

FILE NOTATIONS

Entered in NID File
Location Map Pinned
Card Indexed

Checked by Chief
Approval Letter
Disapproval Letter

COMPLETION DATA:

Date Well Completed *2/29/50*

..... WW..... TA...✓..
GW..... OS..... PA.✓...

Location Inspected
Bond released
State or Fee Land

LOGS FILED

Driller's Log.....✓
Electric Logs (No.) ✓.....
E..... I..... Dual I Lat..... GR-N..... Micro.....
BHC Sonic GR..... Lat..... Mi-L....
CBLog..... CCLog..... Others.....

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

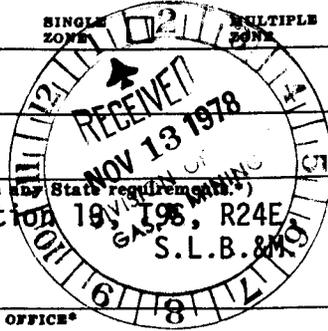
1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER
 SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 PACIFIC TRANSMISSION SUPPLY COMPANY

3. ADDRESS OF OPERATOR
 P. O. Box 3093, Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface 567' FNL, 1690' FWL (NE NW) Section 19, T9S, R24E
 At proposed prod. zone



5. LEASE DESIGNATION AND SERIAL NO.
 31266
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 7. UNIT AGREEMENT NAME
 Devil's Playground
 8. FARM OR LEASE NAME
 Federal
 9. WELL NO.
 21-19
 10. FIELD AND POOL, OR WILDCAT
 Wildcat
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 Section 19, T9S, R24E
 12. COUNTY OR PARISH
 Uintah
 13. STATE
 Utah

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 50 miles SE of Vernal, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 567'

16. NO. OF ACRES IN LEASE
 1600

17. NO. OF ACRES ASSIGNED TO THIS WELL
 160

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

19. PROPOSED DEPTH
 7125'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5166 GR

22. APPROX. DATE WORK WILL START*

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	125	175 Sxs.
12-1/4	9-5/8	36.0	3200	500 Sxs.
7-7/8	4-1/2	11.6	7125	400 Sxs.

Operator proposes to drill to and test the Mesaverde formation. Intermediate casing will be run and cemented to protect the oil shale section of the Green River formation. All water flows and significant hydrocarbon shows will be evaluated and reported. The well will be operated according to the attached prognosis and all applicable regulations. Adequate BOP equipment will be maintained at all times as indicated in the attached Pressure Containment Data Specifications. If commercial production is encountered, production casing will be run and cemented to adequately protect all potentially productive intervals.

APPROVED BY THE DIVISION OF OIL, GAS, AND MINING
 DATE: 11-22-78
 BY: *Chas B. Feightson*

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.

SIGNED R. J. Firth TITLE Petroleum Engineer DATE 11/9/78

(This space for Federal or State office use)
 PERMIT NO. B-047-30531

APPROVAL DATE

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

3-USGS, SLC, UT; 1-Div.of OG&M, SLC, UT; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-File

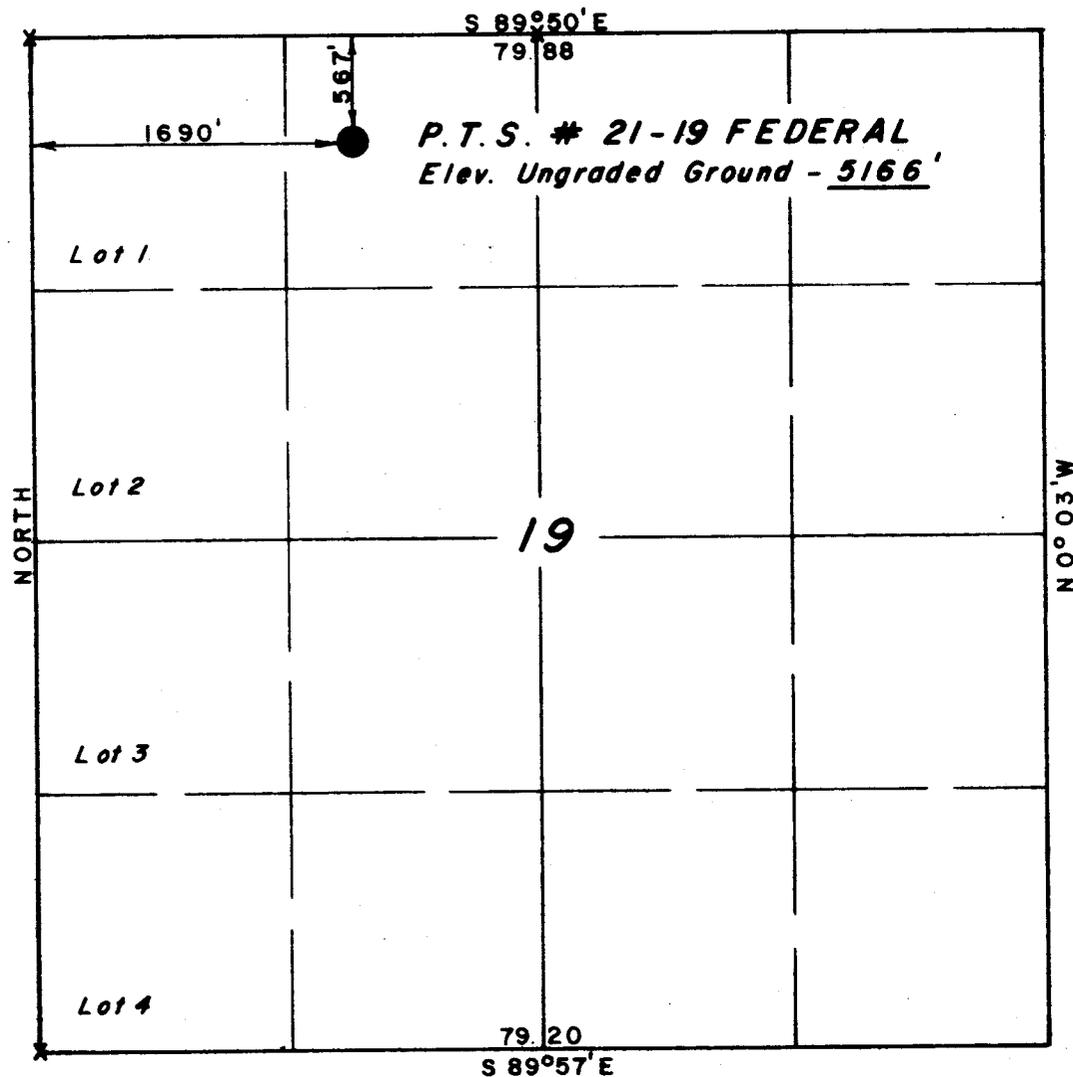
*See Instructions On Reverse Side

T 9 S, R 24 E, S. L. B. & M.

PROJECT

PACIFIC TRANSMISSION SUPPLY CO.

Well location, P. T. S. # 21-19 FEDERAL,
located as shown in the NE 1/4 NW 1/4
Section 19, T 9 S, R 24 E, S. L. B. & M.
Uintah 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.

Sam Stewart

REGISTERED LAND SURVEYOR
REGISTRATION NO 3154
STATE OF UTAH

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

SCALE	1" = 1000'	DATE	11 / 9 / 78
PARTY	DA JB BW RP	REFERENCES	GLO Plat
WEATHER	Clear / Cool	FILE	PACIFIC TRANSMISSION

X = Section Corners Located

U.S. GEOLOGICAL SURVEY, CONSERVATION DIVISION

FROM: DISTRICT GEOLOGIST, SALT LAKE CITY, UTAH

TO: DISTRICT ENGINEER, SALT LAKE CITY, UTAH

Well	Location	Lease No.
PACIFIC TRANSMISSION SUPPLY COMPANY	567' FNL x 1690' FWL (NE1/4NW1/4) SEC. 19 T. 9S, R. 24E, SLM JINTAH COUNTY, UTAH GR. E. 5166	U-31266
<p>1. Stratigraphy and Potential Oil and Gas Horizons. ^{11/21/78} The surface rocks are Minto and the Mesaverde will be tested. Operators estimated tops should be close.</p> <p>2. Fresh Water Sands. Fresh or usable water may be found in the sands of the Minto and Green River Formations to a depth of about 2,000 feet. Deeper aquifers contain saline water or brine.</p> <p>3. Other Mineral Bearing Formations. (Coal, Oil Shale, Potash, Etc.) These lands are valuable prospectively for bitumens (Silsolite) and are within oil shale withdrawal 5327. The most important oil shale beds occur in the Parachute Creek member (Mahogany zone) of the Green River Formation. The top of the Mahogany zone may occur at about 5100 ± feet. Site is underlain by a sequence of oil shale beds at least 60 feet in thickness that will yield 25 gallons of oil per ton of oil shale. The Sabine Expl. Co. #1 in sec. 20, same township, reported lost circulation at 3411'.</p> <p>4. Possible Lost Circulation Zones. Protect any fresh water aquifers penetrated.</p> <p>5. Other Horizons Which May Need Special Mud, Casing, or Cementing Programs.</p> <p>6. Possible Abnormal Pressure Zones and Temperature Gradients. Unknown.</p> <p>7. Competency of Beds at Proposed Casing Setting Points. Probably adequate.</p> <p>8. Additional Logs or Samples Needed. None. Operators logging program is adequate. Oil shale beds in the Parachute Creek member should be delineated and protected.</p> <p>9. References and Remarks Within 2 mile radius of KGS.</p>		
Date: 11/24/78		Signed: REG

United States Department of the Interior
Geological Survey
8440 Federal Building
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. U-31266

Operator Pacific Transmission Supply Co.

Well No. 21-19

Location 567' FNL & 1690' FWL NENW Sec. 19 T. 9S. R. 24E

County Uintah State Utah Field Unnamed

Status: Surface Ownership Public Minerals Federal

Joint Field Inspection Date December 12, 1978

Participants and Organizations:

George Diwachak

U.S. Geological Survey, Salt Lake City

Cory Bodman

Bureau of Land Management, Vernal

R. J. Firth

Pacific Transmission Supply Company

Related Environmental Analyses and References:

(1) Bonanza Planning Unit

(2)

Analysis Prepared by:

George Diwachak
Environmental Scientist
Salt Lake City, Utah

Date: December 12, 1978

JAN 09 1979

Noted - G. Diwachak

*Pad 175 x 325
Pit 100 x 150
0.4 mile new access
Flow line not used
Stockpile topsoil
2.5 ac
Arch Sw
Line pits - Pg 6*

Proposed Action:

On November 13, 1978, Pacific Transmission Supply Company filed an Application for Permit to Drill the No. 21-19 development well, a 7125-foot gas test of the Mesa Verde Formation; located at an elevation of 5166 GR ft. in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 19 T. 9S., R. 24E. on Federal mineral lands and public surface; Lease No. U-31266. There was no objection raised to the wellsite nor to the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Subsurface and 13-Point Surface Protection Plans are on file in the U.S.G.S. District Office in Salt Lake City, Utah and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the Bureau of Land Management, the controlling surface agency. Rehabilitation plans would be decided upon as the well neared completion; the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 175 ft. wide x 325 ft. long and a reserve pit 100 ft. x 150 Ft. A new access road would be constructed 18 ft. wide x 0.4 miles long. The new road would cross two drainages requiring culverts or crossings as determined by the BLM.

The operator proposes to construct production facilities on disturbed area of the proposed drill pad.

If production is established, plans for a gas flow line would be submitted to the appropriate agencies for approval. The anticipated starting date is upon approval and duration of drilling activities would be about 30 days.

Location and Natural Setting:

The proposed drillsite is approximately 6 miles SE of Bonanza and 50 miles SE of Vernal, the nearest towns. A fair road runs to within 0.4 miles of the location. This well is in the Devils' Playground Unit.

Topography:

Regional topography consists of a basin formed by the Blue Mountain Plateau and Green River to the north and White River and Roan Plateau to the south. The topography of the proposed wellsite is of a gently rolling nature, sloping

to the north from a small ridge with many resistant knolls and intermittent drainages throughout.

Geology:

The surface geology is Uintah Formation. The soil is sandy clay. No geologic hazards are known near the drillsite. Seismic risk for the area is minor based on historic evidence.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs would be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss-of circulation would exist and is possible in the sandstone units of the Mesa Verde. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep in to the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation.

A geologic review of the proposed action has been furnished by the Area Geologist, U.S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy clay to a clay type soil with some gravels present and numerous rock outcrops. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface as there is some organic material present. Rehabilitation is necessary to prevent erosion and encroachment

of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately 2.5 acres of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated.

Precipitation:

Annual rainfall should range from about 8 to 10" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 8".

Winds are medium and gusty, occurring predominately from west to east. Air mass inversions are rare. The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

Drainage from the proposed location is toward the north through intermittent non-perennial drainages to Coyote Wash, a tributary of the White River.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage

systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface water systems. The potentials for pollution would be present from leaks or spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and comingling of formations via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of fresh water formations are listed in the 10-Point Subsurface Protection Plan. There would be no tangible effect on water migration in fresh water aquifers. The pits should be lined as they will be constructed predominantly of fill material. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

Vegetation:

The vegetation at the location consists of sagebrush, greasewood, shadscale and native grasses.

Plants in the area are of the salt-desert-shrub types.

Proposed action would remove about 2.5 acres of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

Wildlife:

The fauna of the area consists predominantly of mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of reptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

An animal and plant inventory has been made by the BLM. No endangered plants or animals are known to habitate the project area.

Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required

prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction operations; activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent facilities placed on the location would be painted a color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment would not be visible to passersby of the area due to a low knoll between the major road and the proposed location.

The economic effect on one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are significant in Uintah County.

