

Time Value of Money

| Money | At Jan 1 | | | | | | |
|-----------------|----------|------|------|------|------|------|------|
| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
| US\$ in wallet | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| US\$ in bank | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| US\$ (deflated) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Inflation | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Interest Rate | 0% | 0% | 0% | 0% | 0% | 0% | 0% |
| Multiplier | 1 | | | | | | |

Cost of chocolate

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|----------------|------|------|------|------|------|------|------|
| US\$ flat | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| US\$ inflation | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| US\$ | | | | | | | |

Bars of chocolate

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|------|---------|---------|---------|---------|---------|---------|---------|
| US\$ | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| US\$ | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| US\$ | | | | | | | |

Real versus Nominal

| Costs | At Dec 31 | | | | | | |
|----------------|-----------|------|------|------|------|------|------|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| US\$ Nominal | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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

#DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

US\$ Real (2018)

Money Available
Cost of Choc Bar

| 2027 | 2028 | 2029 | 2030 |
|------|------|------|------|
| 0.0 | 0.0 | 0.0 | 0.0 |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 |
| 0% | 0% | 0% | 0% |
| 0% | 0% | 0% | 0% |

| 2027 | 2028 | 2029 | 2030 |
|------|------|------|------|
| 0 | 0 | 0 | 0 |
| 0.00 | 0.00 | 0.00 | 0.00 |

| 2027 | 2028 | 2029 | 2030 |
|---------|---------|---------|---------|
| #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |

| 2025 | 2026 | 2027 | 2028 |
|------|------|------|------|
| 0.00 | 0.00 | 0.00 | 0.00 |
| 0% | 0% | 0% | 0% |
| 1.00 | 1.00 | 1.00 | 1.00 |

#DIV/0! #DIV/0! #DIV/0! #DIV/0!

| Year 9 | Year 10 |
|--------|---------|
| 0.00 | 0.00 |

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 |
| Discount Factor | | | | | | | | |
| Discounted Cashflow | | | | | | | | |
| NPV | | | | | | | | |
| Discount Rate | | 0% | | | | | | |
| Excel Calculation | | | | | | | | |

Example 2

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 |
|---------------------|--------|--------|--------|--------|--------|--------|--------|
| Capital Cost | | | | | | | |
| Revenue | | | | | | | |
| Operating Cost | | | | | | | |
| Net Cashflow | | | | | | | |
| Discount Factor | | | | | | | |
| Discounted Cashflow | | | | | | | |
| NPV | | | | | | | |
| Discount Rate | | | | | | | |
| IRR | | | | | | | |
| Excel Calculation | | | | | | | |

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

| | | | | | | | | |
|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| Year 8 | Year 9 | Year 10 | Year 11 | Year 12 | Year 13 | Year 14 | Year 15 | Year 16 |
|--------|--------|---------|---------|---------|---------|---------|---------|---------|

Year 17 Year 18 Year 19 Year 20

WACC Calculation

Risk Free Rate 0.00%

Corporate Interest Rate 0.00%

Equity market return 0.00%

Company Beta 0

Corporate Tax Rate 0%

| | Debt | Equity |
|-------------------|------|--------|
| Debt:Equity Split | 0% | 100% |

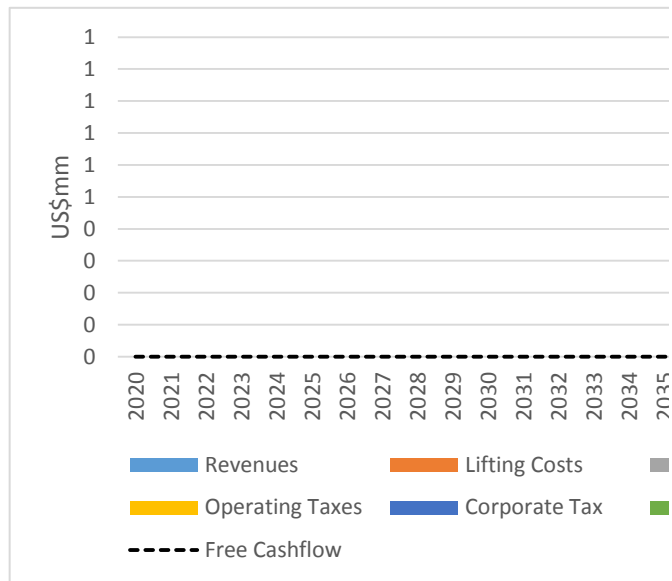
Cost of Debt 0.00%

Cost of Equity 0.00%

WACC 0.00%

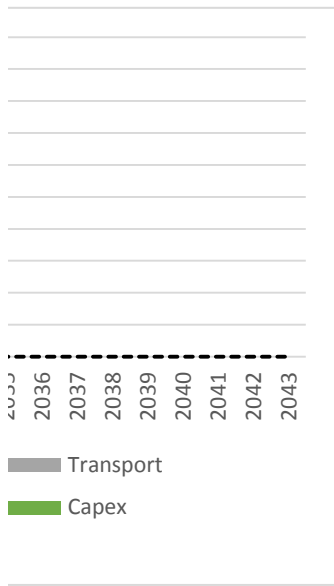
| | | | | | | |
|------------------------|---------|---------|---------|---------|---------|---------|
| Terminal Value | | | | | | |
| Implied FCF | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| Implied DCF | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| NPV | #DIV/0! | | | | | |
| Plus Cash | 0 | | | | | |
| Less Debt | 0 | | | | | |
| Total NPV | #DIV/0! | | | | | |
| IRR | ##### | | | | | |
| <i>EBITDA Multiple</i> | 20 | | | | | |

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|-----------------|---------|---------|---------|---------|---------|---------|
| Revenues | 0 | 0 | 0 | 0 | 0 | 0 |
| Lifting Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Transport | 0 | 0 | 0 | 0 | 0 | 0 |
| Operating Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| Corporate Tax | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| Capex | 0 | 0 | 0 | 0 | 0 | 0 |
| Free Cashflow | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |



| | | | | | |
|---------|---------|---------|---------|---------|---|
| | | | | | 0 |
| #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | 0 |
| #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | 0 |

| 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 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 |
| #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |

