

2 Year Business Plan 2017-2018

Natural Gas & Petroleum Resources

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DEPARTMENTAL OVERVIEW

Purpose: To provide the maximum dividend possible to the City of Medicine Hat for the benefit of the citizens.

Objective: Conduct business in a safe and ethical manner within regulatory standards, maximizing shareholder value and cash flow through controlling costs, expedient abandonment of non-economic assets, optimizing current production, current asset development, new asset revenue generation, and divestment of non-core assets.



SERVICES PROVIDED BY THE DEPARTMENT INCLUDE:

Business Services – oil & gas marketing, production accounting, reservoir management, business development, and performance reporting

Surface Land & Environment – surface land and environmental stewardship

Mineral & Joint Venture – manage mineral leases, partner agreements, and contracts

Production Operations – maintain, optimize and safely operate wells, facilities, and pipelines

Subsurface Technical – discover new revenue sources and manage development projects

Total Budget Expenditures

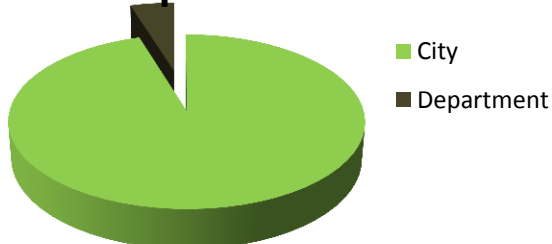


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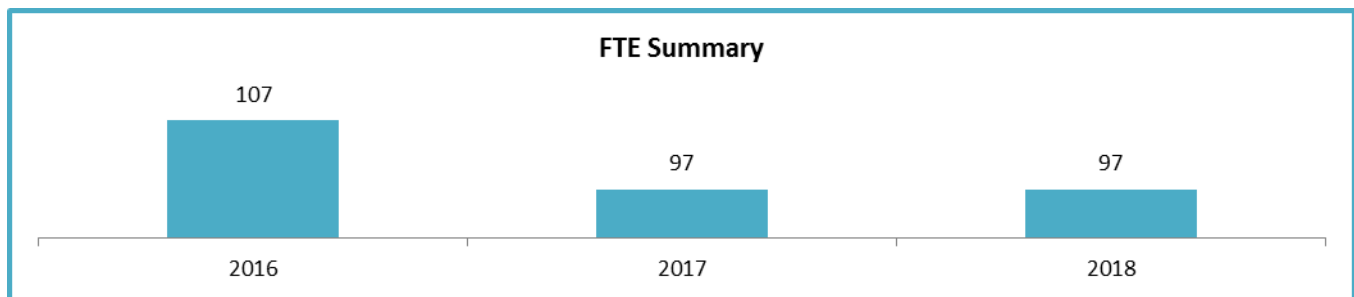
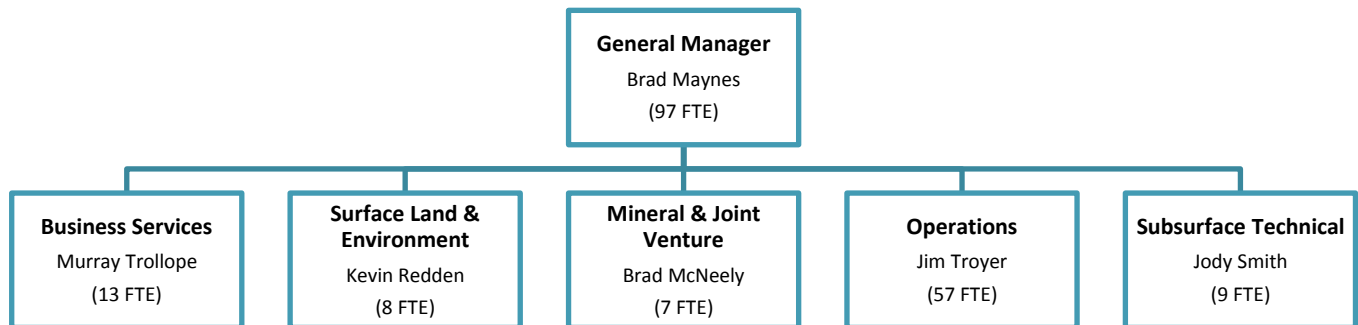
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DEPARTMENT OVERVIEW

Corporate Mission Statement

“Deliver value through exceptional public service.”

Organizational Chart



Core Services & Customers

NGPR Objective: Conduct business in a safe and ethical manner within regulatory standards, maximizing shareholder value and cash flow through controlling costs, expedient abandonment of non-economic assets, optimizing current production, development where economic, and divestment of non-core assets.

External Customers: Crown and Freehold surface and mineral lease owners, grazing leaseholders, Provincial & Federal regulatory agencies, operating and non-operating partners, and service providers.

Internal Customers: City of Medicine Hat departments including NGPR, City Council, Energy Committee, Gas Distribution, Electric Generation, Finance, Treasury, Legal, Purchasing, and Fleet and citizens of Medicine Hat.

Key Performance Indicators (KPI's) for 2017-18

Safety, Environmental & Regulatory

- Zero Lost Time Incidents
- Zero Preventable Vehicle Incidents
- Zero High Risk Environmental Incidents
- Zero High Risk Regulatory Incidents

