

UTAH DIVISION OF OIL, GAS AND MINING



REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE X WATER SANDS _____ LOCATION INSPECTED _____ SUB. REPORT/ABD. _____

DATE FILED 12-17-79

LAND: FEE & PATENTED STATE LEASE NO. PUBLIC LEASE NO. UTAH ~~16909~~ ³⁸³⁹⁹ INDIAN

DRILLING APPROVED: 12-20-79 OW

SPUDED IN:

COMPLETED: PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION: 4966' GL

DATE ABANDONED: Location abandoned WELL NEVER DRILLED 5-5-81

FIELD: Undesignated 386 Natural Buttes

UNIT:

COUNTY: Uintah

WELL NO. Duck Creek 19-16GR

API NO: 43-047-30656

LOCATION 672' FT. FROM (N) ~~XX~~ LINE. 1933' FT. FROM (E) ~~XX~~ LINE. NW NE 1/4-1/4 SEC. 16

α

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
9S	20E	16	BELCO PETROLEUM CORP.				

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
 672' FNL & 1933' FEL (NW NE)
 At proposed prod. zone
 SAME

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

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 672'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 5348'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 4766' NAT GL

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13"	9-5/8"	36.0# K-55	200'	200 sx
7-7/8"	5 1/2"	15.5# K-55	5348'	1000 sx

1. SURFACE FORMATION: Uinta
2. EST LOG TOPS: Green River @ 1827'.
3. Expect wtr throughout the Uinta, oil in the Green River @ 1827' to TD.
4. CASING DESIGN: New casing as described above, surface casing will be set with a dry hole digger.
5. MIN BOP: 10" 3000 psi hydraulic doublegate BOP. Will test to 1000 psi prior to drilling surface plug and on each trip for bit.
6. MUD PROGRAM: A water based gel chemical mud weighted to 10.5 ppg will be used to control the well.
7. AUX. EQUIP: 2" 3000 psi choke manifold and kill line, kelly cock, stabbing valve and visual mud monitoring.
8. No cores or DST's are anticipated. Will run DIL, CNL-FDC-GR w/Caliper logs. A fracture treatment of ±15,000 gals ADC & ±15,000# sand is planned.
9. No abnormal problems or pressures are anticipated.
10. Operations will commence approx 3/80 and end approx 3/80.

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 Alexander E. Coze TITLE ENGINEERING CLERK DATE 12/11/79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

5. LEASE DESIGNATION AND SERIAL NO.
 UTAH 16909
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 UTE (SURFACE)
 7. UNIT AGREEMENT NAME
 8. FARM OR LEASE NAME
 DUCK CREEK
 9. WELL NO.
 19-16 GR
 10. FIELD AND POOL, OR WILDCAT
 DC - GREEN RIVER
 11. SEC., T., R., M., OR BLS. AND SURVEY OR AREA
 SEC 16, T9S, R20E
 12. COUNTY OR PARISH 13. STATE
 UINTAH UTAH