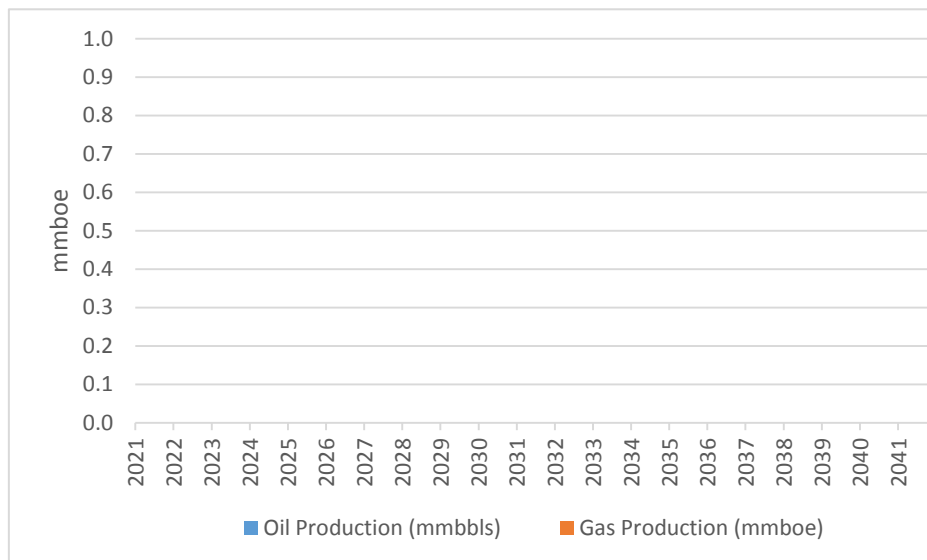


Production

| | Oil | | Gas | |
|-------------------------------|---------------------------|------|--------------------|---------------------------|
| | mmbbls | kbpd | Bcf | mmcf/d |
| Resources | 0 | | 0 | |
| Recovery Factor | 0% | | 0% | |
| Reserves | 0 | | 0 | |
| Start date | 5 years after first capex | | Peak as % Reserves | 5 years after first capex |
| Peak Production (mmbbls) | 0 | 0 | 0% | 0 |
| Time to Peak (yrs) | 0 | | | |
| Length of Peak (yrs) | 0 | | | |
| Decline rate (%) Yrs 2,3,4,5+ | 0% | | | 0% |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-----------------------------------|------------|------|------|------|------|------|
| Oil production | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total oil produced to 2040 | 0.0 | | | | | |
| Barrels per day | | 0 | 0 | 0 | 0 | 0 |
| Gas Production | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total gas produced to 2040 | 0.0 | | | | | |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-------------------------|------|------|------|------|------|------|
| Oil Production (mmbbls) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gas Production (mmboe) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total (mmboe) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Production Scenarios

Total Produced

Oil Production Scenarios

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

Gas Production Scenarios

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

Total

0

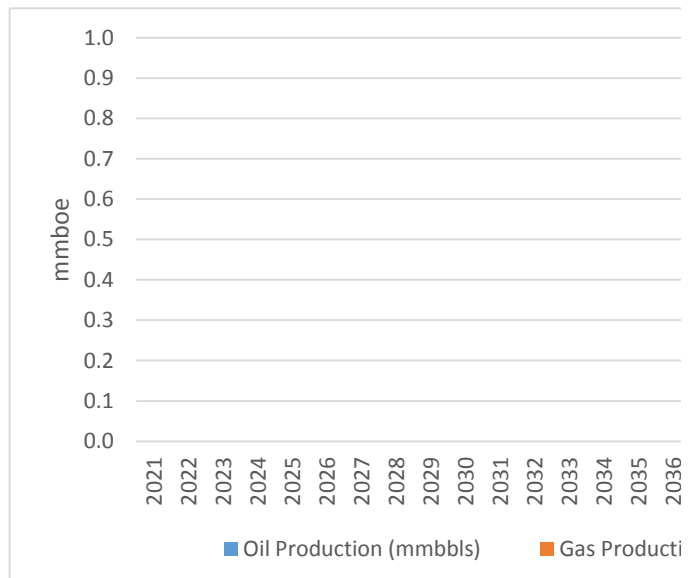
Peak as %
Reserves

0%

0% 0%

| 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|------|------|------|------|------|------|------|------|------|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|------|------|------|------|------|------|------|------|------|
| 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 |



Revenue Calculation

| | | |
|-----------------|------------|-----------|
| <i>Export %</i> | <i>Oil</i> | <i>0%</i> |
| | <i>Gas</i> | <i>0%</i> |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|---------------------------|------------|------------|------------|------------|------------|------------|
| Oil Production | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Domestic Sales | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Export Sales | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| <i>Domestic Oil Price</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> |
| <i>Export Oil Price</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> |
| Domestic Revenue | 0 | 0 | 0 | 0 | 0 | 0 |
| Export Revenue | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Oil Revenue | 0 | 0 | 0 | 0 | 0 | 0 |
| Gas Production | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| <i>Domestic Gas Price</i> | <i>4.0</i> | <i>4.0</i> | <i>4.0</i> | <i>4.0</i> | <i>4.0</i> | <i>4.0</i> |
| <i>Export Gas Price</i> | <i>0.0</i> | <i>0.0</i> | <i>0.0</i> | <i>0.0</i> | <i>0.0</i> | <i>0.0</i> |
| Domestic Sales | 0 | 0 | 0 | 0 | 0 | 0 |
| Export Sales | 0 | 0 | 0 | 0 | 0 | 0 |
| Domestic Revenue | 0 | 0 | 0 | 0 | 0 | 0 |
| Export Revenue | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Gas Revenue | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Revenues | 0 | 0 | 0 | 0 | 0 | 0 |
| Oil Production Scenarios | | | | | | |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Gas Production Scenarios | | | | | | |
| 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Export Oil Price | #DIV/0! | | | | | |
| 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 |

