



Bonavista Acid Gas Injection at  
South Rosevear  
Bonavista Energy Corporation

# Verification Report

March 4, 2015

ICF Consulting Canada, Inc.  
Suite 605, 734 – Seventh Avenue SW  
Calgary, AB T2P 3P8

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## Statement of Verification

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March 4, 2015

Executive Director  
Air and Climate Change Policy Branch  
Alberta Environment and Sustainable Resource Development  
12th Floor, Baker Centre  
10025 – 106 Street NW  
Edmonton, Alberta T5J 1G4

### Introduction

Bonavista Energy Corporation (“**Bonavista**”) engaged ICF Consulting Canada, Inc. (“**ICF**”) to review their GHG Assertion – *Alberta Offset System Greenhouse Gas Assertion of Emissions Reduction Credits* and supporting evidence, covering the period June 1, 2013 through June 30, 2014 (“**GHG Assertion**”). The GHG Assertion, dated March 3, 2015, specifies a claim for 191,337 tonnes CO<sub>2</sub>e over the aforementioned period, which resulted from an acid gas injection offset project based on the Quantification Protocol for Acid Gas Injection. The claim is comprised of the following vintages of credits:

Vintage Year	Claim (tonnes CO <sub>2</sub> e)
2013 (June 1 - December 31)	92,463
2014 (January 1 - June 30)	98,874

The Responsible Party, Bonavista, is responsible for the information within the GHG Assertion. Blue Source Canada (“**Blue Source**”) was responsible for the preparation and presentation of the GHG Assertion. Our responsibility is to express our opinion as to whether the GHG Assertion is materially correct, in accordance with Alberta Environment and Sustainable Resource Development’s approved quantification methodology Quantification Protocol for Acid Gas Injection (May 2008, version 1.0) (“**Protocol**”) for this project; the *Specified Gas Emitters Regulation* (Alberta Reg.139/2007) (“**Regulation**”), and the associated guidance documents.

### Scope

We completed our review in accordance with the ISO 14064 Part 3: *Greenhouse Gases: Specification with guidance for the validation and verification of greenhouse gas assertions* (ISO, 2006). As such, we planned and performed our work in order to provide positive, but not absolute assurance with respect to the GHG Assertion. Our review criteria were based on the Protocol, the Regulation, and the associated guidance documents. We reviewed the Offset Project Plan; GHG Assertion; and associated documentation. We developed the verification procedures based on the results of a risk assessment that we conducted during the planning stage. The verification procedures are identified in the Verification Plan and the details of any data sampling that was conducted are provided in the Sampling Plan (both plans are appended to the Verification Report). We believe our work provides a reasonable basis for our conclusion.

## Conclusion

No unresolved misstatements remain in the GHG Assertion.

Based on our review, it is our opinion to a reasonable level of assurance that the GHG emissions reductions contained in the GHG Assertion are materially correct and presented fairly in accordance with the relevant criteria.

### **Jennifer Suke, P.Eng.**

Professional Engineer, Alberta (164930)  
Lead Verifier and Designated Signing Authority  
ICF Consulting Canada, Inc.  
Calgary, Alberta

### **Duncan Rotherham**

Vice President and Managing Director  
ICF Consulting Canada, Inc.  
Toronto, Ontario

## 1 Verification Summary

Lead Verifier: Jennifer Suke  
Associate Verifier: Kate Nesbitt  
Internal Peer Reviewer: Julie Tartt

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Verification Timeframe: January to March, 2015

Site Visit Date: Permission to waive the site visit was granted by ERSD through letter correspondence to Mr. Graham Harris with Blue Source Canada, dated December 11, 2014. In lieu of a site visit, ICF conducted an office visit and interviews with the Responsible Party on January 22, 2015.

Objective of the verification: Reasonable assurance on GHG Assertion for Emissions Reductions Credits

Assurance being provided to: Alberta Environment and Sustainable Resource Development

Standard being verified to: ISO 14064-3:2006 Specification with guidance for the validation and verification of greenhouse gas assertions

Verification criteria employed: Climate Change and Emissions Management Act  
Specified Gas Emitters Regulation (Alberta Regulation 139/2007)  
Technical Guidance for Offset Project Developers, Version 4.0, February 2013  
Technical Guidance for Greenhouse Gas Verification at Reasonable Level Assurance, Version 1.0, January 2013  
Quantification Protocol for Acid Gas Injection (May 2008, Version 1)

Verification scope – Gases: Carbon Dioxide, Methane, Nitrous Oxide

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Project Title: Bonavista Acid Gas Injection at South Rosevear

Location: Acid gas processing occurs at the gas plant located at LSD 16-11-54-15 W5  
Acid gas injection is located at LSD 8-11-54-15 W5

Project Start Date: March 5, 2007

Credit Start Date: March 5, 2007

Credit Duration Period: March 5, 2007 to March 4, 2015

Expected Lifetime of the Project: The acid gas injection project was expected to continue for as long as technically and economically viable. The project was determined to be no longer viable and the acid gas injection well was shut-in on June 30, 2014.

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Actual Emissions Reductions/  
Removals Achieved: 191, 337 tCO<sub>2</sub>e (June 1, 2013 to June 30, 2014)

Other Environmental  
Attributes: None

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Project Registration: N/A

Project Activity:

- Occurs in Alberta – The Project is located in Alberta
- Results from actions not otherwise required by law and beyond business as usual (“BAU”) and sector common practices – Injection of acid gas from sour gas plants no longer meets the “additionality” requirements of the Offset System and has become common practice (greater than 40% uptake). Because this Project was approved and listed on the Alberta Offset Registry prior to the retirement of the Protocol in 2013, it is eligible for the remainder of its crediting period.
- Results from actions taken on or after January 1, 2002 – Project started in March 2007.
- Occur on or after January 1, 2002 – the first credits from the Project occur in March 2007.
- Be real, demonstrable, quantifiable, and verifiable – emissions are measured and verified as described in the Verification Report.
- Have clearly established ownership – ownership of the environmental attributes associated with the Project has been clearly demonstrated.
- Be counted once for compliance purposes – the Project does not report under any other offset registries and does not trade RECs.

Project Report Temporal  
Period:

June 1, 2013 to June 30, 2014

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Verification Summary:

No material misstatements were detected in the final GHG Assertion.  
Reasonable level assurance Verification Statement issued.

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Main Contact  
(Verifier)

Jennifer Suke, P.Eng.  
ICF Consulting Canada  
734 – 7 Avenue SW, Suite 605  
Calgary, Alberta T2P 3P8  
587-390-8301 Jennifer.Suke@icfi.com

Main Contact  
(Quantification Consultant)

Tooraj Moulai  
Blue Source Canada  
Suite 700, 717 – 7<sup>th</sup> Avenue SW  
Calgary, Alberta T2P 0Z3  
403-269-3026 [Tooraj@bluesourcecan.com](mailto:Tooraj@bluesourcecan.com)

Main Contact  
(Responsible Party)

Marc Moreau  
Bonavista Energy Corporation  
1500, 525 – 8<sup>th</sup> Avenue SW  
Calgary, Alberta T2P 1G1  
403-514-7330 Marc\_Moreau@bonavistaenergy.com

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## 2 Project Information

Bonavista Energy Corporation (“**Bonavista**”) has developed the necessary documentation detailing project activities to support their claim for emissions reductions to be registered on the Alberta Offset Registry under Alberta’s Specified Gas Emitters Regulation. Bonavista has engaged ICF Consulting Canada, Inc. (“**ICF**”) to provide a third-party verification of the emissions reductions asserted by Bonavista related to the project activities discussed herein.

The quantification of the emissions reductions associated with the project is defined by Alberta Environment and Sustainable Resource Development’s (“**ESRD**”) Quantification Protocol for Acid Gas Injection, May 2008, version 1 (“**the Protocol**”). The Offset Project Report, *Bonavista Acid Gas Injection at South Rosevear: Greenhouse Gas Emissions Reduction Offset Project Report* (24 February 2015) (“**OPR**”), supports the *Alberta Offset System Greenhouse Gas Assertion of Emissions Reduction Credits* for the period June 1, 2013 through June 31, 2014 (“**GHG Assertion**”) made by Bonavista related to this project.

The Bonavista Acid Gas Injection at South Rosevear (“**the Project**”) covered by this verification engagement involves the creation of 2013 and 2014 vintage emissions reductions achieved through permanent geological sequestration of carbon dioxide in the acid gas stream. The Project discontinued operations as of June 30, 2014.

Bonavista is the operator of the South Rosevear Gas Plant. Previously Suncor Energy Oil, followed by ARC Resources Ltd. were authorized by Bonavista to act in the capacity of the Project Developer for this Project. For the current reporting period, Bonavista is both the operator and Project Developer.

This is the third time ICF has been engaged for verification services pertaining to this Project. Previously ICF was engaged by Suncor Energy Oil for the March 5, 2007 to December 31, 2009 credit duration period and by ARC Resources Ltd. for the January 1, 2012 to May 31, 2013 credit duration period.

This document describes the terms and scope of this verification. It serves to communicate the findings of the verification.

### 3 Verification Procedures

The scope of the verification was defined during the verification planning stage and is detailed in the Verification Plan, which is appended to this document. The Verification Plan also describes ICF's verification process that was executed through the course of the verification. The specific verification procedures that were planned and executed through the verification process are detailed in Section 4 of this report.

