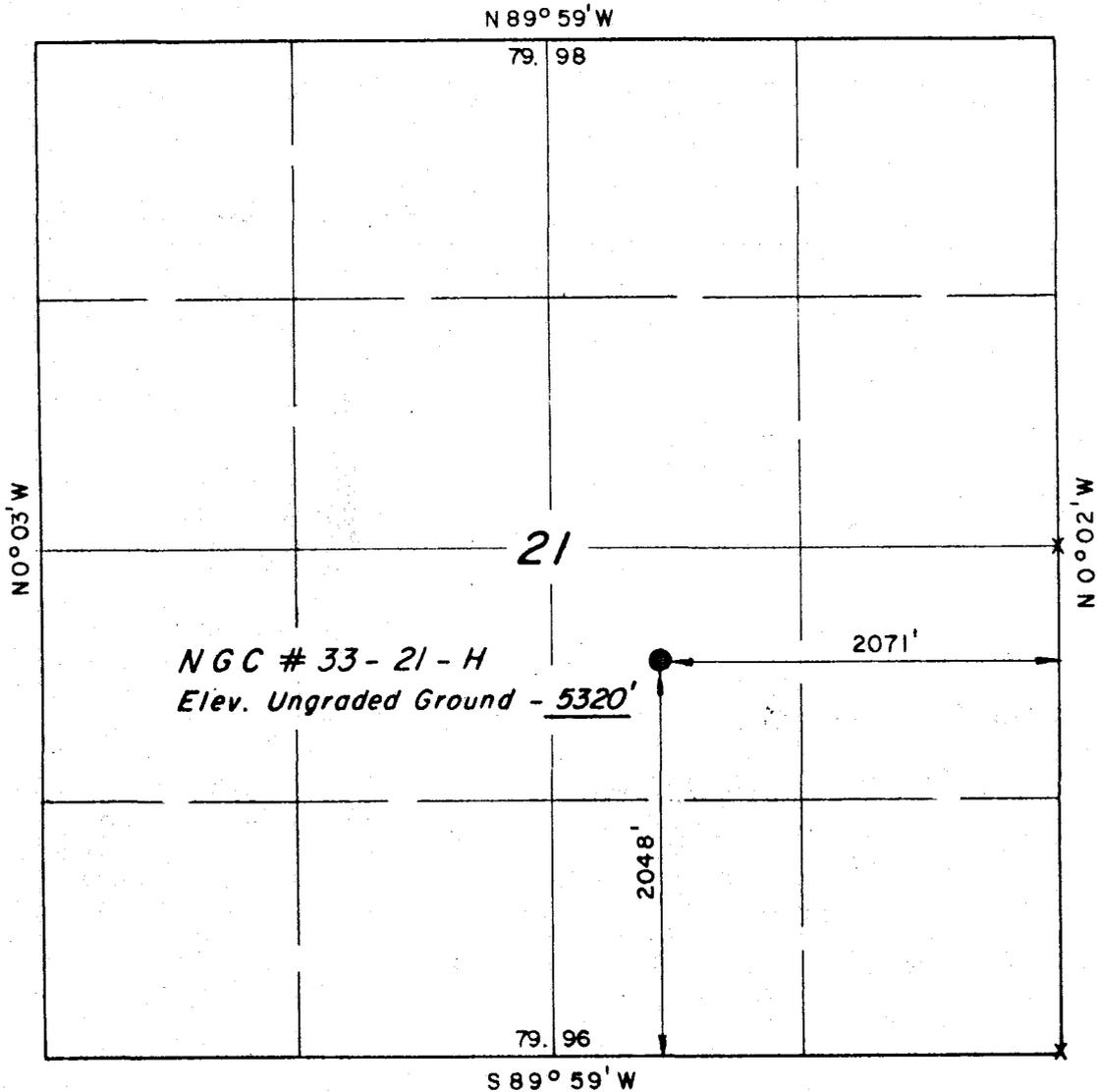
FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 1/1/80

State of N

T 9 S , R 17 E , S . L . B . & M .

**PROJECT**  
**NATURAL GAS CORP. OF CA**

Well location, *NGC # 33-21-H*,  
 as shown in the NW1/4 SE1/4 Section  
 T9S, R17E, S.L.B. & M. Duchesne  
 County, Utah.



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
 FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
 SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
 BEST OF MY KNOWLEDGE AND BELIEF.

*Lawrence E. Kay*  
 REGISTERED LAND SURVEYOR  
 REGISTRATION NO 3137  
 STATE OF UTAH

**UINTAH ENGINEERING & LAND SURVEYING**  
 P. O. BOX Q - 85 SOUTH - 200 EAST  
 VERNAL, UTAH - 84078

X = Section Corners Located

SCALE	1" = 1000'	DATE	10/4/82
PARTY	RK JF RP	REFERENCES	GLO Plat
WEATHER	Fair	FILE	NATURAL GAS

Natural Gas Corporation of California  
Well No. 33-21-H  
Section 21, T. 9 S., R. 17 E.  
Duchesne County, Utah  
Lease U-13905

Supplemental Stipulations

- 1) Adequate and sufficient electric/radioactive logs will be run to locate and identify the prime oil shale horizons in the Mahogany Zone of the Green River formation. Casing and cementing programs will be adjusted to eliminate any potential influence of the well bore or productive hydrocarbon zones on the oil shale resource. Surface casing program may require adjustment for protection of fresh water aquifers. (See attached tentative casing and cementing program for the Uinta Basin.)



# United States Department of the Interior

GEOLOGICAL SURVEY  
Conservation Division  
2000 Administration Building  
1745 West 1700 South  
Salt Lake City, Utah 84104

February 2, 1981

## General Outline for the Protection and Isolation of Ground Water and Oil Shale in the Uinta Basin.

The oil shale occurs with varying thicknesses in most parts of the Uinta Basin and at varying depths. Ground water also occurs at varied depths above and below the Oil Shale. These ground waters have varying degrees of salinity. Nonetheless, drilling for hydrocarbon in the Uinta Basin should provide for the protection of the oil shale and the ground water if either is present.

The protection of the oil shale and the ground water can effectively be carried on through the design of an adequate casing and cementing program for each well drilled in the area.

In the Uinta Basin, water occurs mainly in the Uinta and the Green River formations. As drilling for hydrocarbon gets deeper into the crust of the earth, more ground water might be encountered and will be protected as it is encountered.

This notice's purpose is to attempt to lay the groundwork for a casing program and cementing program that will protect the oil shale and the ground water if present.

These programs are to be considered as guidelines. The specificity of casing depth, amount of cement and the depth of staging collars will be considered on an individual basis after a careful study of the logs of each individual well. Cementing from the bottom up is an economical solution if carefully conducted.

The casing and cementing program presented here as an example, will assume that fresh water was encountered in the upper parts of the Green River, that the oil shale occurs in the middle of the Green River (1000 foot section) and that some ground water is encountered in the lower parts of the Green River.

In this case, three areas will have to be cemented to assure the integrity of the ground water and oil shale. These areas are above the upper fresh water, across the oil shale and below the lower water aquifer. Deep aquifers that do not contain useful water are cemented to prevent water zone influence on production.

The following casing and cementing program will be appropriate for this example:

- A. Surface casing is set at approximately 300 feet and cemented to the surface.

