



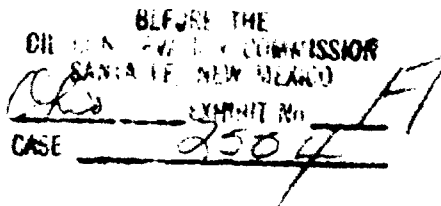
Consolidated City Gas, Inc.

Executive Offices

September 29, 1959

UNITED STATES NATIONAL
BANK BUILDING
DENVER 2, COLORADO
PHONE AMHERST 6-1308

Ohio Oil Company
Post Office Box 120
Casper, Wyoming



Attention: Mr. R. W. McCanne
Division Manager

Re: Our jointly owned Government-Owens
No. 1-7, SW/4 of Section 7, T31N-
R12W, San Juan County, New Mexico

Gentlemen:

You will recall that subject well was drilled during the fall of 1957 and completed as a Mesa Verde gas producer. For details of the drilling and completion history, I refer you to the following two reports: (1) DRILLING AND COMPLETION HISTORY dated October 22, 1957, and (2) COMPLETION REPORT dated October 23, 1957.

In brief, we drilled with mud through the proven Mesa Verde and set 7 in. production casing at 5,000 ft. We then drilled with gas to a depth of 6695 ft., a point some 20 ft. above the top of the Dakota Formation. Because of the problems associated with a troublesome high pour point oil seep from the Greenhorn, it was necessary to mudup. We then drilled to an ultimate total depth of 6807 ft. which provided a Dakota penetration of 89 ft. We drill stem tested the whole Dakota interval establishing a stable natural flow of 10 to 15 MCFD.

Limited experience with the Dakota Formation in the San Juan Basin at that time indicated the need for considerably more natural potential before attempting a commercial completion. Accordingly, we abandoned the Dakota and proceeded with the Mesa Verde completion.

Subsequent experience in the area has pointed up two important factors: (1) If an effective frac can be accomplished, prolific production can be established from the Dakota in this area even in the face of zero natural flow: (2) Several Dakota sand stringers below our Owens penetration depth are productive.

In support of our analyses, we offer the following comments: The Dakota section penetrated in our Owens well is identical to that producing in several wells in the immediate area. In this respect, we call your attention to the Southern Union McCord in the SW/4 of Section 15-T30N-R13W, our Government Payne No. 1 in the SW/4 of Section 19-T31N-R12W, our Government-Cain No. 1 in the NE/4 of Section 25-T31N-R13W, Aztec's Thompson No. 1 in the NE/4 of Section 33-T31N-R12W. In addition, we have recently successfully completed our Government-Senter No. 1 in the same zone exposed in the Owens well, this well being located in the SW/4 of Section 24-T31N-R13W. At this time we are effecting a recompletion in this same and deeper zones in our Government Lea No. 1 in the SW/4 of Section 30-T31N-R13W.

All of these above mentioned wells are also productive from several sand stringers below our penetration depth in the Owens well.

Finally, we point out that the subject Owens well had a better natural indication even after being drilled with mud than most of these above listed wells had after being drilled with gas. Of course, they were all fraced.

We are confident that by deepening our Owens well some 50 ft. we can effect an into-the-line potential of 800 MCFD to 1500 MCFD along with 12 to 15 bbls. of condensate per MCFD. Gross reserves would be on the order of 5 to 8 billion cu. ft. along with 60 to 100 M bbls. of condensate. Since the Dakota is not prorated, relatively rapid payouts for the expenditures would be noted.

We propose to re-enter the Owens No. 1-7, build a simple sodium bentonite mud with a low water loss characteristic, drill the 7 in. casing plug, wash to the top of the cement plug opposite the Dakota Formation, drill the Dakota plug, and deepen to approximately 6860 ft. We then would run a 5 1/2 in. liner with turned down couplings as we have done in several instances in this area, hanging it from the base of the 7 in. and circulating cement around same. We would then after WOC run a collar log and perforate the prospective Dakota Formation. If necessary, we would selectively break down the various Dakota intervals with acid and then proceed with a sand-water frac utilizing some 60,000 lbs. of sand in 40 to 60,000 gals. of water.

The frac would be accomplished by running a squeeze packer to the top of the Dakota liner on either 3 1/2 in. tubing or 4 1/2 in. casing in order to get maximum frac effectiveness via high injection rates. The dual completion would essentially involve the setting of a Baker Model D permanent production packer in the liner. We would propose a string of 2 in. or 1 1/4 in. tubing to serve the Dakota and an annular string of 1 1/4 in. tubing to serve the Mesa Verde. We would probably wish to give the Mesa Verde a mud acid wash after the Dakota frac in order to resolve the adverse effects of mud contamination through the 7 in. casing perforations during the deepening operation.



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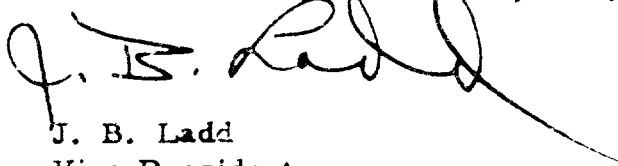
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We attach herewith an estimate of the cost for the proposed work and respectively urge early approval of your 51% share in order that the well may be recompleted and put on the line as rapidly as possible so that we may realize maximum production during the imminent winter withdrawal period.

It is probably unnecessary to amend our present operating agreement but a new communitization agreement covering the Dakota Formation would need to be prepared and filed. We would be happy to do this.

Very truly yours,

CONSOLIDATED OIL & GAS, INC.

A handwritten signature in dark ink, appearing to read "J. B. Ladd", with a long, sweeping horizontal line extending to the right.

J. B. Ladd
Vice President

JBL/mwk
Enclosure

GOVERNMENT OWENS NO. 1-17
SW/4 OF SECTION 7, T31N, R12W,
SAN JUAN COUNTY, NEW MEXICO

ESTIMATED COST OF DEEPENING & RECOMPLETION
AS A DUAL DAKOTA-MESA VERDE WELL

Intangibles:

Rig Time - 18 days @ \$900	\$16,200
Cement & Services	800
Log & Perforate	2,500
Water	3,000
Location	600
Frac Materials & Services	8,000
Trucking	2,000
Mud Materials	1,500
Miscellaneous Labor & Services	<u>3,500</u>
Sub-Total	\$38,100

Tangibles:

2000' of Liner	\$ 4,000
6800' of Tubing	5,100
Dual Downhole Equipment	2,000
Xmas Tree Adaptation	800
Separator	2,800
Miscellaneous Fittings, Etc.	<u>400</u>
Sub-Total	\$15,100

GRAND TOTAL

\$53,200