16. NO. OF ACRES IN LEASE 260
 17. NO. OF ACRES ASSIGNED TO THIS WELL

20. ROTARY OR CABLE TOOLS
 ROTARY

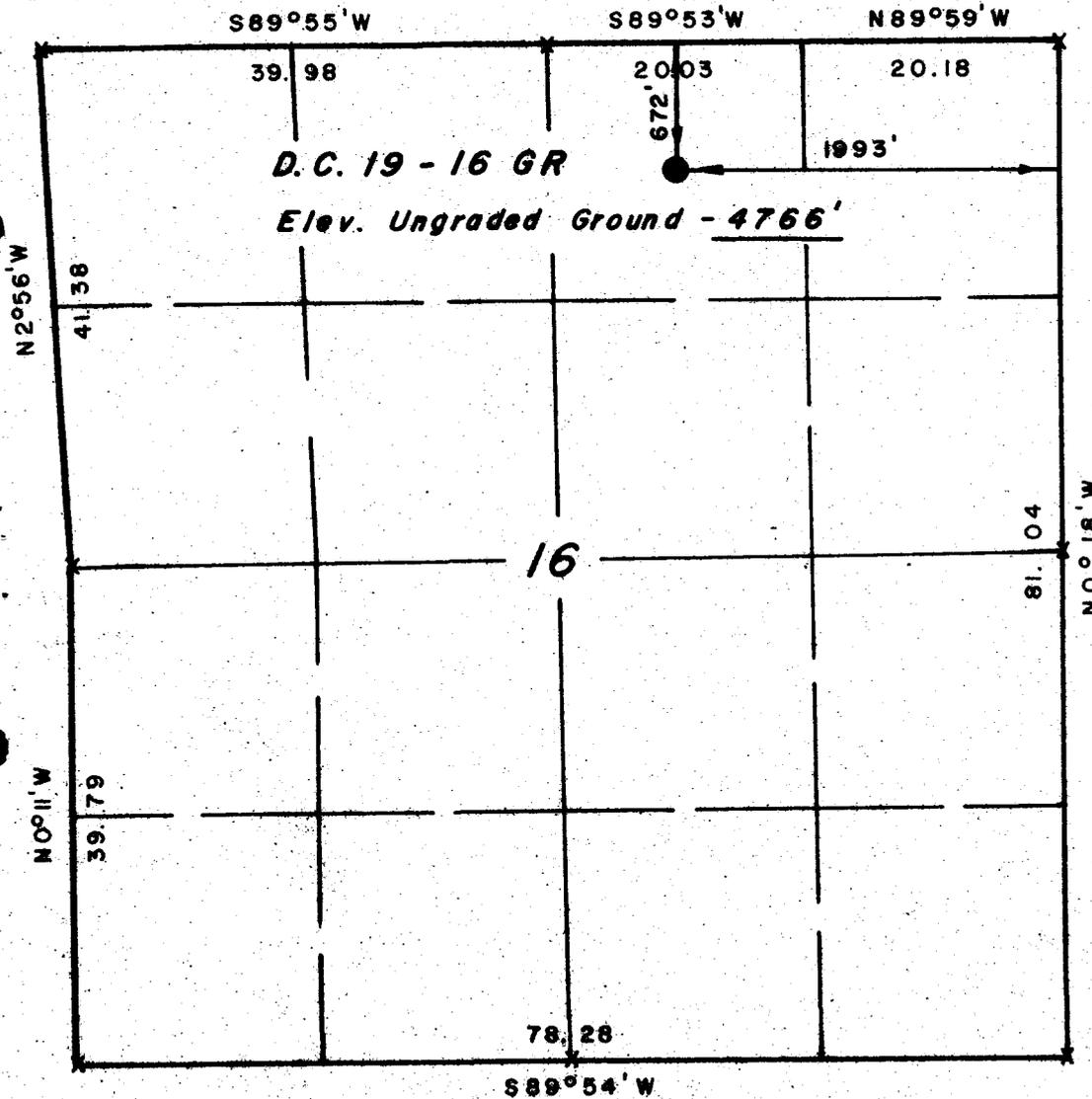
22. APPROX. DATE WORK WILL START*
 3/80

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

PROJECT

