

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
 P.O. Box 3093, Casper, WY 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface 1930' FSL, 1834' FEL, NW SE Section 15, T12S, R14E
 At proposed prod. zone 2426' 1430'
LOCATION CHANGE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 42 miles southwest of Myton, Utah

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
 1600±

17. NO. OF ACRES ASSIGNED TO THIS WELL
 640

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

19. PROPOSED DEPTH
 6875'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 7651' Ungr. Gr.

22. APPROX. DATE WORK WILL START*
 September 1, 1980

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"	54.5	60'	75 sacks
12-1/4	9-5/8"	40.0	500'	225 sacks
7-7/8	4-1/2"	11.6	6875'	450 sacks

Operator proposes to drill a well to a depth of 6875' or approximately 500' into the Cretaceous Mesaverde. All water and significant hydrocarbon shows will be evaluated and reported. Operations will be conducted according to the attached well program and procedure and in conformance with all applicable regulations. No abnormal pressures, temperatures or other potential hazards are anticipated. Operations are expected to commence about September 1, 1980 and be completed in about 30 days.

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. J. Firth TITLE Petroleum Engineer DATE 6/30/80

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (ORIG. SCD.) R. A. HENRICKS TITLE FOR E. W. GUYNN DISTRICT ENGINEER DATE 23 OCT 1980

CONDITIONS OF APPROVAL, IF ANY:

3-USGS,UT; 1-Ut. Div. of OG&M; 1-J.C. Osmond; 1-D.E. Beardsley; 1-E.R.Henry

NOTICE OF APPROVAL

*See Instructions On Reverse Side

Utah Oil + Gas

CONDITIONS OF APPROVAL ATTACHED TO ORIGINAL COPY

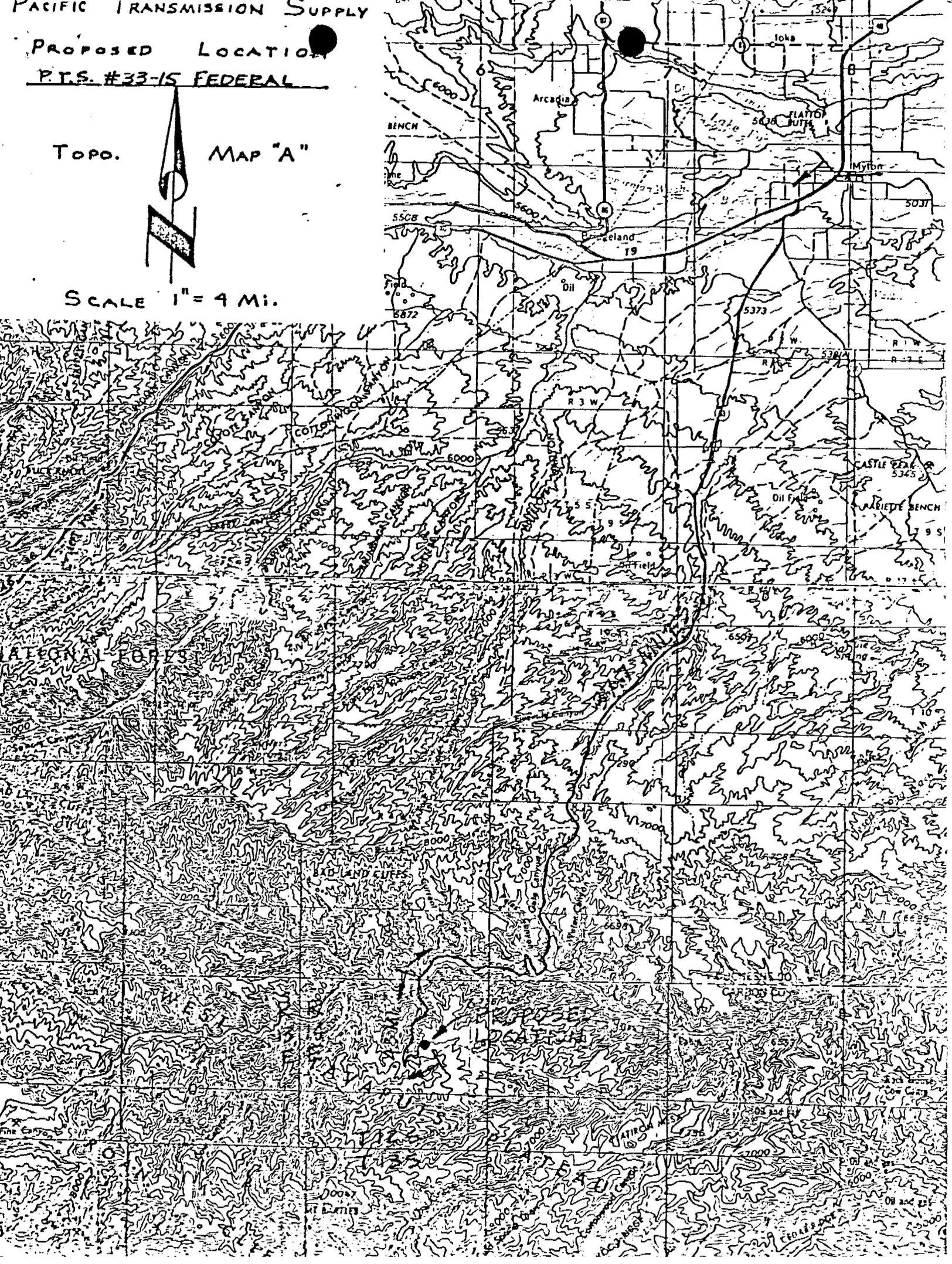
FLARING OR VENTING OF GAS IS SUBJECT TO NTL 4-A DATED 11/69

PROPOSED LOCATION
P.T.S. #33-15 FEDERAL

TOPO. MAP "A"



SCALE 1" = 4 MI.

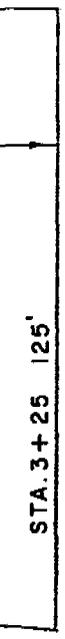
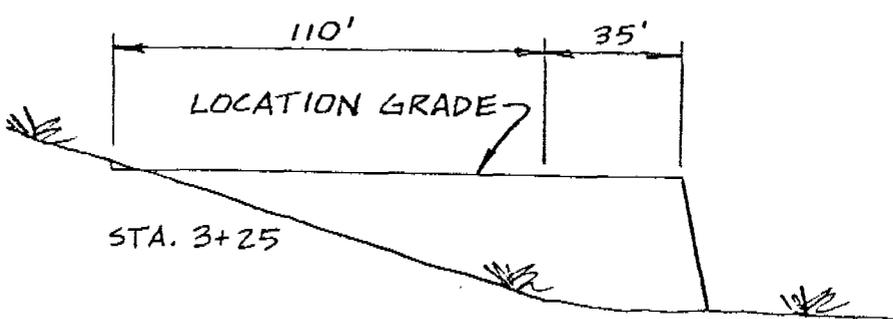
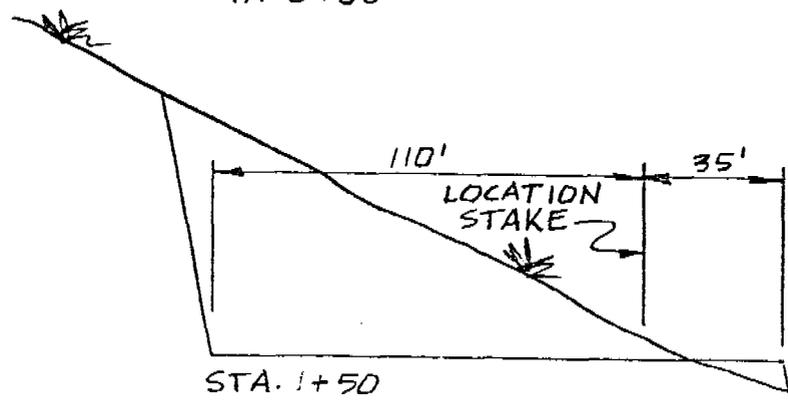
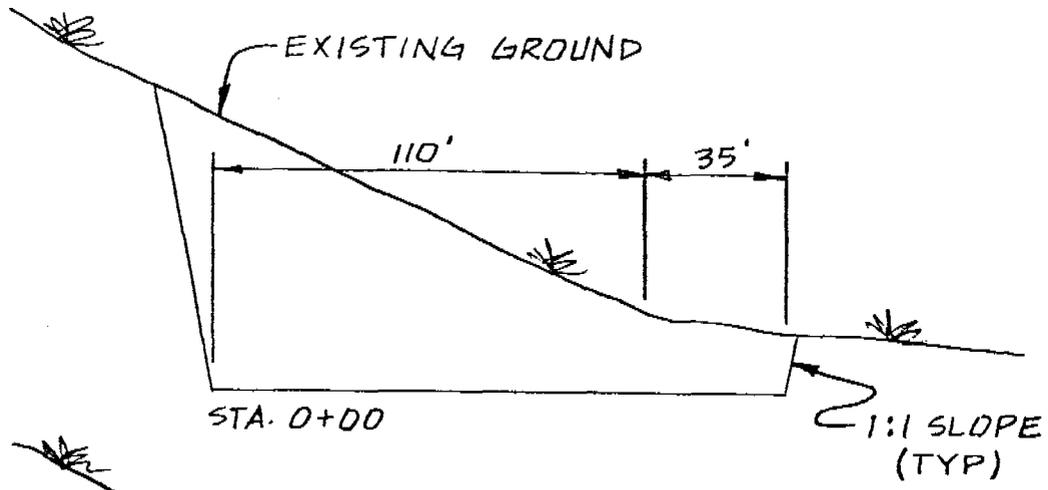


NATURAL GAS CORP. OF CALIF.

