



**Orphan Well  
Association**

Alberta Oil and Gas Orphan Abandonment and Reclamation Association

# Orphan Well Association

## 2012/13 Annual Report

June 2013

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Slate Energy Inc. D0/03-34-055-24W4/0  
Service rig during abandonment operations January 18, 2013

### ***CHAIRMAN'S MESSAGE***

2012/13 was an interesting year for the Orphan Well Association (OWA), which operates as an independent not for profit organization under the delegated authority of the Energy Resources Conservation Board (ERCB) and as an agent of Alberta Environment and Sustainable Resource Development (ESRD). Our funding comes primarily from the upstream oil and gas industry.

This fiscal year, the OWA conducted almost \$12 million of orphan abandonment and reclamation work. We saw a steady growth in new orphan sites received from ESRD and a jump in new orphan wells received from the ERCB due to changes in its liability management programs. We also saw an increase in participation by industry as evidenced by a sharp increase in working interest claims.

The OWA is planning for an increase in orphan activity due to the growth in our inventory of orphans; and by providing the funding, the upstream oil and gas industry is demonstrating its commitment to dealing with upstream oil and gas orphans so they do not represent a liability to the Alberta taxpayer.

A handwritten signature in cursive script, reading "David Pryce".

David Pryce  
Chairman



## **BACKGROUND**

### **Orphan Well Association**

The Alberta Oil and Gas Orphan Abandonment and Reclamation Association is a not for profit organization which operates under the registered trade name of the Orphan Well Association (OWA). The OWA operates as a separate, financially independent organization under the legal authority delegated by the Alberta Energy Resources Conservation Board (ERCB).

The OWA was established in 2002, as a result of collective efforts between the upstream oil and gas industry and the provincial government. The mandate of the OWA is to manage the abandonment of upstream oil and gas orphan wells, pipelines, and facilities and the reclamation of associated sites. The Alberta government supports the OWA through its regulatory agencies of the upstream oil and gas industry, Alberta Energy Resources Conservation Board (ERCB) and Alberta Environment and Sustainable Resource Development (ESRD, formerly Alberta Environment or AENV) which:

- (1) Initiate appropriate enforcement actions to ensure that the responsible parties address their obligations to deal with their well and facility abandonment and reclamation liabilities, and
- (2) Develop appropriate policies to minimize unfunded orphan liability and to prevent the creation of new orphans.

The OWA, ERCB and ESRD have a signed Memorandum of Understanding which outlines the roles and responsibilities of each organization regarding orphans. The ERCB and ESRD are responsible for identifying and investigating potential orphans. Orphans are defined as specific properties which can be wells, pipelines, facilities or associated sites that have been investigated by the ERCB or ESRD for legally responsible or financially viable parties and then designated as orphan through a memo. As part of this process, the ERCB investigates and deems companies that hold well licenses as defaulting working interest participants under the *Oil and Gas Conservation Act* and the *Orphan Fund Delegated Administration Regulation* first, and then designates specific properties as orphans through a signed Acceptance memo.

In July 2012, the ERCB established a significant procedure change which allows them now to designate companies that are, in the ERCB's opinion, insolvent or not financially viable companies which can still be active on corporate registries, i.e. not defunct. With this change and with updates in May 2013 to the ERCB's Liability Management system, the OWA is anticipating an increase in the number of orphans in the coming years.



ESRD participates in the orphan process by investigating and then by providing the legal authority to the OWA for right of access to conduct our site reclamation activities on orphan well or facility sites by issuing an Environmental Protection Order (EPO) to the defunct or insolvent operator. When the defunct or insolvent operator does not comply with the order, ESRD designates the OWA as their agent through a site specific Agent letter. Once a site is designated as an orphan by the ERCB through a Turnover memo (a signed Acceptance letter) and the ESRD Agent letter with the associated EPO's are received from ESRD, the OWA has the legal authority to access sites and can proceed to conduct its site reclamation activities. Note that the use of the term Site Reclamation includes the activities of remediation or decontamination as well as reclamation.

The ERCB collects funds from industry through an annual Orphan Fund levy and other fees. These funds are then remitted to the OWA to cover the expenditures on orphan abandonment and reclamation activities. Each year the OWA prepares an annual budget which determines the amount of the Orphan Fund levy. This budget is then approved by its voting Member organizations: Canadian Association of Petroleum Producers (CAPP), Explorers and Producers Association of Canada (EPAC formerly Small Explorers and Producers Association of Canada or SEPAC), and the ERCB. When this occurs, the ERCB then proceeds to collect the annual Orphan Fund levy from industry.

#### **Directors of the Orphan Well Association**

Five representatives are appointed as directors by our Member organizations. After many years of involvement in the ERCB orphan programs and the OWA, Hal Knox stepped down as our director representing the ERCB in June 2012. As per our by-laws, our directors are listed as follows:

- David Pryce, Vice-President, Canadian Association of Petroleum Producers
- Orest Kotelko (Canadian Natural Resources Limited), Canadian Association of Petroleum Producers
- David Wolf (Stone Petroleums Ltd.), Explorers and Producers Association of Canada
- Kevan van Velzen, Alberta Energy Resources Conservation Board
- Shannon Flint, Alberta Environment and Sustainable Resource Development (honorary non-voting director)



Alliance Oils Limited 00/14-11-006-02W5/0  
Reclaimed road looking west August 28, 2012

## ***HISTORICAL SUMMARY***

### **Historical Summary of Funding**

A Historical Summary of Funding for the OWA orphan activities is shown in Figure 1 and Table 1. Out of the over \$206 million that has been collected since 1992 to fund orphan activities, over \$168 million was contributed by the upstream oil and gas industry in Alberta or 81%.

In addition to industry contributions, Alberta Energy contributed 15% funding. First, in 2009 there was a one time grant funding of \$30 million as part of the Government of Alberta's three part economic stimulus plan which was implemented after the fall of 2008. Second, there was a contribution of \$50,000 to the OWA as support for additional work that was directed by the ERCB in 2012 under Directive 079 to help the government do abandoned well locating and testing in urban areas for wells which are licensed to defunct companies and are not designated as orphan. The remaining 4% of orphan funding is \$9 million from interest earned.

Prior to September 1997, the ERCB had the legal authority to conduct well abandonments on orphans. The provincial legislation was then changed in 1997 to give the ERCB the legal authority to conduct additional orphan activities such as pipeline abandonment, facility decommissioning and reclamation of associated sites. The ERCB conducted these abandonment, decommissioning and reclamation orphan



activities under the program known as the Alberta Orphan Program until March 31, 2002. The OWA commenced operations on the same orphan activities as a separate not for profit organization from the ERCB on April 1, 2002.

Up to 2002, the Orphan Fund levy was collected by the ERCB based on the number of inactive wells held by each Licensee on December 31<sup>st</sup> of the prior calendar year. During that time, the ERCB implemented new changes to its liability program. After April 1, 2002, the Orphan Fund levy was collected by the ERCB based on each Licensee's calculated proportionate share of total deemed industry liability as per application of the ERCB's Liability Licensee Rating program.

The other sources of funding for this program are from First Time Licensee Fees and Board Directed Transfer Fees (FTL and BDT Fees). See Financial Highlights, Revenue for a description of these two fees.

## Historical Summary of Expenditures

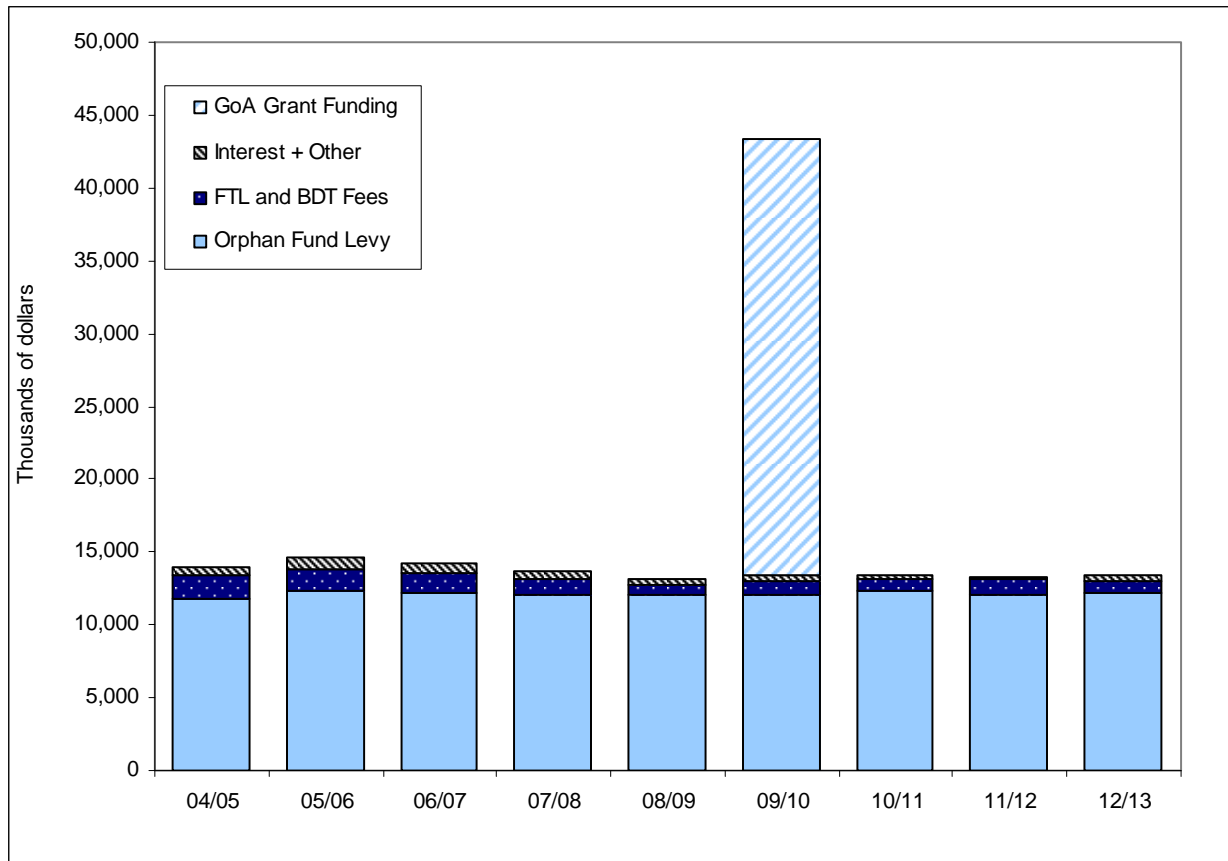
A Historical Summary of Operating Expenditures is shown below in Figure 2 and Table 2. This summary divides OWA operating expenditures into five types. As per the Financial Statements, Statement of Operations, four types of expenditures are considered Operating Expenditures (Site Reclamation, Well Abandonment, Pipeline Abandonment and Facility Decommissioning). The fifth type of expenditure (ERCB Enf Activities/WIC) is a combination of ERCB Enforcement Activities and industry Working Interest Claims. See Financial Highlights, Expenditures Section for more information on these types of expenditures.

