

## **2017 Annual Report**





**Alberta Oil and Gas Orphan Abandonment and Reclamation Association** 

## **Our Vision and Mandate**

The Orphan Well Association began as an innovative collaboration among the Alberta Government, provincial regulators and the oil and gas industry to work toward a common goal: protecting public safety and managing the environmental risks of oil and gas properties that do not have a legally or financially responsible party that can be held to account. These properties are known as "orphans."

The mandate of the OWA is to safely decommission orphan oil and gas wells, pipelines and production facilities, and restore the land similar to its original state.

Since its formation in 2002, the OWA has successfully decommissioned approximately 1,400 orphan wells, with more than 800 of the sites reclaimed.

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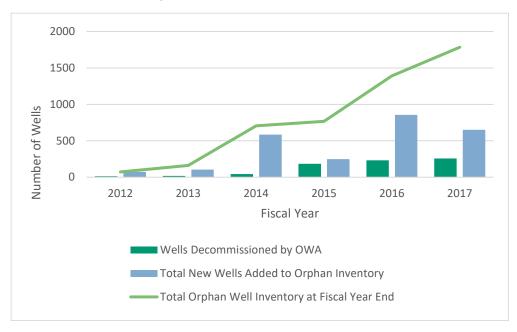
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This Annual Report contains forward-looking statements based on current expectations, estimates, projections and assumptions and certain operating and financial measures. By the nature of its mandate and work, there are potential impacts to the organization's future operations and related finances that the OWA cannot predict. Where expressed, forward-looking statements are provided in the interest of context that stakeholders may find useful. The OWA fiscal year is from April 1 to March 31. For this annual report, years are referenced as the first year; that is, 2017 refers to April 1, 2017 through March 31, 2018.

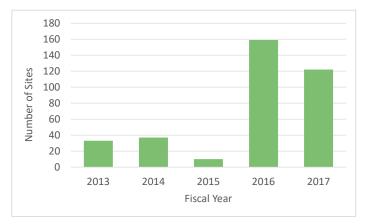
## **Highlights**

#### **Orphan Well Inventory and Wells Decommissioned**

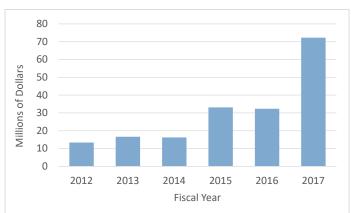


The increase in orphan properties is expected to continue as there are nearly 30 companies within Alberta's regulatory jurisdiction that are currently insolvent. These assets may have a material impact on the OWA in the coming years. There are a number of factors that are unknown to the OWA that will determine how many wells may be designated as orphan, including potential buyers and the working interest partners of the properties.

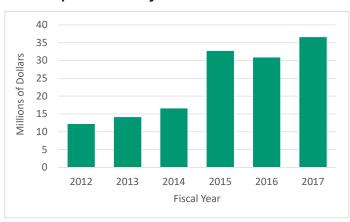
#### **Number of Sites Reclaimed and Closed**



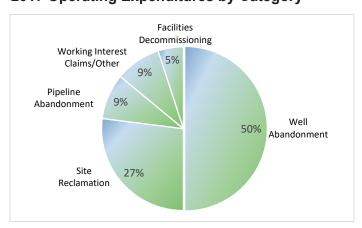
#### Funding



#### **Total Expenditures by Fiscal Year**



#### 2017 Operating Expenditures by Category



## Message from the Chair

## Moving Forward Through Times of Change

The past year has been one of substantial change for the Orphan Well Association. We have strengthened our team with the newly-created position of Executive Director, and are very pleased to welcome Lars De Pauw, who brings a breadth and depth of experience to this role.

Lars has, in turn, transitioned more of the OWA's expertise in house. We have brought together a strong team with diverse experience in our core mandate of safe, efficient and effective approaches to decommissioning and reclamation operations that protect the safety of Albertans and our environment.

One of the catalysts for evolving the OWA's structure and capacity has been the significant increase in the inventory that must be decommissioned and reclaimed. Our overall inventory of wells and facilities has doubled since 2015, and that has placed significant pressure on the OWA team. While we don't view these increased numbers as a new status quo, the fact is that it will take several years to normalize the OWA inventory.

It's in this context that we have restructured our operations and refined our strategies. And, it is also in this context that we have worked with industry partners—most notably the tireless efforts of the Petroleum Services Association of Canada—to enable a step change. Following extensive consultation, a one-time grant of \$30 million was provided from the Government of Canada to the Alberta Government for activities associated with decommissioning and reclamation. Rather than pass these funds on directly to our operations, the Province has leveraged it nearly eight-fold to cover the interest on a \$235 million repayable loan to support the OWA's efforts. This loan will be repaid by the oil and gas industry over the next nine years, but will enable the OWA in the shorter term to deal with the influx of orphans while supporting the service industry.

This represents a *win* on many fronts. First, the federal and provincial funding plan—along with a tripling of direct industry funding since 2014—will allow the OWA to tackle orphans at an accelerated rate. This is a great long-term outcome for our shared environment.

It's also a win for the OWA in that it supports economies of scale, so that we can optimize every dollar spent on our workforce, procurement and logistics.

Finally, it is an important economic win. As most people know, Alberta's economic engine has slowed, driven by a sustained slump in commodity prices. This has contributed to an increase in orphans and a reduction in industry jobs at the same time. The counter-cyclical nature of the surge investment for the OWA will, according to government estimates, add more than 1,600 new jobs over the next three years. That, in turn, will support jobs in many communities across Alberta.

This is an exciting time for the OWA, and I look forward to working with the Board of Directors, our staff, and our partners and stakeholders over the coming year.

**Brad Herald** 

Brad Herald

Chair of the Board of Directors, Orphan Well Association
Vice President, Operations, Canadian Association of Petroleum Producers

## **Message from the Executive Director**

## Meeting the Challenge

The Orphan Well Association's fundamental job is to turn a failure created by a company that didn't survive into a successful outcome that protects people and places, and takes the potential risk of liability off the books for Alberta taxpayers. So, to appreciate the role of the OWA, you need to be both a pessimist who sees every potential obstacle and an optimist who sees every possible solution.

The day-to-day work of the OWA brings together operational, technical and scientific expertise from oil and gas producers, the environment and petroleum services sectors, and the Alberta Energy Regulator (AER), with a good measure of input from our organizational and individual stakeholders. Our mission is to protect public safety, and manage environmental risk for those oil and gas properties that do not have a solvent and responsible owner. These properties are known as *orphans*.

Our team recognizes that what we do can sometimes technically be a small project on paper, but it can have a big impact on private landowners and public users of Crown lands – and we take those considerations very seriously.

The work we do varies from straightforward to highly complex. On one side of that spectrum is restoring the land on an orphan property that may, for example, have a low impact in a rural area. On the more complex side, we have safely decommissioned wells with potentially dangerous levels of hydrogen sulphide gas near more densely populated residential areas.

Across these operations, our work is understandably viewed by many stakeholders by what they can see on the surface. But much of our work is not visible at the surface—there's a lot of expertise and effort behind and below what can be seen. This includes detailed safety and environmental planning, and the critical operational work carried out from a few metres to several hundred metres below ground, with a high degree of precision.

Year after year, the operational and technical challenges we face are well understood by the OWA, industry and AER experts, and they have been effectively and efficiently resolved at a steady pace.

But, while the on-the-ground and under-the-ground nature of the work we do hasn't changed substantially over the past decade, the volume of that work has. In 2012, our inventory of orphan properties at fiscal year-end was 74 in total. By 2017, our well inventory has risen to 1,778, with more than 650 received in the 2017 fiscal year alone. This represents a major increase in field work and has been the catalyst for change in the OWA's organizational strategies and funding.

To be clear, although the inventory is trending upward, we don't see this current volume of orphans as a long-term *normal;* it is a *surge*. We have had a rapid ramp-up in inventory due to a combination of factors. And, we have solutions underway to expedite orphan decommissioning and reclamation in response.

