

UTAH OIL AND GAS CONSERVATION COMMISSION

27 47 ✓

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

This well was L.A well never drilled as of 1-10-81  
 \* Resubmitted new application as of July 20<sup>th</sup> 1981  
 \* Location Abandoned - Well never drilled - July 15, 1982

DATE FILED 6-26-81 (2<sup>nd</sup> APP)

LAND: FEE & PATENTED \_\_\_\_\_ STATE LEASE NO. \_\_\_\_\_ PUBLIC LEASE NO. U-38400 INDIAN \_\_\_\_\_

DRILLING APPROVED: 9-28-79 \*6-29-81 (2<sup>nd</sup> APP)

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

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

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

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

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

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

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

WELL ELEVATION: 4750' GL

DATE ABANDONED: LA 7-12-81 \* 7-15-82 LA (2<sup>nd</sup> APP)

FIELD: NATURAL BUTTES 3/86

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

COUNTY: UINTAH

WELL NO. DUCK CREEK #13-17GR

API NO. 43-047-30 <sup>630</sup> ~~30~~

LOCATION 1931' FT. FROM (W) (S) LINE, 628'

FT. FROM (E) (N) LINE, NE SE

1/4 - 1/4 SEC. 17

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
<u>9S</u>	<u>20E</u>	<u>17</u>	<u>BELCO DEVELOPMENT CORP,</u>				

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  
 BELCO PETROLEUM CORPORATION

3. ADDRESS OF OPERATOR  
 P. O. BOX X, VERNAL, UTAH 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
 At surface  
 628' FEL & 1931' FSL (NE SE)  
 At proposed prod. zone  
 SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 628'

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)  
 628'

16. NO. OF ACRES IN LEASE  
 280

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 280

18. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 5222'

19. PROPOSED DEPTH  
 5222' Green River

20. ROTARY OR CABLE TOOLS  
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 4750' Natural GL

22. APPROX. DATE WORK WILL START\*  
 12/79

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9-5/8"	36.0# K-55	200'	200 sx
8-3/4"	4 1/2"	11.5# K-55	5222'	1000 sx - as needed

1. SURFACE FORMATION - Uinta
2. EST LOG TOPS: Green River 1755'
3. Anticipate water throughout the Uinta. Anticipate oil & gas shows in the Green River from 1755' to TD.
4. CASING DESIGN: New casing as above. Surface will be set with a dry hole digger.
5. MIN. BOP: 8", 3000# hydraulic doublegate BOP. Test to 1000# prior to drilling surface plug & on each trip for bit.
6. MUD PROGRAM: A water based gel-chemical weighted to 10.5 ppg will be used to control the well.
7. AUX. EQUIP: 2", 3000# choke manifold & kill line, kelly cock, stabbing valve & visual mud monitoring,
8. Run DIL, CNL-FDC-GR logs. No cores or DST's are anticipated. A frac treatment of ±12,000 gals ADC & ±12,000# sand is anticipated.
9. No abnormal pressures or problems are anticipated.

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.

10. Operations will commence approx 12/79 and end approx 12/79.  
 SIGNED Meghan E. Cape TITLE ENGINEERING CLERK DATE 9/21/79

(This space for Federal or State office use)  
 PERMIT NO. \_\_\_\_\_ APPROVAL DATE 9/27/79

APPROVED BY clm B Flight TITLE Director DATE 9/27/79  
 CONDITIONS OF APPROVAL, IF ANY:

5. LEASE DESIGNATION AND SERIAL NO.  
 UTAH 0574  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 UTE (SURFACE)  
 7. UNIT AGREEMENT NAME  
 8. FARM OR LEASE NAME  
 DUCK CREEK  
 9. WELL NO.  
 13-17 GR  
 10. FIELD AND POOL OR WARD  
 DE Natural Buttes  
 GREEN RIVER  
 11. SEC., T., R., OR BLK. AND SURVEY OR AREA  
 SEC 13, T9S, R20E  
 12. COUNTY OR PARISH  
 UINTAH  
 13. STATE  
 UTAH

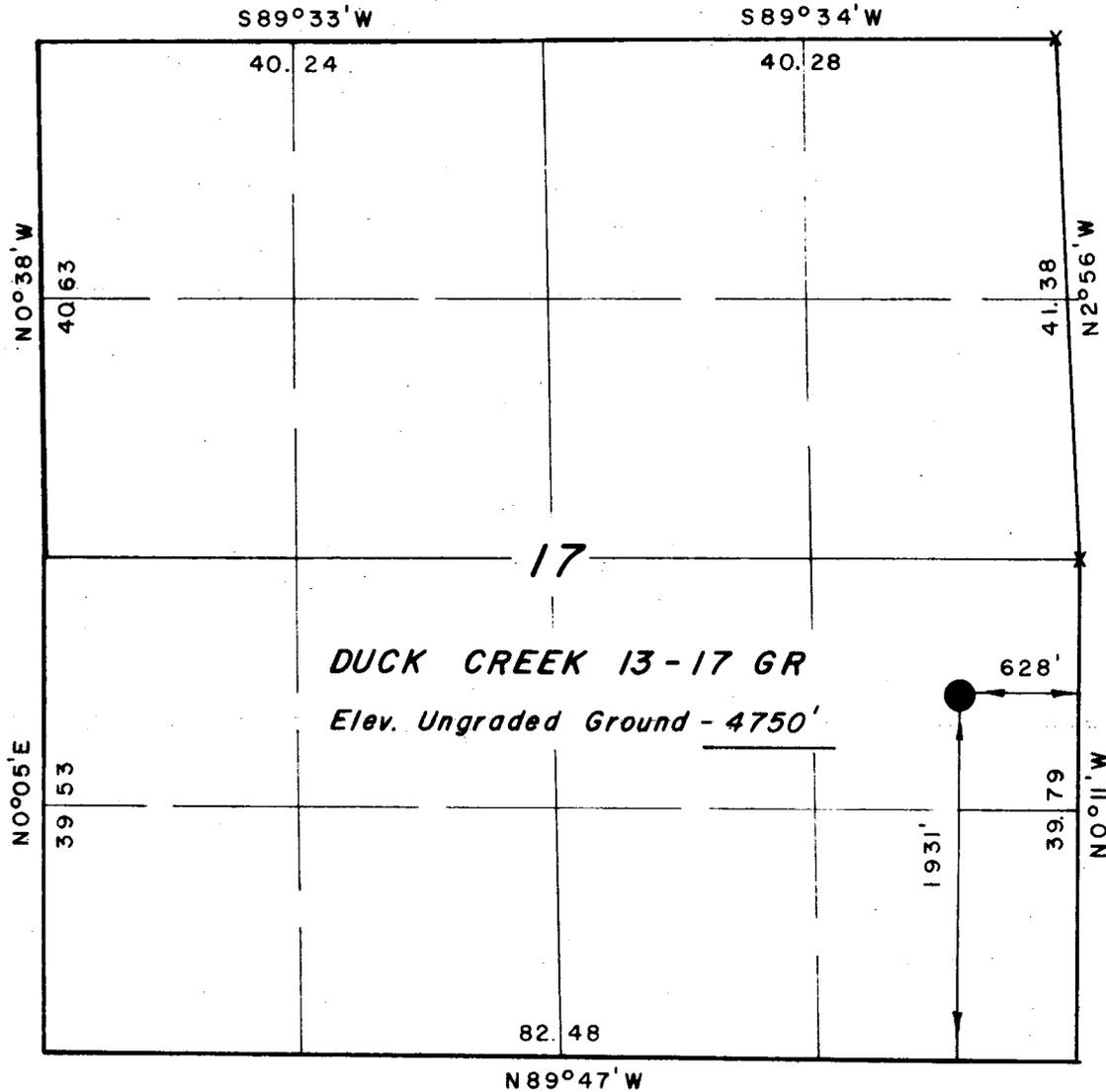
T 9 S, R 20 E, S. L. B. & M.

PROJECT  
**BELCO PETROLEUM CORP.**

Well location, *DUCK CREEK 13-17 GR*,  
 located as shown in the NE 1/4 SE 1/4  
 Section 17, T9S, R20E, S.L.B.&M.  
 Uintah County, Utah.