To date, total expenditures on these five types of expenditures are \$183 million. The bottom of Table 2 shows what comprises the \$23 million difference between Historical Revenue (\$206 million) and Historical Operating Expenditures (\$183 million). This \$23 million difference is comprised of the following:

- Admin (Administration) for 16 years of \$6.4 million or 3% of total
- Orphan Fund Levy of \$12 million collected for the following year 2013/14 operations and
- Operating Balance of \$4.8 million.



**Figure 1 – Historical Summary of Funding**



**Table 1 – Historical Summary of Funding (\$k)**

Year (Apr 1 to Mar 31)	Prior Years	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	Totals
GoA Grant Funding								30,000		50	30,050
Orphan Fund Levy	38,711	11,855	12,321	12,205	12,072	12,087	12,110	12,274	12,076	12,151	147,862
FTL and BDT Fees	10,420	1,570	1,460	1,360	1,020	640	890	820	1,040	850	20,070
Interest + Other	4,370	488	902	667	593	383	410	272	202	367	8,654
<b>Total Revenue (\$k)</b>	<b>53,501</b>	<b>13,913</b>	<b>14,683</b>	<b>14,232</b>	<b>13,685</b>	<b>13,110</b>	<b>13,410</b>	<b>13,366</b>	<b>13,318</b>	<b>13,418</b>	<b>206,636</b>





## OPERATING HIGHLIGHTS

In 2012/13, total expenditures of \$10,683k was spent on Operating Activities (14% decrease from \$12,464k in prior year). Summarized below is a table that shows the four types of operating expenditures and their percent of total expenditures for 2012/13.

Operating Expenditures (\$k)		
Site Reclamation	8,733	81.7%
Well Abandonment	1,728	16.2%
Pipeline Abandonment	194	1.8%
Facility Decommissioning	28	0.3%
Total	10,683	100.0%

### Site Reclamation

The OWA's largest type of operating expenditure is Site Reclamation. The total expenditure on Site Reclamation in this year was \$8,733k (14% decrease compared to \$10,107k in the prior year). Expenditures on Site Reclamation remain high because the inventory of orphan sites that require reclamation certificates is much larger than the inventory of wells, pipelines and facilities that require abandonment. Although closure was obtained on a number of orphan sites, there are 387 orphan sites in this year's inventory as of March 31, 2013 compared to 389 orphan sites at the prior year end (388 sites in 2010/11 and 435 sites in 2009/10). This is because the addition of new orphan sites is almost equal to the number of sites which receive closure. This year's inventory included 37 new orphan sites that were turned over by ESRD for reclamation.

### Site Reclamation Closure Count

The Site Reclamation Closure Count, which is the count of orphan sites which have obtained closure, is shown in Figure 3 and Table 3 on Page 10. To date, closure has been obtained on 448 out of 808 (56%) orphan sites. The count of orphan sites is based on 368 sites that have received reclamation certificates (*Sites RC Received*) plus 80 sites that have received some other type of closure (*Sites Handled*) plus 387 sites in year end inventory minus 27 sites that have received reclamation certificates or some other type of closure this year. These terms are further described below.



### Sites RC Received

Sites counted in this category have received a Reclamation Certificate from Alberta Environment and Sustainable Resource Development (ESRD), which regulates both private and public lands. Alberta Environment (AENV), which regulated private lands and Alberta Sustainable Resource Development (ASRD), which regulated public lands, amalgamated to form ESRD towards the end of 2011.

The issuing of a Reclamation Certificate indicates that the site reclamation satisfies applicable provincial regulatory standards and no further action is required. Sites that are counted can either be well sites or facility sites. When one location receives a reclamation certificate and there are two overlapping leases, two counts are taken for this category, one for each lease. For example, when a reclamation certificate is received on a facility footprint that completely overlaps a well site, two counts are taken for the one reclamation certificate.

The process to prepare a site for application for a reclamation certificate can take several years. After remediation and reclamation is completed on a site, it can take up to five years 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 after remediation closure depends on the land use, type of vegetation and factors that affect growing conditions such as rainfall.

Twenty-five orphan sites received reclamation certificates this year (compared to 35 in the prior year and 55 in 2010/11). In addition, there were 31 applications for reclamation certificates submitted to ESRD that are awaiting review as of March 31, 2013.

### Sites Handled

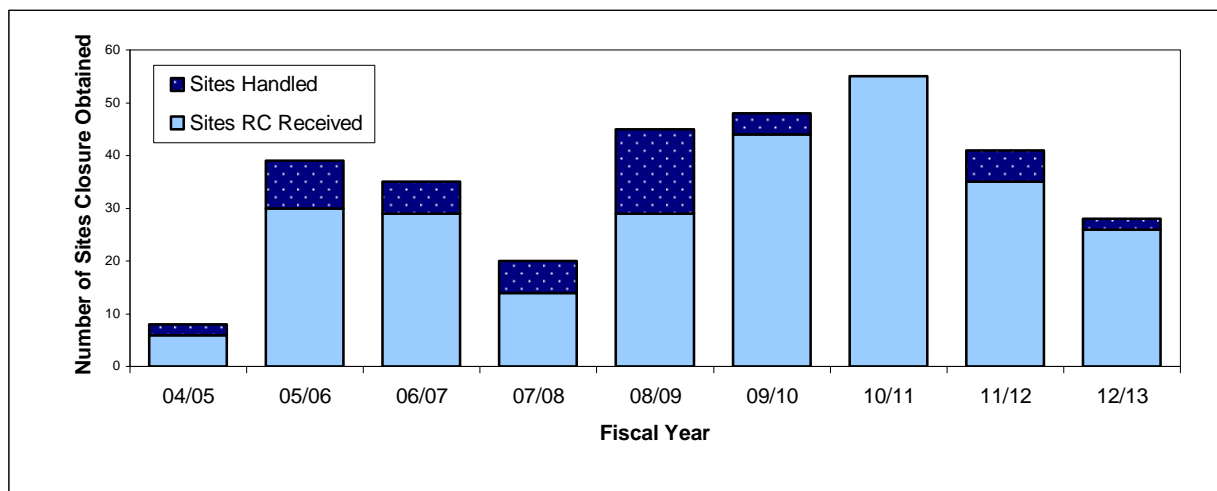
Sites counted in this category have received some type of closure with no further action required. This includes sites associated with wells that were abandoned prior to reclamation legislation being enacted, known as Reclamation Exempt (Rec Exempt) wells. These are wells that either a) are in the White Area (private land) of the province and were abandoned prior to June 1, 1963, or b) are in the Green Area (Crown land) of the province and were abandoned prior to August 15, 1978. Rec Exempt well sites are not considered "specified land" by ESRD and therefore do not require a reclamation certificate. For Rec Exempt sites, any surface reclamation issues that impede the current land use are addressed. The OWA documents the work done and notifies ESRD with a letter of file closure.



This category also counts sites that have a different closure mechanism because they do not require Reclamation Certificates for closure, for example pipeline spills. Sites that are taken over by active oil and gas companies by overlapping an orphan site with a new surface lease are also counted in this category.

Note that ESRD has updated this process with the document R&R/12-02 which replaces the C&R/IL/01-9. Two orphan sites were taken over by active oil and gas companies this year and were counted as Sites Handled.

**Figure 3 – Site Reclamation Closure Count**



**Table 3 – Site Reclamation Closure Count**

Fiscal Year (Apr 1 to Mar 31)	Prior Years	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	Total
Sites RC Received	101	6	30	29	14	29	44	55	35	25	368
Sites Handled	29	2	9	6	6	16	4	0	6	2	80
<b>Site Reclamation Closure Count</b>	<b>130</b>	<b>8</b>	<b>39</b>	<b>35</b>	<b>20</b>	<b>45</b>	<b>48</b>	<b>55</b>	<b>41</b>	<b>27</b>	<b>448</b>



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### **Reclamation and Remediation Definitions**

In this report, Site Reclamation is broadly broken into two types of activities, reclamation and remediation. This broad breakdown is shown in two rows in Table 4 2012/13 Site Reclamation Costs by Category and in Table 5 2012/13 Average Site Reclamation Costs by Category. This year, Site Reclamation expenditures were 20% on reclamation and 80% on remediation (compared to 19% and 81% prior year).

Reclamation is the term used to describe activities that focus on returning the land to its equivalent land use capability. Reclamation activities can include subsoil replacement, re-contouring and de-compaction, re-establishment of drainage, topsoil replacement and re-vegetation of disturbed land. They also include weed control, vegetation monitoring, detailed site assessment of the soils and vegetation and the preparation of applications for reclamation certificates from ESRD when reclamation has been completed.

Remediation is the term used to describe the activities that include the investigation and removal of contaminant impacts to soil and groundwater as per current ESRD regulatory guidelines. Remediation (also known as decontamination) is typically completed before a site is reclaimed.

### **Site Reclamation Categories**

To better describe Site Reclamation expenditures in the year, each orphan site was assigned one of seven Categories according to the largest expenditure on each site in the year. For example, if an orphan site was remediated and then reclaimed in the same year, the site would be assigned to the Remediation Category if more money was spent on remediation than on reclamation. Similarly, if the remediation was minor and more money was spent to reclaim the site than to remediate it, the site would be assigned to the Major or Minor Reclamation Category depending on the type of activity that was conducted.

The 2012/13 Site Reclamation Costs by Category are shown in Figure 4 and Table 4, and the 2012/13 Average Site Reclamation Costs by Category are shown in Figure 5 and Table 5 below. Note that the average cost per site given in Table 5 is affected by the distribution and type of work conducted on all the sites that are in the Category. For example, in the Phase 2 Environmental Site Assessment (ESA) and Remediation categories, sites with significant lagging reporting expenditures for Phase 2 ESA or

Remediation work done in the prior year were included; this inclusion lowers the average cost per site. Similarly, one or two extensive Phase 2 ESA investigations or very large Remediation projects will skew the average cost per site higher. See the comments in each category description regarding the factors that affect the average cost per site values in Table 5.