Sales Volume

- 2017 goal = 9,154 boe/day
- 2018 goal = 10,111 boe/day

Operating Excellence

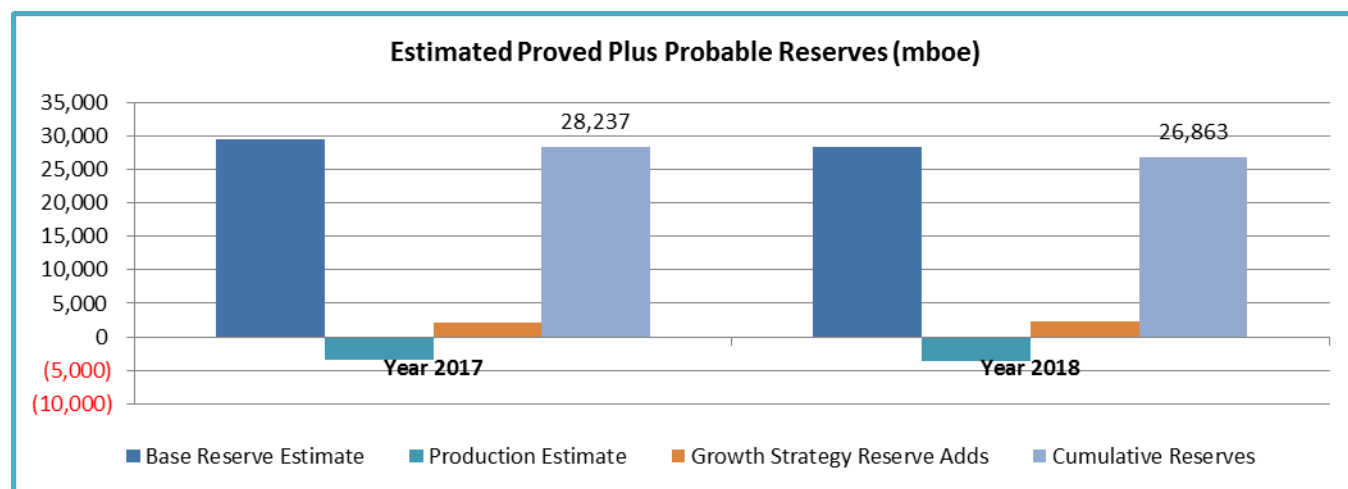
- Administrative Costs = \$4.49/boe for 2017 and \$4.10/boe for 2018
- Natural Gas Lifting Costs = \$2.17/mcf for 2017 and \$2.31/mcf for 2018
- Oil Lifting Costs = \$14.61/bbl for 2017 and \$14.49/bbl for 2018

Finding & Development

- Goal = \$17.16/boe per Growth Strategy

Reserves (proved plus probable)

- 2017 goal = 28,237 mboe
- 2018 goal = 26,863 mboe



Significant Issues and Trends

Strengths	Weaknesses
Strong balance sheet, no debt, approximately \$75 million depletion reserve and \$140 million unappropriated surplus with access to debt financing	Heavy (80% production) reliance on shallow natural gas when considering long term low natural gas price forecasts, and uncompetitive cost structure vs. unconventional (shale) gas.
Functional technical team with low staff turnover	Conventional (shallow) natural gas is high cost and distant from market vs. unconventional (shale) gas
Low cost operator of shallow natural gas	Municipal approval process can be lengthy vs. industry; Municipality has low risk tolerance
Non-taxable	Emergency Protection Order (EPO) restricting opportunities in Manyberries and area
Hedging policy in place to assist with predictability of future cash flows	Cash flow from operations declining due to low price, natural production decline, and expiry of long term price contracts
Strong reputation in community as safe and ethical employer; in natural gas business for 100+ years; proud of our environmental record of excellence	Reserve depletion due to limited acquisition opportunities with upside exploration and development to be found within current Investment Framework
Growth Strategy and performance targets in place	Significant future liabilities for eventual abandonment and site reclamation of assets

Opportunities	Threats
Acquisition or divestment to diversify reliance on shallow natural gas	Long-term low natural gas price forecast
Technical Advisory Panel to assist NGPR, Energy Committee, and Council with industry knowledge and strategic planning	Regulatory changes – species at risk, liability rating, operational environment, First Nations consultation, opposition to fossil fuels, carbon tax, greenhouse gases, etc....
Acquisition, exploration, and development costs are low due to depressed industry (i.e. cost of industry support services)	Service availability - services are leaving Medicine Hat due to lack of work
Political/societal push towards green energy should lead to higher natural gas consumption	Natural Gas Market Access – Western Canada gas needs better market access; LNG export terminal has not been approved; Eastern Canada now being primarily served by lower cost USA shale gas
Global demand for oil and gas is forecasted to continue to increase	Public Mistrust – industry is perceived as “smelly, slow to adopt new environmental technologies, often in denial about climate change, and stalling a rapid transition to a ‘green’ economy” ¹
Potential for deeper reservoirs in Medicine Hat area has not been adequately evaluated by industry	Government (municipal, provincial, federal) turnover through elections can change the desirability for continued investment in the oil and gas industry

¹ Sarah Edman, ConocoPhillips. *Public Perception of the Oil and Gas Industry*. Retrieved from http://www.spe.org/twa/print/archives/2013/2013v9n2/08_Pillars_FINAL.pdf

CURRENT STRATEGIES & ACTION PLANS

#	SP Ref	KR Ref	Strategic Priority & Key Result & Action Plan	Who	When
1	5	5.3	Existing Oil & Gas Assets <ul style="list-style-type: none"> Produce while looking for profitable divestment opportunities Maximize profitability while ensuring “Best in Class” safety and environmental performance Continue the optimization strategy for non-operated Glauco C oil pool (property operated by 3rd party) 	NGPR	Ongoing
2	1 5 6	1.4 5.1 5.2 5.3 6.5	Growth Strategy <ul style="list-style-type: none"> Invest up to \$45 million over 3 years (2017-2019) in exploration and drilling to further evaluate the deeper potential in the general CMH area Strategy will be re-evaluated after one year 	NGPR	Q1-Q4 2017
3	5	5.1 5.2 5.3	Business Development <ul style="list-style-type: none"> Evaluate disposition and acquisitions markets for potential divestment of CMH assets or accretive acquisitions 	NGPR	Q1-Q4 2017
4	6	6.5	Manyberries <ul style="list-style-type: none"> Work towards a legal or negotiated solution to resolve the issue of expropriated oil and gas assets 	NGPR	Q1-Q4 2017
5	5	5.2	Abandonment & Reclamation Liability <ul style="list-style-type: none"> Refine the financial estimate of future abandonment and reclamation liability for NGPR assets Conduct prudent abandonment and reclamation operations based on regulatory requirements and projected cash flows 	NGPR	Q1-Q4 2017

Service Enhancement

Goal: Increase stakeholder knowledge and understanding to provide greater transparency of the NGPR business unit

Priorities for Service Enhancement or Improvement:

