



**Forest  
Practices  
Board**

## **Audit of Oil and Gas Activities for Wildfire Act Compliance**

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*Venturion Oil Limited  
ARC Resources Ltd.  
Tervita*

**FPB/ARC/183**

January 2016

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# Audit Results

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## Introduction

The Forest Practices Board is the public's watchdog for sound forest and range practices in British Columbia. One of the Board's roles is to audit the practices of industry to ensure compliance with the *Wildfire Act*.

As part of the Forest Practices Board's 2015 compliance audit program, the Board randomly selected the Peace Natural Resource District as the location for a limited scope compliance audit. The Board decided to examine oil and gas industrial activities for compliance with the *Wildfire Act*. These activities include land clearing, mechanical brushing and clearing, and maintaining rights of way.

The Peace District is 7.6 million hectares in size, so to narrow the audit to a manageable size, the Board selected the Lower Beatton Landscape Unit within the district to evaluate. Within this landscape unit, the Board identified three oil and gas operations with industrial activities during the audit period—Venturion Oil Limited, ARC Resources Ltd. and Tervita.

This report explains what the Board audited and the results. Detailed information about the Board's compliance audit process is provided in Appendix 1.



Operating oil pump in the Beatton Landscape Unit. The area was cleared and all woody debris was ground, mixed with the topsoil and stored just outside the berm surrounding the clearing.

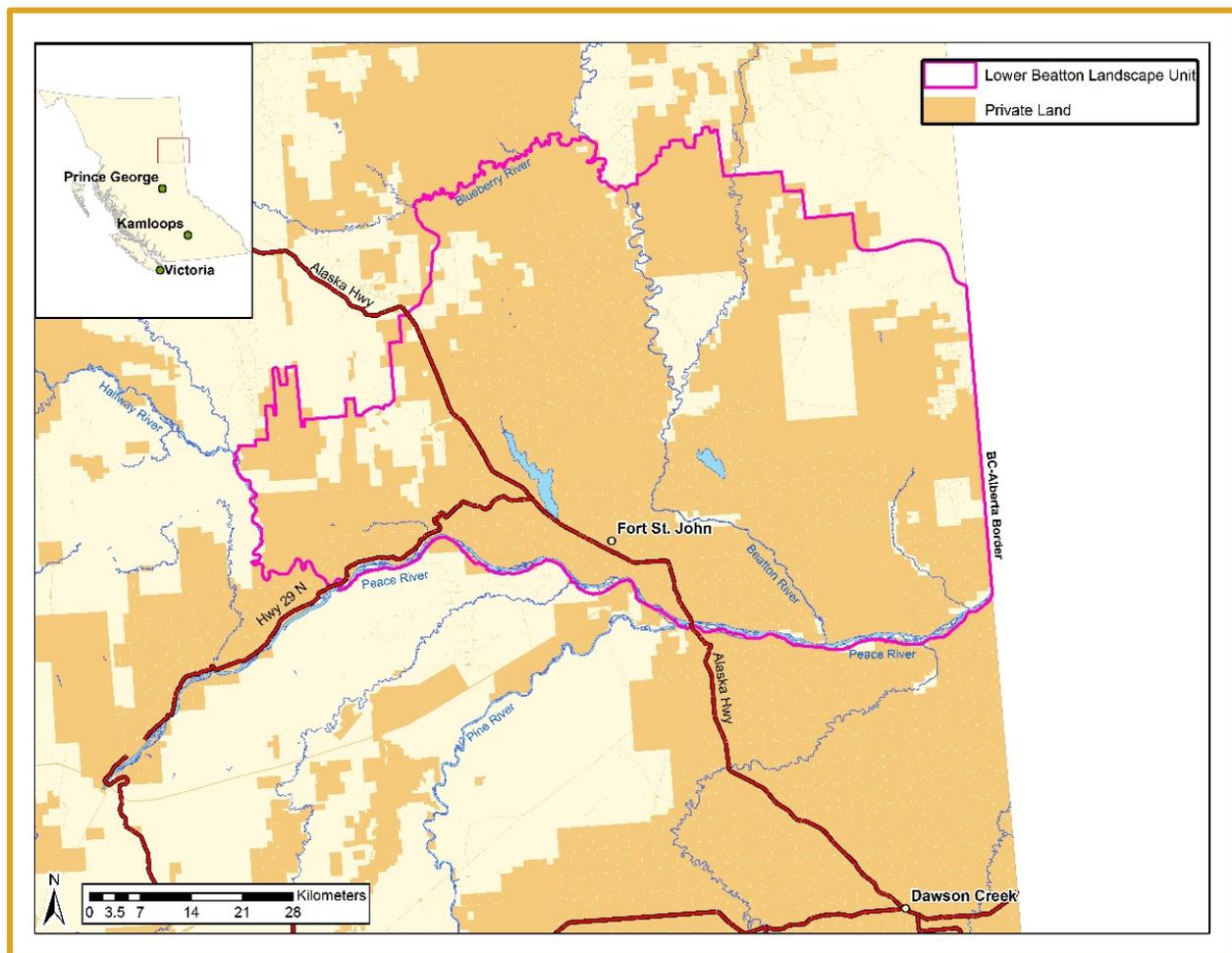
## Background

The Lower Beatton Landscape Unit covers 500 000 hectares around the city of Fort St. John. The area is bounded by the Halfway River to the west, the Blueberry River to the north, the Peace River to the south and the Alberta border to the east. About 326 000 hectares of the landscape is private land.