But should this well discover a significant new hydrocarbon source, local, state, and possible national economics might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface agency's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

There are no national, state, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

The proposed location is within the Bonanza Planning Unit. This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The E.A.R. is on file in the agency's State offices and is incorporated herein by reference.

Waste Disposal:

The mud and reserves pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternative to the Proposed Action:

1) Not Approving the Proposed Permit--The Oil and Gas Lease Grants The Lessee Exclusive Right To Drill For, Mine, Extract, Remove and Dispose Of All Oil and Gas Deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and subsurface would be prevented as much as possible under U.S.G.S. and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of (oil and gas) should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

2) Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal, or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environment would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

3) Since they would be constructed predominantly of fill material, the reserve pits should be lined with an impervious material to protect against possible spills. Archaeological clearance will be necessary prior to final approval. ←

Adverse Environmental Effects Which Cannot be Avoided:

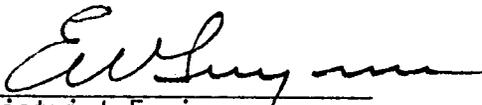
Surface disturbance and removal of vegetation from approximately 2.5 acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer,

additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills of gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the White River. The potential for pollution to Coyote Wash would exist through leaks and spills.

Determination:

This requested action ~~does~~/does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Sec. 102(2)(C).

12/22/78
Date


District Engineer
U.S. Geological Survey
Conservation Division
Oil and Gas Operations
Salt Lake City District

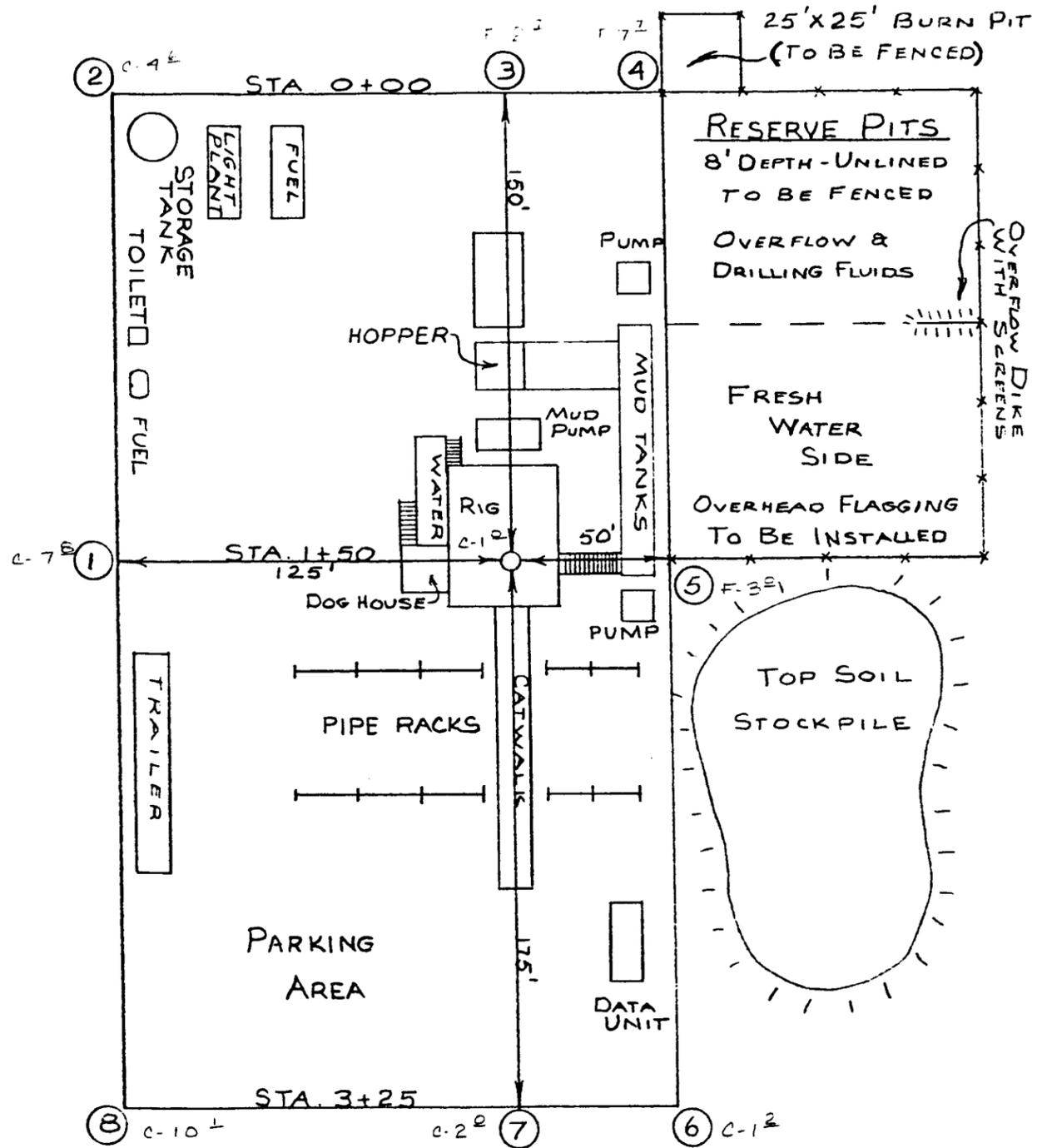


Pacific Transmission
Supply Co. #21-19

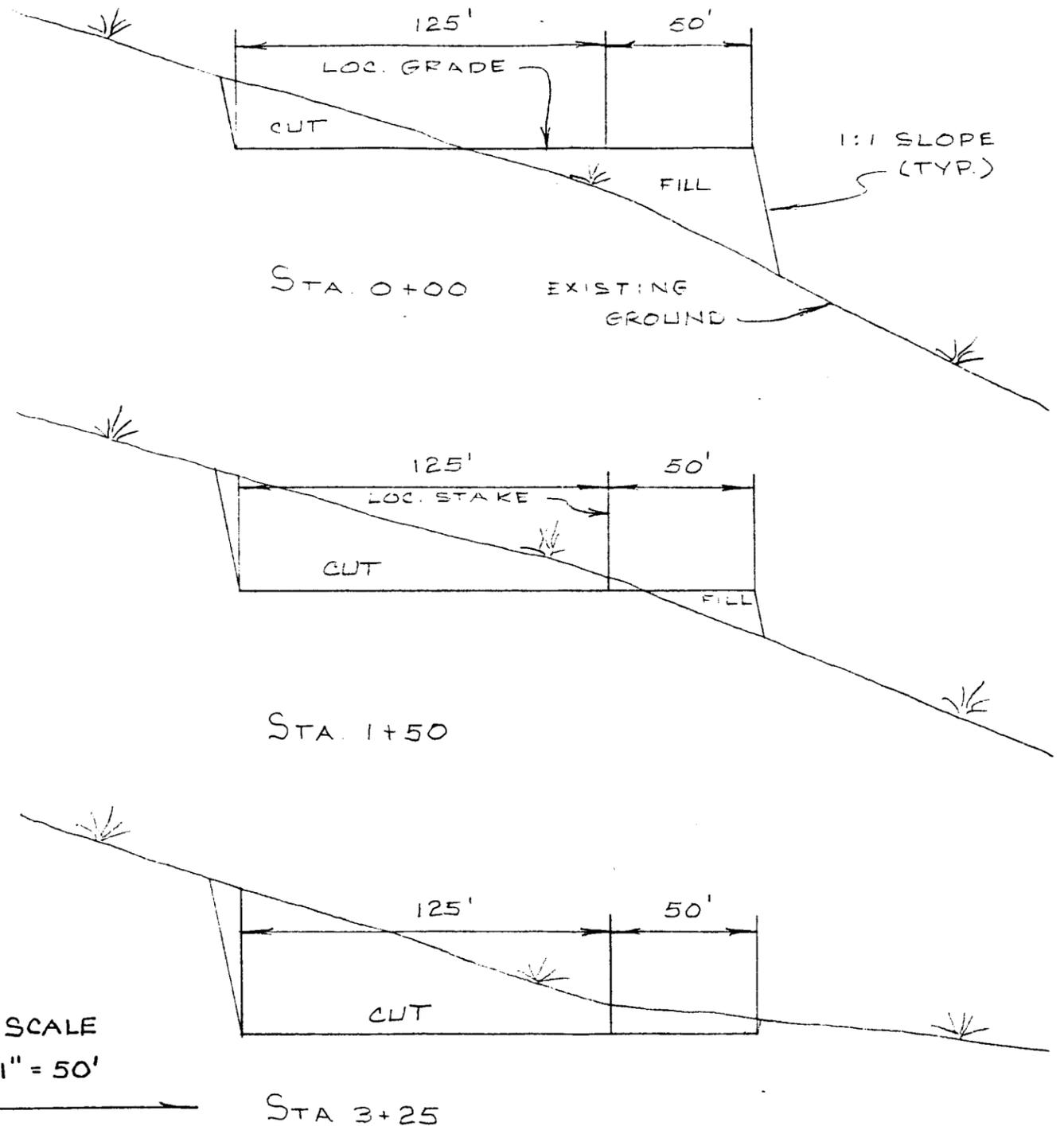
↑
NW

PACIFIC TRANSMISSION SUPPLY CO.

F.T.S. # 21-19 FEDERAL
LOCATION LAYOUT & CUT SHEET



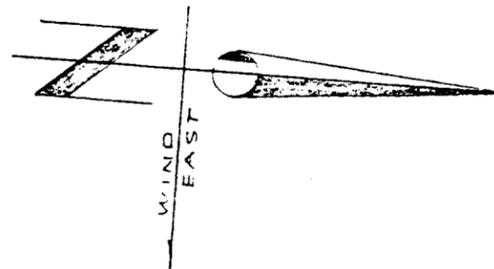
CROSS SECTIONS



SOILS LITHOLOGY
- NO SCALE -

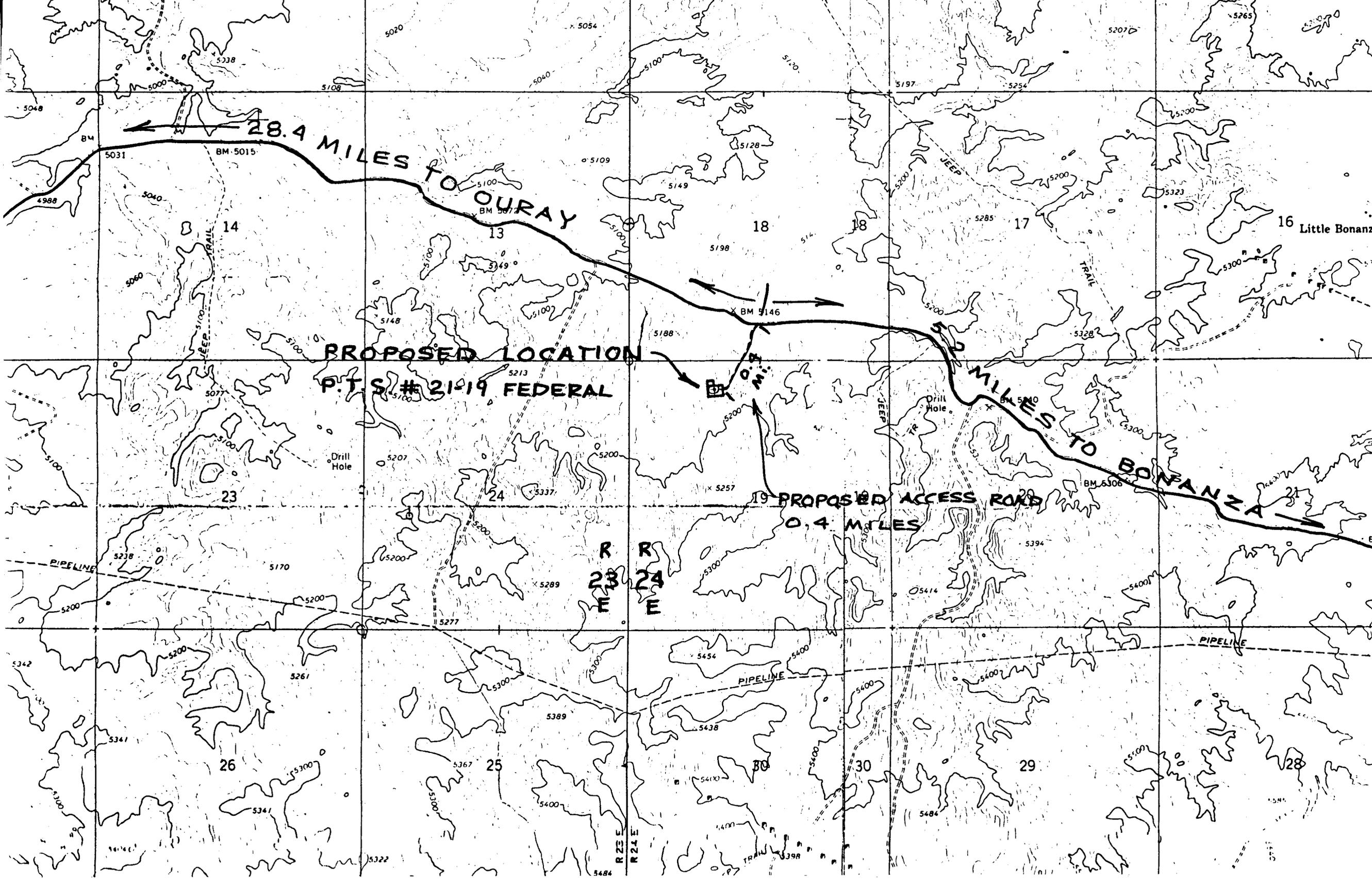


SCALE - 1" = 50'



APPROX YARDAGES

CUT - 6,980 CU. YDS.
FILL - 1,335 CU. YDS.



