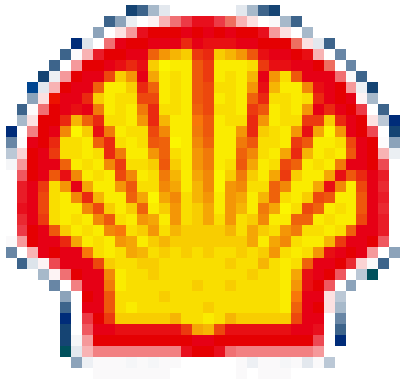
BOMBS CONSULTING

COMPANY



Brett Gleasman

Executive Summary

You have asked me to figure out which Oil and Gas Company you should invest your money into. I looked into three companies Shell, Exxon, and BP. Out of these three companies you should invest your money into BP oil and gas.

Introduction

In this report there might be many terms and variables that could be confusing. To start it off every company is given an API #, an API # is a value the distinctively identifies a Well/Company. With oil everything is in BBLS. BBLS stands blue barrels, which is the unit of measurement for oil production. With Gas everything is in MCF, MCF is the unit of measurement that is used for gas production.

Looking deeper into the report you might come across terms in the forecasted values table. First there is revenue, revenue is the amount of money made with out taking out the direct or taxes. Direct cost is the amount of money that the company has to pay to produce either one BBLS or one MCF. Tax is money that the government takes from the company. From the tax, revenue, and cost the next value that is found is the Net Cash Flow (NCF), this value is the amount of money that is made in future years of the well. Then from the NCF the present value is found, the present value is the amount of money that the NCF would be worth today taking out the interest rate. Interest rate is a percent that raises the value of a dollar.

The perfect hyperbolic curve is a line that predicts how oil or gas should be around when produced.

Methodology

The first equation that was used when we was the perfect hyperbolic curve equation: ***q = qi * (1 + b * di * t)^(-1 / b).*** The q stands for the perfect curve value, the qi is the starting point, t is the time, b is the decline exponent, while di stands for the initial decline. This equation was used to forecast the values for future years of oil and gas production.

Then we found out the net cash flow and present value. To do that we had to first find the revenue, to find that we took the number of either BBLS or MCF produced and multiplied that by how much it was sold for: ***revenue = BBLS/MCF * amount sold for.*** Then we had to find the cost, we did that by taking the number of BBLS or MCF produced and multiplied that by the cost for each BBLS or MCF: ***cost = BBLS/MCF * cost to produce.*** Then we had to find the tax that the government collects: ***tax = (revenue – cost) * tax rate.*** After we found the revenue, cost, and tax we could find the Net Cash Flow: ***NCF = revenue – cost – tax.*** Once we had the NCF we could find the present value: ***pv = (NCF) / ((1 + i)^n).*** The NCF is the net cash flow, i is the interest rate, and n is the number of periods or the month.

After we found out both the NCF and the PV we took those values and added them up to figure out how much total money they would make for your company.

Results and Discussion

These tables are constant for all of the wells.

	1st	2nd	3rd
Oil Price/BBLS	$ 29.40	$ 29.96	$ 30.80
Direct Cost/BBLS	$ 4.35	$ 4.35	$ 4.35
Tax Rate	48%	48%	48%
Interest Rate	1%	1%	1%

	1st	2nd	3rd
Gas Price/MCF	$ 6.67	$ 6.79	$ 6.99
Direct Cost/MCF	$ 4.35	$ 4.35	$ 4.35
Tax Rate	48%	48%	48%
Interest Rate	1%	1%	1%

BP – API # 05123123590000

For the BP Oil well we took the forecasted values from the perfect hyperbolic curve and forecasted out all of the Net cash flow and the Present value. We found these values by taking the number of BBLS or MCF that was produced and found out the revenue, then cost, tax, and finally found the NCF and Present Value. From these values we found out how much money would be made for the next three years. The present value tells you how much you will make this current date, while the Net Cash Flow tells you how much you will make over the next couple of years with inflation.