- B. The next casing string will be set at approximately 300 feet below the lowest aquifer. Cementing will be done in three stages, using two stage collars and cement baskets or equivalent as described below and on attached sketches:
1. Cement first stage through the casing shoe to fill annulus back to base of lower aquifer.
  2. Place 1st stage collar (with cement basket immediately below) at a selected point at the base of the oil shale. Cement will have to reach top of oil shale.
  3. Place 2nd stage collar (with cement basket immediately below) 50 feet above the top of the Bird's Nest aquifer and cement to at least 300 feet above the stage collar.
- C. The above is an example. Reasonable equivalents that accomplish these same protective measures, (such as cementing the water zones instead of isolating them), depending on the individual cases will be considered for approval.
- D. When the above mentioned well is to be abandoned, inner-casing plugs will have to be placed at the same depth as the above mentioned annulus cement jobs.

The use of cement bond logs will verify the authenticity of the cement job performed.

- E. The Operator of such well should notify U.S.G.S. 48 hours prior to commencement of casing and cementing activity, so a technician could be dispatched to witness the operations to verify compliance with casing and cementing program.

Attached Sketches:

1. Schematic of the required casing and cementing program.
2. Cross section of the Uinta Basin.
3. Schematic of the general ground water protection program.

E. W. Guynn  
District Oil and Gas Supervisor

AMR/kr

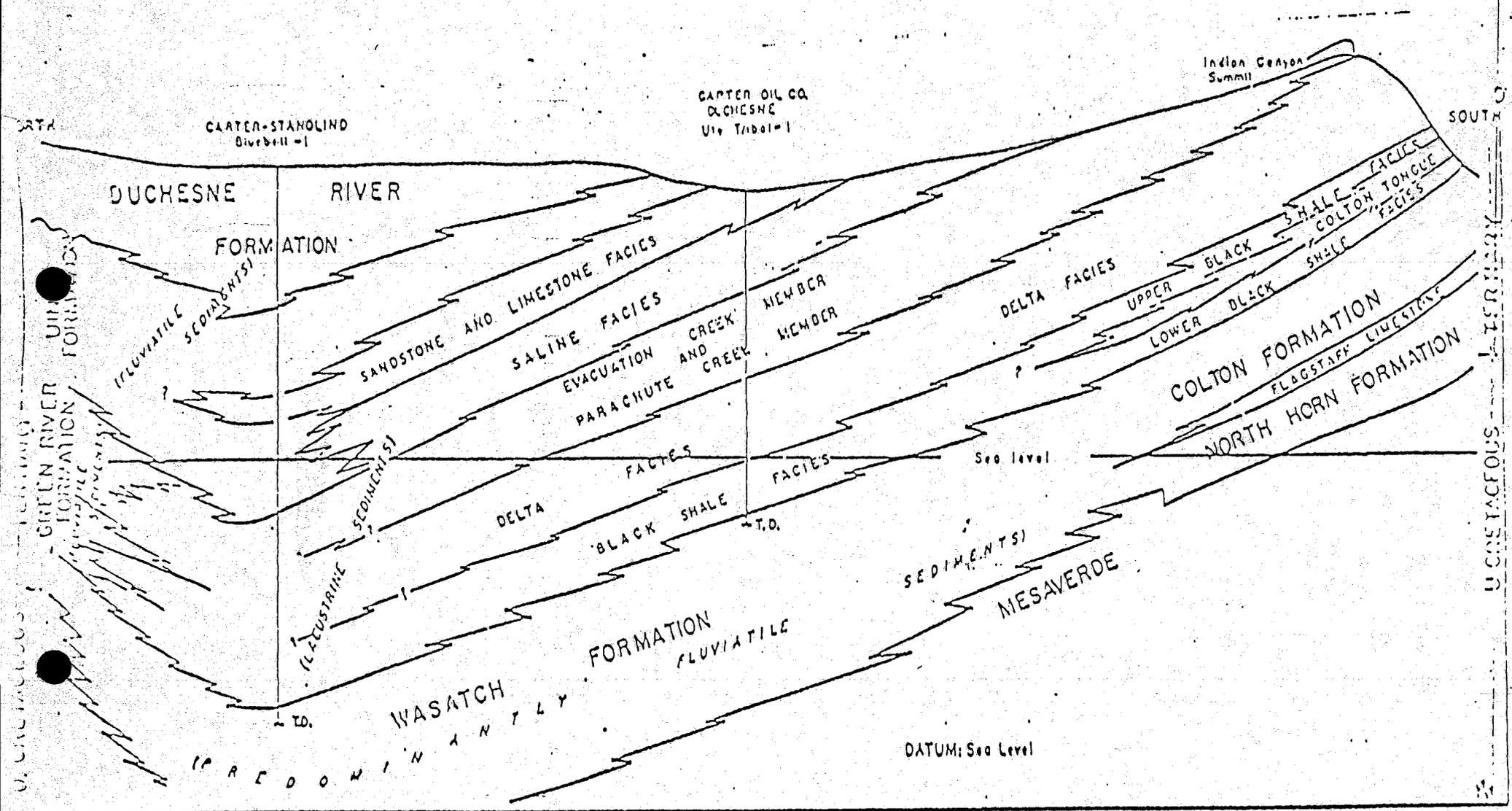
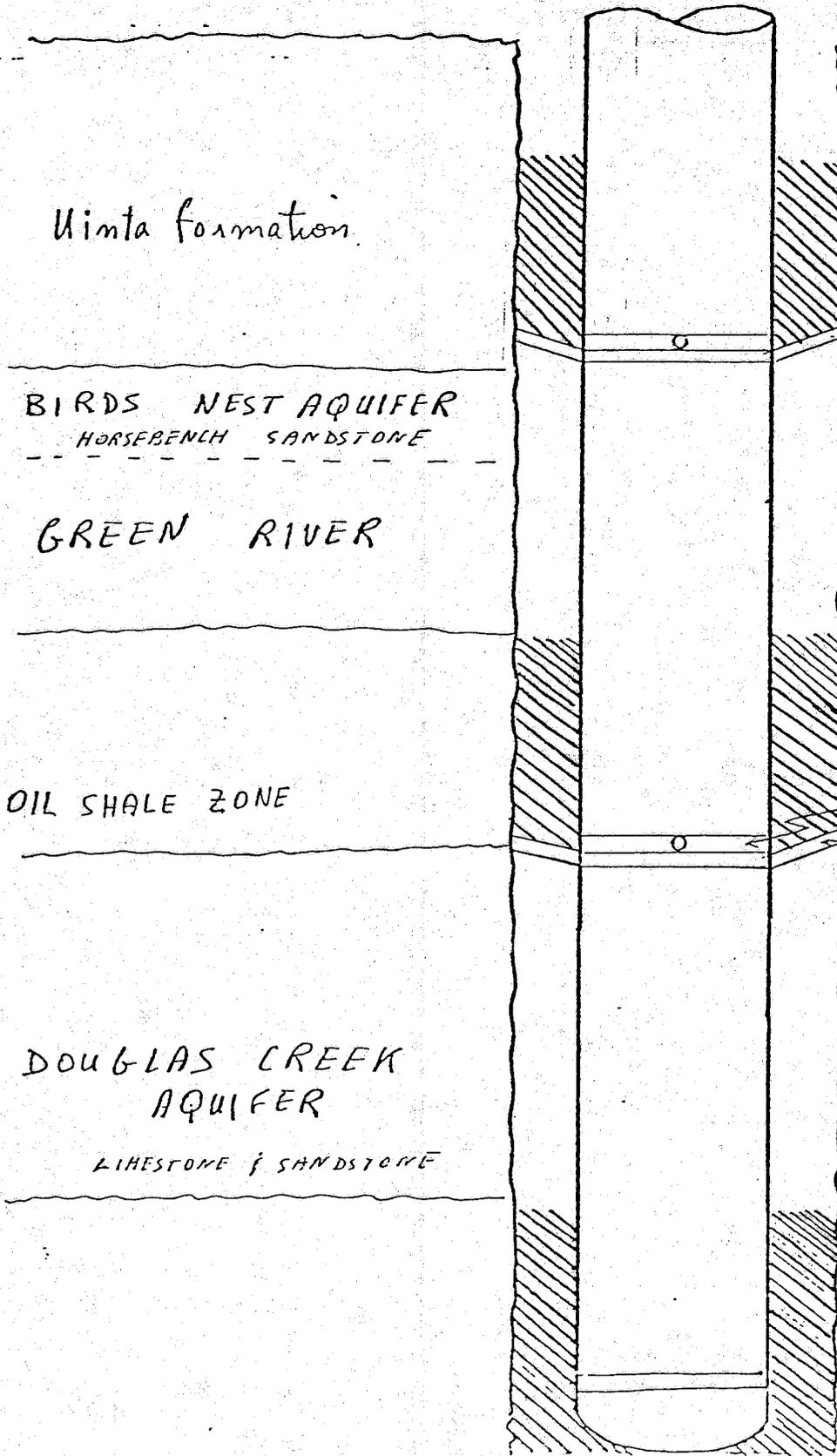


