

An Example Oil Field

| Sensitivities | | | 1 | 0% |
|-----------------------------|---|--|---|------|
| Oil Price | 1 | | 2 | +15% |
| Production | 1 | | 3 | +30% |
| Operating Costs & Transport | 1 | | 4 | -15% |
| Capex | 1 | | 5 | -30% |

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|---------|---|----------|----------|----------|----------|
| Revenues | 0 | 65 | 23 | 14 | 10 | 8 |
| Operating Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Transport Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Operating Taxes | 0 | -9 | -3 | -2 | -1 | -1 |
| EBITDA | 0 | 56 | 20 | 12 | 9 | 7 |
| Depreciation | 0 | 0 | 0 | 0 | 0 | 0 |
| EBIT | 0 | 56 | 20 | 12 | 9 | 7 |
| Tax on EBIT | 0 | -11.2545 | -3.93908 | -2.36345 | -1.77258 | -1.32944 |
| <i>Corporate Tax Rate</i> | 20% | | | | | |
| Post tax cashflow | 0 | 45 | 16 | 9 | 7 | 5 |
| CAPEX | 0 | 0 | 0 | 0 | 0 | 0 |
| Free Cashflow (FCF) | 0 | 45 | 16 | 9 | 7 | 5 |
| Cumulative FCF | 0 | 45 | 61 | 70 | 77 | 83 |
| Discount Rate | 0.0% | | | | | |
| Discount Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Discounted Cashflow (DCF) | 0 | 45 | 16 | 9 | 7 | 5 |
| NPV (\$mm) | 146 | | | | | |
| IRR (%) | #ČÍSLO! | | | | | |
| Payback (years) | | When does cumulative cashflow turn positive | | | | |
| Excel Calculation | \$82 | | | | | |
| <i>Breakeven Oil Price Calculation</i> | 60.00 | <i>After Goal Seek Function in Data:What If</i> | | | | |
| Alternative NPV (terminal value) | | | | | | |
| FCF for 10 years | 0 | 45 | 16 | 9 | 7 | 5 |
| Terminal Value | | | | | | |

| | | | | | | |
|------------------------|---------|----|----|---|---|---|
| Implied FCF | 0 | 45 | 16 | 9 | 7 | 5 |
| Implied DCF | 0 | 45 | 16 | 9 | 7 | 5 |
| NPV | 146 | | | | | |
| Plus Cash | 0 | | | | | |
| Less Debt | 0 | | | | | |
| Total NPV | 146 | | | | | |
| IRR | #ČÍSLO! | | | | | |
| <i>EBITDA Multiple</i> | 7 | | | | | |

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Lifting Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Transport | 0 | 0 | 0 | 0 | 0 | 0 |
| Operating Taxes | 0 | 9 | 3 | 2 | 1 | 1 |
| Corporate Tax | 0 | 11 | 4 | 2 | 2 | 1 |
| Free Cashflow | 0 | 45 | 16 | 9 | 7 | 5 |
| Capex | 0 | 0 | 0 | 0 | 0 | 0 |

Base
High
Upside
Low
Downside

Results
NPV 146 US\$mm
IRR #ČÍSLO! %

| 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|------|------|------|------|------|------|------|------|------|
| 7 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 |
| 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 6 | 6 | 6 | 6 | 6 | 5 | 5 | 5 |
| -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 |
| 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 |
| 88 | 93 | 98 | 102 | 107 | 111 | 116 | 120 | 124 |
| 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 5 | 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 5 | | | | |

| 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|------|------|------|------|------|------|------|------|------|
| 6 | 6 | 5 | 5 | 5 | 5 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 |
| 5 | 5 | 5 | 4 | 4 | 4 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 5 | 5 | 4 | 4 | 4 | 0 | 0 | 0 |
| -1 | -1 | -1 | -1 | -1 | -1 | 0 | 0 | 0 |
| 4 | 4 | 4 | 4 | 3 | 3 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 4 | 4 | 4 | 3 | 3 | 0 | 0 | 0 |
| 128 | 132 | 135 | 139 | 142 | 146 | 146 | 146 | 146 |
| 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 4 | 4 | 4 | 4 | 3 | 3 | 0 | 0 | 0 |



Domestic Oil Price

| | | | | | | |
|------------|------|------|------|------|------|------|
| Base Case | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| Scenario 2 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 |
| Scenario 3 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| Scenario 4 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Scenario 5 | 21.0 | 21.0 | 21.0 | 21.0 | 21.0 | 21.0 |

Domestic Gas Price

| | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|
| Base Case | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scenario 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scenario 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scenario 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scenario 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Export Gas Price

| | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|
| Base Case | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scenario 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scenario 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scenario 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Scenario 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| | | | | | | | |
|------|------|------|------|------|------|------|------|
| 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| 34.5 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 |
| 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 | 39.0 |
| 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| 21.0 | 21.0 | 21.0 | 21.0 | 21.0 | 21.0 | 21.0 | 21.0 |

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

2040

0.0

0.0

0.0

30

60

0

0

0

0.0

0.0

0.0

0

0

0

0

0

0

0.0

0.0

+15%

0.0

+30%

0.0

-15%

0.0

-30%

0.0

0.0

+15%

0.0

+30%

0.0

-15%

0.0

-30%

60.0

69.0

78.0

51.0

42.0

30.0
34.5
39.0
25.5
21.0

0.0
0.0
0.0
0.0
0.0

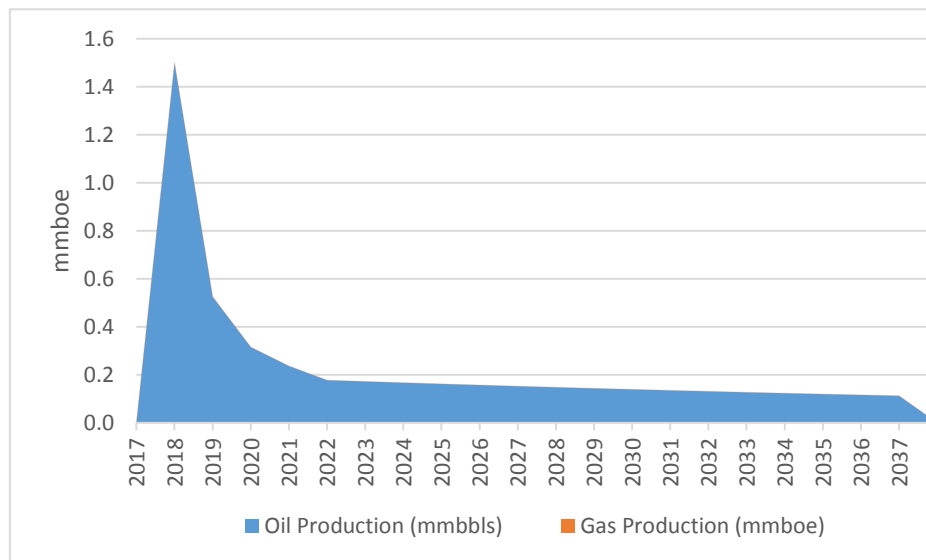
0.0
0.0
0.0
0.0
0.0

Production

| | Oil | | | | |
|--------------------------|-------------|------|-----------|-----|----|
| | mmbbls | kbpd | | | |
| Resources | 100 | | | | |
| Recovery Factor | 5% | | | | |
| Reserves | 5 | | | | |
| Start date | 5 years | | Peak as % | | |
| | after first | | Reserves | | |
| | capex | | | | |
| Peak Production (mmbbls) | 1.5 | 4 | 30% | | |
| Time to Peak (yrs) | 0 | | | | |
| Length of Peak (yrs) | 0 | | | | |
| Decline rate (%) | 65% | 40% | 25% | 25% | 3% |