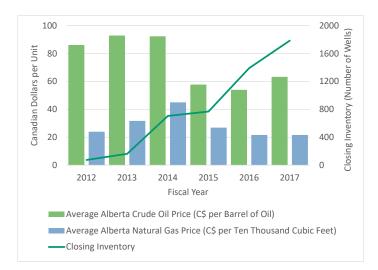
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#### The Surge

One of the key factors affecting the increase in the inventory of orphans has been a significant drop in oil and gas commodity prices over a much longer than normal cycle. Energy producers plan projects for a range of economic scenarios in the long term but, as many in the oil and gas industry in Alberta and elsewhere know, the *lower for longer* change in market pricing has had major impacts on planning and company budgets. Most oil and gas companies have absorbed and adapted to price changes, but there has been an increase in insolvencies, with a few high-profile cases.



The shorter-term impact of commodity price cycles has been combined with a longer-term trend. Alberta has a maturing industry and many facilities that have been in operation for decades—including some of the oldest sites in the province—are at, or nearing, the end of their lifecycles.

The overwhelming majority of these facilities will be safely decommissioned solely at the cost of the operating companies.

The other key factor affecting the increase in our inventory is the yet-to-be resolved legal decision, commonly known as the "Redwater Energy" decision, regarding if and how receivers managing corporations in receivership, bankruptcy or insolvency proceedings must address their obligations for safe and responsible decommissioning of their operating assets. It's the position of the OWA, the Alberta Energy Regulator, the Alberta, British Columbia, Saskatchewan and Ontario governments, several industry associations, environmental and landowner advocates that the regulatory imperative of safe decommissioning should have precedence over secured creditors in the event of a licensee's insolvency.

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## **Abandoning Orphans?**

Some of the terms we use in the energy industry have a very long history in legislation and regulation, but can understandably cause concern for stakeholders. "Abandoning orphans" doesn't sound like serving the public interest!

What the OWA actually does when we abandon orphans is to manage the safe decommissioning of operations at and below the surface, and the reclamation of the land around oil and gas properties that don't have a responsible owner and operator.

#### **Orphan**

An orphan must be designated as such by the Alberta Energy Regulator and can refer to a well, pipeline, facility or site that no longer has any legally or financially responsible owner. However, any company that has invested in a project as a Working Interest Partner (WIP) has legislative accountabilities and most WIPs quickly step up for costs or operations for either decommissioning a site or restoring it to safe operations.

#### Abandon

The word abandon sounds like walking away. In fact, in Alberta's oil and gas sector, it's just the opposite. When energy infrastructure is no longer needed, it is permanently decommissioned in a manner that ensures it will not pose a risk to the environment or the public. It is *abandoned*.

#### Remediate

This is the clean-up stage. It is the process of surveying, managing and removing contaminants from substances that spilled or leaked and may be impacting the soil or groundwater. There is a large volume of academic research and engineering experience that informs remediation processes.

#### Reclamation

Sites must be reclaimed so that the land returns to how it looked and how it was used (or similarly) before development took place. Access roads may be removed, recontouring may blend the site back into the surrounding landscape, and topsoil, seeding and trees may be added appropriately.

#### Responding to the Challenge

Industrial operations leaving behind environmental liabilities are, regrettably, not unusual in public or private industry, at any time, or in any place, globally.

What is unusual—and possibly unique—is Alberta's creation of a dedicated organization funded by industry and overseen by an independent board to manage decommissioning and reclamation of orphaned liabilities.

Albertans generally support a *polluter pay* principle. From its basic mandate, there is actually no direct polluter to pay for OWA's work. Instead, there is acknowledgement of a social contract for the broader industry to *ensure*, and to literally *insure*, that environmental risks are mitigated and disturbed sites are restored. This principle is reflected in the OWA's funding from oil and natural gas producers in the province. This levy ensures that costs are not borne by tax-payers.

In response to the challenges of a maturing industry and an increasing number and more complex inventory, the OWA is evolving to a revised funding and new organizational model.

These plans include an increase in funding from industry, from a \$15 million annual levy in 2014 to \$30 million in 2015 to a threefold increase to \$45 million annual

funding in 2018. Plans call for the industry levy to increase further to \$60 million in 2019 and 2020.

Going forward, our plans are supported – although not directly funded, to be clear – from two levels of government. Under agreements announced over the past year, the Province of Alberta will provide a repayable loan of \$235 million to the OWA for decommissioning and reclamation activities. The interest on this 9-year loan will be covered by a \$30 million grant to the Province from the Federal Government.

Collectively, increased industry levies and the repayable loans from the Government of Alberta will support more than \$300 million in OWA directed decommissioning and reclamation work over the next three years. This will go a long way toward recovering from the recent surge in new orphans, but does not fully cover potential – and potentially substantial – additions to our inventory beyond that three-year window. This means we need to continue to evolve our strategies and funding.

This is a pivotal time for OWA as we move from a history of a well-managed and steady business-as-usual state to a more challenging, changing and certainly expanded business environment.

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### Lexin Resources

Lexin Resources was a mid-sized energy company focused primarily on natural gas production in Southern Alberta.

Beginning in 2016, the Alberta Energy Regulator assessed significant financial and operational risk associated with the company's producing assets and began taking steps to ensure compliance with provincial energy and environmental regulations. In mid-2016, Lexin laid off most of their staff and communicated to the AER that they would not be able to respond to an incident or emergency if one occurred. The AER took the necessary steps to protect public safety and ultimately designated the OWA and other Working Interest Partners to maintain the assets while a process was undertaken to sell the assets to other interested parties.

This corporate failure represents a potentially massive increase in the OWA inventory. As of year-end 2017, there are 1,117 Lexin wells and 71 associated facilities, as well as other field assets that have been placed into the care of the OWA with the balance of the Lexin assets being maintained by existing Working Interest Partners. The OWA continues to work closely with the AER and affected stakeholders, including the Tsuu T'ina First Nation, the City of Calgary, and affected landowners, directly and through the Alberta Surface Rights Board, to ensure public safety and advance the sales process or safe decommissioning of the properties.

Our response includes moving direct oversight of our planning and projects to key staff positions and we have recruited a core team of industry veterans to support our plans. Qualified contractors—the best and most experienced decommissioning and reclamation experts in the industry—will continue to be core to the OWA's work. This workforce includes many experienced people working directly with major industry companies, and we are looking at how to leverage that expertise to meet OWA's goals.

Assessment of decommissioning and reclamation work is based on science and a vast body of on-the-ground experience. While public safety and environmental protection are the top priority, we are also seeking organizational efficiencies. For example, we can bundle orphans, regardless of source, into a series of larger projects in a region, capturing economies of scale in workforce, logistics and supply chain management.

There are many other initiatives underway, all under the guidance of our experienced Board and with the support of an expert staff. I'm grateful for their guidance and support and I've appreciated the opportunity to connect with stakeholders locally, regionally and nationally. Very importantly, I'm excited to get out to the field to see the work of the OWA in action.

This has been a year of transition. We have challenges ahead and we are ready to meet them.

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**Lars De Pauw**Executive Director
Orphan Well Association



## Starting from the Ground Up

## Pat Payne's Years of Leadership

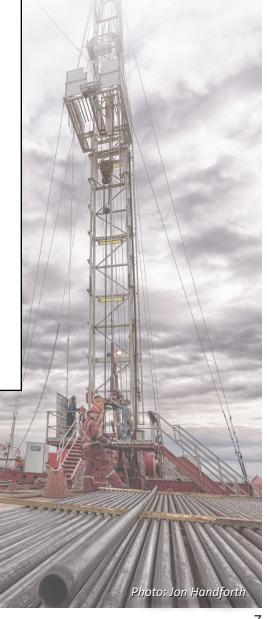
From the beginning, Pat Payne's name was synonymous with the Orphan Well Association. Pat was at the helm of the OWA, steering the organization through uncharted territory.

"When I started, I was handed a list of everything that needed to be done and it was up to me to make it happen," says Pat. That included not only a list of properties to decommission and reclaim, but all the supporting pieces as well. Tracking operations, developing communication processes with landowners, setting up accounting and reporting systems, office management: it all needed to be built. Pat reflects, "It was fun to be an engineer who got to do all those different things—even getting the cleaners to take out the garbage."

