

# PIONEER

## NATURAL RESOURCES

received 02/25/2013  
Facility 427440

February 25, 2013

Mr. Matt Lepore.  
1120 Lincoln Street  
Suite 801  
Denver, Colorado 80203

Pioneer Natural Resources USA, Inc.  
1401 17th Street, Suite 1200  
Denver, Colorado 80202  
Tel: (303) 298-8100 Fax: (303) 298-7800

RE: 2012 1101(e)(1) Variance report

Dear Mr. Lepore:

Pioneer Natural Resources USA, Inc. ("Pioneer") is submitting this letter and attachment in compliance with the conditions of approval of a variance to COGCC rule 1101(e)(1). This variance, document 200338696, was approved on 3/1/12. Pioneer has completed the installation of pressure transducers on 126 wells in strategic locations throughout the field. These transducers are linked to our SCADA system and they monitor pressure on the gathering system and initiate shut-down of the pump on the well if pressure spikes or other conditions are met. The logic diagram for the programmable logic control is included as Attachment 1. These sensors also aid in the operation of the wells and ensure that we operate our 800 mile water gathering system within manufacturing and best engineering limits.

**Table 1. 2012 Pioneer Spills Related to Pipeline Failures**

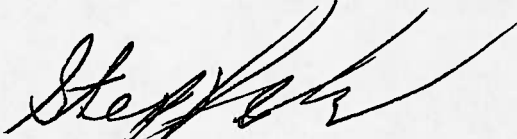
DATE	LOCATION	ROOT CAUSE	WHY SYSTEM DID NOT PREVENT AND ACTION TAKEN
1/19/2012	WOOD 31-2	HUMAN ERROR - CLOSED VALVE	LOW PRESSURE SYSTEM -- CLOSED VALVE CAUSED WATER HAMMER WHICH WOULD HAVE NOT BE PREVENTED BY SHUTTING DOWN PUMP.
1/27/2012	FROO CANYON	FAULTY FUSE - PRESSURE TEST	MODERATE PRESSURE SYSTEM, PIPELINE SEGMENT HAD PASSED SIX HOUR PRESSURE TEST ON 3/22/11.
2/11/2012	STOCK CANYON 34-33	FROZEN 2" VALVE ON GATHERING	MODERATE PRESSURE SYSTEM -- SENSOR WAS PLACED ON WELL AFTER INCIDENT.
3/7/2012	SHAWNEE 34-3	PRESSURE BREAK	HIGHER PRESSURE SYSTEM. WAS WAITING ON ROW FROM DIVISION OF WILDLIFE TO REROUTE WATER WITH AN \$88,000 NEW PIPELINE.
4/6/2012	WOLF CANYON 41-32	BAD FUSE	REPLACED 2" POLY TEE AT TIE IN POINT
4/7/2012	BGR 14-2	INTERNAL CORROSION	LOW PRESSURE SYSTEM. CORROSION CONTROL PROGRAM WAS IN PLACE IN AREA. STEEL PIPELINE WAS LINED IN 2012 WITH A \$121,000 PIPELINE LINER.
4/24/2012	LONESOME 22-10R	CLOSED VALVE	LOW PRESSURE SYSTEM -- CLOSED VALVE CAUSED WATER HAMMER WHICH WOULD HAVE NOT BE PREVENTED BY SHUTTING DOWN PUMP.
6/28/2012	BIG MEADOW 34-4	RUPTURED 2" POLY LINE	VALVE WAS CLOSED AFTER PRESSURE TEST ON NEW PIPELINE SEGMENT INSTALLED IN 2012 AND COMMUNICATION FAILURE CAUSED PUMPING AGAINST VALVE. SINCE MULTIPLE WELLS WERE INVOLVED SYSTEM WOULD NOT LIKELY HAVE PREVENTED.
7/29/2012	WESTON DEEP	BAD INSTALLATION 8" STEEL PIPE	LOW PRESSURE SYSTEM. STEEL PIPELINE FAILED DUE TO POOR INSTALLATION. SPILL WAS LARGE DUE TO LACK OF ISOLATION AND PRESSURE TESTING WOULD HAVE CAUSED SIMILAR ISSUE. 2013 CAPITAL PROJECT PLANNED TO REPLACE STEEL LINE WITH HDPE AND IMPROVE ISOLATION.
12/12/2012	BUSCH 42-30	FROZEN POLY TRANSITION - MAG METER IN HOUSE	MODERATE PRESSURE SYSTEM -- SENSOR WAS PLACED ON WELL AFTER INCIDENT.