**Kyjo Resources Ltd. 00/05-03-041-25W4/0  
Bailing rainwater out of excavation May 26, 2012**

Site Reclamation Categories are described below and typically occur in the same order that the Categories are listed:

Startup: Sites in this category were typically received as new orphans in the fiscal year. Work may include conducting Phase 1 Environmental Site Assessments (ESAs), landowner contact and interviews, initial site visits, posting OWA signs, initial weed control and pre-reclamation site assessments.

Phase 2 ESA: Sites in this category had intrusive investigations conducted to characterize and delineate contaminants in the soil and groundwater. Phase 2 ESA related work included, but was not limited to, conducting electromagnetic conductivity surveys (or EM surveys, which measure soil conductivity that can be an indicator of salinity impacts in the soil), conducting ground disturbance checks, surveying, drilling, installing groundwater monitoring wells, sampling soil and groundwater, lab analyses and report preparation. This category includes Tier 2 approach



assessment work, which uses highly detailed site investigations and contaminant transport modeling to develop site-specific guidelines.

Remediation: Sites in this category had remediation conducted including, but not limited to, dealing with impacts associated with flare pits, drilling waste sumps, underground storage tanks, well centre, spills and other pits. Work may have included hauling impacted material to a landfill or the operation and maintenance of in-situ soil and groundwater treatment systems and confirmatory sampling of soil and groundwater.

Major Reclamation: Sites in this category had substantial reclamation work conducted such as lease and access road stripping, soil redistribution or major re-contouring to blend the site back into the surrounding landscape, and topsoil replacement.

Minor Reclamation: Sites in this category had limited reclamation work conducted such as minor soil disturbances like paratilling for soil decompaction, rock picking, removal of debris, repairing minor slumping at well centre or repairing erosion on access roads. Activities may also have included the addition of small amounts of topsoil, seeding or fencing.

Monitor: Sites in this category had monitoring type work conducted. Work included monitoring vegetation health/growth, weed control, mowing and minor re-seeding. Sites with groundwater monitoring are included in this category when no other Phase 2 ESA or remediation work is conducted.

Closure: Sites in this category had work conducted related to the process of applying for a reclamation certificate. Work included conducting soil, vegetation and landscape detailed site assessments, landowner consultation, preparing and submitting application documents, and responding to application inquires from ESRD. Work to obtain 100% overlapping agreements with a third-party operator was also included in this category.



Figure 4 – 2012/13 Site Reclamation Costs By Category

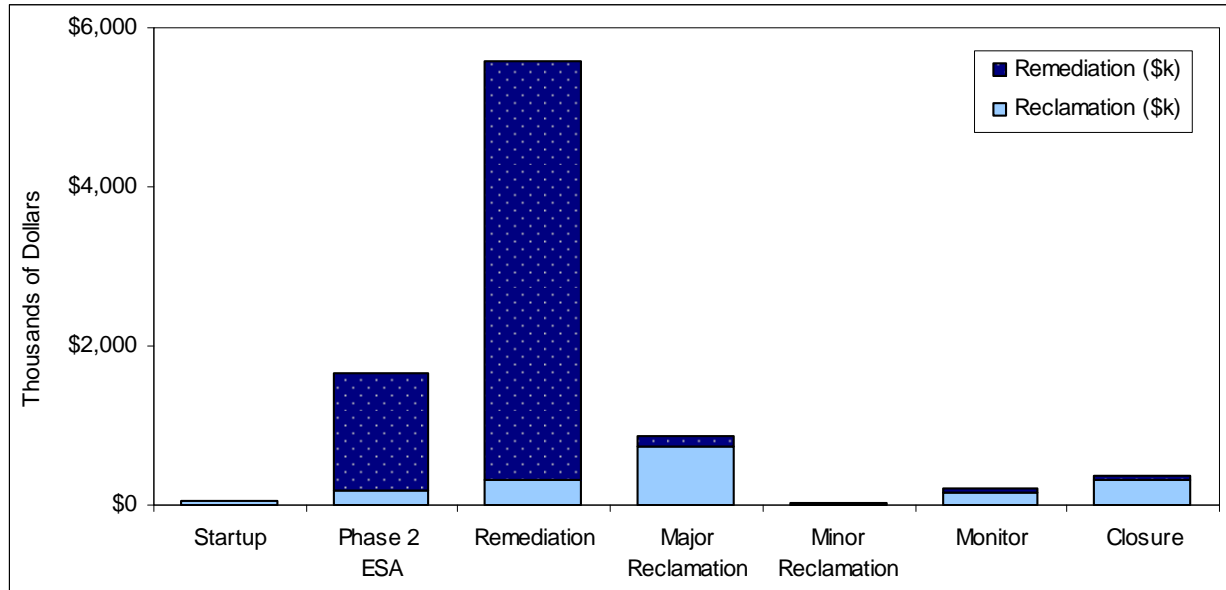
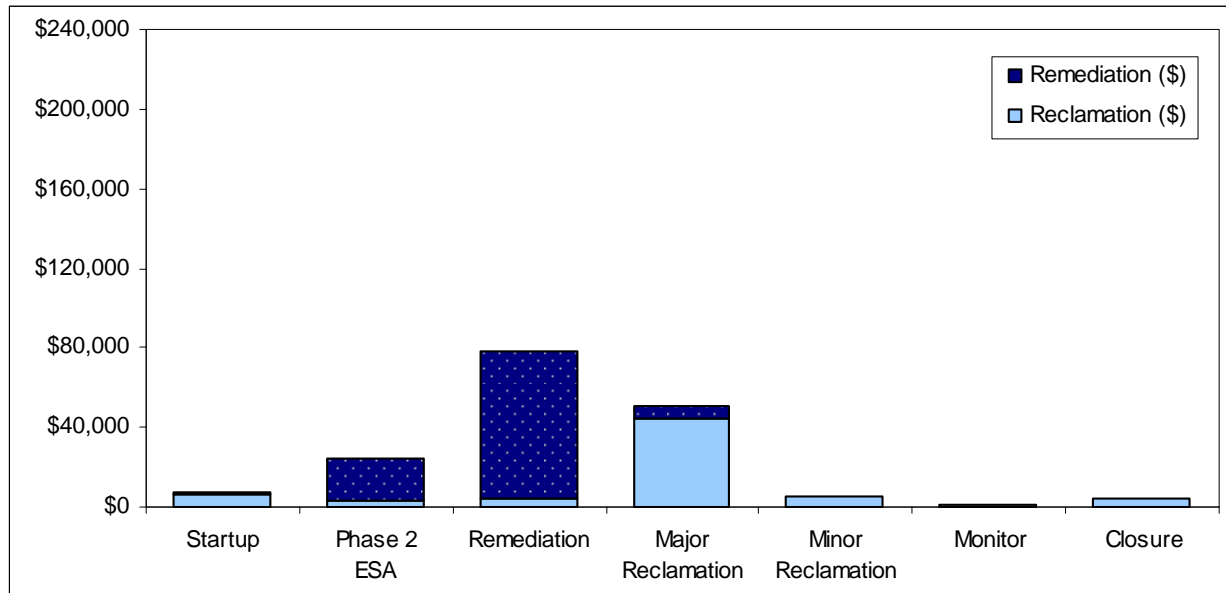


Table 4 – 2012/13 Site Reclamation Costs By Category

Activity	Site Reclamation Category							Total
	Startup	Phase 2 ESA	Remediation	Major Reclamation	Minor Reclamation	Monitor	Closure	
Reclamation (\$k)	49,322	186,690	324,300	748,466	15,343	147,310	311,192	1,782,623
Remediation (\$k)	12,481	1,473,120	5,244,921	111,252	0	56,277	52,117	6,950,168
<b>Total (\$k)</b>	<b>61,803</b>	<b>1,659,810</b>	<b>5,569,221</b>	<b>859,718</b>	<b>15,343</b>	<b>203,587</b>	<b>363,309</b>	<b>8,732,791</b>
Number of Sites	8	67	71	17	3	143	78	387



**Figure 5 – 2012/13 Average Site Reclamation Costs By Category**



**Table 5 – 2012/13 Average Site Reclamation Costs By Category**

Activity	Site Reclamation Category							Total
	Startup	Phase 2 ESA	Remediation	Major Reclamation	Minor Reclamation	Monitor	Closure	
Reclamation (\$)	6,165	2,786	4,568	44,027	5,114	1,030	3,990	4,606
Remediation (\$)	1,560	21,987	73,872	6,544	0	394	668	17,959
<b>Total (\$)</b>	<b>7,725</b>	<b>24,773</b>	<b>78,439</b>	<b>50,572</b>	<b>5,114</b>	<b>1,424</b>	<b>4,658</b>	<b>22,565</b>
Number of Sites	8	67	71	17	3	143	78	387



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### Comments by Site Reclamation Category

The following are comments on Site Reclamation activities conducted this year by Category:

#### Startup category

Startup activities included landowner contact, initial site inspections, weed control, Phase 1 ESAs, and EM surveys. Startup category expenditures totaled \$62k on eight new orphan sites compared to \$22k on ten new sites in the prior year. From Table 5, the average expenditure per site was \$8k (compared to \$2k per site in the prior year and \$7k per site in 2010/11).

Excluding two sites as outliers (with Phase 2 preparation expenditures and Detailed Site Assessment expenditures on a new orphan site which was found reclaimed), the average expenditure was \$4.7k per site. Expenditures are higher this year than in the previous year, because more work than initial file review was completed on these sites.

Note that although there are eight new orphan sites in the Startup category, most new orphan sites are counted in the Phase 2 ESA category, and two new orphan sites are counted in the Closure category because one was found to be reclaimed and ready for application for a reclamation certificate and the other was taken over by an active company.

#### Phase 2 ESA category

Phase 2 ESA activities included conducting EM surveys, drilling boreholes for soil sampling, digging test pits, installing groundwater monitoring wells, collecting soil and groundwater samples, and laboratory analyses. For sites with large impacts, detailed site investigations provide crucial information for developing Remedial Action Plans that have more accurate cost estimates and more detailed work scopes.

