



WEXPRO COMPANY

79 SOUTH STATE STREET • P.O. BOX 11070 • SALT LAKE CITY, UTAH 84147 • 801 530-2700

R. M. KIRSCH
PRESIDENT

September 7, 1984

Mr. Douglas Ball
Ball Associates, Ltd.
105 Main Street
P.O. Box 8
Black Hawk, CO 80422

Mr. Robert Lake
Price Waterhouse
50 West Broadway
Salt Lake City, UT 84101

Gentlemen:

RE: Well Completions in the Hiawatha and Powder Wash Oil and Gas Fields

The Powder Wash field is in Townships 11 and 12 North, Ranges 97 and 98 West, Moffat County, Colorado. The Hiawatha fields are on the Colorado/-Wyoming border, northwest of Powder Wash. Most Powder Wash and Hiawatha wells penetrate several potential Wasatch formation producing reservoirs and Wexpro Company is examining the feasibility of recompleting some of the old wells in hitherto untapped reservoirs.

FACTS

Seven sand intervals await individual examination in the recompletion study. Wexpro will test each zone, coming up the hole, until one proves capable of producing commercial oil and/or gas. Several tests per well will be expensive. As an example of the multiple intervals, Mountain Fuel Supply Company drilled the Hal Stewart Well No. 2 in Powder Wash in 1944 to 5,577 feet. The well has been recompleted three times and has produced from four separate zones so far:

<u>YEAR</u>	<u>FORMATION</u>	<u>ZONE DEPTH</u> (feet)	<u>PRODUCTION</u> (million cubic feet)	(barrels of oil)
1944	Wasatch	4,194-4,216	294	38,984
1945	Wasatch	4,365-4,405	5,923	7,909
1965	Fort Union	5,172-5,208	47	220,054
1973	Wasatch	4,682-4,694	10	

Messrs. Ball and Lake
September 7, 1984
Page 2

The interval completed last (4,682-4,694 feet) tested 500 thousand cubic feet of gas a day. After a short producing period, the well would not produce against existing pipeline pressure. The well is now "loaded up" and will not produce; it has been shut-in since 1973. Now Wexpro will probably re-enter the well to try making it a producer from a shallower zone.

Schedule 3(a) of the Wexpro Agreement lists the Wasatch and Fort Union formations in Powder Wash and Hiawatha as productive gas reservoirs. The Wasatch formation in the East Hiawatha field is also listed as a productive oil reservoir in Schedule 2(a). Schedule 3(b) lists "Prior Company Wells" in these fields.

PROBLEM

Sand lenses, some very small in area, constitute the Wasatch reservoirs. Accordingly, the probability of commercial production from any sand interval is not high. Wexpro cannot afford reasonably to test, for example, three or four of the lower Wasatch zones if Wexpro cannot earn a return on the testing and recompletion costs from those lower zones. Hence, for each well which proves commercial, Wexpro desires to have the total cost of all recompletion attempts considered development-drilling costs.

DISCUSSION

In Section I-18, the Wexpro Agreement defines a "Development Well" as: "A well drilled under the terms of this agreement for carrying out development oil or development gas drilling, as those terms are defined in Section I-27 and I-28."

Section I-28 defines "Development Gas Drilling" to include recompletions as follows:

Any drilling completed (or recompleted in a prior well) after July 31, 1981; drilled within any development drilling area; and:

(a) Targeted and completed in a productive gas reservoir, or

(b) Drilled within 1,980 feet of any prior well, completed in any pool above the lowest point to which such well had been drilled, and completed as a commercial well that produces primarily gas during the first thirty days of production. (Emphasis added.)

Under Section I-20, a "Commercial Well" is defined in part as:

A development well that, upon completion, (i) clearly produces sufficient quantities to pay, at market prices for the products, all costs of drilling, development and

Messrs. Ball and Lake
September 7, 1984
Page 3

operation of the well, or (ii) requires further determination for classification as a commercial well or dry hole. . . .

Section I-20 goes on to describe the commerciality test.

Finally, Section I-19 defines a "Dry Hole" as that portion below the commercial completion. Section I-19 reads:

A development well that (i) upon completion is clearly uneconomical to produce and is plugged and abandoned while the drilling rig is in place or (ii) is otherwise not determined to be a commercial well under the procedures set forth in Section I-20. If a commercial well is completed in a productive reservoir above the total depth drilled, that portion of the well below the lowest productive reservoir to total well depth will be considered a dry hole. (Emphasis added.)

PROPOSAL

Wexpro proposes that all costs of testing the Wasatch sands in the Hiawatha and Powder Wash fields be considered development drilling in any well recompleted commercially. Depending on whether oil or gas predominates, the well will be classified as either a development oil well or a development gas well. Commerciality will be based on the total sand interval testing costs including that of the successful zone and those of the tested, unsuccessful zones.

If you accept Wexpro's proposal, we would appreciate your signing below.

Very truly yours,

ckb

ACCEPTED this _____ day of _____, 1984.

By _____
Wexpro Monitor
Price Waterhouse

By _____
Wexpro Monitor
Ball Associates, Ltd.