P.T.S. # 33-15 FEDERAL

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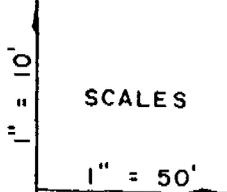
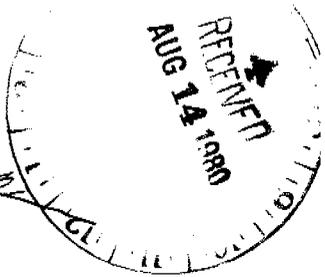
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⑥ F-6²

⑦ F-6⁵

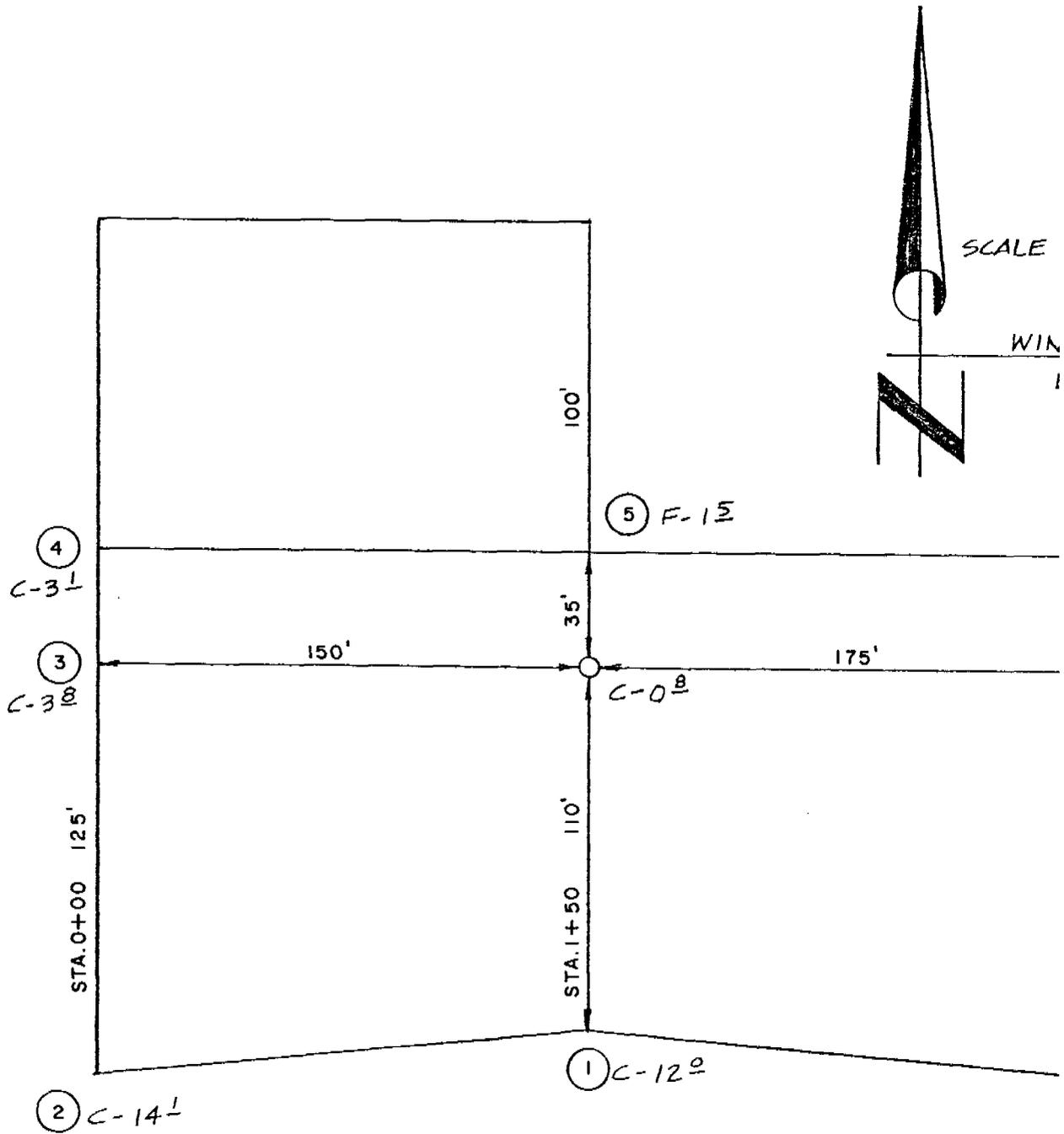
⑧ C-0⁶



APPROXIMATE YARDAGES

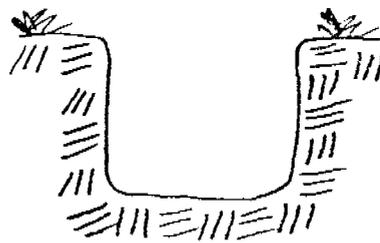
Cubic Yards Fill - 2,000

Cubic Yards Cut - 8,164



SOILS LITHOLOGY

- No Scale -



Light Brown
Sandy Clay

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPlicate
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		5. LEASE DESIGNATION AND SERIAL NO. U-8604
2. NAME OF OPERATOR Natural Gas Coporation of California		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 85 South 200 East, Vernal, UT 84078		7. UNIT AGREEMENT NAME Argyle
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2426' from the south line, 1430' from the east line, NW SE Section 15, T12S, R14E		8. FARM OR LEASE NAME Federal
14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.) 7635' Ungraded Ground	9. WELL NO. 33-15
		10. FIELD AND POOL, OR WILDCAT Wildcat
		11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA Section 15, T12S, R14E
		12. COUNTY OR PARISH Carbon
		13. STATE Utah

789-4573

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) Location Footage Change <input checked="" type="checkbox"/>	

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Application for Permit to Drill submitted on June 30, 1980 indicated location of well as 1930' from the south line and 1834' from the east line.

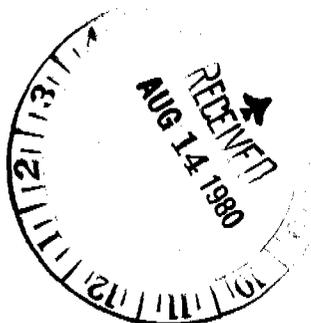
Resurveyed and corrected location of well is 2426' from the south line and 1430' from the east line.

Corrected Surveyor's Plats and Location Plot Plan and Cross Section Sheets are attached.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING

DATE: 8/21/80

BY: [Signature]



18. I hereby certify that the foregoing is true and correct

SIGNED

[Signature]
A. J. Fitch

TITLE

District Superintendent

DATE

8/12/80

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

3-USGS, UT; 1-UT Div. of OGAM; 1-JCOsmond; 1-JCBendler; 1-ERHenry

DRILLING PROGRAM
PTS #33-15
Argyle Unit
Carbon County, Utah

Location: 1930' from the south line, 1834' from the east line,
Section 15, T12S, R14E.

Elevations: 7651' Ungr. Gr., location 1' cut
7664' KB

<u>Geological Prognosis:</u>	<u>Depth</u>	<u>Datum</u>
Green River	Surface	
Wasatch	2895'	+4755
Mesaverde	6347'	+1303
Total Depth	6875' or 500' into the Cretaceous Mesaverde	

Samples: Collect drill cutting samples at ten (10) foot intervals from under surface casing to T.D. or as directed by wellsite geologist. Samples to be collected by drilling contractor crews.

If any significant water flows are encountered, rates should be estimated and water samples obtained to determine salinities and resistivities.

Electric Logging: The following logs will be run from surface casing to T.D.:

Dual Laterolog with Gamma Ray, Formation Density and Compensated Neutron Log with Caliper and Borehole Compensated Sonic Log with Caliper.

If chloride content of the drilling fluid at the time of logging is less than 20,000 ppm, a Dual Induction log should be run instead of the Dual Laterolog.

Mud Logging: A portable mud logging unit will be operated by a contract mud logger from below surface casing to T.D. In addition, occasional geological inspection of samples and hydrocarbon shows by a company geologist will be necessary to determine and verify total depth correlations and, if applicable, zones to be drill stem tested.

Drill Stem Testing: All significant shows of oil and gas should be drill stem tested using conventional drill stem testing equipment and dual packers. Collect samples of all fluids recovered for further analysis.

Drilling Fluid:

<u>Interval (Ft.)</u>	<u>Mud Weight (lbs/gal)</u>	<u>Viscosity (sec/qt.)</u>	<u>Fluid Loss (ml/30 min)</u>
0'-60'			
Drill this interval with dry hole digger using air.			
60'-500'	8.4 - 8.6	26 - 29	No Control
Drill with fresh water. Maintain native solids at a minimum by adding lime and/or a selective flocculant and circulating the reserve pit. If unable to circulate the reserve pit, frequent dumping and cleaning of the mud tanks will be necessary to avoid recirculating drilled solids. Occasional sweeps of prehydrated bentonite may be necessary to ensure adequate hole cleaning while drilling 12-1/4" hole and to prepare hole to run casing.			
500'- 4500'	8.4 - 9.0	30 - 36	10 - 20 cc
Drill with clear flocculated 2% KCl water inhibited with 300-400 ppm chromate. Increase weight as necessary with sodium chloride to control water flows in the Green River and possible gas kicks in the Wasatch. When hole conditions make it necessary, mud up with salt gel for viscosity, caustic soda for pH control and starch and preservative for fluid loss control. Occasional prehydrated gel sweeps may be necessary if tight connections or excessive fill is encountered.			
Some loss of circulation is anticipated in this interval. Fine mica is recommended for controlling minor seepage losses which might develop. If severe losses are encountered which require the use of high percentages of lost circulation material and bypassing the shaker screen, use pill treatments instead of maintaining lost circulation material in the system continuously. Lost circulation which cannot readily be controlled by more conventional means, may justify the use of cement plugs.			
4500'-6875' TD.	9.0 - 10.0	32 - 38	10 cc's or less
Continue drilling to total depth with this mud system, increasing the viscosity as necessary to provide proper hole cleaning. Higher than normal formation pressures should be anticipated in this interval. Fluid densities to 10.5 lbs/gal. may be required to safely balance formation pressures. Drilling fluid salinity can be adjusted as necessary to increase mud weight to 10.3-10.5 lbs/gal. without adding additional solids to the system.			
Seepage and slight loss of circulation may occur as the mud weight is increased. To avoid fracturing weak formations, maintain mud			

weight, yield point and gel strength as low as possible without sacrificing safe operations. Care should be taken to minimize swab and surge-pressure by avoiding excessive pipe speed while tripping.

A small stream of water should be run continuously while drilling and mud tanks cleaned frequently to minimize the recirculation of drilled solids and allow the addition of fresh materials to the system. Water should be reclaimed from the reserve pit to conserve water and also reduce some chemical additions. Wellsite interpretation of hole conditions will assist in determining the fluid properties necessary to ensure satisfactory logging and casing operations.

Casing:

Conductor:

0 - 60' 13-3/8", 54.5 lb./ft., K-55, ST&C, New
Capacity - .1546 bbls/lin. ft.

Surface Casing:

0 - 500' 9-5/8", 40.0 lb./ft., K-55, ST&C, New
Capacity - 7.58 bbls/100'

Production Casing:

0 - Total Depth 4-1/2", 11.6 lb./ft., N-80, LT&C, New
Capacity - 1.55 bbls/100'

Casing Equipment:

Conductor:

Float shoe on bottom joint.

Surface Casing:

Guide shoe on bottom with a float collar one joint off bottom. One centralizer 10' above the shoe and one every 3rd joint thereafter. Use total of 3 centralizers.

Production Casing:

Guide shoe on bottom and a differential fill float collar one joint off bottom. A stage collar may be run if sufficient shows are encountered in the upper Wasatch. Run cement baskets one joint above and one joint below stage collar. Exact placement of centralizers will be dependent upon location and number of productive intervals. Centralizers will be placed at one per joint across pay intervals and one per three joints across non-productive intervals to be cemented.

Cementing:

Conductor - 13-3/8", 54.5 lbs./ft., K-55

Cement to surface with 75 sacks of Class G cement with 2% calcium chloride. (Cement volume calculated using 100% excess.)

Surface Casing - 9-5/8", 40.0 lb./ft., K-55

Cement to surface with 175 sacks light weight slurry cement. Tail in with 50 sacks of Class G cement w/2% calcium chloride. If cement returns are not obtained at surface, recement hole from surface. (Cement volumes calculated using 100% excess.)