1. Improve communication of Council and NGPR Strategic Plan to all staff
2. Improve communication to Council on NGPR business
3. Improve communication to the citizens of Medicine Hat

Priority #	Service Enhancement KPI	Timeline
1	All staff meetings to provide updates	Quarterly
2	Proactive attendance at Council meetings to provide updates on challenges, successes, and future plans	As scheduled
3	Enhance NGPR website to promote awareness of NGPR to the general public	Quarterly

FINANCIAL PLAN SUMMARY & HIGHLIGHTS

Departmental Operating Revenues & Expenses Summary:

NGPR Summary (CAD \$)	2015 Actual Results	2016 Budget	2017 Budget	2018 Budget	2019 Forecast	2020 Forecast	2016 vs. 2017 Variance	Change Note
Volumes								
NG - TIK (mcf)	17,164,641	15,217,664	14,793,195	13,861,124	12,430,180	11,532,658	(424,469)	1
Daily (mcf/d)	47,026	41,692	40,529	37,976	34,055	31,596	(1,163)	
Oil & Liquids (bbl)	378,608	647,968	875,685	1,380,254	1,717,720	1,887,808	227,717	2
Daily (bbl/d)	1,037	1,775	2,399	3,782	4,706	5,172	624	
Price (CAD \$)								
NG (\$/mcf)	\$2.65	\$2.91	\$2.87	\$2.79	\$2.72	\$2.91	(\$0.04)	
Oil & Liquids (\$/bbl)	\$44.60	\$44.47	\$48.90	\$55.88	\$62.57	\$67.39	\$4.43	
Revenues (000's)								
Gas Sales from Production	\$45,481	\$44,283	\$42,399	\$38,624	\$33,837	\$31,848	(\$1,884)	
Contracted Gas Sales	\$0	\$22,355	n/a	n/a	n/a	n/a	(\$22,355)	
Sales of Purchased Gas	\$0	\$0	\$6,932	\$10,864	\$13,548	\$16,100	\$6,932	
Oil Sales	\$16,887	\$28,813	\$42,823	\$77,128	\$107,478	\$127,219	\$14,010	
Other Sales & Services	\$3,177	\$2,950	\$2,365	\$2,335	\$2,295	\$2,245	(\$585)	
Risk Management Instrument	\$0	\$0	(\$952)	(\$1,000)	(\$1,000)	(\$1,000)	(\$952)	
Royalties	(\$3,435)	(\$6,778)	(\$8,769)	(\$14,387)	(\$19,348)	(\$22,615)	(\$1,991)	
Oil & Gas Transportation	(\$2,269)	(\$3,054)	(\$3,784)	(\$5,148)	(\$6,030)	(\$6,461)	(\$730)	
Total Revenues	\$59,841	\$88,569	\$81,014	\$108,416	\$130,780	\$147,336	(\$7,555)	3
Expenses (000's)								
Administration	\$14,300	\$15,618	\$14,994	\$15,119	\$15,361	\$15,607	\$624	
Operations & Maintenance	\$38,116	\$47,477	\$44,957	\$51,958	\$58,093	\$63,063	\$2,520	
Gas Purchases	\$16	\$6,469	\$6,999	\$10,926	\$13,606	\$16,154	(\$530)	
Total Expenses	\$52,432	\$69,564	\$66,950	\$78,003	\$87,060	\$94,824	\$2,614	4
Transfer from Gas Retail	\$15,351	\$1,322	\$0	\$0	\$0	\$0	(\$1,322)	
Earnings from AOG	\$8,287	n/a	n/a	n/a	n/a	n/a	n/a	
EBITDA	\$31,047	\$20,327	\$14,064	\$30,413	\$43,720	\$52,512	(\$6,263)	
Interest Earnings	\$5,806	\$5,300	\$5,332	\$3,599	\$5,307	\$5,579	\$32	
Interest Expense	\$0	(\$75)	(\$90)	(\$90)	(\$90)	(\$90)	(\$15)	
DDA	(\$44,329)	(\$38,738)	(\$57,959)	(\$55,074)	(\$56,083)	(\$58,791)	(\$19,221)	5
Impairment	(\$55,376)	n/a	n/a	n/a	n/a	n/a		
AOG DDA & Other	(\$3,168)	n/a	n/a	n/a	n/a	n/a		
Net Earnings (Loss)	(\$66,020)	(\$13,186)	(\$38,653)	(\$21,152)	(\$7,146)	(\$790)	(\$25,467)	

Notes

1. Natural gas volumes are budgeted to decrease due to natural decline.
2. Oil volumes are budget to increase (35%) due to the growth strategy focusing on oil exploration and development in Alberta and Saskatchewan.
3. Total Revenues are budgeted to decrease by \$7.6 million or 8.5%. The primary reason for the negative variance is the expiration of a long-term gas contract. This is offset somewhat by higher oil sales and corresponding royalties and transportation related to the Growth Strategy.
4. Total Expenses are expected to be decrease by \$2.6 million or 3.8%. The lower costs are largely due to reduction in staff (attrition) and cost monitoring.
6. DDA increases due to new wells and additional capital costs attributable to the Growth Strategy.

TCA DECISION PACKAGE SUMMARY

Refer to Attachment A for detailed information on each decision package.