Figure 5.- View east of cross section of Uinta Basin showing stratigraphy and intertonguing of Tertiary rocks. Ute Tribal-1 (in section) is located about 8 miles southeast of the application area.

PARTIAL CASING & CEMENTING PROGRAM FOR WELLS IN  
NATURAL BUTTES FIELD. UINTAH COUNTY, UTAH



NO SCALE

CEMENT BASKET IS PLACED  
50' ABOVE TOP AQUIFER  
CEMENT TO RISE AT  
LEAST 300' IN ANNULUS

STAGE COLLAR  
CEMENT BASKET

CEMENT BASKET IS SET AT  
CONSOLIDATED SECTION AT THE  
BASE OF THE OIL SHALE ZONE.  
CEMENT TO REACH THE TOP  
OF THE MAHOGANY ZONE

CEMENT WILL REACH BASE  
OF LOWER AQUIFER

OPERATOR NATURAL GAS CORP OF CAL DATE 12-17-82

WELL NAME NGC FED 33-21-H

SEC NW 34 21 T 9 S R 17 E COUNTY DUCHESNE

43-013-30729  
API NUMBER

FED  
TYPE OF LEASE

POSTING CHECK OFF:

<input type="checkbox"/> INDEX	<input checked="" type="checkbox"/> HL	<input checked="" type="checkbox"/>
<input type="checkbox"/> NID	<input checked="" type="checkbox"/> PI	<input type="checkbox"/>
<input checked="" type="checkbox"/> MAP	<input checked="" type="checkbox"/>	<input type="checkbox"/>

PROCESSING COMMENTS:

NO WELLS WITHIN 1000

*RJT ✓*

APPROVAL LETTER:

SPACING:  A-3 \_\_\_\_\_ UNIT  c-3-a \_\_\_\_\_ CAUSE NO. & DATE

c-3-b  c-3-c

SPECIAL LANGUAGE:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP.

AUTHENTICATE LEASE AND OPERATOR INFORMATION

VERIFY ADEQUATE AND PROPER BONDING *FEA*

AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.

APPLY SPACING CONSIDERATION

ORDER NO

UNIT NO

c-3-b

c-3-c

OUTSTANDING OR OVERDUE REPORTS FOR OTHER WELLS OF THE OPERATOR.

IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER

NATURAL GAS CORPORATION  
OF CALIFORNIA

85 South 200 East  
Vernal, Utah 84078  
(801) 789-4573

December 8, 1982

RECEIVED  
DEC 17 1982

DIVISION OF  
OIL, GAS & MINING

Mr. E. W. Guynn  
Minerals Management Service  
1745 West 1700 South, Suite 2000  
Salt Lake City, UT 84104

Division of Oil, Gas & Mining  
4241 State Office Building  
Salt Lake City, UT 84114

Re: NGC #33-21-H Federal  
NW $\frac{1}{4}$  SE $\frac{1}{4}$  Sec. 21, T.9S., R.17E.  
Duchesne County, UT

Gentlemen:

Natural Gas Corporation of California proposes to drill the subject well.  
Enclosed are the following documents:

- 1) Application for Permit to Drill
- 2) Surveyor's Plat
- 3) Ten Point Plan
- 4) 13 Point Surface Use Plan

Your early consideration and approval of this application would be appreciated. Please contact this office if you have any questions concerning this application.

Sincerely,

W. A. Ryan  
Petroleum Engineer

/kh

Encls.

cc: Operations  
C. T. Clark  
E. R. Henry

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  
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 SINGLE ZONE                       MULTIPLE ZONE

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7-7/8"	5-1/2"	17#	TD	As required to protect the oil shale and producing zones.

See attached sheets for additional details.

APPROVED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

DATE: 12-17-82  
BY: *[Signature]*

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24. SIGNED W. A. Ryan TITLE Petroleum Engineer DATE November 22, 1982

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

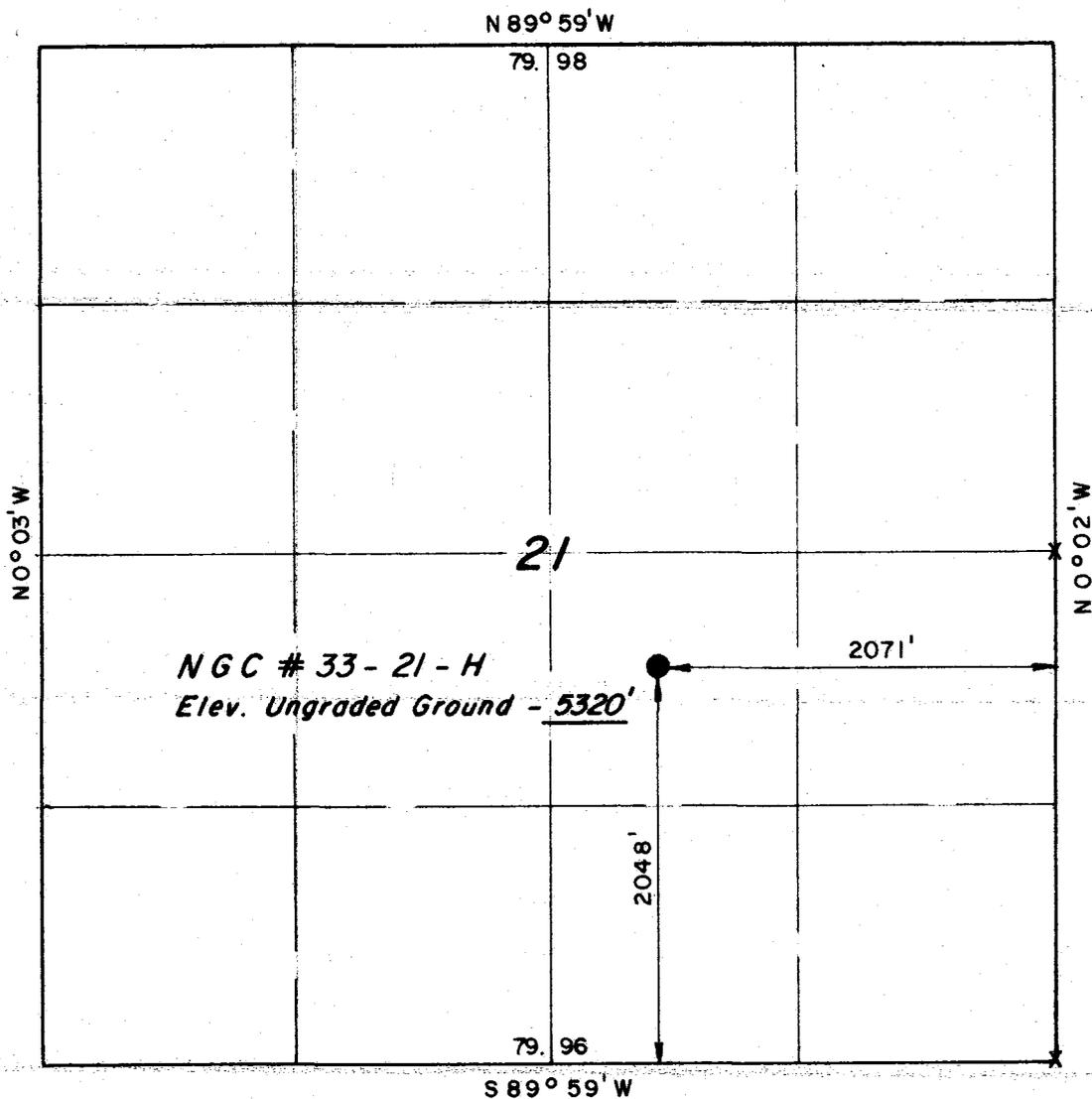
cc: MMS; Div. of OG&M; Operations; CTClark; ERHenry