28.4 MILES TO OURAY

PROPOSED LOCATION
P.T.S. # 21-19 FEDERAL

PROPOSED ACCESS ROAD
0.4 MILES

5.2 MILES TO BONANZA

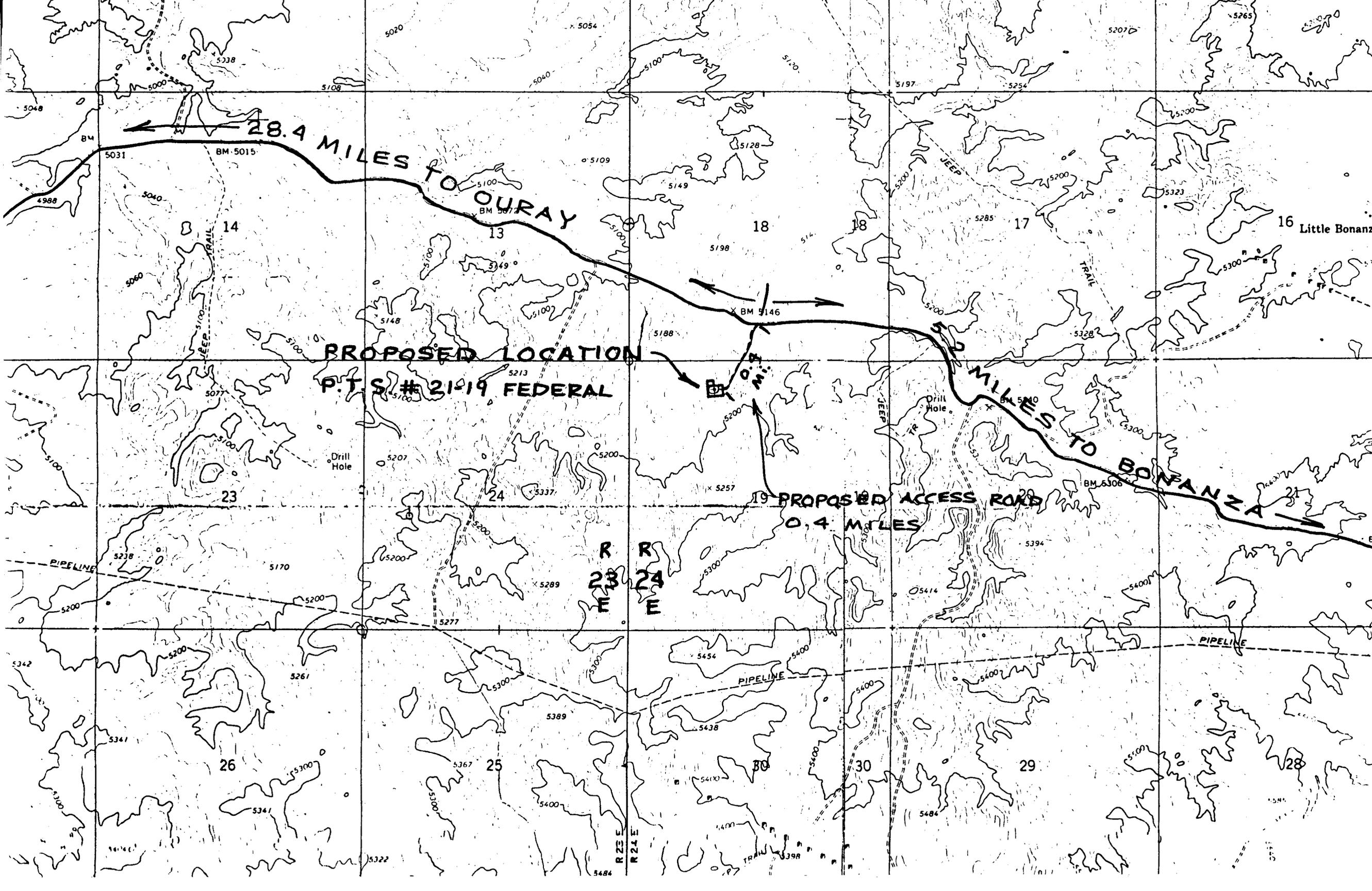
Little Bonanza

R
23
E

R
24
E

R
23
E

R
24
E



STATE OF UTAH
DIVISION OF OIL, GAS, AND MINING

** FILE NOTATIONS **

Date: Nov. 22
Operator: Pacific Transmission
Well No: Fed. 21-19
Location: Sec. 19 T. 9S R. 24E County: Uintah

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

API Number: 43-049-30537

CHECKED BY:

Administrative Assistant: [Signature]

Remarks: Unit well

Petroleum Engineer: _____

Remarks: _____

Director: [Signature]

Remarks: _____

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: Survey Plat Required:

Order No. _____ Surface Casing Change
to _____

Rule C-3(c), Topographic exception/company owns or controls acreage
within a 660' radius of proposed site

O.K. Rule C-3 O.K. In Uintah Playground Unit

Other: _____

Letter Written/Approved

PACIFIC TRANSMISSION SUPPLY COMPANY

212 GOODSTEIN BUILDING
P. O. BOX 3093
CASPER, WYOMING 82602
(307) 265-1027

December 5, 1978



Mr. E. W. Guynn
U. S. GEOLOGICAL SURVEY
8426 Federal Building
Salt Lake City, UT 84138

Re: PTS #21-19 Federal
NE NW Section 19, T9S, R24E
Uintah County, Utah
Devils Playground Unit

Dear Mr. Guynn:

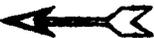
We are enclosing herewith in triplicate the Designation of Operator from Chorney Oil Company for the above captioned well located in the Devils Playground Unit. These copies are to be included with the well package containing the Application for Permit to Drill sent to your office under separate cover November 10, 1978.

Very truly yours,

E. E. Mulholland
E. E. MULHOLLAND
OPERATIONS ENGINEER

/ks

cc: R.J.Firth
Div. of OG&M



Enclr.

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: UTAH
SERIAL No.: U-31266



and hereby designates

NAME: Pacific Transmission Supply Company
ADDRESS: 245 Market Street
San Francisco, California 94105

as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

Township 9 South - Range 24 East
Sec. 17: S $\frac{1}{2}$
Sec. 19: Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$, E $\frac{1}{2}$
Sec. 20: All

1594.32 Acres, more or less
Uintah County, Utah

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.

Vice-President (Signature of lessee)

CHORNEY OIL COMPANY
401 LINCOLN STREET, S.F. 94105

(Address)

November 22, 1978

(Date)

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
 PACIFIC TRANSMISSION SUPPLY COMPANY

3. ADDRESS OF OPERATOR
 P. O. Box 3093, Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface 567' FWL, 1690' FWL (NE NW) Section 19, T9S, R24E, S.L.B.&M.
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 30 miles SE of Vernal, Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)
 567'

16. NO. OF ACRES IN LEASE
 1600

17. NO. OF ACRES ASSIGNED TO THIS WELL
 160

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

19. PROPOSED DEPTH
 7125'

20. ROTARY OR CABLE TOOLS
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 5166 GR

22. APPROX. DATE WORK WILL START*

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	125	175 Sxs.
12-1/4	9-5/8	36.0	3200	500 Sxs.
7-7/8	4-1/2	11.6	7125	400 Sxs.

Operator proposes to drill to and test the Mesaverde formation. Intermediate casing will be run and cemented to protect the oil shale section of the Green River formation. All water flows and significant hydrocarbon shows will be evaluated and reported. The well will be operated according to the attached prognosis and all applicable regulations. Adequate BOP equipment will be maintained at all times as indicated in the attached Pressure Containment Data Specifications. If commercial production is encountered, production casing will be run and cemented to adequately protect all potentially productive intervals.

State of Utah, Department of Natural Resources
 Division of Oil, Gas, and Mining
 1588 West North Temple
 Salt Lake City, Utah 84116

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 11/9/78

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY [Signature] TITLE ACTING DISTRICT ENGINEER DATE FEB 23 1979

CONDITIONS OF APPROVAL, IF ANY:

3-USGS, SLC, UT; 1-Div. of OG&M, SLC, UT; 1-JLWroble; 1-ERHenry; 1-EEMulholland; 1-File

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

*See Instructions On Reverse Side
 NOTICE OF APPROVAL

NECESSARY FLARING OF GAS DURING DRILLING AND COMPLETION APPROVED SUBJECT TO ROYALTY (NTL-4)

STATE OF U

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

NAME OF COMPANY: Pacific Transmission Supply Company

WELL NAME: Devils Playground Federal #21-19

SECTION 19 NE NW TOWNSHIP 9S RANGE 24E COUNTY Uintah

DRILLING CONTRACTOR _____

RIG # _____

SPUDDED: DATE 1/17/80

TIME 10:00 am

HOW cable tools

DRILLING WILL COMMENCE ASAP

REPORTED BY Ron Firth

TELEPHONE # 789-4573

DATE January 15, 1980

SIGNED M. G. Menden

cc: USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse 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		7. UNIT AGREEMENT NAME Devils Playground	
2. NAME OF OPERATOR Pacific Transmission Supply Company		8. FARM OR LEASE NAME Federal	
3. ADDRESS OF OPERATOR P.O. Box 3093, Casper, WY 82602		9. WELL NO. 21-19	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 567' FNL, 1690' FWL, NE 1/4 NW 1/4, Section 19, T9S, R24E		10. FIELD AND POOL, OR WILDCAT Wildcat	
14. PERMIT NO.		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 19, T9S, R24E	
15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5178' KDB		12. COUNTY OR PARISH Uintah	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 type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <u>Spudding Operations</u> <input checked="" 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.)*

Spudded 12-1/4" hole on January 17, 1980. Spudding operations reported to U.S.G.S., Salt Lake City on January 18, 1980. Drilled 12-1/4" hole to 160' and reamed to 17-1/2". Ran 5 jts. 13-3/8", 48.0# H40 surface casing to 167" KB and cemented with 175 sacks Class G cement. Cement circulated to surface. Job completed January 25, 1980. Waiting on rotary drilling rig availability.

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

SIGNED R. J. Firth TITLE Petroleum Engineer

(This space for Federal or State office use)

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

RECEIVED
DATE January 21 1980

JAN 31 1980

DIVISION OF
OIL, GAS & MINING



ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL SITE GEOLOGY - MUD LOGGING

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

February 29, 1980

PACIFIC TRANSMISSION SUPPLY COMPANY
717 17th Street, Suite 2300
Denver, Colorado 80202

Gentlemen:

Enclosed is the final log on PTS #21-19 Federal well, located in
~~SEC 22, T8S, R22E~~ Uintah County, Utah, which our logging unit
just completed. ^{79-19 site}

We have appreciated the opportunity of serving you. If we can be
of any assistance in the final evaluation of zones encountered,
please feel free to call on us.

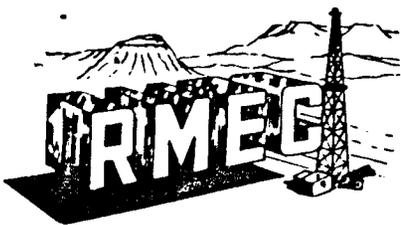
Sincerely,

Douglas R Barron,
Manager

DRB/jdy

Enc: 1 log

XXC: Pacific Transmission Supply Co., Casper, Wyo., 1 log
Pacific Transmission Supply Co., Vernal, Utah, 1 log
USGS, 2 logs
Division of Oil, Gas, and Mining, Salt Lake City, Utah, 2 logs
Enserch Exploration, Inc., Denver, CO, 1 log
J. Milton Wege, Ralph E. Davis & Assoc., Houston, Tx., 1 log
Clifford Cone, Lubbock, Tx., 1 log



ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL LOGGING — CORE AND WATER ANALYSIS

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

COMPANY PACIFIC TRANSMISSION SUPPLY COMPANY

WELL NO. PTS # 21-19

LOCATION 567 FWL 1690 FWL SEC 19 T9S R24E

ZONE OF INTEREST NO. 21

INTERVAL: From 2245 To 2256

DRILL RATE: Abv 1 3/4 MIN Thru 1 1/4 MIN FT Below 2 MIN FT

MUD GAS-CHROMATOGRAPH DATA

	TOTAL	C ₁	C ₂	C ₃	C ₄	C ₅	OTHER
Before	15	225	180	—	—	—	
During	190	42,000	4,800	TR.	—	—	
After	15	225	180	—	—	—	

Type gas increase: Gradual Sharp

Gas variation within zone: Steady Erratic Increasing Decreasing

CARBIDE HOLE RATIO: $\frac{\text{GRAMS}}{\text{READING}}$ X Min. in Peak = _____

Sensitivity: Poor Fair Good

FLUO: Mineral Even Spotty
 None % in total sample _____
 Poor
 Fair % in show lithology _____
 Good COLOR: _____

CUT: None Streaming _____
 Poor Slow
 Fair Mod
 Good Fast
 COLOR: YLLW GRN

STAIN: None Poor Fair Good Live Dead Residue Even Spotty Lt. Dk.

POROSITY: Poor Fair Good Kind MICRALIN

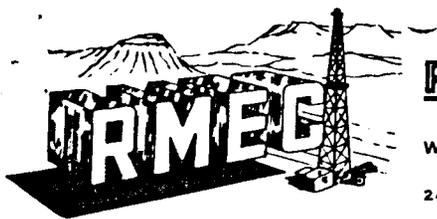
LITHOLOGY LS IN BRN BLKY INTERBD P4R IN SLTLY FRM CALL.

