

**PRELIMINARY REPORT ON FISCAL DESIGNS
FOR THE DEVELOPMENT OF ALASKA NATURAL GAS**

BY
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For

State of Alaska
Legislative Budget & Audit Committee

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Appendix 4

Early Year Cost and Production Profiles of Ten Hypothetical Fields

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Early-Year Cost and Production Profiles of Ten Hypothetical Fields

Field cost and production profiles have been formulated from the field assumptions listed in Section 4.2 of this study. The annual cost profiles together with initial production rates and unit values per boe of total production are tabulated in this appendix for each of the ten hypothetical fields.

Gas with NGL Field # 1 (initial years only are shown)

Years →

Total/boe	Total All Years	Field selected for analysis # 1	1	2	3	4	5	6	7	8	9	10	11
	532.8	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	9.00	18.00	27.00	36.00	36.00	36.00	36.00	36.00
	42.6	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.72	1.44	2.16	2.88	2.88	2.88	2.88	2.88
	490.2	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	8.28	16.56	24.84	33.12	33.12	33.12	33.12	33.12
	0.0	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10.7	Condensate Production (barrels millions)	0.00	0.00	0.00	0.18	0.36	0.54	0.72	0.72	0.72	0.72	0.72
	10.7	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.18	0.36	0.54	0.72	0.72	0.72	0.72	0.72
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	92.4	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	1.56	3.12	4.68	6.24	6.24	6.24	6.24	6.24
	2.7	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.13	0.14	0.14
Max:	28.4%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%
	95.0	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	1.56	3.12	4.68	6.24	6.36	6.37	6.38	6.38
1.08	100.0	Exploration Capital (\$ millions)	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.52	602.1	Development Capital (\$ millions)	0.00	0.00	285.00	285.00	0.00	0.00	0.00	0.00	0.00	3.12	3.12
1.03	95.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
3.60	332.7	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	5.46	10.92	16.38	21.84	22.28	22.30	22.32	22.35
23.88	2205.8	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	37.26	74.52	111.78	149.04	149.04	149.04	149.04	149.04
0.53	49.0	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.83	1.66	2.48	3.31	3.31	3.31	3.31	3.31
0.54	50.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19	Years Field On-stream	0	0	0	1	1	1	1	1	1	1	1

Gas with NGL Field # 2 (initial years only are shown)

Years →

Total/boe	Total All Years	Field selected for analysis # 2	1	2	3	4	5	6	7	8	9	10	11
	777.6	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	9.00	25.20	41.40	57.60	57.60	57.60	57.60
	62.2	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.00	0.72	2.02	3.31	4.61	4.61	4.61	4.61
	715.4	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	8.28	23.18	38.09	52.99	52.99	52.99	52.99
	0.0	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15.6	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.18	0.50	0.83	1.15	1.15	1.15	1.15
	15.6	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.00	0.18	0.50	0.83	1.15	1.15	1.15	1.15
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	134.8	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	0.00	1.56	4.37	7.18	9.98	9.98	9.98	9.98
	4.3	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.21	0.22	0.23
Max:	38.8%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%
	139.1	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	0.00	1.56	4.37	7.18	10.18	10.19	10.20	10.22
0.74	100.0	Exploration Capital (\$ millions)	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6.72	905.9	Development Capital (\$ millions)	0.00	0.00	285.00	285.00	285.00	0.00	0.00	0.00	0.00	4.99	4.99
0.87	117.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	6.50	6.50	6.50	6.50	6.50	6.50	6.50
3.10	417.3	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	4.68	13.10	21.53	30.55	30.58	30.61	30.65
23.88	3219.3	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	37.26	104.33	171.40	238.46	238.46	238.46	238.46
0.53	71.5	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.83	2.32	3.81	5.30	5.30	5.30	5.30
0.37	50.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18	Years Field On-stream	0	0	0	0	1	1	1	1	1	1	1

Gas with NGL Field # 3 (initial years only are shown)