T 9 S , R 17 E , S . L . B . & M .

PROJECT

NATURAL GAS CORP. OF CALIFORNIA

Well location, *NGC # 33-21-H*, located as shown in the NW1/4 SE1/4 Section 21, T9S, R17E, S.L.B. & M. Duchesne County, Utah.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Lawrence C. Kay*

REGISTERED LAND SURVEYOR  
REGISTRATION NO 3137  
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING  
P.O. BOX Q - 85 SOUTH - 200 EAST  
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	10/4/82
PARTY	RK JF RP	REFERENCES	GLO Plat
WEATHER	Fair	FILE	NATURAL GAS

X = Section Corners Located

Ten Point Plan  
 NGC #33-21-H Federal  
 NW $\frac{1}{4}$  SE $\frac{1}{4}$  Section 21, T.9S., R.17E.

1. Surface Formation: Uintah

2. Estimated Formation Tops and Datum:

<u>Formation</u>	<u>Depth</u>	<u>Datum</u>
Green River	1184'	4150'
Oil Shale Facies	1891'	3443'
Delta Facies	2837'	2497'
Green Shale Marker	3833'	1501'
Black Shale Facies	4970'	364'
Green River Lime	5425'	- 91'
Wasatch	5607'	- 273'
T.D.	5800'	- 466'

3. Producing Formation Depth: Green River - 1184', Wasatch - 5607'

4. Proposed Casing Program:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Weight/Ft.</u>	<u>Setting Depth</u>	<u>Casing New/Used</u>
12-1/4	9-5/8	36	300	New
7-7/8	5-1/2	17	T.D.	New

5. BOP and Pressure Containment Data: A 3000 WP BOP system as described in the BOP and Pressure Containment Data (attached) will be installed and maintained from the 9-5/8" surface casing. BOP system including the casing will be pressure tested to a minimum of 3000 psi for 30 mins. prior to drilling and will be mechanically checked daily during drilling operations.

6. Mud Program:

<u>Interval</u>	<u>Mud Weight lbs./gal.</u>	<u>Viscosity Sec./Qt.</u>	<u>Fluid Loss ML/30 mins.</u>	<u>Mud Type</u>
0-5100	Clear Water	-----	No Control	Water/Gel
5100-TD	8.8	40	10cc/less	L.S.N.D.

7. Auxiliary Equipment: Upper Kelly cock, full opening stabbing valve, 2 $\frac{1}{2}$ " choke manifold and pit level indicator.

8. Testing, Coring, Sampling and Logging:

- a. Testing: none.
- b. Coring: Possible side wall core.
- c. Sampling: none.
- d. Logging:

<u>Type</u>	<u>Depth</u>
DIL w/GR & SP	0-TD
FDC/CNL w/GR & CAL and "F" Log Overlay	
* Prox-Micro Log w/GR and CAL	

\* Logged between interval selected by wellsite geologist.

Note: If production casing is set, two to four zones will be perforated. Each zone will be fracture treated with approximately 30,000 gallons of gelled water and 60,000# sand.

- 9. Abnormalities (including sour gas): No abnormal pressures, temperatures, or other hazards are anticipated.
- 10. Drilling Schedule: Drilling should start approximately March 15, 1983 and last 15 days.

## 13 Point Surface Use Plan

### 1. EXISTING ROADS

See attached topographic map A.

To reach NGC Well #33-21-H, proceed west from Myton, Utah along U.S. Highway 40 for 1.5 miles to its junction with Highway 53. Proceed south on Highway 53 for 2 miles to its junction with County Road #216. Follow County Road #216 for 10 miles; turn south and west onto the Sand Wash Road. Proceed 3.4 miles. The proposed access road will start at this point. Off lease right-of-ways will not be required.

### 2. PLANNED ACCESS ROAD

See attached topographic map B.

300 feet of new road will be required for this location. The access road will be constructed to the following standards:

- 1) Width - The running surface will be 18 feet and the total disturbance width including the ditches will not exceed 30 feet.
- 2) Maximum grade - 3%.
- 3) Turnouts - None.
- 4) Drainage designs - Ditches will be constructed on each side of the road, V-shaped, 1 foot deep at 3:1 slopes.
- 5) Location and size of culverts, major cuts and fills - None.
- 6) Surfacing materials - None.
- 7) Gates, cattleguards, or fence cuts - None.
- 8) The proposed road has been flagged.

### 3. LOCATION OF EXISTING WELLS

The following wells are located within a one mile radius of the location site.

- 1) Water wells - None.
- 2) Abandoned wells - None.
- 3) Temporarily abandoned wells - None.
- 4) Disposal wells - None.
- 5) Drilling wells - None.
- 6) Producing wells - None.
- 7) Shut-in wells - None.
- 8) Injection wells - None.
- 9) Monitoring or observation wells for other resources - None.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. (1) Tank batteries - A tank battery will be built on the location.  
(2) Production facilities - None.  
(3) Oil gathering lines - No lines will be constructed as the oil will be hauled by trucks.  
(4) Gas gathering lines - None.
- B. (1) In the event production is established, all petroleum production facilities are to be contained within the proposed location site. In the event that production of oil from this well is established, a berm will be constructed around the tank battery large enough to contain the contents of tanks.  
(2) Construction methods and materials - Production facilities will be placed on the proposed pad. Construction materials will come from the unused portion of the pad.  
(3) Livestock and wildlife protection - The evaporation pond will be fenced on all four sides and overhead wire with flagging installed, if there is oil in the pit.
- C. The rehabilitation of disturbed areas no longer required for the production of this well will be completed by backfilling, recontouring, topsoiling and seeding.

5. LOCATION AND TYPE OF WATER SUPPLY

See attached topographic map A. Water will be obtained from the Upper Pleasant Valley Canal in Section 33, T.4S., R.2W., or at the Clark Roberts Ranch in Section 21, T.8S., R.17E. Agreements have been made with both in the past. The location will depend on the availability of water at the time the well is drilled.

6. SOURCE OF CONSTRUCTION METHODS

All construction materials for this location site and access road will be borrow materials, accumulated during construction of the location site. No additional road gravels or pit lining material from other sources are anticipated at this time, but if they are required, the appropriate actions will be taken to acquire them from private sources.

