

March 29, 2006

Terry Abel
Manger, Resource Applications
AEUB
640-5th Avenue S.W.
Calgary, Alberta
T2P 3G4

Dear Sir:

RE: Chard Resource Management Report – AEUB Decision 2003-23

Please find attached the Chard Resource Management Report for reporting period January 1 to December 31, 2005 as required by Decision 2003-23. This report is submitted on behalf of Petro-Canada Oil and Gas, Imperial Oil Limited, Japan Canada Oil Sands and Nexen Inc., co-venturers in the Chard area as described in the subject decision. Petro-Canada and Imperial are operators of the bitumen leases within the area, and are submitting this one report.

There are two paper copies of the report attached to this letter, as well as two digital copies of the material on CD's. The piezometer data is generated on frequent basis resulting in an extensive record of pressure readings. Due to the size of the files, this data is provided solely on the CD's.

Please call me if you have any questions or concerns.

Derek Lee

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cc: Doug Schulz – Imperial Oil; CD
Chris Hojnik – Nexen; CD
Brian Harschnitz – Jacos; CD

Chard Resource Management Report

**January 1, 2005 to
December 31, 2005**

March 2006

Resource Management Report

Summary

All the PCEJ owners recognize the significant bitumen resource within the Chard area and the importance of retaining this acreage for development in the future. This report includes data that was acquired in 2005 and continues the existing trends in the piezometer datasets providing additional support for the major conclusions of the previous RMRs. Pressure continuity across stratigraphic sequences and vertically through varying fluid regimes and geologic facies is evidenced across several examples throughout the lease area. Of particular importance is the evidence of continued pressure depletion of the shut in top gas zone in 10-14-79-7W4 probably caused by adjacent producing Wabiskwa-McMurray A gas pool (Figure 34, page 10 of this report). The PCEJ bitumen owners request the AEUB consider this concern as it has the potential to impact bitumen recovery at Chard.

Introduction

Petro-Canada and their co-ventures, known as PCEJ that include Nexen, Imperial Oil Limited and Japan Oil Sands Company, own oil sands rights in the Chard Area encompassing 115 sections from Township 79 to 81, range 6 to 8 west of the 4th meridian. These oil sands leases are as follows:

7282060010

7282060011

7282060012

7282060013

7282060014

7282060015

The interest of all parties varies in the area as a result of consolidation of lands. Petro-Canada's interest varies from 0 to 50%. As a result of the consolidation of lands two of the leases have been revised. Lease 7282060010 has been subdivided into two leases (7282060010 and 7282060B10) and lease 7282060014 has been split into 3 leases (7282060014, 7282060B14 and 7282060C14).

For the purpose of simplicity all leases are included in this resource management report and Petro-Canada as operator for the majority of the leases is submitting this report on behalf of all the PCEJ co-venturers.

In June 2003 Petro-Canada, on behalf of the PCEJ partnership, made application for the retention of the Chard oil sand leases. All the leases were continued for a second term under section 13 of the oil sands act. These leases have also been the subject of recent gas over bitumen hearings held in 2001-2002. The result of these hearings was the decision of the EUB (GB2003-023) to shut-in various gas wells deemed to be in communication with the underlying potentially recoverable bitumen resource in the

Chard area. This report is a result of that decision as a responsibility of the bitumen owners to give updated documentation on an annual basis of work performed, data collected and the interpretation of that data in order to keep the Board informed as to the result of recent activity performed by the PCEJ ownership.

2005 Activity

Petro-Canada and its partners did not drill any additional wells or shoot any additional seismic during 2005. In the Chard lease area, no further observation wells were equipped with piezometer gauges in 2005. Within the public record, no static gradient gas pressure measurements were found within the Wabiskaw-McMurray over 2005.

The 2005 piezometer pressure data is included in this report.

Geology

There are no updates to the geology section as no new information is available.

Pressure Data Interpretation

The background information required to interpret the piezometer pressure data that has been supplied in previous resource management reports has not been repeated in this report. Updated pressure history figures have been provided. The figure numbers and titles in this report are consistent with those in the 2004 RMR to facilitate comparisons and utilization of the background information provided in the other figures. The 2005 pressure data continues established trends and provides further support to the conclusions presented in the previous reports.