Oil

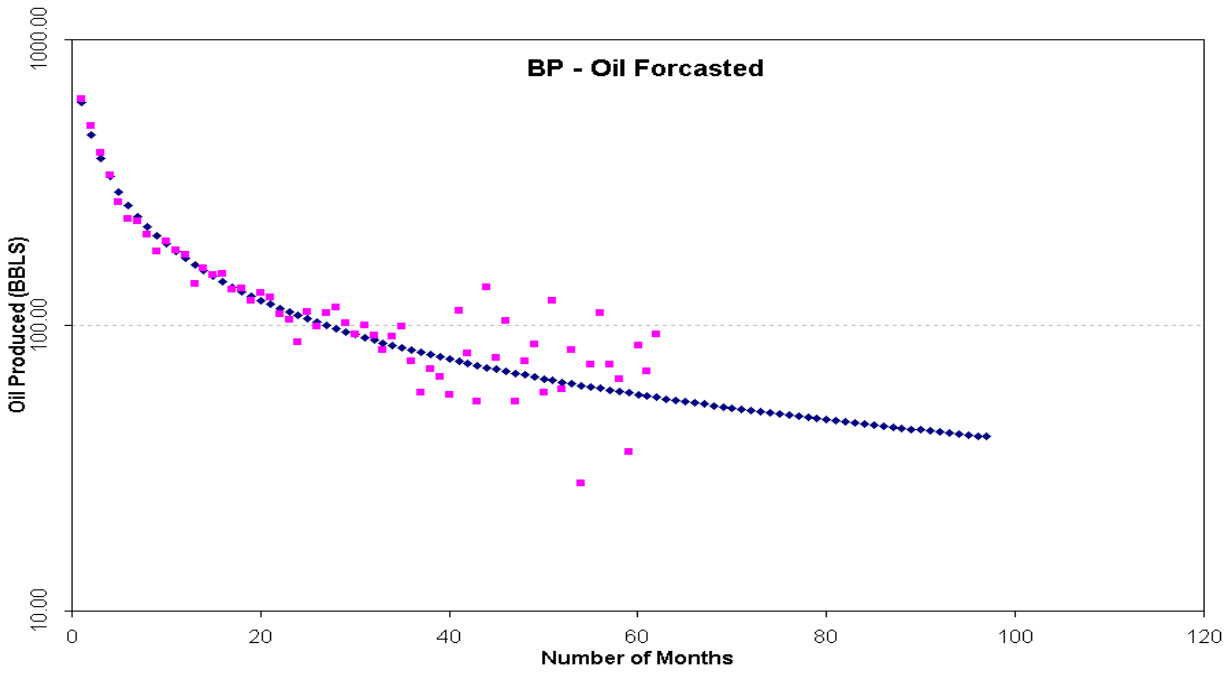
Months	Oil Produced	Net Cash Flow	Present Value	Months	Oil Produced	Net Cash Flow	Present Value	Months	Oil Produced	Net Cash Flow	Present Value
1	57.25	$ 745.73	$ 738.34	13	50.34	$ 670.43	$ 589.08	25	45.14	$ 620.89	$ 484.15
2	56.59	$ 737.10	$ 722.58	14	49.85	$ 663.92	$ 577.59	26	44.77	$ 615.71	$ 475.36
3	55.94	$ 728.71	$ 707.28	15	49.38	$ 657.57	$ 566.40	27	44.40	$ 610.63	$ 466.77
4	55.32	$ 720.54	$ 692.43	16	48.91	$ 651.36	$ 555.50	28	44.03	$ 605.65	$ 458.38
5	54.71	$ 712.59	$ 678.01	17	48.46	$ 645.29	$ 544.87	29	43.68	$ 600.76	$ 450.18
6	54.11	$ 704.85	$ 664.00	18	48.01	$ 639.36	$ 534.51	30	43.33	$ 595.97	$ 442.16
7	53.53	$ 697.30	$ 650.38	19	47.57	$ 633.55	$ 524.41	31	42.99	$ 591.27	$ 434.33
8	52.97	$ 689.94	$ 637.15	20	47.15	$ 627.86	$ 514.56	32	42.65	$ 586.65	$ 426.68
9	52.42	$ 682.77	$ 624.28	21	46.73	$ 622.30	$ 504.95	33	42.32	$ 582.13	$ 419.19
10	51.88	$ 675.77	$ 611.77	22	46.32	$ 616.85	$ 495.58	34	42.00	$ 577.68	$ 411.87
11	51.35	$ 668.94	$ 599.59	23	45.92	$ 611.52	$ 486.43	35	41.68	$ 573.31	$ 404.71
12	50.84	$ 662.28	$ 587.74	24	45.53	$ 606.29	$ 477.50	36	41.37	$ 569.03	$ 397.71