Production Casing: 4-1/2", 11.6 lbs./ft., N-80

Cement requirements to be determined using the Caliper log plus 25% excess. The length of necessary cement column and possible use of stage cementing equipment will be determined following electric log evaluation. If lost circulation occurs while drilling, consider using a light weight cement as an alternate to Class G neat cement.

DRILLING PROCEDURE
PTS #33-15
Argyle Unit
Carbon County, Utah

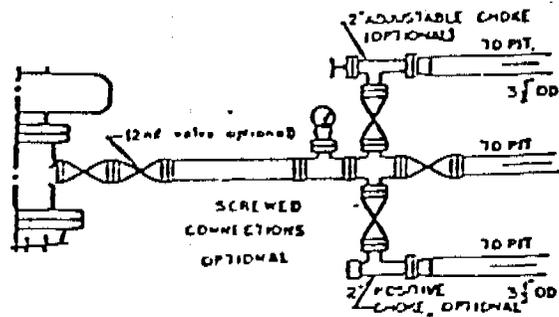
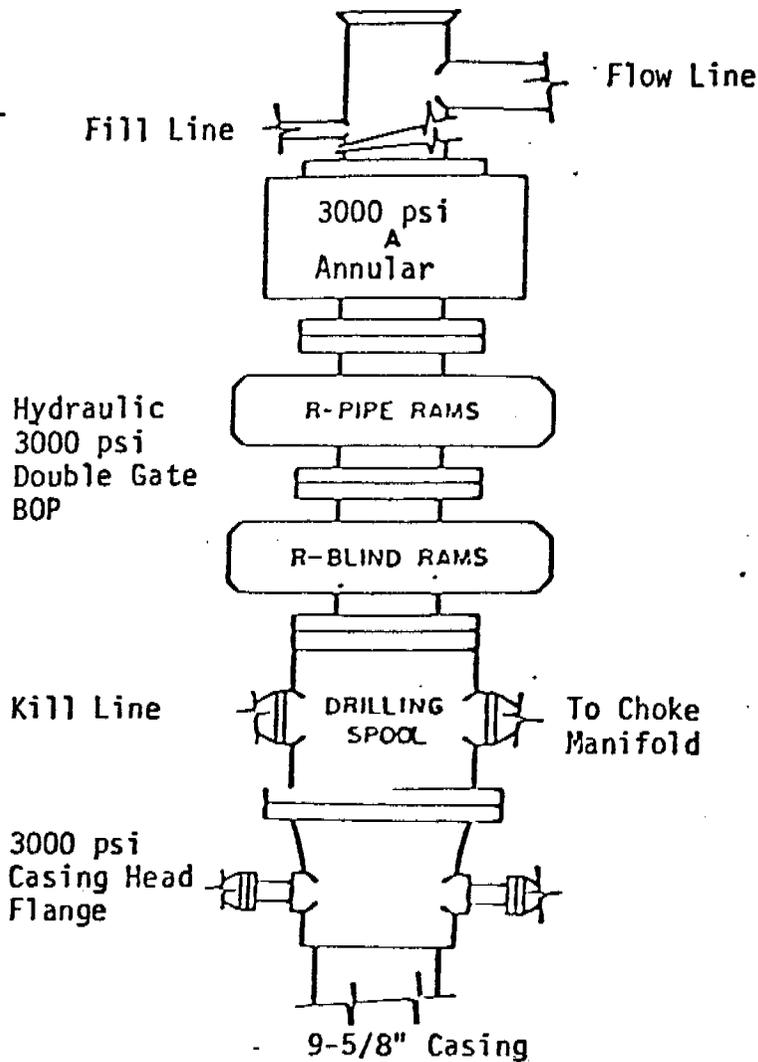
1. Drill 17-1/2" hole to 60'. Run and cement 13-3/8" O.D. conductor pipe with 75 sacks Class G cement with 2% calcium chloride.
2. Drill 12-1/4" hole to 500'. Run and cement 9-5/8" O.D. surface casing as specified.
3. WOC 8 hours. Cut off 9-5/8" casing and install 3000 psig casing flange. Nipple up BOP equipment and pressure test as specified.
4. Drill 7-7/8" hole to T.D. Perform drill stem testing as necessary, conduct electric logging and prepare hole for production casing.
5. Run and cement 4-1/2" casing as specified.
6. Release rig and clean location.

Special Instructions:

1. Run deviation surveys at regular intervals and in conjunction with bit trips.
2. Utilize a degasser and necessary solids control equipment.
3. Avoid surging hole on trips and fill hole properly when pulling pipe.
4. All drilling crew personnel should be familiar with the BOP operations. Operate pipe rams daily and close blind rams each trip out of the hole.
5. A regular daily mud check by the mud engineer is required. Drilling crews should observe to detect fluid level changes in mud pits.

PRESSURE CONTROL SPECIFICATIONS:

PTS #33-15 FEDERAL
ARGYLE UNIT
CARBON COUNTY, UTAH



CHOKE-MANIFOLD DESIGN

Test Schedule - Double Ram Type Preventers

1. 10" BOP System and choke manifold to 2500 psi.
2. The BOP equipment will be well braced with hand controls extending clear of The drilling rig substructure.
3. The accumulator equipment will provide closing pressure in excess of that required with sufficient volume to operate all components.
4. Auxiliary equipment, stand pipe, valves and rotary hose will be tested as per test schedule or to the rated pressure of the equipment at the time of installation.
5. Modification of the pressure control equipment or testing procedures will be approved in writing on the four sheets by the wellsite representative.

PACIFIC TRANSMISSION SUPPLY COMPANY

13 Point Surface Use Plan

Well Location

P.T.S. #33-15 Federal

Located In

Section 15, T12S, R14E, S.L.B. & M.

Carbon County, Utah

1. EXISTING ROADS

See attached Topographic Maps "A" and "B".

To reach the PACIFIC TRANSMISSION SUPPLY COMPANY Well Location P.T.S. #33-15 located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 15, T12S, R14E, S.L.B. & M. from Myton Utah:

Proceed Westerly out of Myton, Utah along U.S. Highway 40 - 2.8 miles to its junction with Utah State Highway 53 to the South; proceed in a Southwesterly direction along this Highway - 28.9 miles to its junction with nine-mile canyon road; proceed Southwesterly along this road 6 miles to its junction with a road to the South; proceed Southerly along this road 4.3 miles to the location site.

U.S. Highway 40 is a bituminous surfaced road. Utah State Highway 53 is a bituminous surfaced road for the first + 5 miles, it then changes to be a dirt road to the junction of the road up nine-mile canyon. The nine-mile canyon road is an improved dirt County road. The Harmon Canyon road is also a dirt road. The Highways mentioned above are maintained by state road crews. The county road is maintained by Carbon County road crews. The road up Harmon Canyon will be maintained by PACIFIC TRANSMISSION SUPPLY COMPANY, or its subcontractors. This maintenance will consist of some minor grade work to smooth road surfaces and for snow removal.

None of the above described roads will require any construction, they will meet the necessary standards required to facilitate an orderly flow of traffic to and from this well during the drilling, completion and production phases of this well.

2. PLANNED ACCESS ROAD

See attached Topographic Map "B".

There will be no access road required as the existing roads mentioned above go directly to the proposed location site.

3. LOCATION OF EXISTING AND PROPOSED FACILITIES

There is one existing abandoned well within a one-mile radius of this location site.

There are no known water wells, disposal wells, producing wells, drilling wells, shut in wells, injection wells, monitoring or observation wells for other resources within a one-mile radius of this location site.

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

There are no PACIFIC TRANSMISSION SUPPLY CO. tank batteries, production facilities, oil gathering lines, gas gathering lines, injection lines, or disposal lines within a one-mile radius of this location site.

In the event that production is established, all petroleum production facilities will be contained within the proposed location site (see Location Layout Sheet). Plans for a flowline from this location to existing lines in the area will be submitted upon completion of the well. Plans will be submitted to the appropriate agencies upon completion of survey. The areas used for production facilities will be built using bulldozers, graders, and workman crews to lay lines, and set up equipment.

The rehabilitation of the disturbed area that is not required for the production of this well, will meet the requirements of Item #7 and #10 and these requirements and standards will be adhered to.

5. LOCATION OF AND TYPE OF WATER SUPPLY

Water to be used in the drilling of this well will be hauled from Nine-Mile Creek, at a point located in the NE $\frac{1}{4}$ Section 3, T12S, R14E, S.L.B. & M. The water will be hauled by truck over existing roads approximately 3.8 miles to the location site.

In the event the above can not be improvised other arrangements will be made and all concerned agencies will be notified. All necessary permits will be taken care of.

There will be no water well drilled at this location site.

6. SOURCE OF CONSTRUCTION MATERIALS

All construction materials for this location site shall be borrow materials accumulated during the construction of the location site. No additional road gravels or pit lining materials 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.

All surface disturbance in on B.L.M. lands.

7. METHODS FOR HANDLING WASTE DISPOSAL

See Location layout Sheet.

A reserve pit will be approximately 8' deep and at least one-half of this depth shall be below the surface of the existing ground.

7. METHODS FOR HANDLING WASTE DISPOSAL - cont...

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 non-flammable materials such as cuttings, salts, drilling fluids, chemicals, produced fluids, etc.

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

The pits will have wire and overhead flagging installed if deemed necessary to protect the water fowl, wildlife, and domestic animals.

At the onset of drilling, the reserve pit will be fenced on three sides and at the time drilling activities are completed, it will be fenced on the fourth side and allowed to dry completely prior to the time that backfilling and other reclamation activities are attempted.

When the reserve pit dries and reclamation activities commence, the pits will be covered with a minimum of four feet of soil and all requirements in Item #10 will be followed.

All waste materials will be contained in a portable trash basket and will be hauled to the nearest sanitary landfill.

A portable toilet will be supplied for human waste.

8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen.

9. WELL SITE LAYOUT

See location layout sheet.

The B.L.M. District Manager shall be notified before any construction begins on the proposed location site.

As mentioned in Item #7, the pits will be unlined unless it is determined by the representatives of the agencies involved that the materials are too porous and would cause contamination to the surrounding area. Then the pits will be lined with a gel and any other type material necessary to make it safe and tight.

When drilling activities commence, all work shall proceed in a neat and orderly sequence.

10. PLANS FOR RESTORATION OF SURFACE

As there is some topsoil on the location site, all topsoil shall be stripped and stockpiled. (See location layout sheet and Item #9). When drilling and production activities have been completed the location site will be reshaped to the original contour and stockpiled topsoil spread over the disturbed area.

Any drainages re-routed during the construction activities shall be restored to their original line of flow as near as possible. Fences around pits are to be removed upon completion of drilling activities and all waste being contained in the trash basket will be hauled to the nearest sanitary landfill.

As mentioned in Item #7, the reserve pits will be completely fenced and wired and overhead flagging installed if there is oil in the pits, and then allowed to dry completely before covering.

Restoration activities shall begin within 90 days after completion of the well. Once completion activities have begun, they shall be completed within 30 days.

When restoration activities have been completed, the location site shall be reseeded with a seed mixture recommended by the B.L.M. District Manager when the moisture content of the soil is adequate for germination. 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

The Topography of the General Area (See Topographic Map "A").