| | First capex | | | | | |
|-----------------------------------|-------------|------|------|------|------|------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Oil production | | 1.50 | 0.53 | 0.32 | 0.24 | 0.18 |
| Total oil produced to 2040 | 4.9 | | | | | |
| Barrels per day | | 4110 | 1438 | 863 | 647 | 485 |
| Gas Production | | | | | | |
| Total gas produced to 2040 | 0.0 | | | | | |

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------------------------|------|------|------|------|------|------|
| Oil Production (mmbbls) | 0.0 | 1.5 | 0.5 | 0.3 | 0.2 | 0.2 |
| Gas Production (mmboe) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total (mmboe) | 0.0 | 1.5 | 0.5 | 0.3 | 0.2 | 0.2 |



Production Scenarios

Total Produced

Oil Production Scenarios

| | |
|---|------|
| 1 | 4.85 |
| 2 | 5.58 |
| 3 | 6.31 |
| 4 | 4.13 |
| 5 | 3.40 |

Gas Production Scenarios

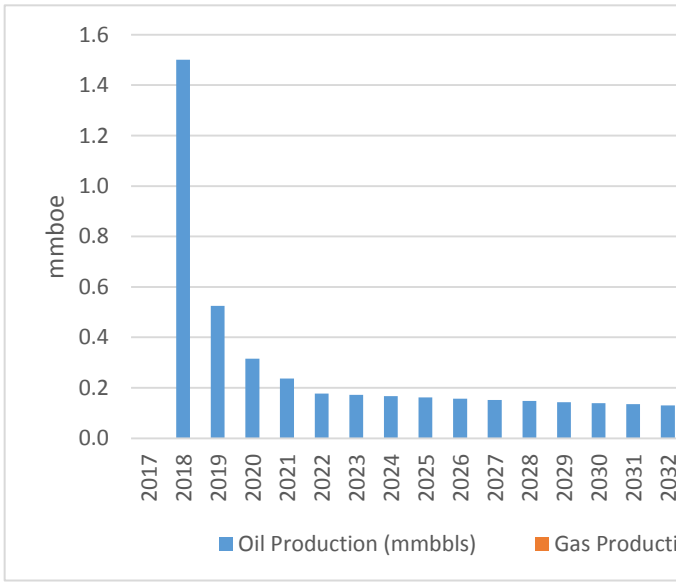
| | |
|---|------|
| 1 | 0.00 |
| 2 | 0.00 |
| 3 | 0.00 |
| 4 | 0.00 |
| 5 | 0.00 |

Gas
 Bcf
 0
 5 years
 after first
 capex
 0
 4
 0
 65%

Total
 5
 0

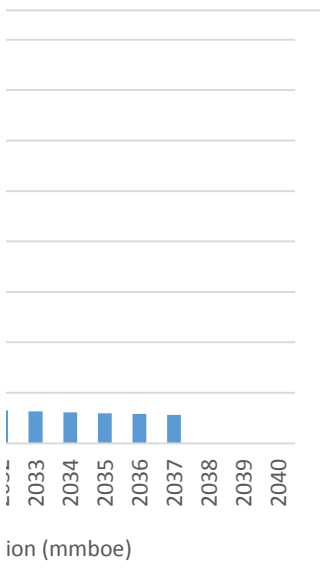
| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|--|------|------|------|------|------|------|------|------|------|
| | 0.17 | 0.17 | 0.16 | 0.16 | 0.15 | 0.15 | 0.14 | 0.14 | 0.13 |
| | 471 | 457 | 443 | 430 | 417 | 404 | 392 | 380 | 369 |
| | | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |
|--|------|------|------|------|------|------|------|------|------|
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |



| 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|------|------|------|------|------|------|------|------|------|
| 0.13 | 0.13 | 0.12 | 0.12 | 0.12 | 0.11 | | | |
| 358 | 347 | 337 | 327 | 317 | 307 | 0 | 0 | 0 |
| 0.0 | | | | | | | | |

| 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|------|------|------|------|------|------|------|------|------|
| 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 |



Capital Expenditure

| | | |
|---------------------|------|---|
| Reserves | 5 | |
| Capex per bbl | 0.00 | |
| Total capex | 0 | |
| % before first oil | 75% | 0 |
| % first oil to peak | 20% | 0 |
| Maintenance capex | 5% | 0 |

| US\$mm | First Capex | | | | | |
|-------------------|-------------|------|------|------|------|------|
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Before first oil | 0 | | | | | |
| First oil to peak | 0 | | | | | |
| Maintenance | 0 | | | | | |
| Total | 0 | | | | | |

Sensitivities

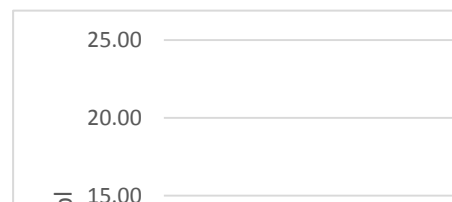
| | | | | | | |
|------|---|---|---|---|---|---|
| 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15% | | | | | | |
| +30% | | | | | | |
| -15% | | | | | | |
| -30% | | | | | | |

Field Comparisons

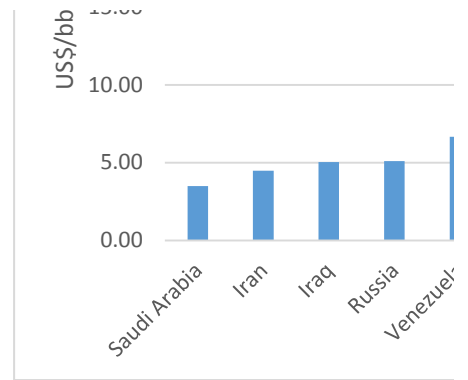
| | Cost /bbl | Capex | Reserves | Peak Prod | Peak Prod |
|-------------------------------|-----------|--------|----------|-----------|-----------|
| | US\$/bbl | US\$mm | mmbbls | kbpd | mmbbls |
| Kashagan (Kazakhstan) | 10.46 | 136000 | 13000 | 1500 | 547.5 |
| ACG (Azerbaijan) | 4.00 | 20000 | 5000 | 620 | 226.3 |
| Thunderhorse (Gulf of Mexico) | 5.00 | 5000 | 1000 | 250 | 91.25 |
| Novy Port (Russia onshore) | 3.25 | 4500 | 1385 | 161 | 58.64 |
| Ghawar (Saudi) | 3.50 | 248500 | 71000 | 5000 | 1825 |
| Lula (Brazil deep water) | 9.04 | 75000 | 8300 | 500 | 182.5 |