Years \longrightarrow

Total/boe	Total All Years	Field selected for analysis # 3	1	2	3	4	5	6	7	8	9	10	11
	1081.8	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	9.00	33.00	57.00	81.00	81.00	81.00	81.00
	86.5	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.00	0.72	2.64	4.56	6.48	6.48	6.48	6.48
	995.3	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	8.28	30.36	52.44	74.52	74.52	74.52	74.52
	0.0	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	21.6	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.18	0.66	1.14	1.62	1.62	1.62	1.62
	21.6	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.00	0.18	0.66	1.14	1.62	1.62	1.62	1.62
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	187.5	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	0.00	1.56	5.72	9.88	14.04	14.04	14.04	14.04
	6.1	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.29	0.31	0.33
Max:	47.1%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%
	193.6	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	0.00	1.56	5.72	9.88	14.32	14.33	14.35	14.37
0.53	100.0	Exploration Capital (\$ millions)	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.13	961.1	Development Capital (\$ millions)	0.00	0.00	222.50	222.50	222.50	222.50	0.00	0.00	0.00	7.02	7.02
0.77	144.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
2.58	483.9	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	3.90	14.30	24.70	35.80	35.84	35.87	35.91
23.88	4478.7	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	37.26	136.62	235.98	335.34	335.34	335.34	335.34
0.53	99.5	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.83	3.04	5.24	7.45	7.45	7.45	7.45
0.40	75.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	18	Years Field On-stream	0	0	0	0	1	1	1	1	1	1	1

Gas with NGL Field # 4 (initial years only are shown)

Years →

Total/boe	Total All Years	Field selected for analysis # 4	1	2	3	4	5	6	7	8	9	10	11
	5428.8	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	0.00	9.00	156.00	303.00	450.00	450.00	450.00
	434.3	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.00	0.00	0.72	12.48	24.24	36.00	36.00	36.00
	4994.5	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	0.00	8.28	143.52	278.76	414.00	414.00	414.00
	0.0	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	108.6	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.18	3.12	6.06	9.00	9.00	9.00
	108.6	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.18	3.12	6.06	9.00	9.00	9.00
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	941.0	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	0.00	0.00	1.56	27.04	52.52	78.00	78.00	78.00
	22.7	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	1.10	1.16	1.22
Max:	76.9%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	1%	1%	2%
	963.7	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	1.56	27.04	53.57	79.10	79.16	79.22
0.11	100.0	Exploration Capital (\$ millions)	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.66	3440.9	Development Capital (\$ millions)	0.00	0.00	610.00	610.00	610.00	610.00	610.00	0.00	0.00	39.00	39.00
0.27	255.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	0.00	15.00	15.00	15.00	15.00	15.00	15.00
2.05	1927.3	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	0.00	3.12	54.08	107.14	158.21	158.32	158.43
23.88	22475.2	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.00	37.26	645.84	1254.42	1863.00	1863.00	1863.00
0.53	499.4	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.00	0.83	14.35	27.88	41.40	41.40	41.40
0.08	75.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	17	Years Field On-stream	0	0	0	0	0	1	1	1	1	1	1

Gas with NGL Field # 5 (initial years only are shown)

Years →

Total/boe	Total All Years	Field selected for analysis # 5	1	2	3	4	5	6	7	8	9	10	11
	10738.8	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	0.00	9.00	216.00	423.00	630.00	630.00	630.00
	859.1	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.00	0.00	0.72	17.28	33.84	50.40	50.40	50.40
	9879.7	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	0.00	8.28	198.72	389.16	579.60	579.60	579.60
	0.0	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	214.8	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.18	4.32	8.46	12.60	12.60	12.60
	214.8	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.18	4.32	8.46	12.60	12.60	12.60
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1861.4	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	0.00	0.00	1.56	37.44	73.32	109.20	109.20	109.20
	48.5	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47	1.54	1.62	1.70
Max:	85.6%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	1%	1%	2%
	1909.9	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	1.56	37.44	74.79	110.74	110.82	110.90
0.05	100.0	Exploration Capital (\$ millions)	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.61	6719.9	Development Capital (\$ millions)	0.00	0.00	983.33	983.33	983.33	983.33	983.33	983.33	0.00	54.60	54.60
0.24	440.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	20.00	20.00	20.00
1.54	2864.8	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	0.00	2.34	56.16	112.18	166.11	166.23	166.35
23.88	44458.6	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.00	37.26	894.24	1751.22	2608.20	2608.20	2608.20
0.53	988.0	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.00	0.83	19.87	38.92	57.96	57.96	57.96
0.08	150.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	22	Years Field On-stream	0	0	0	0	0	1	1	1	1	1	1

Oil with Associated Gas Field # 6 (initial years only are shown)