BELCO PETROLEUM CORP.

Well location, D.C. 19 - 16 GR,
located as shown in the NW1/4NE1/4
Section 16, T9S, R20E, S.L.B. & M.
Uintah County, Utah.



CERTIFICATE

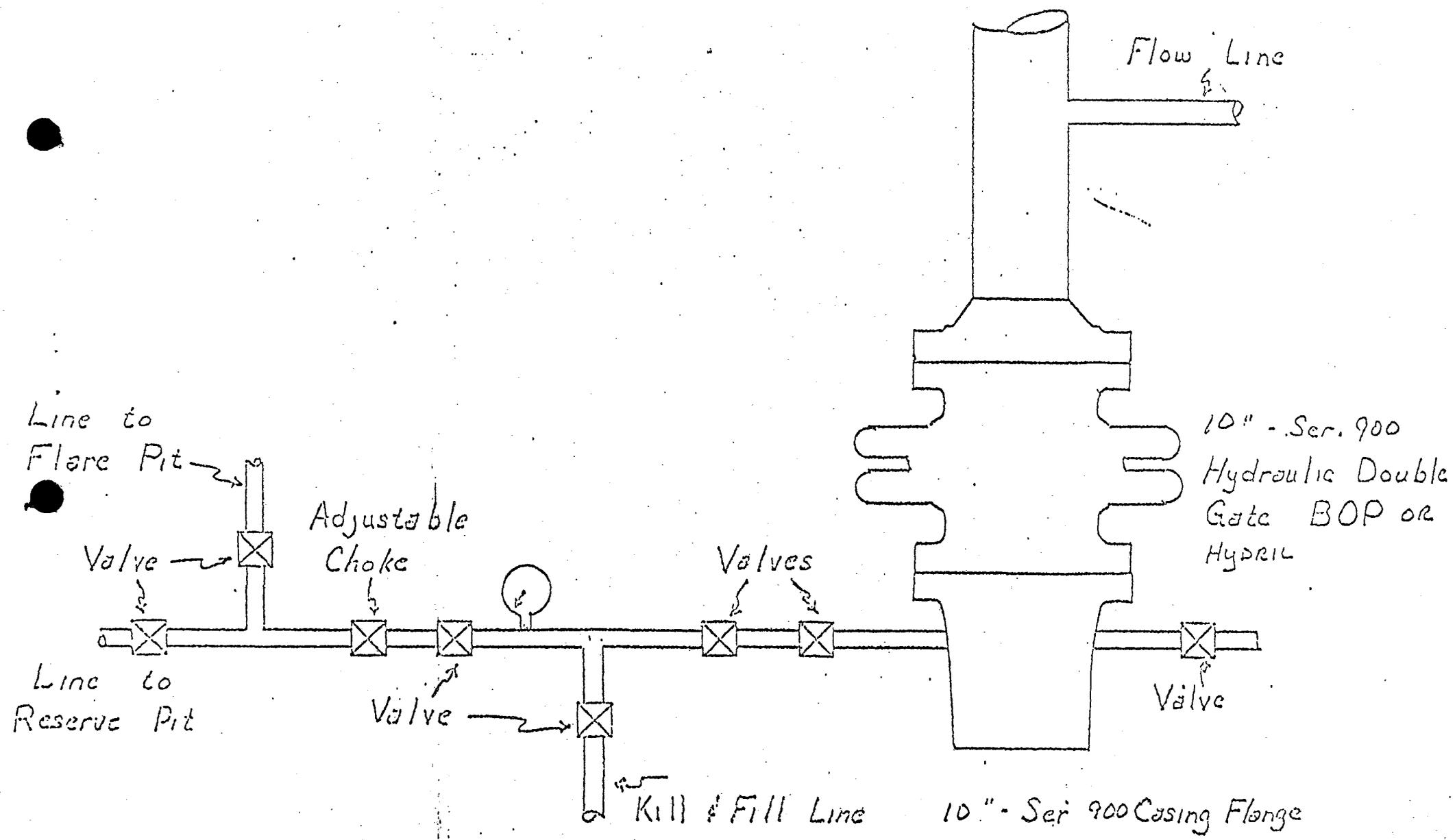
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