Global Comparisons

| | Capex US\$/bbl |
|--------------|-------------------|
| Saudi Arabia | 3.50 |
| Iran | 4.48 |
| Iraq | 5.03 |
| Russia | 5.10 |



| | |
|-----------|-------|
| Venezuela | 6.66 |
| US shale | 7.56 |
| Indonesia | 7.65 |
| US conv | 7.70 |
| Canada | 9.69 |
| Nigeria | 13.10 |
| Norway | 13.76 |
| Brazil | 16.09 |
| UK | 22.67 |

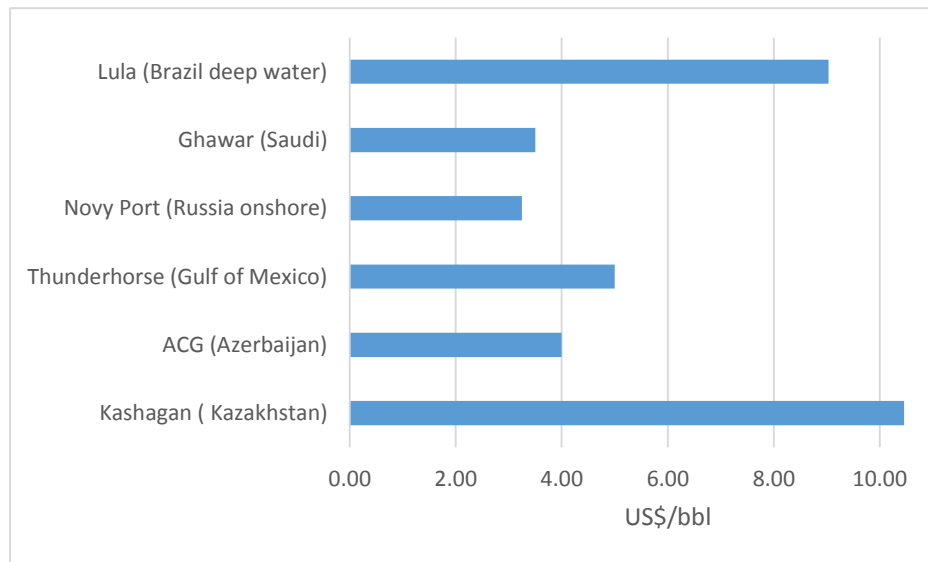


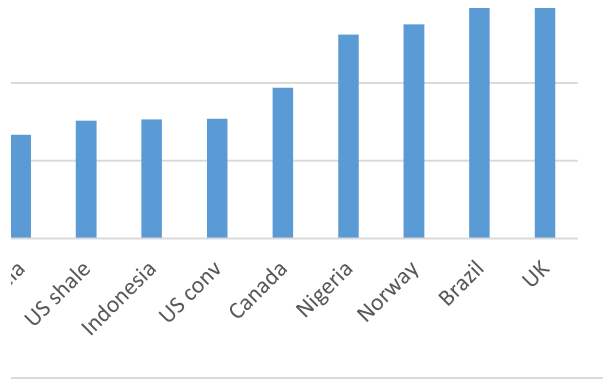
| | | | | | | | | | |
|-----------|------|------|------|----------|------|------|------|------|------|
| First Oil | | | | Peak Oil | | | | | |
| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Capex/
peak bbl
US\$/bbl

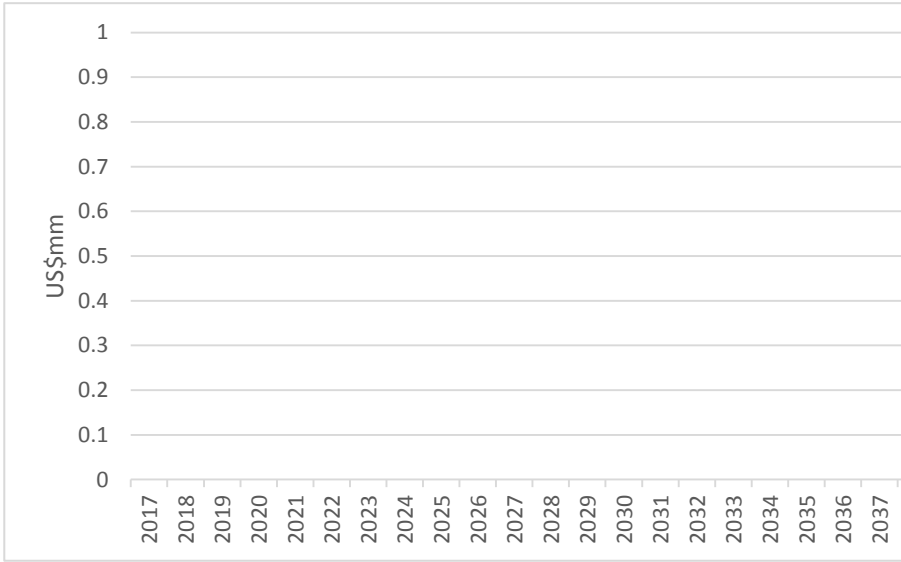
248
88
55
77
136
411

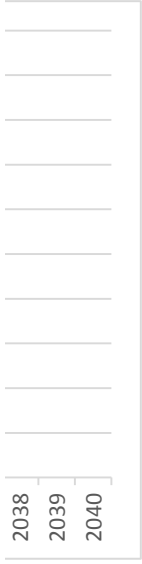




2032 2033 2034 2035 2036 2037 2038 2039 2040

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |





Depreciation

Straight Line

| | |
|------------------------------|----|
| Total Capex | 0 |
| Years of Production | 20 |
| Annual Depreciation (US\$mm) | 0 |

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------------------|----------|----------|----------|----------|----------|----------|
| Depreciation | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Production</i> | <i>0</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> | <i>1</i> |
| Total | 0 | | | | | |

Unit of Production

| | |
|-------------------------|------------|
| Total Reserves | |
| Total Produced | |
| Total Capex | |
| Depreciation per barrel | 0.00 ##### |

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------------|------|------|------|------|------|------|
| Depreciation | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | | | | | |

| | | | | | | | |
|----------------|-----|-----|-----|-----|-----|-----|-----|
| Gas (US\$mm) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total (US\$mm) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Sensitivities

| | |
|---|------|
| 1 | 0.00 |
| 2 | +15% |
| 3 | +30% |
| 4 | -15% |
| 5 | -30% |