The verification was completed according to plan. The final verification schedule was as follows:

**Table 3-1: Verification Schedule**

Procedure	Date
Verification Kick-Off Meeting	January 8, 2015
Verification Procedures Conducted	January through March 2015
Site Visit (please refer to Section 3.1 below)	January 7, 2014
Head Office Visit	January 22, 2015
Internal Peer Review	February 26, 2015
Final Verification Report Issued	March 4, 2015

#### 3.1 Site Visit

On January 7, 2014, a site visit was conducted by Jennifer Suke and Kate Nesbitt as part of the verification engagement for the January 1, 2012 to May 31, 2013 credit duration period. During the course of the site tour, ICF interviewed key operations personnel regarding the operations and data management for the Project.

Bonavista staff interviewed included:

- Craig Hoffman, Plant Foreman
- Lonnie Saken, Field Clerk

The site visit included a review of all GHG emissions sources and sinks in the Project to identify and categorize each one as well as a review of process flow diagrams followed by physical observation of the Project. A review of metering and data management processes were also discussed and observed on site.

As the site visit for the previous crediting period was conducted during the crediting period for the current Assertion a site visit was not conducted as part of the verification procedures. Operations associated with the Project at the Facility fully ceased on June 30, 2014. Permission to waive the site visit was granted by ERSD through letter correspondence to Mr. Graham Harris with Blue Source Canada, dated December 11, 2014.

In lieu of a site visit, ICF conducted interviews at the head office in Calgary to identify any operational changes at the Facility that may impact the GHG Assertion, including shut-in procedures for the acid gas injection operations. Interviews were conducted with the following staff:

- Marc Moreau, Bonavista Senior Joint Energy Representative
- Tooraj Moulai, Blue Source Canada Engineer

A review of emissions sources, data collection, and controls were also discussed. The online data acquisition program was reviewed and discussed along with a review of facility operations and metering.

### 3.2 Summary of Project Changes

Major GHG emissions sources and sinks have been identified by the Responsible Party and are detailed in the Offset Project Plan. The quantification methodologies outlined in the Protocol have been used to calculate GHG emissions sources and sinks. Simulation outputs of the multi-stage Claus process and related tail gas incineration are based on site specific data, and applied in the emissions calculations. Calculated site-specific emission factors were also used.

There have been several changes to the offset project and baseline quantification methodology since the offset project start date including:

- Updated method for calculating fuel gas volumes in the baseline condition (now includes the volume of acid gas incinerated under emissions for SS B6a which is in accordance with the Protocol)
- Adjustment of tail gas volume from the sulphur recovery unit to account for the change in molar flow within the unit through application of a modeled tail gas to acid gas ratio
- Emissions from electricity have been included for the acid gas compressors (SS P9 Injection Unit Operation)
- Updated method for calculating SS B5b – Multi-Stage Claus Unit to improve accuracy (uses the operating specifications of the boiler added in the Project condition instead of the thermal energy credit from the SRU)
- Vented emissions classified under SS P9 Injection Unit Operation are now classified as a negligible emissions source
- The methodology to calculate incinerator fuel gas consumption in the Baseline condition was updated to meet the Protocol requirement regarding the minimum LHV for combustion
- The gas composition used in the calculation of emissions from tail gas incineration (SS B6) is based on the SRU Simulation Report as this is more accurate than using the acid gas composition, as applied in initial reporting periods
- Global Warming Potentials have been updated for the 2014 vintage emissions in accordance with the ESRD's 'Notice of Change for Global Warming Potentials' (January 23, 2014)

The following changes were made since the previous reporting period as a result of the ESRD audit of the January 1, 2012 to May 31, 2013 credit duration period under for which ARC Resources was the Responsible Party:

- The quantification of emissions from electricity for the acid gas compressors was updated to use direct electricity consumption metering; the previous emissions calculations used engineering estimates to calculate consumption
- The calculation of the weighted average gas composition was updated to apply the exact number of days in the reporting period for the fuel gas CO<sub>2</sub> emission factor; the calculation in the previous reporting period applied the total days sampled, not the total days of the reporting period
- The quantification of the tail gas combustion has been updated to include the combustion of carbon monoxide (CO) for the current reporting period (COS, CS<sub>2</sub> and CO are also included, though are not included in the OPP methodology)
- The calculation of the tail gas lower heating value has been updated to include two additional oxidizable components; hydrogen (H<sub>2</sub>) and carbonyl sulphide (COS)
- An explanation of the exclusion of SS P6 – Acid Gas Dehydration and Compression has been included in the OPR for the current reporting period
- Process flow diagrams have been added to the OPR for clarity and completeness

The acid gas injection well was shut-in on June 30, 2014.

The uncertainty associated with the quantification methodologies applied was evaluated during Protocol development. The Project meets the data collection and project specific calculation requirements of the Protocol and therefore, the uncertainty associated with the quantification and resulting assertion meets ESRD requirements.

### 3.3 Program Applicability Criteria

The Project was assessed against the following program applicability criteria outlined in the Protocol, which includes the eligibility criteria specified in ESRD guidance documents. This is described as a verification procedure in Section 4, Verification Findings, in this report.

Protocol applicability criteria include:

- The sequestration project results in removal of emissions that would otherwise have been released to the atmosphere indicated by an affirmation from the project developer and project schematics;
- Where the entities / operation are separate and distinct, the emissions reduced are captured under the protocol and will be reported as being emitted at the source facility such that the emission reductions are not double counted;
- The Acid Gas injection scheme has obtained approval from Energy Resources Conservation Board (ERCB) and meets the requirements outlined under Directive 051: Injection and Disposal Wells – Well Classifications, Completions Logging, and Testing Requirements;
- Metering of injected gas volumes takes place as close to the injection point as is reasonable to address the potential for fugitive emissions as demonstrated by project schematics;
- The sequestration project involves the installation of an acid gas injection project at one of the following:
  - An existing sour natural gas processing facility which commenced operations prior to July 1, 2007, which may either have an operational sulphur recovery unit (i.e. Multi-Stage Claus or Liquid Redox) or may directly incinerate the acid gas stream.
  - Any new natural gas processing facility constructed after July 1, 2007 with total facility GHGs output in the first year of operation, inclusive of any CO<sub>2</sub> that has been captured and sequestered, less than the identified coverage threshold on direct emissions as defined by the *Specified Gas Emitters Regulation*. Therefore, acid gas injection projects applying this protocol at natural gas facilities commissioned after July 1, 2007 must also have total baseline emissions, calculated as per Table 2.4 of this protocol, less than the identified coverage threshold for direct emissions as defined by the *Specified Gas Emitters Regulation*.
- The consolidation or comingling of acid gas streams from multiple emitting facilities during the projects crediting period must be fully accounted for to ensure that each individual emitting facility is eligible to apply this protocol based on the above criteria. The metering and measurement systems implemented for the acid gas injection project activity should allow for disaggregation of the total baseline and project emissions back to the original emitting facilities.
- The quantification of reductions achieved by the project is based on actual measurement and monitoring (except where indicated in the protocol) as indicated by the proper application of this protocol and
- The project must meet the requirements for offset eligibility as specified in the applicable regulation and guidance documents for the Alberta Offset System.

Offset program eligibility criteria include:

- Occur in Alberta;
- Result from actions not otherwise required by law and be beyond business as usual and sector common practices;
- Result from actions taken on or after January 1, 2002;
- Occur on or after January 1, 2002;
- Be real, demonstrable, quantifiable, and verifiable;
- Have clearly established ownership; and
- Be counted once for compliance purposes.

### 3.4 Verification Strategy

The Verification Strategy applied to this verification was a predominantly substantive approach. The Verification Team designed and executed verification procedures that focused on review of original metered and measured data.

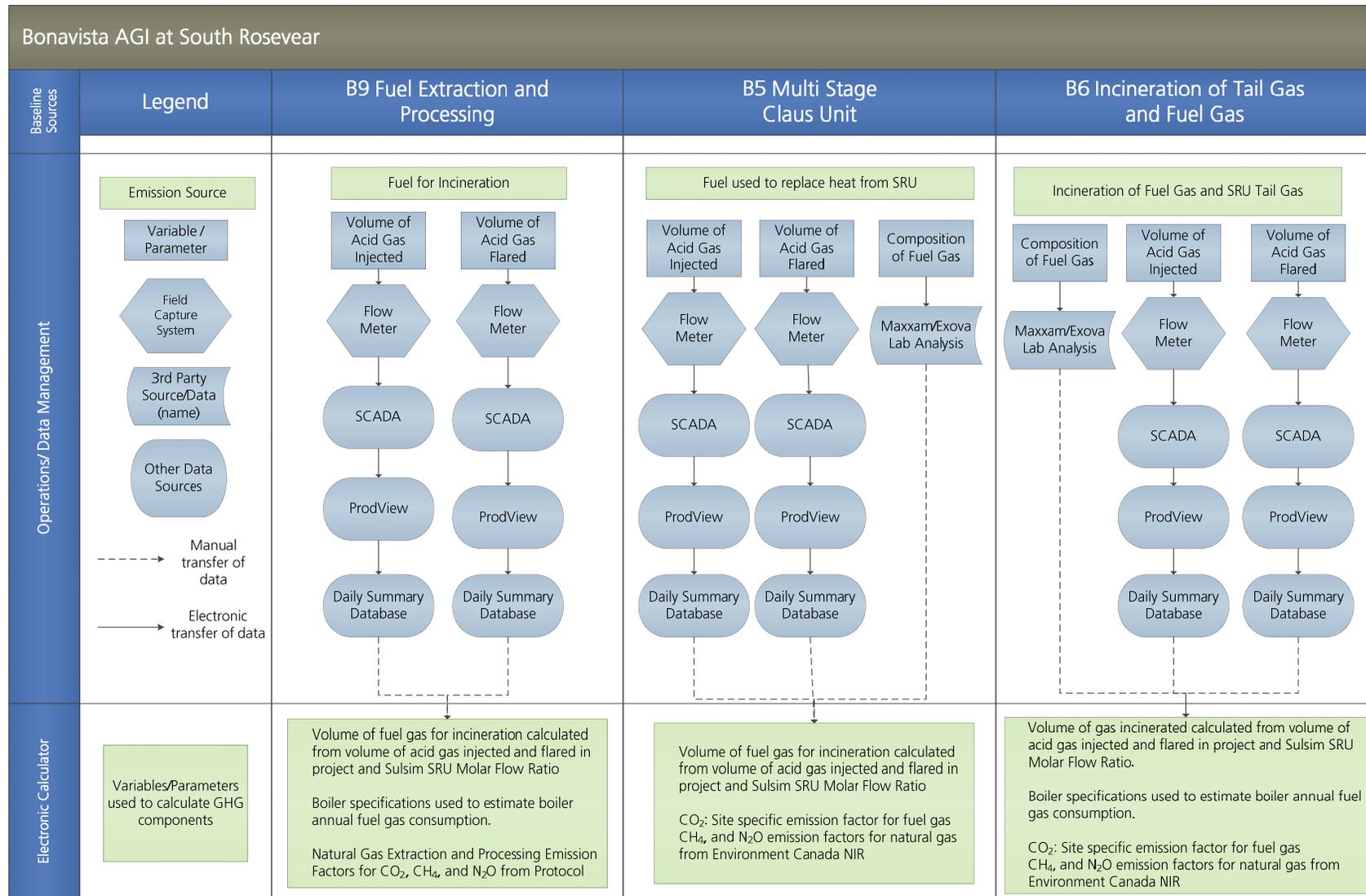
The Responsible Party relies on certain controls for the quantification of emissions. ICF relied on the following controls and as such, tested the operational effectiveness of these controls as well as the data processed by these controls.