The area is mountainous and is a portion of the Roan Cliffs.

The mountains are interlaced with numerous canyons and ridges formed by the nonperennial streams of the area. The sides of these canyons are extremely steep and ledges formed in sandstones, conglomerates, and shale deposits are extremely common to the area.

The geologic structures of the area that are visible are of the Green River Formation (Eocene Epoch) Tertiary Period in the upper elevations and the cobblestone and younger alluvial deposits from the Quarternary Period and of the Duchesne River Formation in the lower elevations.

Out crops of sandstone ledges, conglomerate deposits, and shale are common in this area.

The topsoil in the area range from a light brownish-gray shale (SM-ML) type soil poorly graded gravels and shales to a clayey (OL) type soil.

11. OTHER INFORMATION - cont...

The majority of the numerous washes and streams in the area are of non-perennial nature flowing during the early spring run-off and extremely heavy rainstorms of long duration which are extremely rare as the normal annual rainfall in the area is only 8".

Nine-Mile Creek to the North of this location is the only perennial stream that is affected by this location site.

Due to the low precipitation average, climate conditions and the marginal types of soils, the vegetation that is found in the area is common of the semi-arid region we are located in. It consists of areas of cedar trees, sagebrush, rabbitbrush, some grasses, and cacti as the primary flora. This is also true for the lower elevations.

The fauna of the area consists predominantly of the mule deer, elk, coyotes, rabbits and varieties of small squirrels and other types of rodents. The area is used by man for the primary purpose of grazing domestic sheep and cattle.

The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

The Topography of the Immediate Area (See Topographic Map "B").

P.T.S.#33-15 Federal sits on a relatively steep hillside just out of the bottom on the North side of a large nonperennial drainage known as Harmon Canyon. The Harmon Canyon drainage drains to the Northeast into the aforementioned Nine-Mile Creek (perennial).

The ground slopes through this location from the Southeast to the Northwest at approximately an 11% grade.

The majority of the drainages in the area around this location drain to the Northeast into the Nine-Mile Creek.

The vegetation in the immediate area surrounding the location site is predominantly cedar trees, sagebrush, and grasses. There are no occupied dwellings or other facilities of this nature in the general areas. There are no visible archaeological, historical or cultural sites within any reasonable proximity of the proposed location site. (See Topographic Map "B").

PACIFIC TRANSMISSION SUPPLY COMPANY
P.T.S. #33-15 Federal
Section 15, T12S, R14E, S.L.B.& M.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

R. J. Firth
85 South 200 East
Vernal, UT 84078

Tele: (801) 789-4573

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are to the best of my knowledge and belief, true and correct; that the work associated with the operations proposed herein will be performed by PACIFIC TRANSMISSION SUPPLY COMPANY and its contractors and subcontractors in conformity with this plan and terms and conditions under which it is approved.

**ORIGINAL SIGNED
BY: R. J. FIRTH**

Date

R. J. Firth
Petroleum Engineer

FROM: DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-8604OPERATOR: Natural Gas Corp.WELL NO. 33-15LOCATION: SE 1/4 NW 1/4 SE 1/4 sec. 15, T. 12S., R. 14E., SLMCarbon County, Utah

1. Stratigraphy: Operator tops appear reasonable.

Green River	surface
Wasatch	2895'
Mesaverde	6345'
<u>TD</u>	<u>6875'</u>

2. Fresh Water:

None probable

3. Leasable Minerals:

Coal in the upper Mesaverde, but too deep to worry about.

Oil Shale in the Green River (~ 0 to 2500')

4. Additional Logs Needed: Suite is adequate

5. Potential Geologic Hazards: None expected

6. References and Remarks:

Signature: Gregory W WoodDate: 7-21-80

Oil and Gas Drilling

EA #545-80

United States Department of the Interior
Geological Survey
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, Utah 84104

USUAL ENVIRONMENTAL ASSESSMENT

Date: August 27, 1980

Operator: Natural Gas Corporation of California Well Name and No.: 33-15
Location: 1430' FEL & 2426' FSL Section: 15 Township: 12S Range: 14E
County: Carbon State: Utah Field/Unit: Argleat
Lease No.: U-8604 Permit No.: N/A
Joint Field Inspection Date: August 5, 1980

Prepared By: Greg Darlington

Field Inspection Participants, Titles and Organizations:

Greg Darlington	U.S.G.S. - Vernal, Utah
Mark Mackiewicz	BLM - Price, Utah
R. J. Firth	Natural Gas Corp. of California
Earl Cady	Ross Construction

Related Environmental Documents:

8/29/80 lj

*Admin Camp? 325'
Pad 160' x 150'
pit 80' x 150'
4 1/2 mi existing road
x 30' improve
→ Strip incl
1 5/16 ac
→ Cond 9 12/80
pg 7 1-3*

1. A drill pad 160' wide x 325' long and a reserve pit 80' x 150' would be constructed. Approximately 4.4 miles of new existing road would be improved to 18' of driving surface from a maintained road. 1.5 acres of disturbed surface would be associated with the project. Maximum disturbed width of access road would be limited to 30'.

An existing airstrip about .4 miles northeast of this location would be upgraded and used for crew transportation.

2. Drilling would be to a proposed depth of 6,875 feet.
3. Waste disposal.
4. Traffic.
5. Water requirements - Water would be hauled from Nine Mile Creek near where the access road crosses Nine Mile Creek.
6. Completion.
7. Production.
8. Transportation of hydrocarbons.
9. Other - An airstrip located in adjacent section 14 to the northeast about .4 mile from this location would be used for the transportation of drilling crews to and from the location. It would be adequately upgraded for this purpose.

Details of the proposed action are described in the Application for Permit to Drill.

The location was moved to reduce cuts and fills, reduce impact to juniper and pinon, avoid rerouting the existing access road and move slightly closer to an existing airstrip.

The same presently existing access road would be used. The pad would now be built at the north edge of the road. At the original location the road passed directly through the center of the pad. The road continues .4 miles to reach an existing airstrip which will be upgraded and used for hauling crews during drilling operations.

Environmental Considerations of the Proposed Action:

Regional Setting/Topography: The new location is in a flat open gently sloping area. Steep hillsides are located about 200 feet to the north of the pad as the topography slopes downward toward the north.

PARAMETER

A. Geology

1. Other Local Mineral Resources to be Protected: Oil shale is anticipated in the Green River (0 to 2500 feet). Coal may be present in the upper Mesa-verde but is probably too deep for economically feasible recovery.

Information Source: Mineral Evaluation Report and Mining Report.

2. Hazards:

a. Land Stability: Adequate for the proposed project.

Information Source: Field Observation.

b. Subsidence: Limited subsidence may occur with the withdrawal of gas or oil from a producing well if production is established at this location.

Information Source: Field Observation.

c. Seismicity: The location is in an area of low seismic risk.

Information Source: Geologic Atlas of the Rocky Mountain Region.

d. High Pressure Zones/Blowout Prevention: Higher than normal pressures may be encountered from 4500-6875 feet T.D. Mud weights of about 10.5 are thought to be sufficient to balance formation pressures. BOP equipment is described in the APD.

Information Source: APD.

B. Soils:

1. Soil Character: The soil is a sandy porous clay with well mixed shale and sandstone gravels.

Information Source: Field Observation.

2. Erosion/Sedimentation: Low rainfall, small size of cross drainages involved and fairly level location will tend to minimize impacts of this type.

Information Source: Field Observation.

C. Air Quality: Temporary impacts would occur during construction and drilling.

Information Source: Field Observation.

D. Noise Levels: Temporary impacts would occur during construction and drilling.

Information Source: Field Observation.

E. Water Resources

1. Hydrologic Character

E. Water Resources

1. Hydrologic Character

a. Surface Waters: The location drains north to Nine Mile Creek, then this flows to the Green River.

Information Source: APD.

b. Ground Waters: No fresh water is anticipated.

Information Source: Mineral Evaluation Report.

2. Water Quality

a. Surface Waters: The pits may be lined with bentonite, the quantity used being left to the discretion of the operator. The pits would be in solid cut material at the new location and would be located at least 100 feet from the steep northern sidehill slopes.

Information Source: Field Observation and onsite discussion.

b. Ground Waters: An adequate casing program is outlined in the APD. Plans for dealing with circulation problems are also discussed. These should insure protection to existing ground water aquifers.

Information Source: APD.

F. Flora and Fauna

1. Endangered and Threatened Species Determination

Based on the BLM comments (per Mark Mackiewicz's phone call) received from the BLM Price on August 26, 1980, we determine that there would be no effect on endangered and threatened species and their critical habitat.

2. Flora: Sagebrush, juniper, pinon and native grasses are predominate flora.

Information Source: Field Observation.

3. Fauna: Mule deer, elk, coyotes, rabbits, small rodents and various birds such as raptors, finches, ground sparrows, magpies, crows and jays.

Information Source: APD.

G. Land Uses

1. General: Grazing sheep and cattle. Other gas development in nearby wells of the Argyle Unit.

Information Source: APD.

2. Affected Floodplains and/or Wetlands: None.

Information Source: Field Observation.

3. Roadless/Wilderness Area: The south side of the road opposite to the pad has been under wilderness area consideration but is not recommended for an intensive wilderness study area.

Information Source: BLM Utah Intensive Wilderness Inventory, April 1980..

H. Aesthetics: Limited impacts to aesthetics would result in the remote area where the project is to be located. A good stand of sagebrush and considerable juniper would be removed to make way for a drilling pad and probable eventual production facilities.

Information Source: Field Observation.

I. Socioeconomics: There would be limited impacts associated with this one well. Successful completion would possibly accelerate development of the Argyle Unit. Further pipelines and associated construction would be among the likely results of further development.

Information Source: Field Observation.

J. Cultural Resources Determination: Based on the BLM comments received from BLM Price on August 26, 1980, we determine that there would be no effect on cultural resources subject to comments Mark Mackiewicz made regarding their having received an adequate archaeological report since the BLM stipulations letter of August 8, which I received via Salt Lake City on August 26 in Vernal.

Information Source: Mark Mackiewicz, BLM Price.

K. Adequacy of Restoration Plans: Adequate with the incorporation of BLM stipulations into the present APD plans.

Information Sources: APD and BLM stipulation letter.

Alternatives to the Proposed Action:

1. Disapproving the proposed action or no action - If the proposed action is denied, no action would occur, the existing environment would remain in its present state, the lessee/operator would not realize any return on investments and the public would be denied a potential energy source.
2. Approving the project with the recommended stipulations - Under federal oil and gas leasing provisions, the Geological Survey has a responsibility to approve mineral development if the environmental consequences are not too severe or irreversible. Permanent damage to the surface and subsurface would be prevented as much as possible under USGS and Surface Management Agency supervision. Environmental impacts would be significantly mitigated.