John J. Sargent
REGISTERED LAND SURVEYOR
REGISTRATION NO 2454
STATE OF UTAH

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

SCALE	1" = 1000'	DATE	11/20/79
PARTY	N.J.M. S.B.	REFERENCES	GLO Plat
WEATHER	Fair & Cool	FILE	BELCO PETRO. CORP.

X = Section Corners Located



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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b. TYPE OF WELL
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24. SIGNED Myron E. Coze TITLE ENGINEERING CLERK DATE 1/79

(This space for Federal or State office use)
 PERMIT NO. 43-047-30656 APPROVAL DATE Dec 20, 79

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

5. LEASE DESIGNATION AND SERIAL NO.
 UTAH 16909

6. IF INDIAN, ALIOTTES OR TRIBE NAME
 UTE (SURFACE)

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 DUCK CREEK

9. WELL NO.
 19-16 GR

10. FIELD AND ZONE OR WELL IDENTIFICATION
~~DC - GREEN RIVER~~
undesignated

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SEC 16, T9S, R20E

12. COUNTY OR PARISH
 UINTAH

13. STATE
 UTAH

17. NO. OF ACRES ASSIGNED TO THIS WELL
 260

20. ROTARY OR CABLE TOOLS
 ROTARY

22. APPROX. DATE WORK WILL START*
 3/80

RECEIVED

DEC 17 1979

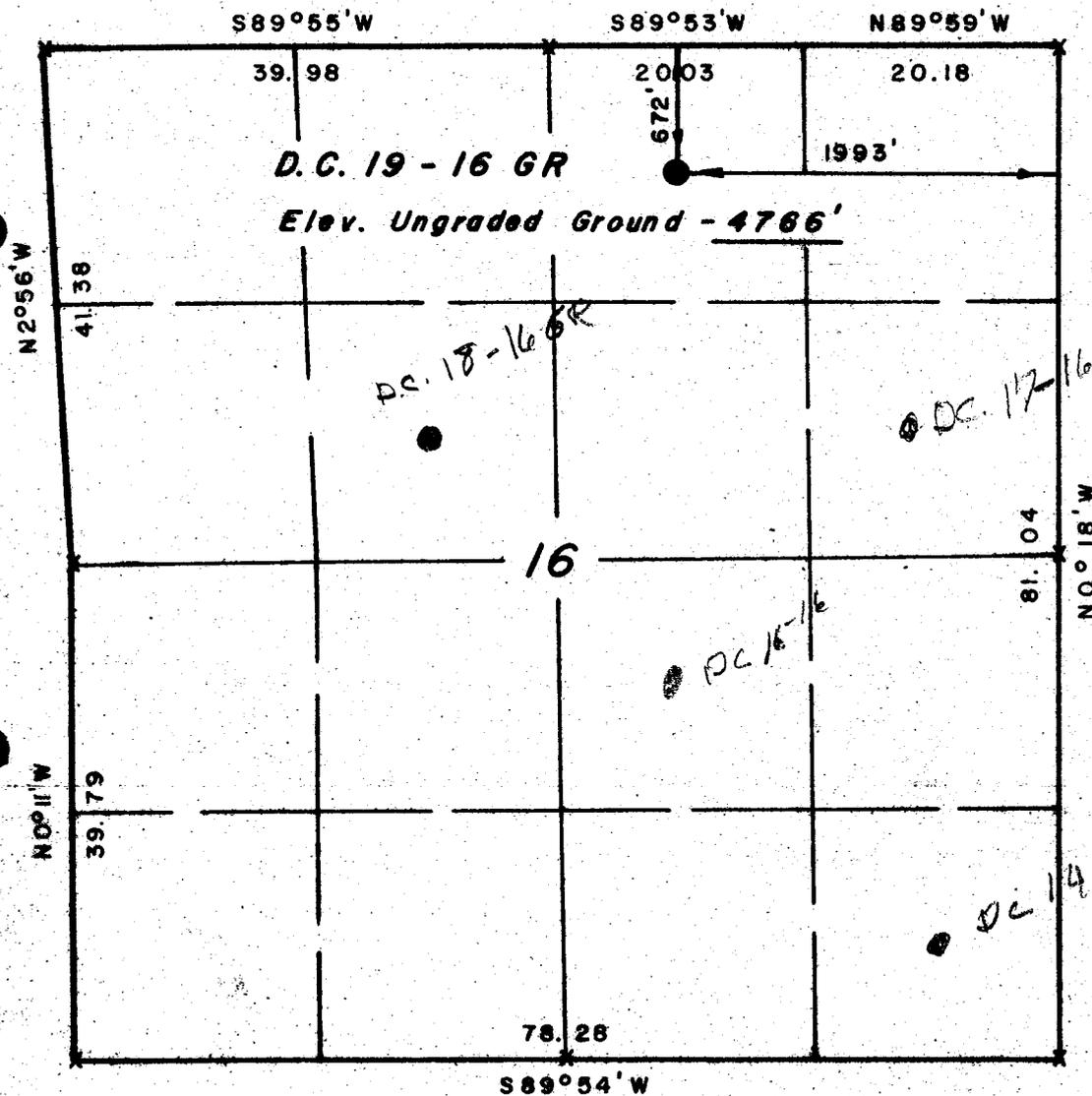
DIVISION OF OIL, GAS & MINING

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

PROJECT

BELCO PETROLEUM CORP.

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located as shown in the NW1/4NE1/4
Section 16, T9S, R20E, S.L.B. & M.
Uintah County, Utah.



X = Section Corners Located



CERTIFICATE

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

Nelson J. [Signature]

REGISTERED LAND SURVEYOR
REGISTRATION NO 2454
STATE OF UTAH

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

SCALE	1" = 1000'	DATE	11/20/79
PARTY	N.J.M. S.B.	REFERENCES	GLO Plat
WEATHER	Fair & Cool	FILE	BELCO PETRO. CORP.

** FILE NOTATIONS **

DATE: December 18, 1979

Operator: Belco Petroleum Corporation

Well No: Duck Creek # 19-16GR

Location: Sec. 16 T. 9S R. 20E County: Uintah

File Prepared:

Entered on N.I.D.:

Card Indexed:

Completion Sheet:

API Number 43-047-30656

CHECKED BY:

Geological Engineer: _____

Petroleum Engineer: _____

Director: 7 ~~_____~~

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 Fed

Plotted on Map

Approval Letter Written

turn

if gas only one well

#1

*Al
PJ*



SCOTT M. MATHESON
Governor

OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON
Executive Director,
NATURAL RESOURCES

STATE OF UTAH

CHARLES R. HENDERSON
Chairman

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT
Director

1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771

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

December 20, 1979

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

- Re: Well No. Duck Creek #14-16GR, Sec. 16, T. 9S, R. 20E., Uintah County, Utah
- Well No. Duck Creek #16-16GR, Sec. 16, T. 9S, R. 20E., Uintah County, Utah
- Well No. Duck Creek #17-16GR, Sec. 16, T. 9S, R. 20E., Uintah County, Utah
- Well No. Duck Creek #18-16GR, Sec. 16, T. 9S, R. 20E., Uintah County, Utah
- Well No. Duck Creek #19-16GR, Sec. 16, T. 9S, R. 20E., Uintah County, Utah

Insofar as this office is concerned, approval to drill the above referred to oil wells is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure. However, should any of these wells produce gas in commercial quantities, none of the other wells may produce gas.

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
Geological 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 Numbers assigned to these wells are #14-16GR - 43-047-30652; #16-16GR - 43-047-30653; #17-16GR - 43-047-30654; #18-16GR - 43-047-30655; #19-16GR - 43-047-30656.

Sincerely,

DIVISION OF OIL, GAS AND MINING

Michael T. Minder
Michael T. Minder
Geological Engineer

/b:tm

cc: USGS
Donald Prince

VERNAL DISTRICT
MARCH 7, 1980
PAGE NO. 2

NBU 9-32GR Pumped 3 BO, 10 BW in 24 hrs, 80% WC, TP-30, CP-10, 8 X 64 SPMXL, no gas vented