10-26-81-7W4 Case Study – Vertical Communication Across an Extended Mudstone/Bitumen Column to Bottom Water.

The 10-26 case study illustrates the following major points:

- *Top gas pressure depletion is transmitted through an extensive 50 meter shale and underlying bitumen column through to the bottom water aquifer in an adjacent section.*
- *Pressure rebound within the bottom water aquifer occurs after shut-in of gas production.*
- *The bottom water pressure increase prior to offsetting gas shut-in is within the piezometer resolution of +/- 5 kPa.*
- *A communication pathway for bottom water migration to the upper aquifer is evidenced with depletion of upper gas sands.*

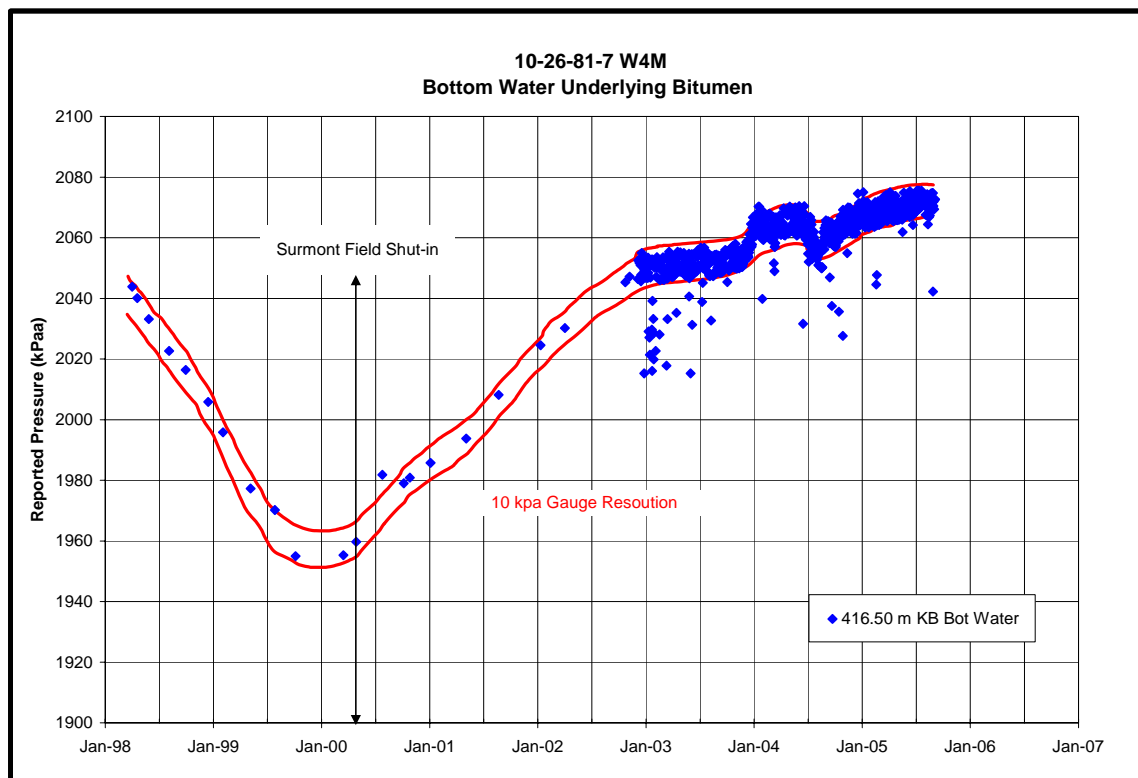


Figure 3. – Pressure History for the 10-26-81-7W4 Bottom Water Piezometer

9-24-80-7W4 Case Study - Continuity Across Mudstones through Bitumen with Top Water Influx.