2024

2025

2026

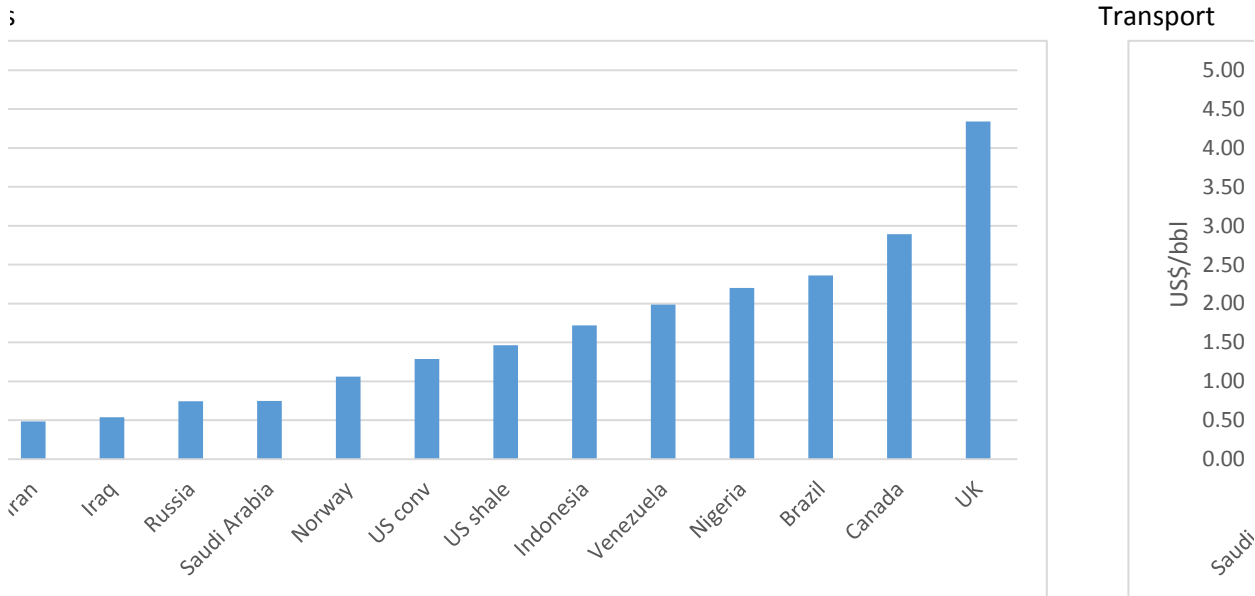
2027

2028

2029

2030

2031



2024

2025

2026

2027

2028

2029

2030

2031

0.0

0.0

0.0

0.0

0.0

0.0

0.0

0.0

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

2032

2033

2034

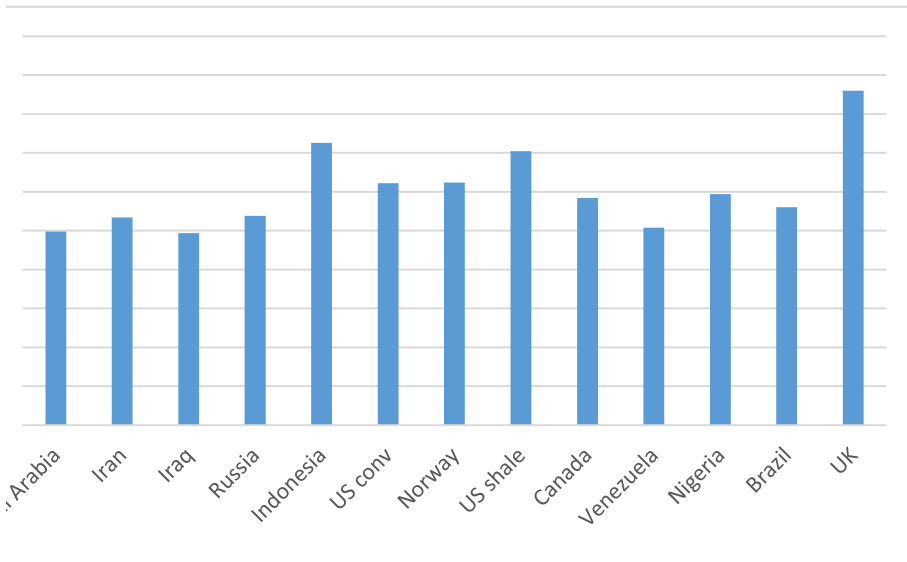
2035

2036

2037

2038

2039



2032

0.0

2033

0.0

2034

0.0

2035

0.0

2036

0.0

2037

0.0

2038

0.0

2039

0.0

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

2040

2040
0.0

0.0

0.0

Operating Taxes

Oil Tax

| | | |
|-------------|---------|-------------------|
| Export Tax | Sliding | of export barrels |
| Royalty | 5.0% | of oil revenues |
| Other taxes | 1.0% | of total revenues |

| | | | | | | |
|------------------|----|----|----|----|----|----|
| Export Oil Price | 60 | 60 | 60 | 60 | 60 | 60 |
|------------------|----|----|----|----|----|----|

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------------|------|------|------|------|------|------|
| Export Tax | 0.0 | 5.1 | 1.8 | 1.1 | 0.8 | 0.6 |
| Royalty | 0.0 | 3.3 | 1.1 | 0.7 | 0.5 | 0.4 |
| Other | 0.0 | 0.7 | 0.2 | 0.1 | 0.1 | 0.1 |
| Total | 0 | 9.0 | 3.1 | 1.9 | 1.4 | 1.1 |

Export Tax

| | | |
|---------------|-----|---------------------|
| Cut-off point | 30 | US\$/bbl |
| Tax | 25% | above cut-off point |

| | | | | | | |
|---------------------|-----|-----|-----|-----|-----|-----|
| Export Tax (\$/bbl) | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 |
|---------------------|-----|-----|-----|-----|-----|-----|

Gas Tax

| | | |
|------------|-----|-----------------|
| Export Tax | 30% | export revenues |
| Royalty | 0.5 | US\$/mcf |

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-----------------------|------|------|------|------|------|------|
| Export Tax | | | | | | |
| Royalty | | | | | | |
| Total | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Operating Taxes | 0 | 9 | 3 | 2 | 1 | 1 |
| Total US\$/boe | | | | | | |

Gross Taxes US\$/bbl

| | |
|--------------|-------|
| Saudi Arabia | 0 |
| Iran | 0 |
| Iraq | 0.91 |
| Russia | 8.44 |
| Indonesia | 1.55 |
| US conv | 5.03 |
| Norway | 0.19 |
| US shale | 6.42 |
| Canada | 2.48 |
| Venezuela | 10.48 |
| Nigeria | 4.11 |

Brazil
UK

6.66
0

60 60 60 60 60 60 60 60 60

| 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.0 | 0.0 | 0.0 |
| 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 |
| 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 |

7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5

| 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| 5.99 | 5.99 | 5.99 | 5.99 | 5.99 | 5.99 | ##### | ##### | ##### |