NOTE:

Elev. Ref. Pt. 175' N53°30'02"E - 4751.29'  
 " " " 225' " - 4752.14'  
 " " " 250' S36°29'58"E - 4751.98'  
 " " " 300' " - 4752.36'



X = Section Corners Located



CERTIFICATE

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

*Steve 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	9/7/79
PARTY	S.S. S.H. M.H. S.B.	REFERENCES	GLO Plat
WEATHER	Fair	FILE	BELCO

September 28, 1979

Belco Petroleum Corporation  
P.O. Box X  
Vernal, Utah 84078

Re: Well No. Duck Creek #13-17GR, Sec. 13, T. 9S, R. 20E., Uintah County, Utah  
Well No. Natural Duck #14-15GR, Sec. 14, T. 9S, R. 20E., Uintah County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil wells are hereby granted in accordance with Section 40-6-11, Utah Code Annotated 1953; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon these wells, you are hereby requested to immediately notify one of the following:

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

FRANK M. HAMNER  
Chief Petroleum Engineer  
Office: 533-5771  
Home: 531-7827

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

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

The API numbers assigned to these wells are #13-17GR - 43-047-30630;  
#14-15GR - 43-047-30631,

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder  
Geological Engineer

/btm

cc: USGS

UNITED STATES DEPARTMENT OF THE GEOLOGICAL SURVEY

DUPLICATE COPY

U-38400

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]
2. NAME OF OPERATOR: BELCO PETROLEUM CORPORATION
3. ADDRESS OF OPERATOR: P. O. BOX X, VERNAL, UTAH 84078
4. LOCATION OF WELL: 628' FEL & 1931' FSL (NE SE)
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: SAME

5. LEASE DESIGNATION AND SERIAL NO. UTAH 0574 0579
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE (SURFACE)
7. UNIT AGREEMENT NAME: DUCK CREEK
8. FARM OR LEASE NAME: 13-17 GR
10. FIELD AND POOL, OR WILDCAT: DC - GREEN RIVER
11. SEC., T., R., N., OR BEG. AND SURVEY OR AREA: SEC 17, T9S, R20E
12. COUNTY OR PARISH: UTAH
13. STATE: UTAH

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. hole line, if any) 628'
16. NO. OF ACRES IN LEASE 280
17. NO. OF ACRES ASSIGNED TO THIS WELL
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 5222'
19. PROPOSED DEPTH 5222'
20. ROTARY OR CABLE TOOLS: ROTARY
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4750' Natural GL
22. APPROX. DATE WORK WILL START: 12/79

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Rows include 1 1/2" hole with 9-5/8" casing and 8-3/4" hole with 4 1/2" casing.

SURFACE FORMATION - Uinta
EST LOG TOPS: Green River 1755'
Anticipate water throughout the Uinta. Anticipate oil & gas shows in the Green River from 1755' to TD.
CASING DESIGN: New casing as above. Surface will be set with a dry hole digger.
MIN. BOP: 8", 3000# hydraulic doublegate BOP. Test to 1000# prior to drilling surface plug & on each trip for bit.
MUD PROGRAM: A water based gel-chemical weighted to 10.5 ppg will be used to control the well.
AUX. EQUIP: 2", 3000# choke manifold & kill line, kelly cock, stabbing valve & visual mud monitoring, Run DIL, CNL-FDC-GR logs. No cores or DST's are anticipated. A frac treatment of +/-12,000 gals ADC & +/-12,000# sand is anticipated.
No abnormal pressures or problems are anticipated.

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.

21. Operations will commence approx 12/79 and end approx 12/79.

SIGNED: [Signature] TITLE: ENGINEERING CLERK DATE: 12/21/79
PERMIT NO. APPROVAL DATE: DEC 20 1979
APPROVED BY: [Signature] TITLE: ACTING DISTRICT ENGINEER DATE: DEC 18 1979



DIVISION OF OIL, GAS & MINING

CONDITIONS OF APPROVAL ATTACHED State of UT OPERATOR'S COPY

NOTICE OF APPROVAL

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

U-38400

LEASE NO. ~~3633~~

OPERATOR: Belco Petroleum Corp.

WELL NO. Duck Creek 13-17 GR

LOCATION: NE 1/4 SE 1/4 sec. 19, T. 9S, R. 20E, SLM  
Uintah County, Utah

1. Stratigraphy: Uinta- Surface

Green River - 1540 +3210  
Mahogany Zone 2250 +2500

2. Fresh Water: See attached WRD report.

Operator expects water through the Uinta Fm.

3. Leasable Minerals: Oil Shale Land; Withdrawal E.O. 5327

Gas may be present in the Wasatch

Pods of saline minerals are possible in the Green River Fm.

4. Additional Logs Needed: APD proposed suite should be adequate.

5. Potential Geologic Hazards: Loss of circulation is possible in leached intervals below rich oil shale zones.

6. References and Remarks: U.S.G.S. Prof. Paper. 548

U.S.G.S. files, SLC  
Within Bitter Creek Field KGS

Signature: J. Paul Mathony

Date: 10 - 3 - 79

Depths of fresh-water zones:

Gas Producing Enterprises, Inc., Natural Buttes Unit, No. 5

Bitter Creek Field

1,320' fel, 1,320' fsl, sec. 28, T. 9 S., R. 20 E., SLBM, Uintah Co., Utah

Elev. 4,900 ft, test to 10,000 ft.

Casing: 9-5/8" to 250 ft,  
7" to 6,000 ft,  
4-1/2" to 10,500 ft.

Formation tops, approx.:

Uinta Fm	surface
Green River Fm	1,700 ft
Wasatch Fm	5,100 ft
Mesaverde Gp	8,100 ft
Mancos Fm	10,400 ft

There are no recorded water wells in the near vicinity of this proposed test. A deep well about 7 miles southeast of the proposed test recovered useable water (brackish or slightly saline) from as deep as 3,500 feet, near the base of the Green River Formation. Useable water may occur as deep as 3,000 feet at this proposed test site.

CTS  
3-31-70

Oil and Gas Drilling

EA #601-79

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

Usual Environmental Analysis

Lease No.: U-38400

Operator: Belco Petroleum Corporation

Well No.: 13-17

Location: 628' FEL & 1931' FSL

Sec.: 17

T.: 9S

R.: 20E

County: Uintah

State: Utah

Field: Duck Creek

Green River Formation

Status: Surface Ownership: Indian

Minerals: Federal

Joint Field Inspection Date: October 2, 1979

Participants and Organizations:

Craig Hansen

USGS - Vernal, Utah

Dale Hanburg

BIA - Ft. Duchesne

Rick Schatz

Belco Petroleum Corporation

Bud Pease

Pease Construction

Related Environmental Analyses and References:

Analysis Prepared by: Craig Hansen  
Environmental Scientist  
Vernal, Utah

Reviewed by: George Diwachak  
Environmental Scientist  
Salt Lake City, Utah

Date: October 3, 1979

*Pod 150 x 400  
Pod 100 x 200  
2 mi x 32 wide new access  
Flow line not incl.  
Stack pit in pond  
2 4/10 cc  
Mitig. for Bq 6  
(3) A.*

Noted - G. Diwachak

Proposed Action:

On September 24, 1979, Belco Petroleum filed an Application for Permit to Drill the No. 13-17 development well, a 5222 foot oil test of the Green River Formation; located at an elevation of 4750 ft. in the NE $\frac{1}{4}$  SE $\frac{1}{4}$ , Section 17, T. 9S. R. 20E. on Federal mineral lands and Indian surface; lease No. U-38400. 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 Plan are on file in the USGS District Office in Salt Lake City, Utah and the USGS Northern Rocky Mountain Area Office in Casper, Wyoming. The 13-Point Surface Protection Plan is on file in the District Office in Salt Lake City.

A working agreement has been reached with the BIA-Ft. Duchesne 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 150 ft. wide x 400 ft. long and a reserve pit 100 ft x 200 ft. A new access road would be constructed 32 ft. wide x 2 miles long from a maintained road. 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 December 1979 and duration of drilling activities would be about 30 days.

Location and Natural Setting:

The proposed drill site is approximately 4 miles South of Ouray, Utah, the nearest town. A poor road runs to within .2 miles of the location. This well is in the Duck Creek field.

Topography:

The location is in a flat alluvial valley surrounded by weathered sandstone and shale hills with small dendritic drainage patterns running thru the location.

Geology:

The surface geology is the Uintah Formation tertiary in age.

The soil is compacted sand, clay and gravel.

No geologic hazards are known near the drillsite.

Seismic risk for the area is moderate. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

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 hydro-carbon 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.

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. 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. 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 Indian Affairs.

Approximately 2.6 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 rain fall should range from about 8 to 11" 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:

The location drains West by nonperennial drainage to the Green River which is the major drainage of the basin.

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. The pits would be unlined. 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:

Sagebrush, rabbit brush, shad scattle, tumbleweeds, halogen and cactus exist on location.

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

Proposed action would remove about 2.6 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, antelope, 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 BIA. No endangered plants or animals are known to inhabit 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 visible from a major road. After drilling operations, completion equipment would be visible to passersby of the area but would not present a major intrusion.

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, Utah.

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.

#### Waste Disposal:

The mud and reserves pits would contain all fluids used during the drilling operations. A trash cage would be utilized for any solid wastes generated at the site and would be removed 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 USGS 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.



Belco  
13-17  
North.

(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) Drilling should be allowed provided the following mitigative measures are incorporated into the proposed APD and adhered to by the operator. 

- A. A berm should be built around the East and West sides of the location to reduce erosion of well pad from small drainages crossing the location.

Adverse Environmental Effects Which Cannot Be Avoided:

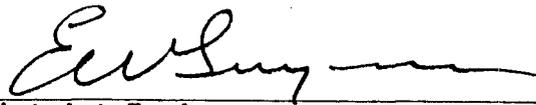
Surface disturbance and removal of vegetation from approximately 2.6 acres of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife 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, gas leaks, and spills of oil and 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 Green River. The potential for pollution to the Green River would exist through leaks and spills.