Over her 20 years of service, there was steady growth. "The goal was always to do better. We identified gaps and built improvements. In the beginning, I visited every single well and site, and met most of the landowners. It gave me a strong appreciation for the challenges of each property and allowed me to be responsive back in the office based on what I had learned." That meant addressing safety issues and landowner concerns, knowing quality vendors and making sure the job got done right.

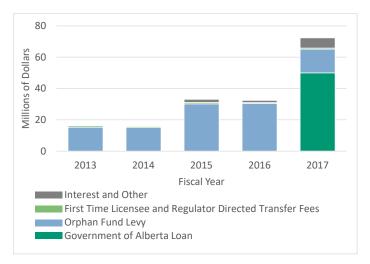
Pat's favourite part of the work? "The people. Developing trust, sitting around the coffee table instead of being adversaries. The AER can be thanked for their role in that—the Appropriate Dispute Resolution Program created a breakthrough for us." In addition, Pat appreciated the decommissioning and environmental consultants who paid particular care and attention in thinking out projects and talking to landowners, to be proactive in addressing challenges and opportunities.

The OWA thanks Pat Payne for her many years of dedication and wishes her all the best in her future endeavours. She set the foundation for this unique organization.



## **Operational Summary**

### Funding the OWA



Funding for the OWA increased by 123% to \$72.3 million in 2017, from \$32.4 million the year before. Funding is provided from the Orphan Fund Levy, First Time Licensee and Regulator Directed Transfer fees, interest and other sources, which includes deposits held through the AER's Licensee Liability Rating (LLR) Program. In addition, the Alberta Government announced in May 2017 that it would lend the OWA \$235 million. The interest on this loan is being covered by a \$30 million grant from the Government of Canada. The first loan advance to the OWA was in 2018, and the last advance will be in 2020. The \$235 million loan will be repaid by the oil and gas industry through the annual Orphan Fund Levy starting in 2019, with the last repayment occurring in 2027.

The graph above shows that the Orphan Fund Levy decreased in 2017; however, this is not a true representation of the trend due to the timing of when the funding was received. Historically, the financial statements showed a substantial surplus at year-end that would be used in the following fiscal year. To address this timing issue, starting in 2018, the levy was issued in April instead of March. As a result, it will be accounted for in the 2018 fiscal year, causing the funding for fiscal 2017 to appear lower. This reporting situation will only take place for this annual report, as it is the transition year to the new funding schedule.

In reality, the Orphan Fund Levy increased by 48% to \$45.0 million in calendar 2018, from \$30.4 million.

The Orphan Fund Levy is based on the estimated cost of abandonment and reclamation activities for the upcoming fiscal year. The Orphan Fund Levy is set by the AER in consultation with the OWA, CAPP and EPAC.

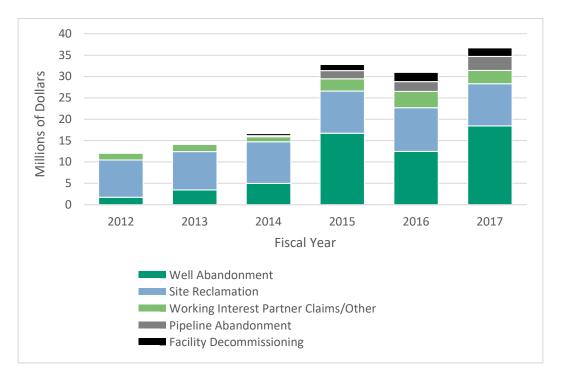
First Time Licensee and Regulator Directed Transfer fees increased by 26% to \$730,000 in 2017, from \$580,000 the year before. A First Time Licensee fee of \$10,000 is required by the AER from companies applying for eligibility to hold a well, facility or pipeline license. The AER collects Regulator Directed Transfer fees from an active company when it acquires a property licensed to a defunct company. The AER gathers and remits First Time Licensee and Regulator Directed Transfer fees to the OWA.

Funding from interest and other sources increased by 378% to \$6.5 million from \$1.4 million, primarily as a result of LLR deposits.

The LLR Program, managed by the AER, is another source of funding for the OWA. The LLR program assesses companies' ability to address their abandonment, remediation and reclamation obligations by calculating a ratio of deemed assets (oil and natural gas production) to deemed liabilities (estimated abandonment and reclamation costs). When companies do not maintain a ratio above 1.0, the AER requires a security deposit to cover these closure costs in the event the company is not able to meet its obligations in the future. The AER remits this money to the OWA when appropriate, if the company is no longer solvent. For a list of LLR amounts recovered by the OWA in 2017, refer to Appendix 1.

The terms "Facilities Decommissioning", "Well Abandonment", and "Pipeline Abandonment" all refer to the engineering assessment, closure and permanent securing of defunct operational sites to ensure they do not pose a risk to the public or the environment. While "Decommissioning" is the more common general term for these activities, regulations and industry guidelines commonly use the term "Abandonment", so this term appears throughout the Operational Summary and in the Appendixes.

## **Operating Expenditures**



The OWA's operating expenditures over the past five years are divided by well abandonment, site reclamation, pipeline abandonment, facility decommissioning, and reimbursement for Working Interest Partner claims and other costs including historic AER operations relating to similar sites (2012 to 2015).

Total OWA expenditures increased by 19% to \$36.7 million in 2017, from \$31.0 million the year before. This was due in part to OWA receiving the first loan advance from the Alberta Government, which allowed more field work to be conducted than originally budgeted.

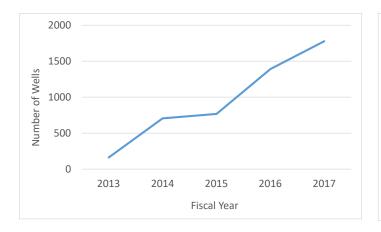
#### Detailed expenditures are:

- well abandonment increased by 48% to \$18.4 million, from \$12.4 million the year before.
- site reclamation decreased by 4% to \$9.9 million, from \$10.2 million the year before.
- Working Interest Partner claims decreased by 18% to \$3.1 million, from \$3.8 million the year before.
- pipeline abandonment increased by 44% to \$3.3 million, from \$2.2 million the year before.
- facilities decommissioning decreased by 8% to \$2.0 million, from \$2.1 million the year before.

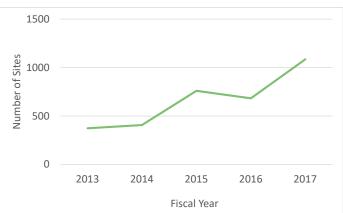
Facilities decommissioning and site reclamation expenditures were impacted due to the timing of primary funding.

Working Interest Partner claims are made by active companies when they manage the abandonment, decommissioning and/or reclamation of assets jointly owned with defunct partners. In these situations, the active company performs a function comparable to the OWA to properly decommission and reclaim the property. The OWA then reimburses the active company for the defunct company's portion of the activities. More information about working interest claims is available in a later section of this operational summary and in Appendix 2.

## **Orphan Well Inventory**



### **Reclamation Inventory**



The number of orphan wells in the OWA inventory to be abandoned (decommissioned) increased by 28% to 1,778 at the end of fiscal 2017, from 1,391 wells at the end of fiscal 2016. This inventory number does not include orphan sites that require remediation and reclamation only.

The number of new orphan wells received for abandonment from the AER decreased by 28% to 666 in 2017, from 928 the year before.

The following is a summary of the changes in the orphan well inventory for 2017.

Changes in Alberta's Orphan Well Inventory for 2017

Description	Number of Wells				
Reported as of March 31, 2017	1,391				
New wells received	666				
Completed well abandonments	- 259				
Other well closures	-20				
As of March 31, 2018	1,778				

The number of sites in the OWA reclamation inventory increased 59% to 1,085 at the end of fiscal 2017, from 683 at the end of fiscal 2016. The reclamation inventory increases when the OWA receives new sites that only require reclamation, and when the OWA is finished abandoning (decommissioning) wells and has transferred the sites into the reclamation inventory. The inventory decreases when the OWA receives reclamation certificates and when it is discovered that a site in the reclamation inventory still requires further abandonment operations. Other changes to the inventory take place when a site is transferred to another oil and gas company, and when a site is received and reclaimed by the OWA in the same year.