SAMPLE QUALITY FAIR

NOTIFIED JOE MENCE @ 7:00 AM HRS. DATE: FEB 10, 1990

REMARKS OIL SHALE

ZONE DESCRIBED BY Larry D Rose



ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL LOGGING — CORE AND WATER ANALYSIS

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

COMPANY PACIFIC TRANSMISSION SUPPLY COMPANY

WELL NO. PTS 21-19.

LOCATION 567 FNL 1690 FWL SEC 19 T9S R24E

ZONE OF INTEREST NO. #2

INTERVAL: From 2868 To 2873

DRILL RATE: Abv 2 1/2 MIN FT Thru 2 MIN Below 3 MIN FT

MUD GAS-CHROMATOGRAPH DATA

	TOTAL	C ₁	C ₂	C ₃	C ₄	C ₅	OTHER
Before	230	23250	1200	400	TR	—	
During	590	39000	32,400	800	550	—	
After	230	23250	1200	400	TR	—	

Type gas increase: Gradual Sharp

Gas variation within zone: Steady Erratic Increasing Decreasing

CARBIDE HOLE RATIO: $\frac{\text{GRAMS}}{\text{READING}}$ X Min. in Peak = _____ Sensitivity: Poor Fair Good

FLUO: Mineral Even Spotty CUT: None Streaming
 None % in total sample 10% Poor Slow
 Poor Fair Mod
 Fair % in show lithology 10% Good Fast
 Good COLOR: LT YLW GRN COLOR: YELLOW

STAIN: None Poor Fair Good Live Dead Residue Even Spotty Lt. Dk.

POROSITY: Poor Fair Good Kind INTERGRANULAR.

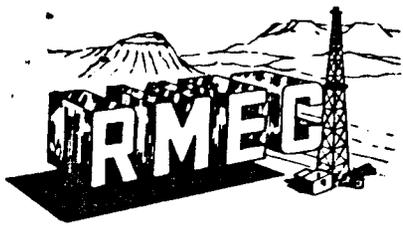
LITHOLOGY TR SS CLR VFG ANG FRI CALC LS TN BRN BLKY BRIT

SAMPLE QUALITY POOR

NOTIFIED JOE MONCE @ 7:00 AM HRS. DATE: FEB 11, 1980

REMARKS OIL SHALE

ZONE DESCRIBED BY Larry D Rose



ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL LOGGING — CORE AND WATER ANALYSIS

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

COMPANY PACIFIC TRANSMISSION SUPPLY COMPANY

WELL NO. PTS #21-19

LOCATION 567 FNL 1690 FWL SEC19 T9S R24E

ZONE OF INTEREST NO. #3

INTERVAL: From 4109 To 4120

DRILL RATE: Abv 3 MIN FT Thru 1 1/4 MIN FT Below 2 1/2 MIN FT

MUD GAS-CHROMATOGRAPH DATA

	TOTAL	C ₁	C ₂	C ₃	C ₄	C ₅	OTHER
Before	75	10,500	TR	—	—	—	
During	500	30750	2400	TR	—	—	
After	75	10,500	TR	—	—	—	

Type gas increase: Gradual Sharp

Gas variation within zone: Steady Erratic Increasing Decreasing

CARBIDE HOLE RATIO: $\frac{\text{GRAMS}}{\text{READING}}$ X Min. in Peak = _____ Sensitivity: Poor Fair Good

FLUO: Mineral Even Spotty
 None % in total sample _____
 Poor
 Fair % in show lithology _____
 Good COLOR: _____

CUT: None Streaming
 Poor Slow
 Fair Mod
 Good Fast
 COLOR: _____

STAIN: None Poor Fair Good Live Dead Residue Even Spotty Lt. Dk.

POROSITY: Poor Fair Good Kind INTERGRANULAR

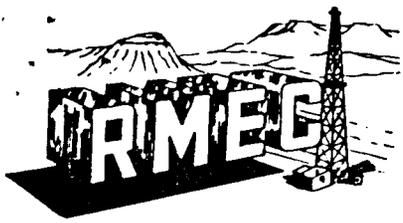
LITHOLOGY SH GY BLKY SFT CALC TRSS WHFRST SBANG SLTY

TTX LIAV FRI ADWASE QTZ GRNS. SAMPLE QUALITY POOR

NOTIFIED JOE MONCE @ 7:00 AM HRS. DATE: FEB 17, 1980

REMARKS NO SAMPLE 4110 - 4120

ZONE DESCRIBED BY Larry D Rose



ROCKY MOUNTAIN GEO-ENGINEERING CO.

WELL LOGGING — CORE AND WATER ANALYSIS

2450 INDUSTRIAL BLVD.

PHONE 243-3044

GRAND JUNCTION, COLORADO 81501

COMPANY PACIFIC TRANSMISSION SUPPLY COMPANY

WELL NO. PTS 21-19

LOCATION 567 ENL 1690 FWL SEC 19 T9S R24E

ZONE OF INTEREST NO. 14

INTERVAL: From 5027 To 5024

DRILL RATE: Abv 3 1/2 MIN FT Thru 1 MIN FT. Below 3 1/2 MIN FT

MUD GAS-CHROMATOGRAPH DATA

	TOTAL	C ₁	C ₂	C ₃	C ₄	C ₅	OTHER
Before	320	33,000	2,000	TR	—	—	
During	570	45,750	3,000	200	TR.	—	
After	320	33,000	2,000	TR	—	—	

Type gas increase: Gradual Sharp

Gas variation within zone: Steady Erratic Increasing Decreasing

CARBIDE HOLE RATIO: $\frac{\text{GRAMS READING}}{\text{X Min. in Peak}} = \underline{\hspace{2cm}}$ Sensitivity: Poor Fair Good

FLUO: Mineral Even Spotty CUT: None Streaming
 None % in total sample 1% Poor Slow
 Poor Fair Good Fair Mod
 Fair % in show lithology Good Fast
 Good COLOR: COLOR:

STAIN: None Poor Fair Good Live Dead Residue Even Spotty Lt. Dk.

POROSITY: Poor Fair Good Kind

LITHOLOGY SHGY DKGY SALRD BLKY FRM CALC SANDY

ABN LSE QTZ GRNS FG CLR FRST SANG SAMPLE QUALITY POOR

NOTIFIED JOE MONCE @ 7:00 HRS. DATE: FEB 19, 1980

REMARKS VERY POOR SAMPLES

ZONE DESCRIBED BY Randy D Rosa

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-31266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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 GAS WELL OTHER

2. NAME OF OPERATOR

Pacific Transmission Supply Company

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.*
See also space 17 below.)
At surface

567' FNL, 1690' FWL, NE 1/4 NW 1/4, Section 19, T9S, R24E

7. UNIT AGREEMENT NAME

Devils Playground

8. FARM OR LEASE NAME

Federal

9. WELL NO.

21-19

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Section 19, T9S, R24E

14. PERMIT NO.

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

5178' KDB

12. COUNTY OR PARISH

Uintah

18. STATE

Utah

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Drilling Progress Report

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(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.)*

Daily Drilling Reports Attached.

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

SIGNED

R. J. Firth

TITLE Petroleum Engineer

RECEIVED
DATE 3/2/80

DATE

MAR 3 1980

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

DIVISION OF
OIL, GAS & MINING

Pacific Transmission Supply Co.
Devils Playground Unit
#21-19 Federal

- 2/5/80 TD 167'. 13-3/8", 48.0#, H40 surface casing @ 167' KBM. Testing BOP equipment. Completed rig repairs (draw works, etc.), raised derrick, PU drlg. equipment, thawed pump and prep. to drill. Started drilling cement @ 5:30 a.m.
- 2/6/80 TD 552'. Drilling. WOB 35,000, 72 RPM. 5-1/2 x 18 pump, 60 SPM, 1,000# pressure. Bit No. 1, 12-1/4", J44, HTC in @ 154', 398' in 17-1/2 hrs. Deviations: 1-1/4° @ 260', 3/4° at 520'. Tested BOP equipment - 1500 psi, Hydril 1000 psi.
- 2/7/80 TD 1355'. Drilling. WOB 40,000, 60 RPM, 6 x 8 pump, 100 SPM, 800# pressure. Bit No. 1, 12-1/4", J44, HTC in @ 154', 1201' in 37-1/2 hours. Deviations: 3/4° at 750', 1° at 1007', 1-1/2° at 1266'. Repairs: 2-1/4 hours pump. Mud wt. 8.4, vis. 28.
- 2/8/80 TD 1775'. Drilling. WOB 40,000, 60 RPM, 6 x 8 pump, 100 SPM 600# pressure. Bit No. 1, 12-1/4", J44, HTC in @ 154', 1621' in 60 hrs. Deviations: 1-1/4° at 1500'. Lost returns @ 1623', drilled 1623'-85' with partial returns, drilled 1685'-1775' with no returns. Mud: water.
- 2/9/80 TD 1815'. Drilling cement. WOB 30,000, 60 RPM, 6 x 8 pump, 85 SPM, 600# pressure. Bit No. 1, 12-1/4", J44, HTC in @ 154' - out @ 1815', 1661' in 65 hours. Bit No. 2, 12-1/4", F4, STC in @ 1815'. Drilled 1775'-1815'. Drilled 1775'-1815' with no returns. Cemented w/230 sack RFC, WOC, Top of cement @ 1672'. Mud:water.
- 2/10/80 TD 2377'. Drilling. WOB 35,000, 60 RPM, 6 x 8 pump, 100 SPM, 1000# pressure. Bit No. 2, 12-1/4", F4 in @ 1815'. 562' in 20 hours. Drilled cement plug thru lost circulation interval. Continued drilling 12-1/4" hole. Full returns. Mud wt. 8.5, vis. 28.
- 2/11/80 TD 2946'. Drilling. WOB 40,000, 60 RPM, 6 x 8 pump, 100 SPM, 800# pressure. Bit No. 2, 12-1/4", F4 in at 1815', 1131' in 42-1/4 hours. Deviation: 1-1/4° at 2500'. Drilling 12-1/4" hole. Full returns. Mud wt. 8.7, vis. 29.
- 2/12/80 TD 3248'. Logging with Schlumberger. Bit No. 2, 12-1/4", F4 in at 1815', out at 3248', 1433' in 54-1/2 hours. Drilled 12-1/4" hole to 3248'. Circulate and condition hole for logging. Driller TD (geolograph) 3200', Strap TD 3248', Schlumberger TD 3242'. Mud wt. 8.8, vis. 31.

RECEIVED

MAR 3 1980

DIVISION OF
OIL, GAS & MINING

- 2/13/80 TD 3248'. Circulating to cement casing. Completed logging. DISFL, CNL-FDC, BHC. Log Tops: Green River-Evacuation Ck. 910'
Green River-Parachute Ck. 1506'
H Marker 2885'
Ran 79 jts. 9-5/8", 36#, K55, STC intermediate casing. Land casing at 3248'. Mud wt. 9.2, vis. 32, chl 8,000.
- 2/14/80 TD 3248'. Testing BOP equipment. Circulated and cemented with 450 sacks 50-50 Pozmix cement and 100 sacks Class G cement. Good circulation. Bumped plug w/1400#. Float held. Set slips and install casing spool. Nipple up BOP equipment and test.
- 2/15/80 TD 3526'. Drilling. WOB 35,000, 60 RPM, 5-1/2 x 18 pump, 60 SPM, 1200# pressure. Bit no. 3, 7-7/8", F45 in at 3248'. 278' in 9 hrs. Tested BOP equipment to 2500#. Drilled cement. Mud:water.
- 2/16/80 TD 4192'. Drilling. WOB 35,000, 50 RPM. 6 x 8 pump, 100 SPM, 1000# pressure. Bit No. 3, 7-7/8"; F45 in at 3248'. 944' in 31 hours. Mud wt. 8.8, vis. 28.
- 2/17/80 TD 4598'. Drilling. WOB 35,000, 50 RPM. 6 x 8 pump, 100 SPM, 900# pressure. Bit No. 3, 7-7/8", F45 in at 3248'. 1350' in 53-1/2 hrs. Deviation: 2-3/4° at 4200'. Mud wt. 9.0, vis. 28.
- 2/18/80 TD 4995'. Drilling. WOB 35,000, 50 RPM. 5-1/2 x 18 pump, 60 SPM, 1100# pressure. Bit No. 3, 7-7/8", F45 in at 3248', 1747' in 75-1/2 hrs. Deviation: 2-1/2° at 4737'. Drilling break: 4695'-4754' 160 units gas. Mud wt. 9.0, vis. 28.
- 2/19/80 TD 5362'. Drilling. WOB 35,000, 50 RPM, 6 x 8 pump, 100 SPM, 900# pressure. Bit No. 3, 7-7/8", F45 in at 3248'. 2114' in 98-3/4 hrs. Drilling break: 5027'-44' 250 units gas. Mud wt. 8.9, vis. 28.
- 2/20/80 TD 5800'. Drilling. WOB 35,000, 50 RPM, 6 x 8 pump, 100 SPM, 900# pressure. Bit No. 3, 7-7/8", F45 in at 3248'. 2552' in 121-3/4 hrs. Mud wt. 9.4, vis. 28, chl 31,000.
- 2/21/80 TD 6043'. Tripping with magnet. WOB 35,000, 50 RPM. 6 x 8 pump, 100 SPM, 900# pressure. Bit No. 3, 7-7/8", F45 in at 3248' out at 2795' total 133 hrs. Cond. T7, B8, 0-1/2. Deviation: 2° at 5801'. Tripped for bit. Lost cone off bit #3. Running magnet and junk basket to recover cone. Mud wt. 8.6, vis. 28, chl. 21,000.
- 2/22/80 TD 6052'. Drilling. WOB 30,000, 60 RPM, 6 x 8 pump, 100 SPM, 800# pressure. Bit No. 4, 7-7/8", JD8, HTC in at 6043'. 9' in 1 hour. Deviation: 2° at 6043'. Unable to get to bottom with magnet due to fillup. Trip in with new bit No. 4. Wash and ream 5183'-6043'. Resume drilling. Mud wt. 9.0, vis. 32, chl. 56,000.

