Tri-State Consulting Company

Well Projections and Recommendations

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Executive Summary:

Tri-State Consulting Company has been asked by your company to prepare a report that shows a well with the highest forecasted net worth in three years. We have reached a conclusion on your query, and show our findings in this brief summary. Three companies submitted wells to sell to your company, including Chevron, Shell, and British Petroleum (BP). Using decline curve analysis, and technical data calculations we determined that of these offers, the well offered by Shell will be the most profitable over the next thirty-six months. Our recommendation to you is to accept the offer given by Shell.

Introduction:

Tri-State Consulting Company was hired by your institution to predict one oil/gas well that will provide you with the most profit over the next three years. Three highly successful oil companies have submitted offers to you; these companies are Chevron, Shell, and British Petroleum (BP). In this report, we will project the most profitable well offered to you out of these three. Also, this report will detail the steps we took to come to this conclusion.

Methodology:

To come to our conclusion on the highest well profit for the next thirty-six months, Tri-State Consulting used several formulas and techniques. This section of our report presents these formulas and techniques.

The companies of Chevron, Shell, and British Petroleum were the companies submitting offers to you. We then got the past facts and figures from the proposing company's wells. Using past data from these wells, we were able to project each well's outlook for the next thirty-six months. First, we put their data onto a line graph using Microsoft Excel. This data included their output of oil from the past in BBLS, which means "blue barrels" on the y-axis, and output of gas in MCF, also on the y-axis. We then listed the time in months on the x-axis. Following this, we used a hyperbolic decline formula, to insert a decline curve into each graph. These curves were then stretched over the next thirty-six months to provide a fairly accurate prediction of what the well's output will be over the next three years. Sometimes, it is not possible to make a curve fit the actual statistics perfectly, but at worst, you will make even more than we project.

The hyperbolic decline formula we used was: q=qi(1+b*Di*t)^(-1/b).

- "q" is the rate of decline at a given point
- "qi" is the initial rate (at the beginning)
- "b" is the decline exponent at that point
- "Di" is the decline rate at that point
- "t" is the time (in months) for the curve

Since the statistics were in units of months, we used Microsoft Excel to drag them down for the next thirty-six months. These charts conveyed the projected output in BBLS of oil and MCF of gas for three years in the future. We then copied and pasted this projected information to a new worksheet.

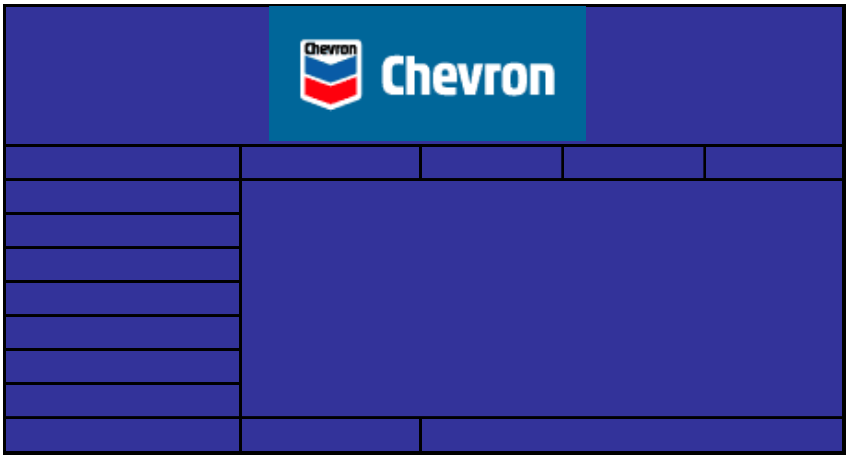
This worksheet is where the real work began in predicting the total worth of each well in three years. We calculated the revenue, direct cost, tax, net cash flow, present value, and net present value for each of the next thirty-six months. The current price of oil per BBL is about $30.00, and for gas per btu is about $4.50. The direct cost for one MCF of gas is $0.65 and for one barrel of oil is $4.35. The actual formulas to calculate this information is shown below. Net present value is what each well will be worth to you, in full, over the next three years.