Domestic Oil 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 |

Domestic Gas Price

| | | | | | | |
|------------|-----|-----|-----|-----|-----|-----|
| Base Case | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| Scenario 2 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |
| Scenario 3 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 |
| Scenario 4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 |
| Scenario 5 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |

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 |

Slope 10%

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 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 |

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |
| 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 |
| 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 |
| 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 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 |

2044

0.0

0.0

0.0

0

0

0

0

0

0.0

4.0

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%

0.0

0.0

0.0

0.0

0.0

0.0
0.0
0.0
0.0
0.0

4.0
4.6
5.2
3.4
2.8

0.0
0.0
0.0
0.0
0.0

Capital Expenditure

| | Total mmboe | Oil mmbbls | Gas bcf | Bcf per well Wells | |
|---------------------|----------------|---------------|------------|--------------------|-----|
| Reserves | 0 | 0 | 0 | 8 | 0.0 |
| Wells | 0 | | | | |
| Capex per well | 0.0 | | | | |
| Capex per bbl | #DIV/0! | | #DIV/0! | | |
| Total capex | 0 | | | | |
| % before first oil | 75% | 0 | | | |
| % first oil to peak | 0% | 0 | | | |
| Maintenance capex | 25% | 0 | | | |

First Capex First oil

| | 2022 | 2023 | 2023 | 2024 | 2025 | 2026 |
|------------------|------|------|------|------|------|------|
| US\$mm | 0 | 0 | 0 | 0 | 0 | 0 |
| Before first oil | 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

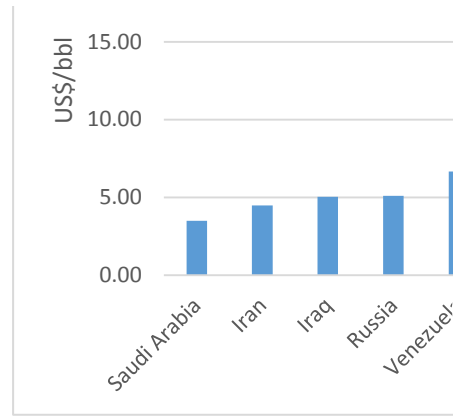
| | Cost /bbl | Capex | Reserves | Peak Prod | Peak Prod |
|-------------------------------|-----------|--------|----------|-----------|-----------|
| | US\$/bbl | US\$mm | mmbbls | kbpd | mmbbls |
| Kashagan (Kazakhstan) | 10.46 | 136000 | 13000 | 1500 | 547.5 |
| ACG (Azerbaijan) | 4.00 | 20000 | 5000 | 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 |

| | | |
|----------------------------|-------|--------------|
| US shale | \$7mm | per well |
| Ultimate recovery per well | 8.0 | bcf per well |

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 |

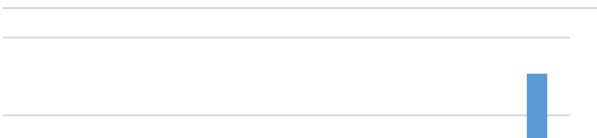
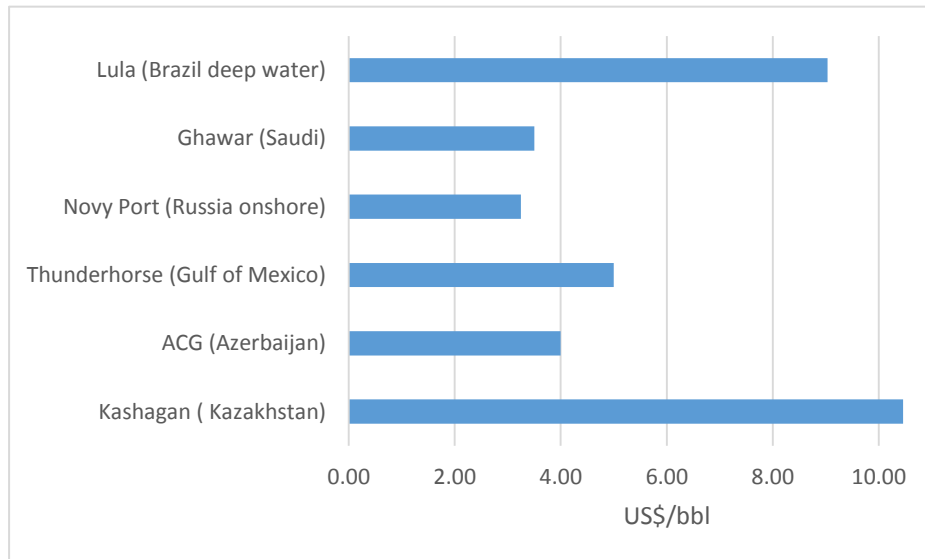


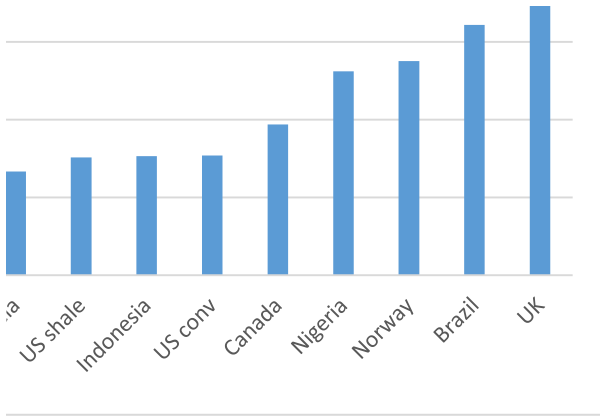
| 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
|------|------|------|------|------|------|------|------|------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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 |

