Verification Report for Emission Reductions Relating to J. B. Hunt Trucking Intermodal Project Including Emission Breakdown by State

Reporting Period: August 1, 2010 – August, 31 2011

Prepared for:
Blue Source, LLC

September 30, 2011

Ruby Canyon Engineering

743 Horizon Ct. Suite 385

Grand Junction, Colorado 81506

(970) 241-9298

Table of Contents

1.0 Introduction 1
1.1 Responsible Parties 1
1.2 Project Background 1
2.0 Summary of Verifier Qualifications and Experience 2
3.0 Verification Plan 2
3.1 Objectives 3
3.2 Eligibility Criteria 3
3.3 Scope 3
3.4 Materiality 3
4.0 Assessment of GHG Data and Information 4
4.1 Project boundary 4
4.1.1 Baseline scenario 4
4.1.2 Technologies and processes 4
4.1.3 GHG sources, sinks and/or reservoirs 4
4.1.4 Types of greenhouse gases 4
4.1.5 Start Date & Current Report Period 4
4.2 Sampling Plan 5
4.3 Assessment Against Verification Criteria 5
4.3.1 Eligibility 5
4.4 Assessment of GHG Information and Information System Controls 5
4.4.1 Dispatched Loads 5
4.4.2 Miles Traveled 5
4.4.3 Fuel Economies 6
4.4.4 Variance Factors 6
5.0 Evaluation of the GHG Assertion 6
5.1 Emission Reductions 6
5.2 Finding Overview 7
6.0 Verification Statement 8

1.0 Introduction

Ruby Canyon Engineering (RCE) was contracted by Blue Source, LLC (Blue Source) to perform the verification of the fourth Reporting Period of the J. B. Hunt Trucking Intermodal emission reduction ("Project") listed with the Canadian Standards Association (CSA).

1.1 Responsible Parties

Blue Source, LLC	J.B. Hunt Transport, Inc.
Mr. Mahesh Gundappa Vice President, Engineering Blue Source, LLC 3165 E. Millrock Drive, Suite 340 Holladay, UT 84121 Phone: (919) 649 8392 Fax: (919) 460 9177 E-mail:mgundappa@bluesource.com	Mr. Gary Whicker Senior Vice President – Engineering Services J.B. Hunt Transport, Inc. 615 J.B. Hunt Corporate Drive Lowell, Arkansas 72745 Phone – (479) 820-8143 Fax – (479) 820-4499 E-mail – Gary_Whicker@jbhunt.com

1.2 Project Background

Blue Source is an active supplier of emission reduction credits sourced from geologic sequestration, conservation, transportation, and avoidance projects and entities. J.B. Hunt Transport Services, Inc. (J.B. Hunt) is one of the largest truck-load transportation and logistics companies in North America.

In 1989, J.B. Hunt formed a partnership with the former Santa Fe Railroad (now Burlington Northern Santa Fe). Over the next decade new intermodal concepts were developed and tested. In 2000, the J.B. Intermodal (JBI) business segment was formed within J.B. Hunt and over 300 million USD of capital was invested in containers, chassis, tractors and software to support the new JBI.

The goal of intermodal ground transport is to optimize the best of both truck and rail modes. Freight is loaded in containers and picked up at a shipper's location by a JBI tractor or third party dray company for transport to the rail yard. The freight is then transported from highway vehicles to rail cars for what is typically the longest leg of the route. At the destination rail yard, JBI freight is then transferred from the rail car and delivered by JBI or dray carriers to the final destination. This method of transporting freight via intermodal reduces fuel consumption and greenhouse gas emissions. Transporting freight via trains is over three times more efficient than trucks on a ton-mile basis. Thus, using trains to transport freight has the potential to provide significant greenhouse gas emissions reductions.