NBU 28-4B Flowed 30 MCF in 24 hrs, 48/64 choke, TP-750, CP-750, 625 Back PSI

NBU 54-2B Flowed 876 MCF in 24 hrs, 10/64 choke, TP-2100, CP-2100, 0 BC, 0 BW

NBU 39-28B SI TP-700, CP-1000, SI 24 hrs

NBU 47-27B Open to pit, TP-0, CP-1450, open to pit 192 hrs

NBS 1-32G SI TP-2130, CP-pkr, SI 72 hrs

NBU 41-34B SI TP-1100, CP-1640, SI 120 hrs

EGNAR #1 1400 MCF, 0 BC, TP-700, LP-590, 68°

LOCATION STATUS

NBU 48-29B	WOCU
STGU 18-17	WOCU
CWU 43-11	WOCU
CWU 46-30	WOCU
CWU 42-13	Location built, surface set
CWU 48-19	Location built
DUCK CREEK 4-17	Location built
8-16GR	Location built
9-16GR	Location built
10-16GR	Location built
11-16GR	Location built
12-9GR	Approved
13-17GR	Approved
14-16GR	Building location
15-16GR	WO USGS approval, NID sent 12-13-79, inspected 2-11-80
16-16GR	Approved
17-16GR	WO USGS approval, NID sent 12-13-79
18-16GR	WO USGS approval, NID sent 12-13-79
19-16GR	WO USGS approval, NID sent 12-13-79, inspected 2-11-80
20-9GR	WO USGS approval, NID sent 12-13-79, inspected 2-12-80
21-9GR	WO USGS approval, NID sent 12-13-79, inspected 2-12-80
NATURAL DUCK 5-15GR	Approved
6-15GR	WO USGS approval, NID sent 12-11-79, inspected 2-11-80
7-15GR	WO USGS approval, NID sent 12-11-79, inspected 1-7-80
8-15GR	WO USGS approval, NID sent 3-4-80
9-15GR	WO USGS approval, NID sent 3-4-80
14-15GR	Approved
STAGECOACH 16-26	Location built
17-25	Approved
19-33	WO USGS approval, NID sent 12-17-79, inspected 2-12-80
20-7	WO USGS approval, NID sent 12-17-79
21-8	WO USGS approval, NID sent 12-17-79, inspected 2-12-80
CWU FED 1-4	WO USGS approval, NID sent 12-17-79, inspected 2-12-80
1-5	WO USGS approval, NID sent 12-17-79, inspected 2-12-80

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DUPLICATE

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

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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
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At proposed prod. zone
SAME

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State of Utah, Department of Natural Resources
Division of Oil, Gas, and Mining
1000 West North Temple
Salt Lake City, Utah 84116

SIGNED Allyn E. Coze TITLE ENGINEERING CLERK DATE 12/11/79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY (ORIG. SIGN) E. W. GUYNN FOR E. W. GUYNN DISTRICT ENGINEER DATE APR 24 1980

CONDITIONS OF APPROVAL Production Facilities & Flowline not approved

CONDITIONS OF APPROVAL ATTACHED TO OPERATOR'S COPY

NOTICE OF APPROVAL

Utah State Oil & Gas

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

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

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

SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. U-38399

OPERATOR: Belec Petroleum Corp.

WELL NO. 19-16 GR

LOCATION: NW 1/4 NE 1/4 sec. 16, T. 9S, R. 20E, SEM

Uintah County, Utah

1. Stratigraphy:	Depth	Elevations
Uinta -	SURFACE	- ~ + 4766
Green River -	1800'	- ~ + 2950
Mahogany Zone -	2450'	- ~ + 2300
Wasatch -	5300'	- ~ - 550
TD	5348'	- ~ - 582

2. Fresh Water:
Expected throughout the Uinta Fm.

3. Leasable Minerals:

Oil Shale - Mahogany zone of the Green River Fm, top estimated to be at 2450' deep and 35 ft. thick; expected to average 30 gals/ton

Bilsonite - may occur in nearly vertical veins.

4. Additional Logs Needed:

Run logging suite throughout the Green River to TD.

5. Potential Geologic Hazards:

No abnormal pressures anticipated.