The following is a summary of the changes in the orphan site reclamation inventory for 2017.

Changes in Alberta's Orphan Site Reclamation Inventory for 2017

Description	Number of Sites
Reported as of March 31, 2017	683
New sites received for reclamation only	16
Abandoned wells added to reclamation inventory	496
Reclamation certificates received	-105
Sites moved from reclamation to abandonment inventory	-4
Sites transferred to another oil and gas company	-1
Sites received and handled in the same year*	17
As of March 31, 2018	1,085
* Not included in total as of March 31, 2018.	

### Inspections

Inspections are an important activity that ensures protection of public safety and the environment. Inspection results support the OWA's risk assessment with higher risk sites being prioritized. The OWA contacts landowners or surface rights holders to notify them about the OWA and the orphan well, pipeline, facility or site to confirm land access before conducting an inspection.

In 2017, the OWA inspected 393 sites, 89% of which were on new orphan wells.

OWA Site Inspections for 2017

Inspections in 2017	Count
New Site Inspections, Routine	321
New Site Inspections, Non-Routine*	28
Repeat Inspections/Monitoring**	44
Total	393

<sup>\*</sup> New Site Inspections, Non-Routine includes sites requiring multiple visits and/or lab testing. Included are surface casing vent flow or gas migration sites.

\*\* Repeat Inspections/Monitoring include return visits to confirm well repairs or

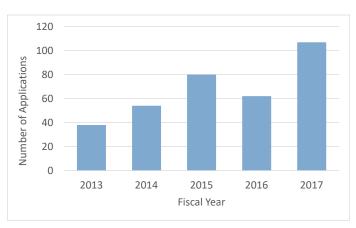
#### Number of Wells Abandoned



The number of orphan wells abandoned (decommissioned) increased by 12% to 259 in 2017, from 232 the year before. Wells include those decommissioned by the OWA and by the AER as an enforcement action that were subsequently designated as orphans. The AER has reduced this type of enforcement work and made no requests for reimbursement for enforcement activities in the last two years.

A well is considered abandoned when the AER's requirements in *Directive 020: Well Abandonment* (*Directive 020*) are satisfied. Once all necessary subsurface abandonment actions are taken, the final step is to *cut and cap* the well. In this stage, the well casing is cut to a minimum of one metre below the surface (with some exceptions listed in *Directive 020*) and a vented cap is placed atop the well casing. At this point, remediation and/or reclamation of the site may begin.

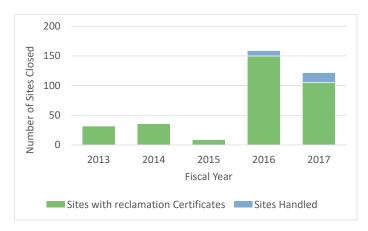
## Number of Reclamation Certificate Applications Submitted



The number of orphan sites that are ready for a regulatory decision regarding closure is reflected in the number of applications submitted for reclamation certificates. The number of sites with applications submitted for reclamation certificates increased by 73% to 107 in 2017, from 62 the year before. It takes years for a site to become suitable for a reclamation certificate application. The increase in applications in 2017 is because many sites the OWA worked on in the previous two to four years became ready for an application within the same fiscal year.

inspection of long-term wells.

#### Number of Sites Closed

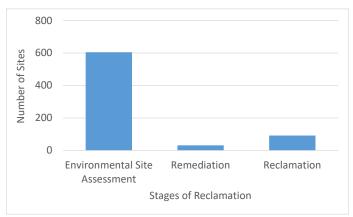


The number of sites the OWA closed decreased by 30% to 105 in 2017, from 150 the year before. The decrease is due to a high number of reclamation certificates issued by the AER in 2016 when a new online reclamation certification system was introduced. The system, OneStop, cleared a backlog of applications, with the OWA receiving 89 reclamation certificates within a short period of time.

Sites that are closed may have received a reclamation certificate or have been deemed as handled. Reclamation certificates are provided for sites that had wells or facilities. Also counted in this category are sites on federal reserve land, which receive federal environmental closure in the form of a signed Memorandum of Surrender from Indian Oil and Gas Canada. Sites in this category have satisfied applicable regulatory standards and no further action is required.

Sites counted as handled have received some type of closure with no further action required. This includes sites that had wells abandoned prior to reclamation legislation being enacted, known as reclamation exempt wells. This category also includes sites that are closed but did not receive reclamation certificates and sites taken over by active oil and gas companies with a new surface lease.

## Number of Sites in the Reclamation Process



The process to prepare a site for reclamation certification can take several years. 2017 saw a 94% increase in the number of sites starting the Environmental Site Assessment (ESA) process, with 605 in 2017 compared to 312 the year before. The increase is due to the OWA beginning ESAs on sites while wells were still in the abandonment phase.

The stages of the reclamation process include:

- Environmental Site Assessment: Once a site is ready to begin the reclamation process, the OWA conducts an ESA to characterize and delineate contaminants in the soil and groundwater. Detailed site investigations and contaminant transport modeling may be used to develop site-specific remediation guidelines.
- Remediation: In the remediation phase, contaminants from substances that spilled or leaked are managed or removed.
- Reclamation: Once remediation is complete, the site must be reclaimed so that the land returns to how it looked and how it was used (or similarly) before development took place.

After remediation and reclamation is completed, it can take up to five years or more for the site to re-vegetate and be ready for the detailed site assessment required for a reclamation certificate application. The actual time required to obtain a reclamation certificate depends on the land use, type of vegetation and factors that affect growing conditions, such as amount of rainfall.

## Working Interest Claims

Working interest claims are made by active companies when they manage the abandonment, decommissioning and/or reclamation of assets jointly owned with defunct partners. In these situations, the active company performs the function of the OWA to properly decommission and reclaim the property. The OWA then reimburses the active company for the defunct company's portion of the activities.

In fiscal 2017, the OWA processed working interest claims related to the abandonment of 76 wells, reclaimed 15 wells, abandoned and reclaimed one well and abandoned five pipeline segments.

See Appendix 2 for a detailed list of claims.

## **Independent Auditor's Report**



## Independent Auditor's Report

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To the members of the

Alberta Oil and Gas Orphan Abandonment and Reclamation Association

We have audited the accompanying financial statements of the Alberta Oil and Gas Orphan Abandonment and Reclamation Association (the "Association"), which comprise the statement of financial position as at March 31, 2018, and the statements of operations, changes in net assets, and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

#### Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for not-for-profit organizations, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

#### **Auditor's responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Association's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the Association's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Grant Thornton

#### **Opinion**

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Association as at March 31, 2018, and its financial performance and its cash flows for the year then ended in accordance with Canadian accounting standards for not-for-profit organizations.

Calgary, Canada June 14, 2018 Great Thoraton 11P
Chartered Professional Accountants

## **Financial Statements**

# ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION Statement of Financial Position As at March 31, 2018 (thousands of dollars)

	2018	2017
Assets		
Current assets		
Cash	\$ 49,340	\$ 2,903
Accounts receivable from the AER	822	14,115
Prepaid expense and other receivables	338	175
GST receivable (Note 4)	211	1,963
	50,711	19,156
Tangible capital assets (Note 5)	60	-
	\$ 50,771	\$ 19,156
Liabilities and net assets		
Current liabilities		
Accounts payable and accrued liabilities	\$ 3,195	\$ 3,902
Long term note payable (Note 6)	43,970	-
Deferred contribution (Note 6)	6,030	
Internally restricted assets (Note 7)	500	-
Unrestricted assets	(2,924)	15,254
	(2,424)	15,254
	\$ 50,771	\$ 19,156

Commitment (Note 12)

See accompanying notes to financial statements.

## ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION Statement of Operations Year ended March 31, 2018 (thousands of dollars)

	2018	2017
Revenues		
Orphan fund levy through the AER	\$ 15,106	\$ 30,448
Industry, enforcement and licensee liability rating recoveries through the AER	5,013	603
Salvage sales	1,211	649
First time licensee fees and regulator directed transfer fees through the AER	730	580
Interest income	587	100
	22,647	32,380
Expenditures		
Operating		
Well abandonment	18,460	12,483
Site reclamation	9,833	10,213
Pipeline abandonment	3,284	2,283
Facility decommissioning	 1,980	2,158
	33,557	27,137
Other		
Working interest claims (Note 8)	3,131	3,816
Fund administration (Note 9)	2,335	1,064
Non-recoverable GST expense (Note 4)	949	1,989
Interest on long term note payable (Note 6)	353	-
AER enforcement activities (Note 10)	-	-
	 6,768	6,869
	40,325	34,006
Deficiency of revenues over expenses	\$ (17,678)	\$ (1,626)

See accompanying notes to financial statements.

# ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION Statement of Changes in Net Assets March 31, 2018 (thousands of dollars)

	Internally Restricted	Unrestricted	2018	2017
Balance, beginning of year	\$ -	\$ 15,254	\$ 15,254	\$ 16,880
Deficit	-	(17,678)	(17,678)	(1,626)
Transfer to internally restricted fund	500	(500)	-	-
	\$ 500	\$ (2,924)	\$ (2,424)	\$ 15,254

See accompanying notes to financial statements.

# ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION Statement of Cash Flows Year ended March 31, 2018 (thousands of dollars)

	2018	2017
Cash provided by (used in)		
Operating		
Deficiency of revenues over expenses	\$ (17,678)	\$ (1,626)
Non-cash items		
Amortization of tangible capital assets	12	-
Changes in operating non-cash working capital		
Decrease in accounts receivable from the AER	13,293	978
Decrease (increase) in GST receivable	1,752	(1,432)
Increase in prepaid expense and other receivables	(163)	(62)
(Decrease) increase in accounts payable and accrued liabilities	(707)	2,831
	(3,491)	689
Capital transactions		
Acquisition of tangible capital assets	(72)	
Financing		
Long term note payable	43,970	-
Deferred contribution	6,030	-
Net increase in cash	46,437	689
Cash, beginning of year	2,903	2,214
Cash, end of year	\$ 49,340	\$ 2,903

See accompanying notes to financial statements.

Approved on behalf of the Board of Directors:

Brad Herald

Director

Onest Kith

Director

Notes to the Financial Statements

March 31, 2018 (thousands of dollars)

#### Note 1 Authority and purpose

The Alberta Oil and Gas Orphan Abandonment and Reclamation Association (OWA or the Association) operates under the authority of the Oil and Gas Conservation Act, Orphan Fund Delegated Administration Regulation, and the Societies Act, Chapter S-18, 1980, as amended. The OWA was created as a Delegated Administration Organization (DAO) under the delegated authority of the Alberta Energy Regulator (AER) and was established to manage the abandonment of Alberta upstream oil and gas orphan wells, pipelines, facilities and the reclamation of associated sites. The Members of the OWA are the Canadian Association of Petroleum Producers (CAPP), the Explorers and Producers Association of Canada (EPAC), the AER and Alberta Environment and Parks (honorary non-voting Member).

#### Note 2 Significant accounting policies

#### a) Basis of presentation

The Association's financial statements are prepared in accordance with Canadian accounting standards for not for profit organizations.

#### b) Revenue recognition

The OWA follows the deferral method of accounting for contributions. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and the collection is reasonably assured. Restricted contributions are recognized as revenue in the year in which the related expenses are incurred.

#### c) Tangible capital assets

Purchased tangible capital assets are recorded at cost. Donated tangible capital assets are recorded at their fair values at the date of donation. Amortization is provided on a straight-line basis over the assets' estimated useful lives as follows:

Computers

3 years

#### d) Financial assets and liabilities

Initial measurement: Upon initial measurement, the Association's financial assets and liabilities are measured at fair value, which, in the case of financial assets or financial liabilities that will be measured subsequently at amortized cost, is increased or decreased by the amount of the related financing fees and transaction costs.

Subsequent measurement: At each reporting date, the Association measures its financial assets and liabilities at amortized cost (including any impairment in the case of financial assets).

The Association records cash, accounts receivable from the AER, other receivables, and accounts payable and accrued liabilities at amortized cost.

**Notes to the Financial Statements** 

March 31, 2018 (thousands of dollars)

#### Note 2 Significant accounting policies (continued)

Financial assets measured at amortized cost are assessed for indications of impairment. When there is an indication of impairment indicating a significant adverse change in the expected timing or amount of future cash flows from the financial asset, an impairment loss will be recognized in the statement of operations. The reversal of a previously recognized impairment loss on a financial asset measured at amortized cost is recognized in the statement of operations in the year the reversal occurs.

#### e) Use of estimates

The preparation of the financial statements in conformity with Canadian accounting standards for not for profit organizations, requires management to make estimates and assumptions which affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the year. Due to the inherent uncertainty involved with making such estimates, actual results reported in future years could differ from those estimates.

Items subject to significant management estimate include accrued liabilities, amortization of tangible capital assets and fair value of long term note payable.

#### f) Not for profit status

The OWA, as a not for profit organization, has no liability for income tax under the Income Tax Act (Canada).

#### Note 3 Economic dependence and contributions

The OWA receives substantially all of its revenue through the AER. The AER collects the orphan fund levy, first time licensee fees, regulatory directed transfer fees, enforcement recoveries, and liability licensee rating recoveries from industry. These funds are then contributed directly to the OWA. The annual revenue received by the OWA is subject to budget submission to the AER.

#### Note 4 GST receivable and non-recoverable GST expense

During fiscal 2016, the CRA pronounced a new ruling for the OWA which determined that OWA is a GST exempt entity for fiscal years ending March 31, 2014-2016. This change in ruling has resulted in a refund of GST paid during these years, as reduced by the income tax credits claimed by fifty percent as OWA is a not-for-profit entity. The net effect for his ruling has resulted in a GST receivable of \$211 (2017 - \$1,963) and non-recoverable GST expense of \$949 (2017 – 1,989).

Notes to the Financial Statements

March 31, 2018 (thousands of dollars)

#### Note 5 Tangible capital assets

			2018	2017
		Accumulated	Net book	Net book
	Cost	amortization	value	value
Computers	\$ 72	\$ 12	\$ 60	\$ 
	\$ 72	\$ 12	\$ 60	\$ 

#### Note 6 Long term note payable

The OWA entered into a loan agreement with Her Majesty the Queen in Right of Alberta as represented by the President of Treasury Board, Minister of Finance and by the Minister of Energy (the Province) under which the OWA may borrow money from the Province to a maximum aggregate amount of \$235,000. The date of last permitted unsecured advance is April 1, 2020, with quarterly frequencies at zero percent interest rate on the advances. The loan is fair valued at \$205,000 with the difference between book value and fair value recorded as a deferred contribution, and amortized into revenue over the life of the loan. As at March 31, 2018, the first advance of \$50,000 has been received, of which \$6,383 is recorded as a deferred contribution and \$353 is recorded in interest income. The following is the advance and repayment schedule for the note payable.

	2018	2019	2020	2021	2022	2023	2	2024-2027
Advance schedule	\$ 50,000	\$ 100,000	\$ 68,000	\$ 17,000	\$ -	\$ -	\$	-
Repayment Schedule	\$ -	\$ 5,556	\$ 18,056	\$ 30,198	\$ 30,198	\$ 30,198	\$	120,794

#### Note 7 Internally restricted assets

On January 25, 2018, the Board of Directors approved the establishment of an internally restricted fund. The Directors maintain sovereignty of the allocated fund and initial balance is \$500 to be used at the discretion of the Board.

#### Note 8 Working interest claims

The OWA accepts claims from the AER made by industry for defunct working interest partners. Working interest partners are any party under a joint operating or other agreement under which the party is entitled to a proportionate share of cash flows as well as costs. If a company has a defunct working interest partner with a well, facility or associated site that is deemed orphan by the AER, the OWA will reimburse the proportionate share of costs on behalf of the defunct working interest partner of the completed abandonment and/or the completed reclamation. Reclamation is considered completed and reimbursement can be made when a reclamation certificate has been issued on the site.