There are many industrial and recreational activities in the area including: forestry, oil and gas, ranching, hiking, camping, fishing, hunting, and motorized summer and winter sports. There are no community watersheds in the landscape unit but there are over 100 domestic water licences and several small provincial parks.

Venturion Oil Limited is a Calgary, Alberta, based private oil and gas company that acquires and develops conventional oil fields from other oil and gas companies. ARC Resources is a mid-sized oil and gas company headquartered in Calgary with an extensive resource base of high quality oil and natural gas development opportunities. Tervita is a leading environmental solutions provider. The company treats byproducts of oil and gas for industrial and mining companies across North America to maximize recovery of useable products and ensure the waste is treated in an environmentally friendly manner.

### Map of Lower Beatton Landscape Unit



## Audit Approach and Scope

The Board conducted a limited scope compliance audit, focusing on compliance with the *Wildfire Act* and *Wildfire Regulation*, of three oil and gas companies operating under master licences to cut in the Lower Beatton Landscape Unit. The audit assessed industrial activities carried out by Venturion Oil Limited, ARC Resources Limited and Tervita between September 1, 2013, and September 23, 2015.

The Board's audit reference manual, *Compliance Audit Reference Manual, Version 7.0, September 2012*, set out the standards and procedures that were used to carry out this audit.

Two professional foresters and a chartered professional accountant made up the audit team. Field work to assess for compliance was carried out between September 21 and September 23, 2015.

## Planning and Practices Examined

Industrial activities that are subject to the *Wildfire Act* included mechanical land clearing for facility sites and right of ways, portable wood chipping; and maintenance of rights of way including grass mowing.

Auditors focused on two legal requirements:

- Section 11 of the *Wildfire Regulation* requires that licensees assess the fire hazard within six months of the activity starting.
- Section 12 of the *Wildfire Regulation* requires that fire hazards be abated within 12 months of the completion of the industrial activity.

There was no active land clearing or right of way maintenance during the field review. Consequently, auditors could not assess if the licensees had appropriate fire-fighting hand tools or an adequate fire suppression system on site when those activities were conducted.

**Table 1. Sites, Roads and Pipelines Subject to Audit**

Licensee	Master Licence to Cut	Well Sites	Treatment & Recovery Sites	Landfill Sites	Waste Transfer Station Sites	Access Roads (KM)	Pipelines (KM)
Venturion	M02357	5	-	-	-	2.0	2.5
ARC Resources	M02250	3	-	-	-	7.2	1.0
Tervita	M02255	-	2	1	2	-	-

## Findings



Area cleared at the Strawberry Landfill site.

Land clearing for all sites was well done. The licensees often ground woody debris at the time of clearing, mixed it with the top soil from the clearing and stored the mixture adjacent to the clearing. Auditors did not observe any instances of slash accumulation associated with the clearing activities.

Access roads were well constructed. In general, Venturion and ARC Resources disposed of access road right of way debris by burning and mixing the residue into the soil. On roads where the right of way was cleared less than six months before the field review, the debris was piled in a manner that would facilitate burning.



Road access into a well site.  
*Note the debris pile that requires disposal.*



Gas line buried under cleared and grass seeded right of way.

Pipelines were well constructed. Venturion and ARC Resources disposed of pipeline right of way debris by burning and mixing the residue into the soil.

## Wildfire Protection

Auditors examined fire hazard assessment and abatement activities on all of the sites listed in Table 1 on page 3.

Auditors found that all three licensees abated fire hazard on their sites within the required timeframe and there was no evidence of slash residue following abatement. However, licensees could not demonstrate that they assessed the fire hazard before they abated the hazard.

The *Wildfire Act*<sup>i</sup> requires licensees to assess the fire hazard, including an assessment of the fuel hazard and its associated risk of a fire starting or spreading. Furthermore, the licensees must provide a copy of a fire hazard assessment to an official when requested.

Assessing fire hazard is a legal requirement and must be completed regardless of whether the hazard was abated. It is a reasonable step to take to determine if an industrial activity has created a fire hazard. If a licensee identifies a fire hazard and then abates it or schedules it for abatement, it could demonstrate to government that the licensee has been diligent should a fire start as a result of the industrial activity.

In this case, the licensees are abating the hazard as a standard practice. However they cannot demonstrate that they have been diligent in assessing the hazard, which is a non-compliance with legislation. This non-compliance is considered not significant since fire hazards are being abated in an effective and timely manner. As a result, this is an area requiring improvement.