Phase 2 ESA category expenditures were a total of \$1,660k on 67 sites (compared to \$1,795 on 67 sites in the prior year). The Phase 2 ESA expenditures ranged from a low of \$511 for lagging reporting to a high of \$66k for a Phase 2 ESA on a large, remote northern site. From Table 5, the overall average Phase 2 ESA category cost was \$25k (compared to \$27k per site in the prior year).

Looking in more detail, 31 of the 67 sites had initial Phase 2 ESA's conducted on them for an average of \$38k per site with a range from \$21k to \$51k including reclamation and Phase 1 costs. (Note that the average cost of a Phase 1 was found to be \$4.6k ranging from \$1.5k to \$9.3k.) Excluding reclamation and Phase 1 costs, the average cost of an initial Phase 2 ESA was \$32k.



Fifteen sites in this Phase 2 ESA category had supplemental investigations conducted to further characterize and delineate contaminants. The average cost of a site with Phase 2 supplemental investigations excluding reclamation costs was \$23k (ranging from \$10k to \$43k).

The remaining sites included in this category either have charges for lagging Phase 2 ESA reporting, were included in the count as having overlaps with another operator or had work that went on hold. These sites were excluded from the average cost calculations.

Note that a few site assessments were conducted using the Tier 2 approach. This approach, which is in accordance with ESRD regulatory guidelines, is chosen for sites with large impacts in order to generate alternative remedial options that are protective of receptors. Using this approach, contaminant pathways and site specific receptors are identified. Based on the site information obtained during the Phase 2 ESAs, contaminant transport modeling is used to predict and assess the contaminant risk to the nearby human and/or ecological receptors (e.g. livestock, plants, aquatic life). On most of the orphan sites, the contaminants of concern are elevated concentrations of salinity in the soil and groundwater from produced water.

#### Remediation category

The largest Site Reclamation expenditures were for sites in the Remediation category, with \$5,569k spent on 71 sites (compared to \$6,624k on 47 sites in the prior year). From Table 5, the average Remediation category expenditure was \$78k per site (compared to \$141k per site in the prior year). Because of the addition of new orphan sites with minimal contaminant impacts, the inventory of sites now includes less expensive remediation projects.

Site expenditures on five large remediation projects ranged from \$301k to \$580k for an average cost of \$409k per site (compared to \$529k average on seven large sites in the prior year). These large remediation projects are being staged over two or more years due to the large volumes of impacted soil that require remediation. One of these large remediation projects obtained remediation closure this year.

Thirty-one other sites had remediation category expenditures ranging from \$20k to \$289k. Excluding the five very large projects and sites with only lagging reporting costs, the average remediation expenditure was \$109k per site (compared to \$106k in the prior year).



**Legal Oil & Gas Ltd. 00/14-29-052-25W4/0  
Excavation in City of Edmonton February 6, 2012**

The following are highlights of Remediation expenditures on the five large remediation projects. The projects are presented in order of decreasing magnitude of expenditure and list the defunct company, the location and the amount expended on each site.

*1// Legal Oil & Gas Ltd. 00/14-29-052-25W4/0 (\$580k)*

This site is considered a priority because of its location in the Transportation Utility Corridor (TUC) in the City of Edmonton and its position in a drainage restructuring project associated with the widening of the adjacent Anthony Henday highway. In addition, there is a residential area nearby. After an initial excavation in 2010, 2011 was used to collect more groundwater data on this site and further develop the site-specific remediation guidelines. Based on the risk-assessment model, 6,851 tonnes of hydrocarbon, metal and salinity impacted soil from the former flare pit were removed to a Class 2 landfill. Because of concerns with infiltrating groundwater, the excavation was backfilled. Current data suggests that closure on this site may be achieved in the next one or two years. Through communication with the stakeholders for the TUC, the original drainage plan was modified to reduce the risk of salinity impacts migrating further from the site. Included in this expenditure are costs for groundwater monitoring and sampling and updating the risk assessment model based on the new data collected.



*2// Big Valley Energy Corporation 00/16-24-048-21W4/0 (\$432k)*

This facility site was selected for remediation because of landowner concerns, its large surface footprint on cultivated land, and the length of time this site has been an orphan. The remediation work conducted was a continuation of last year's work. Included in this expenditure is groundwater monitoring, further delineation of boron impacts and updating the site-specific guidelines. Remediation activities included the removal of 4,861 tonnes of salinity, hydrocarbon, and boron impacted soil from the former flare pit area to a Class 2 landfill. The excavation was backfilled with imported clean fill obtained by constructing a dugout in the same field. Further remediation will be staged over the next one or two years after which obtaining closure is anticipated.

*3// Legal Oil & Gas Ltd. 00/05-31-049-26W4/0 (\$391k)*

This orphan site had a facility on it and was selected as a priority because of its location in the Town of Calmar and its proximity to residences. The work conducted was a continuation of last year's remediation work and focused on the removal of soil with hydrocarbon and other impacts that have the potential to impact human and ecological receptors. Much of the soil that was removed was co-impacted by salinity. Remediation activities included stripping and stockpiling the topsoil, followed by the excavation and hauling of 3,378 tonnes of hydrocarbon, metal and salinity impacted material to a Class 2 landfill and backfilling with suitable material from a local source. Further activities included groundwater sampling, additional delineation and contaminant modeling of the salinity impacts. Remediation and a longer term management approach are based on site-specific guidelines derived from a Tier 2 process, in accordance with regulatory guidelines.

*4// Legacy Petroleum Ltd. 02/06-29-011-02W4/0 (\$342k)*

This former well site had predominantly salinity impacts related to produced water from the well. Site-specific remediation guidelines were developed for this site. In the previous year, the majority of impacted soils were excavated and stockpiled on-site and the excavation was partially backfilled. This year, the excavation was completed, 6,271 tonnes of material were hauled to a Class 2 landfill and the excavation was backfilled and contoured. Closure has now been achieved and, after settling, the site will be ready for surface reclamation.

*5// Acheson-East Oil & Gas Co. Ltd. FA/05-07-051-25W4/0 (\$301k)*

This facility site was selected as a priority because of its proximity to a water body and to residential acreages currently under development. Impacts were mainly salinity impacts from produced water and a flare pit, and there were some hydrocarbon and metal impacts as well. After consultation with the regulator, 3,942 tonnes of impacted material were hauled to a Class 2 landfill. Site-specific guidelines were developed for remediation of the impacted soils at this site. Further delineation drilling was done in the former flare pit area in preparation for next year's excavation. Included in this expenditure are costs for groundwater monitoring and sampling and updating the risk assessment model based on the new data collected.



**Legacy Petroleum Ltd. 00/16-35-011-02W4/0  
Stripping topsoil June 21, 2012**

Major Reclamation category

Major Reclamation category expenditures totaled \$860k on 17 sites (compared to \$1,049k on 28 sites in the prior year). Site expenditures in the Major Reclamation category this year ranged from \$10k to \$138k. The average expenditure for sites in the Major Reclamation category was \$50k (compared to \$37k in the prior year). Many sites counted in this category also had minor remediation work done or had expenditures for lagging reporting from the prior year, which resulted in an increased average cost per site.



Site expenditures on three very large reclamation projects ranged from \$110k to \$138k with an average cost of \$124k per site (double compared to an average cost of \$62k per site for very large reclamation projects in the prior year). Excluding these three large reclamation projects, the other 14 sites had expenditures ranging from \$10k to \$65k with an average expenditure of \$38k per site (compared to \$26k in the prior year, excluding the large projects).

Major reclamation activities included surface re-contouring, re-establishment of drainage, reclamation of access roads, topsoil purchase and/or replacement and seeding. Note that eight additional sites had major reclamation work conducted on them, but they are counted in the Remediation category because the expenditures on remediation activities were larger. Adding these sites gives a total of 25 sites that had major reclamation activities conducted on them (compared to a total of 32 sites in the prior year).

The following are highlights of Major Reclamation expenditures on the three largest projects. The projects are presented in order of decreasing magnitude of expenditure and list the defunct company, the location and the amount expended on each site.

*1// Big Valley Energy Corp FA/09-13-048-21W4/0 (\$138k)*

This orphan site is a facility site with a very large footprint that required extensive subsoil re-contouring to repair settling and restore proper drainage. Expenditures also included costs for purchasing and spreading 963 m<sup>3</sup> of topsoil and seeding. This site included remediation expenditures of \$47k for groundwater sampling, abandoning groundwater monitoring wells, and lagging reporting. Excluding the costs for remediation activities, the expenditure on reclamation was \$91k.

*2// Range Energy Inc. 00/04-30-098-02W6/0 (\$125k)*

This remote, forested site was constructed with a large cut and fill, requiring the movement of large quantities of mineral soil. A large amount of snow plowing for the winter access was required, as well as the construction and later removal of a temporary snow bridge in a small, permanent creek. A two-tier strip had been used to construct the site. However, windrows had been placed so close together that blending had occurred and separation required additional time. After topsoil replacement, the site was left to recover naturally but may be planted if recruitment is slow or not occurring.



*3// SynCo Exploration Inc. 02/03-30-097-19W5/0 (\$110k)*

Winter access to this remote, forested site required snow plowing of over five kilometers of access road covered in over one meter of snow, as well as the construction and later removal of a temporary snow bridge in two small, permanent creeks. The access road was frozen down with water to enable trucks and equipment to pass. The site was built with a large cut and fill, requiring the movement of large quantities of mineral soil to restore the original contour. The access road was similarly re-contoured. After application of the limited topsoil/duff material available, the site was left to recover naturally but may be planted if recruitment is slow or not occurring.

Minor Reclamation category

Minor Reclamation category expenditures totaled \$15k on three sites (compared to \$85k on 8 sites in the prior year). Expenditures ranged from \$3k to \$7k with an average expenditure of \$5k per site (compared to an average of \$11k the prior year and \$5k in 2010/11). Activities included repairing minor slumping, adding small amounts of topsoil, seeding and paratilling.

Monitoring category

Monitoring activities included vegetation monitoring, site inspections, weed control, and groundwater monitoring. Expenditures on some sites counted in this category also include small costs for lagging remediation reporting from the prior year. Monitoring category expenditures totaled \$204k on 143 sites (compared to \$273k on 147 sites in the prior year). The average cost per site in the Monitoring category was \$1k per site (compared to \$2k per site in the prior year).

