

GEOHAZARD RISK ASSESSMENT
CENTRAL REGION

SITE C56: H836:02 SETTLEMENT

LEGAL LOCATION: **11-29-23-W4**

REFERENCE LOCATION
ALONG HIGHWAY: **km 9**

UTM COORDINATES: **N 5704031 E 351107 (NAD83)**

AT FILE: **H836:02**

AT PLAN & PROFILE:

Date of Initial Observation: **June 2008**

Date of Previous Inspection: **May 17, 2011**

Inspected By: Klohn Crippen Berger Ltd.

Date of Current Inspection: **June 14, 2012**

Inspected By: Klohn Crippen Berger Ltd.

Instruments Installed: none

Risk Assessment: **PF(1) * CF(1) =1**

Last Updated by: Klohn Crippen Berger Ltd.
Date: June 14, 2012

Location and General Description of Instability

The site is located on Highway 836:02 at about km 9, approximately 6 km southeast of Carbon, and consists of an embankment constructed within a shallow coulee. The highway edge was settling and has been patched several times.

Geotechnical Conditions

No available subsurface exploration data nor any geotechnical ground investigation has been carried out along the extent of distressed road section.

Chronology (Refer to Section G for Further Information)

June 2008

The pavement was patched in year 2008. Some cracks have appeared but no settlement has been noted since the last patch was applied.

June 2009

No significant cracking or slumping of the roadway was observed at the time of the 2009 inspection but a pronounced dip in the pavement was observed. It was considered that the settlement of the highway shoulder is due to a surficial slide. However, any evidence of cracking or slumping on the embankment slope is masked by vegetation. No settlement has been noted at the time of inspection, but rainfall levels have been particularly low.

2010

In May 2010, cracking was observed in the shoulder and southbound lane. Settlement of the shoulder and a portion of the driving lane was also noted. At the time of the May 2010 inspection, the area immediately south of the slump was being deep patched in preparation for repaving. The area of concern was load tested with the water truck during the inspection, but no displacement of the asphalt under the weight of the truck was noted. 160 (5 rows) of launched soil nails were installed in July 2010.

June 2011

Minor cracking at extreme edge of the pavement.

June 2012

Minor cracking along white line at edge of pavement. The crack should be filled and sealed to prevent water infiltration.