REC
MAR 3 1980

DIVISION OF
OIL, GAS & MINING

Pacific Transmission Supply Co.
Devils Playground
#21-19 Federal
Page 3

- 2/23/80 TD 6168'. Washing and reaming to bottom. WOB 30,000, RPM 60. Pump 6 x 8, 100 SPM, 800# pressure. Bit No. 4, 7-7/8", JD8 in at 6043', out at 6168'. 125' in 12-1/2 hrs. Bit No. 5, 7-7/8" J44 in at 6168', cond. T7, B7, 0-1/8. Tripped for bit change. Bridge at 4856' with bit no. 5. Ream and wash to bottom.
- 2/24/80 TD 6289'. Drilling. WOB 35,000, RPM 50. Pump 6 x 8, 100 SPM, 700# pressure. Bit no. 5, 7-7/8", J44 in at 6168'. 121' in 22 hours. Mixing and conditioning mud while drilling. Spl. top Mesaverde 6202'. Mud wt. 9.6, vis. 31, chl. 104,000.
- 2/25/80 TD 6294'. Tripping in with bit no. 6. Bit no. 5, 7-7/8", J44 in at 6168' out at 6294', 126' in 24 hours, cond. T7, B3, 1. Drilled to 6294' and lost 350# pump pressure. Checked for hole in pipe and tripped out with bit no. 5. Laid down 1 cracked drill collar. Made magnet run to recover inserts from bit no. 5 and pieces of cone from bit no. 3.

RECEIVED

MAR 3 1980

DIVISION OF
OIL, GAS & MINING

NATURAL GAS CORPORATION OF CALIFORNIA

OPERATIONS HEADQUARTERS
308 DURBIN CENTER BUILDING
145 SOUTH DURBIN STREET
P. O. BOX 3093
CASPER, WYOMING 82602
(307) 265-1027

GEOLOGICAL WELL REPORT
PACIFIC TRANSMISSION SUPPLY COMPANY
DEVIL'S PLAYGROUND PTS #21-19 FEDERAL
SECTION 19, TOWNSHIP 9 SOUTH, RANGE 24 EAST
UINTAH COUNTY, UTAH

Submitted by:

Erik Enquist, Geologist
Natural Gas Corporation
February 28, 1980

RECEIVED

MAR 5 1980

DIVISION OF
OIL, GAS & MINING

WELL DATA

OPERATOR: Pacific Transmission Supply Co.

LEGAL LOCATION: 567' FNL, 1690' FWL (NE, NW), Sec. 19, T9S, R24E

WELL NAME: PTS #21-19 Federal (Devil's Playground)

COUNTY AND STATE: Uintah County, Utah

ELEVATIONS: 5166' (Gr) 5179' (KB)

CONTRACTOR: Olsen Drilling Company, Rig #2

SPUD DATE: DRY HOLE: DRILLING CONTRACTOR: 2/5/80

SURFACE CASING: 9-5/8", 36.0 # casing to 3248'

HOLE SIZE: 12-1/4" hole to 3248', 7-7/8" hole to 6700'

FLUIDS CONTRACTOR: D.M.I., Vernal, Utah

DRILLSTEM TESTS: None

LOGGING DATA: 3248' - DIL w/Gamma Ray, BHC Sonic w/Gamma Ray and Caliper, CN-FD w/
Gamma Ray and Caliper.
6700' - DIL w/Gamma Ray, BHC Sonic w/Gamma Ray and Caliper, CN-FD w/
Gamma Ray and Caliper.

MUD LOGGING: Rocky Mountain Engineering Company, Grand Junction, Colorado
Logger - Larry Rose

CORES: None

TOTAL DEPTH: Driller - 6700'
Logger - 6696'

CEASED DRILLING: 2/26/80

RIG RELEASED:

RECEIVED
MAR 5 1980

DIVISION OF
OIL, GAS & MINING

WELL HISTORY

<u>DATE</u>	<u>HOURS DRILLING</u>	<u>DEPTH</u>	<u>ACTIVITY</u>
2/05/80		154'	Test BOP's; drilling cement.
2/06/80	17-1/2	552'	Drilling; rig repair.
2/07/80	20	1355'	Drilling.
2/08/80	22-1/2	1775'	Drilling.
2/09/80	5	1815'	Drilling. Trip to set cement plug; WOC
2/10/80	20	2377'	Drilling.
2/11/80	22-1/4	2946'	Drilling.
2/12/80	22-1/4	3248'	Drilling; trip for logs; Logging.
2/13/80	0	3248'	Logging; ran 9-5/8" casing.
2/14/80	0	3248'	WOC; nipple up BOP's
2/15/80	9	3526'	Test BOP's; drilling.
2/16/80	22	4192'	Drilling.
2/17/80	22-1/2	4598'	Drilling.
2/18/80	22	4995'	Drilling.
2/19/80	23-1/4	5362'	Drilling.
2/20/80	23	5800'	Drilling.
2/21/80	11-1/4	6043'	Drilling; fish for bit cones.
2/22/80	1	6052'	Fish for bit cone; reaming; drilling.
2/23/80	11-1/4	6168'	Drilling; trip for bit #4.
2/24/80	22	6289'	Drilling.
2/25/80	2	6294'	Drilling; trip for bit #5.
2/26/80	20-3/4	6595'	Drilling.
2/27/80	7-3/4	6700'	Drilling; trip for logging; logging.

RECEIVED

MAR 5 1980

DIVISION OF
OIL, GAS & MINING

DEVIATION RECORD

<u>Depth</u>	<u>Deviation</u>
260'	1-1/4 deg.
520'	3/4 deg.
750'	3/4 deg.
1007'	1 deg.
1266'	1-1/2 deg.
1500'	1-1/4 deg.
2500'	1-1/4 deg.
3200'	1 deg.
4200'	2-3/4 deg.
4737'	2-1/2 deg.
5801'	2 deg.
6043'	2 deg.
6700'	2 deg.

BIT RECORD

<u>No.</u>	<u>Make</u>	<u>Type</u>	<u>Size</u>	<u>In</u>	<u>Out</u>	<u>Ftg.</u>	<u>Hrs.</u>
1	HTC	J-44 (RR)	12-1/4"	154'	1815'	1661'	65
2	STC	F-4	12-1/4"	1815'	3248'	1433'	54-1/2
3	STC	F-45	7-7/8"	3248'	6043'	2795'	133
4	HTC	JD8	7-7/8"	6043'	6168'	125'	12-1/2
5	HTC	J-44	7-7/8"	6168'	6294'	126'	24
6	HTC	J-33	7-7/8"	6294'	6700'	406'	28-1/2

RECEIVED

MAR 5 1980

DIVISION OF
 OIL, GAS & MINING

FORMATION TOPS

	<u>Sample</u>	<u>Log</u>	<u>Datum</u>
H Marker		2885'	+2294'
I Marker		3007'	+2172'
J Marker		3294'	+1885'
K Marker		3504'	+1675'
L Marker		3806'	+1373'
M Marker		3864'	+1315'
N Marker		3952'	+1227'
Wasatch	4315'	4264'	+ 827'
Y Marker		5857'	- 678'
Mesaverde	6203'	6195'	-1016'

KB Elevation - 5179'

<u>Interval</u>	<u>R_w</u>
3248' - 3900'	0.18
3900' - 4150'	0.20
4150' - 4340'	0.80
4340' - 6700'	0.18

RECEIVED

MAR 5 1980

DIVISION OF
OIL, GAS & MINING

SAMPLE DESCRIPTIONS

<u>Depth</u>	<u>Lithology</u>
5400-5410'	Shale (100%), medium to dark gray, light brown, salmon red, blocky, firm to hard.
5410-5420'	No sample.
5420-5470'	Shale (100%), predominantly medium gray, occasionally dark gray, light brown, maroon, platy to blocky, firm.
5470-5490'	Shale (100%), predominantly medium gray, occasionally light brown, platy to blocky, firm to hard. Sandstone, trace, white, very fine grained, sub-angular, firm to hard, well sorted, tight, calcareous.
5490-5500'	Shale (100%), as above.
5500-5530'	Shale (100%), predominantly medium gray, occasionally dark gray, light brown, firm to brittle, flaky to blocky. Sandstone, trace, clear, white, fine grained, sub-angular, firm to friable, well sorted, poor porosity, calcareous, occasionally salt and pepper, medium grained.
5530-5550'	Shale (100%), medium gray, light gray, light brown, lavender, platy to flaky, occasionally hackly, firm to brittle, calcareous.
5550-5560'	Shale (100%), gray, salmon red, light brown, firm to brittle, blocky to flaky, occasionally hackly, calcareous. Sandstone, trace, light gray, very fine grained, sub-angular, friable, well sorted, poor porosity, calcareous.
5560-5600'	Shale (100%), as above.
5600-5610'	Shale (100%), gray, salmon red, light green, tan, lavender, blocky to platy to flaky to hackly, slightly calcareous.
5610-5620'	Shale (90%), as above. Sandstone, white, salt and pepper, very fine grain, sub-angular, firm, occasionally friable, well sorted, tight, occasional trace of porosity, calcareous.
5620-5650'	Shale (100%), medium-dark gray, light brown, lavender, blocky, occasionally platy, firm, slightly calcareous. Sandstone, trace, white, light gray, very fine grained, sub-angular, firm to friable, well sorted, calcareous.
5650-5700'	Shale (100%), medium dark gray, brown, occasionally light green, black, blocky, occasionally hackly, slightly calcareous. Sandstone, trace, light gray, very fine grained, sub-angular, tight, calcareous, occasionally clear, medium grained, angular, firm, well sorted, tight.

RECEIVED

MAR 5 1980

<u>Depth</u>	<u>Lithology</u>
5700-5760'	Shale (100%), Light to medium gray, light green, light brown, salmon red, blocky, occasionally flaky, soft to brittle, calcareous.
5760-5780'	Shale (80%), medium gray, light brown, maroon, light green, blocky, occasionally flaky, firm to soft, calcareous. Sandstone (20%), light gray, clear, fine grained, occasionally very fine grained, sub-angular, firm to friable, well sorted, poor porosity, calcareous, occasionally loose, clear to milky, medium grained, sub-angular to round, quartz crystals.
5780-5790'	Shale (70%), as above; sandstone (30%), as above.
5790-5800'	Shale (80%), as above; sandstone (20%), as above.
5800-5810'	Shale (100%), medium to dark gray, reddish brown, light brown, occasionally light green, blocky to flaky, firm, calcareous to slightly calcareous.
5810-5820'	Shale (70%), as above; sandstone (30%), white, clear, very fine grained, sub-angular, firm to friable, well sorted, poor porosity, slightly calcareous, slightly unconsolidated.
5820-5830'	Shale (80%), as above; sandstone (20%), as above.
5830-5850'	Shale (100%), medium to light gray, occasionally light green, dark gray, light brown, firm to hard, occasionally soft, blocky. Sandstone, trace, light green, very fine grained, sub-angular, friable, well sorted, trace porosity, calcareous. Limestone, trace, light gray, soft, micro-crystalline, earthy.
5850-5860'	Shale (100%), as above; sandstone, milky, very fine to medium grained, sub-angular, firm to friable, well sorted, poor porosity, calcareous.
5860-5870'	Shale (100%), dark to medium gray, lavender to red, tan, blocky to flaky, firm, calcareous.
5870-5900'	Shale (100%), as above; sandstone, trace, light gray, white, very fine grained, sub-angular, firm to friable, moderately well sorted, fine, porosity, silty, calcareous.
5900-5910'	Shale (100%), gray, brown, brick red, firm to brittle, blocky to platy, to flaky, slightly calcareous. Sandstone, trace, gray, white, milky, very fine grained, occasionally medium grained, sub-angular to angular, firm to hard, occasionally friable, predominantly well sorted, occasionally poor porosity, calcareous, occasionally glauconitic.
5910-5950'	Shale (100%) as above; sandstone, trace, light gray, milky, salt and pepper, very fine to fine grained, sub-angular, firm, well sorted, tight, slightly calcareous, occasionally pyritic.

MAR 5 1980

<u>Depth</u>	<u>Lithology</u>
5950-5970'	Shale (100%), medium to dark gray, black, light green, tan, light brown, firm to soft, blocky to flaky, slightly calcareous. Sandstone, trace, light gray, very fine grained, sub-angular, firm, well sorted, tight, pyritic. Limestone, trace, white, firm, crypto-crystalline, earthy.
5970-5980'	Shale (90%), medium to dark gray, brownish-gray, firm, blocky to platy, slightly calcareous; Sandstone (10%), dark milky, very fine grained, sub-angular, firm to friable, well sorted, trace porosity, slightly calcareous.
5980-5990'	Shale (100%), as above; sandstone, trace, as above.
5990-6000'	Shale (100%), medium gray, brownish-gray, light brown, salmon-red, lavender, firm, occasionally soft, blocky to flaky. Sandstone. trace, as above.
6000-6010'	Shale (100%), medium to light gray, brownish-gray, salmon-red, light brown, lavender-red, firm to soft, blocky to flaky, slightly very calcareous. Limestone, trace, light gray, soft, crypto-crystalline, earthy.
6010-6030'	Shale (100%), as above; limestone, trace, white, light gray, soft, crypto-crystalline, earthy.
6030-6070'	Shale (100%), as above; sandstone, trace, salt and pepper, fine to medium grained, angular to sub-angular, firm, well sorted, tight, calcareous.
6070-6090'	Shale (90%), dark to medium to light gray, light green, light brown, tan, brick-red, brownish-orange, firm, blocky. Sandstone (10%), white, salt and pepper, fair grained, sub-angular, hard, well sorted, tight, calcareous.
6090-6110'	Shale (90%), medium to light gray, brownish-orange, brick-red, tanish-yellow, lavender, hard, blocky to flaky, slightly calcareous. Sandstone (10%), light gray, salt and pepper, fine to very fine grained, sub-angular, firm to hard, well sorted, tight, calcareous, occasionally friable, well to poorly sorted.
6110-6120'	Shale (100%), medium gray, brownish-orange, brick-red, brownish-yellow, black, firm, blocky to flaky. Sandstone, trace, as above. Limestone, trace, white, firm, crypto-crystalline, transparent.
6120-6130'	Shale (90%), as above. Sandstone (10%), white, light green, medium to light gray, fine to very fine grained, sub-angular, firm to friable, well sorted, tight, calcareous. Limestone, trace, as above.