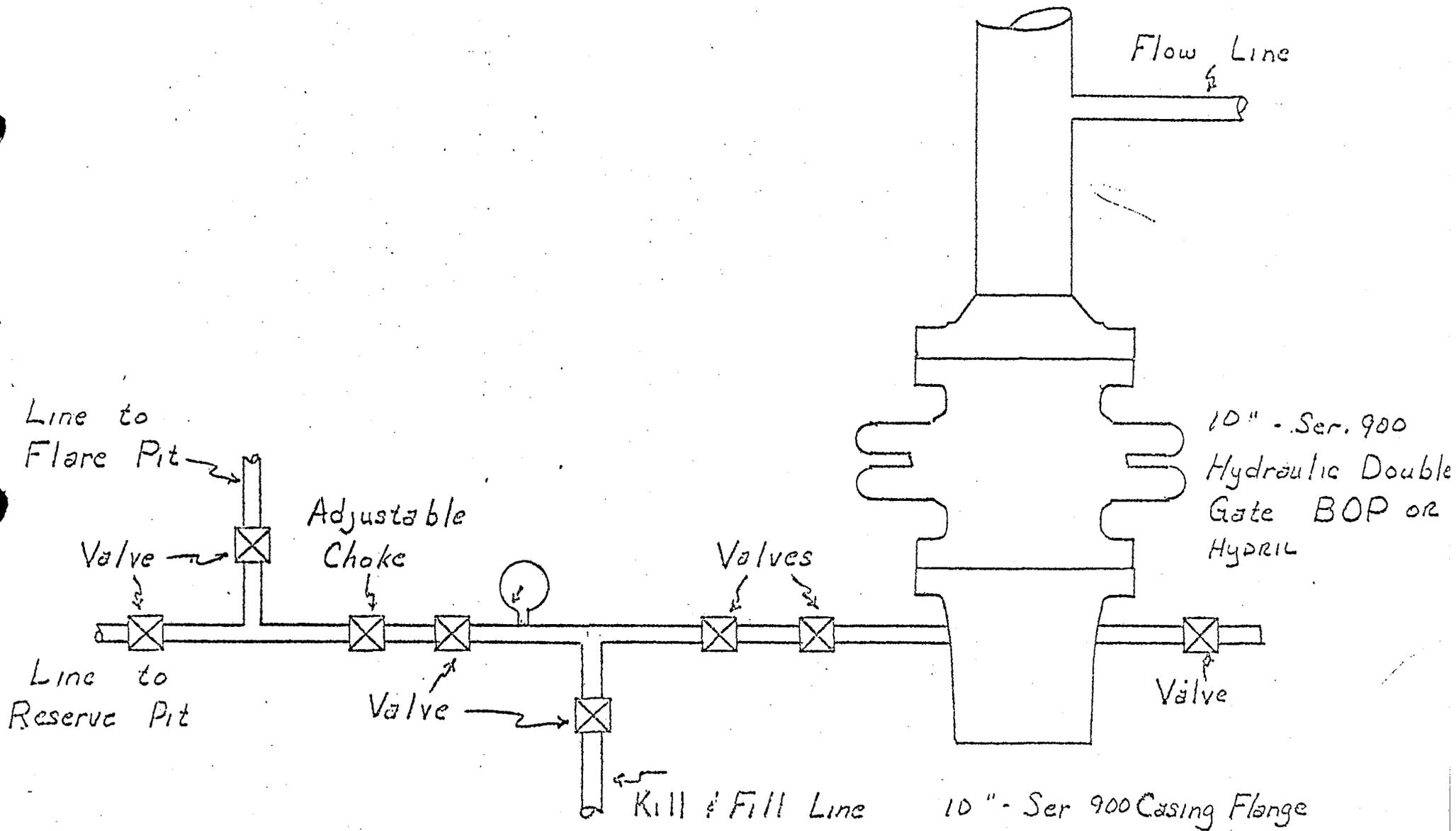
Determination:

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

Date

11/21/79

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



September 29, 1980

Belco Petroleum Corporation  
P.O. Box X  
Vernal, Utah 84078

RE: Well No. Duck Creek #12-9GR  
Sec. 9, T. 9S, R. 20E.,  
RE: Well No. Duck Creek #13-17GR,  
Sec. 13, T. 9S, R. 20E.,  
RE: Well No. Chapita Wells 1-5,  
Sec. 5, T. 9S, R. 22E.,  
Uintah County, Utah

Gentlemen:

In reference to above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

BARBARA HILL  
CLERK TYPIST

/bjh

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

January 12, 1981

Belco Petroleum Corporation  
P.O. Box X  
Vernal, Utah 84078

*L.A.*

Re: Returned Applications for Permit to Drill  
Well No. 12-9GR  
Section 9, T. 9S., R. 20E.  
Uintah County, Utah  
Lease No. U-13633

Well No. 14-15GR  
Section 15, T. 9S., R. 20E.  
Uintah County, Utah  
Lease No. U-0144858

Well No. 13-17GR  
Section 17, T. 9S., R. 20E.  
Uintah County, Utah  
Lease No. U-38400

Gentlemen:

The Applications for Permit to Drill the referenced wells were approved December 18, 1979. Since that date no known activity has transpired at the approved locations. Under current District policy (Conditions of Approval Item No. 10), Application's for Permit to Drill are effective for a period of one year. In view of the foregoing this office is rescinding the approval of the referenced applications without prejudice. If you intend to drill at these locations on a future date, a new Application for Permit to Drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for these drill sites. Any surface disturbance associated with the approved locations of these wells is to be rehabilitated. A schedule for this rehabilitation must, then, be submitted. Your cooperation in this matter is appreciated.

Sincerely yours,

bcc: DCM, CR, O&G, Denver  
BIA  
Utah State O&G  
Utah State BLM  
USGS-Vernal  
Well File  
APD Control

(Orig. Sgd.) R. A. Henricks  
*for* E. W. Gwynn  
District Oil and Gas Supervisor

RAH/TW/tm

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  
 BELCO DEVELOPMENT CORPORATION

3. ADDRESS OF OPERATOR  
 P.O. BOX X, VERNAL, UTAH 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 628' FEL & 1931' FSL (NE SE)  
 At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 APPROX. 4 MILES SW OF OURAY, UTAH

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 628'

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 19. PROPOSED DEPTH 5222'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 4750' NATURAL GL

5. LEASE DESIGNATION AND SERIAL NO.  
 UTAH - 38400  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 SURFACE \* UTE TRIBE  
 7. UNIT AGREEMENT NAME  
 8. FARM OR LEASE NAME  
 DUCK CREEK  
 9. WELL NO.  
 13-17GR  
 10. FIELD AND FOOT OR WILDERNESS  
 Natural Bitter  
 DE-GREEN RIVER  
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 SEC 17, T9S, R20E  
 12. COUNTY OR PARISH 13. STATE  
 UINTAH UTAH  
 17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40  
 20. ROTARY OR CABLE TOOLS  
 ROTARY  
 22. APPROX. DATE WORK WILL START\*  
 6/81

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	36# K-55	200'	200 sx to surf
8 3/4"	4 1/2"	17# K-55	5222'	SUFFICIENT CEMENT TO COVER 200' ABOVE THE GREEN RIVER FORM. TO PROTECT OIL SHALE.

SEE ATTACHMENTS FOR:

- (1) Location Plat
- (2) 10 Point program
- (3) BOP design
- (4) 13 point surface use plan w/additional provisions for BIA
- (5) Location layout sheet plus Topo maps A & B
- (6) Production facilities schematic

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 J. C. Ball TITLE DISTRICT ENGINEER DATE 5-11-81