2017-2018 TCA Decision Packages (listed in priority order):*

Ref.	Year	Name	Capital Cost	Operating Earning**
5	2017	Growth Strategy	\$32,288,000	\$3,121,000
5	2017	Pipeline Upgrades	\$500,000	
5	2017	Facility Upgrades	\$502,000	
5	2017	Facility & Pipeline Repair	\$1,460,000	(\$31,000)
5	2017	Facility & Pipeline Abandonment	\$920,000	
5	2017	Well Repair	\$1,153,000	(\$24,000)
5	2017	Well Abandonment	\$1,071,000	
5	2017	Surface Lease Reclamation	\$2,909,000	
5	2017	Non-Operated – Development	\$5,699,000	\$736,000
5	2017	Non-Operated – Abandonment	\$100,000	
5	2017	Office	\$25,000	(\$3,000)
5	2018	Growth Strategy	\$41,011,000	\$11,961,000
5	2018	Pipeline Upgrades	\$333,000	
5	2018	Facility Upgrades	\$500,000	
5	2018	Facility & Pipeline Repair	\$2,171,000	(\$145,000)
5	2018	Facility & Pipeline Abandonment	\$920,000	
5	2018	Well Repair	\$1,161,000	(\$103,000)
5	2018	Well Abandonment	\$1,071,000	
5	2018	Surface Lease Reclamation	\$2,489,000	
5	2018	Non-Operated – Development	\$9,141,000	\$2,279,000
5	2018	Non-Operated – Abandonment	\$100,000	
5	2018	Office	\$45,000	(\$10,000)
5	2018	Leasehold Improvements	\$550,000	(\$18,000)
Total			\$106,534,000	\$17,763,000
5	2017	<i>Gas Well Recompletion Program</i>	<i>\$1,125,000</i>	
5	2017	<i>Manyberries Development Program</i>	<i>\$4,015,000</i>	
5	2017	<i>Bigstick Booster Compression</i>	<i>\$1,100,000</i>	
5	2017	<i>Station Decommissioning</i>	<i>\$1,000,000</i>	
<i>Total</i>			<i>\$7,240,000</i>	

* *Italicized requests are not included in the management (staff) recommended budget.*

** Operating Earnings (revenue less expenses including amortization) in first full year of operations (actual impact may occur over a number of years).

2014-2018 COUNCIL STRATEGIC PRIORITIES AND KEY RESULTS

Strategic Priority 1:

Economic Development: We foster a sustainable, growing and diverse economy with a strong industrial base and a vibrant downtown.

Strategic Priority 2:

Infrastructure and Amenities: We have high quality, sustainable infrastructure and amenities, and a reputation for excellent management and maintenance.

Strategic Priority 3:

Social Wellness: A safe community that welcomes diversity and supports all citizens with high quality and accessible cultural, recreational and public services.

Strategic Priority 4:

Image and Profile: We promote our distinctive community and excellent quality of life to our citizens and the world.

Strategic Priority 5:

Fiscal Management: Responsible financial management focused on the long term ensures a sustainable city.

Strategic Priority 6:

City Government: The City increasingly stands out as a well-governed and well-organized municipal corporation with a positive corporate culture.

Strategic Priority 1: Economic Development Key Results

- **KR 1.1:** At least one more heavy industrial operator or major expansion of existing heavy industry occurs by December 2018.
- **KR 1.2:** A cohesive economic development strategy is completed and being implemented by December 2014.
- **KR 1.3:** The Downtown Revitalization Plan is funded and being implemented by June 2018.
- **KR 1.4:** Value added manufacturing and processing is increased by December 2016.

Strategic Priority 2: Infrastructure and Amenities Key Results

- **KR 2.1:** Improve and implement an asset management plan with attention to our deep utilities and transportation network by December 2016.
- **KR 2.2:** The flood mitigation plan is fully implemented by April 2016.
- **KR 2.3:** The percentage of renewable energy production and consumption increases relative to other business growth by September 2015 and thereafter.

Strategic Priority 3: Social Wellness Key Results

- **KR 3.1:** The river valley is developed as an aesthetic, recreational feature and as a tourist attraction by December 2018 and thereafter.
- **KR 3.2:** Appropriate river valley commercial development increases by December 2018 and thereafter.
- **KR 3.3:** Meaningful engagement opportunities for youth are developed and implemented by December 2015 and thereafter.
- **KR 3.4:** Opportunities to enhance existing green space are identified and implemented by December 2016 and thereafter.
- **KR 3.5:** Increased recreational opportunities in the south side of the city are identified and developed by December 2018.

Strategic Priority 4: Image and Profile Key Results

- **KR 4.1:** Medicine Hat promotional agencies align behind a strong external brand and promote Medicine Hat with a unified external voice by December 2015 and thereafter.
- **KR 4.2:** Visitors increasingly choose Medicine Hat as a destination, and increasingly leave with a positive impression of the city by December 2014 and thereafter.
- **KR 4.3:** Citizens are increasingly positive ambassadors for Medicine Hat by December 2014 and thereafter.
- **KR 4.4:** Medicine Hat is increasingly viewed as a choice community and a great place to work, live and play by December 2016 and thereafter.

Strategic Priority 5: Key Results

- **KR 5.1:** The City's healthy balance sheet provides flexibility for the future by March 2015 and thereafter.
- **KR 5.2:** A risk tolerance framework is articulated and adopted by Council by September, 2014.
- **KR 5.3:** The City's sustainable equity pool continues to produce dividends by March 2014 and thereafter.

Strategic Priority 6: City Government Key Results

- **KR 6.1:** A high performance culture with clear accountabilities is in place in the City by December 2014.
- **KR 6.2:** Councilors are role models for excellence in governance by December 2014 and thereafter.
- **KR 6.3:** Increasingly efficient and effective customer-oriented service delivery is implemented in the City by December 2014 and thereafter.
- **KR 6.4:** Employee turnover is reduced and measurable increases in employee satisfaction are recorded by September 2014 and thereafter.
- **KR 6.5:** Council is a resource for strategic direction and advice to the CAO by September 2014 and thereafter.
- **KR 6.6:** The best organization structure for the City to move forward into the future is determined and implemented by December 2016.

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Division:

Project Name: Drilling & Completions

Project Type: TCA (on-going costs)
in thousands of dollars

Reference No: 5

Department Priority Ranking:

Organization Priority Ranking:

Recommended by Management Team: Yes

(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	6,596	42,497	70,579	89,955	99,108	111,108	114,818	124,170	126,721	133,420
	Royalties	(1,059)	(7,199)	(15,762)	(18,745)	(21,559)	(23,151)	(24,813)	(25,625)	(27,000)	(26,934)
	Total	5,537	35,298	54,817	71,210	77,549	87,957	90,005	98,545	99,721	106,486
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	90	556	940	1,228	1,355	1,527	1,580	1,714	1,759	1,875
	Materials & supplies	632	3,890	6,581	8,593	9,484	10,686	11,063	11,996	12,311	13,124
	Contracted services	1,084	6,669	11,282	14,731	16,258	18,320	18,965	20,565	21,105	22,499
	Amortization	326	1,867	4,465	7,066	9,667	12,269	14,871	17,473	20,074	22,676
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	2,132	12,982	23,269	31,617	36,764	42,802	46,480	51,748	55,249	60,174
Revenue less Expense		\$ 3,405	\$ 22,316	\$ 31,548	\$ 39,593	\$ 40,785	\$ 45,155	\$ 43,525	\$ 46,797	\$ 44,471	\$ 46,312
Capital Expenditure		\$ 23,180	\$ 32,200	\$ 23,220	\$ 32,240	\$ 23,220	\$ 32,240	\$ 23,220	\$ 32,240	\$ 23,220	\$ 32,240
1). Drill & Complete		\$ 23,180	\$ 32,200	\$ 23,180	\$ 32,200	\$ 23,180	\$ 32,200	\$ 23,180	\$ 32,200	\$ 23,180	\$ 32,200
2). Optimization, Water Injection		\$ -	\$ -	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40
3). Recompletion		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

ROI % **23%**

The return on investment is based on the expected incremental revenue/expenses from the life of the wells drilled through the development program. The Exploration and Development plan covers many capital budget categories as summarized below. This assumes the growth strategy will be repeated year over year.

Activity

Acquire mineral interests
Analyze reservoir/rock formation through seismic
Drill & complete well
Build facility to process hydrocarbons
Tie in facility to pipeline

Budget Category

Mineral Acquisitions
Exploitation - Geosciences & Engineering
Drilling & Completions
Facilities
Gathering Pipelines

Description & Purpose

Develop the City's mineral leases to maximize the future value of the assets.

Implications & Justification

Each project has undergone a preliminary analysis to ensure it passes the 10% return on investment threshold. Prior to project commencement, a more rigorous economic review is performed. Potential 2017 projects include 33 new drills plus the completion of economically viable wells. 2018 projects include 44 new drills plus the completion of economically viable wells.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Focus on natural gas development vs. oil development. Not recommended. Unconventional shale gas has unlocked vast quantities of natural gas globally capping the price of natural gas and leaving conventional shallow gas with marginal economics.
- 2) Do nothing. Preserve cash but do not increase value to the City's reserves, production, or asset base. Not recommended.
- 3) Commence Growth Strategy to increase reserves, production and cash flow. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Division:

Project Name: Mineral Acquisitions

Project Type: TCA (on-going costs)
in thousands of dollars

Reference No: 5

Department Priority Ranking:

Organization Priority Ranking:

Recommended by Management Team: Yes
(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	-	-	-	-
	Amortization	108	286	464	643	821	999	1,177	1,356	1,534	1,712
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	108	286	464	643	821	999	1,177	1,356	1,534	1,712
Revenue less Expense		\$ (108)	\$ (286)	\$ (464)	\$ (643)	\$ (821)	\$ (999)	\$ (1,177)	\$ (1,356)	\$ (1,534)	\$ (1,712)
Capital Expenditure		\$ 2,300	\$ 1,500	\$ 2,300	\$ 1,500	\$ 2,300	\$ 1,500	\$ 2,300	\$ 1,500	\$ 2,300	\$ 1,500
1). Mineral Acquisitions		\$ 2,300	\$ 1,500	\$ 2,300	\$ 1,500	\$ 2,300	\$ 1,500	\$ 2,300	\$ 1,500	\$ 2,300	\$ 1,500

ROI % 23%

The return on investment is based on the expected incremental revenue/expenses from the life of the wells drilled through the development program. The Exploration and Development plan covers many capital budget categories as summarized below.

Activity

Acquire mineral interests
Analyze reservoir/rock formation through seismic
Drill & complete well
Build facility to process hydrocarbons
Tie in facility to pipeline

Budget Category

Mineral Acquisitions
Exploitation - Geosciences & Engineering
Drilling & Completions
Facilities
Gathering Pipelines

Description & Purpose

These funds will be used to acquire crown and freehold mineral interests.

Implications & Justification

Each project has undergone a preliminary analysis to ensure it passes the 10% return on investment threshold. Prior to project commencement, a more rigorous economic review is performed. Budget funds will be used to purchase mineral interests.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Do nothing. Preserve cash but do not increase value to the City's reserves, production, or asset base. Not recommended.
- 2) Commence Growth Strategy to increase reserves, production and cash flow. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES
Division:
Project Name: Exploitation – Geosciences & Engineering
Project Type: TCA (on-going costs)
in thousands of dollars

Reference No: 5
Department Priority Ranking:
Organization Priority Ranking:
Recommended by Management Team: Yes
(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	-	-	-	-
	Amortization	52	184	335	487	638	789	941	1,092	1,243	1,395
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	52	184	335	487	638	789	941	1,092	1,243	1,395
Revenue less Expense		\$ (52)	\$ (184)	\$ (335)	\$ (487)	\$ (638)	\$ (789)	\$ (941)	\$ (1,092)	\$ (1,243)	\$ (1,395)
Capital Expenditure		\$ 2,475	\$ 750	\$ 2,475	\$ 750	\$ 2,475	\$ 750	\$ 2,475	\$ 750	\$ 2,475	\$ 750
1). Operated		\$ 2,475	\$ 750	\$ 2,475	\$ 750	\$ 2,475	\$ 750	\$ 2,475	\$ 750	\$ 2,475	\$ 750

ROI % **23%**

The return on investment is based on the expected incremental revenue/expenses from the life of the wells drilled through the development program. The Exploration and Development plan covers many capital budget categories as summarized below.

Activity	Budget Category
Acquire mineral interests	Mineral Acquisitions
Analyze reservoir/rock formation through seismic	Exploitation - Geosciences & Engineering
Drill & complete well	Drilling & Completions
Build facility to process hydrocarbons	Facilities
Tie in facility to pipeline	Gathering Pipelines

Description & Purpose
Manage the City's assets by performing geological surveys, mapping and modeling.