Capex/
peak bbl
US\$/bbl

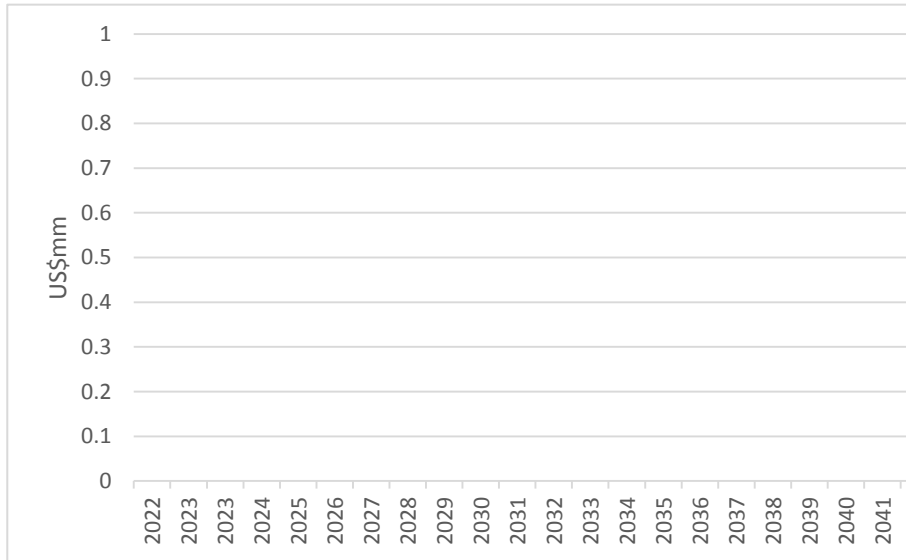
248
88
55
77
136
411



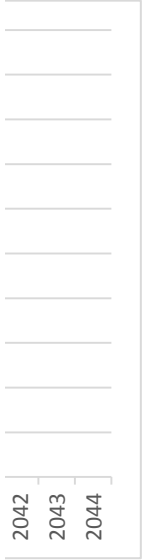


| 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 |
|------|------|------|------|------|------|------|------|------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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 |



2042
2043
2044



Operating Costs

| | | | | | | | |
|------------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Lifting Costs | 0.00 US\$/boe | real | | | | | |
| Total for model | 0 US\$mm | | | | | | |
| Variable | 0.00 US\$/bbl | | 80% | | | | |
| Fixed | 0 US\$mm | | 20% | | | | |
| Years production | 23 | | | | | | |
| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
| US\$mm | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 0 | | | | | | |

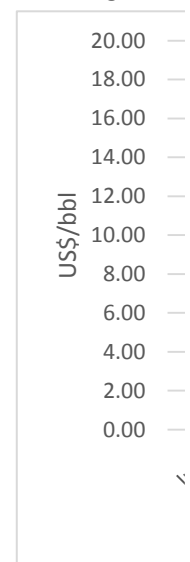
Base Case and Sensitivities

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

Global Comparisons

| | Lifting US\$/bbl | | Transport US\$/bbl |
|--------------|---------------------|-------------|-----------------------|
| Iran | 1.94 | Saudi Arabi | 2.49 |
| Iraq | 2.16 | Iran | 2.67 |
| Russia | 2.98 | Iraq | 2.47 |
| Saudi Arabia | 3.00 | Russia | 2.69 |
| Norway | 4.24 | Indonesia | 3.63 |
| US conv | 5.15 | US conv | 3.11 |
| US shale | 5.85 | Norway | 3.12 |
| Indonesia | 6.87 | US shale | 3.52 |
| Venezuela | 7.94 | Canada | 2.92 |
| Nigeria | 8.81 | Venezuela | 2.54 |
| Brazil | 9.45 | Nigeria | 2.97 |
| Canada | 11.56 | Brazil | 2.80 |
| UK | 17.36 | UK | 4.30 |

Lifting Costs



Company examples

| | |
|------------|------|
| Rosneft | 3.10 |
| Lukoil | 4.26 |
| BP | 6.90 |
| Chesapeake | 2.92 |

Transport Costs

| | |
|-----|---------------|
| Oil | 0.00 US\$/bbl |
| Gas | 0.00 US\$/mcf |

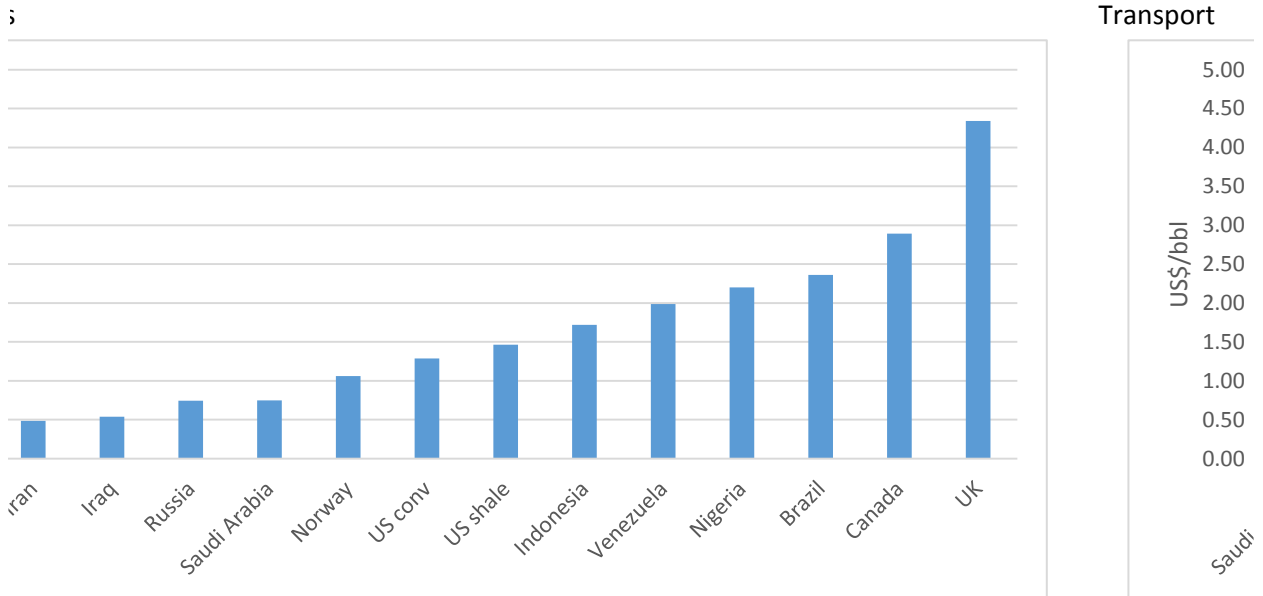
2021 2022 2023 2024 2025 2026 2027

| | | | | | | | |
|----------------|-----|-----|-----|-----|-----|-----|-----|
| Oil (US\$mm) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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 |