Closure category

Closure activities included conducting soil, vegetation and landscape detailed site assessments, landowner consultation, preparing and submitting reclamation certificate applications, and dealing with inquiries from ESRD about applications. Closure category expenditures totaled \$363k on 78 sites with an average of \$5k per site (compared to \$256k on 82 sites with an average of \$3k per site in the prior year).

The average expenditure increased this year because a number of sites in the Closure category included expenditures for updating older Phase I ESAs to meet current ESRD requirements. Some sites also included minor expenditures for lagging Phase 2 ESA and remediation reporting from the prior year. Two of the 37 new orphan sites received during this fiscal year are counted in this category. One site met the ESRD standards for reclamation certificate application this year, and the other site was taken over by an operating company.



Sarg Oils Ltd A3/03-04-001-16W4/0  
Pump Jack February 17, 2013

## Well Abandonment

Well Abandonment expenditures in 2012/13 totaled \$1,728k (24% decrease compared to \$2,272k in the prior year). Even with this decrease, a significant amount of well abandonment work was accomplished.

### Well Abandonment Description

Well abandonment is the proper plugging down hole and the wellhead removal at the surface of a well as per ERCB Directive 020 Well Abandonment Guide. Typical steps in well abandonment are described as follows:

- o **Zonal abandonment** –The oil or gas that is produced from a well comes from a specific interval inside the well or down hole. Zonal abandonment is the plugging of this production interval down hole in the well. This can be done with a bridge (mechanical) plug in a cased well or with a cement plug in an open hole well (a well that is not cased). When a bridge plug is set, it must be pressure tested to 7 MPa for 10 minutes, and then covered with 8 vertical or lineal meters of Class G cement on top. The casing is then filled with a non-corrosive fluid or a non-saline water before surface abandonment.



CB Pak Inc 00/04-17-013-06W4/0  
Remedial repairs September 24, 2012

- **Remedial repairs** – If groundwater protection is required or if the well is leaking (typically gas), remedial repairs are required. Well leaks can be surface casing vent flows (normally gas leaking from the annular space between the production casing and the surface casing) or gas migration (normally gas leaking into the soil outside of the surface casing) from the rock formation below. A typical remedial repair, sometimes called an intervention, can involve perforating the casing and squeezing cement into the perforations. Note that in well abandonments remedial repairs refers to down hole operations and in site reclamation remedial work refers to dealing with contaminated soil.
  
- **Groundwater protection** – The well logs are reviewed, or the well is logged to identify and confirm that there is isolation outside the casing in the rock formation between the base of groundwater protection and the hydrocarbon formations below and between the base of groundwater protection and the protected intervals above. If required, a remedial repair will be conducted to provide adequate isolation.
  
- **Surface Abandonment** – The well head is removed and the casing stubs are lowered and cut off 1 m minimum below ground level and capped with a vented cap. For wells that are located within 15 km of urban development, the minimum casing stub cut off depth is 2 m.



### Orphan Well Inventory

This year there was a large increase in the number of new orphan wells to be abandoned. Most of the increase can be attributed to the process change that the ERCB implemented in July 2012 (see Page 2). In the fourth quarter, the OWA received an additional group of new orphans, 48 wells, 30 pipeline segments, and 3 licensed facilities which are licensed to 12 different companies. Some of the companies are defunct, i.e. struck on Alberta Corporate Registries, but most of them are still active on corporate registries. This increase was primarily due to an ERCB's policy change in 2012 which allows the accelerated turnover of wells by deeming companies as defaulting working interest participants that are either defunct or are considered insolvent yet still active on corporate registries. This change is anticipated to allow the ERCB to be more responsive in its enforcement actions and the ERCB has committed to conducting enforcement, if there is any evidence of solvency of these active companies.

#### Orphan Well Inventory

As of March 31, 2012	14 wells
New wells received in fiscal year	50 wells
Wells repaired and abandoned	- 14 wells
Long Term orphan wells*	24 wells
As of March 31, 2013	74 wells

#### \*Long Term orphan wells

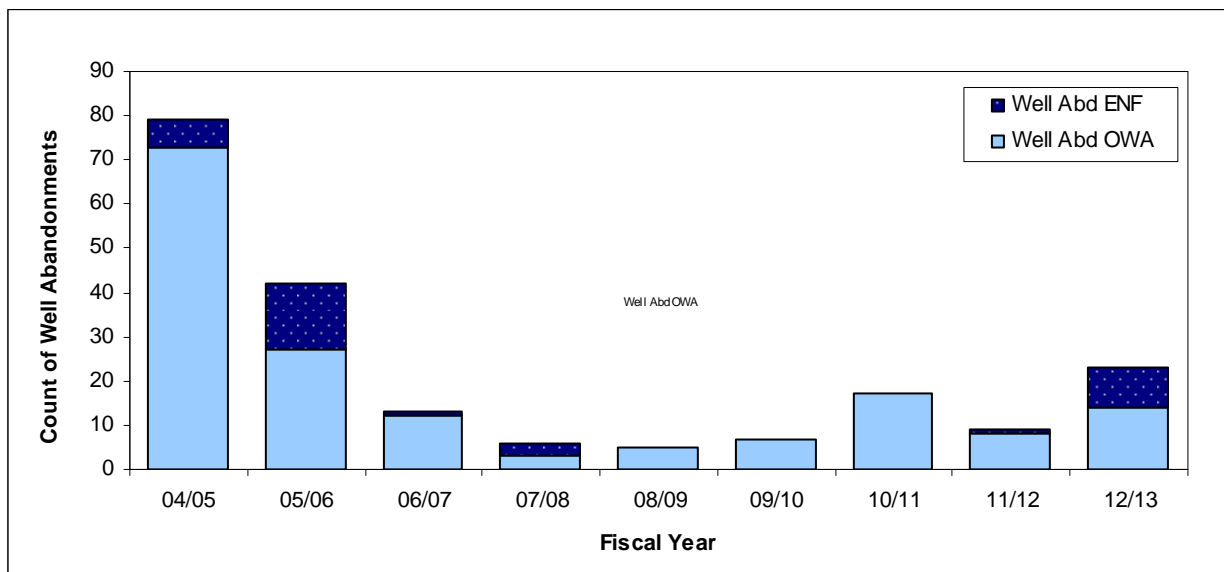
A new risk management tool used to review well abandonments and to set priorities was submitted to the ERCB and was implemented in 2012. This tool assesses the risk associated with each well according to four consequences: Health and Safety, Environmental, Regulatory Concerns and Stakeholder Concerns. These consequences are weighed against the technical difficulties associated with the remedial repair and abandonment of these wells. Using this tool, wells are either scheduled for abandonment, or scheduled for long term active monitoring or risk mitigation. The eight wells and sites which were reported under Care and Custody in prior annual reports are now included in the Long Term orphan well list.



**Well Abandonment Count**

The Well Abandonment Count of the number of orphan well abandonments counted to date is shown below in Figure 6 and Table 6. The well count is split into two types of counts; wells which are abandoned by the OWA (*Well Abd OWA*) and wells which are abandoned by the ERCB as Enforcement Action (*Well Abd ENF*) that subsequently are designated as orphans by the ERCB.

**Figure 6 – Well Abandonment Count**



**Table 6 – Well Abandonment Count**

Fiscal Year (Apr 1 to Mar 31)	Prior Years	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	Total
Well Abd OWA	291	73	27	12	3	5	7	17	8	14	457
Well Abd ENF	114	6	15	1	3	0	0	0	1	9	149
<b>Well Abd Count</b>	<b>405</b>	<b>79</b>	<b>42</b>	<b>13</b>	<b>6</b>	<b>5</b>	<b>7</b>	<b>17</b>	<b>9</b>	<b>23</b>	<b>606</b>



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The terms used in Figure 6 and Table 6 are described below.

Well Abd OWA

Wells in this category are turned over to the OWA by the ERCB through a memo that designates specific properties (wells, pipeline, facilities or sites) as orphan. When these designated wells are properly abandoned or handled so that no further action is required by the OWA, they are counted. For example, if a well was designated as orphan for remedial repairs and it was confirmed that the well was abandoned properly and was not leaking, the well would be counted as handled. If a well was designated as an orphan for abandonment and its well license was later transferred to an active company, it would be counted as handled.

Well Abd ENF

Wells in this category were abandoned by the ERCB, either as part of their enforcement activities on reluctant licensees or in prior years (before the 1990's) as historical orphans with ERCB involvement. As part of their enforcement activities, the ERCB issues Abandonment Orders to all liable parties (licensees and working interest partners for wells and facilities, and licensees for pipelines). When the ERCB is dealing with a reluctant liable party, it can conduct the abandonment and attempt to recover the monies. See Well Abandonment Highlights for further details.

If the ERCB subsequently determines that the reluctant liable party is a defaulting working interest participant, the ERCB can then designate the specific properties as orphan for the purpose of reimbursement of any third party abandonment costs to the ERCB. The OWA then can reimburse the ERCB and take the well abandonment count in this category. This year, the Well Abd ENF count was for reimbursement to the ERCB for nine wells. See Financial Highlights, Expenditure Section Table 8 for further details on these reimbursements.



**CB Pak Inc 00/04-17-013-06W4/0  
Service rig in Town of Redcliff September 25, 2012**

### **Well Abandonment Highlights**

A variety of well operations for remedial repairs were conducted on fourteen orphan wells this year. A brief summary of the well operations on each well is given below.

#### *CB Pak Inc. 00/04-17-013-06W4/0 (\$264k)*

This historical orphan well was drilled in 1927 in what is now the town of Redcliff. This well was turned over to the OWA last year after a landowner struck the casing stub when excavating the basement for a house. See 2011/12 Annual Report for a description of the operations conducted last year on this well.

After extensive testing, the well was confirmed to still require remedial repairs. Since 2011, the landowner had built a new house on the adjacent lot 11.6 m from well centre which restricted access for the service rig. A service rig was moved on and in 8 rig days, the cement retainer and cement were drilled out with some difficulty, logs were run, the well was perforated and cement squeezed twice. After confirmation that the repair was successful, the well was surface abandoned to meet the City of Medicine Hat standards (concrete culverts filled with washed gravel and capped with a metal inspection cover) to facilitate regular gas migration testing of abandoned wells.