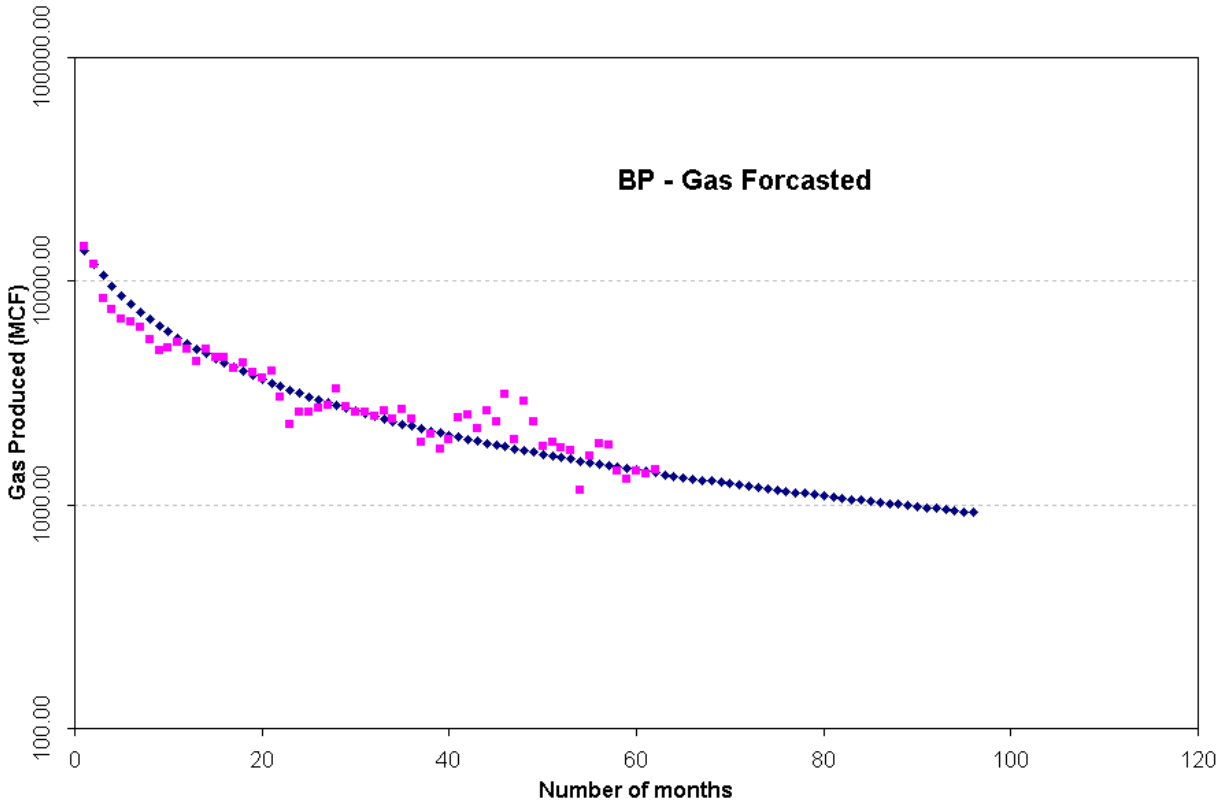
	Net Cash Flow	Present Value
Totals:	$23,202.50	$ 19,556.39

Gas

Month	MCF	Net Cash Flow	Present Value	Month	MCF	Net Cash Flow	Present Value	Month	MCF	Net Cash Flow	Present Value
1	906.00	$ 2,834.97	$ 2,806.90	13	812.18	$ 2,595.04	$ 2,280.16	25	735.97	$ 2,424.43	$ 1,890.50
2	897.36	$ 2,807.94	$ 2,752.61	14	805.23	$ 2,572.84	$ 2,238.27	26	730.26	$ 2,405.62	$ 1,857.26
3	888.89	$ 2,781.42	$ 2,699.62	15	798.40	$ 2,551.01	$ 2,197.31	27	724.64	$ 2,387.10	$ 1,824.71
4	880.57	$ 2,755.40	$ 2,647.88	16	791.69	$ 2,529.55	$ 2,157.26	28	719.10	$ 2,368.86	$ 1,792.84
5	872.41	$ 2,729.86	$ 2,597.37	17	785.08	$ 2,508.45	$ 2,118.08	29	713.65	$ 2,350.90	$ 1,761.63
6	864.40	$ 2,704.79	$ 2,548.03	18	778.59	$ 2,487.70	$ 2,079.76	30	708.28	$ 2,333.21	$ 1,731.06
7	856.53	$ 2,680.17	$ 2,499.84	19	772.20	$ 2,467.29	$ 2,042.27	31	702.99	$ 2,315.78	$ 1,701.12
8	848.81	$ 2,656.00	$ 2,452.77	20	765.92	$ 2,447.21	$ 2,005.60	32	697.78	$ 2,298.61	$ 1,671.79
9	841.22	$ 2,632.26	$ 2,406.78	21	759.73	$ 2,427.46	$ 1,969.71	33	692.64	$ 2,281.70	$ 1,643.06
10	833.77	$ 2,608.94	$ 2,361.84	22	753.65	$ 2,408.02	$ 1,934.59	34	687.58	$ 2,265.03	$ 1,614.90
11	826.45	$ 2,586.03	$ 2,317.92	23	747.66	$ 2,388.89	$ 1,900.22	35	682.59	$ 2,248.60	$ 1,587.32
12	819.25	$ 2,563.52	$ 2,275.00	24	741.77	$ 2,370.06	$ 1,866.58	36	677.68	$ 2,232.41	$ 1,560.29