Base Case and Sensitivities

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

2028 2029 2030 2031 2032 2033 2034 2035
 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0



2028 2029 2030 2031 2032 2033 2034 2035

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 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 |

2036

0.0

2037

0.0

2038

0.0

2039

0.0

2040

0.0

2041

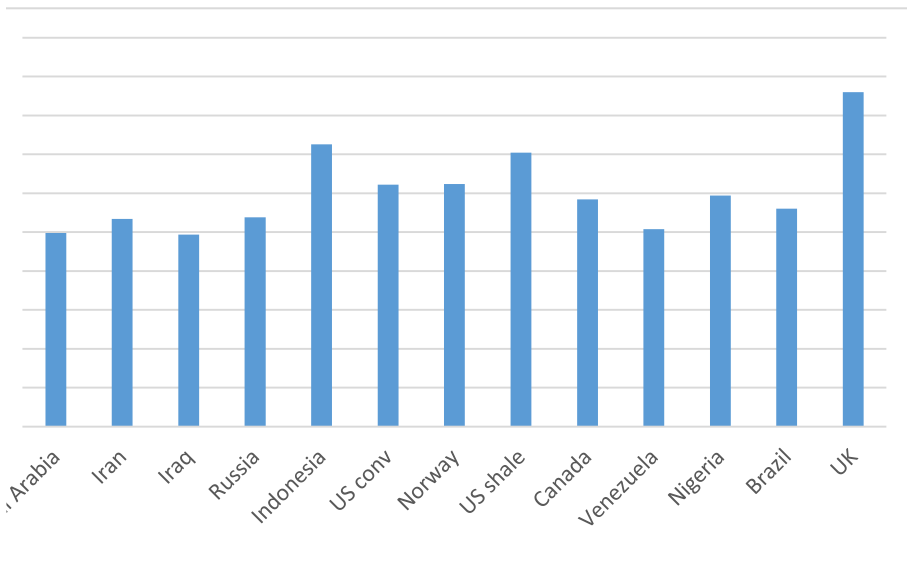
0.0

2042

0.0

2043

0.0



2036

2037

2038

2039

2040

2041

2042

2043

| | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|
| 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 |

2044

0.0

2044

0.0
0.0
0.0

Operating Taxes

Oil Tax

Export Tax Sliding of export barrels
Royalty 0.0% of oil revenues
Other taxes 0.0% of total revenues

Export Oil Price 0 0 0 0 0 0

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|------------|------|------|------|------|------|------|
| Export Tax | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Royalty | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 |

Export Tax

Cut-off point 0 US\$/bbl
Tax 0% above cut-off point

Export Tax (\$/bbl) 0 0 0 0 0 0

Gas Tax

Export Tax 0% export revenues
Royalty 0 US\$/mcf

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|------------|------|------|------|------|------|------|
| Export Tax | 0 | 0 | 0 | 0 | 0 | 0 |
| Royalty | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Total Operating Taxes 0 0.0 0.0 0.0 0.0 0.0

Total US\$/boe #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0!

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

Depreciation

Straight Line

| | |
|------------------------------|---------|
| Total Capex | 0 |
| Years of Production | 0 |
| Annual Depreciation (US\$mm) | #DIV/0! |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|-------------------|----------|----------|----------|----------|----------|----------|
| Depreciation | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| <i>Production</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> | <i>0</i> |
| Total | 0 | | | | | |

Unit of Production

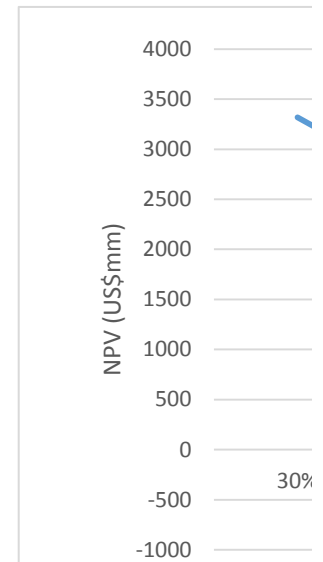
| | |
|-------------------------|---------|
| Total Reserves | 0 |
| Total Produced | 0 |
| Total Capex | 0 |
| Depreciation per barrel | #DIV/0! |

| | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 |
|--------------|---------|---------|---------|---------|---------|---------|
| Depreciation | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| Total | #DIV/0! | | | | | |

Sensitivities

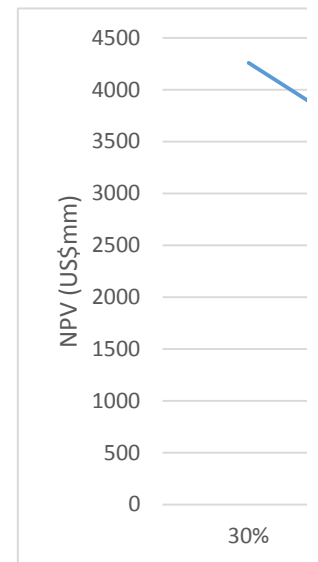
Oil Price

| | NPV |
|------|------|
| 30% | 3318 |
| 15% | 2392 |
| 0% | 1465 |
| -15% | 539 |
| -30% | -388 |



Production

| | NPV |
|------|------|
| 30% | 4257 |
| 15% | 3203 |
| 0% | 2149 |
| -15% | 1094 |
| -30% | 40 |



Capex

| | NPV |
|------|------|
| 30% | 1012 |
| 15% | 1580 |
| 0% | 2149 |
| -15% | 2717 |
| -30% | 3285 |

Opex

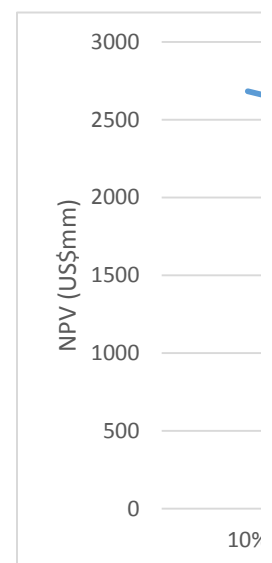
| | NPV |
|------|------|
| 30% | 1735 |
| 15% | 1942 |
| 0% | 2149 |
| -15% | 2356 |
| -30% | 2563 |

