

**North Pierson Unit No. 2  
Waterflood EOR Project**

**2015 Annual Report**

**February 18, 2016  
Crescent Point Energy Corporation**

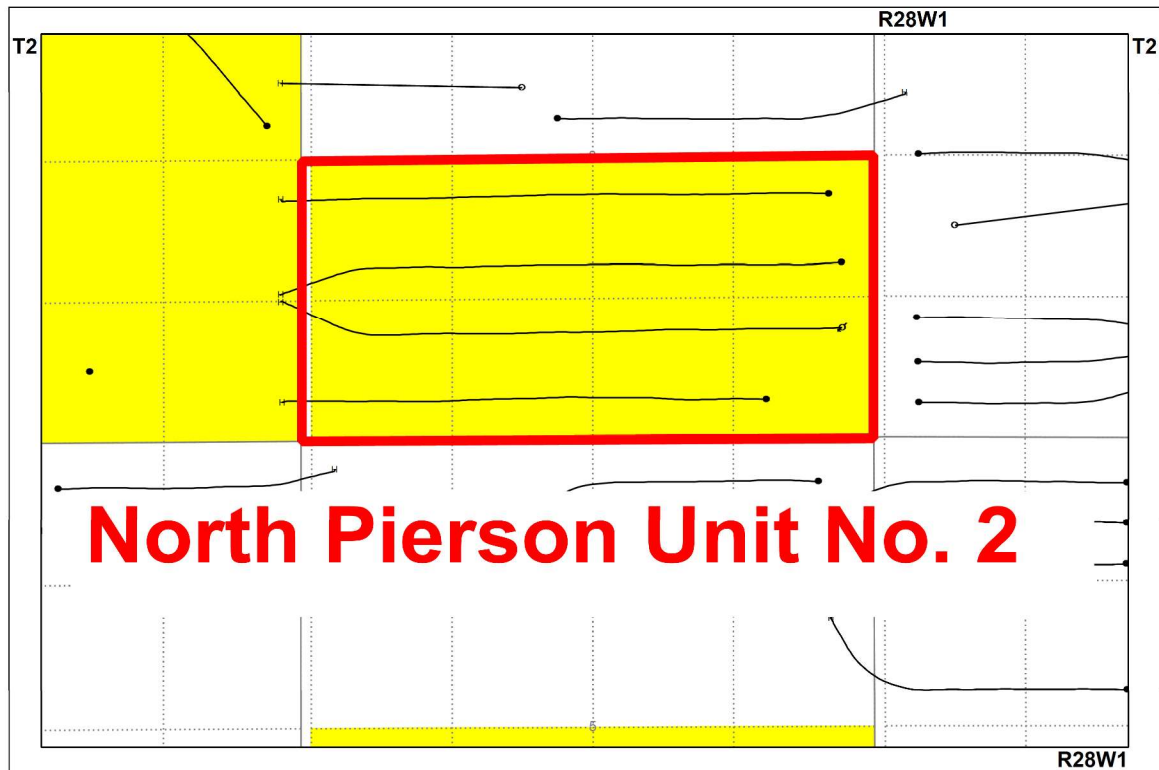
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## Introduction

North Pierson Unit No. 2 (NP2) was approved on March 27, 2014. On June 30, 2015, Crescent Point Energy (CPG) acquired all of Legacy's properties including NP2. NP2 includes 2 horizontal producing wells, 1 shut in horizontal well and 1 horizontal injector located in the south ½ of 08-002-28W1 shown in the figure below.

**Figure 1: North Pierson Unit No. 2 Area Outline**

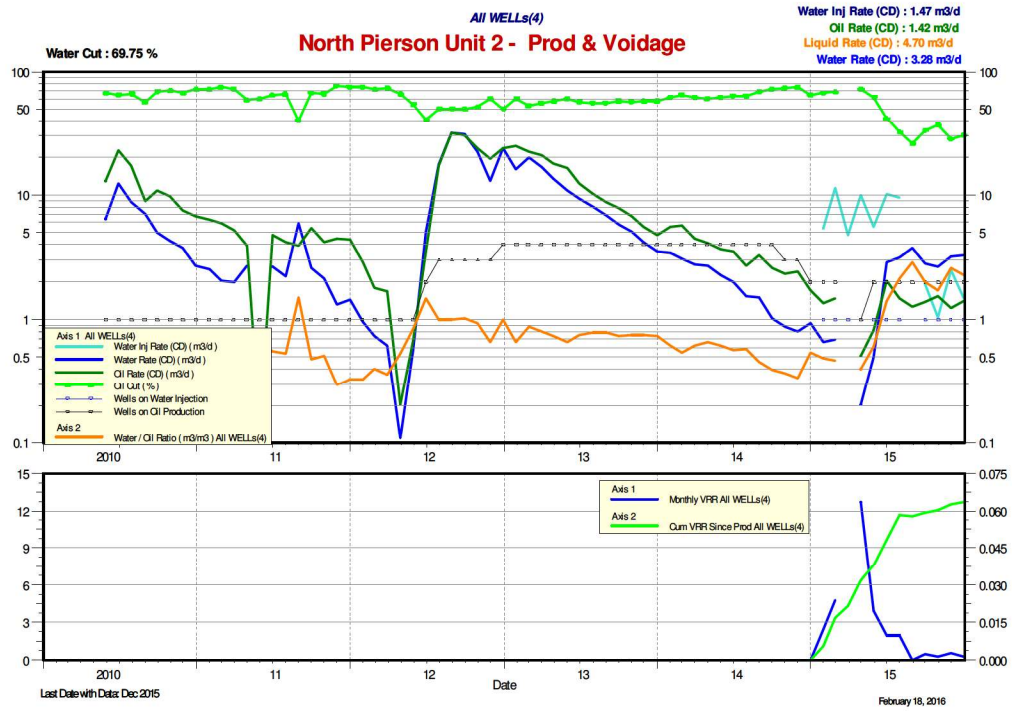


CPG, in accordance with Section 73 of the Manitoba Drilling and Production Regulation, hereby submits the 2015 Annual Progress Report for NP2.

