

GEOHAZARD RISK ASSESSMENT
CENTRAL REGION

SITE C47: H27:10 RED DEER RIVER VALLEY EROSION

LEGAL LOCATION: **16-31-21-W4**

REFERENCE LOCATION
ALONG HIGHWAY: **KM 21+00 to KM 25+00**

UTM COORDINATES: **N 5723839 E 367863** (NAD83)

AT FILE: **H27:10**

AT PLAN & PROFILE:

Date of Initial Observation: June, 2007

Date of Previous Inspection: June 13, 2008

Inspected By: Klohn Crippen Consultants Ltd.

Date of Current Inspection: **June 15, 2012**

Inspected By: Klohn Crippen Berger Ltd.

Instruments Installed: None

Risk Assessment: **PF(9) * CF(4) = 36**

Last Updated by: Klohn-Crippen Consultants Ltd.
Date: July 15, 2012

Location and General Description of Instability

Storm events in the spring of 2007 displaced existing gabion ditch structures resulting in extensive erosion features and damage to gabions over a 2 km length due to large ditch flows. Large diameter culvert was blocked with debris during storm event. Culvert was damaged and water overtopped the road.

Geotechnical Conditions

No ground investigation/ borehole logs are available.

Chronology (Refer to Section G for Further Information)

June 2007

Storm events in the spring of 2007 displaced existing gabion ditch structures resulting in extensive erosion features and damage to gabions over a 2 km length. Rocks inside of gabion baskets were displaced and several entire gabion mats were lifted and relocated downstream. It was recommended that a survey and condition assessment of the gabion structures be performed to determine the remedial action required. It was noted that significant repairs are required to the ditch protection system.