Fracking Oil Investment memorandum

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| to: | Fracking Oil Investor |
| from: | Kimberly roeten & Allen Larmee |
| subject: | Decision support |
| date: | November 21, 2016 |
| cc: | Warren McIntosh |
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As a wealthy investor of Fracking Oil Company, you have wanted to know the net present values for barrel oil prices at $50, $70, $90, and $110, using the company’s $10 million requested investment and your counteroffer of $5 million. Assuming the interest rates for the next 8 years will be 4 percent each year, and we have figured out which NPVs are positive at a 15 percent rate required rate of return. The purpose of this analysis was to calculate the net present values to determine the total amount the project will produce and use them as a way to help you determine which investment option is the better one to undertake.

The eight scenarios that are being tested are four “His” investments of $50, $70, $90, and $110, which denote your original requested investment of $10 million, and four “Yours” investments of $50, $70, $90, and $110, which denote your offer of $5 million. The positive NPVs represent acceptable investments because they add value to the firm rather than subtract value from it.

In this case, the scenarios you should consider are the Yours-90 and Yours-110 scenarios because their NPVs at 15 percent are positive values, which make them better investing opportunities. Therefore, a more fair investment is closer to $5 million rather than $10 million because the goal is to go with the investment that earns more value than it costs and all of the other investment options, including all of the “His” investments, cost more than they earn.

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| Scenario | Investment | Oil Price | Interest Rate | NPV @ 15% |
| His-50 | $10,000,000 | $50 | 4% | $ (7,029,207) |
| His-70 | $10,000,000 | $70 | 4% | $ (4,674,570) |
| His-90 | $10,000,000 | $90 | 4% | $ (2,356,262) |
| His-110 | $10,000,000 | $110 | 4% | $ (52,749) |
| Yours-50 | $5,000,000 | $50 | 4% | $ (2,681,381) |
| Yours-70 | $5,000,000 | $70 | 4% | $ (326,744) |
| Yours-90 | $5,000,000 | $90 | 4% | $ 1,991,564 |
| Yours-110 | $5,000,000 | $110 | 4% | $ 4,295,078 |