Adverse Environmental Effects:

1. If approved as proposed:
 - a. About 1.5 acres of vegetation would be removed, increasing and accelerating erosion potential.
 - b. Pollution of groundwater systems could occur with the introduction of drilling fluids into the aquifer(s). The potential for interaquifer leakage and lost circulation is ever-present, depending on the casing program.
 - c. Minor air pollution would be induced on a temporary basis due to exhaust emissions from rig engines and support traffic.
 - d. The potential for fires, leaks, spills of gas and oil or water exists.
 - e. During construction and drilling phases of the operation, noise and dust levels would increase.
 - f. Distractions from aesthetics during the lifetime of the project would exist.
 - g. Erosion from the site would eventually be carried as sediment in the Nine Mile Creek. The potential for pollution to Nine Mile Creek would exist through leaks and spills.
 - h. If hydrocarbons would be discovered and produced, further development of the area could be expected to occur, which would result in the extraction of irreplaceable resource, and further negative environmental impacts. These impacts include the cumulative loss of wildlife habitat due to the areas necessary for roads, pipelines, drillsites, and transmission lines. These actions may disrupt wildlife social behavior and force habitat relocation over an extended period of time. In addition, the cumulative effects of non-point erosion become substantial in a developing field, primarily those located near perennial streams where siltation and sedimentation are critical to aquatic life cycles.

2. Conditional Approval:

- a. All adverse impacts described in section one above could occur.

Recommended Approval Conditions:

Drilling should be allowed, provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator:

1. See attached Lease Stipulations. *None*
2. See attached BLM Stipulations.
3. The Mining Report requests additional logs for the identification and protection of potentially valuable minerals (oil shale) subject to the Mineral Lease Act of 1920.

Controversial Issues and Conservation Division Response:

None are presently evident.

We have considered the proposed action in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment.

Determination:

I determine that the proposed action (as modified by the recommended approval conditions) does not constitute a major Federal action significantly affecting the quality of the human environment in the sense of NEPA, Section 102 (2)(C).

E. L. ... District Eng'r
Signature & Title of Approving Official

9/22/80
Date



North View Original Location
NGCC 33-15

Sec. 15, T12S, R14E

8/5

Greg

FROM: DISTRICT GEOLOGIST, ME, SALT LAKE CITY, UTAH
TO: DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH
SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-8604
WELL NO. 33-15

OPERATOR: Natural Gas Corp.
LOCATION: SE 1/4 NW 1/4 SE 1/4 sec. 15, T. 12S., R. 14E., SLM
Carbon County, Utah

1. Stratigraphy: Operator tops appear reasonable.

Green River	surface
Wasatch	2895'
Mesaverde	6345'
<u>TD</u>	<u>6875'</u>

2. Fresh Water:

None probable

3. Leasable Minerals:

Coal in the upper Mesaverde, but too deep to worry about.

Oil Shale in the Green River (in 0 to 2500')

4. Additional Logs Needed: Suite is adequate

5. Potential Geologic Hazards: None expected

6. References and Remarks:

Signature: Gregory W Wood

Date: 7-21-80

Natural Gas Corp
15-125-14E

Grey

Memorandum

To: District Oil and Gas Engineer, Mr. Edward Gynn
From: Mining, Supervisor, Mr. Jackson W. Moffitt
Subject: Application for Permit to Drill (form 9-331c) Federal oil and gas lease No. U-8604 Well No. 33-15

1. The location appears potentially valuable for:

- strip mining*
- underground mining** *oil shale*
- has no known potential. *coal too deep*

2. The proposed area is

- under a Federal lease for _____ under the jurisdiction of this office.
- not under a Federal lease under the jurisdiction of this office.
- Please request the operator to furnish resistivity, density, Gamma-Ray, or other appropriate electric logs covering all formations containing potentially valuable minerals subject to the Mineral Leasing Act of 1920.



*If location has strip mining potential:

Surface casing should be set to at least 50 feet below the lowest strip minable zone at _____ and cemented to surface. Upon abandonment, a 300-foot cement plug should be set immediately below the base of the minable zone.

**If location has underground mining potential:

The minable zones should be isolated with cement from a point 100 feet below the formation to 100 feet above the formation. Water-bearing horizons should be cemented in like manner. Except for salines or water-bearing horizons with potential for mixing aquifers, a depth of 4,000 feet has been deemed the lowest limit for cementing.

Signed *Allen J. Lane*



United States Department of the Interior

IN REPLY RE

3100
U-8604
(U-601)

BUREAU OF LAND MANAGEMENT
Moab District
Price River Resource Area
P. O. Drawer AB
Price, Utah 84501

August 8, 1980

Memorandum

To: District Engineer, USGS, Salt Lake City, Utah
From: Acting Area Manager, Price River
Subject: Natural Gas Corporation of California - (PTS) APD,
Well No. 33-15, T. 12 S., R. 14 E., Sec. 15

On August 12, 1980 a joint onsite inspection was made to determine the adequacy of Natural Gas Corporation of California's proposed drilling plans.

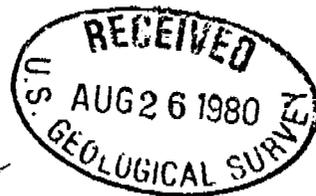
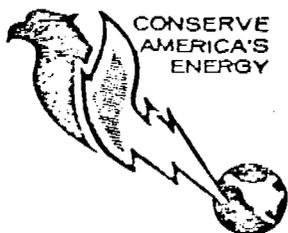
To avoid making large cuts and fills it was agreed to move the pad approximately 575 feet to the north. Natural Gas Corporation of California will resurvey the area and submit a map showing this change.

BLM will allow minimal upgrading of that portion of the access road located on public lands.

Permission is granted to use the airstrip located in T. 12 S., R. 14 E., Sec. 14.

Please forward the following stipulations and requirements to Natural Gas Corporation of California with your notice of approval:

1. Prior to approval of the drill site, the operator shall submit a cultural report, by a BLM approved archeologist.
2. All trees cut during pad preparation shall be piled adjacent to the north side of the pad near the road.
3. Topsoil to a depth of 10 inches shall be stockpiled and respread when drilling is completed.
4. The impacted area shall be contoured to the original contour when reclamation begins. A roughened surface shall be left.



Save Energy and You Serve America!

5. The impacted area shall be reseeded in the fall (October through November) with the use of a drill using the following seeding mixture:

<u>Common Name</u>	<u>Botanical Name</u>	<u>Rate-lbs/acre</u>
Western wheatgrass	Agropyron smithii	4
Blue grama grass	Bouteloa gracilis	4
Sandberg bluegrass	Poa secunda	4
Winterfat	Ceratoides lanata	1½
Globemallow	Sphaeralcea grossulariaefolia	1

6. Drill pits shall be lined with bentonite if soils high in coarse fragments are encountered.

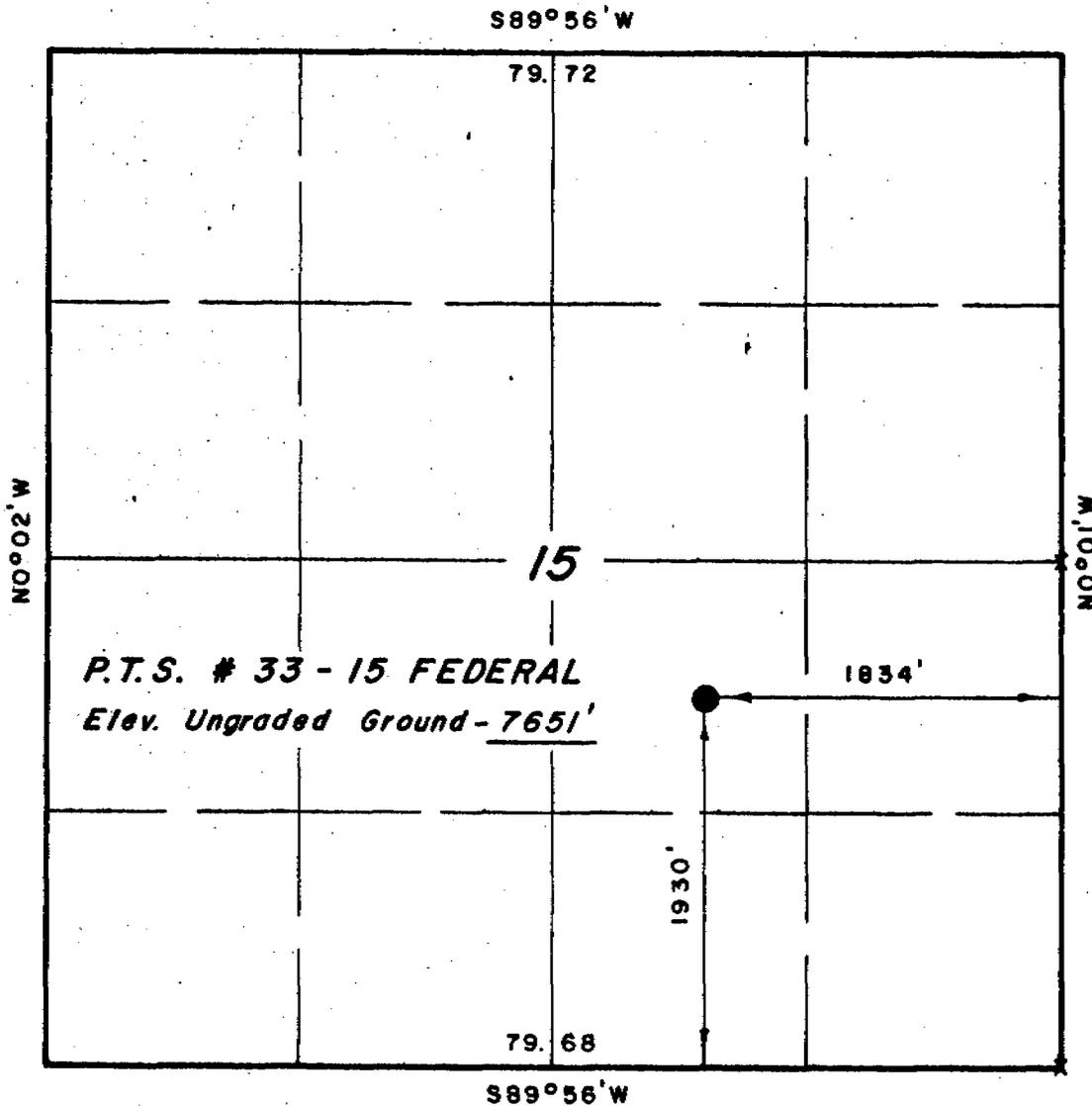
Dennis J. Willis

T 12 S, R 14 E, S.L.B. & M.

PROJECT

PACIFIC TRANSMISSION SUPPLY CO.

Well location, *P.T.S. #33-15 FEDERAL*,
located as shown in the NW1/4 SE1/4 Section 15,
T12S, R14E, S.L.B. & M. Carbon County, Utah.



X = Section Corners Located



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.