7. METHODS FOR HANDLING WASTE DISPOSAL

- 1) Cuttings, drilling fluids and produced fluids - A reserve pit will be constructed. The reserve pit will be approximately 10' deep and at least one-half of this depth shall be below the surface of the existing ground.

One half of the reserve pit will be used as a fresh water storage area during the drilling of this well and the other one-half will be used to store nonflammable materials such as cutting, salts, drilling fluids, chemicals, produced fluids, etc.

Prior to the onset of drilling, a "stock tight" fence shall be installed on three sides of the reserve pit. This fence will be either (1) woven wire at least 28 inches high and within four inches of ground surface with two strands of barbed wire above the woven wire with 10-inch spacing, or (2) at least five strands of barbed wire spaced, starting from the ground, at approximately 6-, 8-, 10-, 12-, and 12-inch intervals. At the completion of drilling operations, the fourth side of the reserve pit will be fenced and allowed to dry completely before the pit is backfilled. If there is oil on the pits, overhead wire and flagging will be installed on the pits.

If deemed necessary by the agencies concerned to prevent contamination to surrounding areas, the reserve pit will be lined with a gel.

- 2) Sewage - A portable chemical toilet will be supplied for human waste.
- 3) Garbage - Trash cages will be on all locations and all trash will be removed to an authorized landfill.
- 4) Site Clean-up - Immediately after the rig is moved out, the area around the well site will be cleaned and all refuse placed in the burn pit.

#### 8. ANCILLARY FACILITIES

There are not ancillary facilities planned for a the present time and none foreseen in the near future.

#### 9. WELL SITE LAYOUT

See typical rig layout.

#### 10. PLANS FOR RESTORATION OF THE SURFACE

Prior to construction of the location, the top six inches of soil material will be stripped and stockpiled. This will amount to approximately 18 cubic yards of material that will be stockpiled.

If the well is producing, the platform and pit areas no longer required for the production of the well will be backfilled, recontoured, topsoiled and seeded.

If the well is abandoned, the entire disturbed area (including roads) will be restored by: (1) backfilling; (2) recontouring; (3) topsoiling; (4) seeding. Specifically: the platform highwall(s) and road fill(s) will be eliminated by moving all excavated material back in place. Restoration of the location and access road will begin within 90 days after completion of the well. The BLM representative will be notified prior to starting the rehabilitation operations.

The following seed mixture and methods for seeding will be used: The seed mixture will be determined by the Bureau of Land Management at the time of abandonment.

Seed will be planted after September 1 and prior to ground frost; or seed will be planted after the frost has left and before May 15. All seed will be drilled on the contour at a depth of  $\frac{1}{4}$  to  $\frac{1}{2}$  inch. Slopes too steep or rocky for machinery will be broadcast and the seed hand raked into the soil. When broadcasting the seed, the rate per acre will be doubled.

The Lessee further covenants and agrees that all of said clean-up and restoration activities shall be done and performed in a diligent and most workmanlike manner and in strict conformity with the above mentioned Items #7 and #10.

#### 11. OTHER INFORMATION

- 1) The Vernal District BLM will be contacted by the Operator or dirt contractor forty-eight hours prior to beginning any work on public land.
- 2) The dirt contractor will be furnished a copy of the approved APD and Surface Use Plan prior to beginning any work on public land.
- 3) All permanent (on-site for six (6) months duration or longer) structures constructed or installed, including the pumpjack, shall be painted a flat, non-reflective, earthtone color to match Tnemec 23-08351 Mesa Brown Enduratone or an approved equal. All facilities shall be painted within six months of when the production facilities are put in place. Facilities that are required to comply with O.S.H.A. (Occupational Safety and Health Act) are excluded.
- 4) Construction and maintenance of roads, rehabilitation of disturbed areas, and construction of pipeline routes shall be in accordance with the surface use standards as set forth in the booklet, "Surface Operating Standards for Oil and Gas Exploration and Development".
- 5) If production casing is run, two to four zones will be perforated. Each zone will be fracture treated with approximately 30,000 gallons of gelled water and 60,000# of sand.

#### 12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Natural Gas Corporation of California  
85 South 200 East  
Vernal, UT 84078  
Attn: Bill Ryan or Rick Canterbury  
Telephone: (801) 789-4573

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 and belief, true and correct; and that the work associated with the operations proposed herein will be performed by Natural Gas Corporation of California and its contractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

November 22, 1982

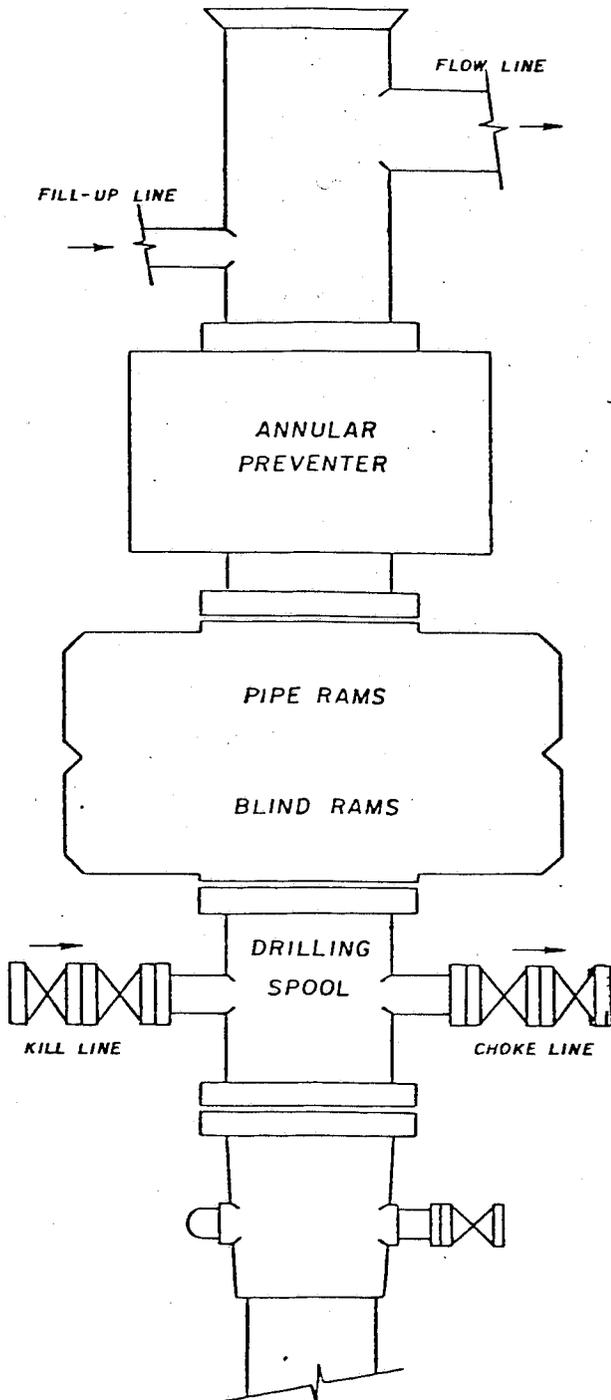
Date

*William A Ryan*

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W. A. Ryan, Petroleum Engineer

NATURAL GAS CORPORATION  
OF  
CALIFORNIA  
BOP AND PRESSURE CONTAINMENT DATA  
NGC 33-21-H  
Section 21, T.9S., R.17E.