Implications & Justification

Each project has undergone a preliminary analysis to ensure it passes the 10% return on investment threshold. Prior to project commencement, a more rigorous economic review is performed. Budget funds will be used to obtain data (e.g. seismic) to assist with the analysis of the rock formation, identification of potential hydrocarbon reservoirs, and to assist with the drilling location selection.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Drill wells without seismic information. Not recommended. Seismic and modelling information enhances the probability of locating hydrocarbons.
- 2) Do nothing. Preserve cash but do not increase value to the City's reserves, production, or asset base. Not recommended.
- 3) Commence Growth Strategy to increase reserves, production and cash flow. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Division:

Project Name: Facilities

Project Type: TCA (on-going costs)
in thousands of dollars

Reference No: 5

Department Priority Ranking:

Organization Priority Ranking:

Recommended by Management Team: Yes

(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	-	-	-	-
	Amortization	113	510	1,089	1,672	2,265	2,863	3,462	4,058	4,648	5,236
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	113	510	1,089	1,672	2,265	2,863	3,462	4,058	4,648	5,236
Revenue less Expense		\$ (113)	\$ (510)	\$ (1,089)	\$ (1,672)	\$ (2,265)	\$ (2,863)	\$ (3,462)	\$ (4,058)	\$ (4,648)	\$ (5,236)
Capital Expenditure		\$ 5,333	\$ 6,978	\$ 5,389	\$ 7,133	\$ 5,629	\$ 7,133	\$ 5,629	\$ 7,008	\$ 5,511	\$ 7,008
1). Operated Facilities		\$ 5,333	\$ 6,978	\$ 5,389	\$ 7,133	\$ 5,629	\$ 7,133	\$ 5,629	\$ 7,008	\$ 5,511	\$ 7,008

ROI % 23%

The return on investment is based on the expected incremental revenue/expenses from the life of the wells drilled through the development program. The Exploration and Development plan covers many capital budget categories as summarized below.

Activity

Acquire mineral interests
Analyze reservoir/rock formation through seismic
Drill & complete well
Build facility to process hydrocarbons
Tie in facility to pipeline

Budget Category

Mineral Acquisitions
Exploitation - Geosciences & Engineering
Drilling & Completions
Facilities
Gathering Pipelines

Description & Purpose

Purchase and install new or replacement processing, compression or injection facilities to cost effectively deliver the City's natural gas and petroleum resources to market maximizing the future value of its assets.

Implications & Justification

Each project has undergone a preliminary analysis to ensure it passes the 10% return on investment threshold. Prior to project commencement, a more rigorous economic review is performed. Budget funds will be used to build facilities to support the Exploration & Development Growth Strategy.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Do not build facilities but rather truck all production from wellhead to processing plant. Not recommended. Facilities will only be constructed when the economics are cheaper than the processing option.
- 2) Do nothing. Preserve cash but do not increase value to the City's reserves, production, or asset base. Not recommended.
- 3) Commence Growth Strategy to increase reserves, production and cash flow. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Division:

Project Name: Gathering Pipelines

Project Type: TCA (on-going costs)
in thousands of dollars

Reference No: 5

Department Priority Ranking:

Organization Priority Ranking:

Recommended by Management Team: Yes
(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	-	-	-	-
	Amortization	11	41	80	119	158	197	236	276	315	354
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	11	41	80	119	158	197	236	276	315	354
Revenue less Expense		\$ (11)	\$ (41)	\$ (80)	\$ (119)	\$ (158)	\$ (197)	\$ (236)	\$ (276)	\$ (315)	\$ (354)
Capital Expenditure		\$ 500	\$ 333	\$ 500	\$ 333	\$ 500	\$ 333	\$ 500	\$ 333	\$ 500	\$ 333
1). Operated Gathering Pipelines		\$ 500	\$ 333	\$ 500	\$ 333	\$ 500	\$ 333	\$ 500	\$ 333	\$ 500	\$ 333

ROI % 23%

The return on investment is based on the expected incremental revenue/expenses from the life of the wells drilled through the development program. The Exploration and Development plan covers many capital budget categories as summarized below.

Activity

Acquire mineral interests
Analyze reservoir/rock formation through seismic
Drill & complete well
Build facility to process hydrocarbons
Tie in facility to pipeline

Budget Category

Mineral Acquisitions
Exploitation - Geosciences & Engineering
Drilling & Completions
Facilities
Gathering Pipelines

Description & Purpose

Purchase and install pipelines to cost effectively deliver the City's natural gas and petroleum to processing facilities maximizing the future value of the assets.

Implications & Justification

Each project has undergone a preliminary analysis to ensure it passes the 10% return on investment threshold. Prior to project commencement, a more rigorous economic review is performed. Budget funds will be used to tie in the facility to pipeline for successful new drills.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Do not build gathering lines but rather truck all production from wellhead to processing plant. Not recommended. Gathering pipelines will only be constructed when the economics are cheaper than the transportation option.
- 2) Do nothing. Preserve cash but do not increase value to the City's reserves, production, or asset base. Not recommended.
- 3) Commence Growth Strategy to increase reserves, production and cash flow. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES
Division:
Project Name: Facility & Pipeline Repair & Abandonment
Project Type: TCA (on-going costs)
in thousands of dollars

Reference No: 5
Department Priority Ranking:
Organization Priority Ranking:
Recommended by Management Team: Yes
(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	-	-	-	-
	Amortization	31	145	327	515	690	859	1,026	1,192	1,355	1,516
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	31	145	327	515	690	859	1,026	1,192	1,355	1,516
Revenue less Expense		\$ (31)	\$ (145)	\$ (327)	\$ (515)	\$ (690)	\$ (859)	\$ (1,026)	\$ (1,192)	\$ (1,355)	\$ (1,516)
Capital Expenditure		\$ 2,380	\$ 3,091	\$ 2,920	\$ 2,741	\$ 2,720	\$ 2,684	\$ 2,720	\$ 2,634	\$ 2,634	\$ 2,634
1). Facility and Pipeline Repair		\$ 1,460	\$ 2,171	\$ 2,000	\$ 1,821	\$ 1,800	\$ 1,764	\$ 1,800	\$ 1,714	\$ 1,714	\$ 1,714
2). Facility and Pipeline Abandonment		\$ 920	\$ 920	\$ 920	\$ 920	\$ 920	\$ 920	\$ 920	\$ 920	\$ 920	\$ 920

ROI % TBD

The return on investment is To Be Determined (TBD) because in some cases the work must be completed to maintain regulatory compliance. In other instances, many options are weighed before the final solution is determined. In these instances, the solution with the highest return is undertaken.