- Revenue: (oil price/BBL)(output of BBLS)+(gas price/btu)(MCF output)
- Direct Cost: (output of BBLS)(direct cost/oil)+(MCF output)(direct cost/ gas)
- Tax: (Revenue - Direct Cost)(tax rate)
- Net Cash Flow: Revenue - Direct Cost – Tax
- Present Value: (Net Cash Flow)/(1+tax rate)^month
- Net Present Value: Add up all month's present values

Results and Discussion:

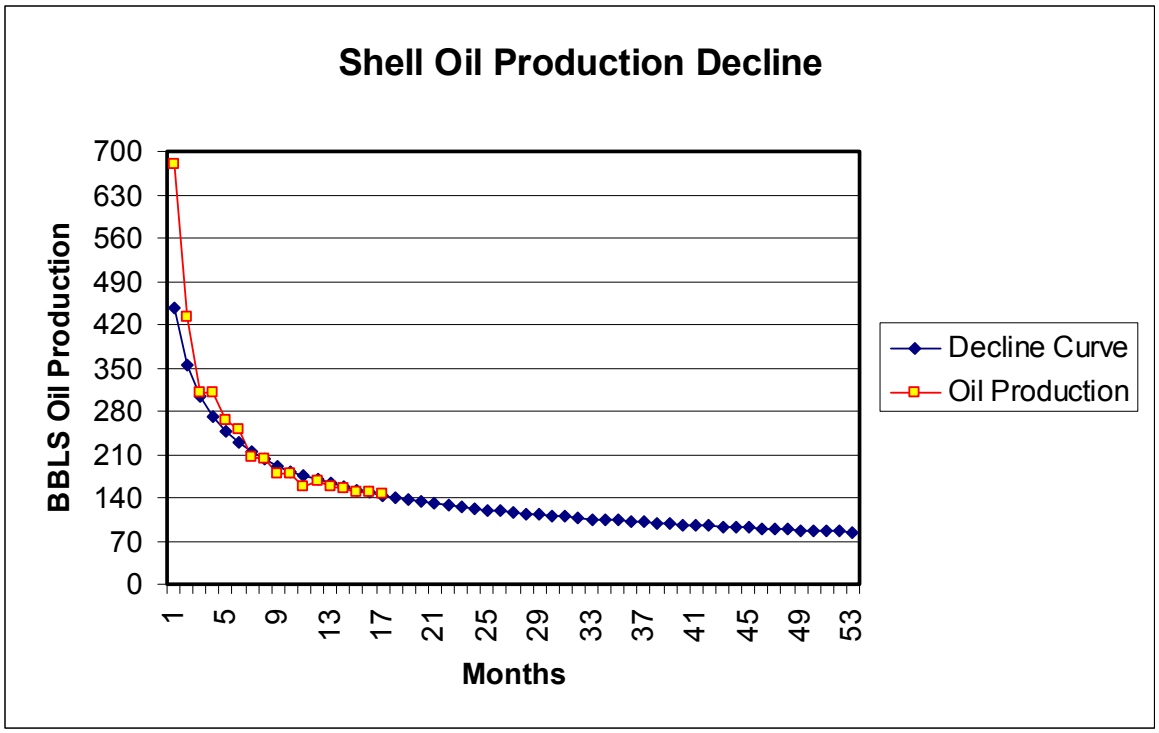
The tables below show the first month of oil and gas projection, the first year, and so on. The calculations to determine the information in these charts are explained in "methodology."