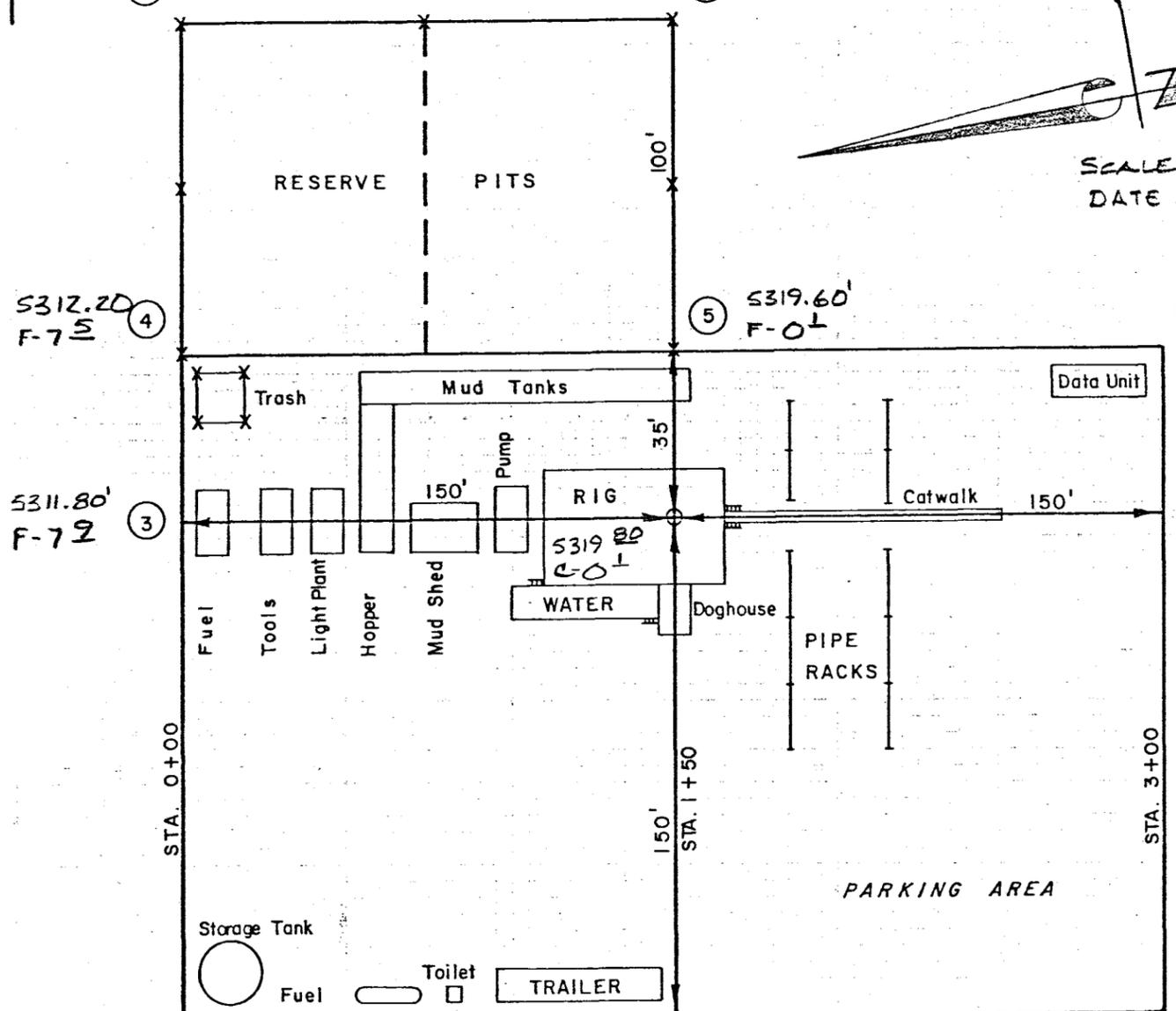


1. BOP equip shall consist of a double gate, hydraulically operated preventer with pipe & blind rams or two single ram type preventers, one equipped w/pipe rams, the other w/blind rams.
2. BOP's are to be well braced w/ hand controls extended clear of substructure.
3. Accumulator to provide closing pressure in excess of that required w/sufficient volume to operate all components.
4. Auxiliary equipment: Lower kelly cock, full opening stabbing valve, 2½" choke manifold, pit level indicator &/or flow sensors w/alarms.
5. All BOP equipment, auxiliary equipment stand pipe & valves & rotary hose to be tested to the rate pressure of the BOP's at time of installation & every 30 days thereafter. BOP's to be mechanically checked daily.
6. Modification of hook-up or testing procedure must be approved in writing on tour reports by wellsite representative.

N.G.C. # 33-21-H

5312.85'  
F-3 1/2 TO TOP OF DIKE  
C-4 1/2 TO BOTTOM OF PIT

5318.00'  
C-9 1/2 TO BOTTOM OF PIT.