Notes to the Financial Statements

March 31, 2018

(thousands of dollars)

#### Note 9 Fund administration

Fund administration includes contract payments and salaries to management of \$194 (2017 - \$345). No remuneration and benefit payments were made to Board members for 2018 and 2017.

#### Note 10 AER enforcement activities

AER enforcement activities expenditures are amounts paid to the AER for third party abandonment expenditures on wells, pipelines and facilities incurred by the AER during their enforcement actions against liable parties. In cases when the wells, pipelines or facilities are subsequently deemed orphan by the AER, the OWA will reimburse the AER for these expenditures.

#### Note 11 Financial instruments

The Association's main financial risk exposure is detailed as follows:

#### (i) Credit risk

The Association is exposed to credit risk, which is the risk that a counterparty will fail to perform an obligation or settle a liability, resulting in a financial loss to the Association. The Association's accounts receivable are primarily due from AER and are subject to normal credit terms. The maximum credit risk exposure associated with the Association's financial assets is the carrying amount.

#### (ii) Liquidity risk

The Association is exposed to liquidity risk which is the risk that the Association will be unable to generate or obtain sufficient cash to meet obligations as they fall due. Mitigation of this risk is achieved through the active management of cash and debt. The liquidity risk is assessed as low for the Association.

The contractual maturities of financial liabilities as of March 31, 2018 are as follows:

	Total	2019	2020	2021	2022	!	2023	Th	ereafter
Accounts payable and accrued liabilities	\$ 3,195	\$ 3,195	\$ -	\$ -	\$ -	\$	-	\$	-
Long term note payable	\$ 50,000	\$ 5,556	\$ 18,056	\$ 26,388	\$ -	\$	-	\$	-

#### Note 12 Commitment

Office space contracted payments are as follows:

	Total 2019		2020	2021	2022	2023	2023-2025
Contracted payments	\$ 1,089 \$	170 \$	170 \$	170 \$	170 \$	170 \$	239

## Appendix 1

## Licensee Liability Rating Program Amounts Recovered by the OWA in Fiscal 2017

Defunct or Insolvent Licensee	Amount of Recovery
NEO Exploration Inc.	\$1,239,900
Tallgrass Energy Corp.	\$876,500
385417 Alberta Ltd.	\$387,500
Goldenrod Resources Inc.	\$378,100
Cougar Oil and Gas Canada Inc.	\$230,400
Drake Energy Ltd.	\$230,200
Canada West Resources Inc.	\$184,500
Enquest Environmental Services Corp.	\$171,200
Avondale Energy Inc.	\$163,300
Aspen Endeavour Resources Inc.	\$150,800
Sandbox Energy Corp.	\$126,800
Riley Resources Inc.	\$124,000
Storm Cat Energy Corporation	\$121,700
Shoreline Energy Corp.	\$109,400
Foret Management Ltd.	\$51,000
Sunrise Energy Ltd.	\$50,000
Water Solutionz Enterprises Inc.	\$48,100
Golden Coast Energy Corp.	\$44,800
Stout Energy Inc.	\$44,200
Fogo Energy Corp.	\$41,700
Frontier Energy Inc.	\$37,500
County Line Energy (Canada) Inc.	\$31,300
Vanguard Exploration Corp.	\$27,100
Gateway Petroleum Inc.	\$15,700
United Penn Oil & Gas Ltd.	\$15,400
Duel Energy Inc.	\$7,600
Hazelwood Energy Limited	\$7,100
Camino Industries Inc.	\$4,900
Total	\$4,920,700

## Appendix 2

### **Working Interest Claims in Fiscal 2017**

In fiscal 2017, working interest partners abandoned 76 wells, reclaimed 15 wells, abandoned and reclaimed one well and abandoned five pipeline segments.

Defunct Licensee	Working Interest Partner	Location Type of Claim	Defunct Licensee		
			Working Interest Partner (%)	Working Interest Claim Amount (\$)	Gross Amount (\$)
Sekur Energy Management Corp.	Chair Resources Inc.	1000241 02/02-30-026-15W4/00 Abandonment	50.0000%	32,078.64	64,157.28
Sekur Energy Management Corp.	Chair Resources Inc.	1000242 00/06-31-035-03W4/00 Abandonment	50.0000%	12,629.05	25,258.10
Sekur Energy Management Corp.	Chair Resources Inc.	1000243 00/14-31-035-03W4/00 Abandonment	50.0000%	7,693.44	15,386.88
Sekur Energy Management Corp.	Chair Resources Inc.	1000244 00/16-31-035-03W4/04 Abandonment	50.0000%	21,204.91	42,409.82
Sekur Energy Management Corp.	Chair Resources Inc.	1000245 00/16-23-035-04W4/00 Abandonment	50.0000%	6,901.25	13,802.50
Sekur Energy Management Corp.	Chair Resources Inc.	1000246 00/02-19-036-03W4/02 Abandonment	50.0000%	24,794.97	49,589.94
Sekur Energy Management Corp.	Chair Resources Inc.	1000247 02/02-19-036-03W4/00 Abandonment	50.0000%	6,945.96	13,891.92
Sekur Energy Management Corp.	Chair Resources Inc.	1000248 00/16-19-036-03W4/00 Abandonment	50.0000%	5,031.03	10,062.06
Sekur Energy Management Corp.	Chair Resources Inc.	1000249 PL/06-31-035-03W4/02 Pipeline Abandonment (3 Seg)	50.0000%	30,404.79	60,809.58
Sekur Energy Management Corp.	Cenovus Energy Inc.	1000250 02/16-19-035-03W4/00 Abandonment	35.0000%	7,161.99	20,462.83
Sekur Energy Management Corp.	Cenovus Energy Inc.	1000251 00/07-31-035-03W4/00 Abandonment	35.0000%	5,567.29	15,906.54
Sekur Energy Management Corp.	Cenovus Energy Inc.	1000252 00/09-31-035-03W4/00 Abandonment	35.0000%	5,145.00	14,700.00
Duel Energy Ltd.	Sinopec Daylight Energy Ltd.	1000267 00/07-04-059-15W4/00 Abandonment	25.0000%	7,601.24	30,404.96
R.B. Lowry Resources Ltd.	TAQA North Ltd.	1000273 00/13-09-062-11W5/00 Abandonment	7.4143%	12,232.19	164,982.10
Kootenay Energy Inc.	Potts Petroleum Inc.	1000268 00/13-15-042-13W4/00 Abandonment & Reclamation	50.0000%	14,172.99	28,345.98
Camino Industries Inc.	Pengrowth Energy Corp.	1000269 00/06-03-034-02W5/00 Abandonment	75.0000%	115,791.98	154,389.31
Entourage Energy Ltd.	Harvest Operations Corp.	1000270 00/16-22-087-12W5/02 Abandonment	97.5000%	79,205.46	81,236.37
Tudor Corporation Ltd. Canadian Coyote Energy Ltd.	Encana Corporation	1000271 00/13-20-038-10W4/00 Abandonment	44.4553% 48.4197%	22,104.66	23,800.44
Tudor Corporation Ltd. Canadian Coyote Energy Ltd.	Encana Corporation	1000272 00/15-20-038-10W4/00 Abandonment	44.4553% 48.4197%	19,765.48	21,281.81
Redwater Energy Corp.	Sinopec Daylight Energy Ltd.	1000274 00/02-33-054-21W4/00 Abandonment	60.0000%	33,729.20	56,215.33
Redwater Energy Corp.	Sinopec Daylight Energy Ltd.	1000275 00/15-23-054-21W4/00 Abandonment	70.0000%	40,067.96	57,239.94
Redwater Energy Corp.	Sinopec Daylight Energy Ltd.	1000276 02/07-30-061-26W4/00 Abandonment	72.0000%	66,091.88	91,794.28
Redwater Energy Corp.	Sinopec Daylight Energy Ltd.	1000277 00/01-04-061-27W4/00 Abandonment	72.0000%	46,366.02	64,397.25
Redwater Energy Corp.	Sinopec Daylight Energy Ltd.	1000278 FA/01-33-054-21W4/00 Abandonment	60.0000%	5,763.51	9,605.85

