
FRACKING OIL INVESTMENT DECISION

TO: WEALTHY FRIEND
FROM: TURNER BARNETT
SUBJECT: FRACKING OIL INVESTMENT DECISION
DATE: NOVEMBER 3, 2016
CC:

Hello, my wealthy friend! I know that you are trying to get into the fracking oil well business and I heard that it can be a quite tricky thing to invest your money in. I have done a little bit a research and learned that these oil wells are not guaranteed to bring up oil and that the prices of oil have fluctuated rapidly over the years. After you put me to the task of finding out which method of investment is the most profitable, I gathered a hefty amount of data and used it to calculate the net present value for each of the scenarios that you had given me.

Given all of the scenarios that were mentioned, I calculated the NPV (Net Present Value) at a 15% required rate of return using the investment amount and the price per barrel of oil with an interest rate of 4% each year from 2017 to 2024. After finding the NPV for each of the scenarios, I then sorted them based on the highest positive number being the best investment and the lowest negative number as the worst investment. Out of the eight scenarios, only two of them turned out to be potentially good investments. The scenario with the largest positive NPV, or the best investment, is the one with an investment amount of \$5,000,000 and a price per barrel of \$110, which has an NPV@15% of positive \$4,295,078. The other scenario that is potentially a good investment is the investment amount of \$5,000,000 and a price per barrel of \$90, which has an NPV@15% of positive \$1,991,564. The worst potential investments are the two scenarios that have an investment amount of \$10,000,000 and barrel prices of \$50 and \$70, which have an NPV@15% of negative \$7,029,207 and negative \$4,674,570.

To conclude this, I believe that your best bet for this investment decision is to go with an investment amount of \$5,000,000 and a price per barrel of \$110. Overall, the scenarios with an investment amount of \$5,000,000 are ideal in this situation. All of the investments that have an amount of \$10,000,000 have a negative NPV@15%, so I would advise to steer clear of investing that much into the fracking oil wells. I have included a table to show each of the scenarios and their net present value at 15% return rate.

Scenario Summary									
	HIS50	HIS70	HIS90	HIS110	YOURS50	YOURS70	YOURS90	YOURS110	
Changing Cells:									
\$B\$11	\$ 50	\$ 70	\$ 90	\$ 110	\$ 50	\$ 70	\$ 90	\$ 110	
\$B\$13	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 10,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	
\$C\$12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
\$D\$12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
\$E\$12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
\$F\$12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
\$G\$12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
\$H\$12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
\$I\$12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
\$J\$12	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	
Result Cells:									
\$J\$19	\$ (7,029,207)	\$ (4,674,570)	\$ (2,356,262)	\$ (52,749)	\$ (2,681,381)	\$ (326,744)	\$ 1,991,564	\$ 4,295,078	