Pioneer spent \$50,000 in 2012 implementing this system and spent \$270,000 on pressure reduction projects based on the pressure monitoring system.

Each spill is investigated by an investigation team and is reviewed and they are reviewed monthly. The results of these investigations and the actions taken are presented to upper management quarterly. Several spills in 2012 were caused by valves being closed or opened by either Pioneer personnel or landowners who were desperate for water due to drought conditions. Pioneer has instituted new training procedures for operators and has placed locks on several dozen valves in 2012.

Pioneer will continue to expand and refine this system in 2013 and will work to prevent future spills.

Submitted on behalf of Pioneer Natural Resources USA Inc.,

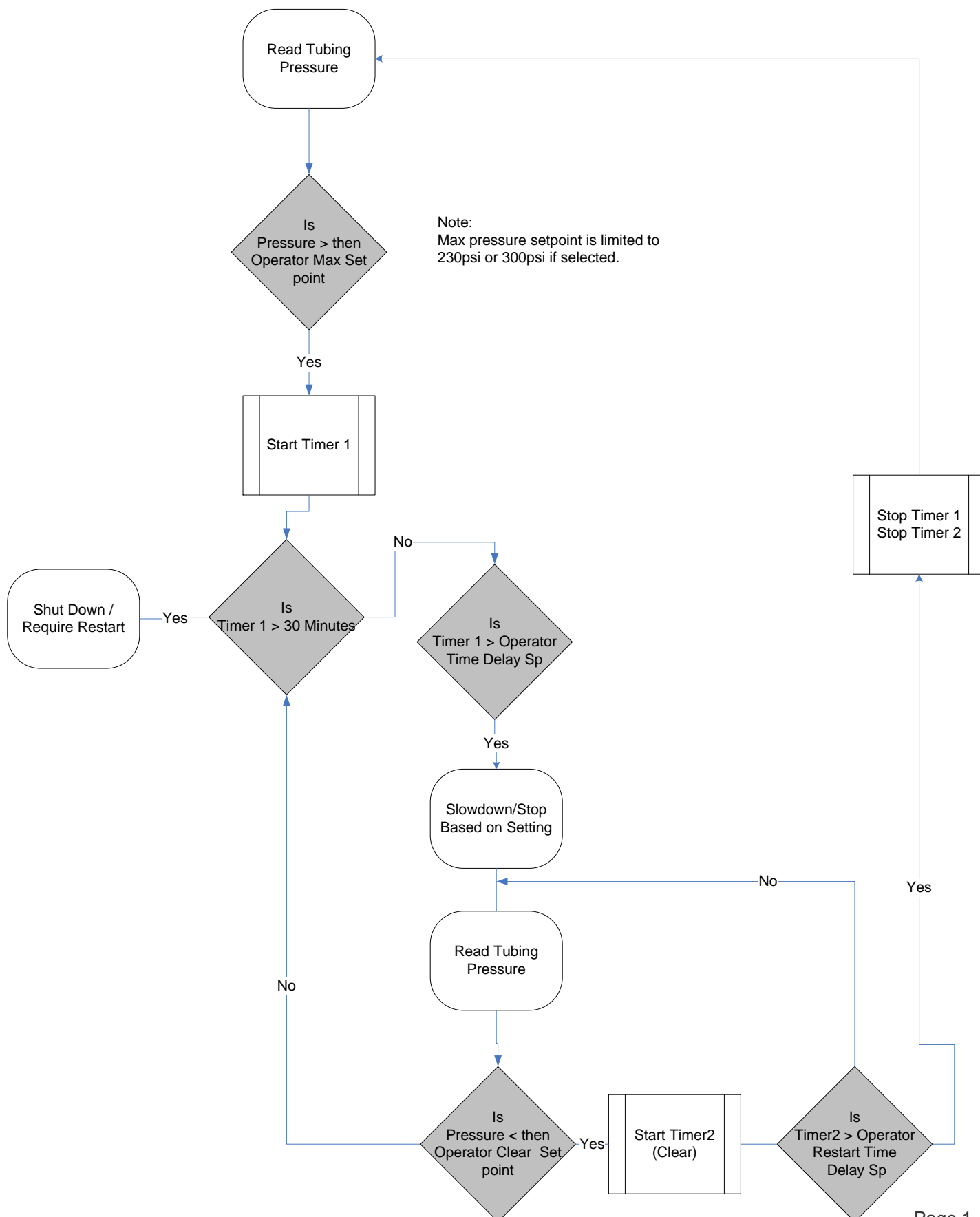
A handwritten signature in black ink, appearing to read 'Steve Schreck', with a long, sweeping horizontal line extending to the right.