Description & Purpose

Maintain required facilities and pipelines to optimize their profitability and abandon out of service equipment and pipelines to comply with regulations

Implications & Justification

Each project has undergone a preliminary analysis to ensure it passes the 10% return on investment threshold. Prior to project commencement, a more rigorous economic review is performed. In most cases, the City of Medicine Hat is required by regulatory standards to complete this work. Potential projects for 2017 includes: \$2.17 million on regulatory work (e.g. maximum operating pressure, leak repair, water crossing replacement), \$500k to decommission one facility, and \$420k for pipeline abandonments. Potential projects for 2018 includes: \$1.46 million on regulatory work (e.g. maximum operating pressure, leak repair, water crossing replacement), \$500k to decommission one facility, and \$420k for pipeline abandonments.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Do nothing. Risk regulatory non-compliance and/or opportunity to reduce operating costs through proper repairs/abandonment. Not recommended.
- 2) Maintain regulatory compliance as laid out by Provincial governing bodies. Recommended.
- 3) If project is not for regulatory compliance, review options and select project with highest return. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Division:

Project Name: Well Repair & Abandonment

Project Type: TCA (on-going costs)

in thousands of dollars

Reference No: 5

Department Priority Ranking:

Organization Priority Ranking:

Recommended by Management Team: Yes

(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	-	-	-	-
	Amortization	24	103	211	320	437	559	680	802	924	1,045
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	24	103	211	320	437	559	680	802	924	1,045
Revenue less Expense		\$ (24)	\$ (103)	\$ (211)	\$ (320)	\$ (437)	\$ (559)	\$ (680)	\$ (802)	\$ (924)	\$ (1,045)
Capital Expenditure		\$ 2,224	\$ 2,232	\$ 2,187	\$ 2,370	\$ 2,362	\$ 2,370	\$ 2,362	\$ 2,370	\$ 2,370	\$ 2,370
1). Well Repair		\$ 1,153	\$ 1,161	\$ 1,116	\$ 1,299	\$ 1,291	\$ 1,299	\$ 1,291	\$ 1,299	\$ 1,299	\$ 1,299
2). Well Abandonment		\$ 1,071	\$ 1,071	\$ 1,071	\$ 1,071	\$ 1,071	\$ 1,071	\$ 1,071	\$ 1,071	\$ 1,071	\$ 1,071

ROI % **TBD**

The return on investment is To Be Determined (TBD) because in some cases the work must be completed to maintain regulatory compliance. In other instances, many options are weighed before the final solution is determined. In these instances, the solution with the highest return is undertaken.

Description & Purpose

Maintain producing wells to optimize profitability and abandon non-producing wells to comply with regulations.

Implications & Justification

Each project has undergone a preliminary analysis to ensure it passes the 10% return on investment threshold. Prior to project commencement, a more rigorous economic review is performed. In some cases, the City of Medicine Hat is required by regulatory standards to complete this work. In addition, well abandonment is one step in a process to maintain our Licensee Liability Ratio above 1.0 with each Province to avoid placing monies on deposit as well as reducing and eliminating future costs such as property taxes and surface lease rentals. Potential projects for 2017 and 2018 include: \$1.15 million on regulatory work (e.g. surface case vent flow, coil tubing modifications, replace corroded wellheads), and \$1.07 million for 25 well abandonment and Directive 79 work.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Do nothing. Risk regulatory non-compliance and/or opportunity to reduce operating costs through proper repairs/abandonment. Not recommended.
- 2) Maintain regulatory compliance as laid out by Provincial governing bodies. Recommended.
- 3) If project is not for regulatory compliance, review options and select project with highest return. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Division:

Project Name: Surface Lease Reclamation

Project Type: TCA (on-going costs)

in thousands of dollars

Reference No: 5

Department Priority Ranking:

Organization Priority Ranking:

Recommended by Management Team:

Yes

(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	(100)	(200)	(300)	(400)
	Amortization	-	-	-	-	-	-	-	-	-	-
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	(100)	(200)	(300)	(400)
Revenue less Expense		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 100	\$ 200	\$ 300	\$ 400
Capital Expenditure		\$ 2,909	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489
1). Operated		\$ 2,909	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489	\$ 2,489

ROI % 3.85%

The return on investment is based on the expected incremental expenses savings from the abandonment program. The yearly savings are \$2,500/year per well in perpetuity. The approximate cost to abandon is \$65,000. (\$2,500/\$65,000 = 3.85%)

Description & Purpose

Reclaim surface leases to comply with regulations and minimize the carrying costs of unproductive leases.

Implications & Justification

Surface lease reclamation is required by regulation once the well/facility has been abandoned. Once a Surface Reclamation Certificate is received (issued by Provincial regulatory body) NGPR no longer needs to access the site and can discontinue surface rental payments to the landowner. In addition, surface lease reclamation is one step in a process to maintain our Licensee Liability Ratio above 1.0 with each Province to avoid placing monies on deposit as well as reducing and eliminating future costs. Potential projects for 2017 and 2018 includes \$2.9 million and \$2.5 million respectively for surface reclamation activities.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Do nothing. Risk regulatory non-compliance and opportunity to reduce operating costs once a Surface Reclamation Certificate is received. Not recommended.
- 2) Maintain regulatory compliance as laid out by Provincial governing bodies. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Reference No: 5

Division:

Department Priority Ranking:

Project Name: Non-Operated Properties

Organization Priority Ranking:

Project Type: TCA (on-going costs)