Estimates of baseline emissions, actual project emissions, and emission reductions were verified in accordance with the ISO 14064-3 guidelines to a Reasonable Level of Assurance. This verification is based on data obtained from J.B Hunt and Blue Source, and uses the protocol entitled *Blue Source's Project Description Report – GHG Reduction Protocol for J. B. Hunt's Intermodal Transport Project (December 2008)* that was developed for this project. Additional changes were made to the calculation methodology in RP3 in Blue Source's *GHG Assertion of GHG Emission Reductions from JB Hunt's Intermodal Transport Project (October 2010)*, where the emission reductions are disaggregated into individual States. The protocol was based on established emission estimation techniques, conservative estimates, accurate/reliable data sources, emissions factors, and documented methodologies. Verification findings indicate that all significant emission sources that materially affect the emission reductions are included within the scope of the project. Emission factors and methodology used to calculate actual emissions are consistent by source type (truck or rail). The sources of data are documented and records are maintained by J.B. Hunt.

Emission reduction estimates were determined annually over the reporting period. Baseline emissions are the actual carbon dioxide equivalents (CO_2e) emissions that would have been released to the atmosphere in the absence of the investment that JBI made in their intermodal program. This verification report documents that CO_2e emission credits totaling 2,307,480 tonnes were created for the reporting period of August 1, 2010 – August 31, 2011.

2.0 Summary of Verifier Qualifications and Experience

RCE is a leading GHG verification company in the North American voluntary carbon market and maintains a staff of experienced GHG verifiers. RCE staff possesses skills with emissions estimation, establishing project boundaries, and baseline determination, as wells as extensive experience with the various calculation methods, mass balance equations, site-specific and default emission factors, and the concepts of materiality. RCE completed the ANSI accreditation program to become an ISO 14065 approved GHG validation and verification (V&V) body on October 9, 2009. RCE is currently an approved verifier for the CSA, CAR, PCT, TCR, and ACR GHG registries and has completed GHG verifications in the landfill gas, livestock, coal mine methane, oil & gas, renewable energy, ozone depleting substances, nitrous oxide, and transportation sectors. RCE is already ANSI-accredited to perform verifications under Project-Level Scope for Scope 1 (combustion, fuel switching) and Scope 2 (process emissions, N_2O, ODS), Project-Level Scope 5 (agriculture) and Scope 6 (waste gas, landfill and coal mine methane).

3.0 Verification Plan

RCE created a project specific verification plan that included risk assessment and a desktop sample plan. RCE did not perform a site-visit for this reporting period since RCE completed a detailed facility visit during the previous reporting period. RCE created the verification plan based on the following criteria:

Table 1 – Verification Assumptions

REPORTING PERIOD	o August 1, 2010 – August 31, 2011
PROTOCOLS AND STANDARDS	o CSA GHG CleanProjects™ Registry: Blue Source's Greenhouse Gas Emission Reduction Protocol for JB Hunt's Intermodal Transport Project, December 2008 o ISO 14064-2 "Greenhouse gases – Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements" o ISO 14064-3 "Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions" o CSA GHG CleanProjects™ Registry: Verification Guidance
LEVEL OF ASSURANCE & MATERIALITY	o Reasonable Level of Assurance o Materiality (5%)

Prior to starting the verification, RCE developed a desktop verification plan that was followed throughout the verification. The verification plan consisted of the following activities:

- Prior to completing a verification agreement, RCE completed its internal COI form to identify any potential conflict of interest with the Project proponent (J.B. Hunt) or Project developer (Blue Source). RCE's COI policy conforms to ISO 14065 requirements.
    - The potential for COI was identified to be Low
- Blue Source sent preliminary data and information to RCE on September 1, 2011.
- A teleconference verification kick-off meeting was held with Mahesh Gundappa on September 12, 2011. During the kick-off meeting RCE reviewed the verification objectives and process, the verification schedule, and requested the verification background documents.