WACC Calculation

Risk Free Rate

Corporate Interest Rate

Equity market return

Company Beta

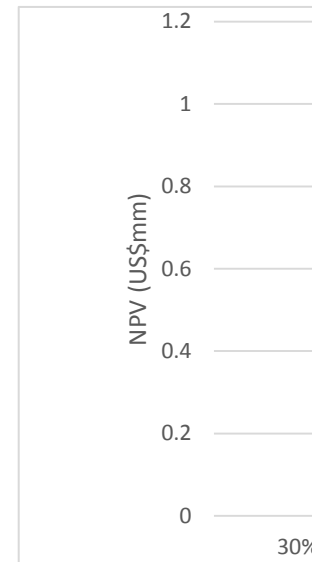
Corporate Tax Rate

| | Debt | Equity |
|-------------------|-------|--------|
| Debt:Equity Split | | 100% |
| Cost of Debt | 0.00% | |
| Cost of Equity | 0.00% | |
| WACC | 0.00% | |

Sensitivities

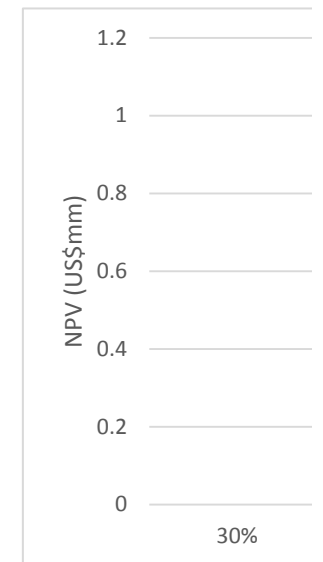
Oil Price

NPV
30%
15%
0%
-15%
-30%



Production

NPV
30%
15%
0%
-15%
-30%



Capex

NPV
30%
15%
0%
-15%
-30%

Opex

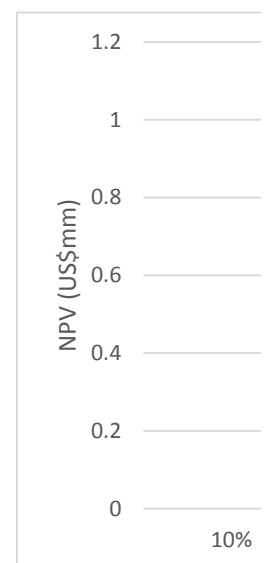
NPV
30%
15%
0%
-15%
-30%

Corporate Tax Rate

NPV
10%
15%
20%
25%
30%

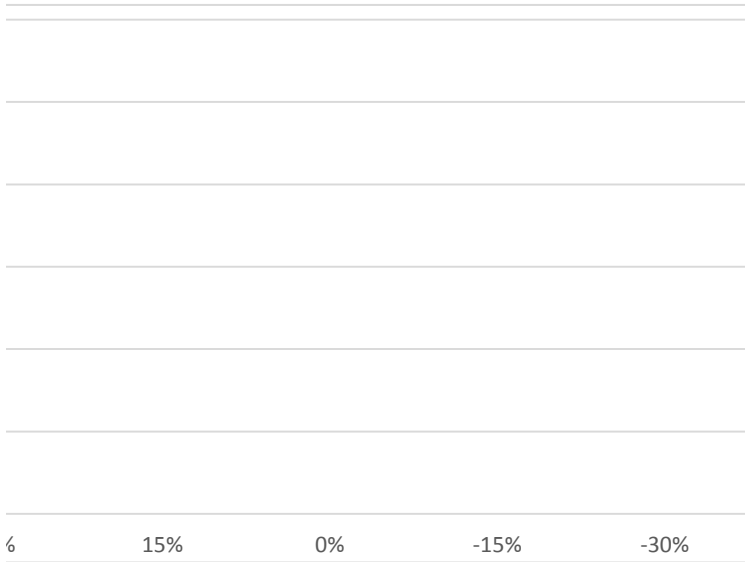
Discount Rate

NPV
5.0%
7.5%
10.0%
12.5%
15.0%

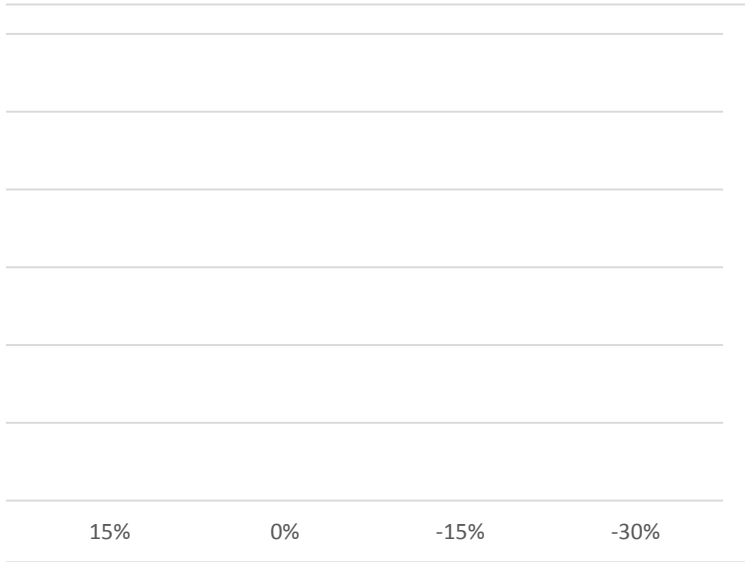


Summary

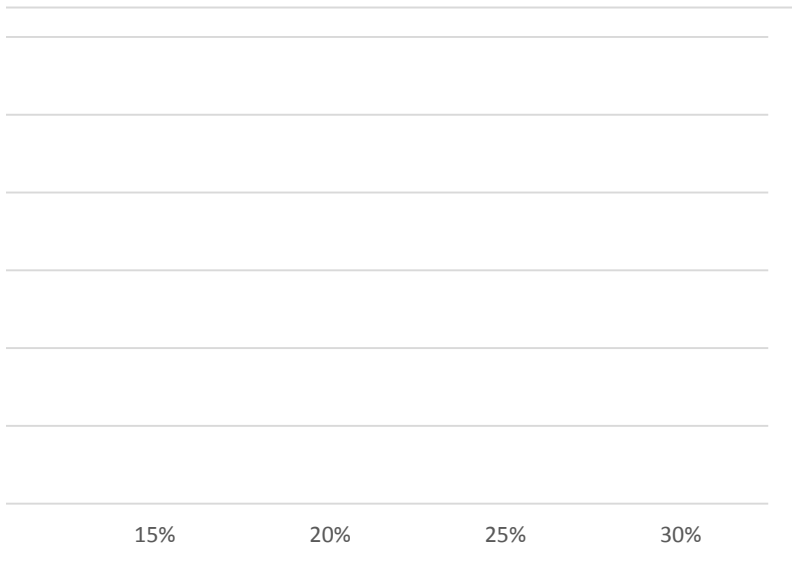
| | Oil Price | Production Capex | Opex | Corp Tax | Disc. Rate | |
|----------|-----------|------------------|------|----------|------------|---|
| Downside | 0 | 0 | 0 | 0 | 0 | 0 |
| Low | 0 | 0 | 0 | 0 | 0 | 0 |
| Base | 0 | 0 | 0 | 0 | 0 | 0 |
| High | 0 | 0 | 0 | 0 | 0 | 0 |
| Upside | 0 | 0 | 0 | 0 | 0 | 0 |