	Net Cash Flow	Present Value
Totals:	$ 90,007.09	$ 75,792.87


BP - Oil Forcasted
Oil Produced (BBLS)
1000.00
100.00
10.00
0
20
40
60
80
100
120
Number of Months


BP - Gas Forcasted
Gas Produced (MCF)
100000.00
10000.00
1000.00
100.00
0
20
40
60
80
100
120
Number of months

Shell – API # 5123111130000

For shell we used the same concept as in BP but with different data. We again took the perfect hyperbolic curve and the values from it to predict how much money would be made over the next three years. We found these values to be less than that of BP, but ranked 2nd overall.

Oil

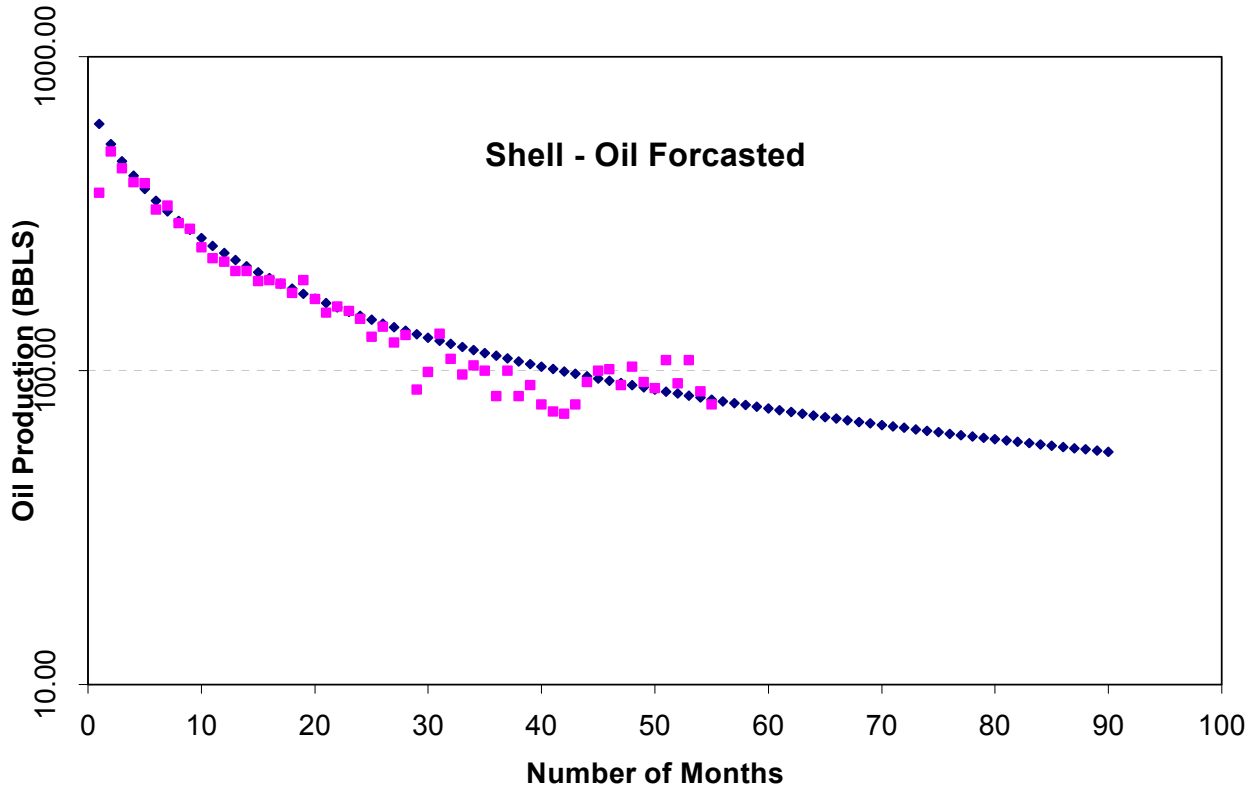
Months	Oil Produced	Net Cash Flow	Present Value	Months	Oil Produced	Net Cash Flow	Present Value	Months	Oil Produced	Net Cash Flow	Present Value
1	35.34	$ 460.37	$ 455.81	13	32.21	$ 428.89	$ 376.85	25	29.56	$ 406.56	$ 317.02
2	35.06	$ 456.68	$ 447.68	14	31.97	$ 425.73	$ 370.37	26	29.36	$ 403.78	$ 311.74
3	34.78	$ 453.05	$ 439.72	15	31.73	$ 422.61	$ 364.02	27	29.16	$ 401.04	$ 306.56
4	34.51	$ 449.47	$ 431.93	16	31.50	$ 419.53	$ 357.79	28	28.96	$ 398.33	$ 301.47
5	34.23	$ 445.94	$ 424.30	17	31.28	$ 416.50	$ 351.68	29	28.77	$ 395.66	$ 296.48
6	33.97	$ 442.47	$ 416.82	18	31.05	$ 413.51	$ 345.70	30	28.57	$ 393.02	$ 291.59
7	33.71	$ 439.04	$ 409.50	19	30.83	$ 410.55	$ 339.83	31	28.39	$ 390.41	$ 286.79
8	33.45	$ 435.67	$ 402.33	20	30.61	$ 407.64	$ 334.08	32	28.20	$ 387.84	$ 282.08
9	33.19	$ 432.35	$ 395.31	21	30.39	$ 404.77	$ 328.44	33	28.01	$ 385.30	$ 277.46
10	32.94	$ 429.07	$ 388.43	22	30.18	$ 401.93	$ 322.91	34	27.83	$ 382.79	$ 272.92
11	32.69	$ 425.84	$ 381.69	23	29.97	$ 399.13	$ 317.49	35	27.65	$ 380.31	$ 268.47
12	32.45	$ 422.66	$ 375.09	24	29.76	$ 396.37	$ 312.17	36	27.47	$ 377.87	$ 264.10