- RCE performed a strategic review and risk assessment of the received data and support documents in order to understand the scope and areas of potential risk in the GHG emissions reductions.
- A risk-based desktop sampling plan was developed based upon the strategic review and risk assessment. The verification plan and desktop sampling plan were used throughout the verification and were revised as needed based upon additional risk assessments.
- A risk-based desk-top review of the submitted verification documents was performed. The desk top review included an assessment of the GHG calculation methods and inputs, source data completeness, GHG management and monitoring systems, and record retention practices.
- Following a review of the GHG assertion, data and supporting documents, RCE sent Blue Source additional data/information requests via the List of Findings on September 15, 22, & 29, 2011, and held several conference calls with Blue Source and J.B. Hunt to discuss the required documents in more detail. All items in the List of Findings were closed out on September 30, 2011.
- A senior technical review of the verification plan, sampling plan, report and statement was conducted.
- A final verification report and statement, and listing of findings were developed.
- An exit meeting was held with the client on September 30, 2011.

3.1 Objectives

The goal of the verification activities was to ensure that the Project was eligible under the Canadian Standards Association (CSA) GHG CleanProjects™ Registry guidelines, the GHG assertion made by Blue Source was materially correct, and that the calculation methods and data gathering and monitoring systems used were compliant with GHG standards and CSA guidelines. Furthermore, the verification activities ensure that the data provided to RCE is well documented and free of any material errors.

3.2 Eligibility Criteria

To be eligible under the CSA GHG CleanProjects™ Registry guidelines a project must follow the GHG emission reduction reporting methods in ISO 14064-2, which specifies principles, requirements and provides guidance at the project level for quantifying and reporting GHG emission reductions or removal enhancements.

3.3 Scope

The scope of the verification activities includes the following:

- Establish the eligibility of the Project under the CSA's GHG CleanProjects™ Registry
- Verify the existence and ongoing operation and maintenance of the Project
- Verify the source of the raw data
- Ensure the completeness and accuracy of the GHG reduction calculations.
- Verify that the monitoring, metering, and recordkeeping procedures conducted by the Project operator meet the level of assurance defined for the Project

3.4 Materiality

RCE determined that the GHG assertion was materially accurate within the 5% materiality threshold by verifying the following information:

- Number of loads dispatched by J. B. Hunt
- Documented miles driven by trucks
- Estimated miles traveled for trainloads

- Fuel economies of both the trucks and trains
- Mileage variance factors for trucks and trains
- BTU/ton-mile variance factors for each railroad
- Intermodal share of freight transportation in U.S.

4.0 Assessment of GHG Data and Information

The following sections define the scope to which the GHG verification activities were limited to.

4.1 Project boundary

The project boundary includes truck loads dispatched by J.B. Hunt for their JBT and JBI fleets (including the independent contractors and outsourced drays), and the rail intermodal loads contracted through J.B. Hunt, but dispatched through third-party railroad companies.

4.1.1 Baseline scenario

In the absence of the Project Activities, 84% of the loads of freight would have been transported by over-the-road JBT trucks rather than by railroads. RCE verified this baseline scenario to be appropriate and conservative.

4.1.2 Technologies and processes

A fuel-based methodology is used to calculate all CO_2e emissions. Thus, the largest data requirements are truck loads (empty, loaded and deadhead), miles traveled, and fuel economy (which is then converted to fuel consumption). J.B. Hunt engineers provided database queries and resulting spreadsheets containing the annual dispatch, empty and deadhead truck loads, train loads, and miles, load weights, truck fleet fuel economies, and rail miles.

The Project utilizes software systems PC-Miler, PC-Railer, and Rand McNally to calculate baseline truck, rail, and JBI Dray mileage.

PC-Miler and PC-Railer are accepted industry wide and complies with U.S. DoD and GSA distances for approved freight rating and billing. Given this certification, RCE has a high level of assurance of the accuracy and use of the software.

J.B. Hunt has integrated Rand McNally mileage into their data management system and can run jobs that calculate mileage and routes for any given ramp pair. The product is used industry wide and also provides a high level of assurance in the accuracy of the mileage provided.