William J. ...
REGISTERED LAND SURVEYOR
REGISTRATION NO 2454
STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX Q - 110 EAST - FIRST SOUTH
VERNAL, UTAH - 84078

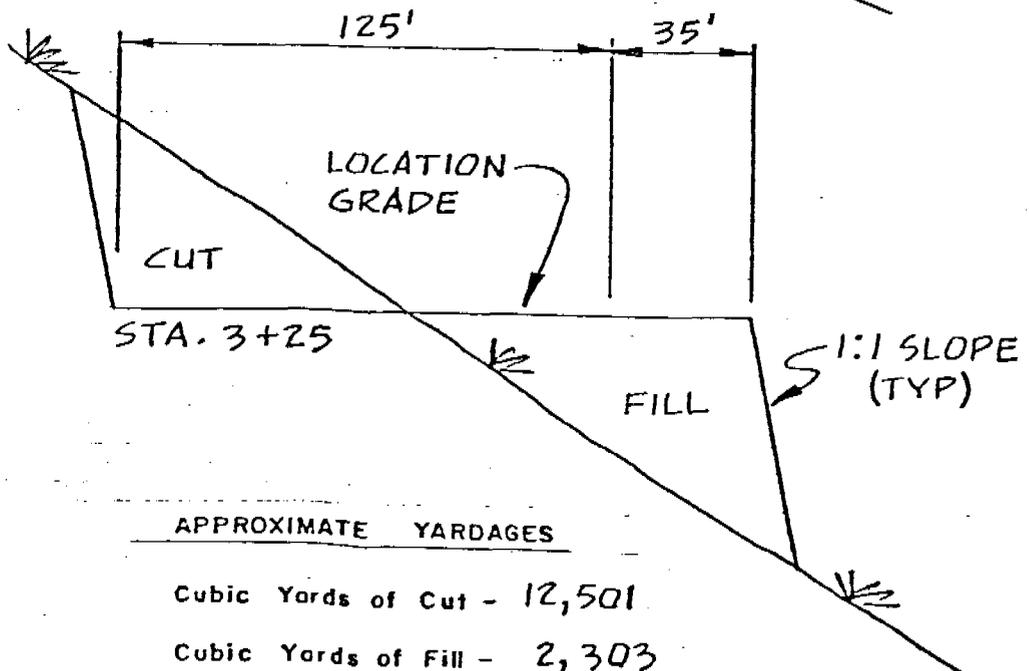
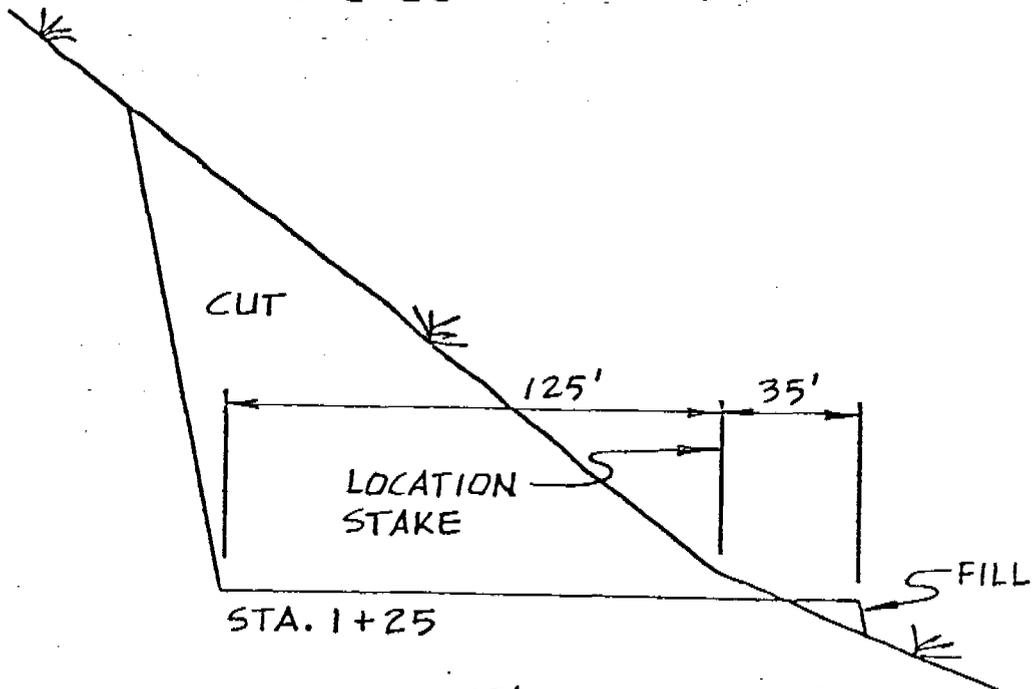
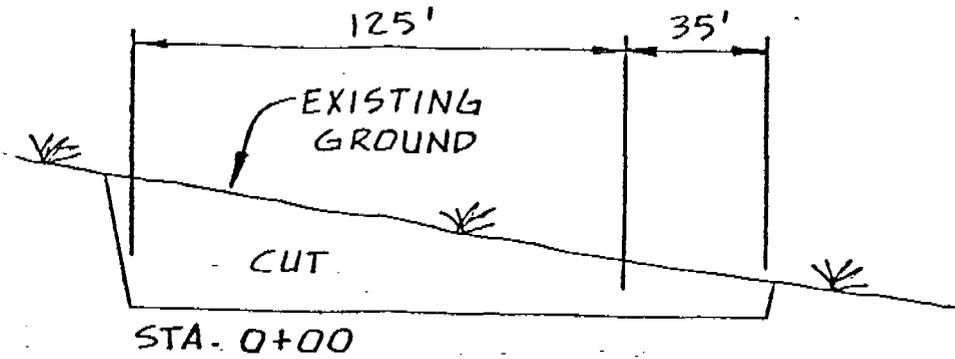
SCALE 1" = 1000'	DATE 6 / 17 / 80
PARTY N.J.M. S.H. H.M. S.B.	REFERENCES GLO Plat
WEATHER Fair & Hot	FILE P.T.S. CO.

PACIFIC TRANSMISSION SUPPLY CO.

P.T.S. # 33-15 FEDERAL

CROSS SECTIONS

1 F-11³
 1 F-7^L
 1 C-9³

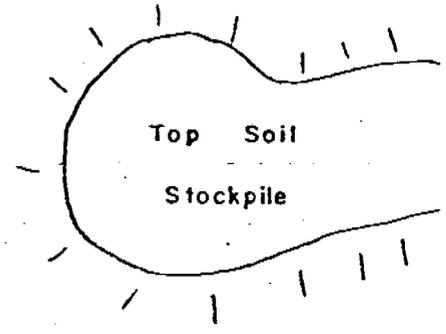
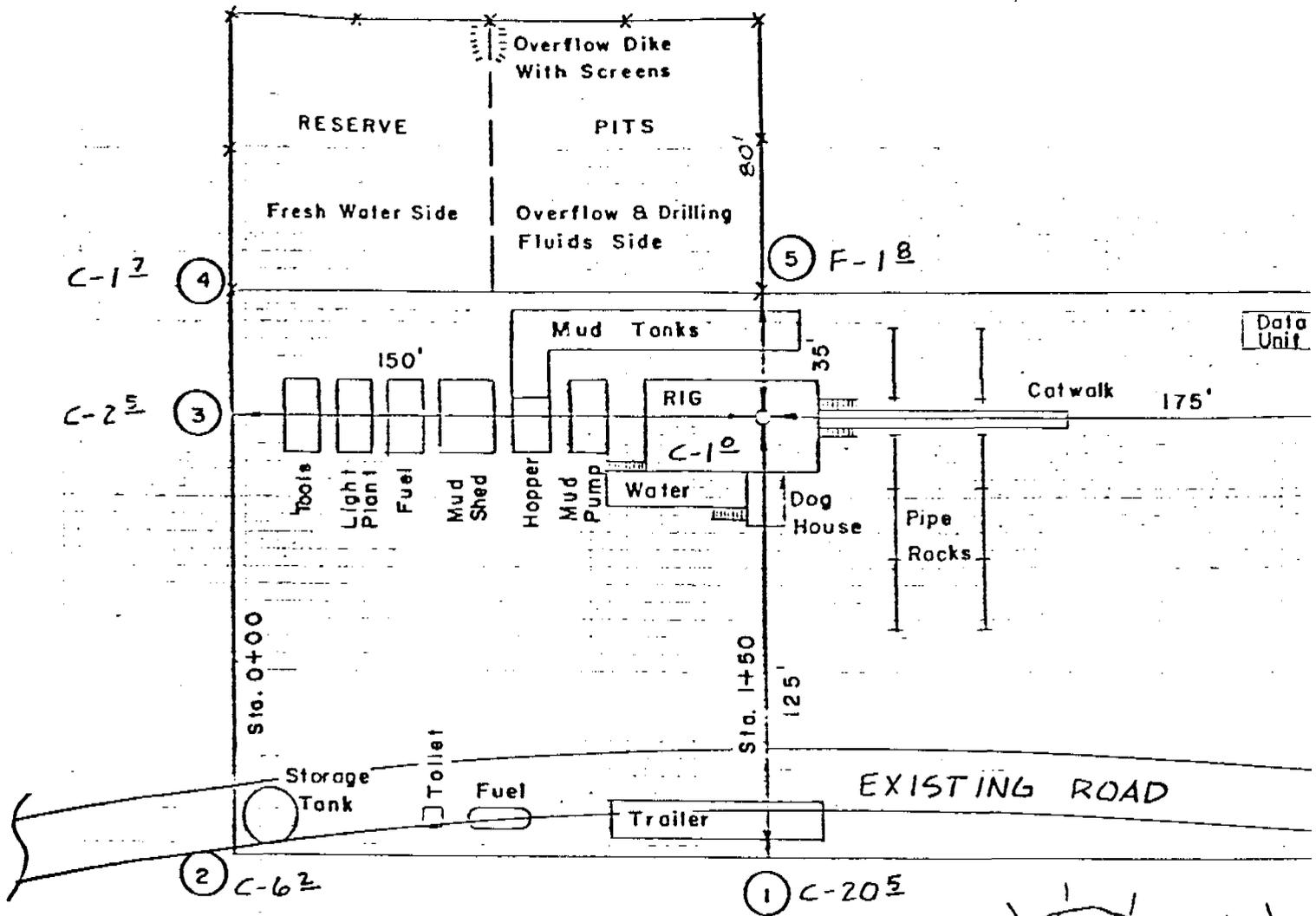


1" = 10'
 SCALES
 1" = 50'

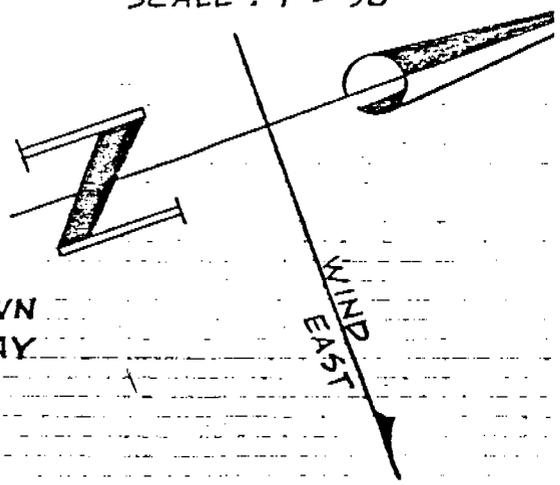
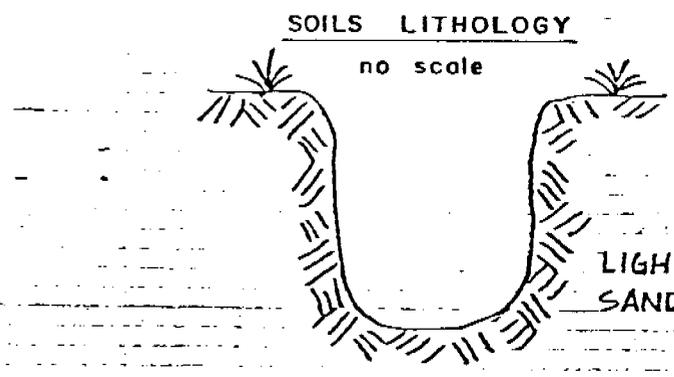
APPROXIMATE YARDAGES