- Calibration and maintenance program, applicable to all directly metered data
- ProdView Software

Details of the verification procedures employed to conduct these tests are provided in Section 4 of this report.

### 3.5 Data Management and Control System Review

The Verification Team developed a thorough knowledge of the data management and control systems utilized in the Project through the review of the Offset Project Plan, observations during the site visit, and interviews with key Project personnel. The data flow diagram shown below outlines the flow of Project data and the custody of control.



Bonavista AGI at South Rosevear					
Project Sources	P12 Fuel Extraction and Processing	P8 Upset Flaring		P10 Recycled Gas	P9 Injection Unit Operation
Operations/ Data Management					
Electronic Calculator	<p>Natural Gas Extraction and Processing Emission Factors for CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from Protocol</p>	<p>CO<sub>2</sub>: Site specific emission factor for fuel gas CH<sub>4</sub>, and N<sub>2</sub>O emission factors for natural gas from Environment Canada NIR</p>		<p>CO<sub>2</sub> : CO<sub>2</sub> density, CO<sub>2</sub> composition</p>	<p>Compressor rating                  CO<sub>2e</sub>: Alberta Environment grid emission factor for electricity</p>

### 3.6 Responsible Party Documentation Reviewed

#### Offset Project Plan

- *Bonavista Acid Gas Injection at South Rosevear Project Plan* (January 2012) (OPP\_Bonavista AGI at South Rosevear\_2012.pdf)

#### Offset Project Report & Assertion

- *Bonavista Acid Gas Injection at South Rosevear: Greenhouse Gas Emissions Reduction Offset Project Report* (24 February 2015) (South\_Rosevear\_AGI\_OPR\_2013\_2014\_v2.5\_FINAL\_2015\_02\_24\_with\_appendices\_signed\_executed.pdf)
- *Alberta Offset System Greenhouse Gas Assertion of Emission Reduction Credits* (March 3, 2015) (NOC\_South\_Rosevear\_2013\_2014\_v1.0\_2015\_03\_03\_signed.pdf)

#### GHG Emissions Electronic Calculator

- Bonavista Rosevear Calculator 2013\_2014\_v3.0\_2015\_02\_06.xlsx
- Bonavista Rosevear Calculator 2013\_2014\_v3.5\_2015\_02\_18.xlsx

#### Gas Composition Lab Analysis Reports & Confirmations

- South Rosevear 2014 AGI Acid Gas Analyses.zip
- South Rosevear AGI 2014 Sales Gas Analyses Reports.zip
- 16-11-054-15-W5 - 2013-07-17 - Acid Gas to Injection.pdf
- 16-11-054-15-W5 - 2013-08-13 - Sales Gas AutoSampler.pdf
- 16-11-054-15-W5 - 2013-09-11 - Sales Gas AutoSampler.pdf
- 16-11-054-15-W5 - 2013-12-03 - Sales Gas AutoSampler.pdf
- Email Comms South Rosevear Clarification on Sales Gas Sampling 2015-2-24.pdf
- 9-22-54-15 Shut In Date Documentation.msg

#### SRU Simulation Report

- ESC1956 Blue Source Canada Bonavista South Rosevear SRU Sulsim Simulation Report 2015.pdf
- Bonavista\_2014\_TG\_Composition(sulsim).xlsx
- Bonavista\_AGComp\_Weighted\_Average\_v3.xlsx

#### Design Base Memorandum Report

- Rosevear DBM-R1.pdf

#### Calibration Reports

- 7-14 G.C July222013.docx
- 7-14 G.C June212013.docx
- AGI Calibration Reports.pdf
- Cal Report - 2013 & 2014 for 16-11-54-15W5 FT-7015.pdf
- Cal Report 2013 - 9-22-054-15 (10-22 surface) .pdf

#### Monthly Gas Processing Plant Sulphur Balance Reports (S-30)

- Rosevear S30 2013.xlsx
- Rosevear S30 2014.xlsx

#### Production Well CO<sub>2</sub> Plots

- South Rosevear Avg CO2 Composition Plots June 2013-June 2014.xlsx

#### Production Well Information Reports

- 09-22-054-15W5,03 Production 2012-2014.pdf
- 12-23-054-15W5,00 Production 2012-2014.pdf

- 14-14-054-15W5,02 Production 2012-2014.pdf

Electricity Consumption by Compressors

- S.Rosevear AGI Compressor Power BillingHistory\_0040000433151.xlsx

Confirmations / Regulatory Approvals

- South Rosevear Gas Plant Ownership 2013-2014.pdf
- EPEA Approval No. 1353-02-00.pdf
- ERCB Approval 10738.pdf
- AGI Well License.pdf
- 00001353-02-00.pdf
- 00001353-02-01.pdf

Negligible Emissions Correspondence

- South Rosevear AGI Project Verifier Question RE Acid Gas Injection Well Pressure Valve Potential Venting Situations.pdf

## 4 Verification Findings

### 4.1 Verification Findings

The Verification Team planned and completed the verification procedures described in the following two tables. The procedures and findings related to each *specific Project or Baseline emissions source and sink variable* used to quantify the GHG Assertion are provided in Table 4.1-1. The procedures and findings related to the *overall Project GHG Assertion* are provided in Table 4.1-2.

Detailed descriptions of any misstatements identified by the Verification Team are provided in Table 4.2-1.

**Table 4.1-1: Project and Baseline GHG Emissions Sources and Sinks Findings**

Data Description	Verification Procedure(s)	Findings
<b>B9 – Fuel Extraction and Processing</b>		
<b>Fuel gas volume</b>	Review Electronic Calculator and OPR regarding data sources, transcription, and data security;	Data used for the calculation of emissions associated with fuel extraction and processing were reviewed as described in the attached sampling plan. Data sources and transfer processes were reviewed and are depicted in the data flow diagram. No misstatements identified.
	Re-perform calculation using original data sources.	The quantity of GHG emissions reductions were re-calculated based on the methodologies described in the Offset Project Report (OPR) and compared to the quantity of GHG emissions reductions calculated in the Electronic Calculator.  The methodologies described in the OPR were found to be consistent with the Electronic Calculator.  No outstanding misstatements.
<b>Fuel gas composition</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	All monthly gas analysis reports were compared against data used in the Electronic Calculator (see Sampling Plan). The fuel gas LHV was recalculated using data from the gas analysis report.  No misstatements identified.
<b>Tail gas composition (from SRU Simulation Report)</b>	Evaluate SRU Simulation Report data inputs for relevance.	Input parameters and assumptions used for the SRU Simulation Report (Sulsim report) were reviewed and found to be consistent with previous years and applicable to the project baseline.  No misstatements identified.

Data Description	Verification Procedure(s)	Findings
<b>Molar flow ratio (from SRU Simulation Report)</b>	Evaluate SRU Simulation Report data inputs for relevance.	Input parameters and assumptions used for the SRU Simulation Report were reviewed and found to be relevant to the current reporting period and applicable to the project baseline.  No misstatements identified.
<b>Boiler fuel gas consumption</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	The data inputs to the calculation of boiler fuel gas consumed in the baseline condition were reviewed. The data inputs were found to be applicable and consistent. Please see Findings for B5b – Multi-Stage Claus Unit for more detailed information.  No misstatements identified.
<b>Volume of acid gas injected</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	A review of monthly acid gas injection volumes from S-30 reports used in the Electronic calculator was completed as detailed in the Sampling Plan.  No misstatements identified.
	Verify meter calibration	The calibration report was reviewed for meter FT-5001 and demonstrated that the Responsible Party's controls in place are being implemented.  No misstatements identified.
<b>Volume of acid gas flared</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	A review of monthly acid gas injection volumes used in the Electronic Calculator was completed as detailed in the Sampling Plan.  No misstatements identified.
	Verify meter calibration	The calibration report was reviewed for meter FT-5001 and demonstrated that the Responsible Party's controls in place are being implemented.  No misstatements identified.
<b>B5b – Multi-Stage Claus Unit</b>		
<b>Boiler steam flow rate</b>	Review Electronic Calculator and OPR regarding data sources, transcription, and data security;	ICF reviewed the boiler design parameters and found them to be consistent with those used in the Electronic Calculator.  No misstatements identified.