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

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

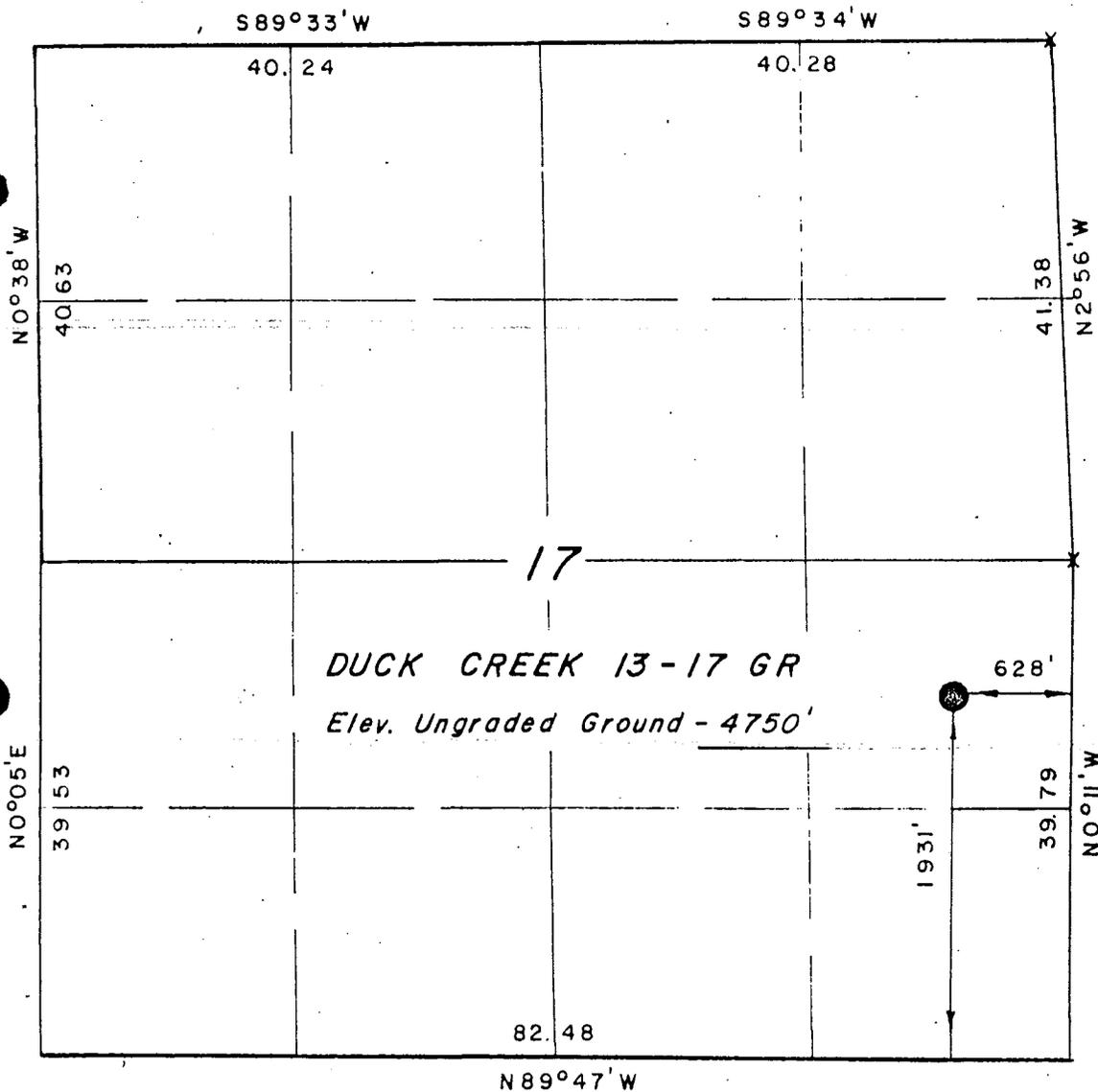
APPROVED BY THE STATE  
 OF UTAH DIVISION OF  
 OIL, GAS, AND MINING

DATE 6-26-81  
 BY: M. J. Minder

BELCO PETROLEUM CORP.

T 9 S, R 20 E, S. L. B. & M.

Well location, *DUCK CREEK 13-17 GR*,  
located as shown in the NE 1/4 SE 1/4  
Section 17, T9S, R20E, S.L.B.&M.  
Uintah County, Utah.



X = Section Corners Located

NOTE:

Elev. Ref. Pt.	175'	N53°30'02"E	- 4751.29'
"	"	" 225'	" - 4752.14'
"	"	" 250' S36°29'58"E	- 4751.98'
"	"	" 300'	" - 4752.36'



CERTIFICATE

I, the undersigned, hereby certify that the foregoing plat was prepared from field notes and original surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

*Gene 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	9/7/79
PARTY	S.S. S.H. M.H. S.B.	REFERENCES	GLO Plat
WEATHER	Fair	FILE	BELCO

\*\* FILE NOTATIONS \*\*

DATE: June 12, 1981  
OPERATOR: Bileo Development Corp.  
WELL NO: Duck Creek #13-176R  
Location: Sec. 17 T. 9S R. 20E County: Uintah

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

API Number 43-047-30997

CHECKED BY:

Petroleum Engineer: M. S. Mander 6-26-81

Director: \_\_\_\_\_

Administrative Aide: as per Rule C-3, OK on boundaries,

APPROVAL LETTER:

Bond Required:  Survey Plat Required:

Order No. ~~\_\_\_\_\_~~ O.K. Rule C-3

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

Lease Designation  Plotted on Map

Approval Letter Written

Hot Line  P.I.

June 29, 1981

Belco Development Co.  
P. O. Box "X"  
Vernal, Utah 84078

RE: Well No. Duck Creek #13-17GR  
Sec. 17, T. 9S, R. 20E,  
Uintah County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure. However, this well may be completed as an oil well ONLY in the green river formation.

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

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

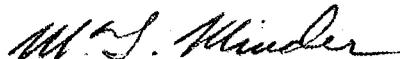
Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

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

The API number assigned to this well is 43-047-30997.

Sincerely,

DIVISION OF OIL, GAS, AND MINING



Michael T. Minder  
Petroleum Engineer

MTM/db  
CC: USGS

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL OIL WELL [X] GAS WELL [ ] OTHER [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR BELCO DEVELOPMENT CORPORATION

3. ADDRESS OF OPERATOR P.O. BOX X, VERNAL, UTAH 84078

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 628' FEL & 1931' FSL (NE SE) At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* APPROX. 4 MILES SW OF OURAY, UTAH

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 628'

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

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

19. PROPOSED DEPTH 5222'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4750' NATURAL GL

22. APPROX. DATE WORK WILL START\* 6/81

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Includes rows for 12 1/4" and 8 3/4" hole sizes.

SEE ATTACHMENTS FOR:

- (1) Location Plat
(2) 10 Point program
(3) BOP design
(4) 13 point surface use plan w/additional provisions for BIA
(5) Location layout sheet plus Topo maps A & B
(6) Production facilities schematic

Resubmittal of an application previously approved on December 18, 1979

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 DISTRICT ENGINEER DATE 5-11-81

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY [Signature] TITLE FOR E. W. GUYNN DISTRICT ENGINEER DATE JUL 16 1981

CONDITIONS OF APPROVAL, IF ANY:

NOTICE OF APPROVAL

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

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

State Oil & Gas

RECEIVED JUL 20 1981 DIVISION OF OIL, GAS & MINING

Identification CER/EA No. 601-79

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

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator Belco Petroleum  
Project Type Oil Well Development  
Project Location 628' FEL 1931' FSL Section 17, T. 9S, R. 20E  
Well No. 13-17 Lease No. U-38400  
Date Project Submitted October 2, 1981

FIELD INSPECTION Date Waived - Resubmittal

Field Inspection  
Participants

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

Related Environmental Documents: \_\_\_\_\_

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects and, therefore, does not represent an exception to the categorical exclusions.

7-2-81  
Date Prepared

[Signature]  
Environmental Scientist

I concur  
JUL 14 1981  
Date

[Signature] FOR  
District Supervisor  
E. W. GYNN  
DISTRICT ENGINEER

Typing In 7-2-81 Typing Out 7-2-81

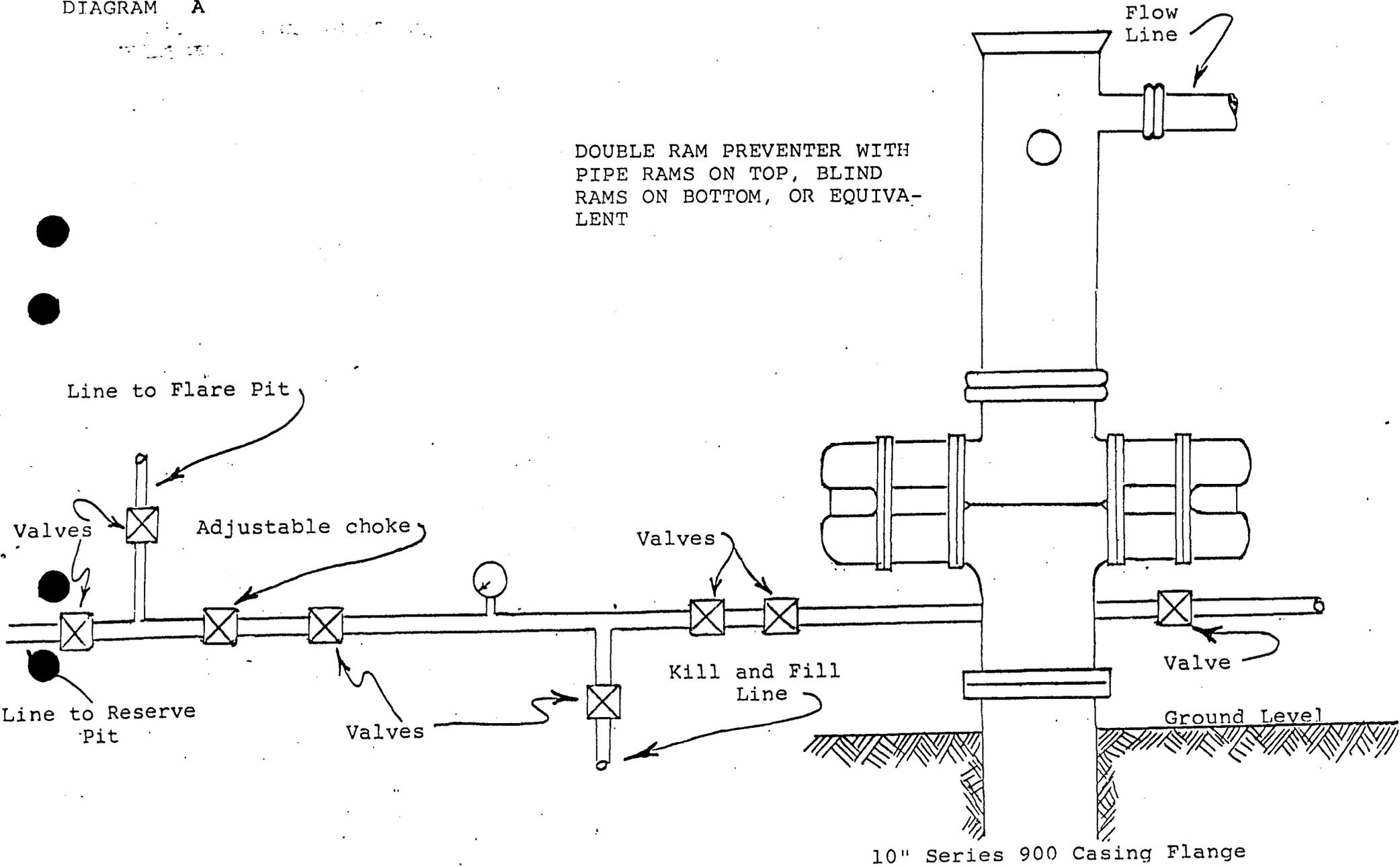


CATEGORICAL EXCLUSION REVIEW COMMON REFERENCE LEGEND

1. Surface Management Agency Input
2. Reviews Reports, or information received from Geological Survey  
(Conservation Division, Geological Division, Water Resource Division,  
Topographic Division)
3. Lease Stipulations/Terms
4. Application Permit to Drill
5. Operator Correspondence
6. Field Observation
7. Private Rehabilitation Agreement