RECEIVED

MAR 5 1980

<u>Depth</u>	<u>Lithology</u>
6130-6140'	Shale (90%), as above, occasionally brownish-yellow. Sandstone (10%), salt and pepper, light green, light gray, white, coarse to medium grained, slightly very fine grained, sub-angular, friable to firm, well sorted, poor porosity, calcareous, occasionally glauconitic. Limestone, trace, as above.
6140-6150'	Shale (90%), gray, light green, tanish-yellow, reddish-brown, black, lavender, firm, blocky to flaky to splintery, occasional glauconitic. Sandstone (10%), salt and pepper, white, fine to very fine grained, sub-angular, firm, well sorted, tight, calcareous. Limestone, trace, as above.
6150-6180'	Shale (100%), as above; sandstone, trace, as above; limestone, trace, white, firm, crypto-crystalline, transparent.
6180-6190'	Shale (50%), light to medium gray, brownish-red, light brown, lavender, firm to hard, blocky to flaky, slightly calcareous. Sandstone (50%), salt and pepper, fine grained, sub-angular, firm, occasionally friable, well sorted, poor porosity, slight to slightly calcareous, occasionally light green to light gray, very fine grained, sub-angular, hard, well sorted, tight, slightly glauconitic.
6190-6200'	Shale (80%), as above; sandstone (20%), as above, occasionally white.
6200-6210'	Shale (90%), as above; sandstone (10%), as above, occasionally medium grained; limestone, trace, white, transparent, crypto-crystalline.
6210-6220'	Shale (70%), as above; sandstone (30%), as above; limestone, trace, as above.
6220-6230'	Shale (100%), medium gray, brownish-red, light green, light brown, occasionally brick-red, brownish-yellow, firm to hard, blocky, occasionally sandy, slightly calcareous.
6230-6240'	Shale (80%), as above; sandstone (20%), salt and pepper, light gray, fine to very fine grained, sub-angular, firm, well sorted, tight, calcareous; limestone, trace, as above.
6240-6270'	Shale (90%), medium gray, maroon, brownish-red, light green, firm to hard, blocky to flaky to splintery, slightly calcareous. Sandstone (10%), as above.
6270-6290'	Shale (100%), predominantly medium gray, occasionally lavender, brownish-red, firm to hard, blocky to flaky to splintery, slightly calcareous. Sandstone, trace, as above.
6290-6300'	Shale (100%), medium gray, brick-red, brownish-red, brown, occasionally light to dark gray, lavender, brittle, flaky to platy to blocky, slightly calcareous. Sandstone, trace, salt and pepper, fine grained, occasionally medium grained, sub-angular, firm, well to moderately to well sorted, tight, occasionally poor porosity, very calcareous. Coal, trace, black, brittle, vitreous.

Depth	Lithology
6300-6310'	Shale (50%), as above, occasionally light green, glauconitic. Sandstone (20%), salt and pepper, milky, fine to medium grained, sub-rounded to sub-angular, firm, well to moderately well sorted, slightly tight, slight to well to poor porosity, calcareous. Coal (30%), as above.
6310-6320'	Shale (90%), as above; sandstone (10%), as above, occasionally light grey, very fine grained. Limestone, trace, white, crypto-crystalline, firm, transparent.
6320-6340'	Shale (90%), medium to light gray, brick-red, tanish-yellow, brown, occasionally light green, dark gray, firm to brittle, blocky to flaky, slightly calcareous, occasionally sandy; Limestone, trace, as above. Sandstone (10%), milky, light gray, occasionally salt and pepper, fine to very fine grained, sub-angular, firm, well sorted, tight, calcareous, occasionally glauconitic.
6340-6350'	Shale (100%), as above; sandstone, trace, as above.
6350-6360'	Shale (70%), medium to light gray, buff, brick-red, lavender, brown, occasionally tanish-yellow, brittle to firm, occasionally soft, flaky to blocky, slightly calcareous. Sandstone (30%), light gray, white, salt and pepper, fine to very fine grained, firm to friable, moderately well sorted, tight, calcareous. Limestone, trace, white, crypto-crystalline, firm, transparent.
6360-6370'	Shale (60%), as above; sandstone (40%), as above; limestone, trace, as above.
6370-6380'	Shale (70%), as above; sandstone (20%) as above; limestone (10%), white, light gray, crypto-crystalline, firm, transparent.
6380-6430'	Shale (90%), medium to dark gray, brick-red, brown, brownish-yellow, occasionally light green, black, carbonaceous, firm to brittle, blocky to flaky, slightly calcareous. Sandstone (10%), milky, light gray, salt and pepper, medium to fine to very fine grained, sub-angular, firm, well sorted, tight, calcareous. Limestone, trace, as above, occasionally yellow.
6430-6450'	Shale (100%), as above; sandstone, trace, as above; limestone, trace, white, crypto-crystalline, firm, transparent.
6450-6470'	Shale (90%), predominantly medium to dark gray, brownish-red, occasionally light gray, light green, buff, firm, blocky, slightly calcareous, occasionally glauconitic. Sandstone (10%), light gray, salt and pepper, fine to very fine to medium grained, sub-angular to sub-rounded, firm to hard, moderately well sorted, tight, very calcareous.
6470-6480'	Shale (70%), as above, occasionally yellow-tan; sandstone (30%), as above, occasionally milky; limestone, trace, as above.

<u>Depth</u>	<u>Lithology</u>
6480-6500'	No sample.
6500-6510'	Shale (10%), gray, reddish-brown, firm, blocky, slightly calcareous. Sandstone (10%), light gray, salt and pepper, fine to medium to very fine grained, sub-angular, firm, occasionally friably, well sorted, tight, occasionally trace porosity, calcareous. Coal (80%), black, brittle, vitreous.
6510-6520'	Shale (80%), medium to dark gray, buff, black, carbonaceous, occasionally brownish-red, light green, firm to hard, blocky, slightly calcareous. Sandstone (10%), as above, occasionally milky. Coal (10%), as above.
6520-6540'	Shale (90%), as above; sandstone (10%), as above; limestone, trace, white, crypto-crystalline, firm, transparent.
6540-6550'	No sample.
6550-6570'	Shale (70%), predominantly medium to light to dark gray, occasionally buff, brownish-red, brownish-yellow, firm, blocky, slightly to very calcareous. Sandstone (30%), salt and pepper, light gray, fine to very fine to medium grained, sub-angular, firm, slightly friable, moderately to well sorted, slightly tight, slight to well to poor porosity, slightly calcareous, slightly glauconitic. Limestone, trace, white, crypto-crystalline, firm, transparent.
6570-6600'	Shale (90%), as above; sandstone (10%), as above; limestone, trace, as above.
6600-6610'	Shale (70%), gray, brownish-orange, occasionally light to dark gray, tanish-yellow, firm to brittle, slightly calcareous, occasionally brownish-grey, firm, slightly to very silty and sandy. Sandstone (30%), salt and pepper, milky, buff, light gray, fine to medium grained, sub-angular, firm to friable, moderately well sorted, tight, very calcareous. Limestone, trace, white, crypto-crystalline, firm, transparent.
6610-6620'	Shale (90%), as above, slightly flaky to splintery. Sandstone (10%), as above, occasionally light green, very fine grained, well sorted, tight.
6620-6650'	Shale (100%), as above, slightly brick-red, slightly sandy, occasionally black, carbonaceous. Sandstone, trace, as above.
6650-6680'	Shale (90%), medium gray, brownish-orange, brick-red, tanish-yellow, brownish-buff, light green, firm, blocky to flaky, occasionally hackly, slightly calcareous, occasionally sandy, occasionally glauconitic. Sandstone (10%), milky, salt and pepper, medium to light gray, fine to medium to very fine grained, sub-angular, firm, well sorted, tight, calcareous. Coal, trace, black, brittle, vitreous. Limestone, trace, white, crypto-crystalline, firm, transparent.

Depth	Lithology
6680-6700'	Shale (100%), medium to dark gray, buff, occasionally brick-red, tanish-yellow, brownish-red, black, carbonaceous, firm, blocky to flaky, slightly calcareous. Sandstone, trace, as above.

RECEIVED

MAR 5 1980

DIVISION OF
OIL, GAS & MINING

WELL PROGNOSIS
PTS #21-19 FEDERAL
Uintah County, Utah

LOCATION: 567' FNL, 1690' FWL (NE NW), Section 19, T9S, R24E

OPERATOR: Pacific Transmission Supply Company

LEASE: 31266

DRILLING CONTRACTOR: To be selected.

FORMATION TOPS AND DATUM:

<u>Formation</u>	<u>Depth</u>	<u>Datum</u>
Green River		
Parachute Creek	1481	+3685
H-Marker	2961	+2205
Wasatch	4306	+ 860
Mesaverde	6141	- 975
TOTAL DEPTH	7125	-1959

SAMPLE COLLECTION: Collect cutting samples at ten (10) foot intervals from under surface to total depth. Samples will be collected by drilling crews for the wellsite geologist. Two (2) sets of samples will be collected in the oil shale section of the Green River formation with one (1) set to be sent to the Bureau of Mines, Laramie Energy Research Center, 9th and Lewis, Laramie, Wyoming 82070; Attention: Mr. Pete Dana. Frequency of sample collection may be changed at the wellsite geologist's discretion.

LOGGING PROGRAM: Dual Induction Laterolog, Borehole Compensated Sonic with Gamma Ray and Caliper, Compensated Neutron-Formation Density with Gamma Ray and Caliper.

MUD LOGGING: Portable mud logging unit operated by wellsite geologist from below surface casing to total depth.

DRILLSTEM TESTING: All significant shows of oil and gas will be drillstem tested. Use floor manifold with positive choke assembly, hydraulic jars, safety joint, reverse circulating sub, sampler assembly and dual packers. Collect samples of all fluids recovered for further analysis.

MUD PROGRAM:

<u>Interval (Feet)</u>	<u>Mud Weight (lbs./gal.)</u>	<u>Viscosity (Sec./qt.)</u>	<u>Fluid Loss (Ml/30 min.)</u>	<u>Mud Type</u>
0-125	8.4-9.0	26-45	No Control	Water
125-3200	8.7-9.0	26-30	No Control	Salt Water (40-60000 ppm NaCl)
3200-6500	8.7-9.0	26-30	No Control	Salt Water (40-60000 ppm NaCl)
6500-TD	9.1-9.6	32-45	12-15cc	Salt Mud (60-80000 ppm NaCl)

DRILLING PROGRAM:

- 1) Move in air percussion rig. Drill 17-1/2" hole and set \pm 125', 13-3/8" surface casing. Cement to surface.
- 2) Move in rotary drilling rig and drill 12-1/4" hole to \pm 3200'. Log and prepare hole for intermediate casing.
- 3) Set and cement +3200', 9-5/8", 36.0#, K-55 casing. WOC.
- 4) Drill 7-7/8" hole to total depth. Perform drillstem testing as necessary. Log and evaluate well.
- 5) In the event productive intervals are present, run 4-1/2", 11.6#, N-80 casing and cement as necessary across potential zones.
- 6) Release rotary drilling rig and develop completion procedure.