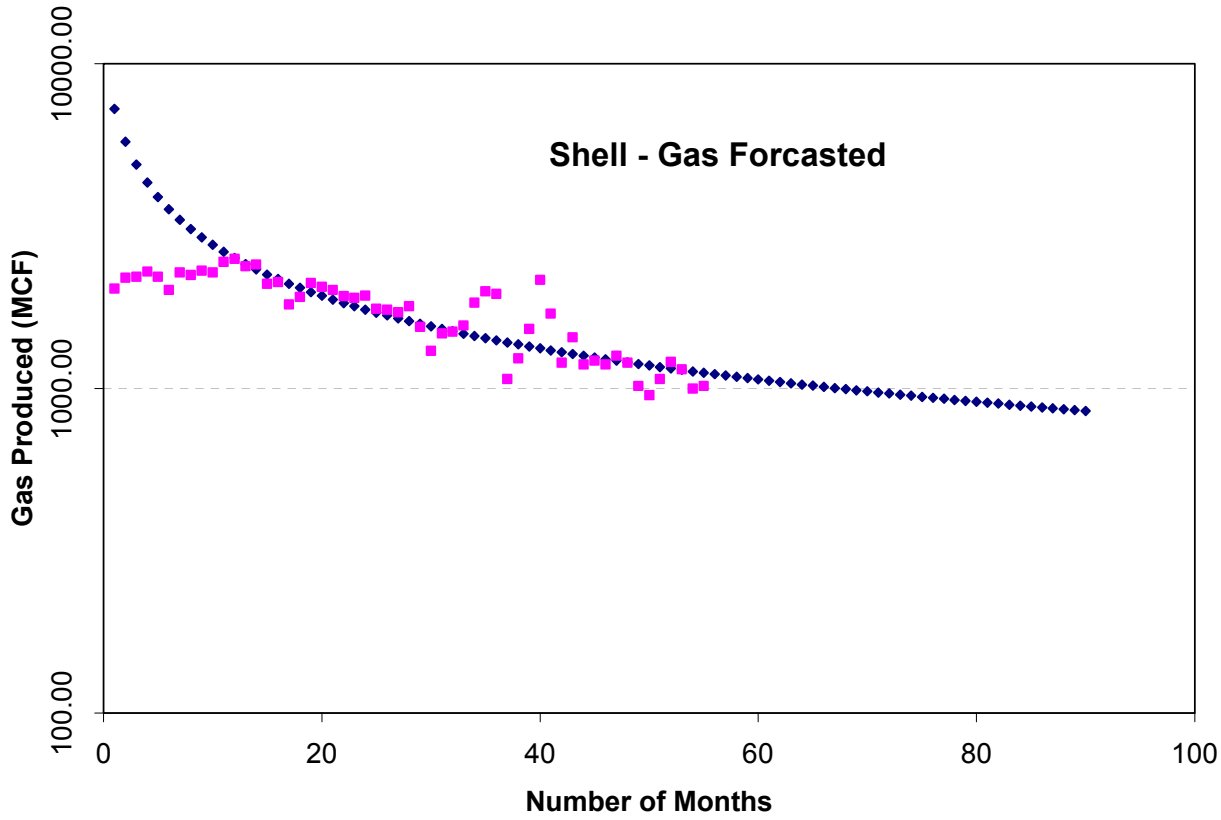
	Net Cash Flow	Present Value
Totals:	$ 14,942.69	$ 12,566.62