#### *First West Petroleum Inc. 00/04-31-066-23W4/0 (\$87k)*

This well was drilled in 1997 with 114.3 mm production casing landed at 659.5 mKB. In the prior year



the zonal abandonment was completed and one remedial repair attempt was made on the surface casing vent flow and the well was logged again. See 2011/12 Annual Report. This year, another remedial repair was conducted and when it was confirmed to be successful, the well was then surface abandoned.

The wells licensed to Slate Energy Inc. were more difficult than average to abandon. All four wells were in sour oil service and the rods were very difficult to pull out of the hole, and the tubing hangars and packers were found difficult to unseat. Casing leaks were found in all the wells which complicated operations.

*Slate Energy Inc. D0/03-34-055-24W4/0 (\$202k)*

This sour oil well was drilled in 1988 with 139.7 mm production casing landed at 1,189.3 mKB. A service rig was moved on and operations took 8 rig days. One entire day was required to unseat the tubing hangar and packer and pull the tubing out of hole. A power swivel with a casing scraper and bit was run in to drill out obstructions encountered. The scraper and bit got stuck in the hole and after several attempts to retrieve them, the 73 mm tubing was cut to leave the tools downhole. Approval was given to set a bridge plug above the fish with 2 lineal meters of Hydromite set above. A second bridge plug was set with 8 lineal meters of cement. The well was confirmed to have no vent flow and was surface abandoned.

*Slate Energy Inc. D0//04-34-055-24W4/0 (\$110k)*

This sour oil well was drilled in 1988 with 139.5 mm production casing landed at 1,191 mKB. The rods were very difficult to pull and the tubing anchor took another day to unseat. A bridge plug was set to zonal abandon the well and a shallow casing leak was identified at 37.25 - 44.25 mKB and dealt with. Five days of rig time was required to zonal abandon this well. The well was confirmed to have no vent flow and was surface abandoned.

*Slate Energy Inc. 02/06-34-055-24W4/0 (\$147k)*

This sour oil well was drilled in 1986 with 114.3 mm production casing landed at 1,140.9 mKB. During prior well operations in 2003, a casing leak was identified and repaired. A service rig was moved on and removed the rods and unseated the tubing hangar with some difficulty. The well was zonal abandoned with a bridge plug and logged to confirm groundwater protection. The casing was perforated twice and a balanced cement plug was set and then a bridge plug was set with 8 lineal meters of cement above it. Six days of rig time were required. The well was confirmed to have no vent flow and was surface abandoned.



*Slate Energy Inc. 00/11-34-34-055-24W4/0 (\$123k)*

This sour well was drilled in 1999 with 139.7 mm production casing landed at 1,154 mKB. The well was observed to have a surface casing vent flow and prior workover reports indicated H<sub>2</sub>S content exceeding 2,000 ppm. The rods were difficult to pull and the tubing hanger difficult to unseat. A bridge plug with 8 lineal meters of cement was set to zonal abandon the perforations. Service rig rigged off after 5 days of rig time to zonal abandon this well. The well was then logged with wireline and the surface casing vent flow was confirmed. This well will require further remedial repairs next year.

*Padriv Development Ltd. 00/07-18-033-16W4/0 (\$184k)*

This well was drilled in 2000 with 114.3 mm production casing landed at 1072 mKB. The well was observed to have a surface casing vent flow. When a service rig moved on, tubing was pulled and it was found that a slick line had been dropped into the well and a casing leak was found at 523 - 525 mKB which became the suspected source of the vent flow. During extensive fishing operations for the slickline, a rope spear was stuck at 860 m. Eventually, approval was obtained to run cement around the fish to zonal abandon the production perforations. The casing leak was cement squeezed which repaired the apparent vent flow. A total of 12 rig days were required to fish, zonal abandon and repair the casing leak. After confirmation that there was no longer a surface casing vent flow, the well was surface abandoned.

*Padriv Development Ltd. 00/08-14-045-01W4/0 (\$111k)*

This well was drilled in 2006 with 114.3 mm production casing landed at 350 m. The well was open hole completed from 350 to 422 mKB. The well had a surface casing vent flow which was identified to have the production zone as the source. When a service rig moved on, the well was difficult to kill and there were problems associated with tubing plugging with formation material from the open hole.

The open hole section was eventually cleaned out to 394.6 mKB and two cement plugs were set to abandon the open hole section. A bridge plug was set above the cement plugs at 341 mKB with 8 lineal meters of cement. Four days of rig time were required. After confirmation that the vent flow was repaired, the well was surface abandoned.

*Padriv Development Ltd. 00/07-28-034-17W4/0 (\$74k)*

This well was drilled in 2002 with 114.3 mm production casing landed at 593.5 mKB. A casing leak caused difficulties with the well operations. The production perforations were abandoned with 2 bridge plugs and the casing leak was identified at 373 to 375 mKB. Cement was squeezed at the casing leak and after confirmation that the vent flow was repaired, the well was surface abandoned.



*Beau Energy Inc. 02/10-21-030-06W4/0 (\$46k)*

This well was drilled in 2010 to a depth of 939 mKB and did not produce. There were no leaks observed with this well. A service rig was used to pull the 73 mm tubing from the 139.7 mm production casing. The perforations were zonal abandoned, groundwater protection was confirmed and the well was surface abandoned.

*Peace West Energy Corporation 00/07-24-073-10W5/00 (\$39k)*

*Peace West Energy Corporation 00/05-26-073-10W5/0 (\$22k)*

Both of these wells were drilled in 2008 but were never perforated and produced. There were no leaks observed with these wells. Part of the abandonment expenditures was to freeze in access to these locations in the winter. The wells were logged to confirm groundwater protection and then abandoned according to ERCB Directive 020.

*Advance Oil Company Limited 00/16-19-019-02W5/0 (\$20k)*

This historic well in the Turner Valley area was drilled in 1928 and was turned over to the OWA after a complaint from a sour gas plant operator about a sink hole which formed on the plant site when the wood timbers covering the well started to collapse. A conductor barrel was initially set over the slumped area and covered for safety at surface. When excavated, a 393.7 mm casing stub was found with the top 1.5m below ground level. After confirmation that there was no gas migration, a 2 lineal meter bentonite plug was placed in the casing and a cap was set on top. The excavation was backfilled and the area leveled.

### **Other Well Activities**

Oxville Oil Gas & Development Co Limited 00/14-10-046-02W4/0 (\$9k) was turned over because the casing stub was at ground level and impeded the agriculture operations of the landowner. No gas migration was observed and to minimize ground disturbance, the casing was cut 2 meters below ground level using a high pressure water jetting system, capped with a steel plate, and backfilled.

This year, all the Long Term orphan wells were inspected and a number of them had extensive monitoring conducted on their surface casing vent flows or gas migration. Because of this extensive monitoring, the average expenditure on Long Term orphan wells was \$4.4k.

Out of the 48 new wells received in the fourth quarter, 35 initial inspections were completed. The other 13 wells were not inspected because either they were on hold due to potential Board Directed Transfer requests or they were not scheduled due to their location. The average inspection cost was \$1.7k.



Closure was obtained on one orphan well without any abandonment operations. Inter-City Gas Corporation 00/06-11-026-12W4/0 was formally turned over as an orphan based on an inquiry received at an ERCB field office. After the OWA opened the file and started research, the ERCB subsequently confirmed that the well location was in error and that no work was required. As a result, the OWA closed this file and added this well to the count.

### **ERCB Directive 079 Urban Well Locating and Testing**

In September 2012, the ERCB released *Directive 079: Surface Development in Proximity to Abandoned Wells* which established new requirements for licensees to locate and test abandoned wells near existing and proposed developments. In consultation with Alberta Energy, the ERCB and industry, it was recognized that for public assurance it was important to locate and test abandoned wells licensed to defunct companies which are not yet designated as orphans. The ERCB gave direction to the OWA to do Directive 079 well locating and testing on existing abandoned wells licensed to defunct companies in municipalities and assigned 103 wells for the OWA to locate and test before July 31, 2013.

Alberta Energy contributed to the OWA efforts by providing support for communications with property owners and made an additional contribution towards funding this non-orphan work in the following year of \$50,000 in grant funding. Well file reviews were conducted and air photo data were reviewed to prepare for the well locating and testing. A significant effort was also put into developing a communication plan to notify and meet with property owners. In the fall of 2012, eight wells were located and tested in the municipalities of Edmonton, Calmar and Devon. The well locations included a playground, a school yard and underneath a residence. No indications of methane anomalies were observed. Total expenditures on the Directive 079 work including well review, preparation, and testing was \$48k.

### **Pipeline Abandonment (\$194k)**

In 2012/13, pipeline abandonment expenditures were \$194k on nine pipeline segments (128% increase compared to \$85k on nine pipeline segments in the prior year). The pipeline abandonment average costs were significantly higher than last year because of the difficulty of the pipeline abandonments on seven of the lines. Three pipelines associated with a facility licensed to Bridges Energy Inc. were identified to be partially exposed and possibly corroding where they crossed the Edson River. A decision was made to remove all the Bridges Energy Inc. lines from the river crossing because of potential environmental impacts. With involvement from the regulators, care and attention was taken to minimize any possible environmental impacts to the waterway from the operations. The three lines were properly abandoned along their length and removed at the river crossing for just under \$100k or \$33k each.



Three lines licensed to Padriv Development Ltd. and one line associated with Trekelano Resources Ltd. were particularly challenging because of tie-in points to pipeline segments operated by other companies and because of their proximity to other lines. These four pipeline segments took \$85k to abandon for an average of \$21k each. Two pipeline abandonments this year were less expensive than normal. The already abandoned pipelines were removed to lease boundaries to facilitate site reclamation work on a site licensed to Legacy Petroleum Ltd. for a cost of \$6k or \$3k each. In the prior year, the average pipeline abandonment was \$5k per pipeline segment.



Sarg Oils Ltd 00/12-09-001-17W4/0 well site  
Storage tanks February 14, 2013

### **Facility Decommissioning (\$28k)**

In 2012/13, facility decommissioning expenditures were \$28k (compared to \$1k in prior year). A total of \$26k was spent on the decommissioning of three single well facilities licensed to Padriv Development Ltd which were abandoned this year. Decommissioning work included removal and disposal of fluids in tanks and equipment, as well as cleaning and hauling the equipment for disposal. None of the equipment was in salvageable condition. The remaining debris was disposed of at a local landfill. The remaining expenditures were on planning facility work in the upcoming year.



## ***FINANCIAL HIGHLIGHTS***

This section highlights additional information on the Financial Statements, Statement of Operations.

