



00275083

RECEIVED

NOV 10 1976

COLO. OIL & GAS CONS. COMM.

CITIES SERVICES COMPANY  
12 Point Surface Use Plan  
for  
Well Location  
Daniels Federal C.D. #1  
Located In  
Section 6, T9N, R90W, 6th P.M.  
Moffat County, Colorado

1. EXISTING ROADS

See attached Topographic Map "A", to reach Cities Service Co., well location in Section 6, T9N, R90W, 6th P.M. The existing 0.9 miles of unimproved dirt road shall be improved by grading from the State Highway 13 to the exit off onto the proposed access road. (See attached Topographic Map "B".)

2. PLANNED ACCESS ROAD

See Topographic Map "B". The proposed access road will be an 18' crown road (9' on either side of the centerline) with a drain ditch on either side where needed to handle drainage. Maximum grade on the proposed access road is approximately 1%. The access road is to be constructed of native borrow accumulated during construction. The proposed access road will leave the location site on the north side and proceed northeast approximately 0.3 miles to the existing unimproved dirt road. Ground traversed by the access road is vegetated with sagebrush and grasses.

A permanent cattleguard will be installed on the access road (Sec. 31-T10N-R90W) per the landowners request. Cattleguard location indicated in blue on topographic map "B". In addition a temporary cattleguard should be installed immediately off Highway 13-789 and set back from the existing fence line to allow turning vehicles to leave the highway as soon as possible and eliminate the hazard of accidents. This temporary cattleguard will be on BLM surface. Temporary cattleguard is indicated in green on topographic map "B".

3. LOCATION OF EXISTING WELLS

As shown on Topographic Map "B", there are no other wells within a two mile radius of the proposed well site. (See location plat for placement of Cities Service Company, well location within the section.)

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

All production facilities are to be contained within the proposed location site. There are no other Cities Service Co., flow, gathering, injection, or disposal lines within a one mile radius. In the event production is established, additional plans for a flowline from the location to the existing gathering line 1.0 mile west of the location shall be submitted. (See attached Topographic Map "B".)

5. LOCATION AND TYPE OF WATER SUPPLY

Water used to drill this well is to be hauled from a stock watering pond in the SW 1/4, SW 1/4 Section 31, T10N, R90W, 6th P.M. approximately 0.3 mile to the northwest of the location site.

6. SOURCE OF CONSTRUCTION MATERIALS

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

6. CONTINUED:

access road. No additional road gravels or pit lining material from other sources are anticipated at this time.

7. METHODS FOR HANDLING WASTE DISPOSAL

All garbage and trash that can be burned, shall be burned. All unburnable garbage and trash accumulated during the development of this well shall be contained in the trash pit shown on the attached location layout sheet. When drilling activities have been completed, the rig moved off the location and production facilities set up, all garbage and trash on the location site shall be cleaned up, deposited in the trash pit, and covered with a minimum 4' of cover. All production waste such as cuttings, salts, chemicals, overflows of condensate, water, and drilling fluids shall be contained in the east cell of the reserve pit and on completion of drilling activities buried with a minimum of four feet of cover. (See end paragraph in Item No. 10.)

8. ANCILLARY FACILITIES

There will be no ancillary facilities.

9. WELL SITE LAYOUT

See attached location layout plat. The B.L.M. District Manager, U.S.G.S. District Engineer and the surface owner shall be notified before any construction begins on the proposed location site. When drilling activities commence, all work shall proceed in a neat and orderly sequence.

10. PLANS FOR RESTORATION OF SURFACE

As there is some topsoil in the area, all topsoil will be stripped and stockpiled prior to drilling activities (see Item No. 9). When all production activities have been completed, the location site, access road, and flowline route will be reshaped to the original contour and the (the topsoil on the location only) topsoil spread over the disturbed area. Any drainages re-routed during the construction and production activities shall be restored to their original line of flow. All additional wastes being accumulated during production activities and contained in the reserve pit and trash pit shall be buried with a minimum four feet of cover. The location site, access road, and flowline route shall be reseeded with a seed mixture recommended by the surface owners, when the moisture content of the soil is adequate for germination. Restoration activities shall begin within 90 days after completion of the well. Once completion activities have begun, they shall be completed within 30 days. The lessee further covenants and agrees that all of said cleanup and restoration activities shall be done and performed in the best and most workmanlike manner and in strict conformity with the above mentioned Items No. 7 and No. 10.