The 9-24 case study illustrates the following key points:

- *Pressure communication with underlying bitumen and bottom water segregated by mudstones.*
- *Late time pressure restoration within top sands from multiple effects inclusive of progressive aquifer influx.*
- *Impact of regional drainage from an offsetting producer following localized production shut-in.*
- *A practical time scale for pressure equilibration between depleted gas sands and underlying fluids.*

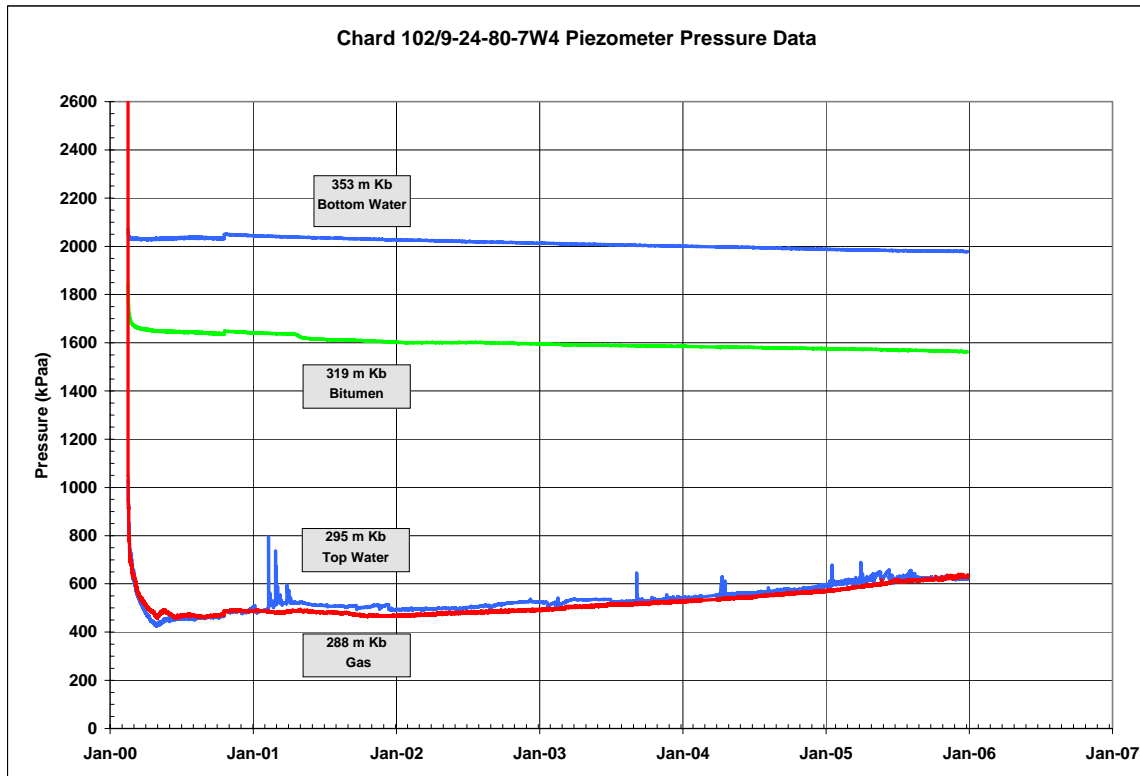


Figure 9. – 102/9-24 Piezometer Pressure History

10-30-80-6W4 Case Study – Pressure Equalization Across Aquifer, Communication to Bitumen Through IHS, Top Water Influx.

The 10-30 case study illustrates the following key points:

- *Pressure communication with underlying bitumen through IHS layers.*
- *Late time influx of top water above bitumen.*
- *Pressure equalization across gas sands segregated by regional aquifer.*
- *Linear late time pressure restoration within top sands from multiple effects inclusive of progressive aquifer influx.*
- *Necessity of continuous pressure readings to interpret complex dynamic behavior within highly heterogeneous geological environment.*
- *Impact of regional drainage from offsetting producer following localized production shut-in.*