The baseline truck miles are calculated using PC- Miler by entering the starting and ending ramp pairs to calculate the route and total number of miles. The project railroad miles are calculated using PC Railer and entering railroad ramp pairs.

4.1.3 GHG sources, sinks and/or reservoirs

The GHG emissions sources applicable to the Project include mobile source combustion of diesel fuel.

4.1.4 Types of greenhouse gases

The GHG mobile source emissions applicable to this Project include CO_2, CH_4, and N_2O.

4.1.5 Start Date & Current Report Period

- The Project Start Date of the 10 year Crediting Period was October 1, 2006
- This report documents verification activities for August 1, 2010 – August 31, 2011.

4.2 Sampling Plan

The majority of the GHG assertion baseline (~70%) resulted from the intermodal loads delivered by the Burlington Northern & Santa Fe (BNSF) railroad. Actual track miles and recent BNSF fuel economies were available for BNSF. In addition, actual track miles and railroad-specific fuel economies were available for the next largest railroad Norfolk Southern (NS) which represented approximately 17% of the GHG assertion. Again, actual track miles and recent NS fuel economies were available.

RCE's risk-based desktop sample plan was based on the following:

- Review of the GHG report and assertion for errors or misstatements
- Verify use of appropriate variance factors, fuel efficiencies, and mileage software
- Review of GHG information and control systems and GHG management
- Verify that any changes to trucking dispatch, data management, and maintenance operations, have been documented since the previous verification
- Completeness of supporting documentation to confirm baseline scenario (actual loaded miles)
- Calculation methodologies were correctly applied
- Calculations and results were materially correct
- Verify that all the necessary monitoring and metering were in place and maintained
- Verify QA/QC procedures are in place and being followed
- Verify the documentation trail of a sample of customer loads (dispatched ramp pair miles) to accounting (paid bill of ladings and invoices)

4.3 Assessment Against Verification Criteria

4.3.1 Eligibility

The CSA's GHG CleanProjects™ Registry guidelines indicate a project must follow the GHG emission reduction reporting methods in ISO 14064-2. RCE has determined that the project has met these requirements.

4.4 Assessment of GHG Information and Information System Controls

4.4.1 Dispatched Loads

Dispatched loads are entered from J.B. Hunt's facilities and entered into the truck's on-board computer. The load is tracked and the data is transferred to J.B. Hunt's mainframe computer database. Output files are queried for daily reports. J.B. Hunt uses error checking software to match each load order with actual truck data.

4.4.2 Miles Traveled

Data for the trucks were collected by the J.B. Hunt on-board truck computers, and communicated via a satellite tracking system to an in-house database system. J.B. Hunt checks the truck's odometer readings with the dispatched miles to record any variances. The variances are tracked and recorded each month, and then applied to the dispatched amounts.

Actual rail miles were determined from data obtained from BNSF and NS railroads for various ramp pairs used for transporting JB Hunt intermodal loads. For the remaining ramp pairs J.B. Hunt used software PC Railer to estimate the rail miles. Using this approach, approximately 99 percent of the total track miles traveled were determined. These actual rail miles were compared to PC Railer miles in the JBI reporting system and indicated that the actual track miles were about 10 percent greater than miles generated from the software. To account for this difference, the reported rail miles were increased by a variance factor (discussed in Sec. 4.4.4).

4.4.3 Fuel Economies

Fuel economies for each truck were determined using data from the fuel billing system. The driver must enter the truck identification number, and odometer reading before receiving fuel from the fueling station. Fuel economies are recorded each time a driver fills up a truck with diesel. J.B. Hunt accurately calculates and documents truck fuel economies for both the JBI and JBT fleets separately on a monthly basis. The fueling system has safeguards that monitor the time between fuel-ups, mileage, and the truck's identification number to prevent partial fuel-ups that will affect the MPG tracking. If the truck does not meet all of the criteria, the fuel-up will not be authorized without further investigation from J.B. Hunt.

