Xcel Energy®
RESPONSIBLE BY NATURE™

1800 Larimer St. Suite 1300
Denver, Colorado 80202

May 28, 2015

Ms. Shannon McMillan
Colorado Air Pollution Control Division
4300 Cherry Creek Drive South, APCD-SS-B1
Denver, CO 80246-1530

RE: Baxter Compressor Station, Permit 11GA3514
Annual Colorado Regulation 7 LDAR Report

Dear Mrs. McMillan,

Attached are the results of the annual Optical Gas Imaging (OGI) Survey that was completed March 19, 2015 for the Baxter Compressor Station that is located in Garfield County, Colorado. This survey was completed by the Trihydro Corporation to screen for leaks and verify compliance for Colorado Department of Public Health and Environment in accordance with Colorado Regulation 7 Leak Detection and Repair Monitoring Requirements.

The project objectives were to complete the OGI Survey at Baxter to identify leaking components that fall under the requirements of Colorado Regulation 7. Any components identified as leaking during the inspection were documented and tagged with a visible leaker tag. First attempts at repairs were completed on-site by Public Service Company of Colorado personnel for all leaks that were not placed on a Delay of Repair Log. If a repair attempt was made and the leak was no longer visible with the infrared camera, the leak was documented as being repaired along with the date of initial repair.

Instrument checks were performed for the infrared camera pursuant to the methods described in Subpart A of 40 CFR 60. The Environmental Protection Agency (EPA) established the daily instrument checks as part of the alternative work practice in Section 60.18(a)(2)(g), and while not required under Colorado Regulation 7, Trihydro views this process as a best practice to demonstrate the quality of monitoring that was completed.

In summary, Trihydro personnel utilized an infrared camera to observe components and equipment that are considered to be in VOC (Volatile Organic Compound) Service. In total, 17 components and 1 tank vent were found leaking and were documented in the recordkeeping portion of the attached annual report.

Should you have any questions please feel free to contact me at 303-294-2185.

Sincerely,

Michael J. Barrett
Environmental Analyst
Xcel Energy

Enclosures.

cc: Ron Smith
Gary Magno
ES File

Baxter Compressor Station

2015 LDAR Annual Report

Leak Detection and Repair (LDAR) Annual Report Form (Version December 18, 2014)

Regulation 7, Section XVII.F.9

Section 1: General Information

Company Name:	Public Service Company of Colorado		
Inspection Year:	2015	# Facilities Inspected:[1]	1
Contact Person:	Michael J. Barrett	Title:	Environmental Analyst
Phone Number:	303-294-2185	E-mail Address:	Michael.J.Barrett@xcelenergy.com

[1] Identify the list of facilities inspected in the Addendum Table 1 in Section 5

Section 2: LDAR Inspections

Inspection Method	# Inspections
AIMM at Natural Gas Compressor Stations:	1
AIMM at Well Production Facilities:	0
AVO at Well Production Facilties:	0
TOTAL	1

Section 3: Leaking Components Details

Component Type	# Leaks Identified	# Leaks Repaired	# Leaks on Delay of Repair List as of Dec 31
Valves:	2	0	2
Connectors:	15	11	4
Flanges:	0	0	0
Pump Seals:	0	0	0
Pressure Relief Devices:	1	0	1
TOTAL	18	11	7

Section 4: Responsible Official Certification

All information contained in the LDAR Annual Report must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section 1.B.38.

Please note the Colorado Statutes state that any person who knowingly, as defined in §18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of §25-7 122.1, C.R.S.

I, the Responsible Official, have reviewed this annual report in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this report are true, accurate and complete.