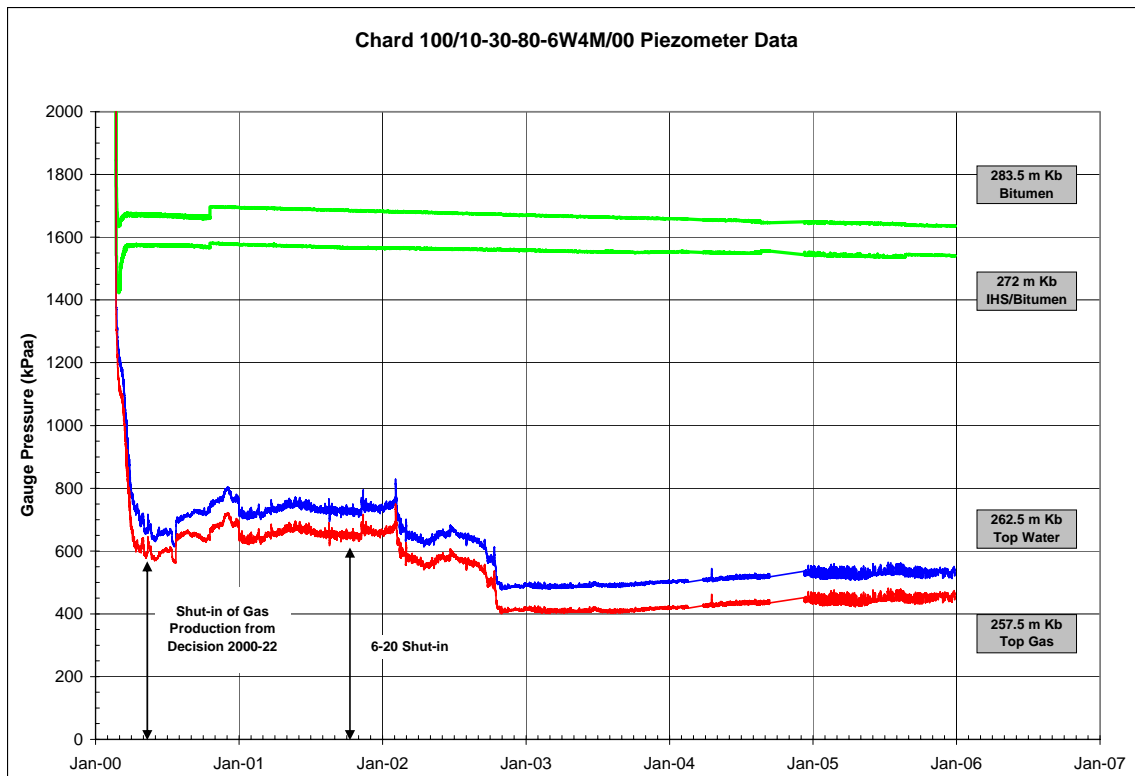


Figure 18. – 10-30 Piezometer Pressure History

The 2005 data is noisier than the historic data but still shows the pressure trends. The cause of the noise is being investigated and any defective surface equipment will be replaced.

11-33-80-6W4 Case Study – Lateral Pressure Depletion Communicating Through Top Water Aquifer to Bitumen.

The 11-33 case study illustrates the following key points:

- *Pressure transmission through the top water aquifer from adjacent depleted gas sands is transferred to underlying bitumen.*
- *Parallel recorders at constant depth illustrate gauge accuracy differences.*
- *The piezometer data confirms the presence of a normal hydrostatic gradient through the bitumen column.*