Gas

Month	MCF	Net Cash Flow	Present Value	Month	MCF	Net Cash Flow	Present Value	Month	MCF	Net Cash Flow	Present Value
1	560.95	$ 676.00	$ 669.31	13	537.14	$ 682.78	$ 599.93	25	516.12	$ 707.19	$ 551.45
2	558.84	$ 673.46	$ 660.19	14	535.29	$ 680.43	$ 591.95	26	514.48	$ 704.94	$ 544.25
3	556.76	$ 670.95	$ 651.22	15	533.46	$ 678.10	$ 584.08	27	512.85	$ 702.71	$ 537.16
4	554.70	$ 668.47	$ 642.39	16	531.64	$ 675.79	$ 576.33	28	511.24	$ 700.51	$ 530.17
5	552.66	$ 666.01	$ 633.69	17	529.85	$ 673.51	$ 568.70	29	509.65	$ 698.32	$ 523.28
6	550.65	$ 663.59	$ 625.13	18	528.07	$ 671.26	$ 561.18	30	508.07	$ 696.15	$ 516.49
7	548.66	$ 661.19	$ 616.70	19	526.32	$ 669.02	$ 553.78	31	506.50	$ 694.01	$ 509.80
8	546.68	$ 658.81	$ 608.40	20	524.57	$ 666.81	$ 546.48	32	504.95	$ 691.88	$ 503.21
9	544.73	$ 656.46	$ 600.23	21	522.85	$ 664.62	$ 539.29	33	503.41	$ 689.77	$ 496.71
10	542.81	$ 654.13	$ 592.18	22	521.14	$ 662.45	$ 532.21	34	501.89	$ 687.68	$ 490.30
11	540.90	$ 651.83	$ 584.25	23	519.45	$ 660.30	$ 525.23	35	500.38	$ 685.61	$ 483.98
12	539.01	$ 649.56	$ 576.45	24	517.78	$ 658.17	$ 518.35	36	498.88	$ 683.56	$ 477.76

	Net Cash Flow	Present Value
Totals:	$ 24,336.03	$ 20,322.18


Shell - Oil Forcasted
Oil Production (BBLS)
1000.00
100.00
10.00
0
10
20
30
40
50
60
70
80
90
100
Number of Months


Shell - Gas Forcasted
Gas Produced (MCF)
10000.00
1000.00
100.00
0
20
40
60
80
100
Number of Months

Exxon – API # 5123133540000

We then took the values for Exxon and did the same that we did with the other two wells. We found out that the values for the BP well were the highest out of all the wells. Exxon ranked 3rd out of the three wells.