6. References and Remarks:

Within Bitter Creek KGS.
UGMS - map 44

Signature: Joseph Incardine Date: 2-1-80

Oil and Gas Drilling

EA #166-80

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

Usual Environmental Analysis

Lease No.: U-38399

Operator: Belco Petroleum

Well No.: 19-16

Location: 672' FNL & 1933' FEL Sec.: 16 T.: 9S R.: 20E

County: Uintah State: Utah Field: DC-Green River

Status: Surface Ownership: Tribal Minerals: Federal

Joint Field Inspection Date: February 11, 1980

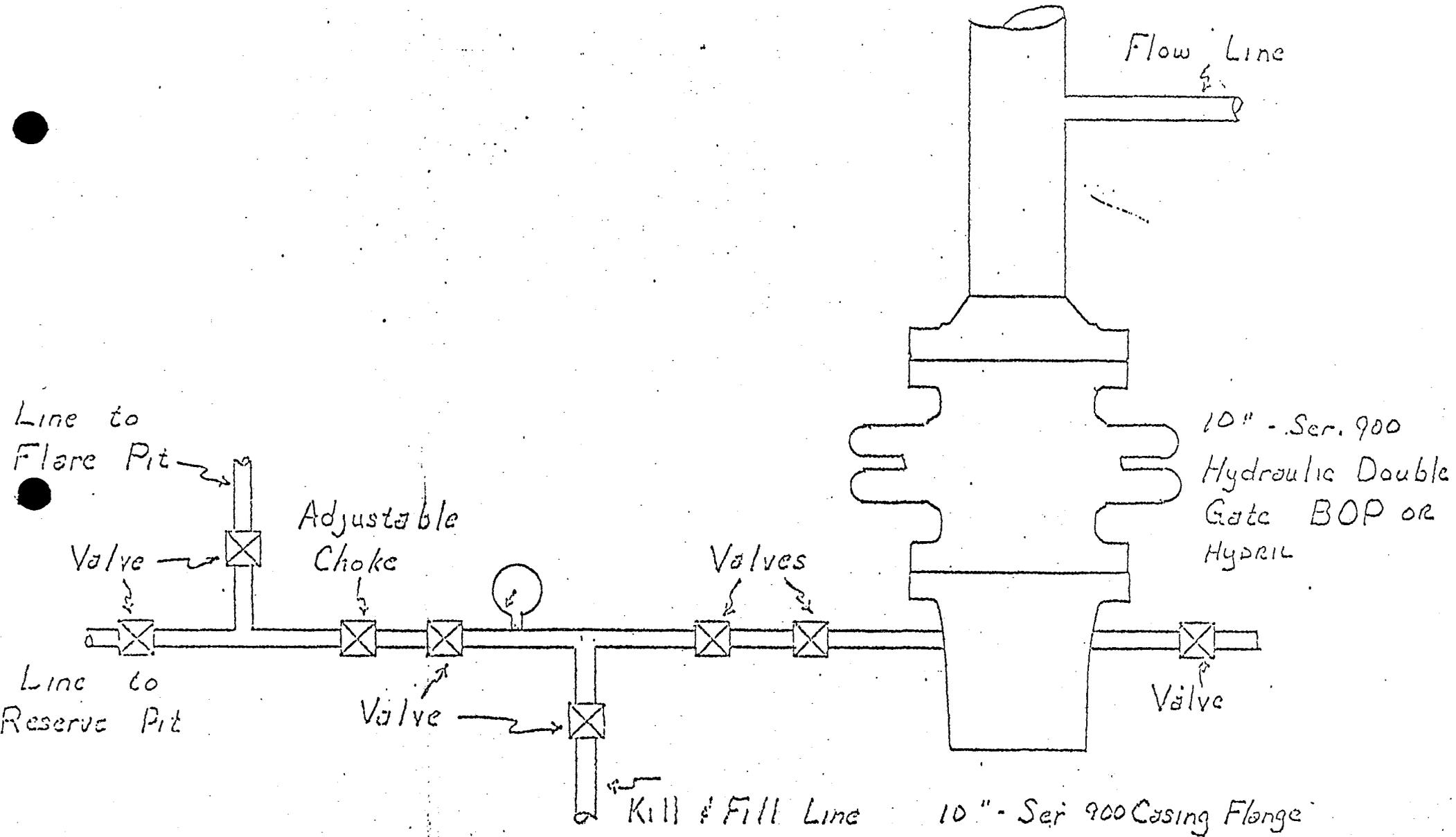
Participants and Organizations:

Craig M. Hansen	USGS - Vernal, Utah
Dale Hanburg	BIA - Ft. Duchesne
Rich Schatz	Belco Petroleum
Ed Taylor	Belco Petroleum
John Olsen	Pease Construction

Analysis Prepared by: Craig Hansen
Environmental Scientist
Vernal, Utah

Date: February 13, 1980

*Pad 180 x 325
Pit 100 x 150
4/10 mi x 32' new access
Pad fac on road
Stockpile topsoil
3 3/10 ac
→ mitigators Pg 6
3) a*



Proposed Action:

On December 12, 1979, Belco Petroleum filed an Application for Permit to Drill the No. 19-16 development well, an 5348 foot oil test of the Green River formation Tertiary In Age, located at an elevation of 4766 ft. in the NW NE 1/4 Section 16-T9S-R20E on Federal mineral lands and Tribal surface, lease No. U-38399. There was no objection 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 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. 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 Bureau of Indian Affairs Ft. Duchesne, the controlling surface agency. Rehabilitation plans would be decided upon as well neared completion, the Surface Management Agency would be consulted for technical expertise on those arrangements.

The operator proposes to construct a drill pad 180 ft. wide x 325 ft. long and reserve a pit 100 ft. x 150 ft. A new access road would be constructed 32 ft. wide x .4 miles long from a maintained road. The operator proposes to construct production facilities on disturbed area of the proposed drill pad. The anticipated starting date is March 80 and duration of drilling activities would be about 30 days.

Location and Natural Setting:

The proposed drillsite is approximately 4.5 miles south of Ouray, Utah, the nearest town. A fair road runs to within .4 miles of the location. This well is in the Duck Creek Green River field.

Topography:

The location is in the bottom of a flat weathered area at the Uinta formation small hills of weathered sandstone and shale of the same formation exist to the west and east of the location.

Geology:

The surface geology is the Uintah formation Tertiary In Age.

The soil is, sandy clay to clay type soil.

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 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. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blow out or to cause formations 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 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 road per the recommendations of the Bureau of Indian Affairs.

Approximately 3.3 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 7" 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:

The location drains north by non perennial drainage to the White River 3 miles to the north of the location.

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 and 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:

Bottlebrush, rabbitbrush, fourwing saltbrush, sha^dscale and annual weeds exist on the location.

Plants in the area are of the salt-desert-shrub types grading to the pinon-juniper association.

Proposed action would remove about 3.3 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 predominately 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 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 mitigation 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 operations 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 of 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 possibly 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 reserve 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 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 vegetation, 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.



Belco 19-16
Looking north.

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

A. Basic stipulations of concurrence by Bureau of Indian Affairs.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately 3.3 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 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 the White River would exist through leaks and spills.

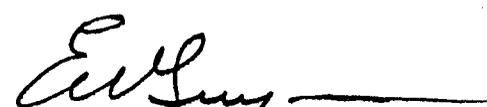
Finding of No Significant Impact:

"We have considered the proposed Belco Petroleum #19-16 in the preceding pages of this EA and find, based on the analysis of environmental considerations provided therein, no evidence to indicate that it will significantly (40 CFR 1508.27) impact the quality of the human environment."