Data Description	Verification Procedure(s)	Findings
<b>Boiler efficiency</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	ICF reviewed the boiler efficiency and found it to be consistent with published values and those used in the Electronic Calculator.  No misstatements identified.
<b>B6a – Incineration (Fuel Gas)</b>		
<b>Volume of fuel gas consumed for incineration</b>	Review calculator and OPR regarding data sources, transcription, and data security;	Volume of fuel gas for incineration in the baseline is calculated based on surrogate parameters. ICF reviewed the parameters described in the OPR against those used in the Electronic Calculator and found them to be consistent. A Sulphur Recover Unit (SRU) Simulation report is used to estimate the fuel gas composition of the SRU; ICF evaluated the data inputs to the model and found them to be conservative.  No misstatements identified.
<b>Fuel gas composition</b>	Review calculator and OPR regarding data sources, transcription, and data security;	Sampling of fuel gas compositions used in the calculation of the site specific emissions factor was completed as detailed in the Sampling Plan.  No misstatements identified.
<b>B6b – Incineration (Tail Gas)</b>		
<b>Volume of tail gas incinerated</b>	Review calculator and OPR regarding data sources, transcription, and data security;	The tail gas applied in the calculation of emissions is based on The SRU Simulation Report produced by Sulphur Experts. Inputs of The SRU Simulation Report were reviewed and deemed to be conservative and relevant.  The Protocol only prescribes quantification of CO <sub>2</sub> for this emission source, however COS, CS <sub>2</sub> and CO have also been included in the GHG emissions calculation. Carbon monoxide was not previously included in the quantification of tail gas emissions but has been included for the current reporting period to increase accuracy of the calculation.  No misstatements identified.
<b>Molar flow ratio</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	The molar flow ratio calculated by the SRU Simulation Report was consistent with the value used in the Electronic Calculator.  No misstatements identified.

Data Description	Verification Procedure(s)	Findings
<b>Composition of tail gas</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	The tail gas CO <sub>2</sub> composition in the Electronic Calculator was compared against the SRU Simulation Report.  No misstatements identified.
<b>P8 - Upset Flaring</b>		
<b>Volume of acid gas flared</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	Acid gas flared volumes in the Electronic Calculator were compared against S-30 reports.  No misstatements identified
	Verify meter calibration	Calibration reports were reviewed and demonstrated that the Responsible Party's controls in place are being implemented.  No misstatements identified.
<b>Volume of supplemental fuel gas</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	Fuel gas volumes to acid gas flared reported in the Facility's S-30 reports were and found to be consistent with the Electronic Calculator.  No misstatements identified.
<b>Composition of acid gas flared</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	Acid gas compositions used in the Electronic Calculator were verified against lab analysis reports  No misstatements identified.
<b>Composition of fuel gas</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	Fuel gas compositions used in the Electronic Calculator were verified against lab analysis reports (see Sampling Plan).  No misstatements identified.
<b>P10 – Recycled Gas</b>		
<b>Volume of sour gas produced</b>	Verify meter calibration	Calibration reports were reviewed and demonstrated that the Responsible Party's controls in place are being implemented.  No misstatements identified.
	Compare raw data records, invoices against data in Electronic Calculator for consistency;	Monthly volumes of acid gas produced from well 14-14 and 9-22 in the Electronic Calculator were compared to the Single Well Report.  No misstatements identified.

Data Description	Verification Procedure(s)	Findings
<b>Composition of produced gas</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	CO <sub>2</sub> composition plots were reviewed and compared against values in the Electronic Calculator.  No misstatements identified.
<b>P9 – Injection Unit Operation</b>		
<b>Electricity consumption for compressor operation</b>	Compare raw data records, invoices against data in Electronic Calculator for consistency;	ICF sampled monthly electricity consumption totals for the compressors.  No misstatements detected.

Table 4.1-2: Project GHG Assertion Findings

GHG Assertion Risk Category	Verification Procedure(s)	Findings
<b>Changes at the Project Level</b>	Compare emission sources on the current Electronic Calculator with those in previous years;	The inventory of emission sources has not changed from previous years.  An increase in the Baseline emissions compared to previous reporting periods was found to be attributable to a higher molar flow ratio calculated in the SRU Simulation Report. This ratio dictates the increase in tail gas volume from the SRU compared to the input acid gas volume due to oxidizing components. The increase in tail gas results in an increase in fuel gas use for incineration. The change in acid gas composition also affects the tail gas composition produced by the SRU Simulation Report.  A decrease in project emissions was found to be consistent with the reduced injection volumes of acid gas at the end of the reporting period.
	Interview Project operations personnel regarding changes to equipment inventory or changes in operation that have occurred in the time period covered by the GHG Assertion	Through interviews of project operations personnel, no changes to the equipment inventory were identified. Operational changes include shut-in of production well 9-22 in March 2014, and shut-in of the acid gas injection well on June 30, 2014.
<b>Incomplete emissions sources</b>	Compare each emissions source and sink listed in the OPP and OPR to those identified through interviews of operations personnel and observation during the site visit.	Emissions sources identified were found to be consistent with those identified through verification procedures.  No misstatements identified.

GHG Assertion Risk Category	Verification Procedure(s)	Findings
	Through the site visit and understanding of the Project, evaluate any emissions sources or sinks that are not considered by the Protocol.	All emission sources and sinks in the Project have been considered by the Protocol.
<b>Negligible sources</b>	Evaluate the appropriateness and quantification of any negligible emissions sources;	ICF evaluated the calculation of venting emissions and determined them to be conservative. Through interviews, ICF confirmed with operations that no acid gas venting occurred during the reporting period. ICF concluded that venting is appropriately classified as negligible.  No misstatements identified.
<b>Continuity of reporting practices</b>	Interview key Project personnel regarding the application of applicability criteria.	Applicability criteria were reviewed, and operations personnel were interviewed. As detailed in Section 3.2, the Project was found to meet all applicability criteria.  No misstatements identified.
<b>Complexity of data systems</b>	Develop a data life cycle diagram, or data map for each major GHG emissions source/sink and confirm with Project operations and GHG reporting personnel;	The data flow diagram developed through interviews and data review is included in Section 3.5.
	Observe or interview Project operations personnel regarding the operation of data transfer systems during site tour, including manual data entry procedures and associated controls;	Project personnel were interviewed in regards to data transfer systems. In June 2013 Facility changed their data historian from Fieldview to Prodview. Information gathered was used to inform the data flow diagram.
<b>Completeness of GHG Assertion</b>	Review GHG Assertion and Project documentation against guidance documents for completeness;	ICF reviewed the Offset Project Plan (OPP), Offset Project Report (OPR), and Assertion against the corresponding ESRD templates. Documentation was found to be complete.

GHG Assertion Risk Category	Verification Procedure(s)	Findings
<b>Use of appropriate quantification methodologies</b>	Review quantification formulae and estimation calculations prescribed by the Protocol against those described in the OPR and utilized in the GHG Electronic Calculator for each GHG emissions source/sink;	Quantification formulae and estimation calculations described in the Project documentation and utilized in the Electronic Calculator were reviewed against those prescribed in the Protocol.  ICF found that any changes to the quantification methodology from the OPP have been documented in the OPR and that the quantification methodologies employed are in accordance with the Protocol.  No misstatements identified.
	Calculate emissions reduction claim from original, second-party or third-party data.	ICF recalculated emissions from original, second, party or third party data using the quantification methodology described in the Protocol and OPR.  No misstatements identified.
<b>Transcription of Final GHG Assertion</b>	Compare calculated values to those in the GHG Assertion for transcription accuracy;	GHG Assertion was compared to calculated values in the Electronic Calculator.  No misstatements identified.
<b>Number of parties involved</b>	Observe or interview Project operations personnel regarding the operation of data transfer systems during site tour, including manual data entry procedures and associated controls;	Bonavista el and BlueSource Project personnel were interviewed during the site visits to understand data transfer systems, data entry procedures and associated controls.  Systems, procedures and controls in place deemed adequate to reduce and/or identify errors that may occur due to the number of parties involved.
<b>Ownership</b>	Review of documents proving the ownership of the assets creating the emissions reductions;	The ownership breakdown of the South Rosevear Gas Plant was reviewed for the current reporting period.  No misstatements identified.
<b>Significant errors reported in previous verifications</b>	Review audit findings and previous verification findings and relevance to the current GHG Assertion	Findings from the previous verification were reviewed and are addressed in Section 4.4. Findings from the ESRD audit of the previous assertion were reviewed and are addressed in Section 3.2.
<b>Assessment of Emission Factors and Default Parameters</b>	Compare emission factors used in calculations against reference documents cited in Protocol and OPP.	Emission factors used in the Electronic Calculator were review and found to be consistent with reference documents.  No misstatements identified.

GHG Assertion Risk Category	Verification Procedure(s)	Findings
<b>Approval of activities</b>	Review of documents proving the approval of project activities;	The ERCB Acid Gas Disposal Approval No. 10738 was reviewed and demonstrates approval for the disposal of hydrogen sulphide and carbon dioxide into the Rosevear Beaverhill Lake B Pool as of August 6, 2010.  No misstatements identified.

## 4.2 Misstatements

No misstatements were identified.

## 4.3 Materiality

No misstatements were identified in the GHG Assertion, and as such ICF found no breach of materiality (greater than 5% of the total GHG Assertion).

## 4.4 Other Findings

Through the course of the verification the data management systems and controls employed in the quantification of emissions reductions associated with the Project were reviewed, as detailed in Section 4.1 above. These systems were found to be effective in the calculation of the GHG Assertion.