Printed/Typed Name - Responsible Official:	Title:
Luke A. Litteken	Vice President Gas Operations
Signature:	Date:
Luke A. Litteken	5/28/2015

Section 5: Facilties Inspected

Addendum Table 1		
Plant AIRS ID (e.g., 123/7896)	**Location (e.g., Lat/Long)**	**Facility Name**
045/0121/006	39.394616/-108.394619	

Baxter Compressor Station

Appendix A: 2015 LDAR Recordkeeping Form

Leak Detection and Repair (LDAR) Recordkeeping Form

Regulation 7, Section XVII.F.8

Version: October 15, 2014

Section 1: Site Information

Facility Name:	Baxter Compressor Station						
AIRS ID:	045/0121/006		County:	Garfield			
Location (decimal degrees):	Latitude:	39.394616	Longitude:	-108.394619	Section, Township, Range:	Section 3, 8 South, Range 104 West	
Date of Inspection:	3/19/15	Inspection Type:	☑	Initial AIMM	☐	Periodic	
Method used for inspection (i.e. Method 21, IR Camera, AVO, etc):	IR Camera, Method 21						
Name of person completing inspection:	Ted Koller & Curt Benson - Trihydro Corporation						

Section 2: Summary of Leaking Components

Table 1: Summary of Leaking Components	
Component Type	# Leaks
Valves:	3
Connectors:	14
Flanges:	0
Pump Seals:	0
Pressure Relief Devices (PRD):	1
TOTAL	18

Section 3: Leaking Components Details

Table 2: Monitoring and Repair of Leaking Components[1]

Component ID	Component Type	Monitoring Method Used	Date of 1st Repair Attempt	Date(s) of Additional Repair Attempts	Date(s) of Remonitoring	Result(s) of Remonitoring	Date of Successful Repair	Repair Delayed? (See Table 3)
DC0014	Connector	Camera & Method 21	3/19/15			Requires shut down for safety of operator.		☑
V520	Valve	Camera & Method 21	3/19/15			Requires shut down for safety of operator.		☑
V520	Connector	Camera & Method 21	3/19/15			Requires shut down for safety of operator.		☑
TK354	Relief Valve	Camera & Method 21	3/19/15			Requires shut down for safety of operator.		☑
E004	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Component was no longer leaking.	3/19/15	☐

[1] If more components need to be reported than room available, please add additional leaking components to Table 2 Addendum form on page 3 of this document.

Section 4: Delay of Repair List

Table 3: List of Components added to Delay of Repair List		
Component ID	Reason for Delay (detailed description)	Date Delay No Longer Exists
DC 0014	This component is a gas pneumatic that will be changed out to air pneumatic 5/1/2015 during the facility shutdown and upgrades.	
V520	The drip pot seperator Kimray level controller needs to be replaced during the facility shutdown and upgrade for operator safety. The leak is present at the top of the control valve.	
V520	The drip pot seperator Kimray level controller needs to be replaced during the facility shutdown and upgrades for operator safety. The leak is present at the base of the controller valve connector.	
TK354	NGL Loadout vent controller to be replaced at facility shutdown 5/1/2015 for operator safety.	
NGL 42	Pressure gauge is currently under pressure and needs to be replaced during the facility wide shutdown on 5/1/2015.	
DC 0039	The control valve for the liquid knockout tank is currently under pressure and will require a shutdown to safely replace the valve from leaking.	
DC 0043	1" Connector to the evaporative pond needs to be replaced when the flow of liquid into the pond is off. The leak is detected along the inlet line from gound to outlet.	

Section 5: Unsafe, Difficult, or Inaccessible to Monitor

Table 4: List of Components Identified as Unsafe, Difficult, or Inaccessible		
Component ID or Equipment Description	Component Type	Explanation Why Component Listed and Plan for Monitoring
		All components were easily monitored at the facility an no components were deemed as unsafe, difficult or inaccessible to monitor during this reporting period.

Additional Comments:

The gas operated pneumatics will be replaced during the planned facility shutdown that will occur on May 1, 2015 for multiple upgrades as well as for facility repairs to components that were deemed to be replaced on the Delay of Repair Log as they were under pressure at the time of monitoring and would require a facilitywide shutdown to repair and/or replace.