Defunct Licensee	Working Interest Partner	Location Type of Claim	Defunct Licensee		
			Working Interest Partner (%)	Working Interest Claim Amount (\$)	Gross Amount (\$)
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000253 02/16-32-033-28W4/00 Abandonment	56.0000%	13,476.02	24,064.32
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000254 00/14-33-033-28W4/00 Abandonment	56.0000%	90,003.39	160,720.34
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000255 02/14-33-033-28W4/00 Abandonment	56.0000%	5,698.48	10,175.86
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000256 00/03-04-034-28W4/00 Abandonment	56.0000%	6,353.41	11,345.38
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000257 00/05-04-034-28W4/00 Abandonment	56.0000%	12,147.26	21,691.54
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000258 00/05-04-034-28W4/00 Abandonment	56.0000%	13,903.01	24,826.80
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000259 00/14-04-034-28W4/00 Abandonment	56.0000%	11,645.89	20,796.23
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000260 00/01-08-034-28W4/00 Abandonment	56.0000%	12,979.16	23,177.07
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000261 00/08-08-034-28W4/00 Abandonment	56.0000%	13,715.45	24,491.88
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000262 00/09-08-034-28W4/00 Abandonment	56.0000%	14,257.70	25,460.18
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000263 00/03-09-034-28W4/00 Abandonment	56.0000%	6,398.52	11,425.93
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000264 00/12-09-034-28W4/00 Abandonment	56.0000%	12,766.44	22,797.21
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000265 00/13-09-034-28W4/00 Abandonment	56.0000%	12,349.67	22,052.98
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000266 00/04-15-034-28W4/00 Abandonment	56.0000%	11,881.40	21,216.79
Dove Energy Inc.	Zargon Oil & Gas Ltd.	1000280 00/06-12-010-10W4/00 Reclamation	90.0000%	78,818.72	87,576.36
Sekur Energy Management Corp.	Optimus Energy Limited	1000281 00/16-17-026-15W4/00 Abandonment	30.0000%	4,866.69	16,222.30
Sekur Energy Management Corp.	Optimus Energy Limited	1000282 00/06-20-026-15W4/00 Abandonment	30.0000%	4,409.40	14,698.00
Sekur Energy Management Corp.	Optimus Energy Limited	1000283 PL/06-20-026-15W4/02 Pipeline Abandonment (2 Seg)	30.0000%	2,714.10	9,047.00
Windfire Resources Ltd.	Nytis Exploration Company Inc. (Predator Oil BC Ltd.)	1000279 00/16-13-034-29W4/00 Reclamation	56.0000%	8,715.11	15,562.70
Hazelwood Energy Limited	Primrose Drilling Ventures Ltd.	1000284 00/13-19-001-05W4/00 Reclamation	20.0000%	1,285.90	6,429.50
Hazelwood Energy Limited	Primrose Drilling Ventures Ltd.	1000285 00/06-30-001-05W4/00 Reclamation	20.0000%	712.52	3,562.60
Hazelwood Energy Limited	Primrose Drilling Ventures Ltd.	1000286 02/06-30-001-05W4/00 Reclamation	20.0000%	192.72	963.60
Hazelwood Energy Limited	Primrose Drilling Ventures Ltd.	1000287 00/11-31-001-05W4/00 Reclamation	20.0000%	805.60	4,028.00
Hazelwood Energy Limited	Primrose Drilling Ventures Ltd.	1000288 00/02-18-004-05W4/00 Reclamation	40.0000%	1,601.80	4,004.50

Defunct Licensee	Working Interest Partner	Location Type of Claim	Defunct Licensee		
			Working Interest Partner (%)	Working Interest Claim Amount (\$)	Gross Amount (\$)
Hazelwood Energy Limited	Primrose Drilling Ventures Ltd.	1000289 00/07-18-004-05W4/00 Reclamation	40.0000%	637.20	1,593.00
Hazelwood Energy Limited	Primrose Drilling Ventures Ltd.	1000290 00/04-09-036-20W4/02 Reclamation	17.7800%	1,836.85	10,330.99
NEO Exploration Inc.	ARC Resources Ltd.	1000291 00/06-11-010-16W4/00 Abandonment	57.5000%	18,512.69	32,195.98
Table Sixteen Energy Corp.	ARC Resources Ltd.	1000291 00/06-11-010-16W4/00 Abandonment	14.5000%	4,668.42	32,196.00
NEO Exploration Inc.	ARC Resources Ltd.	1000292 00/06-15-010-16W4/00 Abandonment	57.5000%	14,583.31	25,362.28
Table Sixteen Energy Corp.	ARC Resources Ltd.	1000292 00/06-15-010-16W4/00 Abandonment	14.5000%	3,677.53	25,362.28
NEO Exploration Inc.	ARC Resources Ltd.	1000293 02/16-10-010-16W4/00 Abandonment	57.5000%	15,592.40	27,117.22
Table Sixteen Energy Corp.	ARC Resources Ltd.	1000293 02/16-10-010-16W4/00 Abandonment	14.5000%	3,932.00	27,117.24
NEO Exploration Inc.	ARC Resources Ltd.	1000294 00/06-16-010-16W4/00 Abandonment	57.5000%	11,305.43	19,661.62
Table Sixteen Energy Corp.	ARC Resources Ltd.	1000294 00/06-16-010-16W4/00 Abandonment	14.5000%	2,292.71	15,811.79
NEO Exploration Inc.	ARC Resources Ltd.	1000295 00/07-17-010-16W4/00 Abandonment	57.5000%	13,406.95	23,316.43
Table Sixteen Energy Corp.	ARC Resources Ltd.	1000295 00/07-17-010-16W4/00 Abandonment	14.5000%	2,718.89	18,750.97
Launch Resources Ltd.	TAQA North Ltd.	1000296 00/03-01-057-23W4/00 Reclamation	37.0000%	5,000.04	13,513.62
Sekur Energy Management Corp.	Bonavista Energy Corporation	1000297 00/01-29-047-26W4/00 Abandonment	15.0000%	16,607.92	110,719.47
NEO Exploration Inc.	Bonavista Energy Corporation	1000297 00/01-29-047-26W4/00 Abandonment	35.0000%	38,751.80	110,719.43
Tudor Corporation Ltd.	Paramount Resources (ACL) Ltd. (Apache Canada Ltd.)	1000298 00/01-28-038-10W4/00 Abandonment	23.7796%	7,958.19	33,466.43
Tudor Corporation Ltd.	Paramount Resources (ACL) Ltd. (Apache Canada Ltd.)	1000299 00/01-29-038-10W4/00 Abandonment	15.8240%	5,865.31	37,066.03
Tudor Corporation Ltd.	Paramount Resources (ACL) Ltd. (Apache Canada Ltd.)	1000300 00/06-28-038-10W4/00 Abandonment	49.3634%	31,976.21	64,777.12
Tudor Corporation Ltd.	Paramount Resources (ACL) Ltd. (Apache Canada Ltd.)	1000301 00/06-29-038-10W4/00 Abandonment	37.2329%	9,423.02	25,308.35
Winter Petroleum Ltd.	TAQA North Ltd.	1000302 00/10-21-110-01W6/00 Reclamation	20.0000%	7,663.60	38,318.00
Winter Petroleum Ltd.	TAQA North Ltd.	1000303 00/11-34-110-01W6/00 Reclamation	20.0000%	8,183.69	40,918.45
Winter Petroleum Ltd.	TAQA North Ltd.	1000304 00/10-27-111-01W6/00 Reclamation	75.6400%	30,928.11	40,888.56
Winter Petroleum Ltd.	TAQA North Ltd.	1000305 00/11-36-111-01W6/00 Reclamation	75.6400%	37,242.93	49,237.08
Legend Energy Canada Ltd.	NAL Resources Limited	1000307 00/02-25-038-03W5/00 Abandonment	55.0000%	46,736.02	84,974.58