Corporate Tax Rate

| | NPV |
|-----|------|
| 10% | 2682 |
| 15% | 2415 |
| 20% | 2149 |
| 25% | 1882 |
| 30% | 1615 |

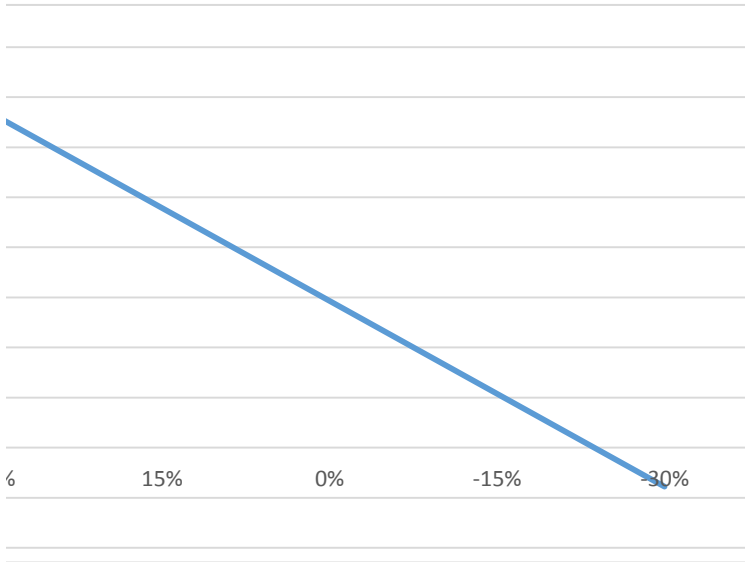
Discount Rate

| | NPV |
|-------|------|
| 5.0% | 5152 |
| 7.5% | 2932 |
| 10.0% | 2149 |
| 12.5% | 496 |
| 15.0% | -154 |

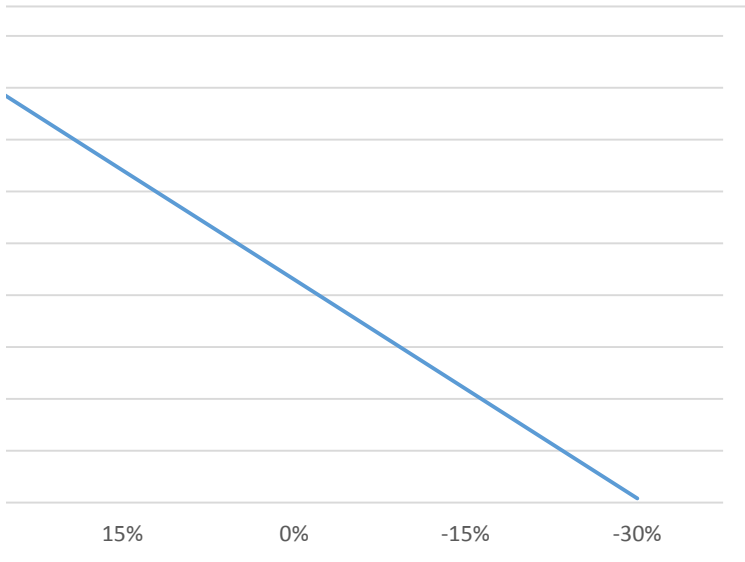


Summary

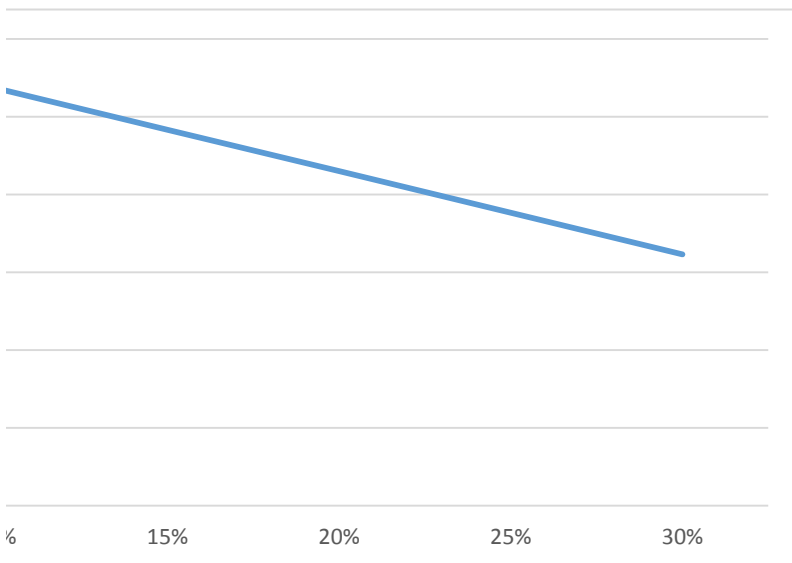
| | Oil Price | Production Capex | Opex | Corp Tax | Disc. Rate | |
|----------|-----------|------------------|------|----------|------------|------|
| Downside | -388 | 40 | 1012 | 1735 | 1615 | -154 |
| Low | 539 | 1094 | 1580 | 1942 | 1882 | 496 |
| Base | 1465 | 2149 | 2149 | 2149 | 2149 | 2149 |
| High | 2392 | 3203 | 2717 | 2356 | 2415 | 2932 |
| Upside | 3318 | 4257 | 3285 | 2563 | 2682 | 5152 |