Through the verification procedures described earlier, ICF identified a number of qualitative items that are not included as misstatements but rather items of note:

1. The Protocol prescribes the quantification of CO<sub>2</sub> from the incineration of tail gas (B6b). The Responsible Party applied the prescribed methodology for this emissions source and also included three additional carbon compounds; COS, CS<sub>2</sub> and CO. Carbon monoxide was not previously included in the quantification of tail gas emissions but has been included for the current reporting period as a result of the audit findings and to increase the accuracy of the calculation.
2. The Alberta Environment Amending Approval, Approval No. 1353-02-01 was provided, demonstrating that the approval for the South Rosevear Sour Gas Processing Plant (Approval No. 1353-02-00) was amended, and construction of the acid gas injection facilities and resulting effluent streams were approved. A signed version was not available, however the Consent to Transfer Approval No. 1353-02-00 was provided, which is the EPEA Approval Transfer to Bonavista, and was signed by the Director. This was identified originally in the verification findings for the previous Assertion period (January 1, 2012 to May 31, 2013).

Also found in the previous Assertion were immaterial discrepancies regarding gas composition analysis reports. Composition analysis reports were again reviewed for this reporting period and as noted in the findings, no misstatements were detected.

## 4.5 Confirmations

The "Confirmations" defined in Section 5.4 of the Technical Guidance for Greenhouse Gas Verification at Reasonable Level Assurance, Version 1.0, January 2013 were completed. The results of this review were as follows.

- Offset project information across offset project documentation was reviewed and found to be consistent and complete;

- Offset project location and any applicable approvals information was included with the GHG Assertion;
- Quantification methodologies have been documented in the offset project documentation;
- Offset project contact, report dates, emission reduction numbers, etc. were included in project documentation;
- Process and data flow diagrams in the project documentation were reviewed during the site visit and found to be an accurate representation of project operations.

## 5 Verification Team

Since 1969, ICF International has been serving major corporations, all levels of government, and multilateral institutions. Globally, approximately 500 of our 5,000 employees are dedicated climate change specialists, with experience advising public and private-sector clients. ICF International has earned a reputation in the field of climate change consulting for its analytical rigour, in-depth expertise, and technical integrity through scores of GHG emissions-related assignments over the past two decades.

Over the past ten years, ICF Consulting Canada, Inc., a fully owned subsidiary of ICF International, has carried out numerous facility-level GHG verifications and verifications of emissions reduction projects. ICF's Verification Body has developed the necessary internal controls to ensure qualified and competent staffing uphold the principles of the relevant standard while quality control processes are utilized to assure data integrity is maintained and safeguarded. ICF's clients choose ICF for its strong brand, technical expertise, and rigorous methodological approach.

ICF has assembled a Verification Team consisting of experienced GHG verifiers.

### Lead Verifier – Jennifer Suke, P.Eng.

Jennifer Suke, is an Associate in ICF's Energy and Carbon Markets division in the Calgary office and a Lead Verifier in ICF's Verification Body. Jennifer has over 5 years of experience quantifying GHG emissions for international landfills under the Clean Development Mechanism (CDM), as well as landfills in Ontario, and British Columbia.

She has also worked on over 15 projects including natural gas production and processing, SAGD, bitumen upgrading and refining, landfill gas utilization, biomass to energy, aerobic digestion, and acid gas injection under the Alberta Specified Gas Emitters Regulation. Jennifer holds an M.Sc. in Sustainable Energy Development from the University of Calgary and a B.Eng. in Environmental Engineering from the University of Guelph. She has completed supplementary verification training, receiving an ICF certificate of training for ISO 14064-3, has current H<sub>2</sub>S Alive training, and is a Professional Engineer in the Province of Alberta.

### Associate Verifier – Kate Nesbitt

Kate Nesbitt is an Associate in ICF's Energy and Carbon Markets division in the Calgary office. Kate has worked as an associate verifier of annual GHG compliance reports for industrial clients in several sectors, including natural gas processing facilities, cogeneration facilities, mining facilities and power generation facilities, under the Specified Gas Emitters Regulation in the province of Alberta and the British Columbia Greenhouse Gas Reduction (Cap and Trade) Act. Additionally, Kate also has experience verifying emissions reductions for wind energy, conservation cropping, energy efficiency and acid gas injection projects. Kate holds a B.Sc. in Environmental Science from the University of Lethbridge and an M.Sc. in Environmental Sustainability from the University of Edinburgh. She has completed training in ISO 14064, and holds current H<sub>2</sub>S Alive training.

### Internal Peer Reviewer – Julie Tartt

Julie Tartt has a Bachelor of Science degree in Environmental Sciences from the University of Guelph and has completed supplementary verification training, receiving a certificate of training for ISO 14064. Julie is the Manager of ICF's Verification Management System (VMS) and is also a Lead Verifier – she led and managed the development of ICF's ANSI-accredited ISO 14065 VMS. She has considerable experience and expertise quantifying greenhouse gases through her work developing numerous GHG inventories, and verifying GHG emissions. Julie has been working with ICF's Verification Body since 2010 and has worked on verifications under several regulatory reporting programs including British Columbia, Ontario, and Quebec's Greenhouse Gas Reporting Regulations, and Alberta's Specified Gas Emitters Regulation. Facility compliance reports verified

have included natural gas pipeline and natural gas processing linear facility operations, coal mining, electricity generation, and cogeneration facilities. Emissions reduction project verifications have included wind electricity generation, landfill gas capture and utilization, aerobic composting, and tillage management projects. Additionally, she has provided verification services for organizations reporting to the Carbon Disclosure Project and The Climate Registry, as well as voluntary emissions reductions projects. Julie also has extensive experience managing and administering large, multi-client, carbon market modeling and analysis studies nationally and at the provincial level.

### Statement of Qualifications

As the Lead Verifier / Designated Signing Authority and a Professional Engineer registered in the province of Alberta, I, Jennifer Suke meet or exceed the required qualifications described in Section 18 of the *Specified Gas Emitters Regulation*, including the training requirements under ISO 14064.

The information contained within this document and this statement of qualifications, is complete and correctly represents the qualifications of ICF and the members of the Verification Team described herein. Dated this fourth day of March, 2015.

**Jennifer Suke, P.Eng.**

Professional Engineer, Alberta (164930)  
Lead Verifier and Designated Signing Authority  
ICF Consulting Canada, Inc.  
Calgary, Alberta

**Duncan Rotherham**

Vice President and Managing Director  
ICF Consulting Canada, Inc.  
Toronto, Ontario

## Appendices

Verification Plan

Sampling Plan

Conflict of Interest Checklist



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## Verification Plan

### Bonavista Energy, Bonavista Acid Gas Injection at South Rosevear

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#### 1 Introduction

This document provides details on the verification scope and process that is planned to conduct a reasonable level verification of the June 1, 2013 through June 30, 2014 Alberta Offset System Greenhouse Gas Assertion of Emission Reduction Credits (the “GHG Assertion”) for Bonavista Energy’s Bonavista Acid Gas Injection Project at South Rosevear, (the “Project”). An overview of operations at the Project will be provided in the Verification Report.

A Verification Risk Assessment was conducted during the verification planning stage; the results are provided in Section 6 of this document. These results were used to inform the development of the verification procedures outlined in the Verification Findings Section of the Verification Report. Additionally, the results of the Risk Assessment informed the development of the Sampling Plan, which will be included in the Verification Report.

The Verification and Sampling Plans will be updated through the course of the verification as additional information becomes available.

The verification conclusion will be documented in the Verification Statement and the verification findings will be further described in the Verification Report. The Verification and Sampling Plans will be appended to the Verification Report to provide information related to the verification scope and process.

#### 2 Verification Scope

##### 2.1 Objective

The primary objective of this verification engagement is to provide assurance to Alberta Environment and Sustainable Resource Development (“ESRD”) that the GHG Assertion is reliable, and of sufficient quality.

##### 2.2 Parties and Users

The person or organization that has overall control and responsibility for the GHG Project, as defined in Section 2.13 of ISO 14064-2:2006, is the “Project Proponent”. For this verification, Bonavista Energy (“Bonavista”) is the Project Proponent.

The person or persons responsible for the provision of the GHG Assertion and the supporting information, as defined in Section 2.24 of ISO 14064-3:2006, is the “Responsible Party”. For this verification, Bonavista is also the Responsible Party. Blue Source Canada has prepared the offset project report and emissions quantification on behalf of the Responsible Party.

ICF Consulting Canada, Inc., the “Verifier” or “ICF”, has been engaged to provide a third-party verification of the GHG Assertion. The Lead Verifier and Associate Verifier compose the ICF “Verification Team”.

The “Intended User” is defined in Section 2.22 of ISO 14064-2:2006 as the individual or organization identified by those reporting GHG-related information that relies on that information to make decisions. ESRD is the Intended User of the information contained within the Verification Statement.

## 2.3 Scope

The verification will be conducted in accordance with *ISO 14064-3: Specification with guidance for the validation and verification of greenhouse gas assertions*.

The Verification and Sampling Plans were developed based on the relevant criteria described in the following:

- *Climate Change and Emissions Management Act*
- *Specified Gas Emitters Regulation, Alberta. Reg.139/2007*
- *Quantification Protocol For Acid Gas Injection (May 2008, Version 1)*
- *Technical Guidance for Offset Project Developers, v4.0, February 2013*
- *Technical Guidance for Greenhouse Gas Verification at Reasonable Level Assurance, Version 1.0, January 2013*

The following table defines the scope elements specified for the Project.