Determination:

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

3/26/80
Date


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

RECEIVED

APR 28 1980

DIVISION OF
OIL, GAS & MINING

October 1, 1980

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

RE: Well No. Duck Creek #21-9, Sec. 9, T. 9S, R. 20E, Uintah County.,
RE: Well No. Duck Creek #20-9, Sec. 9, T. 9S, R. 20E, Uintah County.,
RE: Well No. Duck Creek #19-16GR, Sec. 16, T. 9S, R. 20E, Uintah County.,
RE: Well No. Duck Creek #17-16GR, Sec. 16, T. 9S, R. 20E, Uintah County.,

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.

If you plan on drilling these 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

BARBARA HILL
CLERK TYPIST

/bjh

Belco Petroleum Corporation

Belco

October 6, 1980

Ms. Barbara Hill
Department of Natural Resources
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

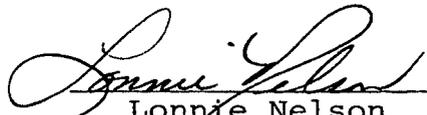
RE: Duck Creek 17-16GR
Duck Creek 19-16GR
Duck Creek 20-9GR
Duck Creek 21-9GR

Dear Ms. Hill;

In response to your letter of October 1, 1980, concerning the subject wells, Duck Creek 20-9GR and Duck Creek 17-16GR are in the third and fourth place, respectively, of our immediate drilling program for the Jacobs Drilling Rig #2. The Duck Creek 19-16GR and Duck Creek 21-9GR are scheduled to be drilled within the next three to four months.

We did not receive USGS approval on these wells until April 24, 1980. Due to the overload of APD's in the USGS office in SLC, their approvals reach this office about four months after the State of Utah approvals. If possible, please extend the State approvals for Duck Creek 19-16GR and Duck Creek 21-9GR. Thank you.

Very truly yours,
BELCO PETROLEUM CORPORATION


Lonnie Nelson
Engineering Clerk

IN/lk

xc: file (4)



SCOTT M. MATHESON
Governor

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

CLEON B. FEIGHT
Director

JOHN L. BELL
C. RAY JUVELIN
THADIS W. BOX
MAXILIAN A. FARBMAN
EDWARD T. BECK
E. STEELE McINTYRE

April 3, 1981

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

Re: SEE ATTACHED SHEET

Gentlemen:

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

This office has not recieved 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 we do not hear from your company-within fifteen (15) days, we will assume you do not intend to drill these wells and action will be taken to terminate the application.) If you plan on drilling these 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

SANDY BATES
CLERK-TYPIST

ATTACHED SHEET

1. Well No. Chapita Wells #50-32
Sec. 32, T. 9S. R. 23E.
Uintah County, Utah

2. Well No. Chapita Wells #51-32
Sec. 32, T. 9S. R. 23E.
Uintah County, Utah

3. Well No. Chapita Wells #54-34
Sec. 34, T. 9S. R. 23E.
Uintah County, Utah

4. Well No. Chapita Wells #55-20
Sec. 20, T. 9S. R. 23E.
Uintah County, Utah

5. Well No. Chapita Wells #57-29
Sec. 29, T. 9S. R. 23E.
Uintah County, Utah

6. Well No. Duck Creek #19-16GR
Sec. 16, T. 9S. R. 20E.
Uintah County, Utah

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

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

9. Well No. Duck Creek #23-16GR
Sec. 16, T. 9S. R. 20E.
Uintah County, Utah

10. Well No. Duck Creek #25-17GR
Sec. 17, T. 9S. R. 20E.
Uintah County, Utah

11. Well No. Duck Creek #26-8GR
Sec. 8, T. 9S. R. 20E.
Uintah County, Utah

12. Well No. Duck Creek #27-9GR
Sec. 9, T. 9S. R. 20E.
Uintah County, Utah

13. Well No. Duck Creek #28-9GR
Sec. 9, T. 9S. R. 20E.
Uintah County, Utah

14. Well No. Duck Creek #29-9GR
Sec. 9, T. 9S. R. 20E.
Uintah County, Utah

15. Well No. Duck Creek 30-9GR
Sec. 9, T. 9S. R. 29E.
Uintah County, Utah

16. Well No. Duck Creek #34-17GR
Sec. 17, T. 9S. R. 20E.
Uintah County, Utah

17. Well No. Natural Duck #12-21GR
Sec. 21, T. 9S. R. 20E.
Uintah County, Utah

18. Well No. Natural Duck #13-21GR
Sec. 21, T. 9S. R. 20E.
Uintah County, Utah

19. Well No. North Duck Creek 38-30GR
Sec. 30, T. 8S. R. 21E.
Uintah County, Utah

20. Well No. Stagecoach 16-26
Sec. 26, T. 8S. R. 21E.
Uintah County, Utah

Belco Development Corporation

Belco

April 8, 1981

State of Utah-Dep't of Natural Resources
Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84116

RE: See attached sheet

Ms. Sandy Bates,

In answer to your letter of April 3, 1981, concerning the applications of the wells listed on the attached sheet, please see the notations I have made under each of the listings.