DIAGRAM A

DOUBLE RAM PREVENTER WITH  
PIPE RAMS ON TOP, BLIND  
RAMS ON BOTTOM, OR EQUIVA-  
LENT



10 POINT PROGRAM

1. GEOLOGIC SURFACE FORMATION:

Uinta formation of the Upper Eocene Age

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta	SURFACE
Green River	1878'

3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Uinta	Sand and shale, possible water
Green River	Sand and shale, anticipate oil

4. PROPOSED CASING PROGRAM:

- a) Surf Csg: 9 5/8" 36# K-55 to 200', cement to surface
- b) Prod Csg: 5 1/2" 17# K-55 to TD, will use enough cement to cover 200' over top of Green River formation

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operators minimum specifications for pressure control equipment are as follows: 10", 3000 PSI hydraulic doublegate BOP or the equivalent. Pressure tests of BOP to 1000# will be made prior to drilling surface plug and on each trip for bit.

6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

It is proposed that the hole will be drilled to approx. 4000' with 3% KCL water in order to clean the hole. From 4000' to TD it is planned to drill the well with mud. The mud system will be a water based, gel-chemical mud, weighted up to 10.5 ppg as required for gas control.

7. AUXILIARY EQUIPMENT TO BE USED:

Auxiliary equipment to be used will be a 2", 2000 PSI choke manifold and kill line, stabbing valve, kelly cock and visual mud monitoring.

8. TESTING, LOGGING AND CORING PROGRAMS:

No coring or drill stem testing has been scheduled for this well. The logging will consist of DLL, CNL, FDC and Gamma Ray w/caliper.

9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

It is not anticipated that abnormal pressures or temperatures will be encountered, nor that any other abnormal hazards such as H<sub>2</sub>S gas will be encountered.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Anticipated starting date is 6/15/81. Drilling operations should be complete 2 1/2 weeks after they commence.

13 Point Surface Use Plan

DUCK CREEK FIELD

DC 43-17GR  
DC 44-17GR  
DC 45-17GR  
DC 46-17GR  
DC 47-17GR  
DC 48-17GR  
DC 49-17GR  
DC 50-~~0~~7GR  
DC 51-8 GR  
DC 56-8,GR  
DC 57-8 GR  
DC 58-8GR  
DC 59-8GR  
(DC 13-17GR

NATURAL DUCK FIELD

ND 15-21GR  
ND 16-20GR  
ND 17-20GR  
ND 18-20GR  
ND 19-20GR  
ND 20-20GR  
ND 21-20GR  
ND 22-20GR  
ND 23-20GR

1. EXISTING ROADS

- A. For the location of the proposed well sites and existing roads, see the Topo maps marked "B", attached to the APD's. All the proposed wells are located in Sections 8, 17, 20 and 21, T9S, R20E, Uintah County, Utah. All wells are within 5 to 6 miles of Ouray, Utah.
- B. The county road running south from Ouray, Utah takes you directly into Sections 8, 17, 20 and 21 where these proposed wells are located. All access roads branch out from this county road.
- C. The proposed access roads are outlined in detail on the Topo Maps marked "B" attached to each individual APD.
- D. See Topo Maps "B".
- E. Not applicable.
- F. Access to the proposed well sites will be over the existing county road except for the proposed access roads. The proposed access roads will be crowned and ditched so as to accomodate rig traffic.

2. PLANNED ACCESS ROADS

See the Maps attached to each APD.

The planned access roads will comply with the general specifications as outlined.

- A. Proposed access roads will be 32 foot crown roads, usable 16 feet on either side of the centerline, with drain ditches along either side of the proposed roads, where it is determined necessary in order to handle any run off from the normal weather conditions prevalent to this area.
- B. Maximum grades of the proposed access roads will be 3% and will not exceed that amount.
- C. No turnouts are planned for the length of the proposed access roads, so additional cut disturbances will be kept to a minimum. Line of site vision is such that turnouts are unnecessary.
- D. Drainage design of the proposed roads will avoid unnecessary disturbance of the natural run off patterns. Drainage will be implemented so as not to cause siltation or accumulate any debris.
- E. Surfacing material shall be the native borrow material from the cut areas and will be used to stabilize the road surfaces and the locations. No other material for construction is anticipated.
- F. No fences will be crossed in order to access the proposed locations; No cattle guards will be needed.

G. The roads have been centerline staked for the full distance of the proposed routes.

3. LOCATION OF EXISTING WELLS

A. Water wells-None

B. Abandoned wells-None

C. Temporarily abandoned wells-None

D. Disposal wells-None

E. Drilling wells-DC 4-17, Gas well.

F. Producing wells- Section 8, DC 41-8GR, Section 17, DC 24-17GR, Section 20, Cige 32-22-9-20, Sun 2 S.O., NBU 21-20B, Section 21, CIGE 28, (NBU 34-Y) ND 10-21GR, ND 11-21GR, ND 4-21GR, NBU 19-21B. River Junction Unit, Phillips RJ 1 & RJ 2.

G. Shut in wells-none

H. Injection wells-None

I. Monitoring wells-None

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

A. Existing production facilities located within one mile of the proposed well are:

1. Tank batteries-Section 16, DC 7-16GR, DC 3-16GR, DC 14-16GR, DC 5-16GR, DC 11-16GR, DC 6-16GR, DC 16-16GR. Section 21, ND 4-21, CIGE 28-21-9-20.

2. Production Facilities: Section 8, DC 41-8GR, Section 17, DC 24-17GR, Section 20, Sun 2 S.O., CIGE 32, NBU 21-20B, Section 21, ND 11-21GR, ND 10-21GR, ND 4-21GR, NBU 19-21B, CIGE 28 (NBU 34-Y) Section 16, DC 8-16GR, DC 7-16GR, DC 17-16GR, DC 3-16GR, DC 16-16GR, DC 14-16GR, DC 15-16GR, DC 5-16GR, DC 11-16GR, DC 6-16GR, DC 18-16, DC 10-16GR.

3. Oil Gathering Lines: Buried oil line from DC 15-16GR to DC 5-16GR, DC 8-16GR to DC 7-16GR, and DC 17-16GR to DC 7-16GR.

4. Gas gathering lines- Northwest Pipeline's gas gathering lines.

5. There are no injection lines in this area.

6. There are no disposal lines in the area.

See attached Duck Creek-Natural Duck Fields map for location of the above.

B. Attached to each individual APD is a diagram marked "B" showing the production facilities to be utilized in the event of production of oil. All production facilities, tank batteries, separators, de-hys, etc., will be kept on the location pad.

Construction materials will be native borrow or cut exposed on the site and will be consistent with accepted oilfield standards and good engineering practices.

A three strand barbed wire fence will be constructed and maintained around any disposal pits during the drilling and completion phase of the well. When these pits are no longer needed or within 90 days, they will be covered over with native borrow material and rehabilitated to conform with the provisions of the rehabilitation agreement of BIA standards.

Guard rails will be constructed around the wellhead to prevent access to livestock or wildlife.

Rehabilitation of the pits is discussed above. The remaining pad not used for producing operations will be recontoured to conform with the natural grade and covered with topsoil saved on the site. This area will be reseeded as per BIA specifications.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Water to be used to drill these wells will be hauled by truck from the White River. Access point for the water will be near the White River Bridge, Section 4, T9S, R20E, Uintah County, Utah. Permit for this water will be purchased from the Bureau of Indian Affairs, prior to the drilling operations.
- B. Water will be hauled by truck (Liquid Transport of Duchesne, Utah, PSC #1969) on the above described access routes. See access routes on Topo Maps "B", attached to each APD. No new roads or pipelines will be needed for this purpose.
- C. No water wells will be drilled.

6. SOURCE OF CONSTRUCTION MATERIALS

- A. All construction materials for these locations and their access roads will be native borrow rock and soil, accumulated during the construction. No additional road gravel or pit lining materials are anticipated at this time, but if they are required, appropriate action will be taken to acquire them from private sources after notification is given to the proper regulatory agencies.
- B. Items described in part "A" are from BIA regulated lands.
- C. See part "A".
- D. No other access roads are required, other than described in Item 2.

7. METHODS OF HANDLING WASTE DISPOSAL

- A. Drill cuttings, drilling fluids, salts, chemicals, and produced fluids will be disposed of in the reserve pits on the location pads.