Scope Element	ISO 14064-3 Definition	Project Specific
<b>Boundary</b>	The Project boundary, including legal, financial, operational and geographic boundaries	Bonavista Acid Gas Injection at South Rosevear, located at the South Rosevear Gas Plant LSD 16-11-54-15 W5 and includes Acid Gas Injection Well site LSD 8-11-54-15 W5
<b>Infrastructure and Activities</b>	The physical infrastructure, activities, technologies and processes associated with the Project	Capture and sequestration of the acid gas stream that previously was processed by a Sulphur Recovery Unit (SRU). Eliminated need to incinerate tail gas from SRU.
<b>GHG Sources and Sinks</b>	GHG sources to be included	<ul style="list-style-type: none"> <li>• Fuel Extraction and Processing</li> <li>• Multi-Stage Claus Unit</li> <li>• Incineration</li> <li>• Flaring</li> <li>• Recycled Gas</li> <li>• Injection Unit Operation</li> </ul>
<b>GHG Types</b>	Types of GHGs to be included	<ul style="list-style-type: none"> <li>• Carbon Dioxide (CO<sub>2</sub>)</li> <li>• Methane (CH<sub>4</sub>)</li> <li>• Nitrous Oxide (N<sub>2</sub>O)</li> </ul>
<b>Reporting Period</b>	Vintage of credits to be included	June 1, 2013 – June 30, 2014

## 2.4 Materiality

During the course of the verification, individual errors, omissions or misrepresentations (collectively referred to as misstatements) or the aggregate of these misstatements will be evaluated qualitatively and quantitatively.

Materiality defines the level at which misstatements in the GHG Assertion or any underlying supporting information precludes the issuance of a reasonable level of assurance.

The Lead Verifier is responsible for applying professional judgment to determine if *qualitative* misstatements could adversely affect the GHG Assertion and subsequently influence the decisions of the Intended User, in which case, the misstatements are deemed to be material.

*Quantitative* misstatements will be calculated individually to determine the impact of the misstatement as a percentage of the GHG Assertion.

All misstatements that are outstanding at the conclusion of the verification are documented in the Verification Report and classified on an individual basis as either material or immaterial.

### Materiality Threshold

The materiality threshold is defined as 5% of the total reported emissions reductions in the GHG Assertion. Individual misstatements and the aggregate of individual misstatements will be analyzed to determine if the materiality threshold has been breached.

### Tolerable Error Threshold

Tolerable error dictates the level of rigor applied to the verification at the emissions source level. Tolerable error for this verification will be set at half of materiality (2.5%) of the total GHG Assertion.

## 2.5 Principles

ISO 14064 defines six principles that should be upheld in the development of the GHG Assertion. These principles are intended to ensure a fair representation and a credible and balanced account of GHG-related information. The verification procedures developed and executed during the course of this verification will present evidence such that each of these principles is satisfied.

### Relevance

Appropriate data sources are used to quantify, monitor, or estimate emissions sources. Appropriate minimum thresholds are used to justify the exclusion or the aggregation of minor GHG sources or the number of data points monitored.

### Completeness

All emissions sources relevant to the Project are included within an identified source category.

### Consistency

Uniform calculations are employed between reporting periods. Emissions calculations for each emissions source are calculated uniformly. If more accurate procedures and methodologies become available, documentation should be provided to justify the changes and show that all other principles are upheld.

### Accuracy

Measurements and estimates are presented, without bias as far as is practical. Where sufficient accuracy is not possible or practical, measurements and estimates are used while maintaining the principles of conservativeness and transparency.

### Transparency

Information is presented in an open, clear, factual, neutral and coherent manner that facilitates independent review. All assumptions are stated clearly and explicitly and all calculation methodologies and background material are clearly referenced.

### Conservativeness

Appropriate parameters affecting the Project's emissions sources are utilized in the calculation of the GHG Assertion. When parameters or data sources are highly uncertain, the choice of parameter or data source utilized results in an underestimation of the GHG Assertion. Note that any error, underestimation or overestimation, would be evaluated as a potential material error.

## 2.6 Limitation of Liability

Due to the complex nature of the operations within the Project and the inherent limitations of the verification procedures employed, it is possible that fraud, error, or non-compliance with laws, regulations, and relevant criteria may occur and not be detected.

### 3 Verification Team

The qualifications of the Verification Team and Internal Peer Reviewer will be provided in the Verification Report.

#### Lead Verifier, Jennifer Suke, P.Eng.

The Lead Verifier is responsible for all activities conducted within the verification, including overseeing the development of the Verification and Sampling Plans and the execution of the verification procedures. The Lead Verifier is the lead author of the Verification Report and executes the Verification Statement at the conclusion of the engagement.

#### Associate Verifier, Kate Nesbitt

The Associate Verifier works under the direction of the Lead Verifier to conduct the verification procedures.

#### Internal Peer Reviewer<sup>1</sup>, Julie Tartt

The Internal Peer Reviewer is not a member of the Verification Team and does not participate in the verification until the draft Verification Report and draft Verification Statement have been prepared. The Internal Peer Reviewer conducts an internal assessment of the verification to ensure the verification procedures have been completed, the results of the verification have been thoroughly documented, any issues or misstatements have been investigated and the verification evidence is sufficient to reach the verification conclusion described in the Verification Statement.

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<sup>1</sup> Note: the Internal Peer Reviewer is not a member of the Verification Team, but is listed here to keep the list of personnel involved in the engagement in one place.

## 4 Verification Process

The ICF approach for conducting verification of a GHG Assertion follows the tasks outlined in the following diagram. Although these tasks are generally completed sequentially, the order may be modified according to circumstances such as scheduling and data availability.

Pre-Engagement	Approach	Execution of Verification	Completion
<ol style="list-style-type: none"> <li>1. Selection of Lead Verifier</li> <li>2. Initiate Conflict of Interest Procedure</li> <li>3. Pre-Engagement Planning and Proposal Development</li> <li>4. Contract Execution</li> <li>5. Assess GHG Program &amp; Revise VMS as Required</li> <li>6. Initiate Verification Tracking</li> </ol>	<ol style="list-style-type: none"> <li>7. Selection of Verification Team</li> <li>8. Communication with Project Proponent</li> <li>9. Kick-off Meeting</li> <li>10. Verification Risk Assessment</li> <li>11. Draft Verification and Sampling Plan</li> </ol>	<ol style="list-style-type: none"> <li>12. Interview Project Personnel</li> <li>13. Conduct Verification Procedures</li> <li>14. Issue Clarification &amp; Data Request</li> <li>15. Revise &amp; Finalize Verification and Sampling Plan</li> <li>16. Address and Evaluate Outstanding Issues</li> </ol>	<ol style="list-style-type: none"> <li>17. Evaluate Evidence</li> <li>18. Hold Verification Findings Meeting (if necessary)</li> <li>19. Draft Verification Report &amp; Statement</li> <li>20. Internal Peer Review</li> <li>21. Completion of COI Form</li> <li>22. Independent Review of Impartiality</li> <li>23. Issue Verification Report &amp; Statement</li> <li>24. Close Verification File</li> <li>25. Develop and Issue Management Memo</li> </ol>

### 4.1 Pre-Engagement

Prior to submitting a proposal to conduct this verification, the following pre-planning steps were taken:

- The results of any previous business engagements or verifications with the Project Proponent were reviewed to determine if any previous unresolved conflicts may preclude ICF from engaging in the verification;
- The Project Proponent’s motivation for completing the verification was established; and
- A Conflict of Interest procedure was initiated that documents whether any perceived or real conflicts were found when considering threats due to:
  - Advocacy
  - Intimidation
  - Financial Interest
  - Self-Review
  - Familiarity/Sympathy
  - Incentives

Following the acceptance of the proposal and signing of a contract for services, the Verification Team was selected. The Verification Team for this engagement is comprised of the individuals identified in Section 3.

## 4.2 Approach

An extensive knowledge of the Project Proponent's business, the relevant industry, and the details of the Project itself are required to conduct a thorough verification that can lead to a conclusion. The initial information collected about the Project Proponent and the Project formed the basis of the preliminary draft Verification Plan. The development of the final Verification Plan is an iterative process; that is, the process will be completed several times through the course of the verification and the resulting plan will be updated as new information became available.

There are three types of risk associated with the GHG Assertion defined in ISO 14064-3:

- Inherent Risk
- Control Risk
- Detection Risk

The process of designing the Verification Plan began with the development of Verification Risk Assessment for both the Project as well as the Project Proponent. The steps in this process included:

- Reviewing the GHG Assertion, and the methodologies employed by the Project;
- Reviewing information on the industry and the specific Project under review;
- Assessing the likelihood that a material misstatement might exist in the GHG Assertion, if no controls were used to prevent misstatements in the GHG Assertion (i.e. inherent risk);
- Assessing the control environment and the corporate governance process (i.e. control risk); and
- Reviewing each emissions source identified in the Project, and evaluating the contribution of each source to the GHG Assertion and the associated potential material misstatement for each.

The results of the Verification Risk Assessment inform the development of the verification procedures, which will be documented in Section 4, Verification Findings, of the Verification Report. A summary of the Verification Risk Assessment is provided in Section 6 of this document. The draft Verification Plan was provided to the Project Proponent before proceeding with the verification.

## 4.3 Execution of Verification

With draft Verification and Sampling Plans in place, the verification procedures will be executed. This process involves collecting evidence, testing internal controls, conducting substantive testing, and developing a review file. Over the course of the verification, the draft Verification and Sampling Plans may change; the final Verification and Sampling Plans provided in the Verification Report reflect the verification parameters and procedures that were actually executed.