11. OTHER INFORMATION

Topography of the general area consists of generally rolling terrain trending east - west with scattered rock outcroppings occurring in the area. Level areas occur along the drainage bottoms throughout the area. Drainages in the area are intermittent in nature running occasionally in the spring time and draining into the annually flowing Fortification Creek.

11. CONTINUED:

Soils of this semi-arid area are of the Wasatch Formation, (lower Eocene), light brown clayey soils containing some poorly graded gravels. The marginal topsoil throughout the area supports the heavy sagebrush and grass vegetation. (Vegetation of the area consists of approximately 90% sagebrush and grasses and 10% bare earth.) The ground in the area is also leased for grazing. Wildlife is moderate; predominantly deer, coyotes, rabbits, and a variety of small ground squirrels and mice. Birds in the area are hawks, finches, ground sparrows, magpies, and jays. The well is located along the east slope of the Fortification Creek drainage. The area surrounding the location site is vegetated with thick sagebrush and grass. The location site itself is vegetated with tall sagebrush. The ground slopes through the location site on approximately a 11% grade. There are no occupied dwellings, or other facilities, including archeological, historical, or cultural sites within any reasonable close proximity of the proposed location site. (See attached Topographic Map "B".)

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

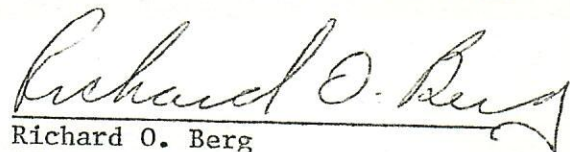
Richard O. Berg  
1600 Broadway, Suite 900  
Denver, Colorado 80202

Home Phone (303) 988-4384  
Bus. Phone (303) 892-0263

CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Cities Service Co., and its' contractors and sub-contractors in conformity with this plan and terms and conditions with this plan and the terms and conditions under which it is approved.

10-27-76  
DATE

  
Richard O. Berg  
Operations Manager

SUPPLEMENTARY INFORMATION

Cities Service Oil Company  
Daniels Federal CD #1  
NE NW Section 6-T9N-R90W  
Moffat County, Colorado

1. Surface Geology - Wasatch Formation
2. Estimated tops of geologic markers:

|                   |       |
|-------------------|-------|
| Ft. Union         | 500'  |
| Lance             | 3000' |
| Fox Hills         | 3800' |
| Lewis Shale       | 4000' |
| Lewis Sand        | 4400' |
| Lower Lewis Shale | 4600' |
| Mesa Verde        | 6200' |
3. Estimated depths of water, hydrocarbon and/or mineral bearing zones:

|            |       |
|------------|-------|
| Lance      | 3000' |
| Lewis Sand | 4400' |
| Mesa Verde | 6200' |
4. Casing Program:

Surface Casing: New 9-5/8" 36# K-55 STC to 500'

Intermediate Casing: Not planned

Production Casing: New 5 1/2" 15.5# K-55 STC to 6400'

Cementing Surface: Approximately 150 sacks 65-35 poz with 6% gel and 2% CaCl<sub>2</sub> followed by 100 sacks "G" with 2% CaCl<sub>2</sub>.

Production: Amounts of cement will be designed subsequent to running Caliper logs. Designed for 1000' fillup with 65-35 poz with 6% gel and neat "G" across pay section.
5. Pressure control equipment specifications:

Casing Head: 9-5/8" S.O.W. x 10 in., 3000 psi wp

Blowout Preventers: 10 in., 3000 psi wp, hydraulically operated, double ram type preventer with pipe and blind rams. (See Exhibit A.)

Testing Procedure: Before drilling out surface casing, blowout preventers, casing head, and casing will be pressure tested to 1000 psi for 15 min., and will be checked for proper operation on each trip.
6. Characteristics of proposed circulating medium:

Water and natural mud to approximately 3700'. Well will be mudded up at this point with a chemically treated water base gel to TD.

7. Auxilliary equipment to be used

Kelly cock will be used, float on bit optional with the contractor and a mud logging unit is planned from base of surface pipe to TD.