Cubic Yards of Cut - 12,501

Cubic Yards of Fill - 2,303



SCALE: 1" = 50'



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [] PLUG BACK []
b. TYPE OF WELL: OIL WELL [] GAS WELL [X] OTHER [] SINGLE ZONE [] MULTIPLE ZONE []
2. NAME OF OPERATOR: Natural Gas Corporation of California
3. ADDRESS OF OPERATOR: P.O. Box 3093, Casper, WY 82602
4. LOCATION OF WELL: 1930' FSL, 1834' FEL, NW SE Section 15, T12S, R14E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 42 miles southwest of Myton, Utah
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)
16. NO. OF ACRES IN LEASE: 1600 +
17. NO. OF ACRES ASSIGNED TO THIS WELL: 640
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
19. PROPOSED DEPTH: 6875'
20. ROTARY OR CABLE TOOLS: Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.): 7651' Ungr. Gr.
22. APPROX. DATE WORK WILL START: September 1, 1980

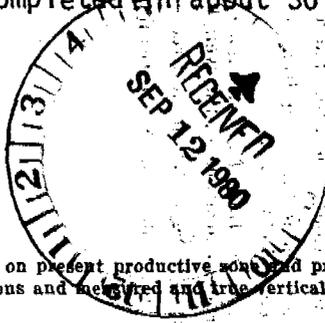
5. LEASE DESIGNATION AND SERIAL NO.: U-8604
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME: Argyle
8. FARM OR LEASE NAME: Federal
9. WELL NO.: 33-15
10. FIELD AND POOL, OR WILDCAT: Wildcat
11. SEC., T., E., M., OR BLK. AND SURVEY OR ABNA: Section 15, T12S, R14E
12. COUNTY OR PARISH: Carbon
13. STATE: Utah

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Rows include 17-1/2, 12-1/4, 7-7/8 hole sizes with corresponding casing sizes, weights, depths, and cement quantities (75, 225, 450 sacks).

Operator proposes to drill a well to depth of 6875' or approximately 500' into the Cretaceous Mesaverde. All water and significant hydrocarbon shows will be evaluated and reported. Operations will be conducted according to the attached well program and procedure and in conformance with all applicable regulations. No abnormal pressures, temperatures or other potential hazards are anticipated. Operations are expected to commence about September 1, 1980 and be completed in about 30 days.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
DATE: 9-17-80
BY: [Signature]



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: [Signature] TITLE: Petroleum Engineer DATE: 6/30/80

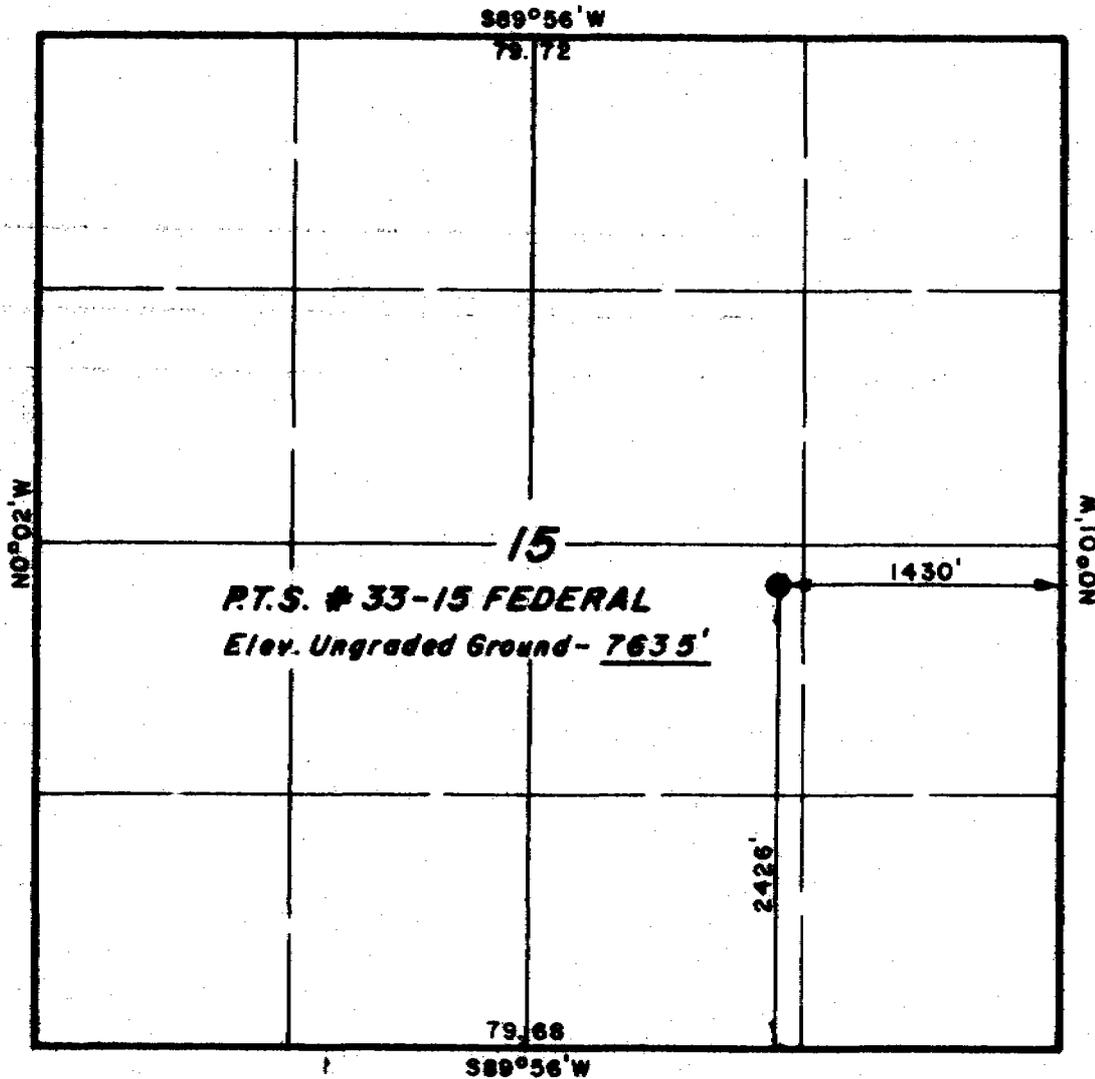
(This space for Federal or State office use)
PERMIT NO. 43-007-30054 APPROVAL DATE 9/17/80

APPROVED BY: CONDITIONS OF APPROVAL, IF ANY: 3-USGS, UT; 1-Ut. Div. of OG&M; 1-J.C. Osmond; 1-D. E. Beardsley; 1-E. R. Henry

T12 S, R14 E, S.L.B. & M.

PROJECT
NATURAL GAS CORP. OF CALIF.

Well location **P.T.S. # 33-15 FEDERAL**,
 located as shown in the NW1/4 SW1/4
 Section 15, T12 S, R14 E, S.L.B. & M.,
 Carbon 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.

Richard J. ...
 REGISTERED LAND SURVEYOR
 REGISTRATION NO. 2454
 STATE OF UTAH

UINTAH ENGINEERING & LAND SURVEYING
 P.O. BOX Q - 110 EAST - FIRST SOUTH
 VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	8 / 12 / 80
PARTY	NM SH HM AW	REFERENCES	GLO Plat
WEATHER	Fair, Hot	FILE	NATURAL GAS OF CALIF.

X = Section Corners Located

** FILE NOTATIONS **

DATE: September 16, 1980
OPERATOR: Natural Gas Corporation of California
WELL NO: Argyle Unit # 33-15
Location: Sec. 15 T. 12S R. 14E County: Carbon

File Prepared: Entered on N.I.D.:
Card Indexed: Completion Sheet:

API Number 43-007-30059

CHECKED BY:

Petroleum Engineer: M.C. Winder 9-17-80

Director: _____

Administrative Aide: _____

APPROVAL LETTER:

Bond Required: Survey Plat Required:
Order No. _____ O.K. Rule C-3
Rule C-3(c), Topographic Exception - company owns or controls acreage
within a 660' radius of proposed site

Unit approval

Lease Designation Ad Unit Plotted on Map
Approval Letter Written *vtm*
Hot Line P.I.

September 17, 1980

Natural Gas Corporation of California
P.O. Box 3093
Casper, Wyoming 82602

Re: Well No. Argyle Unit #33-15
Sec. 15, T. 12S, R. 14E.,
Carbon County, Utah

Insofar as this office is concerned, approval to drill the above referred to gas well is hereby granted in accordance with Section 40-6-11, Utah Code Annotated 1953; and predicated on Rule A-3, 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:

MICHAEL T. MINDER - Petroleum Engineer
Office: 533-5771
Home: 876-3001

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 43-007-30053.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Petroleum Engineer

/btm
cc:USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

2. NAME OF OPERATOR
Natural Gas Corporation of California

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

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 2426' FSL, 1430' FEL, NW $\frac{1}{4}$ SE $\frac{1}{4}$
AT TOP PROD. INTERVAL: Sec. 15, T12S, R14E
AT TOTAL DEPTH: Carbon County, Utah

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

5. LEASE
U-8604

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Argyle

8. FARM OR LEASE NAME
Federal

9. WELL NO.
33-15

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 15, T12S, R14E

12. COUNTY OR PARISH | 13. STATE
Carbon | Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7635' Ungr. gr.

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	<input type="checkbox"/>		<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>		<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>		<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>		<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>		<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>		<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>		<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>		<input type="checkbox"/>
(other) Spudding Operations			<input checked="" type="checkbox"/>

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Rigged up air drilling rig and equipment. Spudded 17 $\frac{1}{2}$ " surface hole at 10 a.m. December 24, 1980. Drilled 17 $\frac{1}{2}$ " surface hole to 64' and ran 2 jts. 13-3/8", 48.0#, H-40 conductor casing. Landed casing at 64' GL and cemented to surface with 75 sacks cement. Good circulation during cementing with cement returns to surface. Rigged down and released air drilling rig and equipment, December 31, 1980.