## Production History

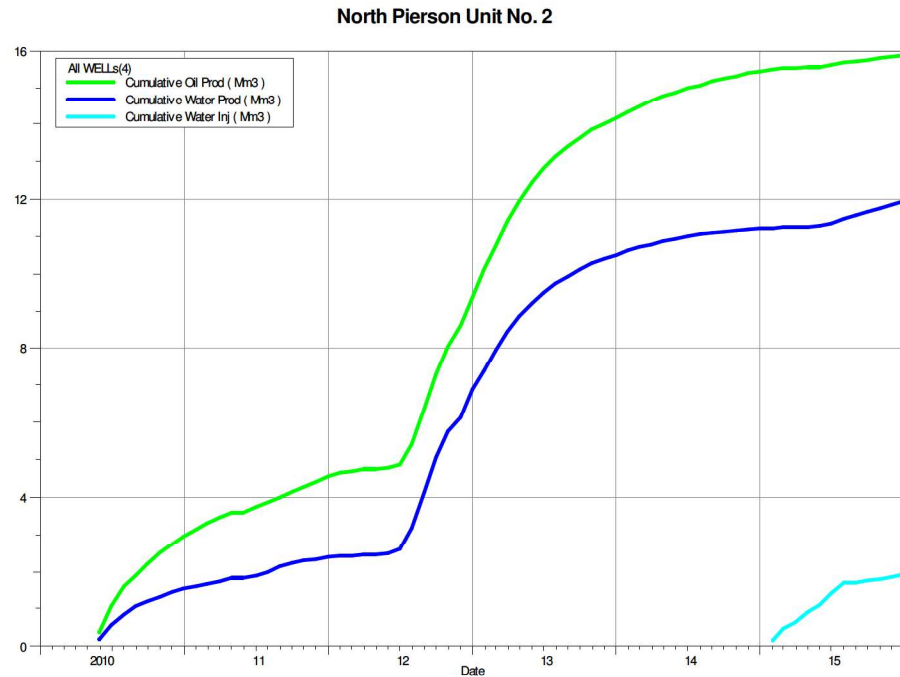
The first well that was drilled was 00/01-08-002-28W1/0 and was placed on production in May 2010. Development continued until December 2012, when the last horizontal was placed on production. Production peaked in August 2012 at 31.6 m<sup>3</sup>/d (198.5 bbl/d) or 10.5 m<sup>3</sup>/d (66.2 bbl/d) per well with a 50% watercut. Production in December 2015 was 1.4 m<sup>3</sup>/d (9.0 bbl/d) with a 70% watercut. 02/01-08-002-28W1 was converted to an injector and started injecting water in January 2015.

**Figure 2: North Pierson Unit No. 2 Production**



Cumulative production for NP2 to the end of December 2015 is 15.9 e<sup>3</sup>m<sup>3</sup> (99.9 mbbbl) of oil and 11.9 e<sup>3</sup>m<sup>3</sup> (75.1 mbbbl) of water, which represents a cumulative recovery factor to date of 2.4%.

**Figure 3: North Pierson Unit No. 2 Cumulative Production and Water Injected**



### **Waterflood Development Plan**

Waterflood development began in January 2015 with the conversion of 02/01-08-002-28W1/0.

### **Waterflood Operating Strategy**

#### Water Source and Quality

The injection water for NP2 will be produced water from the 9-32-1-28W1 battery, where it is treated with scale inhibitor, filtered to 5 microns and distributed to the injection system.

#### Injection Wellhead Pressures

The maximum allowable wellhead injection pressure in NP2 is 4700 kPa. Average monthly injection pressures since the Legacy acquisition in June are in the table below.

**Table 1: North Pierson Unit 2 Average Monthly Injection Pressures**

<b>Date</b>	<b>Injection Pressure (kPa)</b>
Jul-15	418
Aug-15	944
Sep-15	941
Oct-15	851
Nov-15	981
Dec-15	980

Reservoir Pressure

CPG believes in the importance of obtaining annual reservoir pressures. Unfortunately, Legacy had not obtained any reservoir pressures within the unit. Pressures will be taken in 2016, as CPG understands the value that reservoir pressures add to understanding the performance of the waterflood.

Well Servicing

**Table 2: North Pierson Unit 2 2015 Well Servicing**

<b>UWI</b>	<b>Date</b>	<b>Well Service</b>
100/01-08-002-28W1/0	23-Mar-15	Pump Repair

**Waterflood Performance**

Injection commenced in January 2015. Cumulative VRR, as of December 2015 for the entire unit is 0.06 and for the injection pattern is 0.12. At this time, no other drills or injector conversions are planned.

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