Years →

Total/boe	Total All Years	Field selected for analysis # 6	1	2	3	4	5	6	7	8	9	10	11
	21.4	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	1.08	1.32	1.55	1.79	2.03	2.03	1.76	1.53
	1.7	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.09	0.11	0.12	0.14	0.16	0.16	0.14	0.12
	19.7	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.99	1.21	1.43	1.65	1.86	1.86	1.62	1.41
	28.5	Oil Production (barrels millions)	0.00	0.00	0.00	1.44	1.76	2.07	2.39	2.70	2.70	2.35	2.04
	0.0	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	28.5	Total Liquids Production (barrels millions)	0.00	0.00	0.00	1.44	1.76	2.07	2.39	2.70	2.70	2.35	2.04
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	31.8	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	1.61	1.96	2.31	2.66	3.01	3.01	2.62	2.28
	1.4	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06	0.07	0.07
Max:	22.8%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	3%
	33.2	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	1.61	1.96	2.31	2.66	3.07	3.07	2.68	2.34
3.15	100.0	Exploration Capital (\$ millions)	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4.05	128.6	Development Capital (\$ millions)	0.00	0.00	60.00	60.00	0.00	0.00	0.00	0.00	0.00	1.31	1.14
3.15	100.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
3.66	116.2	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	5.62	6.85	8.08	9.31	10.75	10.76	9.39	8.21
2.78	88.5	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	4.47	5.45	6.43	7.41	8.38	8.38	7.29	6.34
4.13	131.0	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	6.62	8.07	9.52	10.97	12.42	12.42	10.80	9.39
1.57	50.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	20	Years Field On-stream	0	0	0	1	1	1	1	1	1	1	1

Oil with Associated Gas Field # 7 (initial years only are shown)

Years \longrightarrow

Total/boe	Total All Years	Field selected for analysis # 7	1	2	3	4	5	6	7	8	9	10	11
	54.0	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	2.52	3.78	5.04	6.30	6.30	5.29	4.44
	4.3	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.00	0.20	0.30	0.40	0.50	0.50	0.42	0.36
	49.7	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	2.32	3.48	4.64	5.80	5.80	4.87	4.08
	77.2	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	3.60	5.40	7.20	9.00	9.00	7.56	6.34
	0.0	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	77.2	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.00	3.60	5.40	7.20	9.00	9.00	7.56	6.34
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	85.5	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	0.00	3.99	5.98	7.97	9.97	9.97	8.37	7.02
	4.7	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.21	0.22	0.23
Max:	32.5%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	2%	3%	3%
	90.2	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	0.00	3.99	5.98	7.97	10.17	10.18	8.59	7.25
1.17	100.0	Exploration Capital (\$ millions)	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.64	311.3	Development Capital (\$ millions)	0.00	0.00	95.83	95.83	95.83	0.00	0.00	0.00	0.00	4.18	3.51
1.78	152.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
3.17	270.6	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	11.96	17.94	23.92	30.50	30.53	25.76	21.76
2.62	223.7	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	10.43	15.65	20.87	26.08	26.08	21.89	18.38
4.15	355.1	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	16.56	24.84	33.12	41.40	41.40	34.75	29.17
0.88	75.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	19	Years Field On-stream	0	0	0	0	1	1	1	1	1	1	1

Oil with Associated Gas Field # 8 (initial years only are shown)

Years →

Total/boe	Total All Years	Field selected for analysis # 8	1	2	3	4	5	6	7	8	9	10	11
	62.3	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	2.16	3.60	5.04	6.48	6.48	5.63	4.90
	5.0	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.00	0.17	0.29	0.40	0.52	0.52	0.45	0.39
	57.3	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	1.99	3.31	4.64	5.96	5.96	5.18	4.51
	103.8	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	3.60	6.00	8.40	10.80	10.80	9.39	8.16
	0.0	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	103.8	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.00	3.60	6.00	8.40	10.80	10.80	9.39	8.16
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	113.4	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	0.00	3.93	6.55	9.17	11.79	11.79	10.25	8.91
	6.6	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.25	0.26	0.27
Max:	30.1%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	3%
	120.0	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	0.00	3.93	6.55	9.17	12.03	12.04	10.51	9.19
0.88	100.0	Exploration Capital (\$ millions)	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.13	355.1	Development Capital (\$ millions)	0.00	0.00	80.00	80.00	80.00	80.00	0.00	0.00	0.00	5.13	4.46
1.85	210.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
2.65	300.0	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	9.83	16.38	22.93	30.07	30.10	26.28	22.97
2.27	257.9	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	8.94	14.90	20.87	26.83	26.83	23.32	20.28
4.21	477.6	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	16.56	27.60	38.64	49.68	49.68	43.19	37.55
0.66	75.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	21	Years Field On-stream	0	0	0	0	1	1	1	1	1	1	1