Table 2 Addendum: Monitoring and Repair of Leaking Components								
Leaking Component ID	Component Type	Monitoring Method Used	Date of 1st Repair Attempt	Date(s) of Additional Repair Attempts	Date(s) of Remonitoring	Result(s) of Remonitoring	Date of Successful Repair	Repair Delayed? (See Table 3)
XV013	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	No leaks were detected after repairs.	3/19/15	☐
FE 230	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Component was tightened and no leaks were detected.	3/19/15	☐
DC 0027	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Connector was tightened and no leaks were detected.	3/19/15	☐
DC 0029	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Connector was tightened an no leaks detected.	3/19/15	☐
Gas 8	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Pressure gauge was tightened and no longer leaking.	3/19/15	☐
Gas 8	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Pressure gauge was tightened and no longer leaking.	3/19/15	☐
NGL 42	Connector	Camera & Method 21	3/19/15			The component needs to be replaced.		☑
DC 0035	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Fitting was tightened and no longer leaking.	3/19/15	☐
DC 0035	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Gauge was tightened and no leaks were detected.	3/19/15	☐
DC 0037	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Connector was tightened and no leaks detected.	3/19/15	☐
DC 0039	Valve	Camera & Method 21	3/19/15			Under pressure and needs to be replaced at shutdown.		☑
DC 0041	Connector	Camera & Method 21	3/19/15	3/19/15	3/19/15	Fitting tightened and no leaks detected.	3/19/15	☐
DC 0043	Connector	Camera & Method 21	3/19/15			Requires facility shutdown to inlet of pond.		☑
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Baxter Compressor Station

Calibration Gas Certificate of Analysis & FLIR Camera Certification

Gas Dynamics
Calibration Gas & Equipment

Gas Dynamics, LLC
46410 Continental Drive
New Baltimore, MI 48047

www.gasdynamics.com

V: (586) 329-1859
F: (586) 421-5123

Emergency Contact – Chemtrec: (800) 424-9300

Precision Calibration Gas Mixture

Certificate of Analysis

Date: 11/06/2014

Method of Analysis: GC

Certificate Reference: 049734-049736

Expires: November 2017

Component	*Nominal Concentration*	*Analytical Result +/- 2%*
Methane (CH4)	100%	99.74%

Cylinder Number(s): 049734
049735
049736

Blend was derived from source gases that were produced using gravimetric balances that were calibrated to NIST ASTM Class 1 weights or were verified by direct comparison to NIST gas mixture reference materials.

Analyst: *J. Wales*

ISO 9001: 2008 Certified

FLIR Commercial Systems, Incorporated • 9 Townsend West • Nashua, NH 03063

Statement of Calibration

Model Number:	GF320	Serial Number:	44401196
Calibration Date:	February 27, 2015		
Lens:	FoI23	Filter:	N/A

It is hereby certified that the above equipment was calibrated by FLIR Commercial Systems using NIST traceable equipment as listed below and meets FLIR Commercial Systems calibration specifications.

FLIR Commercial Systems imaging radiometers are calibrated for either absolute or relative temperature measurements or both. This process is accomplished by characterizing the detector response to a series of known temperature "blackbodies." During the calibration process, the radiometer signal processor's output is calibrated so that it has a direct correlation to the temperature differences created by the various blackbodies.

FLIR Commercial Systems recommends that its radiometric products be re-calibrated annually.

FLIR Commercial System's Black bodies are measurement standard calibrated by FLIR Systems or the OEM manufacturer:

Equipment	Serial Number	Traceable NIST Report Number
ASL PRT T-100-450 (ID # 53355)	B507995	RD19468
ASL Digital Indicator F150 (ID # 53357)	59143	RD19468 / 30371A
Thermocouple JMS TYPE "S" (ID # 53356)	43039-1-2	30371A
Thermocouple JMS TYPE "B" (ID # 73621)	142848-1-1	30371A

Technician: _____