Steve Schreck  
Senior Facilities Engineer

**Attachments:**

Attachment 1: Tubing sensor logic diagram

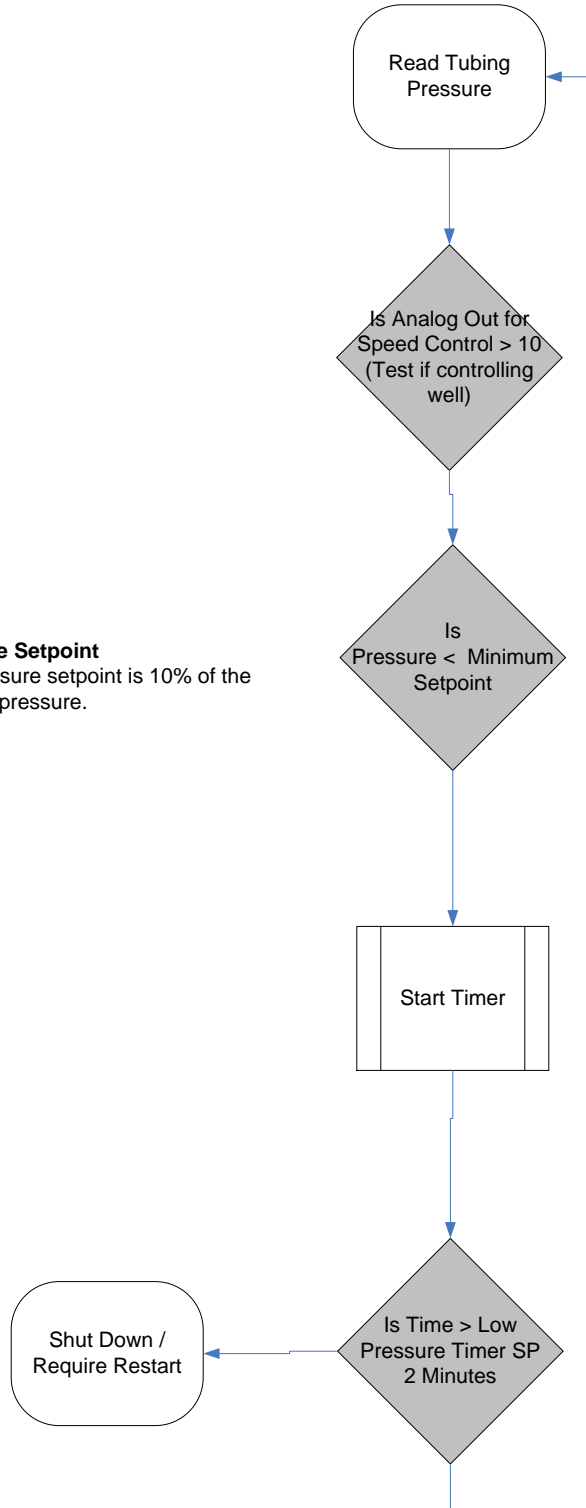
## Tubing High Pressure



## Tubing Low Pressure

### Low Pressure Setpoint

The Low Pressure setpoint is 10% of the tubing restart pressure.



## Cycle Operation

When enabled, the cycle timer will turn on and off the well based on the entered times. The on and off times must be greater or equal to 60 minutes.