### **Revenues (\$13,419k)**

#### **Orphan Fund Levy (\$12,151k)**

The ERCB collects the Orphan Fund levy from the upstream oil and gas industry on an annual basis. In 2012/13, the OWA received \$12,151k from the ERCB for the Orphan Fund levy (1.3% increase compared to \$12,076k in prior year). Each fall, the OWA prepares a budget for the next fiscal year and the industry members (CAPP and EPAC) approve the OWA budget and the amount of the Orphan Fund levy. The OWA then requests the ERCB to levy industry to fund its operations for the upcoming fiscal year. In February 2012, the ERCB invoiced industry \$12,000k for the Orphan Fund levy. The OWA receives more monies than the levy amount invoiced by the ERCB because the ERCB invoices a 20% penalty to companies for late payments. All levy monies collected by the ERCB including any penalties are then remitted to the OWA.

#### **First Time Licensee Fees and Board Directed Transfer Fees (\$850k)**

*First Time Licensee Fee* is a \$10,000 fee which is required by the ERCB as part of the approval process of applications from new Licensees which are companies that apply to the ERCB for their first time approval to hold well, facility and pipeline licenses. The ERCB receives the funds and then remits them to the OWA. A total of \$770k was received through the ERCB in First Time Licensee Fees this year i.e. the ERCB granted the approval of 77 applications for First Time Licensees (22% decrease compared to \$990k prior year).

*Board Directed Transfer Fee* is a \$10,000 fee required by the ERCB for non-routine transfers of licenses. These fees are for the transfers of well and facility licenses with breached Abandonment Orders from a defunct company to a viable company. The ERCB receives the funds and then remits them to the OWA. A total of \$80k was received through the ERCB in Board Directed Transfer Fees or BDT Fees this year (60% increase compared to \$50k prior year). Note that none of the BDT Fees received in this year were for wells or facilities which were already designated as orphans, so there is no count taken for closure for any wells that were BDT transferred in Table 6 Well Abandonment Count.



**Investment (\$164k)**

A total of \$164k was received in bank account interest and investment income from short-term investments (3.2% increase compared to \$159k in prior year). The funds held by the OWA for its operating budget are invested at the best available rates in either high interest savings accounts, highly rated banker acceptances, money market instruments or short-term variable rate guaranteed investment certificates. Investment earnings remained steady compared to the prior year as the total funds held this year were similar to those held in the prior year.

**Enforcement Recoveries and Licensee Liability Rating Recoveries (\$201k)**

This year, \$201k was received from the ERCB (521% increase compared to \$32 in prior year). All of the funds received were recoveries from Licensee Liability Rating security deposits (\$201k) and none were recoveries from successful enforcement action by the ERCB (\$0k).

*Licensee Liability Rating (LLR) Recoveries* are received when the ERCB collects and holds a deposit from a licensee as required by their LLR program. If the licensee subsequently has properties, that is wells, pipelines, facilities, or associated sites which are deemed orphan, the ERCB turns the LLR deposit over to the OWA. The OWA is required to spend the amount held on deposit by the ERCB on behalf of the defunct company for abandonment and/or reclamation before receiving the LLR deposit. See Table 7 - Licensee Liability Rating Recoveries for the amounts of security deposits which were recovered.

**Table 7 – Licensee Liability Rating Recoveries**

<b>Defunct Licensee</b>	<b>Amount of Recovery</b>
Shenandoah Resources Ltd	\$ 24,281.80
Calco Resources	\$ 16,748.73
Cadex Energy Corporation	\$ 15,144.47
Hazelwood Resources Ltd	\$ 88,538.16
Legacy Petroleum Ltd	\$ 56,129.73
<b>Total</b>	<b>\$ 200,842.89</b>

*Enforcement Recoveries* are received when the ERCB successfully recovers monies from a responsible party for enforcement activity conducted on deemed orphan wells, pipelines or facilities. The OWA has the ability to request security deposits held by the ERCB for the defunct company after it demonstrates to the ERCB that it has orphan expenditures on abandonment or reclamation that meet or exceed the amount of the security deposit.



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### **Salvage Sales (\$2k)**

Salvage sales of \$2k were received this year (78% decrease compared to \$11k in prior year). The monies were received for the salvage of miscellaneous equipment, mostly wellheads, left on six different orphan well sites.

### **Expenditures (\$12,791k)**

Expenditures are comprised of Operating Expenditures and Other Expenditures. Total Expenditures in 2012/13 were \$12,791k (4% decrease compared to \$13,355 in prior year).

### **OPERATING EXPENDITURES (\$10,683k)**

The Operating Expenditures were lower (14% decrease compared to \$12,464k in prior year) as part of this fiscal year's plan to rebuild the net assets back up to \$17,000k (\$5,000 surplus plus \$12,000k unrestricted assets internally set aside for following year's operations).

See previous Operating Highlights section for information on Site Reclamation, Well Abandonment, Pipeline Abandonment, and Facility Decommissioning Expenditures.

### **OTHER EXPENDITURES (\$2,108k)**

Other Expenditures are comprised of reimbursements to the ERCB for Enforcement Activities, Fund Administration, and reimbursements to industry for Working Interest Claims. These expenditures are higher this year (142% increase compared to \$871k in prior year) due to a sharp increase in reimbursements to the ERCB for enforcement activities.

### **ERCB Enforcement Activities (\$1,222k)**

This year, the OWA reimbursed the ERCB \$1,222k for Enforcement Activities (80 times or 8000% increase compared to \$15k in prior year). This reflects changes in ERCB processes this year which resulted in the turning over of enforcement files more quickly to the OWA. See Table 8 - ERCB Enforcement Activities Reimbursements below for reimbursement details.

ERCB Enforcement Activities are amounts reimbursed to the ERCB for third party abandonment expenditures on properties (wells, pipelines and facilities) incurred by the ERCB during their enforcement actions. Reasonable attempts are made by the ERCB to have responsible parties abandon their oil and gas properties. Once it is determined that no responsible parties exist, cannot be located, or do not have the financial means to contribute to those costs as per s.70(2)(b)(iii) of the *Oil and Gas Conservation Act*,



the ERCB can deem the licensee as a defaulting working interest participant (WIP) and designate the specific property as an orphan. If a property is designated an orphan prior to its abandonment, the OWA conducts the abandonment and reclamation. If a property is designated an orphan after the abandonment work is conducted by the ERCB as part of its enforcement activities, the OWA will reimburse the ERCB for monies spent on the abandonment work, partial or complete, when the defunct licensee has been deemed a defaulting WIP and the property designated as an orphan.

**Table 8 - ERCB Enforcement Activities Reimbursements**

Defunct Licensee	Location Description*	% WIP	Amount of Reimbursement
Bearcat Explorations Ltd	00/08-20-026-12W4 Surface Abandonment	23.850%	\$ 88,637.72
Forseven Ltd	00/08-20-026-12W4 Surface Abandonment	6.375%	36,350.48
Forseven Inc	00/08-20-026-12W4 Surface Abandonment	5.400%	30,790.99
Peace West Energy Corp	00/07-24-073-10W5 Cost Recovery	100.000%	1,435.70
Peace West Energy Corp	00/05-26-073-10W5 Cost Recovery	100.000%	1,435.70
Peace West Energy Corp	00/01-13-108-19W5 Surface Abandonment	100.000%	181,866.02
Peace West Energy Corp	00/08-24-108-19W5 Surface Abandonment	100.000%	176,347.21
Peace West Energy Corp	00/01-25-108-19W5 Surface Abandonment	100.000%	25,616.33
Peace West Energy Corp	00/15-31-108-19W5 Surface Abandonment	100.000%	53,578.89
Peace West Energy Corp	00/15-33-108-19W5 Surface Abandonment	100.000%	23,313.72
Peace West Energy Corp	00/02-06-109-19W5 Surface Abandonment	100.000%	198,648.16
Peace West Energy Corp	00/01-18-109-19W5 Surface Abandonment	100.000%	40,967.53
Peace West Energy Corp	00/13-21-109-19W5 Surface Abandonment	100.000%	41,764.43
Saguaro Energy Corp	03/07-04-001-11W4 Surface Abandonment	100.000%	320,952.64
<b>Total</b>			<b>\$ 1,221,705.52</b>

\* Description

- Surface Abandonment = reimbursement for a well abandonment completed with surface abandonment
- Cost Recovery = reimbursement for expenditures towards a partial abandonment

This year, the OWA reimbursed the ERCB for the completed well abandonments of nine wells (eight licensed to Peace West Energy Corp and one licensed to Saguaro Energy Corp which were identified as



100% WIP or 100% Working Interest Participant in the wells). The well abandonments are counted in Table 6 – Well Abandonment Count under *Well Abd ENF* in the year the reimbursement was paid to the ERCB, not in the actual year of surface abandonment. The remaining payments are reimbursements for partial WIPs for Bearcat Explorations Ltd, Forseven Ltd and Forseven Inc and for expenditures to inspect two other 100% WIP wells licensed to Peace West Energy Corp.

### **Fund Administration (\$516k)**

Fund Administration expenditures of \$516k are similar to the prior year (1% decrease compared to \$521k in prior year). This includes fees for management, insurance, legal, accounting, and clerical services. Note that the OWA Directors do not receive any remuneration for their voluntary service on the OWA Board of Directors.

### **Working Interest Claims (\$370k)**

This year, the ERCB approved and then the OWA reviewed and reimbursed working interest claims from industry of \$370k (14% increase compared to \$325k in prior year). See Table 9 - 2012/13 Working Interest Claims below for details.

A *Working Interest Claim (WIC)* is a claim submitted by industry to the ERCB for the proportionate share of abandonment and/or reclamation costs incurred on behalf of a defaulting working interest participant (WIP) when the abandonment and/or reclamation is complete. A WIP is any party to a joint operating or other agreement under which the party is entitled to a proportionate share of cash flows as well as the responsibility for the same proportionate share of costs.

Working Interest Claims can be submitted to the ERCB formally by letter in accordance with section 16.541 of the *Oil and Gas Conservation Act*. This supersedes the former process used in ERCB Informational Letter IL 95-03. Abandonment is considered completed when the well abandonment is completed as per ERCB Directive 020 and the ERCB Digital Data Submission (DDS) system is updated to indicate both zonal and surface abandonments. Reclamation is considered completed when a reclamation certificate has been issued by ESRD on the site.