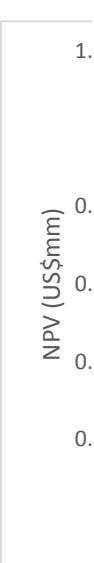
Oil Price

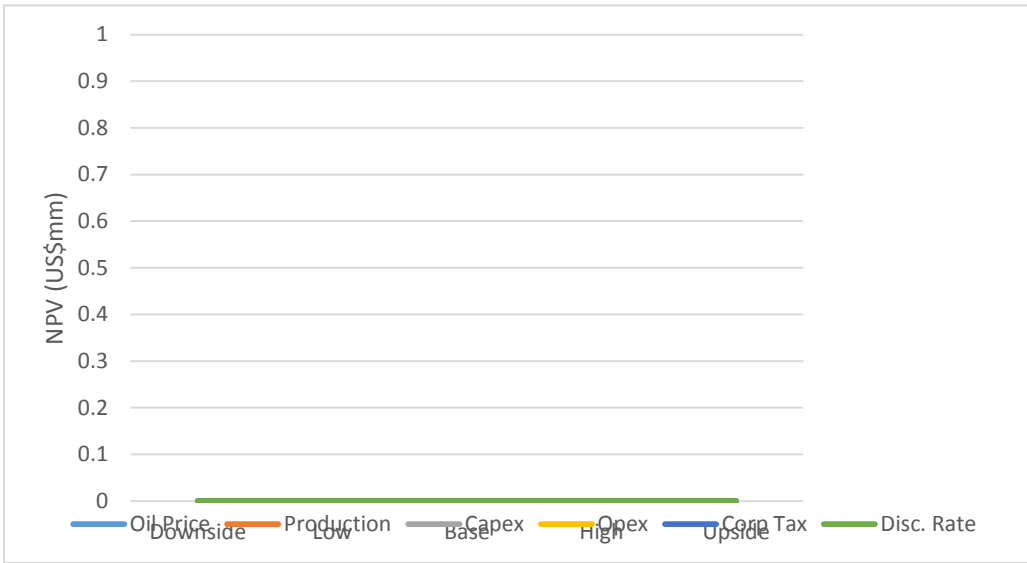


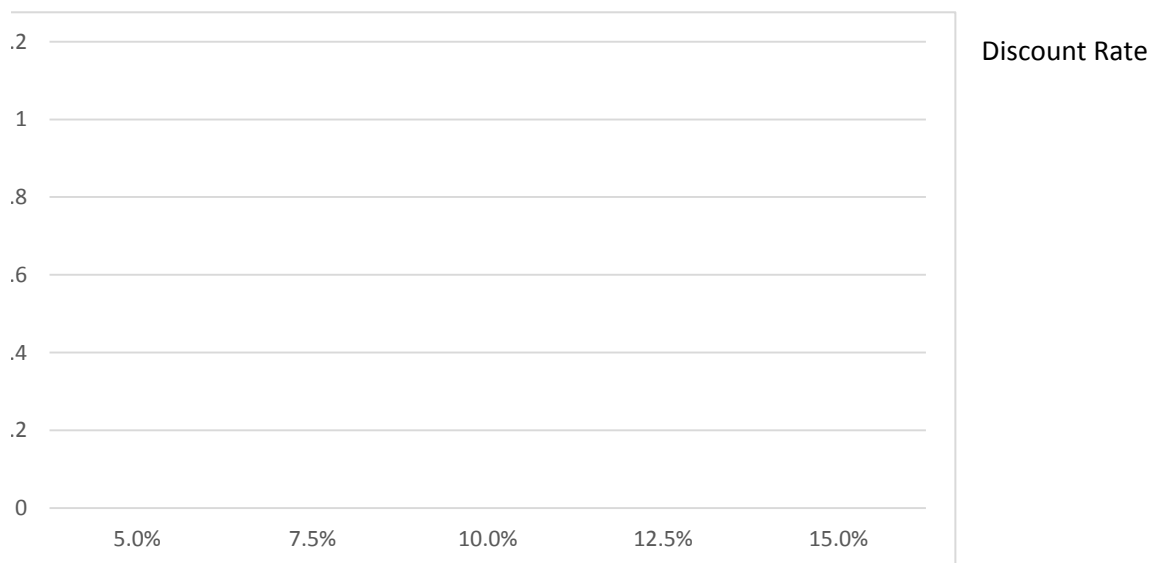
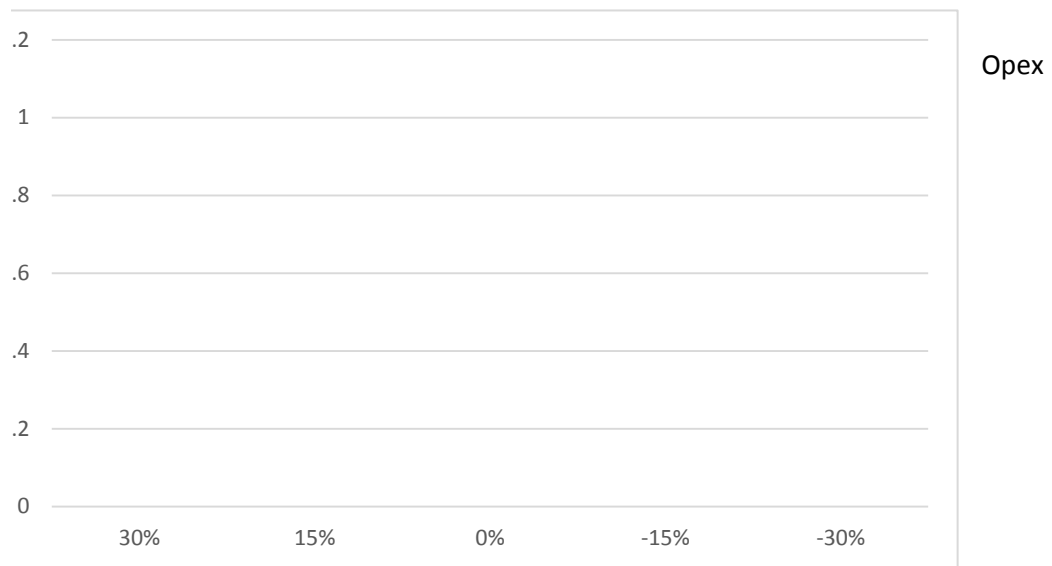
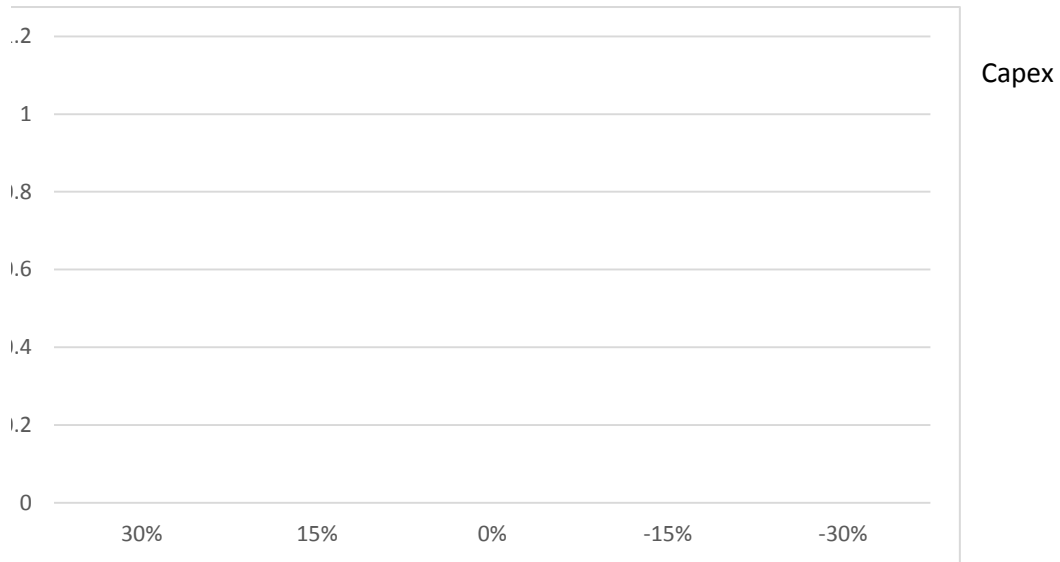
Production