- B. See "A" above for disposal of drilling fluids.
- C. See "A" above for disposal of produced water.
- D. A portable chemical toilet will be provided for human waste during the drilling phase.
- E. Garbage and other waste materials will be contained in a wire mesh cage and then disposed of in an approved waste disposal facility.
- F. Immediately after the drilling rig moves off the location, the remaining trash and garbage will be collected and hauled away by truck. The reserve pit will be fenced on the open side to protect domestic animals and wildlife. This pit will be utilized during the completion and testing phase of the well for storage of produced fluids.

8. ANCILLARY FACILITIES

No airstrips or camps are planned for these wells.

9. WELL SITE LAYOUT

See the Location Layout sheets attached to the individual APD's which show the following items:

- A. Cross section of the pad, showing details of the cuts and fills.
- B. Location of the reserve pits, pipe racks, living facilities and topsoil stockpile.
- C. Rig orientation, parking areas and access road.
- D. Pits will be lined to conserve water and will be fenced on the fourth side at the completion of operations. Proper NTL-2B notices will be filed if the wells produce water.

10. PLANS FOR RESTORATION OF SURFACE

In the event of a dry hole, pits will be allowed to dry and will then be backfilled and waste pits will be backfilled. The location will be restored to as near the original contour as feasible and then reseeded.

- 1. Upon completion of the testing phase of the well, the areas not needed for access to the well and used for producing operations will be filled and recontoured to blend with the surrounding topography and the stockpiled soil redistributed over the unused disturbed area. After final plugging and abandonment of the well, the entire disturbed area will be contoured and topsoil spread over any previously disturbed area.

2. The revegetation of the drill site area and access not needed to carry on production operations will be reseeded with a seed mixture recommended by the BIA. It will be performed at a time of the year when the moisture content of the soil is adequate for germination. The Lessee agrees that all of the clean up and restoration activities shall be done in a diligent and timely manner and in conformity with the above mentioned Items 7 and 10 (1).
3. All pits will be fenced prior to disposal of any waste material and the open side of the reserve pit will be fenced before removing the rig from location. The fences will be maintained in good condition until Item (1) is started.
4. Any oil or condensate on any temporary pit will be removed in a timely manner. Overhead flagging or netting will be installed on any sump pit used to handle well fluids during the producing life of the well.
5. Restoration activities will begin within 90 days after the completion of the well. Once completion activities have begun, they will be completed within 30 days. All wellhead and surface equipment will be painted to blend with the environment, according to BIA specifications.

11. OTHER INFORMATION

Topography of the general area is relatively flat, rolling terrain, consisting of clay and stabilized sand dunes.

Vegetation in the area consists of four-wing saltbrush, tumbleweed, cotton-horn horsebrush, spiny hop sage, curly grass, matchweed, greasewood and a sparse population of Indian ricegrass.

Livestock grazing, mineral exploration and production are the only surface use activities in the area. All lands involved with these locations are controlled by the BIA.

There is no water in the immediate vicinity of these locations, the Green River runs 1 to 3 miles to the north of these locations and also 3 to 4 miles to the west. No occupied dwellings or known archeological or cultural sites are in this area.

12. Belco Development Corporation's representative for these operations will be Mr. J. C. Ball, District Engineer, P. O. Box X, Vernal, Utah, 84078, telephone #1-801-789-0790.

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill sites and access routes; that I am familiar with the conditions which presently exist, that the statements made in this Plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Belco Development Corporation, it's contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

DATE 5/11/81

J. C. Ball  
J. C. BALL  
District Engineer

BUREAU OF INDIAN AFFAIRS  
ADDITIONAL PROVISIONS TO THE SURFACE USE AND OPERATING PLAN

WELL NAME: DUCK CREEK 13-17GR

LOCATION: NE/SE SEC 17, T9S, R20E.  
Uintah County, Utah

1. FIREARMS:

Employees of Belco Development Corporation, it's contractors and subcontractors have been instructed not to carry firearms on the Uintah and Ouray Indian Reservation.

2. OFFROAD TRAFFIC:

Employees of Belco Development Corporation, it's contractors, and subcontractors have been instructed to remain only on established roads and well sites.

3. FIREWOOD:

Employees of Belco Development Corporation, its contractors and subcontractors have been notified of the requirements of the Bureau of Indian Affairs to obtain a wood permit from the Forestry Section before gathering any wood on the Uintah and Ouray Indian Reservation.

4. RESTORATION:

All topsoil will be stripped and stockpiled. When all drilling and production activities end or if abandonment is required, the location site and access road will be reshaped to the original contour and stockpiled soil spread over the disturbed area. Any drainages rerouted during the construction activities shall be restored as near as possible to their original line of flow. Restoration activities shall begin when the pit is sufficiently dry. Once activities have been completed, the location site and access road shall be reseeded with a seed mixture recommended by the Bureau of Indian Affairs when the moisture content of the soil is adequate for seed germination.

5. DISPOSAL OF PRODUCED WATERS:

No produced water is anticipated. However if water is produced, Belco Development Corporation will comply with all requirements of NTL-2B.

6. SIGNS:

A sign stating the following shall be placed on the access road to the location site:

AUTHORIZED PERSONNEL ONLY  
BELCO DEVELOPMENT CORPORATION  
WELL IDENTIFICATION  
FIREARMS ARE PROHIBITED  
THIS LAND IS OWNED BY THE UINTAH  
AND OURAY INDIAN RESERVATION  
PERMITS TO CUT FIREWOOD MUST BE OBTAINED  
FROM THE BIA FORESTRY SECTION PRIOR TO  
CUTTING OR GATHERING ANY WOOD ALONG THIS ROAD

7. RIGHTS OF WAYS:

Right-of-way and damages will be paid as per the resurvey by Uintah Engineering and their affidavit of completion.

8. PERMITS FOR WATER OR EARTH FILL:

Water for this operation will be obtained from the White River, near the White River Bridge in Section 4, T9S, R20E. Permit for water will be purchased before the drilling operations commence.

9. WEED CONTROL:

Belco Development Corporation will initiate a plan for controlling noxious weeds alongside the location and road in accordance with BIA specifications.

10. LITTER:

All litter will be contained in a trash cage and removed from the location at the end of drilling and completion activities. The area will be groomed and cleaned before removal of the cage.

11. BENCH MARKS:

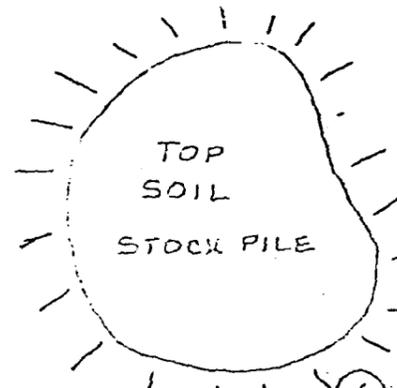
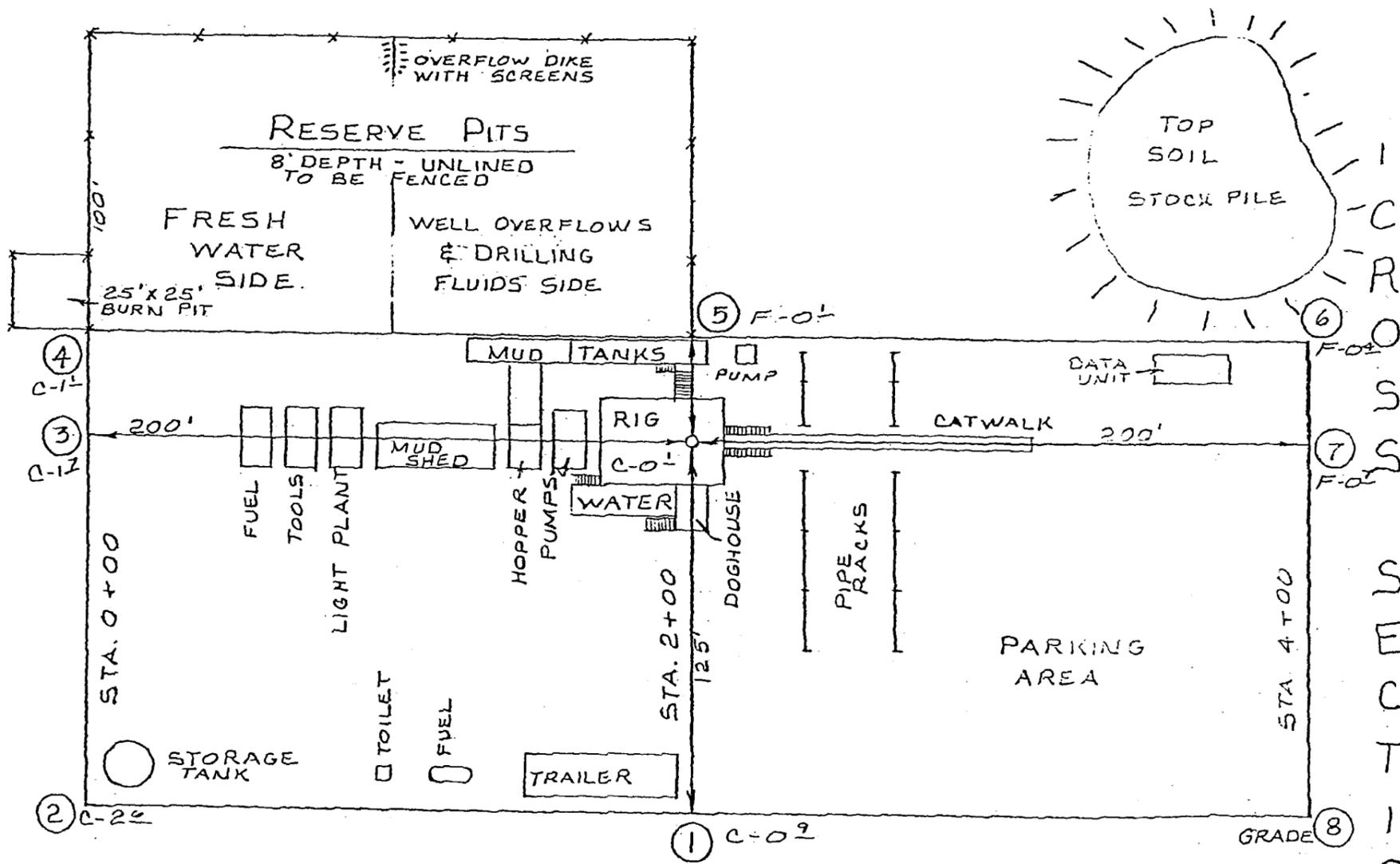
A bench mark will be established near the well site, set in concrete with a brass cap showing the well number and the elevation of the site.