Oil Price

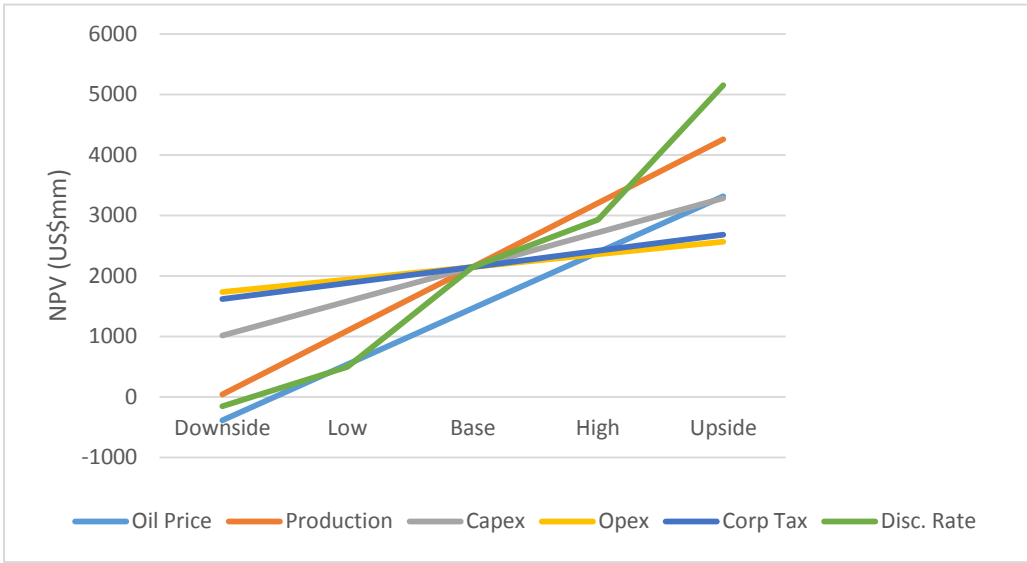


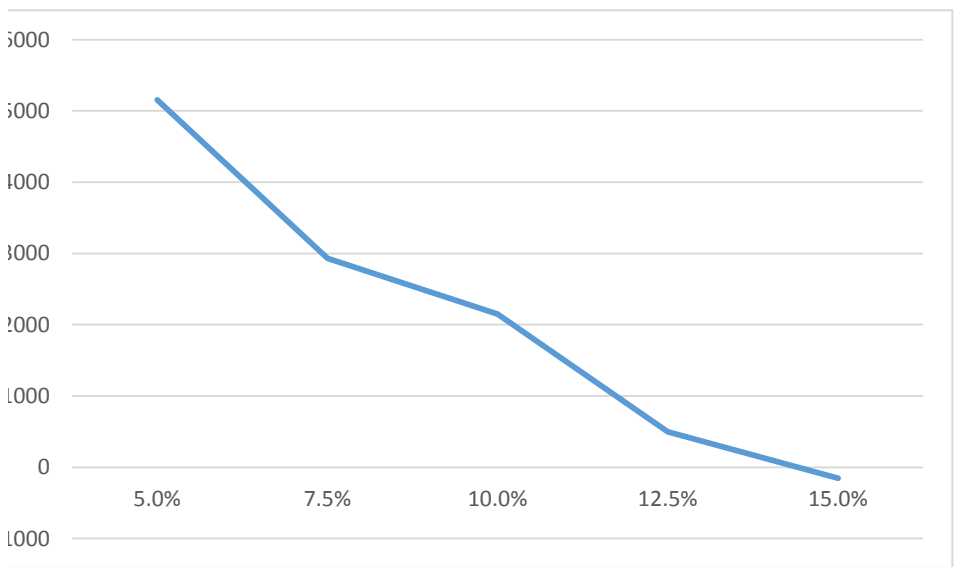
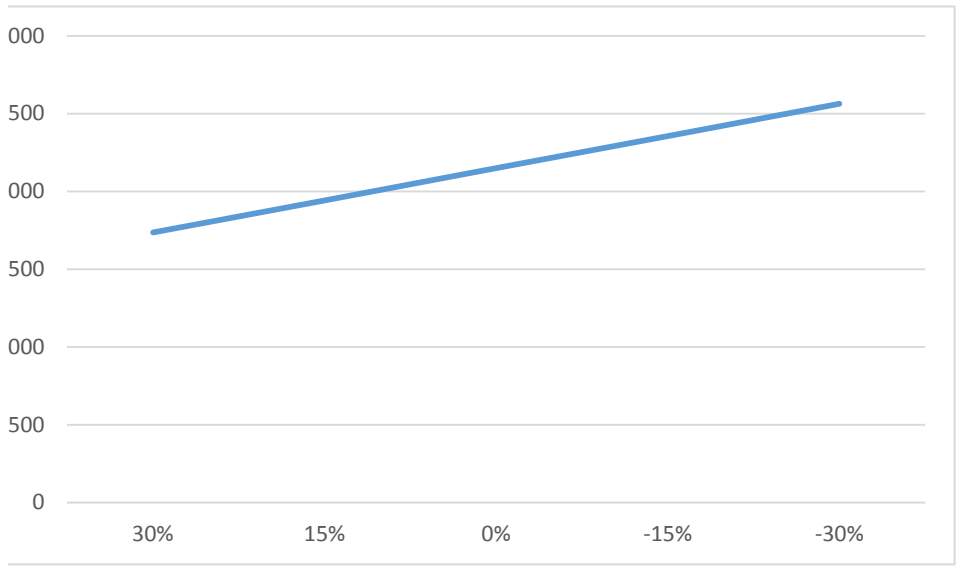
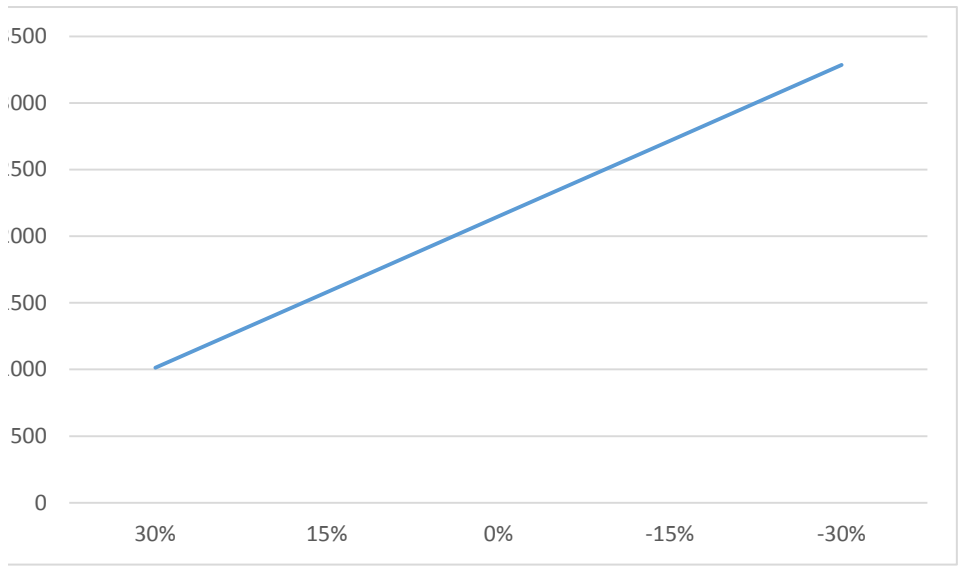
Production