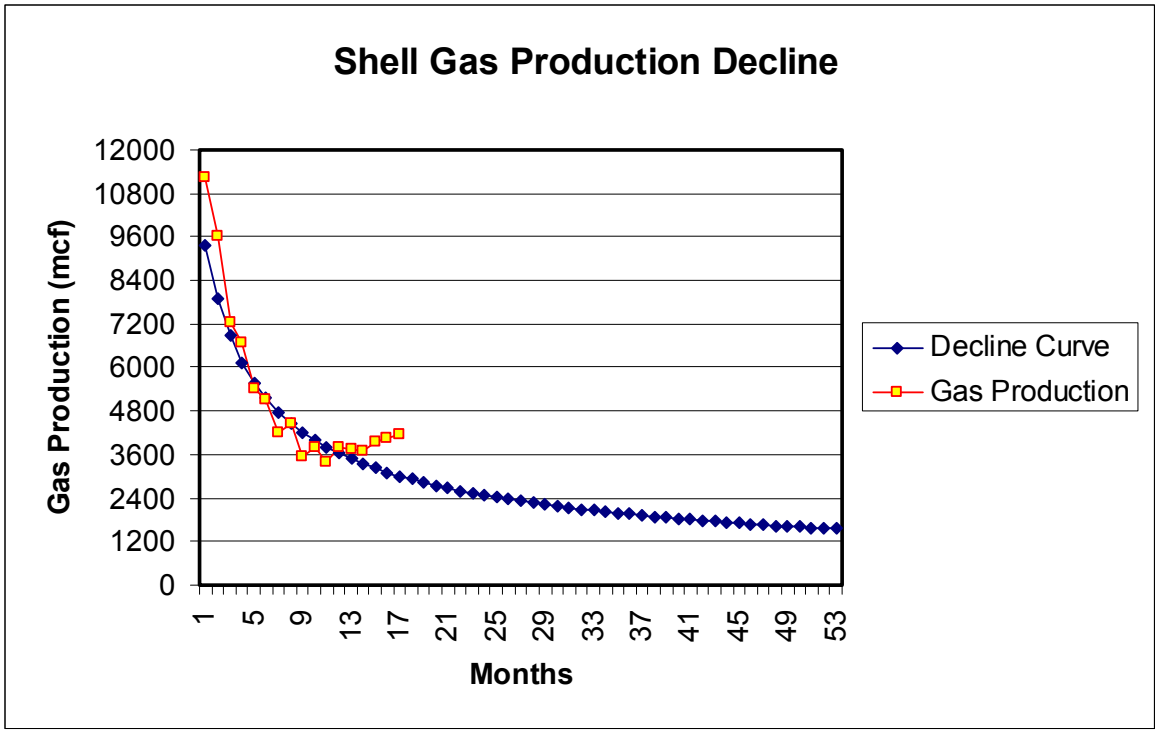
Month	1	12	24	36
Oil Bbls	140.04	112.28	95.50	84.65
Gas MCF	3064.17	2305.47	1860.92	1582.82
Revenue	$17,989.84	$13,742.95	$11,239.00	$9,662.06
Direct Cost	$2,600.87	$1,986.96	$1,625.00	$1,397.04
Tax	$7,386.71	$5,642.87	$4,614.72	$3,967.21
Net Cash Flow	$8,002.27	$6,113.11	$4,999.28	$4,297.81
Present Value	$7,930.89	$5,489.95	$4,031.99	$3,112.90
Net Present Value	$176,696.51			



Month	1	12	24	36
Oil Bbls	114.29	98.77	86.02	76.19
Gas MCF	449.72	325.69	234.19	171.88
Revenue	$5,452.32	$4,428.55	$3,634.51	$3,059.15
Direct Cost	$789.46	$641.33	$526.42	$443.15
Tax	$2,238.17	$1,817.87	$1,491.88	$1,255.68
Net Cash Flow	$2,424.68	$1,969.36	$1,616.21	$1,360.32
Present Value	$2,403.06	$1,768.60	$1,303.50	$985.28
Net Present Value	$56,277.19			

The graphs below show the oil and gas production to date for Shell, as well as the forecasted decline curve for both. We only show Shell's data on the grounds that it has the highest projected net value in three years.





Conclusions:

The opinion of Tri-State Consulting Company is that you should invest your hard earned money into the well offered by Shell. We believe the above charts, graphs, and statistics show our reasoning behind this result.

Tri-State Consulting Company is truly thankful to your company for selecting us to prepare this presentation for you. We hope you are pleased with our findings and will have the results from Shell's well that we project. We would be honored if you should ever need another service to call on us. We are more than happy to do it.