Recommended by Management Team: Yes

in thousands of dollars

(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	1,819	5,107	6,742	7,553	9,603	1,019	9,832	9,930	9,749	8,832
	Other	(356)	(1,172)	(1,411)	(1,559)	(2,234)	(2,490)	(2,687)	(2,853)	(2,807)	(2,450)
	Total	1463	3935	5331	5994	7369	-1471	7145	7077	6942	6382
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	30	54	71	86	100	96	93	91	90	90
	Materials & supplies	212	377	499	604	700	671	651	639	633	629
	Contracted services	364	646	856	1,036	1,200	1,150	1,116	1,096	1,085	1,078
	Amortization	120	579	1,300	2,019	2,645	3,161	3,616	4,054	4,452	4,829
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	727	1,656	2,727	3,745	4,645	5,078	5,476	5,880	6,260	6,626
Revenue less Expense		\$ 736	\$ 2,279	\$ 2,604	\$ 2,249	\$ 2,724	\$ (6,549)	\$ 1,669	\$ 1,197	\$ 682	\$ (244)
Capital Expenditure		\$ 5,799	\$ 9,241	\$ 7,311	\$ 7,439	\$ 5,048	\$ 5,048	\$ 5,048	\$ 4,219	\$ 4,219	\$ 4,219
1). Non-Operated Properties		\$ 5,699	\$ 9,041	\$ 7,111	\$ 7,239	\$ 4,848	\$ 4,848	\$ 4,848	\$ 4,019	\$ 4,019	\$ 4,019
2). Non-Operated Abandonment		\$ 100	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200

ROI % 22%

The return on investment is based on the expected incremental revenue/expenses from the life of the partner operated wells drilled through the development program. The Exploration and Development plan covers many capital budget categories as summarized below.

Activity

Acquire mineral interests
Analyze reservoir/rock formation through seismic
Drill & complete well
Build facility to process hydrocarbons
Tie in facility to pipeline

Budget Category

Mineral Acquisitions
Exploitation - Geosciences & Engineering
Drilling & Completions
Facilities
Gathering Pipelines

Description & Purpose

These are partner operated projects that will develop the City's assets in order to increase product recoveries while maximizing the future value of the assets.

Implications & Justification

Each project has undergone a preliminary analysis to ensure it passes the 10% return on investment threshold. Prior to project commencement, a more rigorous economic review is performed. The capital spend for 2017 and 2018 is \$5.7 million and \$9.2 million, respectively. This involves drilling 6 wells in 2017 and 4 wells in 2018. Adding more injectors to the polymer pilot area in 2018 and spending half the capital required for the new battery in 2018.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Focus on natural gas development vs. oil development. Not recommended. Unconventional shale gas has unlocked vast quantities of natural gas globally capping the price of natural gas and leaving conventional shallow gas with marginal economics.
- 2) Do nothing. Preserve cash but do not increase value to the City's reserves, production, or asset base. Not recommended.
- 3) Commence Growth Strategy to increase reserves, production and cash flow. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Division:

Project Name: Office Equipment

Project Type: TCA (on-going costs)

in thousands of dollars

Reference No: 5

Department Priority Ranking:

Organization Priority Ranking:

Recommended by Management Team: Yes

(ie. is included in staff proposed plan)

		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	-	-	-	-
	Amortization	3	10	17	22	29	33	31	31	33	31
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	3	10	17	22	29	33	31	31	33	31
Revenue less Expense		\$ (3)	\$ (10)	\$ (17)	\$ (22)	\$ (29)	\$ (33)	\$ (31)	\$ (31)	\$ (33)	\$ (31)
Capital Expenditure		\$ 25	\$ 45	\$ 25	\$ 25	\$ 45	\$ 25	\$ 25	\$ 45	\$ 25	\$ 25
1). Equipment		\$ 25	\$ 45	\$ 25	\$ 25	\$ 45	\$ 25	\$ 25	\$ 45	\$ 25	\$ 25

ROI % n/a

Description & Purpose

Replace 1 photocopier in 2017 and 1 photocopier and 1 map plotter in 2018.

Implications & Justification

Increased maintenance costs, increased downtime for repairs, and inefficiencies due to lack of equipment.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

- 1) Lease Copier - cost is higher over the long-term to lease vs. buy. Not recommended.
- 2) Maintain Current Copier - maintenance costs will be higher, increased downtime for repairs. Not recommended.
- 3) Buy New Copier - lower maintenance cost, decreased downtime, and higher productivity. Recommended.

Changes in FTE headcount

None

ATTACHMENT A - TCA DECISION PACKAGES

Department: NATURAL GAS & PETROLEUM RESOURCES

Division:

Project Name: Building Improvements

Project Type: TCA (on-going costs)
in thousands of dollars

Reference No: 5

Department Priority Ranking:

Organization Priority Ranking:

Recommended by Management Team: Yes
(ie. is included in staff proposed plan)

		<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>
Revenue	Fees & Charges	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total	0	0	0	0	0	0	0	0	0	0
Expense	Salaries & benefits	-	-	-	-	-	-	-	-	-	-
	Equipment	-	-	-	-	-	-	-	-	-	-
	Utilities	-	-	-	-	-	-	-	-	-	-
	Materials & supplies	-	-	-	-	-	-	-	-	-	-
	Contracted services	-	-	-	-	-	-	-	-	-	-
	Amortization	-	18	37	37	37	37	37	37	37	37
	Debt financing (Principal)	-	-	-	-	-	-	-	-	-	-
	Debt financing (Interest)	-	-	-	-	-	-	-	-	-	-
	Total	-	18	37	37	37	37	37	37	37	37
Revenue less Expense		\$ -	\$ (18)	\$ (37)	\$ (37)	\$ (37)	\$ (37)	\$ (37)	\$ (37)	\$ (37)	\$ (37)
Capital Expenditure		\$ -	\$ 550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1). Equipment		\$ -	\$ 550	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

ROI % n/a

Description & Purpose

Replace carpet and paint in Kipling office

Implications & Justification

NGPR staff are currently housed in 2 separate buildings. One building is a CMH asset with the other being leased from an external party. By consolidating into 1 space, total annual rental and operating costs for office space will be lower. In addition, all NGPR administrative and technical staff will be in one space which will provide for greater efficiency.

Alternatives and Options

Identify alternatives and options considered and why the recommended project or program was chosen.

1) Do Nothing - rental and operational cost is higher for 2 office spaces vs. 1 office space over the long-term. Not recommended.

2) Build/Purchase Building - CMH has identified a City owned building that can accommodate NGPR's needs, therefore no reason to undertake additional expense. Not recommended.

Changes in FTE headcount

None