Tax Rate







PSA Regime

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Company Revenues | 0 | 32 | 11 | 7 | 5 | 4 | 4 |
| Operating Costs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Transport Costs | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Operating Taxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBITDA | 0 | 32 | 11 | 7 | 5 | 4 | 4 |
| Depreciation | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| EBIT | 0 | 32 | 11 | 7 | 5 | 4 | 4 |
| Tax on EBIT <i>Corporate Tax Rate</i> | 0 20% | -6.45975 | -2.26091 | -1.35655 | -1.01741 | -0.76306 | -1 |
| Post tax cashflow | 0 | 26 | 9 | 5 | 4 | 3 | 3 |
| CAPEX | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Free Cashflow (FCF) | 0 | 26 | 9 | 5 | 4 | 3 | 3 |
| Cumulative FCF | 0 | 26 | 35 | 40 | 44 | 47 | 50 |
| Discount Rate | 10% | | | | | | |
| Discount Factor | 1.10 | 1.21 | 1.33 | 1.46 | 1.61 | 1.77 | 1.95 |
| Discounted Cashflow (DCF) | 0 | 21 | 7 | 4 | 3 | 2 | 2 |
| NPV (\$mm) | 47 | | | | | | |
| IRR (%) | #ČÍSLO! | | | | | | |

Revenue Calculation

| | Company | Govt | | | | | |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Cost Oil | 80% | | | | | | |
| Profit Oil | 50% | 50% | | | | | |
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Total Revenues | 0 | 65 | 23 | 14 | 10 | 8 | 7 |
| Govt Royalty | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Taxable Revenues | 1% | 0 | 65 | 23 | 14 | 10 | 7 |

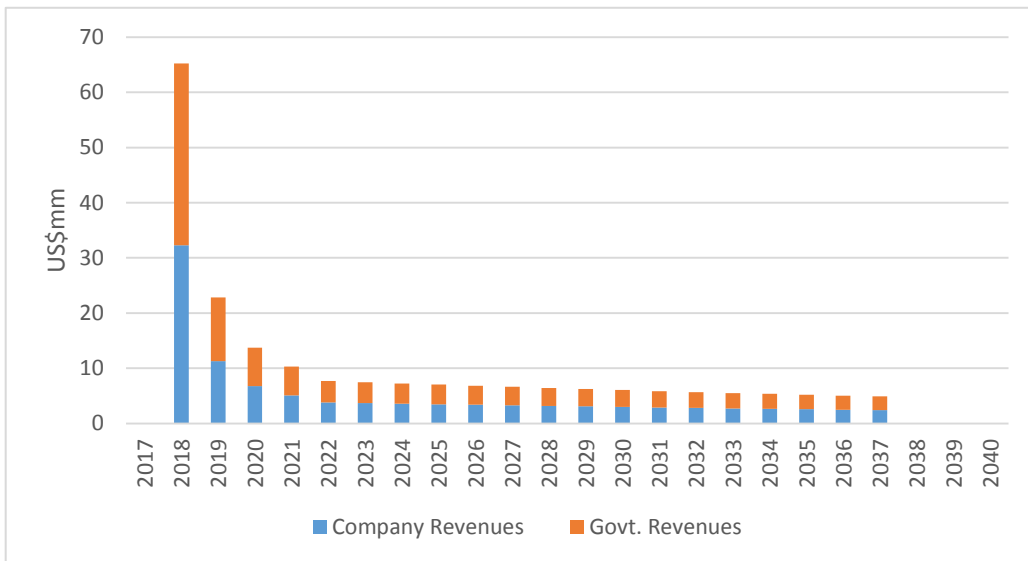
Cost Oil

| | | | | | | | |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 80% of Revenues | 0 | 52 | 18 | 11 | 8 | 6 | 6 |
| Accumulated Cost Oil | | 52 | 70 | 81 | 89 | 95 | 101 |
| Annual Costs | | 0 | 0 | 0 | 0 | 0 | 0 |
| Accumulated Costs | | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 52 | 70 | 81 | 89 | 95 | 101 |
| Payback | | 1 | 1 | 1 | 1 | 1 | 1 |
| Cost Oil to Company | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Profit Oil | 0 | 65 | 23 | 14 | 10 | 8 | 7 |
| Profit Oil | | | | | | | |
| Company | 0 | 32 | 11 | 7 | 5 | 4 | 4 |
| Govt | 0 | 32 | 11 | 7 | 5 | 4 | 4 |
| Total Company Revenues | 0 | 32 | 11 | 7 | 5 | 4 | 4 |
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Company Revenues | 0 | 32 | 11 | 7 | 5 | 4 | 4 |
| Govt. Revenues | 0 | 33 | 12 | 7 | 5 | 4 | 4 |

| 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 | -1 |
| 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 |
| 53 | 56 | 59 | 61 | 64 | 66 | 69 | 71 | 73 |
| 2.14 | 2.36 | 2.59 | 2.85 | 3.14 | 3.45 | 3.80 | 4.18 | 4.59 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |

| 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 |

| | | | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 6 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 107 | 112 | 118 | 123 | 128 | 133 | 138 | 142 | 147 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 107 | 112 | 118 | 123 | 128 | 133 | 138 | 142 | 147 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 |
| 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 |
| 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |



| 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 3 | 3 | 3 | 2 | 2 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 2 | 2 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 3 | 3 | 2 | 2 | 0 | 0 | 0 |
| -1 | -1 | -1 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 2 | 2 | 2 | 0 | 0 | 0 |
| 76 | 78 | 80 | 82 | 84 | 84 | 84 | 84 |
| 5.05 | 5.56 | 6.12 | 6.73 | 7.40 | 8.14 | 8.95 | 9.85 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 6 | 5 | 5 | 5 | 5 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 |

| | | | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 |
| 151 | 155 | 159 | 163 | 167 | 167 | 167 | 167 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 151 | 155 | 159 | 163 | 167 | 167 | 167 | 167 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 5 | 5 | 5 | 5 | 0 | 0 | 0 |
| 3 | 3 | 3 | 2 | 2 | 0 | 0 | 0 |
| 3 | 3 | 3 | 2 | 2 | 0 | 0 | 0 |
| 3 | 3 | 3 | 2 | 2 | 0 | 0 | 0 |
| 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 |
| 3 | 3 | 3 | 2 | 2 | 0 | 0 | 0 |
| 3 | 3 | 3 | 3 | 2 | 0 | 0 | 0 |