Defunct Licensee	Working Interest Partner	Location Type of Claim	Defunct Licensee		
			Working Interest Partner (%)	Working Interest Claim Amount (\$)	Gross Amount (\$)
Legend Energy Canada Ltd.	NAL Resources Limited	1000308 00/05-30-038-02W5/00 Abandonment	92.5000%	25,293.30	27,344.11
Legend Energy Canada Ltd.	NAL Resources Limited	1000309 02/05-30-038-02W5/00 Abandonment	92.5000%	30,786.46	33,282.66
Canadian Coyote Energy Ltd.	Paramount Resources (ACL) Ltd. (Apache Canada Ltd.)	1000298 00/01-28-038-10W4/00 Abandonment	32.1724%	10,766.96	33,466.43
Canadian Coyote Energy Ltd.	Paramount Resources (ACL) Ltd. (Apache Canada Ltd.)	1000299 00/01-29-038-10W4/00 Abandonment	21.4089%	7,935.40	37,065.98
Cougar Oil and Gas Canada Inc.	Pengrowth Energy Corp.	1000306 00/10-34-089-04W5/00 Abandonment	80.0000%	812,879.34	1,016,099.1 8
385417 Alberta Ltd.	Journey Energy Inc.	1000310 00/06-06-047-02W5/00 Abandonment	4.5500%	11,572.12	254,332.31
385417 Alberta Ltd.	Journey Energy Inc.	1000311 02/04-19-048-02W5/00 Abandonment	75.0000%	52,827.19	70,436.25
385417 Alberta Ltd.	Journey Energy Inc.	1000312 00/06-19-048-02W5/02 Abandonment	75.0000%	138,947.80	185,263.73
385417 Alberta Ltd.	Journey Energy Inc.	1000313 00/11-19-048-02W5/00 Abandonment	75.0000%	90,964.81	121,286.41
385417 Alberta Ltd.	Journey Energy Inc.	1000314 00/12-19-048-02W5/00 Abandonment	75.0000%	93,153.47	124,204.63
Terra Energy Corp.	Canadian Natural Resources Limited	1000315 00/10-22-080-09W6/00 Abandonment	88.7500%	115,439.23	130,072.37
Calpine Canada Energy Limited	Canadian Natural Resources Limited	1000316 00/12-25-054-12W4/00 Reclamation	25.0000%	23,011.88	92,047.52
Sabanero Energy Corp.	Potts Petroleum Inc.	1000318 00/15-24-077-12W5/00 Abandonment	85.1852%	71,667.54	84,131.45
Sekur Energy Management Corp.	Signalta Resources Limited	1000317 00/06-33-035-21W4/00 Abandonment	13.6547%	16,828.66	123,244.45
MFS Holdings Ltd.	TAQA North Ltd.	1000320 00/03-20-048-20W4/00 Abandonment	10.0000%	8,807.96	88,079.60
Sabanero Energy Corp.	Potts Petroleum Inc.	1000319 00/07-14-077-12W5/00 Abandonment	77.2500%	70,210.51	90,887.39
Sekur Energy Management Corp.	Cor4 Oil Corp. (Imaginea)	1000322 00/07-16-029-03W4/00 Abandonment	37.5000%	13,831.59	36,884.24
Sekur Energy Management Corp.	Long Run Exploration Ltd.	1000323 00/05-05-021-11W4/00 Abandonment	76.0000%	77,186.76	101,561.53
Shoreline Energy Corp.	Sinopec Daylight Energy Ltd.	1000326 00/08-17-075-01W5/00 Abandonment	37.5000%	62,957.80	167,887.47
Sekur Energy Management Corp.	TAQA North Ltd.	1000321 00/10-33-049-06W4/00 Abandonment	23.3310%	28,046.75	120,212.38
Redwater Energy Corp.	TAQA North Ltd.	1000324 00/06-02-062-02W5/00 Abandonment	3.0540%	7,347.56	240,588.08
Canadian Coyote Energy Ltd.	TAQA North Ltd.	1000325 00/05-04-041-13W4/00 Abandonment	75.0000%	51,327.71	68,436.95

## Governance

The Alberta Oil and Gas Orphan Abandonment and Reclamation Association is an independent non-profit organization, generally known as the Orphan Well Association or OWA. The OWA operates under the delegated legal authority of the AER, the provincial regulator of energy development. Funding for the association's work comes primarily from Alberta's oil and gas producers through the Orphan Well Levy.

Through its Board of Directors, industry, regulatory and government representatives oversee the OWA's operations, priorities and strategic planning to ensure the association is delivering its mandate to protect public health and safety and manage environmental risk.

#### **Board of Directors**

## Brad Herald, Canadian Association of Petroleum Producers, OWA Chair

Brad Herald's work with CAPP has focused on industry operations and economics in Western Canada, including best practices related to the environment and public health and safety. He works closely with industry experts on community and regional stakeholder concerns, and with regulators and governments on policy issues and implementation.

#### Kendall Dilling, Cenovus Energy

Kendall Dilling has 25 years of technical and management experience in the oil and gas industry, including work in environmental protection and management of pipeline projects. He has worked with emerging Canadian and multinational energy companies in health, safety and environment portfolios. In addition to the OWA, Kendall serves on several non-profit industry, community and research boards.

#### Trevor Gosselin, Alberta Energy Regulator

Trevor Gosselin is Director, Asset and Liability Transition Management at the AER and represents the regulator's delegated authority of OWA operations. He brings to the OWA Board experience in organizational management, focused on planning, people, and efficient use of resources. Prior to his current role with the AER, Trevor served in senior leadership roles in domestic and international operations with the Canadian Forces.

#### Orest Kotelko, Canadian Natural Resources Limited

Orest Kotelko has more than 45 years of experience in energy lifecycle development, operations and liability management in drilling, construction and reservoir engineering. His experience includes work with industry associations, major and emerging companies, and governments, as well as stakeholder groups in conventional and oil sands development in Western Canada.

#### Darrel Purdy, Paramount Resources

Darrel Purdy is a Professional Engineer with career experience that covers a broad range of technical, operational and strategic roles in the energy industry. In addition to his work in the upstream oil and gas producing sector of the industry, he brings to the OWA Board significant experience in midstream operations—the gathering and processing facilities that are an important part of the OWA's life-cycle management portfolio.

#### Jim Screaton, Corval Energy Ltd.

Jim Screaton is a Chartered Accountant who has held leadership roles in major, mid-size and emerging energy companies. He brings experience in organizational strategy related to financial analysis, debt and liability, securities regulation and disclosure. In addition, he has represented industry on a breadth of association and committee work, including liability management.

#### Karen Wronko, Alberta Environment and Parks

Karen Wronko is the Executive Director of Land Policy within Environment and Parks. During her career in public service she has worked in a number of areas and has provided senior level leadership to several strategic initiatives, including policy development related to water and land, the growth and diversification of the provincial economy through local economic development, entrepreneurship and small business support, and major initiatives targeted at growing the petrochemical sector in Alberta.

## Management

#### Lars De Pauw, Executive Director

Lars De Pauw took on the leadership of the OWA in 2017. As a Professional Engineer, he has held senior positions in strategic planning, project development, environmental engineering, and client and stakeholder relationship management. His experience includes work with a major Canadian oil and gas producer, a diversified petroleum services company, and strategic and operational consulting businesses.

#### Wanda Sakura, Team Lead, Environment

Wanda Sakura is a Professional Geologist who brings to OWA more than 30 years of environment and safety experience, including direct work with the association's planning and operations since 2006. Her expertise includes management of environmental assessment and remediation of legacy facilities in urban and commercially developed areas. She also brings significant experience in working effectively with Indigenous communities.

#### Ken Willis, Team Lead, Well Decommissioning

Ken Willis has worked as a Professional Engineer in the oil and gas industry since 1980, both in the field from drilling and completions, and as an organizational leader of engineering and technology teams in Canada and internationally. His experience in life-cycle management of facilities covers a broad spectrum of expertise from downhole work to surface production operation sites.