8. Proposed evaluation program

DST: Probable in Lewis Sand and Mesa Verde

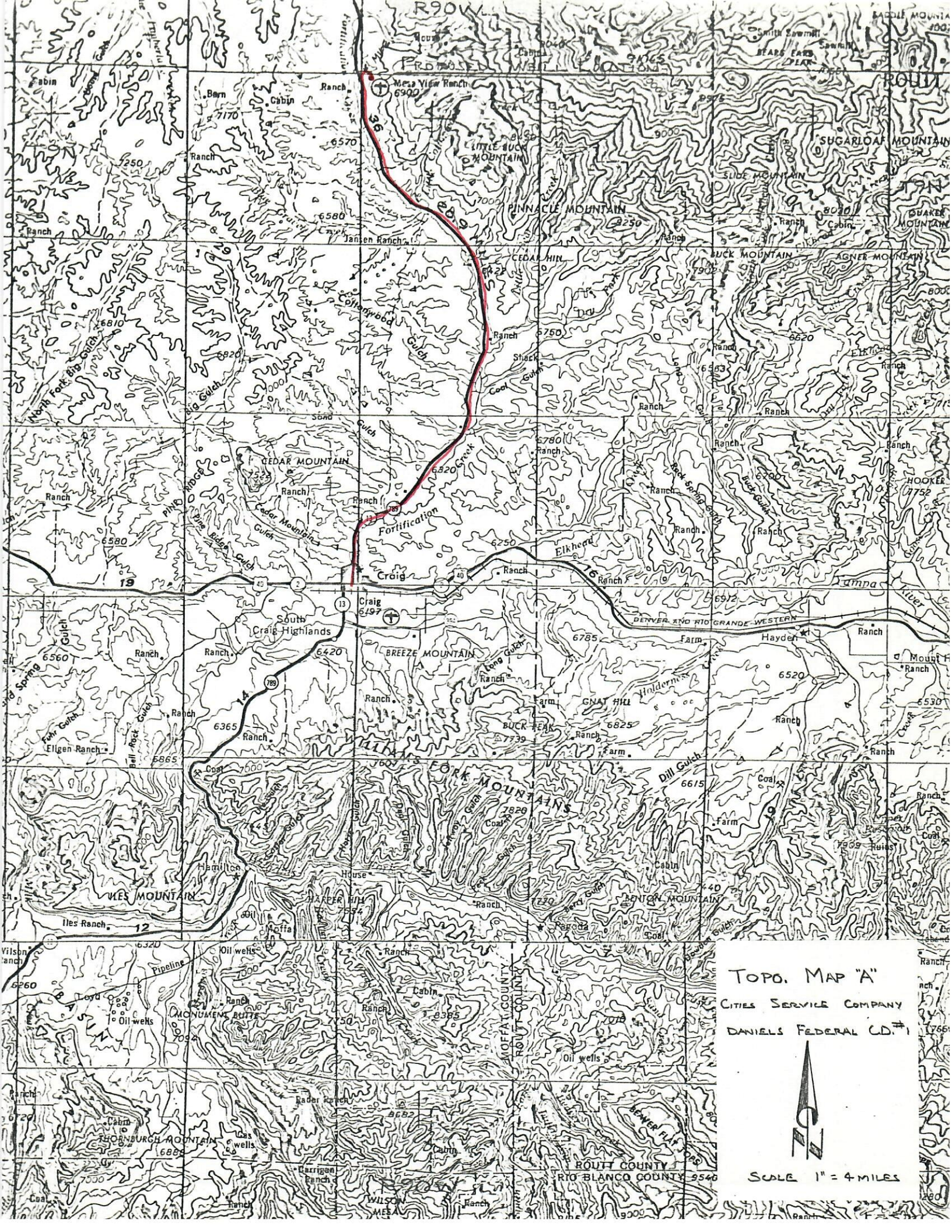
Logs: Dual Induction - LL8, BHC Sonic with Gamma Ray and Compensated  
Formation Density at potential pay zones.

Coring: Not planned

9. Anticipated Hazards:

No abnormal temperatures or pressures are anticipated and no potential drilling hazards are known to exist.

10. Anticipated starting date: November 15, 1976 with duration of operations approximately 30 days.



TOPO. MAP "A"  
CITIES SERVICE COMPANY  
DANIELS FEDERAL CO. #1



SCALE 1" = 4 MILES





Exhibit A-

Cities Service Oil Co.

DANIELS FEDERAL CD#1