## Audit Opinion

In my opinion, the fire hazard activities carried out under master licence to cut M02357 by Venturion Oil Limited, under master licence to cut M02250 by Arc Resources Limited, and under master licence to cut M02255 by Tervita, between September 1, 2013, and September 23, 2015, complied in all significant respects with the requirements of the *Wildfire Act* and *Wildfire Regulation*, as of September 2015. No opinion is provided regarding fire-fighting equipment requirements.

In reference to compliance, the term “in all significant respects” recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.

Without qualifying my opinion, I draw attention to the *Wildfire Protection* section of this report, which describes an area requiring improvement regarding fire hazard assessment for all three licensees.

The *Audit Approach and Scope* and the *Planning and Practices Examined* sections of this report describe the basis of the audit work performed in reaching the above conclusion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the *Wildfire Act*.



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Victoria, British Columbia  
November 2, 2015

# Appendix 1:

## Forest Practices Board Compliance Audit Process

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### Background

The Forest Practices Board conducts audits of government and agreement-holders under the *Forest and Range Practices Act (FRPA)*, section 122, and the *Wildfire Act (WA)*. Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and/or WA requirements.

### Selection of Auditees

The Board conducts about 8 or 9 compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government's BC Timber Sales Program (BCTS). This section describes the process for selecting agreement holders to audit.

To begin with, auditors randomly select an area of the Province, such as a district. Then the auditors review the forest resources, geographic features, operating conditions and other factors in the area selected. These are considered in conjunction with Board strategic priorities (updated annually), and the type of audit is determined. At this stage, we choose the auditee(s) that best suits the selected risk and priorities. The audit selections are not based on past performance.

For example, in 2010, the Board randomly selected the Mackenzie district as a location for an audit. After assessing the activities within that area, we discovered that a large licensee had recently closed operations due to financial problems. As the Board has expressed concern in the past about financially strapped companies failing to meet outstanding obligations, such as reforestation and road maintenance, and we knew that some of the licence area is very remote, the new licence holder was selected for audit.

For BCTS audits, a district within one of the 12 business areas within the province is selected randomly for audit.

### Audit Standards

Audits by the Board are conducted in accordance with the auditing standards developed by the Board. These standards are consistent with Canadian generally accepted auditing standards. The standards for compliance audits are described in the Board's *Compliance Audit Reference Manual*.

### Audit Process

#### Conducting the Audit

Once the Board randomly selects an area or district and determines the scope of audit to be conducted and the licensee(s) to be audited, all activities carried out during the period subject to audit are identified (such as harvesting or replanting, and road construction or deactivation

activities). Items that make up each forest activity are referred to as a population. For example, all sites harvested form the timber harvesting population and all road sections constructed form the road construction population.

A separate sample is then selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to areas where the risk of non-compliance is greater.

Audit fieldwork includes assessments of features using helicopters and ground procedures, such as measuring specific features like riparian reserve zone width. The audit teams generally spend one week in the field.

## **Evaluating the Results**

The Board recognizes that compliance with the many requirements of FRPA and WA, is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

The audit team, composed of professionals and technical experts, first determines whether forest practices comply with legislated requirements. For those practices considered to not be in compliance, the audit team then evaluates the significance of the non-compliance, based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

Auditors categorize their findings into the following levels of compliance:

***Compliance*** – where the auditor finds that practices meet FRPA and WA requirements.

***Not significant non-compliance*** – where the auditor, upon reaching a non-compliance conclusion, determines that one or more non-compliance event(s) is not significant and not generally worthy of reporting. However, in certain circumstances, events that are considered not significant non-compliance may be reported as an area requiring improvement.

***Significant non-compliance*** – where the auditor determines a non-compliance event(s) or condition(s) is or has the potential to be significant, and is considered worthy of reporting.

***Unsound Practice*** – where the auditor identifies a significant practice that, although they are found to be in compliance with FRPA or WA, are considered to not be sound management.

***Significant breach*** – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of one or many non-compliance events.

If it is determined that a significant breach has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Minister of Forests, Lands and Natural Resource Operations.

## Reporting

Based on the above evaluation, the auditor then prepares a draft audit report. The party being audited is given a draft of the report for review and comment before it is submitted to the Board.

Once the auditor submits the draft report, the Board reviews it and determines if the audit findings may adversely affect any party or person. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report. The representations allow parties that may potentially be adversely affected to present their views to the Board.

The Board then reviews the draft report from the auditor and the representations from parties that may potentially be adversely affected before preparing its final report. Once the representations have been completed, the report is finalized and released: first to the auditee and then to the public and government.

## ENDNOTES

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### <sup>1</sup> **Wildfire Act: Hazard assessment and abatement**

7 (1) In prescribed circumstances and at prescribed intervals, a person carrying out an industrial activity or a prescribed activity on forest land or grass land or within 1 km of forest land or grass land must conduct fire hazard assessments.

(2) A person, other than a person who is in a prescribed class of persons referred to in subsection (2.1), carrying out an industrial activity or a prescribed activity, must, within a prescribed time period and to the prescribed extent, abate a fire hazard of which the person is aware or ought reasonably to be aware.



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