DATE: \_\_\_\_\_

5/11/81



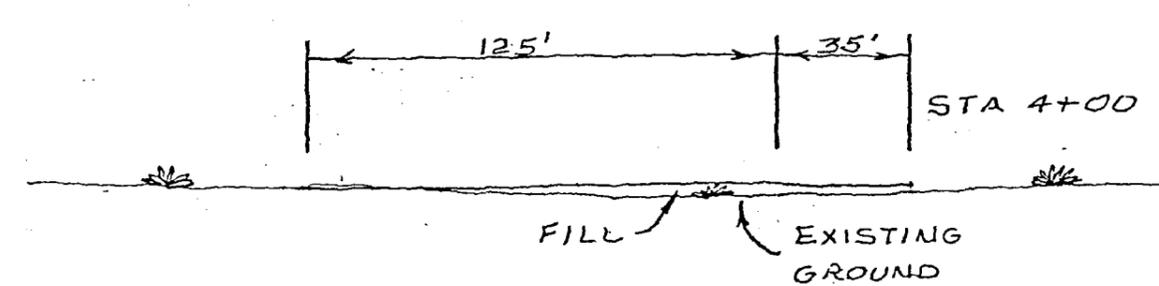
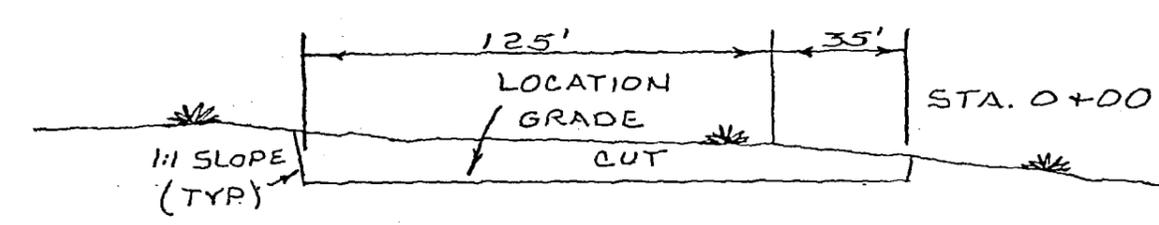
J. C. Ball  
District Engineer



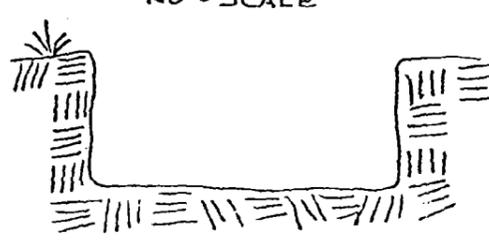
BELCO PETROLEUM CORP.

DUCK CREEK 13-17 GR  
LOCATION LAYOUT & CUT SHEET

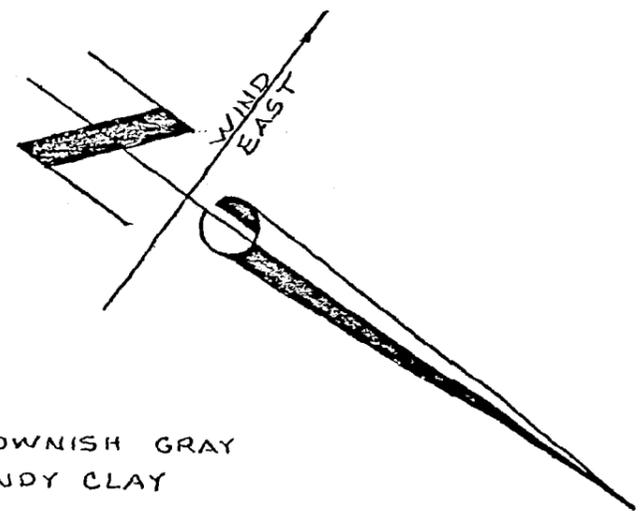
CROSS SECTIONS



SOILS LITHOLOGY  
NO - SCALE



BROWNISH GRAY  
SANDY CLAY



1" = 10'  
SCALES  
1" = 50'

APPROX. YARDAGES  
CUT - 1,612 CU. YDS.  
FILL - 250 CU. YDS.

BELCO PETROLEUM CO. P.  
PROPOSED LOCATION  
DUCK CREEK 13-17GR



SCALE - 1" = 5000'