PERSONNEL & MAILING INFORMATION:

D. E. Beardsley, Manager of Operations
Pacific Transmission Supply Company
P. O. Box 3093
Casper, WY 82602
Telephone: Office (307) 265-1027
Home (307) 234-7666

E. E. Mulholland, Operations Engineer
Pacific Transmission Supply Company
P. O. Box 3093
Casper, WY 82602
Telephone: Office (307) 265-1027
Home (307) 265-4191

R. J. Firth
Pacific Transmission Supply Company
64 East Main Street
Vernal, UT 84078
Telephone: Office (801) 789-4573
Home (801) 789-5575

NOTIFICATION OF SHOWS, DST'S & UNUSUAL PROBLEMS:

D. E. Beardsley Office: (307) 265-1027
J. L. Wroble (303) 571-1662
E. E. Mulholland (307) 265-1027
R. J. Firth (801) 789-4573

Home: (307) 234-7666
(303) 770-2667
(307) 265-4191
(801) 789-5575

DISTRIBUTION OF INFORMATION:

Pacific Transmission Supply Company
P. O. Box 3093
Casper, WY 82602
Attn: D. E. Beardsley

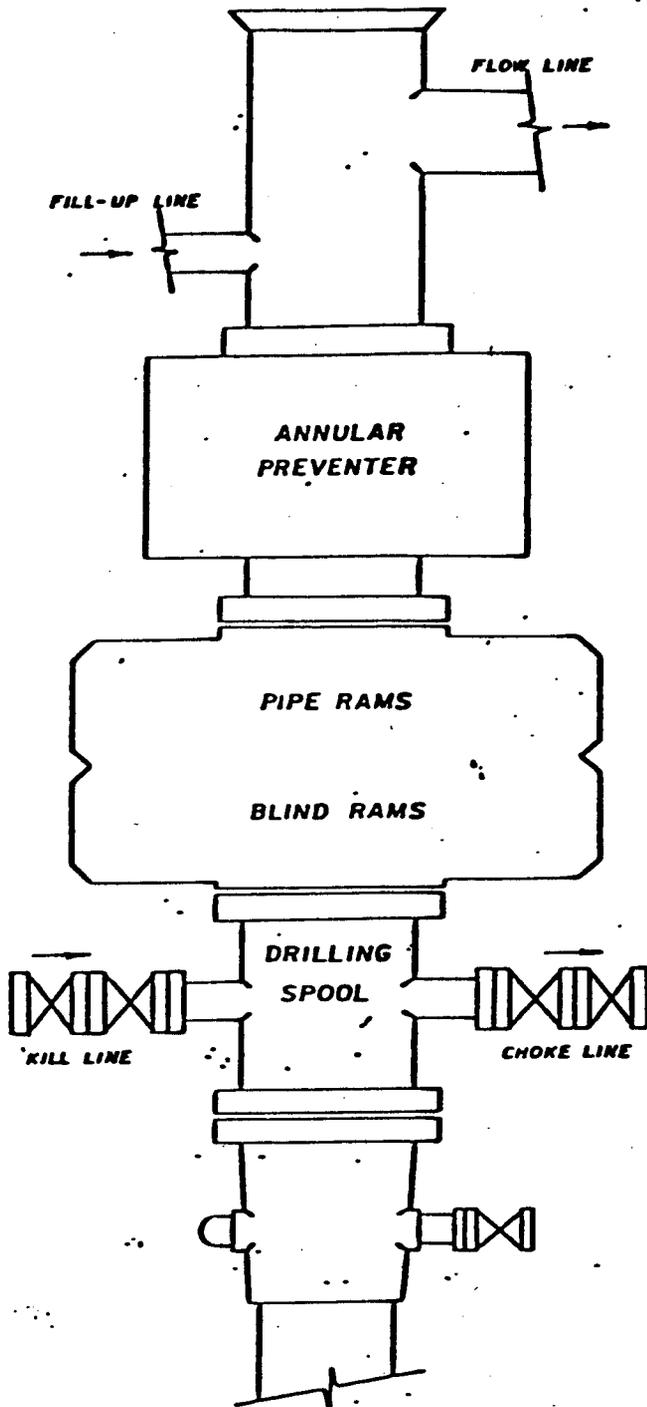
Pacific Transmission Supply Company
64 East Main Street
Vernal, UT 84078
Attn: R. J. Firth

Pacific Transmission Supply Company
633- 17th Street, Suite 2140
Denver, CO 80202
Attn: J. L. Wroble

U. S. Geological Survey
8426 Federal Building
Salt Lake City, UT 84138
Attn: E. W. Guynn

State of Utah
Division of Oil, Gas, & Mining
1588 West North Temple
Salt Lake City, UT 84116
Attn: Chief Petroleum Engineer

PACIFIC TRANSMISSION SUI-LY
BOP AND PRESSURE CONTAINMENT DATA



1. BOP equipment shall consist of a double gate, hydraulically operated preventer with pipe and blind rams or two single ram type preventers, one equipped with pipe rams, the other with blind rams and an annular type preventer, all to be 10" - 3000 W.P.
2. BOP's are to be well-braced with hand controls extended clear of substructure.
3. Accumulator to provide closing pressure in excess of that required with sufficient volume to operate all components.
4. Auxiliary equipment: Lower kelly cock, full opening stabbing valve, 2½" choke manifold, pit level indicator and/or flow sensors with alarms.
5. All BOP equipment, auxiliary equipment stand pipe and valves and rotary hose to be tested to the rated pressure of the BOP's at time of installation and 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.

PACIFIC TRANSMISSION SUPPLY COMPANY

13 Point Surface Use Plan

For

Well Location

P.T.S. #21-19 Federal

Located In

Section 19, T9S, R24E, S.L.B. & M.

Uintah County, Utah

1. EXISTING ROADS

See attached Topographic Map "A", to reach the Pacific Transmission Supply Company well location, P.T.S. #21-19 Federal, located in Section 19, T9S, R24E, S.L.B. & M., from Vernal, Utah.

Proceed East out of Vernal, Utah along U.S. Highway 40, 24 miles to the junction of this Highway and Utah State Highway 45 to the South; proceed South along this road 22 miles to Bonanza, Utah and the junction of this road and a gravel surface road to the West; proceed Westerly along this road 5.2 miles to the junction of this road and the proposed access road to be discussed in Item #2.

There is no construction anticipated on any of the above described road. It will meet the standards necessary, for the hauling of equipment during the drilling and production of this well.

2. PLANNED ACCESS ROAD

See Topographic Map "B".

The proposed access road leaves the existing access road described in Item #1 in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 18, T9S, R24E, S.L.B & M., and proceeds in a Southerly direction 0.4 miles to the proposed location site.

In order to facilitate the anticipated traffic flow necessary to drill and produce this well, the following standards will be met:

This proposed access road will be an 18' crown road (9' either side of the centerline) with drain ditches along either side of the proposed road where it is determined necessary in order to handle any run-off from any normal meteorological conditions that are prevalent to this area.

Back slopes along the cut areas of the road will be $1\frac{1}{2}$ to 1 slopes and terraced.

The road will be centerline flagged prior to the commencement of construction.

The grade of this road will vary from flat to 8%, but will not exceed this amount. This road will be constructed from native borrow accumulated during construction.

If deemed necessary by the local governmental agencies or their representatives turnout will be installed for safety purposes every 0.25 miles or on the top of ridges that will provide the greatest sight distance. These turnouts will be 200' in length and 12' in width and will be tapered from the shoulder of the road for a distance of 50' in length at both the access and the outlet ends.

Any fences that are encountered along this access road will be cut and replaced with a cattleguard with a minimum width of 18' and a loading factor large enough to facilitate the heavy trucks required in the drilling and production of this well.

If cattleguards are to be located at existing gates, they will be installed with the above requirements and with a new gate installed at one end of the cattleguard.

The access from the road to the gate will be of such a nature that there will be no impedance of traffic flow along the main access road and no difficulties encountered by traffic utilizing the gate, either leaving or entering the proposed access road.

2. PLANNED ACCESS ROAD - continued

The terrain that is traversed by this road is relatively flat and is vegetated with sparse amounts of sagebrush and grasses.

3. LOCATION OF EXISTING WELLS

As shown on Topographic Map "B", there are no other wells within a one mile radius of the proposed well site. (See location plat for placement of Pacific Transmission Supply Company, well within the Section).

4. LOCATION OF TANK BATTERIES, PRODUCTION FACILITIES, AND PRODUCTION GATHERING AND SERVICE LINES

All petroleum production facilities are to be contained within the proposed location site. There are no Pacific Transmission Supply Company flow gathering, injection, or disposal lines within a one-mile radius of this location.

In the event production is established, plan for a gas flow line from this location to existing gathering lines or a main production line shall be submitted to the appropriate agencies for approval.

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

5. LOCATION OF AND TYPE OF WATER SUPPLY

Water for this well will be hauled by truck from an existing loading ramp on the White River in the NE $\frac{1}{4}$ of Section 17, T9S, R22E, S.L.B & M., approximately 16 miles to the Northwest from the proposed well site.

6. SOURCE OF CONSTRUCTION MATERIALS

All construction materials for this location site and access road shall be borrow materials accumulated during construction of the location site and access road. 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

See location layout sheet.

A reserve and burn pit will be constructed.

The reserve pit will be approximately 8' 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 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.

7. METHODS FOR HANDLING WASTE DISPOSAL - continued

The pits will have overhead flagging installed at such time as deemed necessary to protect the water fowl, wildlife, and domestic animals.

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

When the reserve pit dries and the 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.

The burn pits will be constructed and fenced on all four sides with a small mesh wire to prevent any flammable materials from escaping and creating a fire hazard.

All flammable materials will be burned and then buried upon completion of this well.

A portable chemical toilet will be supplied for human waste.

8. ANCILLARY FACILITIES

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

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. PLAN 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 all drilling production activities have been completed, and the location site and access road 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 pit shall be buried with a minimum of 5' of cover.

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

10. PLANS FOR RESTORATION OF SURFACE

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 and access ramp 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 cleanup and restoration activities shall be done and performed in a diligent and most workmanlike manner and in strict conformity with the above mentioned Item #7 and #10.

11. OTHER INFORMATION

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

The area is a basin formed by the Blue Mountain Plateau and Green River to the North and White River and Roan Plateau to the South.

The basin floor is interlaced with numerous canyons and ridges formed by the non-perennial streams of the area. The sides of these canyons are 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 Uintah Formation (Eocene Epoch) Tertiary Period in the upper elevations and the cobblestone and younger Alluvial deposits from the Quaternary Period.

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

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

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

The White River to the South of this location is the only perennial stream that is affected by this location site.

Due to the low precipitation average, climatic 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 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, coyotes, rabbits and varieties of small ground 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 (Topographic Map "B")

P.T.S. #21-19 Federal is located at the base of a relatively unlevel hill side which slopes to the South.

11. OTHER INFORMATION - continued

The majority of the drainages in the area around this location run in a Northerly direction into Coyote Wash which is a tributary to the White River and are non-perennial streams.

The terrain in the vicinity of the location slopes to the North from a small ridge through the location site at approximately a 4% grade into a small wash to the North.

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

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

R.J. Firth
80 South 1500 East
Vernal, Utah 84078

Tele: 780-4573

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 this 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 sub-contractors in conformity with this plan and terms and conditions under which it is approved.

DATE

R.J. Firth
Petroleum Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-31266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

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 GAS WELL OTHER

2. NAME OF OPERATOR
Pacific Transmission Supply Company

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.* See also space 17 below.)
At surface
567' FNL, 1690' FWL, NE 1/4 NW 1/4, Section 19, T9S, R24E

7. UNIT AGREEMENT NAME
Devils Playground

8. FARM OR LEASE NAME
Federal

9. WELL NO.
21-19

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA
Section 19, T9S, R24E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, OR, etc.)

5178' KDB

12. COUNTY OR PARISH

Uintah

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
FRACTURE TREAT
SHOOT OR ACIDIZE
REPAIR WELL
(Other)

PULL OR ALTER CASING
MULTIPLE COMPLETE
ABANDON*
CHANGE PLANS

WATER SHUT-OFF
FRACTURE TREATMENT
SHOOTING OR ACIDIZING
(Other)

REPAIRING WELL
ALTERING CASING
ABANDONMENT*

(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.)*

Drilled well to total depth @ 6700' and conducted electric logging operations. Propose to equalize abandonment cement plugs as follows:

Plug no. 1	6200'-6000'	150 sacks cement
Plug no. 2	4300'-4100'	100 sacks cement
Plug no. 3	3350'-3200'	75 sacks cement
Plug no. 4	13-3/8" 9-5/8" annulus	20 sacks cement
Plug no. 5	at surface w/marker	10 sacks cement

Drilling mud (wt. 9.5#/gal, vis 33 secs) will be left between cement plugs. A regulation dry hole marker will be erected. The location site will be cleaned, restored, and rehabilitated in conformance with the prescribed abandonment regulations. The above described abandonment procedures were discussed with Mr. W. P. Martens, U.S.G.S., Salt Lake City on February 28, 1980.

APPROVED BY THE DIVISION OF
OIL, GAS, AND MINING

DATE: _____

BY: _____

RECEIVED

MAR 7 1980

DIVISION OF
OIL, GAS & MINING

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

SIGNED

R. J. BIRTH
R. J. BIRTH

TITLE Petroleum Engineer

DATE March 5, 1980

(This space for Federal or State office use)

APPROVED BY _____

TITLE _____

DATE _____

CONDITIONS OF APPROVAL, IF ANY:

PACIFIC TRANSMISSION SUPPLY COMPANY
Natural Gas Corporation of California

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

March 5, 1980

Mr. E. W. Guynn (3)
GEOLOGICAL SURVEY-CONSERVATION DIV.
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, UT 84104

Mr. Frank M. Hamner (1)
DIVISION OF OIL, GAS & MINING
1588 West North Temple
Salt Lake City, UT 84116

Mr. J. Milton Wege (1)
RALPH E. DAVIS & ASSOCIATES
500 Jefferson, Suite 2031
Houston, TX 77002

Mr. R. W. Sharp (1)
ENSERCH EXPLORATION, INC.
Metrobank Bldg., Suite 1322
Denver, CO 80202

Re: PTS #21-19 Fed., Devils Playground
Section 19, T9S, R24E
Uintah County, UT

Gentlemen:

Enclosed are your required number of copies of Form 9-331, Sundry Notices and Reports on Wells, Request for Approval to Abandon dated March 5, 1980 for the above referenced well.

NOT APPROVED-
See attached letter.

Very truly yours,

R. J. Firth
R. J. Firth
Petroleum Engineer

RJF/kh
Encls.

cc: J. L. Wroble
E. R. Henry
E. E. Mulholland
C. T. Clark (Cover Letter Only)

RECEIVED

MAR 7 1980

DIVISION OF
OIL, GAS & MINING

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

SUBMIT IN TRIPPLICATE
(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 GAS WELL OTHER

2. NAME OF OPERATOR
Pacific Transmission Supply Company

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.* See also space 17 below.)
At surface
567' FNL, 1690' FWL, NE 1/4 NW 1/4, Section 19, T9S, R24E

14. PERMIT NO. | 15. ELEVATIONS (Show whether DF, NT, GR, etc.)
| **5178' KDB**

5. LEASE DESIGNATION AND SERIAL NO.
U-31266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Devils Playground

8. FARM OR LEASE NAME
Federal

9. WELL NO.
21-19

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 19, T9S, R24E

12. COUNTY OR PARISH | 13. STATE
Uintah | 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 type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) Drilling Progress Report <input checked="" 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.)*

Daily Drilling Reports Attached.