Oil with Associated Gas Field # 9 (initial years only are shown)

Years →

Total/boe	Total All Years	Field selected for analysis # 9	1	2	3	4	5	6	7	8	9	10	11
	192.9	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	0.00	9.00	13.50	18.00	18.00	18.00	18.00
	15.4	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.00	0.00	0.72	1.08	1.44	1.44	1.44	1.44
	177.4	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	0.00	8.28	12.42	16.56	16.56	16.56	16.56
	154.3	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	7.20	10.80	14.40	14.40	14.40	14.40
	0.0	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	154.3	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	7.20	10.80	14.40	14.40	14.40	14.40
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	183.9	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	0.00	0.00	8.58	12.87	17.16	17.16	17.16	17.16
	11.3	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.36	0.38	0.40
Max:	37.6%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%	2%
	195.2	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	8.58	12.87	17.50	17.52	17.54	17.56
0.54	100.0	Exploration Capital (\$ millions)	33.3	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.14	576.6	Development Capital (\$ millions)	0.00	0.00	0.00	128.13	128.13	128.13	128.13	0.00	0.00	8.58	8.58
2.39	440.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	20.00	20.00	20.00
2.12	390.4	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	0.00	17.16	25.74	35.01	35.04	35.08	35.11
4.34	798.5	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.00	37.26	55.89	74.52	74.52	74.52	74.52
3.86	709.8	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.00	33.12	49.68	66.24	66.24	66.24	66.24
0.54	100.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	22	Years Field On-stream	0	0	0	0	0	1	1	1	1	1	1

Oil with Associated Gas Field # 10 (initial years only are shown)

Years →

Total/boe	Total All Years	Field selected for analysis # 10	1	2	3	4	5	6	7	8	9	10	11
	750.0	Gross Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	0.00	0.00	21.60	29.70	37.80	45.90	54.00
	60.0	Fuel & Process Gas (bcf)	0.00	0.00	0.00	0.00	0.00	0.00	1.73	2.38	3.02	3.67	4.32
	690.0	Sales Natural Gas Production (bcf)	0.00	0.00	0.00	0.00	0.00	0.00	19.87	27.32	34.78	42.23	49.68
	500.0	Oil Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	14.40	19.80	25.20	30.60	36.00
	0.0	Condensate Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	500.0	Total Liquids Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	14.40	19.80	25.20	30.60	36.00
	0.0	LPG Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	615.0	Petroleum Production Sold (boe millions)	0.00	0.00	0.00	0.00	0.00	0.00	17.71	24.35	31.00	37.64	44.28
	34.5	Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.51	0.54	0.56
Max:	54.3%	Water Cut of Total boe (%)	0%	0%	0%	0%	0%	0%	0%	2%	2%	1%	1%
	649.5	Total Petroleum and Water Production (barrels millions)	0.00	0.00	0.00	0.00	0.00	0.00	17.71	24.84	31.51	38.18	44.84
0.16	100.0	Exploration Capital (\$ millions)	33.3	33.3	33.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.55	2183.5	Development Capital (\$ millions)	0.00	0.00	0.00	382.50	382.50	382.50	382.50	382.50	0.00	18.82	22.14
2.60	1600.0	Fixed Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	0.00	0.00	50.00	50.00	50.00	50.00	50.00
2.11	1298.9	Variable Operating Costs (\$ millions)	0.00	0.00	0.00	0.00	0.00	0.00	35.42	49.68	63.01	76.35	89.69
5.05	3104.9	Gas Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.00	0.00	89.42	122.96	156.49	190.03	223.56
3.74	2300.0	Oil & Condensate Treatment, Transport & Tariff (\$millions)	0.00	0.00	0.00	0.00	0.00	0.00	66.24	91.08	115.92	140.76	165.60
0.57	350.0	Decommissioning Capital (\$ millions)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	32	Years Field On-stream	0	0	0	0	0	0	1	1	1	1	1