Exploration Well Analysis

| | |
|-------------------|-----------|
| Chance of Success | 20% |
| Cost of Well | 50 US\$mm |
| NPV of Success | 146 |
| Dry Hole | -40.0 |
| Successful Well | 29 |
| EMV | -11 |

Questions

Real and Nominal

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|-----------|------|-------|-------|-------|-------|-------|
| Q1 | 100 | 102.5 | 105.1 | 107.7 | 110.4 | 113.1 |

Q2

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---------|------|-------|-------|-------|-------|-------|
| Real | 60 | 60 | 60 | 60 | 60 | 60 |
| Nominal | 60 | 61.20 | 62.42 | 63.67 | 64.95 | 66.24 |

Inflation 2%

| | | | | | | |
|----------|----|-------|-------|-------|-------|-------|
| Real +1% | 60 | 60.60 | 61.21 | 61.82 | 62.44 | 63.06 |
|----------|----|-------|-------|-------|-------|-------|

NPV and DCF

Q1

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|-----------------|------|------|------|------|------|------|------|------|
| US\$m | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Discount factor | 1.10 | 1.21 | 1.33 | 1.46 | 1.61 | 1.77 | 1.95 | 2.14 |
| Discount Rate | 10% | | | | | | | |
| DCF | 91 | 83 | 75 | 68 | 62 | 56 | 51 | 47 |
| NPV | 614 | | | | | | | |
| NPV Excel | 614 | | | | | | | |

Q2

| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|-----------------|--------|--------|--------|--------|--------|------|------|------|
| Capex | -187.5 | -187.5 | -187.5 | -187.5 | -187.5 | | | |
| Cashflow | | | | | | 100 | 150 | 200 |
| Net Cashflow | -188 | -188 | -188 | -188 | -188 | 100 | 150 | 200 |
| Discount Factor | 1.1 | 1.21 | 1.33 | 1.46 | 1.61 | 1.77 | 1.95 | 2.14 |
| Discount Rate | 10% | | | | | | | |
| DCF | -170 | -155 | -141 | -128 | -116 | 56 | 77 | 93 |
| NPV | 381 | | | | | | | |
| NPV Excel | 381 | | | | | | | |
| IRR | 16% | | | | | | | |
| Cost Inflation | 1.25 | | | | | | | |

| | |
|------|------|
| 2026 | 2027 |
| 100 | 100 |
| 2.36 | 2.59 |
| 42 | 39 |

| | | | | | | | | |
|------|------|------|------|------|------|------|------|------|
| 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
| 250 | 300 | 300 | 300 | 300 | 300 | 300 | 270 | 243 |
| 250 | 300 | 300 | 300 | 300 | 300 | 300 | 270 | 243 |
| 2.36 | 2.59 | 2.85 | 3.14 | 3.45 | 3.80 | 4.18 | 4.59 | 5.05 |
| 106 | 116 | 105 | 96 | 87 | 79 | 72 | 59 | 48 |

| 2035 | 2036 | 2037 |
|------|------|------|
| 219 | 197 | 177 |
| 219 | 197 | 177 |
| 5.56 | 6.12 | 6.73 |
| 39 | 32 | 26 |

Time Value of Money

| | At Jan 1 | | | | | | |
|---------------|----------|------|------|------|------|------|------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| US\$ | 100 | | | | | | |
| US\$ | | | | | | 100 | |
| US\$ | | | | | | | |
| Interest Rate | 3% | 3% | 3% | 3% | 3% | 3% | 3% |
| Multiplier | 1.03 | 1.06 | 1.09 | 1.13 | 1.16 | 1.19 | 1.23 |

Real versus Nominal

| Costs | At Dec 31 | | | | | | |
|----------------|-----------|------|------|------|------|------|------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| US\$ Nominal | 1 | 1 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Inflation Rate | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Multiplier | | 1 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Money available

100
Chocolate Bars

Money Invested

100.0

| | | | | | | | |
|----------------|-------|-----|-----|-----|-----|-----|-----|
| Chocolate Bars | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|----------------|-------|-----|-----|-----|-----|-----|-----|

US\$ Real (2018)

Money Available
Cost of Choc Bar

| 2025 | 2026 | 2027 | 2028 |
|------|------|------|------|
|------|------|------|------|

| | | | |
|--|--|--|-----|
| | | | 100 |
|--|--|--|-----|

| | | | |
|------|------|------|--|
| 3% | 3% | 3% | |
| 1.27 | 1.30 | 1.34 | |

| 2025 | 2026 | 2027 | 2028 |
|------|------|------|------|
| 1.00 | 1.00 | 1.00 | 1.00 |

| | | | |
|------|------|------|------|
| 0% | 0% | 0% | 0% |
| 1.00 | 1.00 | 1.00 | 1.00 |

0.0

0.0

0.0

0.0

Example Discounted Cashflow

Example 1

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | |
|---------------------|--------|--------|--------|--------|--------|--------|--------|---|
| Cashflow | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Discount Factor | | | | | | | | |
| Discounted Cashflow | | | | | | | | |
| NPV | 0.0 | | | | | | | |
| Discount Rate | 0% | | | | | | | |
| Excel Calculation | 0.0 | | | | | | | |

Example 2

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--|
| Capital Cost | -100 | -100 | -100 | | | | | |
| Revenue | | | | 30 | 60 | 120 | 150 | |
| Operating Cost | | | | -5 | -5 | -5 | -5 | |
| Net Cashflow | -100 | -100 | -100 | 25 | 55 | 115 | 145 | |
| Discount Factor | 1.08 | 1.17 | 1.26 | 1.36 | 1.47 | 1.59 | 1.71 | |
| Discounted Cashflow | -92.6 | -85.7 | -79.4 | 18.4 | 37.4 | 72.5 | 84.6 | |
| NPV | 173.2 | | | | | | | |
| Discount Rate | 8% | | | | | | | |
| IRR | 18.66% | | | | | | | |
| Excel Calculation | 173.2 | | | | | | | |

| Year 8 | Year 9 | Year 10 |
|--------|--------|---------|
| 0 | 0 | 0 |

| Year 8 | Year 9 | Year 10 |
|--------|--------|---------|
| 150 | 150 | 150 |
| -5 | -5 | -5 |
| 145 | 145 | 145 |
| 1.85 | 2.00 | 2.16 |
| 78.3 | 72.5 | 67.2 |