SCALE: 1" = 50'  
DATE: 11/3/82

5312.20'  
F-7 1/2

5311.80'  
F-7 1/2

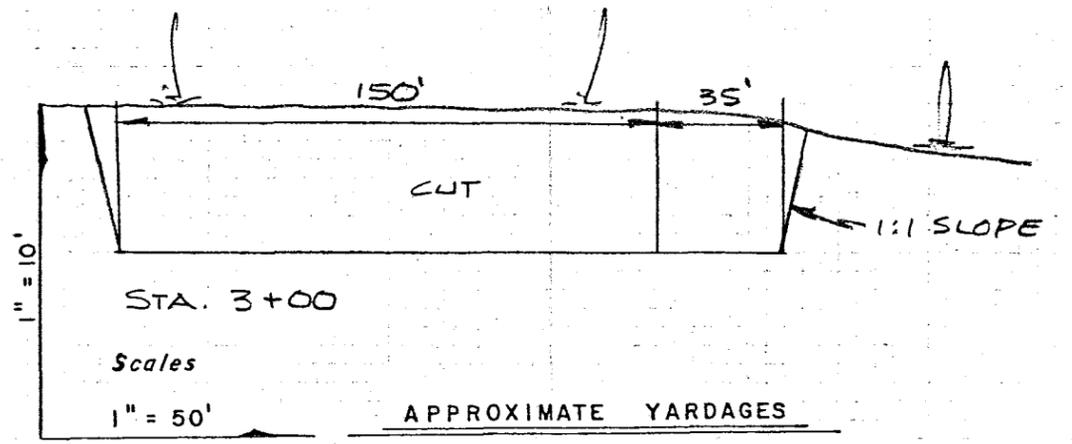
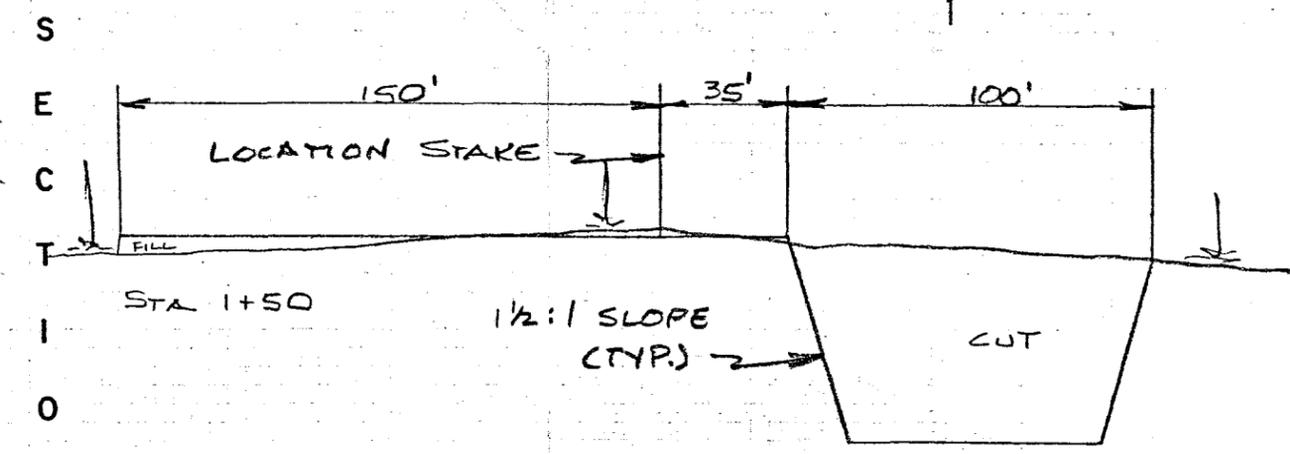
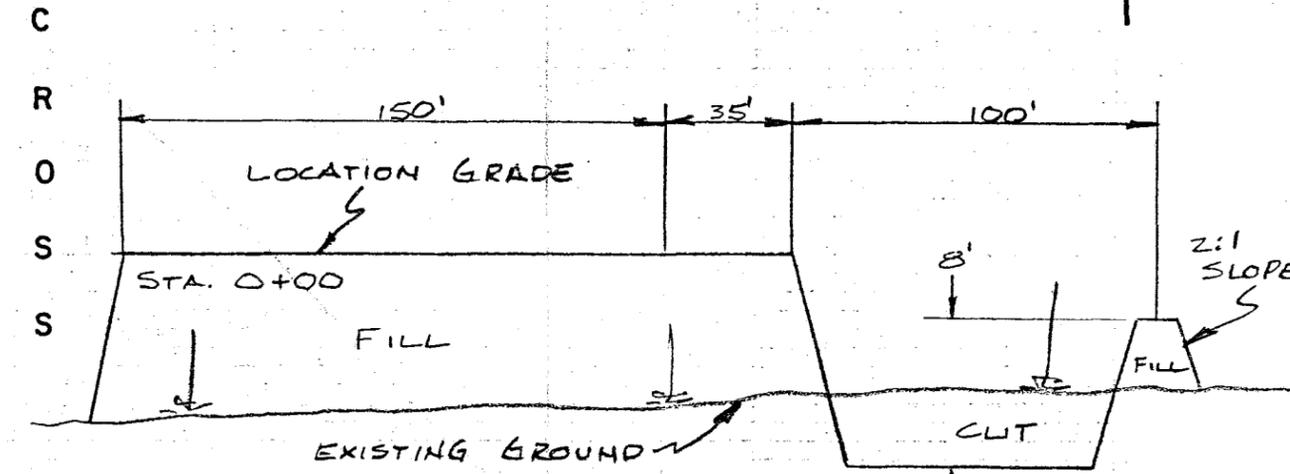
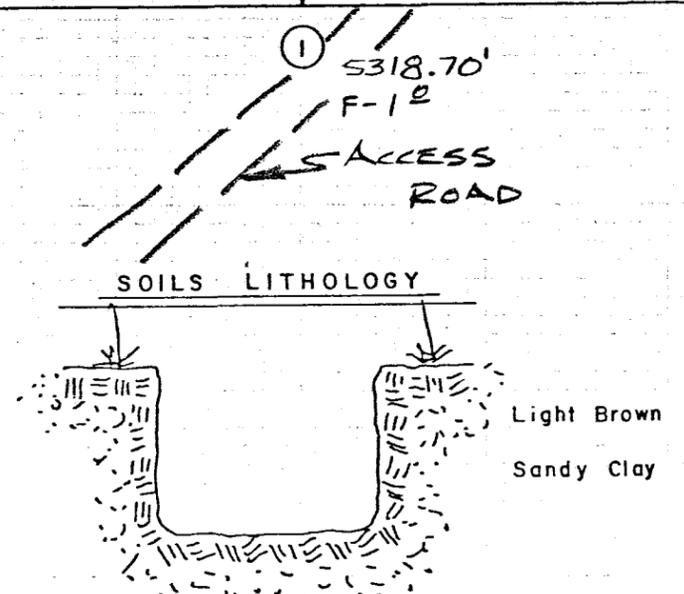
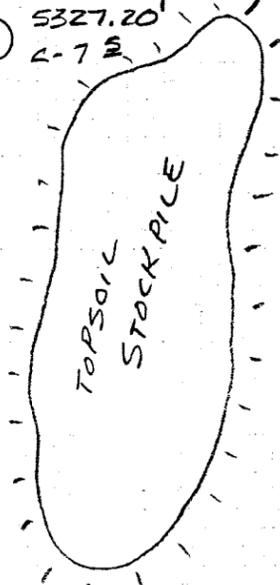
5310.80'  
F-8 1/2

5318.70'  
F-1 1/2

5326.10'  
C-6 1/2

5327.20'  
C-7 1/2

5327.57'  
C-7 1/2



STA. 3+00

Scales

1" = 50'