4.4.4 Variance Factors

Trucks - Actual truck miles driven by both the JBI and JBT fleets are greater than the standard PC Miler miles used by the dispatched load orders. In order to reflect actual miles driven, the PC Miler miles are multiplied by two factors. The first, a *loaded mile adjustment factor*, combines the loaded truck, empty truck, and deadhead miles, and compares them to the PC Miler miles. The second factor applied to the Rand McNally miles is called the *variance factor*. This represents the additional miles driven by the truck drivers that are not required for shipment of the dispatched loads. The causes of additional miles may include road construction detours and food stops. RCE verified the monthly variance factors applied to truck miles in the GHG assertion.

Trains - Actual train miles driven are more than the standard PC Railer miles used by the dispatched load orders. In order to reflect actual miles driven, the PC Railer miles are multiplied by two factors. The first, a *loaded mile adjustment factor*, accounts for the actual miles traveled, and compares them to the PC Railer miles. The second factor applied to the PC Railer miles is called the *empty mile variance factor*. This represents the additional miles driven by the trains that are not required for shipment of the dispatched loads. RCE verified the monthly variance factors applied to train miles in the GHG assertion.

Trains - Information regarding the energy intensities (Btu/revenue-ton-miles) of the railroads was obtained from the American Railroad Association and the two largest carriers for J.B. Hunt, BNSF and NS railroad for 2009 and 2010. In addition, studies from 2001 and 2005 showed the energy intensities of their intermodal locomotives are approximately 21 percent less efficient than their overall fleet average (600 intermodal gross ton-miles/gallon of diesel vs. 762 average gross ton-miles/gallon of diesel). The reasons for the difference are the use of larger locomotive engines for intermodal transport, requiring travel at higher than average speeds (70mph vs. 45mph). In addition to a 21 percent variance factor, an additional 1 percent variance factor is applied to account for rail yard emissions for loading and unloading containers (using overhead cranes and Hostler trucks).

5.0 Evaluation of the GHG Assertion

5.1 Emission Reductions

Table 2 outlines the total quantity of CO_2e of baseline emissions, project emissions, and emission reductions from the Project for the reporting period August 1, 2010 to August 31, 2011.

Table 2: GHG Emission Reductions (CO_2e (tonnes)	August 1-December 31, 2010	January 1 – August 31, 2011	Total
Baseline Emissions	1,592,265	2,643,946	4,236,211
Project Emissions	727,275	1,201,457	1,928,731
Total Emission Reductions	**864,990**	**1,442,490**	**2,307,480**

Table 3 summarizes the total emission reductions by state for the Reporting Period August 1, 2010 – August 31, 2011.

Table 3: GHG Emission Reductions by State – CO_2e (tonnes)

State	CO_2e	State	CO_2e	State	CO_2e	State	CO_2e
AL	22,076	IA	80,234	NV	64,078	SD	18,565
AZ	219,490	KS	19,482	NH	0	TN	94,215
AR	81,535	KY	20,013	NJ	705	TX	171,285
CA	151,099	LA	15,033	NM	195,665	UT	93,229
CO	81,415	ME	0	NY	6,226	VT	11
CT	2,732	MD	9,171	NC	9,062	VA	41,863
DE	0	MA	0	ND	23,233	WA	22,396
DC	0	MI	0	OH	77,605	WV	8,271
FL	11,923	MN	16,700	OK	146,413	WI	9,197
GA	0	MS	12,502	OR	29,334	WY	88,146
ID	31,602	MO	78,242	PA	63,361		
IL	51,004	MT	67,858	RI	107		
IN	33,350	NE	132,979	SC	5,871	Total	**2,307,480**

5.2 Finding Overview

Blue Source provided sufficient evidence and adequate documentation of their emission estimates, data collection procedures, monitoring and quality control procedures. The verification process focused on the documented loads dispatched, variance factors applied to reconcile between actual miles traveled and PC Miler and PC Railer outputs, and assigned fuel economies for both truck and trains. RCE also investigated the use of J.B, Hunt's data management systems that were used to query data and information from the company's data warehouse. Finally, RCE conducted a detailed review of the GHG assertion spreadsheets that were used to quantify the emission reductions.