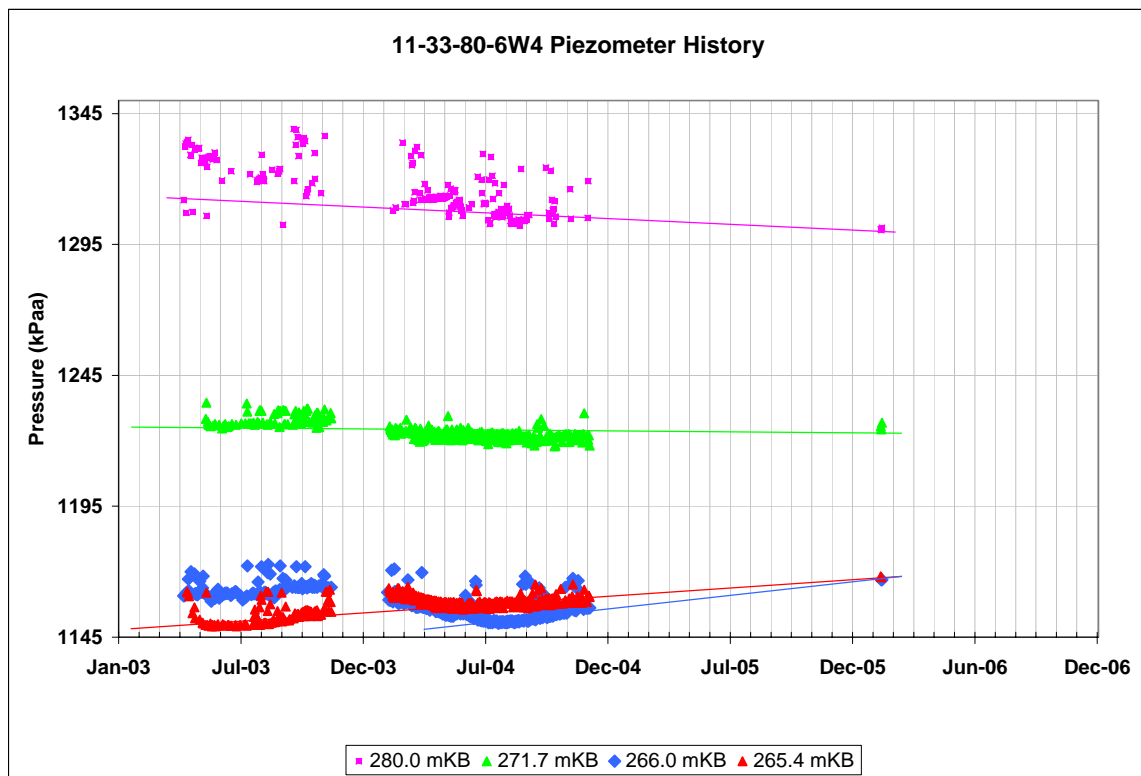


Figure 27. – 11-33 Piezometer History

A data cable failure between the well and data logger resulted in the loss of all the 2005 pressure data measurements. Data measurements taken in February 2006 have been included so that the trends can be interpolated.

10-14-79-7W4 Case Study – Communication Across a Regional Mudstone

The key points illustrated by the 10-14 case study are:

- *Pressure communication across an underlying bitumen zone and the regional A2 mudstone are evidenced.*
- *Potential drainage of a higher pressured shut-in gas pool by an offsetting lower pressured gas pool currently on production.*
- *The consistency between the piezometer dataset and a corresponding static gradient dataset where sufficient test data has been obtained.*