### Site Visit

A site visit will not be conducted for this Project for the crediting period of June 1, 2013 to June 30, 2014. A site visit to the Facility was conducted on January 7, 2014 by ICF as part of a verification for the previous reporting period and is considered to be applicable to this crediting period. Operations associated with the Project at the Facility fully ceased on June 30, 2014. Permission to waive the site visit was granted by ERSD through letter correspondence to Mr. Graham Harris with Blue Source Canada, dated December 11, 2014. In lieu of a site visit, ICF will conduct interviews with Project personnel to identify any operational changes at the Facility that may impact the GHG Assertion.

### Collecting Evidence and Review of Documentation

Sufficiency and appropriateness are two interrelated concepts that are fundamental to the collection of verification evidence. The decision as to whether an adequate quantity (sufficiency) of evidence has been obtained is influenced by its quality (appropriateness).

Through the execution of the verification procedures described in the Verification Report, the Verification Team will review three key forms of evidence including physical, documentary and testimonial:

- Management documentation: policies, programs, and procedures related to the collection, safeguarding, and management of the data supporting the GHG Assertion;
- Records: records comprise time-sensitive data, correspondence, and files including: the Offset Project Plan, quantification calculation worksheet(s), Petrinex records, electricity invoices, lab sampling results, and calibration reports;
- Interviews: the interviews will provide information regarding operations and data management and will provide evidence to support the sufficiency of data controls; and
- Computer systems: data systems and software used to capture and manage the GHG-related data and to calculate the GHG Assertion.

### Testing and Assessment of Internal Controls

The Verification Team will develop a sufficient understanding of the GHG information system and internal controls to determine whether the overall data management system is sound and if it supports the GHG Assertion. This assessment will seek to identify any weakness or gaps in the controls that pose a significant risk of not preventing or correcting problems with the quality of the data and examining it for sources of potential errors, omissions, and misrepresentations. It will incorporate an examination of three aspects of the Project Proponent's internal controls: (1) the control environment, (2) the data systems, and (3) the control and maintenance procedures.

### Assessment of Data

Substantive testing procedures will be used to assess the reasonability and validity of the GHG Assertion. Both quantitative and qualitative analysis will be performed to achieve the desired level of assurance. The verification procedures conducted and ICF's associated findings are described in Section 4 of the Verification Report. The verification procedures include verification activities designed to:

- Review the Project boundary, including a review of the completeness of emissions sources identified;
- Review the Project data sources to ensure the GHG Assertion is calculated based on metered or estimated data that meets the requirements of the *Quantification Protocol for Acid Gas Injection (Version 1, May 2008)*;
- Re-calculate the GHG Assertion, which demonstrates transparency and accuracy; and
- Review the GHG Assertion to ensure the emissions reductions calculated by the Project Proponent have been accurately reported.

### Clarification and Data Request

To facilitate information flow between the Verification Team and the Project Proponent, a consolidated request for additional information will be developed through the course of the verification and issued to the Project Proponent. This "Clarification and Data Request" will be used to document information requests and summarize the responses. It will also be used to document the Verification Team's assessment of each response.

## Developing a Review File

A review file (the “File”) comprised of documents, records, working papers and other evidence collected and created during the course of the review that support the review conclusions will be developed for this verification. This evidence stored in electronic format will serve to provide support for the verification conclusion, provide evidence that the verification was conducted in accordance with the criteria set forth in this document, and aid the Verifier in conducting current and future reviews.

The File will include:

- The GHG Assertion and supporting documentation, as submitted to ESRD;
- Decisions on the level of materiality and the results of the Verification Risk Assessment;
- Documentation on the Project Proponent’s internal controls;
- Descriptions of the controls assessment work and results;
- Documentation of the substantive testing procedures that were carried out and the results;
- Documentation of the confirmations outlined in Table 26 of ESRD’s *Technical Guidance for GHG Verification at Reasonable Level Assurance*, v4.0, February 2013;
- Copies of any correspondence with the Project Proponent or other parties relevant to the review;
- The Verification Team’s working papers;
- The Clarification and Data Request with documented responses from the Project Proponent; and
- Client data (copies of relevant records, spreadsheets, and other data files).

The File is the property of ICF and access to it is normally restricted to the Verifier and the Project Proponent. ICF will retain and safeguard the file for a minimum of seven years.

## 4.4 Completion

This engagement will be formally closed after the verification has been executed and the Verification Report has been finalized.

### Preparing the Verification Report

The purpose of the Verification Report is to document the verification findings. All misstatements are described and compared to the materiality threshold individually and in aggregate. The Verification Statement, which presents ICF’s verification conclusion, is included in the Verification Report.

### Internal Peer Review Process

Prior to releasing the Verification Report and Verification Statement, an internal review process is conducted by the Internal Peer Reviewer. This process ensures that:

- All steps identified as being required to complete the verification were completed;
- Any identified material or immaterial misstatements identified have been either:
  - corrected by the Project Proponent and reflected in the GHG Assertion; or
  - documented in the Verification Report, if misstatements persist at the conclusion of the verification.
- All required documentation detailing the verification process has been prepared, delivered, and retained.

### Closing the Engagement

The verification engagement will be closed out upon delivery of the final Verification Report.

## 5 Verification Schedule

The following schedule is planned for the verification (subject to change with agreement between the Verifier and the Project Proponent).

Description	Scheduled Date
Verification Kick-Off Meeting	January 8, 2015
Draft Verification Plan to Project Proponent	January 12, 2015
Site Visit	N/A
Interviews	January 22, 2015
Initial Clarification & Data Request	January 28, 2015
Draft Verification Statement and Report	February 13, 2015
Final Verification Statement and Report	February 20, 2015

## 6 Verification Risk Assessment

The process for completing a Verification Risk Assessment was described in Section 4.2. The following table describes the *inherent* and *control* risks analyzed by the Verification Team and the corresponding verification procedure(s) outlined in Section 4 of the Verification Report that have been designed to address these risks.

Description of Inherent Risks	Inherent Risk Evaluation	Description of Control Risks	Control Risk Evaluation	Verification Procedure(s)
Data sources used in calculations not transparent	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Review calculator and OPR regarding data sources, transcription, and data security
Calculation error	Low	N/A – ICF not relying on Responsible Party’s controls	N/A	Re-perform calculation using original data sources
Transcription error or inadequate sampling frequency	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare raw data records, invoices against data in Electronic Calculator for consistency
Data or calculations used are not representative	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare raw data records, invoices against data in Electronic Calculator for consistency
Meters are inaccurate	Low	Calibration not performed or failed	Medium	Verify meter calibration
Steam conditions not applicable to site	Low	N/A – ICF not relying on Responsible Party’s controls	N/A	Review calculator and OPR regarding data sources, transcription, and data security
Boiler efficiency used is not applicable to the boiler in Project	Low	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare raw data records, invoices against data in Electronic Calculator for consistency
Assumptions made in estimates are not conservative	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Review calculator and OPR regarding data sources, transcription, and data security
Data or calculations used are not accurate (meters not calibrated, inappropriate monitoring location, etc.)	High	N/A – ICF not relying on Responsible Party’s controls	N/A	Review calculator and OPR regarding data sources, transcription, and data security
Input data to SRU Simulation Report is not representative of reporting period	High	N/A – ICF not relying on Responsible Party’s controls	N/A	Evaluate SRU Simulation Report data inputs for relevance
Only LP flare is metered, quantification of flared gas volume not conservative	High	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview Project personnel responsible for quantifying emissions reductions regarding data metering and validation, data storage,

				data security, and any manual data entry or transcription
Unclear from OPP how fuel volume is reconciled, calculation methodology not transparent	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Review quantification formulae and estimation calculations prescribed by the Protocol against those described in the OPR and utilized in the GHG Emissions Calculator for each GHG emissions source/sink
Meter not specific for acid gas injection well, reported volume of gas injected may not be complete	High	Changes to operations or oversight of acid gas loss in process	High	Compare raw data records, invoices against data in Electronic Calculator for consistency
Normal operational changes at the Project may lead to significant changes in emissions during the reporting period.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare emission sources on the current Electronic Calculator with those in previous years
	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview Project operations personnel regarding changes to equipment inventory or changes in operation that have occurred in the time period covered by the GHG Assertion
Completeness or Consistency of GHG inventory documentation	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare each emissions source and sink listed in the OPP and OPR to those identified through interviews of operations personnel and observation during the site visit
	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview Project operations personnel regarding changes to equipment inventory or changes in operation that have occurred in the time period covered by the GHG Assertion
	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Through the site visit and understanding of the Project, evaluate any emissions sources or sinks that are not considered by the Protocol
Negligible emission sources may not meet the definition and threshold for "negligible" or may have changed in magnitude from previous reporting periods.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Evaluate the appropriateness and quantification of any negligible emissions sources
Methodologies and calculations for reporting may	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview key Project personnel regarding the application of applicability criteria

have changed from previous periods	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare emission sources on the current Electronic Calculator with those in previous years
Data used to quantify emissions is consolidated from several systems.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Develop a data life cycle diagram, or data map for each major GHG emissions source/sink and confirm with Project operations and GHG reporting personnel
	Low	N/A – ICF not relying on Responsible Party’s controls	N/A	Observe or interview Project operations personnel regarding the operation of data transfer systems during site tour, including manual data entry procedures and associated controls
Quantification of emissions within the GHG program requires the use of specific accepted methodologies.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Review quantification formulae and estimation calculations prescribed by the Protocol against those described in the OPR and utilized in the GHG Emissions Calculator for each GHG emissions source/sink
Accepted quantification methodologies may not be correctly implemented.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Calculate emissions reduction claim from original, second-party or third-party data
Quantification of emissions may contain arithmetic errors	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Calculate emissions reduction claim from original, second-party or third-party data
Information may be missing from the GHG Assertion.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Review GHG Assertion against guidance documents for completeness
Information may be incorrectly transcribed into the final GHG Assertion	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare calculated values to those in the GHG Assertion for transcription accuracy
There has been inconsistency in personnel responsible for environmental reporting within the Responsible Party over the past year or since the baseline period.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview Project personnel responsible for quantifying emissions reductions regarding data metering and validation, data storage, data security, and any manual data entry or transcription
The GHG Assertion has been prepared by a second-party consultant.	Low	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare each emissions source and sink listed in the OPP and OPR to those identified through interviews of operations personnel and observation during the site visit