Oil

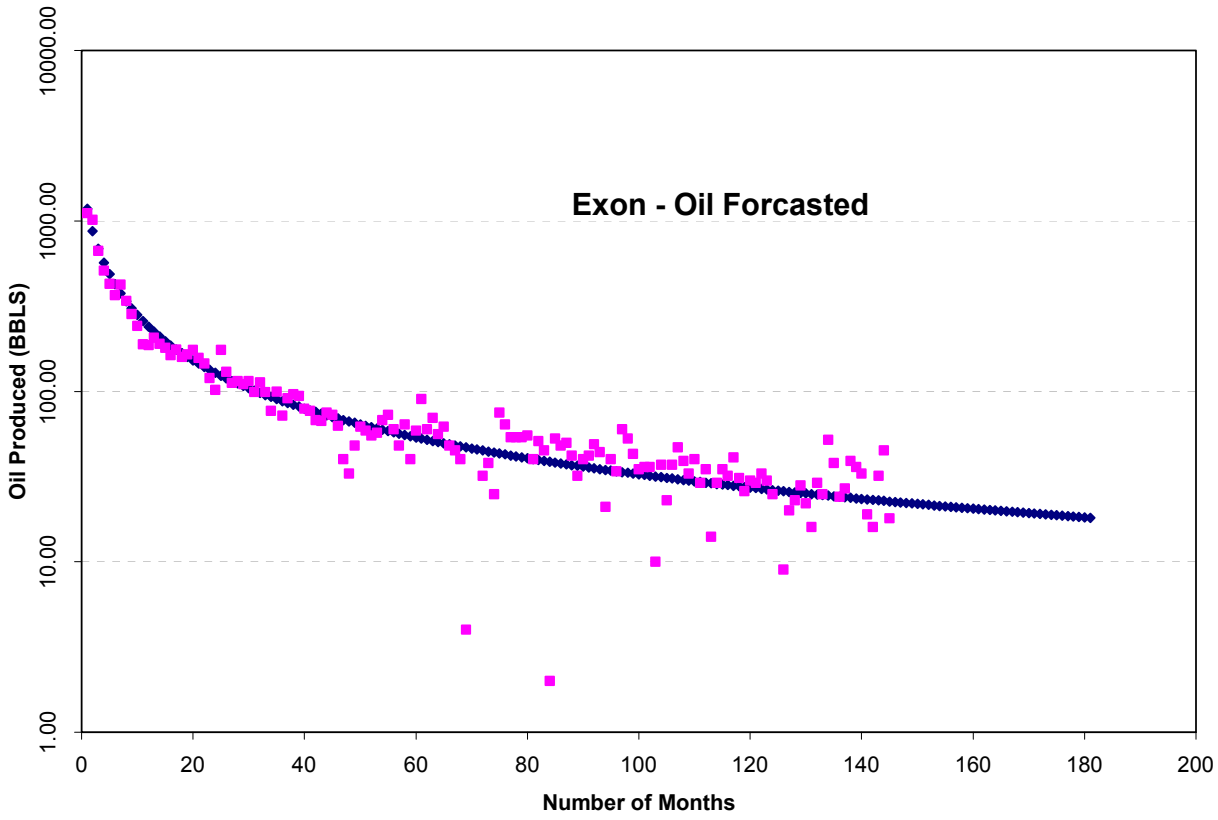
Months	Oil Produced	Net Cash Flow	Present Value	Months	Oil Produced	Net Cash Flow	Present Value	Months	Oil Produced	Net Cash Flow	Present Value
1	22.14	$ 288.43	$ 285.57	13	20.32	$ 270.66	$ 237.82	25	18.77	$ 258.17	$ 201.31
2	21.98	$ 286.30	$ 280.66	14	20.19	$ 268.82	$ 233.86	26	18.65	$ 256.53	$ 198.05
3	21.82	$ 284.21	$ 275.85	15	20.05	$ 266.99	$ 229.97	27	18.53	$ 254.91	$ 194.85
4	21.66	$ 282.14	$ 271.13	16	19.91	$ 265.19	$ 226.16	28	18.42	$ 253.30	$ 191.71
5	21.50	$ 280.10	$ 266.51	17	19.78	$ 263.41	$ 222.42	29	18.30	$ 251.72	$ 188.62
6	21.35	$ 278.09	$ 261.97	18	19.65	$ 261.66	$ 218.75	30	18.19	$ 250.16	$ 185.60
7	21.20	$ 276.11	$ 257.53	19	19.52	$ 259.93	$ 215.15	31	18.08	$ 248.61	$ 182.62
8	21.05	$ 274.15	$ 253.17	20	19.39	$ 258.22	$ 211.62	32	17.96	$ 247.08	$ 179.70
9	20.90	$ 272.22	$ 248.90	21	19.26	$ 256.53	$ 208.15	33	17.85	$ 245.57	$ 176.84
10	20.75	$ 270.31	$ 244.71	22	19.14	$ 254.86	$ 204.75	34	17.75	$ 244.08	$ 174.02
11	20.61	$ 268.43	$ 240.60	23	19.01	$ 253.21	$ 201.41	35	17.64	$ 242.60	$ 171.26
12	20.47	$ 266.58	$ 236.57	24	18.89	$ 251.58	$ 198.13	36	17.53	$ 241.14	$ 168.54