APPROXIMATE YARDAGES

Cu. Yds. Cut - 9,897

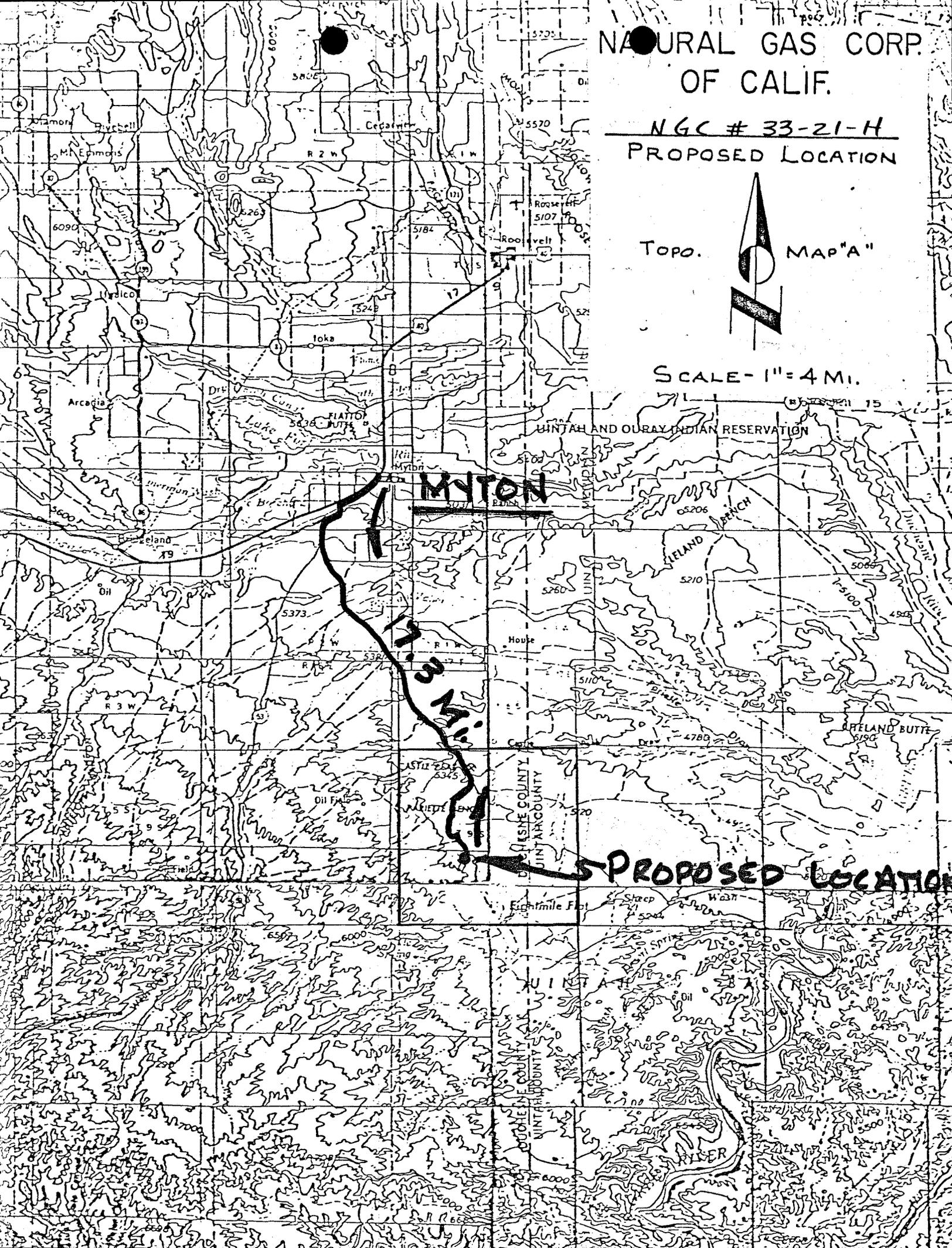
Cu. Yds. Fill - 5,014

NATURAL GAS CORP.  
OF CALIF.

NGC # 33-21-H  
PROPOSED LOCATION

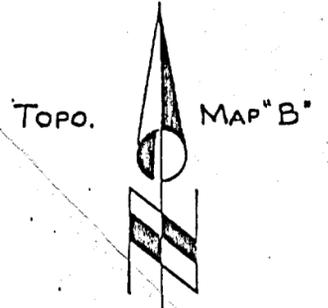


SCALE - 1" = 4 MI.



NATURAL GAS CORP.  
OF CALIF.

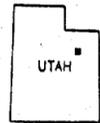
NGC # 33-21-H  
PROPOSED LOCATION



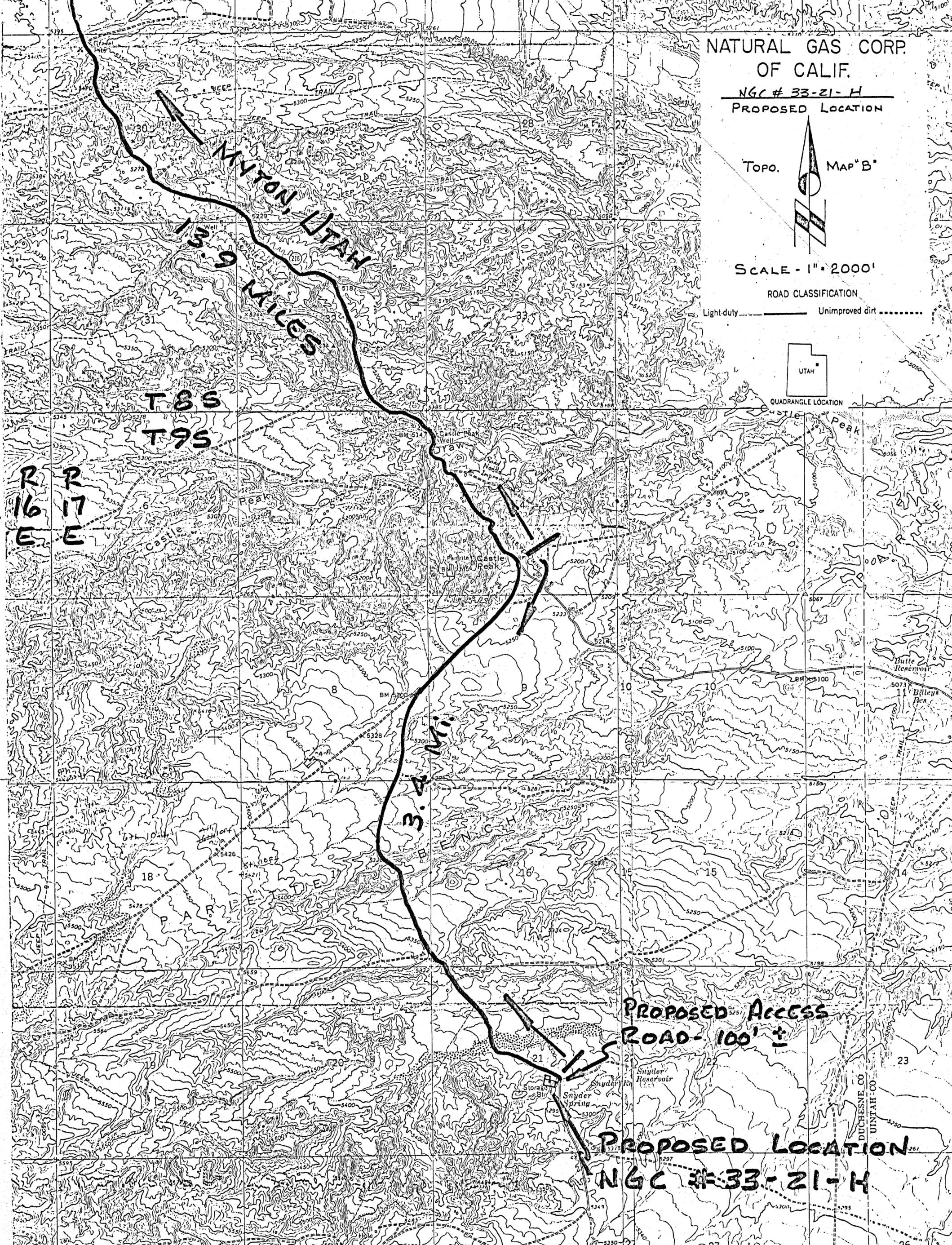
SCALE - 1" = 2000'

ROAD CLASSIFICATION

Light-duty Unimproved dirt



QUADRANGLE LOCATION



PROPOSED ACCESS  
ROAD - 100' ±

PROPOSED LOCATION  
NGC # 33-21-H

December 17, 1982

Natural Gas Corporation of California  
85 South 200 East  
Vernal, Utah 84078

RE: Well No. NGC Fed. 33-21-H  
NWSE Sec. 21, T.9S, R.17E  
Duchesne County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to oil well is hereby granted in accordance with Rule C-3(b), General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

RONALD J. FIRTH - Engineer  
Office: 533-5771  
Home: 571-6068

OR

CLEON B. FEIGHT - Director  
Office: 533-5771  
Home: 466-4455

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-013-30729.

Sincerely,

Norman C. Stout  
Administrative Assistant

NCS/as  
cc: MMS  
Enclosure



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Scott M. Matheson, Governor  
Temple A. Reynolds, Executive Director  
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

December 22, 1983

Natural Gas Corporation of California  
85 South 200 East  
Vernal Utah 84078

RE: Well No. NGC #33-21-H  
2048' FSL, 2071' FEL NW SE  
Sec. 21, T. 9S, R. 17E.  
Duchesne County, Utah

Gentlemen:

Due to excessive time delay in commencing drilling operations, approval to drill the subject well is hereby rescinded effective one calendar month from the date of this notice.

A new Application for Permit to Drill must be filed with this office for approval, prior to future drilling of the subject location.

Respectfully,

A handwritten signature in black ink, appearing to read "Norman C. Stout".

Norman C. Stout  
Administrative Assistant

NCS/cj