Spudding operations reported orally to U.S.G.S., Salt Lake City December 29, 1980.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED R. J. Firth TITLE District Supt. DATE January 2, 1981

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

cc: USGS; UT OG&M; E. J. Gelwick; E. R. Henry; C. T. Clark

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil well gas well other

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. See space 17 below.)
AT SURFACE: 2426' FSL, 1430' FEL, NW $\frac{1}{4}$ SE $\frac{1}{4}$
AT TOP PROD. INTERVAL: Section 15, T12S, R14E
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:		SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF	<input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT	<input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE	<input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL	<input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE	<input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES	<input type="checkbox"/>	<input type="checkbox"/>
ABANDON*	<input type="checkbox"/>	<input type="checkbox"/>
(other) <u>Commencing Drilling Operations</u>		<u>XX</u>

5. LEASE
U-8604

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Argyle

8. FARM OR LEASE NAME
Federal

9. WELL NO.
33-15

10. FIELD OR WILDCAT NAME
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 15, T12S, R14E

12. COUNTY OR PARISH
Carbon

13. STATE
Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
7635' Ungr. gr.

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Rigged up air drilling rig and equipment. Spudded 17 $\frac{1}{2}$ " surface hole at 10 a.m. December 24, 1980. Drilled 17 $\frac{1}{2}$ " surface hole to 64' and ran 2 jts. 13-3/8", 48.0#, H-40 conductor casing. Landed casing at 64' GL and cemented to surface with 75 sacks cement. Good circulation during cementing with cement returns to surface. Rigged down and released air drilling rig and equipment December 31, 1980. Wait on rotary rig availability.

Moved in and rigged up rotary drilling rig, January 30 thru February 2, 1981. Drilled plug and cement in 13-3/8" casing and drilled out below 13-3/8" casing with 12 $\frac{1}{4}$ " bit at 7 p.m. February 2, 1981.

Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED R. J. Firth TITLE District Supt. DATE February 4, 1981

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

cc: USGS; UT Div. OG&M; E. J. Gelwick; E. R. Henry; DeGolyer & MacNaughton; Chorney; American Nat. Gas Prod.; Texoma Prod. Co.; A.G. Andrikopoulos

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.6.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input checked="" type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. U-8604
b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Natural Gas Corporation of California		7. UNIT AGREEMENT NAME Argyle
3. ADDRESS OF OPERATOR 85 South 200 East, Vernal; UT-84078 Telephone 801-789-4573		8. FARM OR LEASE NAME Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2426' FSL, 1430' FEL, NW SE Section 15, T12S, R14E At top prod. interval reported below At total depth		9. WELL NO. 33-15
14. PERMIT NO. _____ DATE ISSUED _____		10. FIELD AND POOL, OR WILDCAT Wildcat
15. DATE SPUDDED 12/24/81 16. DATE T.D. REACHED 3/17/81 17. DATE COMPL. (Ready to prod.) P & A 3/23/81 18. ELEVATIONS (DP, RKB, RT, GR, ETC.)* 7635' GL, 7651' KB 19. ELEV. CASINGHEAD		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Section 15, T12S, R14E
20. TOTAL DEPTH, MD & TVD 7204' 21. PLUG, BACK T.D., MD & TVD _____ 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY _____ ROTARY TOOLS X CABLE TOOLS _____		12. COUNTY OR PARISH Carbon
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* None		18. STATE Utah
25. WAS DIRECTIONAL SURVEY MADE No		26. TYPE ELECTRIC AND OTHER LOGS RUN DI-SFL, FDC-CNL, BHC Sonic,
27. WAS WELL CORED		

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48.0	64'	17"	75 Sacks	
9-5/8"	36.0	559'	12 1/4"	350 Sacks	

29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
None					None		

31. PERFORATION RECORD (Interval, size and number) None		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
		DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

33.* PRODUCTION

DATE FIRST PRODUCTION P & A 3/23/81		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			WELL STATUS (Producing or shut-in) P&A		
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) _____ TEST WITNESSED BY _____

35. LIST OF ATTACHMENTS
Geological Well Report previously submitted.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED R. B. Firth TITLE District Supt. DATE March 27, 1981

~~CONFIDENTIAL~~

*(See Instructions and Spaces for Additional Data on Reverse Side)

cc: USGS; UT Div. of OG&M; DeGolyer; Chorney; American Nat. Gas Prod.; Texoma; A.G. Andrikopoulous; Operations Supt.; ERHenry; CTClark; R.Boschee; JMKunz; J.Langman
R. B. Edmundson; KEReed

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency 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. See Instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

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 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS
<p style="font-size: small; margin: 0;">37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES</p>				38.
				39.

NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
<p style="margin: 0;">Wasatch Lower Wasatch Mesaverde</p>	<p style="margin: 0;">2871' 3930' 6640'</p>		

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

Form approved. Budget Bureau No. 42-R355.5

10

5. LEASE DESIGNATION AND SERIAL NO.

U-8604

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Argyle

8. FARM OR LEASE NAME

Federal

9. WELL NO.

33-15

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Section 15, T12S, R14E

12. COUNTY OR PARISH

Carbon

13. STATE

Utah

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL [] GAS WELL [] DRY [X] Other []

b. TYPE OF COMPLETION: NEW WELL [X] WORK OVER [] DEEP-EN [] PLUG BACK [] DIFF. RESVR. [] Other []

2. NAME OF OPERATOR: Natural Gas Corporation of California

3. ADDRESS OF OPERATOR: 85 South 200 East, Vernal, UT 84078 Telephone 801-789-4573

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2426' FSL, 1430' FEL, NW SE Section 15, T12S, R14E

At top prod. interval reported below

At total depth

CONFIDENTIAL

14. PERMIT NO. DATE ISSUED

Released 10-23-81 23-007-30054 9-17-80

15. DATE SPUNDED 12/24/81 16. DATE T.D. REACHED 3/17/81 17. DATE COMPL. (Ready to prod.) P & A 3/23/81 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 7635' GL, 7651' KB 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 7204' 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)* 25. WAS DIRECTIONAL SURVEY MADE

None

No

26. TYPE ELECTRIC AND OTHER LOGS RUN DI-SFL, FDC-CNL, BHC Sonic, GRCC-CBL 27. WAS WELL CORED

28. CASING RECORD (Report all strings set in well)

Table with columns: CASING SIZE, WEIGHT, LB./FT., DEPTH SET (MD), HOLE SIZE, CEMENTING RECORD, AMOUNT PULLED. Rows: 13-3/8", 48.0, 64', 17", 75 Sacks; 9-5/8", 36.0, 559', 12 1/4", 350 Sacks.

29. LINER RECORD and 30. TUBING RECORD. Columns include SIZE, TOP (MD), BOTTOM (MD), SACKS CEMENT*, SCREEN (MD), SIZE, DEPTH SET (MD), PACKER SET (MD). Values: None.

31. PERFORATION RECORD (Interval, size and number) None. 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. Columns: DEPTH INTERVAL (MD), AMOUNT AND KIND OF MATERIAL USED.

33.* PRODUCTION. Columns: DATE FIRST PRODUCTION (P & A 3/23/81), PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump), WELL STATUS (Producing or shut-in) (P&A), DATE OF TEST, HOURS TESTED, CHOKER SIZE, PROD'N. FOR TEST PERIOD, OIL--BBL., GAS--MCF., WATER--BBL., GAS-OIL RATIO, FLOW. TUBING PRESS., CASING PRESSURE, CALCULATED 24-HOUR RATE, OIL--BBL., GAS--MCF., WATER--BBL., OIL GRAVITY-API (CORR.).

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY

35. LIST OF ATTACHMENTS: Geological Well Report previously submitted.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records. SIGNED: R. B. Firth TITLE: District Supt. DATE: March 27, 1981

CONFIDENTIAL

*(See Instructions and Spaces for Additional Data on Reverse Side)

cc: USGS; UT Div. of OG&M; DeGolyer; Chorney; American Nat. Gas Prod.; Texoma; A.G. Andrikopoulos; Operations Supt.; ERHenry; CTCIark; R.Boschee; JMKunz; J.Langman R. B. Edmundson; KEReed



STATE OF UTAH
NATURAL RESOURCES & ENERGY
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Cleon B. Feight, Division Director

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

January 18, 1982

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

Re: Well No. Argyle Fed. Unit #33-15
Sec. 15, T. 12S, R. 14E
Carbon County, Utah

Gentlemen:

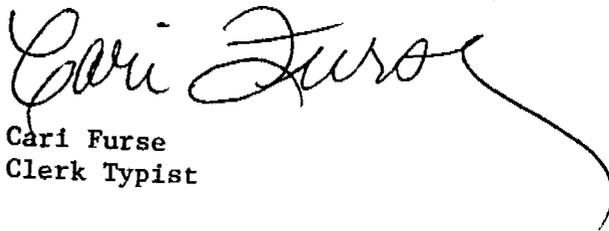
According to our records, a "Well Completion Report" filed with this office March 27, 1981, from above referred to well, indicates the following electric logs were run: DI-SFL, FDC-CNL, BHC- Sonic, GRCC-CBL. As of todays date, this office has not received these logs: GRCC-CBL.

Rule C-5, General Rules and Regulations and Rules of Practice and Procedure, requires that a well log shall be filed with the Commission together with a copy of the elctric and radioactivity logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS AND MINING



Cari Furse
Clerk Typist

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLI
(Other instructions
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

10

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER		7. UNIT AGREEMENT NAME Argyle
2. NAME OF OPERATOR Natural Gas Corporation of California		8. FARM OR LEASE NAME Federal
3. ADDRESS OF OPERATOR 85 South 200 East, Vernal, UT 84078		9. WELL NO. 33-15
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 2426' FSL, 1430' FEL, NW $\frac{1}{4}$ SE $\frac{1}{4}$		10. FIELD AND POOL, OR WILDCAT Wildcat
14. PERMIT NO.		11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA Sec. 15, T.12S., R.14E.
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 7635' GL, 7651' KB		12. COUNTY OR PARISH Carbon
		13. STATE Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Operator reports the following plugs have been set:

- Plug no. 1 6750-6550 - 100 sx
- Plug no. 2 4700-4500
- Plug no. 3 2700-2500
- Plug no. 4 650-500
- Plug no. 5 At surface w/marker

RECEIVED

JUN 14 1984

DIVISION OF OIL
GAS & MINING

Rick Canterbury of our office contacted Dan Crissy of your office some time ago to see if revegetation was adequate. He was informed that it was. I'm sending a subsequent report for your approval and our final release.

18. I hereby certify that the foregoing is true and correct

SIGNED William A. Ryan TITLE Petroleum Engineer DATE 6/12/84
 (This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
 CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Natural Gas Corp. Ron Firth 789-4573

WELL NAME: Argule Unit 33-15

SECTION SE 15 TOWNSHIP 12S RANGE 14E COUNTY Carbon

VERBAL APPROVAL GIVEN TO PLUG AND ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 7204'

CASING PROGRAM:

- 9 5/8" @ 604' cement to surface
- 7 7/8" openhole (9" average gage)

FORMATION TOPS:

- Wasatch- 2871'
- Mesavede- 6640'

no water, or shows, no DST's or coring

PLUGS SET AS FOLLOWS:

- 1) 6750-6550' 100 sx.
- 2) 4700-4500' 150 sx.
- 3) 2700-2500' 150 sx.
- 4) 650-500' 100 sx.
- 5) 50'-surface

Place 9.1#, 45 vis. abandonment mud between plugs; clean and restore site; erect regulation dryhole marker.

DATE 3-25-81 SIGNED MTM