RECEIVED

MAR 7 1980

DIVISION OF
OIL, GAS & MINING

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

SIGNED *R. P. Firth* TITLE Petroleum Engineer DATE March 5, 1980

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

- 2/23/80 TD 6168'. Washing and reaming to bottom. WOB 30,000, RPM 60. Pump 6 x 8, 100 SPM, 800# pressure. Bit No. 4, 7-7/8", JD8 in at 6043', out at 6168'. 125' in 12-1/2 hrs. Bit No. 5, 7-7/8" J44 in at 6168', cond. T7, B7, 0-1/8. Tripped for bit change. Bridge at 4856' with bit no. 5. Ream and wash to bottom.
- 2/24/80 TD 6289'. Drilling. WOB 35,000, RPM 50. Pump 6 x 8, 100 SPM, 700# pressure. Bit no. 5, 7-7/8", J44 in at 6168'. 121' in 22 hours. Mixing and conditioning mud while drilling. Spl. top Mesaverde 6202'. Mud wt. 9.6, vis. 31, chl. 104,000.
- 2/25/80 TD 6294'. Tripping in with bit no. 6. Bit no. 5, 7-7/8", J44 in at 6168' out at 6294', 126' in 24 hours, cond. T7, B3, 1. Drilled to 6294' and lost 350# pump pressure. Checked for hole in pipe and tripped out with bit no. 5. Laid down 1 cracked drill collar. Made magnet run to recover inserts from bit no. 5 and pieces of cone from bit no. 3.
- 2/26/80 TD 6595'. Drilling. Bit no. 6, 7-7/8", J33 in at 6294', 301' in 20-3/4 hours. Mud wt. 9.1, vis 30, chl 54,000.
- 2/27/80 TD 6700'. Logging. Bit no. 6, 7-7/8", J33 in at 6294', 406' in 28-1/2 hours, cond. T3, B4, 1. Circulated and condition hole for logging. Deviation: 2° @ 6700'.
- 2/28/80 TD 6700'. Waiting on orders. Completed logging with Schlumberger. DLL 2995'-6682', CNL-FDC 3138'-6692', BHC Sonic 3135'-6671'. Formation Log Tops: Wasatch 4308', Mesaverde 6195'.
- 2/29/80 TD 6700'. Plugging. Equalized abandonment cement plugs as follows:
- | | | |
|---|--------------------------|-----------------------------|
| 1 | 6200'-6000' | 150 sacks cement |
| 2 | 4300'-4100' | 100 sacks cement |
| 3 | 3350'-3200' | 75 sacks cement |
| 4 | 13-3/8" x 9-5/8" annulus | 25 sacks cement |
| 5 | @ surface | 10 sacks cement with marker |
- Nipple down BOP equipment to cut off casing to set surface plug.
- 3/1/80 TD 6700'. (P & A.) Completed cutting off casing and setting surface cement plugs. Rotary drilling rig released at 9 a.m., 2/29/80.

RECEIVED

MAR 7 1980

DIVISION OF
OIL, GAS & MININ

SCOTT M. MATHESON
Governor

COPY



OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

1588 West North Temple

Salt Lake City, Utah 84116

(801) 533-5771

CHARLES R. HENDERSON
Chairman

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
CONSTANCE K. LUNDBERG
EDWARD T. BECK
E. STEELE McINTYRE

CLEON B. FEIGHT
Director

March 13, 1980

*Pacific Transmission Supply Company
P.O. Box 3093
Casper, Wyoming 82602*

Re: Well No. Federal 21-19
(Devils Playground)
Sec. 19, T. 9S, R. 24E.,
Uintah County, Utah

Gentlemen:

The above referenced well appears to have been plugged and abandoned/plugged back without receiving the approval of this Division. Rule D-1, General Rules and Regulations and Rules of Practice and Procedure, "Notice of Intention to Plug and Abandon--Methods and Procedure," requires that:

(a) Before operations are commenced to plug and abandon any well drilled for the discovery of oil or gas, including any well drilled below the fresh water level, the owner or operator thereof shall give notice to the Commission of the intention to so plug and abandon such well and have the same approved. Said notice shall contain, among other things, the location of the well and when such plugging operations will commence. The notice shall be upon a form prescribed by the Commission, and shall contain all of the information requested thereon; provided however, that in cases of emergency the operator may obtain oral or telegraphic approval to plug and abandon, and of the method of plugging and abandoning the well. Within five (5) days after receiving oral or telegraphic approval, the operator shall file written notice as provided above.

(b) A dry or abandoned well must be plugged so that oil, gas, water or other substance will not migrate through the well bore from one formation to another. Unless a different method and procedure shall be approved by the Commission, the method and procedure for plugging the well shall be as follows:

March 13, 1980

- (1) The bottom of the hole shall be filled to, or a bridge shall be placed at, the top of each producing formation open to the well bore, and a cement plug not less than one hundred (100) feet in length shall be placed immediately above each producing formation open to the well bore.
- (2) A solid cement plug shall be placed from fifty (50) feet below a fresh water zone, or a 100-foot cement plug shall be centered across the top of the fresh water zone.
- (3) At least ten sacks of cement shall be placed at the surface so as to completely plug and entire hole. If more than one string of casing remains at the surface, all annuli shall be so cemented.
- (4) The interval between plugs shall be filled with heavy mud-laden fluid.
- (5) The hole shall be plugged with heavy mud up to the base of the surface string, at which point a plug of not less than fifty (50) feet of cement shall be placed.
- (6) Any perforated interval shall be plugged with cement and any open-hole porosity zone shall be adequately isolated to prevent migration of fluids.
- (7) A cement plug not less than one hundred (100) feet in length shall be centered across the casing stub if any casing is cut and pulled.

If a different rule of plugging is required under a Federal lease, it will be accepted by the Commission.

Rule D-2, "Report of Abandonment and Plugging states:

Within thirty (30) days after the plugging of any well has been accomplished, the owner or operator thereof shall file a plugging report with the Commission. The report shall give a detailed account of the manner in which the plugging work was carried out, including the nature and quantities of materials used in plugging, and the location and extent (by depths) of the plugs of different materials; records of any tests or measurements made and the amount, size and location (by depths) of casing left in the well; and statement of the volume of mud fluid used. If any attempt was made to part any casing, a complete report of the method used and results obtained must be included.

Pacific Transmission Supply Company

Page 3

March 13, 1980

In the future, please obtain State approval prior to the commencement of plugging operations. Please submit a detailed account of the plugging operations on the above referenced well as outlined in Rule D-2.

Your cooperation in correcting this oversight as soon as possible will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS AND MINING

M. T. Minder

Michael T. Minder
Geological Engineer

MTM:btm

cc

PACIFIC TRANSMISSION SUPPLY COMPANY
Natural Gas Corporation of California

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

March 14, 1980

Mr. E. W. Gynn (3)
GEOLOGICAL SURVEY-CONSERVATION DIV.
2000 Administration Bldg.
1745 West 1700 South
Salt Lake City, UT 84104

✓ Mr. Frank M. Hamner (1)
DIVISION OF OIL, GAS & MINING
1588 West North Temple
Salt Lake City, UT 84116

Mr. J. Milton Wege (1)
RALPH E. DAVIS & ASSOCIATES
500 Jefferson, Suite 2031
Houston, TX 77002

Mr. R. W. Sharp (1)
ENSERCH EXPLORATION, INC.
Metrobank Bldg., Suite 1322
Denver, CO 80202

Re: PTS #21-19 Fed., Devils Playground
Section 19, T9S, R24E
Uintah County, UT

Gentlemen:

Enclosed are your required number of copies of Form 9-330, Well Completion or Recompletion Report and Log dated March 13, 1980 for the above referenced well.

Very truly yours,


R. J. Firth
Petroleum Engineer

RJF/kh
Encls.

cc: J. L. Wroble
E. R. Henry
E. E. Mulholland
C. T. Clark (Cover Letter Only)

RECEIVED
MAR 17 1980

DIVISION OF
OIL, GAS & MINING

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

SUBMIT IN DUPLICATE

(See instructions on
reverse side)

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

3

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

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

2. NAME OF OPERATOR
Pacific Transmission Supply Company

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 567' FNL, 1690' FWL, NE 1/4 NW 1/4, Section 19, T9S, R24E
At top prod. interval reported below
At total depth

14. PERMIT NO. **43-047-30537** DATE ISSUED _____

5. LEASE DESIGNATION AND SERIAL NO.
U-31266

6. IF INDIAN, ALLOTTEE OR TRIBE NAME _____

7. UNIT AGREEMENT NAME
Devils Playground

8. FARM OR LEASE NAME
Federal

9. WELL NO.
21-19

10. FIELD AND POOL, OR WILDCAT _____

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Section 19, T9S, R24E

12. COUNTY OR PARISH
Uintah 13. STATE
Utah

15. DATE SPUDDED **1-17-80** 16. DATE T.D. REACHED **2-26-80** 17. DATE COMPL. (Ready to prod.) **2-29-80 D&A** 18. ELEVATIONS (DF, RKB, RT, CR, ETC.)* **5178' RKB** 19. ELEV. CASINGHEAD _____

20. TOTAL DEPTH, MD & TVD **6700'** 21. PLUG, BACK T.D., MD & TVD _____ 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY _____ ROTARY TOOLS **X** CABLE TOOLS _____

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
None 25. WAS DIRECTIONAL SURVEY MADE
No

26. TYPE ELECTRIC AND OTHER LOGS RUN
- DLL, CNL-FDC, BHC Sonic 27. WAS WELL CORED
No

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	167	17-1/2"	175 sacks Class G cement	
9-5/8"	36.0	3248'	12-1/4"	450 sacks Pozmix & 100 sacks Class G cement.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
None					None		

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
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
None	

33. PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)
		D & 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.	GAS-OIL RATIO (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)
**TEST WITNESSED BY
MAR 17 1980**

35. LIST OF ATTACHMENTS
Geological well report submitted on March 3, 1980.

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

SIGNED **R. J. Smith** TITLE **Petroleum Engineer** DATE **3-13-80**

RECEIVED

DIVISION OF
OIL, GAS & MINING

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

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) and 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: "Blocks Cemented": 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.)

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	TOP	BOTTOM	DEPTH
FORMATION	TOP	BOTTOM	MEAS. DEPTH
DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	TRUE VERT. DEPTH
<p style="text-align: center;">38.</p> <p style="text-align: center;">GEOLOGIC MARKERS</p>	<p style="text-align: center;">NAME</p>	<p style="text-align: center;">MEAS. DEPTH</p>	<p style="text-align: center;">TRUE VERT. DEPTH</p>
	<p>Green River</p> <p>Parachute-Creek</p> <p>H Marker</p> <p>Wasatch</p> <p>Mesaverde</p>	<p>1506'</p> <p>2885'</p> <p>4264'</p> <p>6195'</p>	

M

PACIFIC TRANSMISSION SUPPLY COMPANY
Natural Gas Corporation of California

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

March 21, 1980

Michael T. Minder
Geological Engineer
Division of Oil, Gas & Mining
1588 West North Temple
Salt Lake City, UT 84116

Re: Well No. Federal 21-19
Devils Playground Unit
Sec. 19, T.9S., R.24E.
Uintah County, UT

Dear Mr. Minder:

Enclosed is a copy of U.S. Geological Survey Form 9-331, Sundry Notices and Reports on Wells, Subsequent Report of Abandonment, detailing the plugging operations on the above referenced well. These operations were conducted in accordance with procedures approved by Mr. W. P. Martens, U. S. Geological Survey, February 28, 1980.

We regret our neglect in advising and receiving the approval of your Division concerning this matter and will adhere to your requirements in the future. We trust that this reply will assist you in concluding this matter.

Sincerely,



R. J. Firth
Petroleum Engineer

RJF/kh
Attachment

cc: D. E. Beardsley
E. E. Mulholland

RECEIVED
MAR 24 1980

DIVISION OF
OIL, GAS & MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPI
(Other instructions
verse side)

E-
14-

Form approved.
Budget Bureau No. 42 R1424.

5. LEASE DESIGNATION AND SERIAL NO.

U-32166

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Devils Playground

8. FARM OR LEASE NAME

Federal

9. WELL NO.

21-19

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Section 19, T9S, R24E

12. COUNTY OR PARISH

Uintah

13. STATE

Utah

1.

OIL WELL GAS WELL OTHER

2. NAME OF OPERATOR

Pacific Transmission Supply Company

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.* See also space 17 below.)
At surface

567' FNL, 1690' FWL, NE 1/4 NW 1/4, Section 19, T9S, R24E

14. PERMIT NO.

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

5178' KDB

16.

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

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON*

SHOOTING OR ACIDIZING

ABANDONMENT*

REPAIR WELL

CHANGE PLANS

(Other) _____

(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.)*

Drilled well to total depth @ 6700' and conducted electric logging operations. Equalized abandonment cement plugs as follows:

Plug no. 1	6200'-6000'	150 sacks cement
Plug no. 2	4300'-4100'	100 sacks cement
Plug no. 3	3350'-3200'	75 sacks cement
Plug no. 4	13-3/8"-9-5/8" annulus	20 sacks cement
Plug no. 5	at surface w/marker	10 sacks cement

Drilling mud was left between all cement plugs. A regulation dry hole was erected and the location cleaned. The location site surface restoration and rehabilitation work is presently under way and will be completed in conformance with the prescribed abandonment regulations. Reseeding operations to complete the surface restoration requirements of the surface use plan will be performed during the fall after which an inspection notification will be submitted.

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

SIGNED

R. J. Firth

TITLE Petroleum Engineer

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

RECEIVED

MAR 24 1980

DATE

DIVISION OF OIL, GAS & MINING