ROAD CLASSIFICATION  
Light-duty ——— Unimproved dirt - - - - -

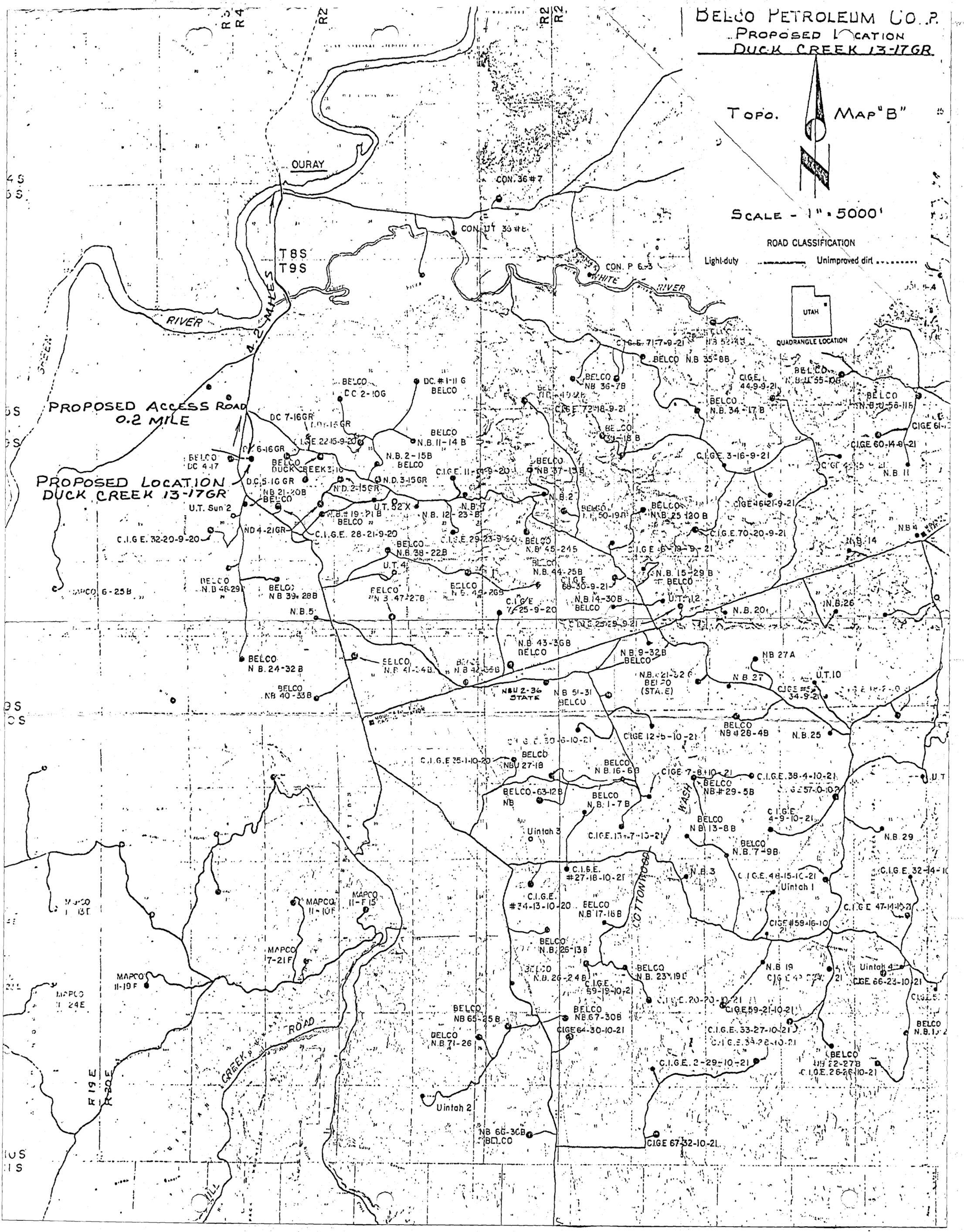
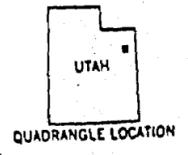
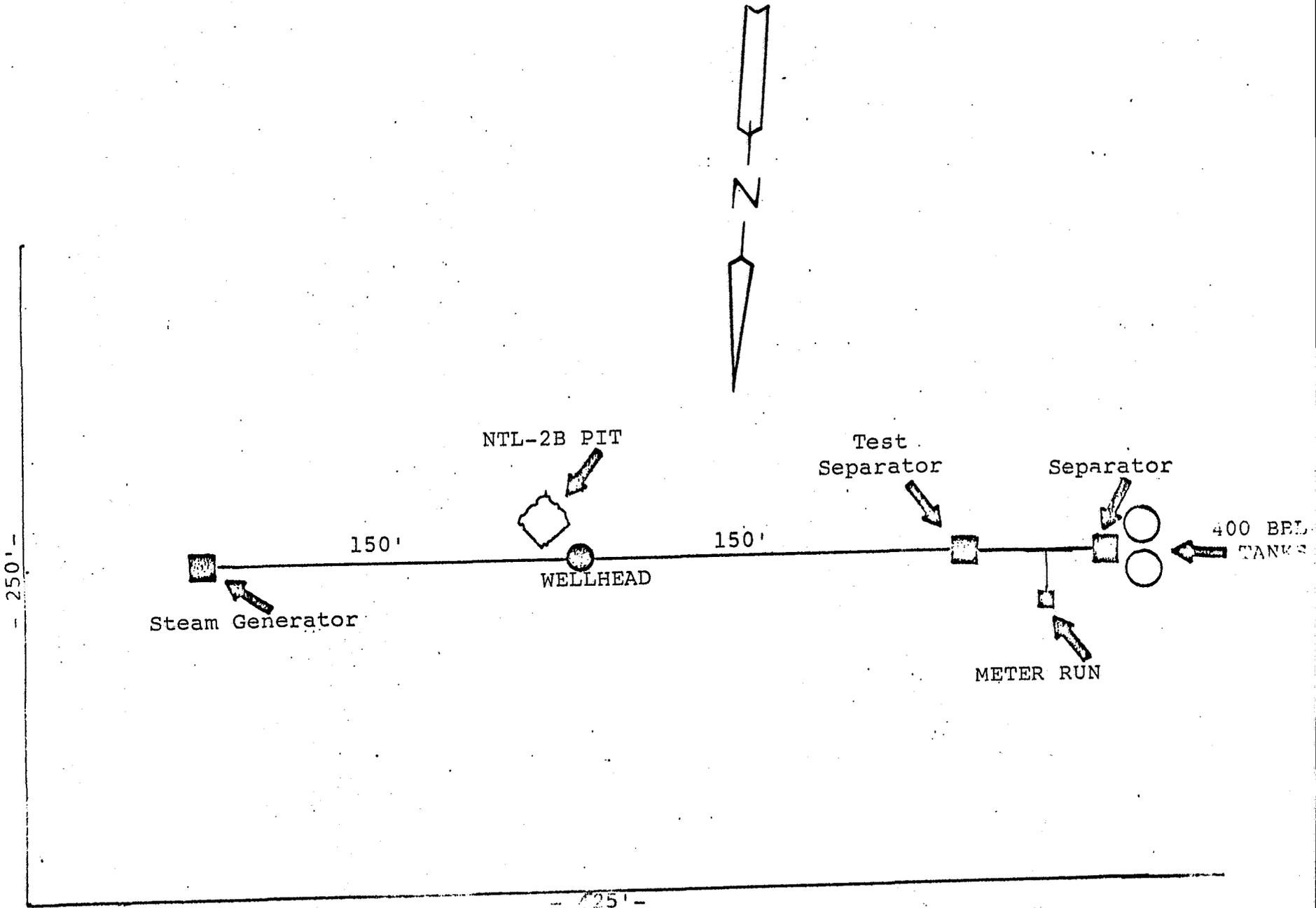


Diagram "B"  
SEPARATION FACILITIES SCHEMATIC





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

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

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

March 3, 1982

Belco Development Corporation  
P. O. Box X  
Vernal, Utah 84078

Re: See attached

Gentlemen:

In reference to the above mentioned wells, considerable time has gone by since approval was obtained from this office.

This office has not received any notification of spudding. If you do not intend to drill these wells, please notify this Division. If spudding or any other activity has taken place, please send necessary forms. If you plan to drill this location at a later date, please notify as such.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

Cari Furse  
Clerk Typist

Well No. Duck Creek 56-8GR  
Sec. 8, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #57-8GR  
Sec. 8, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #58-8GR  
Sec. 8, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #59-8GR  
Sec. 8, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #54-9  
Sec. 9, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #55-9  
Sec. 9, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #52-16GR  
Sec. 16, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #13-17GR  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #43-17GR  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #44-17GR  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #45-17GR  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #46-17GR  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #47-17GR  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #48-17GR  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #49-17GR  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #16-20GR  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #17-20GR  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #18-20Gr  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #19-20GR  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #20-20GR  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #21-20GR  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #22-20GR  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #23-20GR  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #15-21GR  
Sec. 21, T. 9S, R. 20E.  
Uintah County, Utah

**Belco Development Corporation**

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**Belco**

March 8, 1982

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

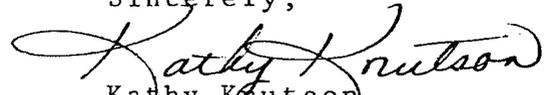
Attn: Cari Furse

RE: See attached list

Dear Ms Furse,

All wells as listed on the attached sheet are being considered by Belco Development Corporation for drilling sometime this year. No activity has taken place on any location as of this date. Belco will notify you when the location is spudded. The Duck Creek 52-16GR well is still waiting on USGS approval.

Sincerely,

  
Kathy Knutson  
Engineering Clerk

/kk

cc: File

**RECEIVED**  
MAR 11 1982

DIVISION OF  
OIL, GAS & MINING

Well No. Duck Creek 56-8GR ✓  
Sec. 8, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #57-8GR  
Sec. 8, T. 9S, R. 20E. ✓  
Uintah County, Utah

Well No. Duck Creek #58-8GR ✓  
Sec. 8, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #59-8GR  
Sec. 8, T. 9S, R. 20E. ✓  
Uintah County, Utah

Well No. Duck Creek #54-9 ✓  
Sec. 9, T. 9S, R. 20E.  
Uintah County, Utah

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Sec. 9, T. 9S, R. 20E. ✓  
Uintah County, Utah

Well No. Duck Creek #52-16GR  
Sec. 16, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #13-17GR  
Sec. 17, T. 9S, R. 20E. ✓  
Uintah County, Utah

Well No. Duck Creek #43-17GR ✓  
Sec. 17, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Duck Creek #44-17GR  
Sec. 17, T. 9S, R. 20E. ✓  
Uintah County, Utah

Well No. Duck Creek #45-17GR ✓  
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Uintah County, Utah

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Uintah County, Utah

Well No. Natural Duck #17-20GR  
Sec. 20, T. 9S, R. 20E. ✓  
Uintah County, Utah

Well No. Natural Duck #18-20Gr  
Sec. 20, T. 9S, R. 20E. ✓  
Uintah County, Utah

Well No. Natural Duck #19-20GR ✓  
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Well No. Natural Duck #20-20GR  
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Uintah County, Utah

Well No. Natural Duck #21-20GR ✓  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #22-20GR  
Sec. 20, T. 9S, R. 20E. ✓  
Uintah County, Utah

Well No. Natural Duck #23-20GR ✓  
Sec. 20, T. 9S, R. 20E.  
Uintah County, Utah

Well No. Natural Duck #15-21GR  
Sec. 21, T. 9S, R. 20E.  
Uintah County, Utah ✓

9

Oil and Gas Operations  
2000 Administration Building  
1745 West 1700 South  
Salt Lake City, Utah 84104

July 15, 1982

Belco Development Corporation  
P.O. Box X  
Vernal, Utah 84078

Re: Rescind Applications for Permit  
to Drill  
Well Nos. 13-17, 43-17, 44-17 and  
22-20  
Sections 17 & 20-T9S-R20E  
Uintah County, Utah  
Lease Nos. U-38400 & U-0144869,  
respectively

Gentlemen:

The Applications for Permit to Drill the referenced wells were approved on July 13 and July 16, 1981. Since that date no known activity has transpired at the approved locations. Under current District policy, applications for permit to drill are effective for a period of one year. In view of the foregoing this office is rescinding the approval of the referenced applications without prejudice. If you intend to drill at these locations at a future date, new applications for permit to drill must be submitted.

This office requires a letter confirming that no surface disturbance has been made for these drill sites. Any surface disturbance associated with the approved locations of the wells will be rehabilitated. A schedule for this rehabilitation must then be submitted to this office. Your cooperation in this matter is appreciated.

Sincerely,

E. W. Guynn  
District Oil & Gas Supervisor

bcc: SMA  
State O&G ✓  
State BLM  
MMS-Vernal  
Well File  
APD Control

DH/dh

RECEIVED

JUL 16 1982

DIVISION OF  
OIL, GAS & MINING