Belco is requesting the State of Utah to extend the State approval for the wells highlighted in yellow, which are on our immediate drilling program, to the date of USGS approval. Also, the Natural Duck 13-21GR approval should arrive from the USGS approximately 4-10-81, please extend this approval.

The wells highlighted in pink have been or will soon be terminated by the USGS, excepting the CW #50-32 and # 51-32 which are State leases, which have been approved for nearly a year. These wells are not on our immediate drilling program, and new applications to drill will be submitted at a later date.

Also enclosed are letters of termination from the USGS, on wells not listed in your letter, which the State may also wish to terminate.

If you need any further information, please call or write. Thank you.

Very truly yours,

RECEIVED

Lonnie Nelson
Lonnie Nelson
Engineering Department

APR 10 1981

Attachments

xc: file

DIVISION OF
OIL, GAS & MINING

ATTACHED SHEET

1. Well No. Chapita Wells #50-32
Sec. 32, T. 9S. R. 23E.
Uintah County, Utah
~~TERMINATE 5-29-81~~

2. Well No. Chapita Wells #51-32
Sec. 32, T. 9S. R. 23E.
Uintah County, Utah
~~TERMINATE 5-29-81~~

3. Well No. Chapita Wells #54-34
Sec. 34, T. 9S. R. 23E.
Uintah County, Utah
~~USGS APPROVED UNTIL 9-16-81~~

4. Well No. Chapita Wells #55-20
Sec. 20, T. 9S. R. 23E.
Uintah County, Utah
~~USGS APPROVED UNTIL 10-23-81~~

5. Well No. Chapita Wells #57-29
Sec. 29, T. 9S. R. 23E.
Uintah County, Utah
~~USGS APPROVED UNTIL 10-23-81~~

6. Well No. Duck Creek #19-16GR
Sec. 16, T. 9S. R. 20E.
Uintah County, Utah
~~TERMINATE 4-24-81~~

7. Well No. Duck Creek #21-9
Sec. 9, T. 9S. R. 20E.
Uintah County, Utah
~~TERMINATE 4-24-81~~

8. Well No. Duck Creek #22-9GR
Sec. 9, T. 9S. R. 20E.
Uintah County, Utah
~~USGS APPROVED UNTIL 11-3-81~~

9. Well No. Duck Creek #23-16GR
Sec. 16, T. 9S. R. 20E.
Uintah County, Utah
~~USGS APPROVED UNTIL 11-3-81~~

10. Well No. Duck Creek #25-17GR
Sec. 17, T. 9S. R. 20E.
Uintah County, Utah
~~USGS APPROVED UNTIL 11-12-81~~

11. Well No. Duck Creek #26-8GR
Sec. 8, T. 9S. R. 20E.
Uintah County, Utah
~~USGS APPROVED UNTIL 10-22-80~~

12. Well No. Duck Creek #27-9GR
Sec. 9, T. 9S. R. 20E.
Uintah County, Utah
~~USGS APPROVED UNTIL 3-12-82~~

13. Well No. Duck Creek #28-9GR
Sec. 9, T. 9S. R. 20E.
Uintah County, Utah
~~USGS APPROVED UNTIL 3-12-82~~

14. Well No. Duck Creek #29-9GR
Sec. 9, T. 9S. R. 20E.
Uintah County, Utah
~~USGS APPROVED UNTIL 3-12-82~~

15. Well No. Duck Creek 30-9GR
Sec. 9, T. 9S. R. 29E.
Uintah County, Utah
~~USGS APPROVED UNTIL 3-12-82~~

16. Well No. Duck Creek #34-17GR
Sec. 17, T. 9S. R. 20E.
Uintah County, Utah
~~USGS APPROVED UNTIL 9-19-80~~

17. Well No. Natural Duck #12-21GR
Sec. 21, T. 9S. R. 20E.
Uintah County, Utah
SPUDED 4-3-81

18. Well No. Natural Duck #13-21GR
Sec. 21, T. 9S. R. 20E.
Uintah County, Utah
USGS APPROVAL SHOULD ARRIVE THIS WEEK

19. Well No. North Duck Creek 38-30GR
Sec. 30, T. 8S. R. 21E.
Uintah County, Utah
~~USGS APPROVED UNTIL 11-3-81~~

20. Well No. Stagecoach 16-26
Sec. 26, T. 8S. R. 21E.
Uintah County, Utah
~~TERMINATED 10-7-80~~

2

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

May 5, 1981

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

Re: Return Application for
Permit to Drill
Well No. 21-9GR
Section 9, T. 9S., R. 20E.
Uintah County, Utah
Lease No. U-13633

Well No. 19-16GR
Section 16, T. 9S., R. 20E.
Uintah County, Utah
Lease No. U-38399

Gentlemen:

The Applications for Permit to Drill the referenced wells were approved April 24, 1980. Since that date no known activity has transpired at the approved locations. Under current District policy, 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,

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

(Orig. Sgd.) R. A. Henricks

for E. W. Guynn
District Oil and Gas Supervisor

RAH/TM/tm