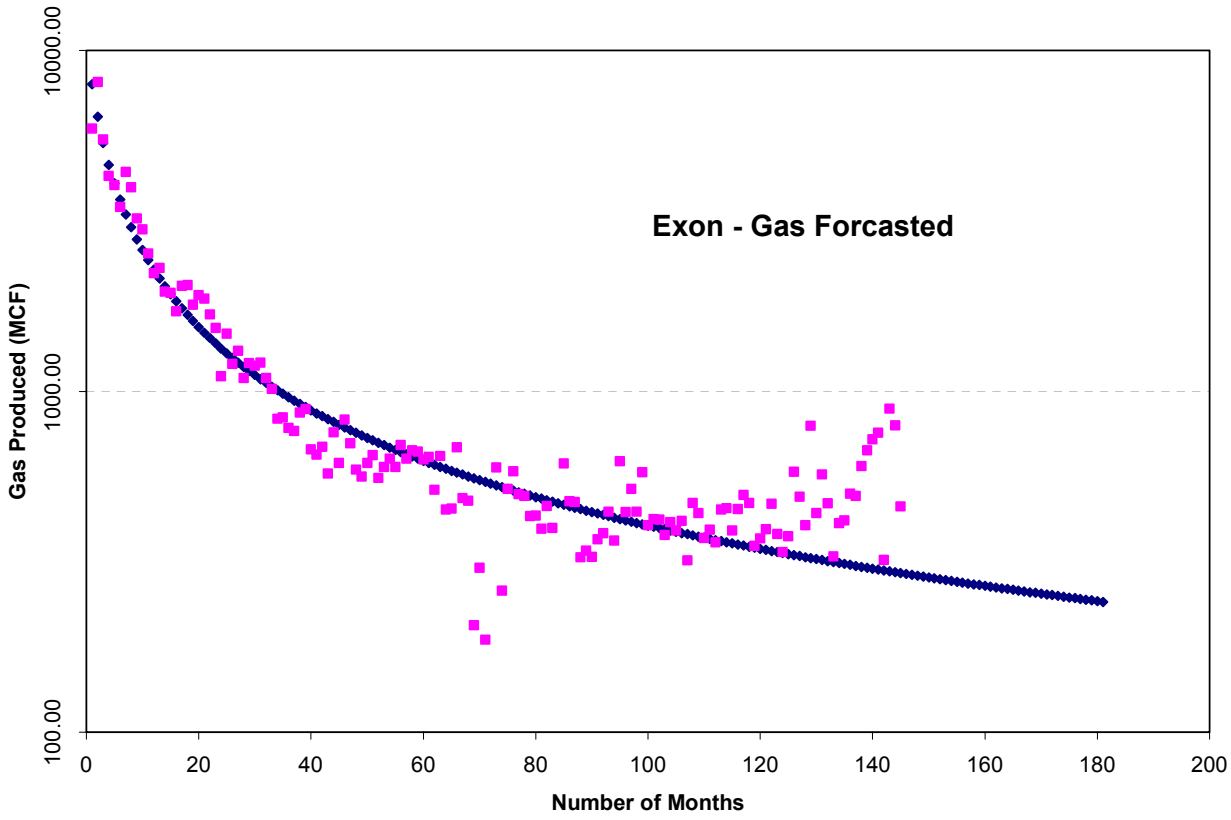
	Net Cash Flow	Present Value
Totals:	$ 9,451.98	$ 7,944.51

Gas

Month	MCF	Net Cash Flow	Present Value	Month	MCF	Net Cash Flow	Present Value	Month	MCF	Net Cash Flow	Present Value
1	291.03	$ 910.66	$ 901.64	13	271.69	$ 868.09	$ 762.76	25	254.90	$ 839.69	$ 654.76
2	289.31	$ 905.27	$ 887.43	14	270.20	$ 863.33	$ 751.07	26	253.60	$ 835.41	$ 644.97
3	287.60	$ 899.94	$ 873.48	15	268.73	$ 858.63	$ 739.58	27	252.31	$ 831.17	$ 635.35
4	285.92	$ 894.68	$ 859.77	16	267.28	$ 853.98	$ 728.29	28	251.04	$ 826.98	$ 625.89
5	284.26	$ 889.49	$ 846.32	17	265.84	$ 849.39	$ 717.20	29	249.78	$ 822.83	$ 616.58
6	282.63	$ 884.36	$ 833.11	18	264.42	$ 844.85	$ 706.31	30	248.54	$ 818.73	$ 607.43
7	281.01	$ 879.30	$ 820.14	19	263.01	$ 840.35	$ 695.59	31	247.30	$ 814.67	$ 598.44
8	279.41	$ 874.29	$ 807.39	20	261.62	$ 835.91	$ 685.07	32	246.08	$ 810.65	$ 589.59
9	277.83	$ 869.35	$ 794.88	21	260.25	$ 831.52	$ 674.72	33	244.88	$ 806.67	$ 580.89
10	276.26	$ 864.46	$ 782.59	22	258.89	$ 827.18	$ 664.55	34	243.68	$ 802.74	$ 572.33
11	274.72	$ 859.63	$ 770.51	23	257.54	$ 822.89	$ 654.56	35	242.50	$ 798.85	$ 563.92
12	273.20	$ 854.86	$ 758.65	24	256.21	$ 818.64	$ 644.73	36	241.33	$ 794.99	$ 555.64

	Net Cash Flow	Present Value
Totals:	$ 30,504.43	$ 25,606.13


Exon - Oil Forcasted
Oil Produced (BBLS)
10000.00
1000.00
100.00
10.00
1.00
0
20
40
60
80
100
120
140
160
180
200
Number of Months


Exon - Gas Forcasted
Gas Produced (MCF)
10000.00
1000.00
100.00
0
20
40
60
80
100
120
140
160
180
200
Number of Months

Conclusion

You have hired me to figure out which well you should invest your money in. I have taken the data that was presented and forecasted out what each well would produce for the next three years to see which company would produce the most amount of Both gas and oil. I was able to come up with the conclusion that your company should invest its money into the BP well. This company showed that it produced the most amounts of oil and gas for the next three years, which will cause for greater profits for your company. Also the carts show the project amounts that you will make.