There were no material findings during the verification activities. All, non-material findings were corrected and Blue Source provided sufficient evidence for all information requests and clarifications.

6.0 Verification Statement

RCE conducted a risk-based analysis of the J. B. Hunt Trucking Intermodal Emission Reduction Project ("Project") GHG assertion where RCE performed a strategic review of the Project data and evidence. Based upon the processes and procedures and the evidence collected, RCE concludes with a reasonable level of assurance that the Project emission reductions during the reporting period August 1, 2010 through August 31, 2011 can be considered:

- In conformance with CSA GHG CleanProjects™ Registry: Blue Source's Greenhouse Gas Emission Reduction Protocol for JB Hunt's Intermodal Transport Project, December 2008
- In conformance with the requirements of ISO 14064-2 and ISO 14064-3
- without material discrepancy, and
- verified to the reasonable level of assurance.

Table 4 the verified State-by-State emission reductions by vintage (2010 and 2011)

Verification Team Signatures

Lead Verifier – Michael Cote	Senior Reviewer – Sally Phipps
	

Table 4: Verified GHG Emission Reductions by State and Vintage - CO_2e (tonnes)

State	August 1-December 31, 2010	January 1 – August 31, 2011	Total
Alabama	7,714	14,362	**22,076**
Arizona	82,457	137,034	**219,491**
Arkansas	30,831	50,704	**81,535**
California	58,456	92,643	**151,099**
Colorado	31,649	49,765	**81,414**
Connecticut	961	1,771	**2,732**
Delaware	-	-	**0**
Washington DC	0	0	**0**
Florida	3,874	8,049	**11,923**
Georgia	-	-	**0**
Idaho	11,566	20,036	**31,602**
Illinois	18,647	32,357	**51,004**
Indiana	11,920	21,430	**33,350**
Iowa	30,865	49,369	**80,234**
Kansas	7,246	12,236	**19,482**
Kentucky	6,844	13,169	**20,013**
Louisiana	4,603	10,430	**15,033**
Maine	-	-	**0**
Maryland	3,279	5,893	**9,172**
Massachusetts	-	-	**0**
Michigan	-	-	**0**
Minnesota	6,483	10,217	**16,700**
Mississippi	4,255	8,247	**12,502**
Missouri	28,914	49,329	**78,243**
Montana	26,497	41,361	**67,858**
Nebraska	51,250	81,728	**132,978**
Nevada	25,152	38,926	**64,078**
New Hampshire	-	-	**0**
New Jersey	276	428	**704**
New Mexico	73,979	121,685	**195,664**
New York	2,528	3,698	**6,226**
North Carolina	2,850	6,211	**9,061**
North Dakota	8,925	14,308	**23,233**
Ohio	28,904	48,702	**77,606**
Oklahoma	55,949	90,665	**146,614**
Oregon	10,295	19,039	**29,334**
Pennsylvania	23,461	39,900	**63,361**
Rhode Island	40	67	**107**
South Carolina	1,753	4,118	**5,871**
South Dakota	7,498	11,067	**18,565**
Tennessee	34,300	59,915	**94,215**
Texas	61,451	109,835	**171,286**
Utah	36,159	57,070	**93,229**
Vermont	10	2	**12**
Virginia	14,424	27,439	**41,863**
Washington	8,651	13,745	**22,396**
West Virginia	2,776	5,495	**8,271**
Wisconsin	3,559	5,638	**9,197**
Wyoming	33,739	54,407	**88,146**
Total	**864,990**	**1,442,490**	**2,307,480**