Tax Rate







Exploration Well Analysis

| | |
|-------------------|----------|
| Chance of Success | 0% |
| Cost of Well | 0 US\$mm |
| NPV of Success | #DIV/0! |
| Dry Hole | 0.0 |
| Successful Well | #DIV/0! |
| EMV | #DIV/0! |

PSA Regime

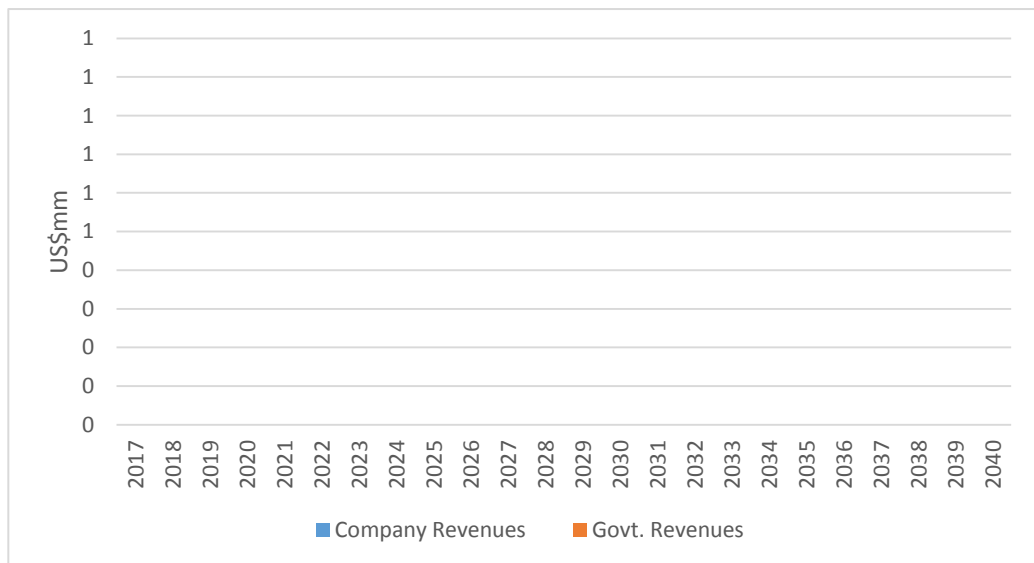
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--|----------------|-------------|-------------|-------------|-------------|-------------|
| Company Revenues | 0 | 0 | 0 | 0 | 0 | 0 |
| Operating Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Transport Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Operating Taxes | 0 | 0 | 0 | 0 | 0 | 0 |
| EBITDA | 0 | 0 | 0 | 0 | 0 | 0 |
| Depreciation | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| EBIT | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| Tax on EBIT <i>Corporate Tax Rate</i> | #DIV/0! 20% | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| Post tax cashflow | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| CAPEX | 0 | 0 | 0 | 0 | 0 | 0 |
| Free Cashflow (FCF) | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| Cumulative FCF | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| Discount Rate | 10% | | | | | |
| Discount Factor | 1.10 | 1.21 | 1.33 | 1.46 | 1.61 | 1.77 |
| Discounted Cashflow (DCF) | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| NPV (\$mm) | #DIV/0! | | | | | |
| IRR (%) | ##### | | | | | |

Revenue Calculation

| | Company | Govt | | | | |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Cost Oil | 80% | | | | | |
| Profit Oil | 50% | 50% | | | | |
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Total Revenues | 0 | 0 | 0 | 0 | 0 | 0 |
| Govt Royalty | 0 | 0 | 0 | 0 | 0 | 0 |
| Taxable Revenues | 1% | 0 | 0 | 0 | 0 | 0 |
| Cost Oil | | | | | | |
| 80% of Revenues | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Accumulated Cost Oil | 0 | 0 | 0 | 0 | 0 | 0 |
| Annual Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Accumulated Costs | 0 | 0 | 0 | 0 | 0 | 0 |
| Payback | 0 | 0 | 0 | 0 | 0 | 0 |
| Cost Oil to Company | 0 | 0 | 0 | 0 | 0 | 0 |
| Profit Oil | 0 | 0 | 0 | 0 | 0 | 0 |
| Profit Oil | | | | | | |
| Company | 0 | 0 | 0 | 0 | 0 | 0 |
| Govt | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Company Revenues | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Company Revenues | 0 | 0 | 0 | 0 | 0 | 0 |
| Govt. Revenues | 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 |
| 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 |



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 |