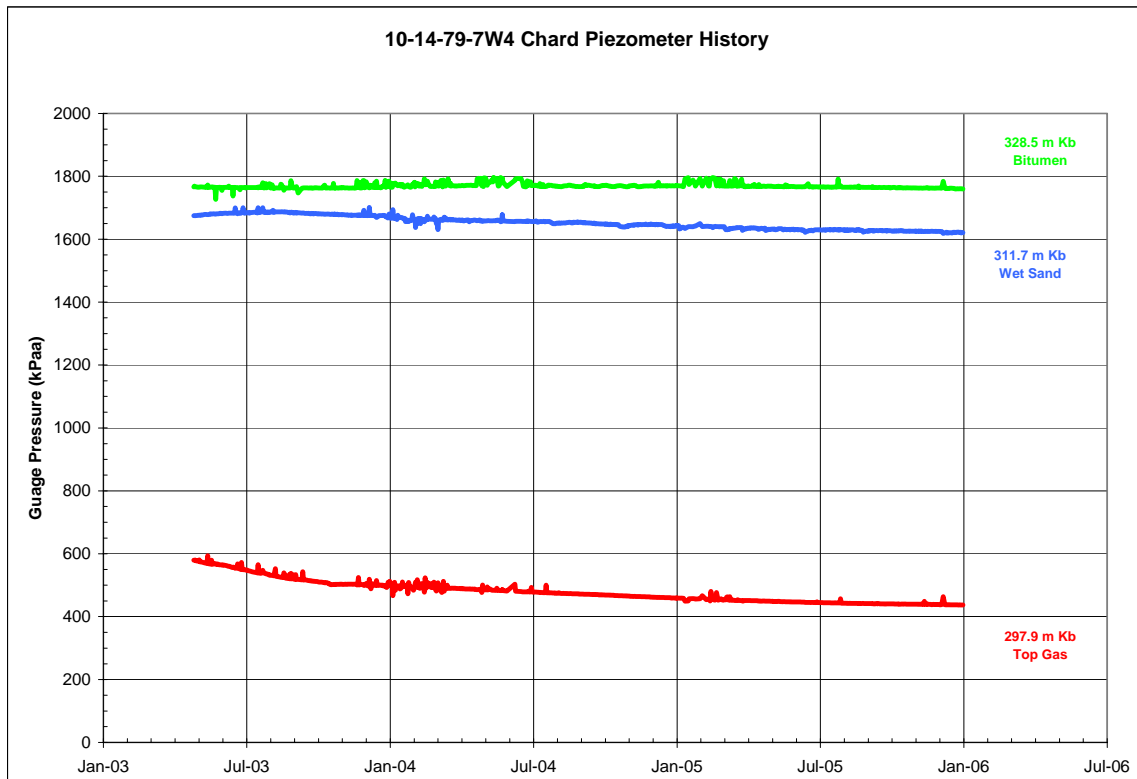


Figure 33. – 10-14 Piezometer History

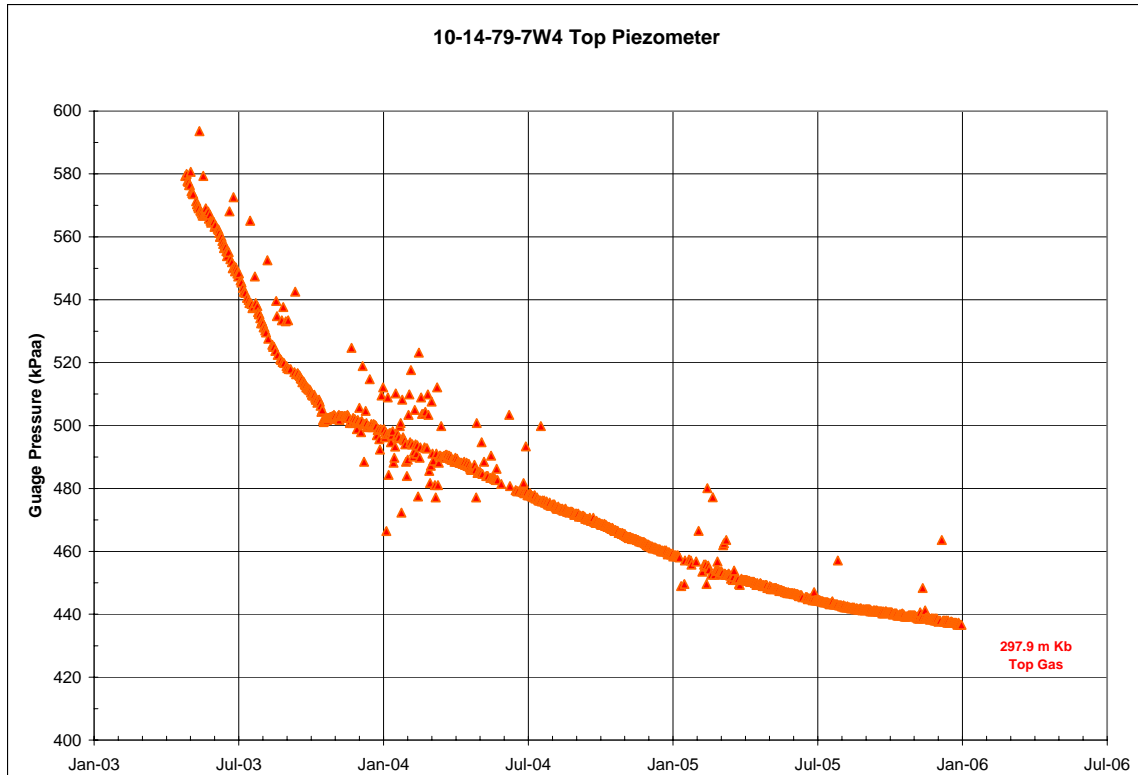


Figure 34. – 10-14 Top Gas Piezometer.

The top gas piezometer continues to show that the pressure declining. This indicates that drainage of the pool is continuing. As documented in the previous RMR we believe that the drainage source is wells in the Wabiskaw-McMurray A gas pool. Continuing gas production from these wells was addressed in the AEUB Phase 3 Final Proceeding and continued gas production was allowed (Decision 2005-122).