Data is entered into a centralized data management system manually, which poses a risk of transcription error.	Low	N/A – ICF not relying on Responsible Party’s controls	N/A	Observe or interview Project operations personnel regarding the operation of data transfer systems during site tour, including manual data entry procedures and associated controls
The Project employs complex processes, relies on numerous measurement points, and/or complicated quantification procedures.	Low	N/A – ICF not relying on Responsible Party’s controls	N/A	Calculate emissions reduction claim from original, second-party or third-party data
A significant shut-down occurred at the Project over the reporting period.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview Project operations personnel regarding changes to equipment inventory or changes in operation that have occurred in the time period covered by the GHG Assertion
A change in the ownership structure of the Project has occurred since the prior reporting period or since crediting began.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Review of documents proving the ownership of the assets creating the emissions reductions
A verification or re-verification has identified material or significant non-material discrepancies.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Review audit findings and previous verification findings and relevance to the current GHG Assertion
Incorrect application of emission factors and default parameters used to quantify emission reductions	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare emission factors used in calculations against reference documents cited in Protocol and OPP
The project does not hold the required regulatory approvals.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Review of documents proving the approval of project activities
Normal operational changes at the Project may lead to significant changes in emissions during the reporting period.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare emission sources on the current Electronic Calculator with those in previous years
	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview Project operations personnel regarding changes to equipment inventory or changes in operation that have occurred in the time period covered by the GHG Assertion

Completeness or Consistency of GHG inventory documentation	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare each emissions source and sink listed in the OPP and OPR to those identified through interviews of operations personnel and observation during the site visit
	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview Project operations personnel regarding changes to equipment inventory or changes in operation that have occurred in the time period covered by the GHG Assertion
	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Through the site visit and understanding of the Project, evaluate any emissions sources or sinks that are not considered by the Protocol
Negligible emission sources may not meet the definition and threshold for "negligible" or may have changed in magnitude from previous reporting periods.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Evaluate the appropriateness and quantification of any negligible emissions sources
Methodologies and calculations for reporting may have changed from previous periods	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Interview key Project personnel regarding the application of applicability criteria
	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Compare emission sources on the current Electronic Calculator with those in previous years
Data used to quantify emissions is consolidated from several systems.	Medium	N/A – ICF not relying on Responsible Party’s controls	N/A	Develop a data life cycle diagram, or data map for each major GHG emissions source/sink and confirm with Project operations and GHG reporting personnel

The *detection risk* is a measure of the risk that the verification procedures will fail to detect material misstatements, should such misstatements exist. The verification procedures will be developed to address inherent and control risks, while ensuring the level of detection risk is sufficiently low to reach a verification conclusion at a reasonable level of assurance.

The results of the Verification Risk Assessment will be utilized by the Verification Team to develop the verification procedures, which are outlined in Section 4 of the Verification Report.



## Sampling Plan

### Bonavista Energy Corporation, Bonavista Acid Gas Injection at South Rosevear

The following sampling plan defines the methodology used to select data to be tested under verification procedures related to confirmation of data through sampling of substantiating evidence. All other procedures that do not include sampling, are described in the Verification Report.

Data Description	Verification Procedure(s)	Sample Size	Sampling Methodology and Justification
Fuel gas composition	Compare raw data records, invoices against data in Electronic Calculator for consistency	All monthly lab analysis reports for the reporting period	Sampled all monthly gas composition analysis reports for the reporting period.
Baseline fuel gas volume	Review calculator and OPR regarding data sources, transcription, and data security	All sources for engineering design parameters used in the calculation of Baseline fuel gas volume	N/A – No sampling, all data reviewed
Acid gas composition	Compare data inputs to the SRU Simulation Report for relevance	All monthly acid gas and fuel gas lab analysis reports for the reporting period	Sampled all monthly gas composition analysis reports for the reporting period.
Volume of acid gas injected	Compare raw data records, invoices against data in Electronic Calculator for consistency	All Monthly Gas Processing Plant Sulphur Balance Reports (S-30) for the reporting period	N/A – No sampling, all data reviewed. S-30 reports are generated by the Responsible Party and not considered substantiating evidence.
Volume per cent of CO <sub>2</sub> in Tail Gas	Compare raw data records, invoices against data in Electronic Calculator for consistency	South Rosevear SRU Simulation Report	N/A – No sampling, all data reviewed
Fuel gas volume to acid gas flare	Compare raw data records, invoices against data in Electronic Calculator for consistency	All Monthly Gas Processing Plant Sulphur Balance Reports (S-30) for the reporting period	N/A – No sampling, all data reviewed
Volume of acid gas flared	Compare raw data records, invoices against data in Electronic Calculator for consistency	All Monthly Gas Processing Plant Sulphur Balance Reports (S-30) for the reporting period	N/A – No sampling, all data reviewed



Data Description	Verification Procedure(s)	Sample Size	Sampling Methodology and Justification
Volume of sour gas produced from well 14-14	Compare raw data records, invoices against data in Electronic Calculator for consistency	Single Well Report – all months (2) of production for the reporting period	N/A – No sampling, all data reviewed
Volume per cent of CO <sub>2</sub> in gas from well 14-14	Compare raw data records, invoices against data in Electronic Calculator for consistency	CO <sub>2</sub> composition plots for all producing months (2) in the reporting period	N/A – No sampling, all data reviewed
Volume of sour gas produced from well 9-22	Compare raw data records, invoices against data in Electronic Calculator for consistency	Single Well Report – all months (9) of production for the reporting period	N/A – No sampling, all data reviewed
Volume per cent of CO <sub>2</sub> in gas from well 9-22	Compare raw data records, invoices against data in Electronic Calculator for consistency	CO <sub>2</sub> composition plots for all producing months (9) in the reporting period	N/A – No sampling, all data reviewed
Electricity consumption from acid gas compressors	Compare raw data records, invoices against data in Electronic Calculator for consistency	Electricity Billing History for all months in the reporting period	N/A – No sampling, all data reviewed



## Conflict of Interest Checklist

Question	Yes	No
<b>1. Can the verifying organization or the Verification Team members directly benefit from a financial interest in the Project Developer or the Project Developer's Project?</b>		<b>X</b>
<i>For example:</i> <ul style="list-style-type: none"> <li>• Owning shares of the Project Developer;</li> <li>• Having a close business relationship with the Project Developer;</li> <li>• Contingent fees relating to the results of the engagement;</li> <li>• Potential employment with the Project Developer; or</li> <li>• Undue concern about the possibility of losing the verification or other fees from the Project Developer.</li> </ul>		
<b>2. Can the verifying organization or Verification Team members be in a position of assessing their own work?</b>		<b>X</b>
<i>For example:</i> <ul style="list-style-type: none"> <li>• Provided GHG consultation services to the project;</li> <li>• Provided validation for the project;</li> <li>• If providing non-GHG work for the company, consideration needs to be given as to how potential and perceived conflicts of interest can be managed;</li> <li>• A member of the Verification Team was previously employed with the company.</li> </ul>		
<b>3. Does the verifying organization or a member of the Verification Team, or a person in the chain of command for the verification, promote or be perceived to promote, a Project Developer's position or opinion to the point that objectivity may, or may be perceived to be, compromised?</b>		<b>X</b>
<i>For example:</i> <ul style="list-style-type: none"> <li>• Dealing in, or being a promoter of, GHG credits on behalf of a Project Developer;</li> <li>• Advocating on behalf of the client to advance a particular position or point of view on an issue that directly affects the GHG assertion; or</li> <li>• Acting as an advocate on behalf of the Project Developer in litigation or in resolving disputes with third parties.</li> </ul>		
<b>4. Is one or more of the Verification Team too sympathetic to the Project Developer's interests by virtue of a close relationship with a Project Developer, its directors, officer or employees?</b>		<b>X</b>
<i>For example:</i> <ul style="list-style-type: none"> <li>• A person on the Verification Team has a close personal relationship with a person who is in a senior GHG compilation role at the Project Developer; or</li> <li>• The Verification Team or a person of influence on the Verification Team has accepted significant gifts or hospitality from the Project Developer.</li> </ul>		
<b>5. Is a member of the Verification Team or a person in the chain of command deterred from acting objectively and exercising professional skepticism by threats, actual or perceived, from the directors, officers or employees of the Project Developer?</b>		<b>X</b>
<i>For example:</i> <ul style="list-style-type: none"> <li>• The threat of being replaced as a third party verifier due to a disagreement with the application of a GHG quantification protocol;</li> <li>• Fees from the Project Developer represent a large percentage of the overall revenues of the verifying organization;</li> <li>• The application of pressure to inappropriately reduce the extent of work performed in order to reduce or limit fees; or</li> <li>• Threats of litigation from the Project Developer.</li> </ul>		

The declaration made in this statement is correct and truly represents ICF Consulting Canada, Inc. and the members of the Verification Team. Dated this fourth day of March, 2015

**Jennifer Suke, P.Eng.**  
Professional Engineer, Alberta (164930)  
Lead Verifier and Designated Signing Authority  
ICF Consulting Canada, Inc.  
Calgary, Alberta, Canada

**Duncan Rotherham**  
Vice President  
ICF Consulting Canada, Inc.  
Toronto, Ontario, Canada