The ERCB reviews Working Interest Claims and determines that the claims are for a defunct company that has been deemed a defaulting working interest participant in accordance with section 70 (2)(iii)(b)(iii) of the *Oil and Gas Conservation Act*. The ERCB can then designate a particular property, (i.e. a well, pipeline, facility or associated site) as an orphan for the purpose of reimbursement of a Working Interest Claim.



The ERCB then gives the Working Interest Claim to the OWA to review for appropriate backup and to provide comment. The OWA requires backup documentation for all expenditures and salvage credits before claims are reimbursed. GST is reimbursed and administration and overhead expenses and legal expenses are not reimbursed. Note that incomplete claims and claims with insufficient documentation can be rejected at this stage.

When the OWA has completed its review and confirmed that all relevant supporting documentation in the claim has been provided, the OWA can proceed with payment directly to the company who made the Working Interest Claim and then notify the ERCB of payment.

**Table 9 - 2012/13 Working Interest Claims**

<b>Defunct Licensee</b>	<b>Working Interest Partner</b>	<b>Location Description</b>	<b>% WIP</b>	<b>Working Interest Claim Amount</b>
Condor Resources Inc.	Penn West Petroleum Ltd	00/06-23-048-08W5 Reclamation	33.3334%	\$ 46,135.63
Brunyan Resources Ltd.	Penn West Petroleum Ltd	00/06-23-048-08W5 Reclamation	33.3333%	46,135.63
Condor Resources Inc.	Penn West Petroleum Ltd	FA/07-23-048-08W5 Reclamation	33.3334%	95,149.72
Brunyan Resources Ltd.	Penn West Petroleum Ltd	FA/07-23-048-08W5 Reclamation	33.3333%	95,149.72
Joffre Oil Ltd	ConocoPhillips Canada Resources Corp.	00/07-10-019-03W5 Reclamation	61.5000%	87,482.99
<b>Total</b>				<b>\$ 370,053.69</b>

**ALBERTA OIL AND GAS ORPHAN ABANDONMENT  
AND RECLAMATION ASSOCIATION**

Financial Statements

March 31, 2013

# Independent Auditor's Report

Grant Thornton LLP  
Suite 900  
833 - 4th Avenue SW  
Calgary, AB  
T2P 3T5  
T +1 403 260 2500  
F +1 403 260 2571  
[www.GrantThornton.ca](http://www.GrantThornton.ca)

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, 2013, March 31, 2012 and April 1, 2011 the statements of operations, changes in net assets and cash flows for the years ended March 31, 2013 and March 31, 2012, 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 company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company'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.

**Opinion**

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Association as at March 31, 2013, March 31, 2012 and April 1, 2011 and the results of its operations and its cash flows for the years ended March 31, 2013 and March 31, 2012 in accordance with Canadian generally accepted accounting principles.

Calgary, Canada

June 20, 2013

*Grant Thornton LLP*  
Chartered Accountants

# ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION

## Statement of Financial Position

As at March 31, 2013

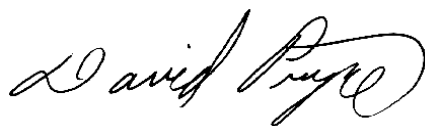
(thousands of dollars)

	2013	2012	2011
<b>Assets</b>			
<b>Current assets</b>			
Cash	\$ 9,031	\$ 7,510	\$ 4,833
Short-term investments	-	-	2,020
Accounts receivable from the ERCB	9,022	9,259	10,818
GST receivable	211	153	429
Prepaid expense and other receivables	126	37	69
	\$ 18,390	\$ 16,959	\$ 18,169
<b>Liabilities and net assets</b>			
<b>Current liabilities</b>			
Accounts payable and accrued liabilities	\$ 1,413	\$ 609	\$ 1,802
<b>Net assets</b>	<b>16,977</b>	<b>16,350</b>	<b>16,367</b>
	\$ 18,390	\$ 16,959	\$ 18,169

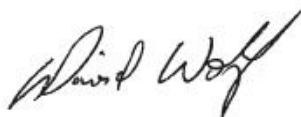
Commitment (Note 9)

See accompanying notes to financial statements.

Approved by the Board:



Director



Director

**ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION****Statement of Operations**

Year ended March 31, 2013

(thousands of dollars)

	2013	2012
<b>Revenues</b>		
Orphan fund levy through the ERCB	\$ 12,151	\$ 12,076
First time licensee fees and board directed transfer fees through the ERCB	850	1,040
Enforcement recoveries and licensee liability rating recoveries through the ERCB	201	32
Interest income	164	159
Alberta Energy government grant	50	-
Salvage sales	2	11
	<b>13,418</b>	<b>13,318</b>
<b>Expenditures</b>		
Operating		
Site reclamation	8,733	10,106
Well abandonment	1,728	2,272
Pipeline abandonment	194	85
Facility decommissioning	28	1
	<b>10,683</b>	<b>12,464</b>
Other		
ERCB enforcement activities (Note 5)	1,222	15
Fund administration (Note 6)	516	521
Working interest claims (Note 7)	370	335
	<b>2,108</b>	<b>871</b>
	<b>12,791</b>	<b>13,335</b>
Excess (deficiency) of revenues over expenditures	\$ 627	\$ (17)

See accompanying notes to financial statements.

**ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION****Statement of Cash Flows**

Year ended March 31, 2013

(thousands of dollars)

	<b>2013</b>	<b>2012</b>
Cash provided by (used in)		
Operations		
Excess (deficiency) of revenues over expenditures	\$ 627	\$ (17)
Changes in operating non-cash working capital		
Decrease in accounts receivable from the ERCB	237	1,559
(Increase) decrease in GST receivable	(58)	276
(Increase) decrease in prepaid expense and other receivables	(89)	32
Increase (decrease) in accounts payable and accrued liabilities	804	(1,193)
	<b>1,521</b>	<b>657</b>
Investing		
Decrease in short-term investments	-	2,020
Net increase in cash	<b>1,521</b>	<b>2,677</b>
Cash, beginning of year	<b>7,510</b>	<b>4,833</b>
Cash, end of year	<b>\$ 9,031</b>	<b>\$ 7,510</b>

During the year, the Association received interest of \$161 (2012 - \$168).

See accompanying notes to financial statements.

**ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION****Statement of Changes in Net Assets**

March 31, 2013

(thousands of dollars)

	<b>2013</b>	2012
Balance, beginning of year	<b>\$ 16,350</b>	\$ 16,367
Excess (deficiency) of revenues over expenditures	<b>627</b>	(17)
Balance of unrestricted net assets, end of year	<b>\$ 16,977</b>	\$ 16,350

See accompanying notes to financial statements.

# ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION

## Notes to the Financial Statements

March 31, 2013

(thousands of dollars)

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### 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 Resources Conservation Board (ERCB) (formerly known as the Alberta Energy and Utilities Board) 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 ERCB and Alberta Environment and Sustainable Resource Development (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) 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).

With respect to financial assets measured at amortized cost, the Association assesses whether there are any indications of impairment. When there is an indication of impairment, and if the Association determines that during the year there was a significant adverse change in the expected timing or amount of future cash flows from the financial asset, it will then recognize a reduction as an impairment

## ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION

### Notes to the Financial Statements

March 31, 2013

(thousands of dollars)

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loss in operations. The reversal of a previously recognized impairment loss on a financial asset measured at amortized cost is recognized in operations in the year the reversal occurs.

d) 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.

e) 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 First-time adoption of Canadian accounting standards for not-for-profit organizations

These financial statements are the Association's first financial statements prepared using new Canadian accounting standards for not-for-profit organizations (hereafter the "new accounting standards"). The date of transition to the new accounting standards is April 1, 2011.

The accounting policies presented in Note 2 and resulting from the application of the new accounting standards were used to prepare the financial statements for the year ended March 31, 2013, the comparative information and the opening statement of financial position as at the date of transition.

*Exemptions relating to first-time adoption*

Section 1501, First-time Adoption by Not-for-profit Organizations, contains exemptions to full retrospective application which the Association may use upon transition. The Association did not apply any optional exemptions.

*Impact of transition on net assets as at April 1, 2011*

The impact of the transition to the new accounting standards on the Association's net assets at the date of transition, that is April 1, 2011, is not significant.

*Reconciliation of excess (deficiency) of revenues over expenses as at March 31, 2012*

The excess (deficiency) of revenues over expenses as at March 31, 2012 determined using the new accounting standards is approximately equivalent to that determined using the previous accounting standards (pre-changeover accounting standards).

*Statement of cash flows*

Accounting standards regarding cash flows included in the new accounting standards are similar to those included in the previous accounting standards. The Association has not made any major adjustment to the statement of cash flows.

## **ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION**

### **Notes to the Financial Statements**

March 31, 2013

(thousands of dollars)

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#### Note 4 Economic dependence and contributions

The OWA receives substantially all of its revenue through the ERCB. The ERCB collects the Orphan fund levy, First time licensee fees, Board 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 ERCB. The OWA also received a one time grant from Alberta Energy of \$50 in 2013 to locate and test abandoned oil and gas wells in urban areas licensed to defunct licensees. This grant is to be used for the purpose of completing the work by October 31, 2013 or the grant not expended is to be returned to Alberta Energy.

#### Note 5 ERCB enforcement activities

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

#### Note 6 Fund administration

Fund administration includes contract payments to management of \$230 (2012 - \$232). No remuneration and benefit payments were made to Board members for 2013 and 2012.

#### Note 7 Working interest claims

The OWA accepts claims from the ERCB 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 ERCB, 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.

#### Note 8 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 ERCB and are subject to normal credit terms. The maximum credit risk exposure associated with the Association's financial assets is the carrying amount.

# ALBERTA OIL AND GAS ORPHAN ABANDONMENT AND RECLAMATION ASSOCIATION

## Notes to the Financial Statements

March 31, 2013

(thousands of dollars)

(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, 2013 are as follows:

	Total	2013	2014	2015	2016	Thereafter
Accounts payable and accrued liabilities	\$ 1,413	\$ 1,413	\$ -	\$ -	\$ -	\$ -

Note 9 Commitment

The ERCB provides administrative services to the OWA, including office space, facilities and equipment, building services, and computer support services. Contracted payments are as follows:

	Total	2014	2015	2016	2017	2018-2030
Contracted payments	\$ 1,122	\$ 50	\$ 55	\$ 57	\$ 62	\$ 898