



**THURBER** ENGINEERING LTD.

**ALBERTA TRANSPORTATION  
PEACE REGION (PEACE RIVER / HIGH LEVEL)  
INSTRUMENTATION MONITORING RESULTS**

**FALL 2014**

**SECTION C**

**SITE PH47: HWY 690:02, DEADWOOD SLIDE**

**1. OBSERVATIONS**

**1.1 Field Program and Instrumentation Status**

One standpipe piezometer (SP10-5) and one vibrating wire piezometer (VW10-1) were monitored at the Hwy 690:02, Deadwood Slide site on September 18, 2014 by Mr. Chad Gray, C.E.T. and Mr. Leonardo Valencia, of Thurber Engineering Ltd. (Thurber). VW10-2 has stopped working since the spring 2014 reading.

A Sinco dip meter was used to read the standpipe piezometers. The vibrating wire piezometers were read using a GEO-KON GK-404 digital VW data recorder device.

**2. INTERPRETATION**

**2.1 Interpretation of Monitoring Results**

The water level decreased in standpipe piezometer SP10-5 by 0.55 m, since the previous reading in spring 2014. The results of the standpipe piezometers are summarized in Table PH47-1.

Since the previous reading in spring 2014, the water level in vibrating wire piezometer VW10-1 decreased by 0.26 m. Table PH47-2 summarizes the vibrating wire piezometer readings.



### **3. RECOMMENDATIONS**

#### **3.1 Future Work**

The instruments should be read again during the spring 2015 program.

#### **3.2 Instrumentation Repairs**

No Instrumentation repairs are required at this time.



**TABLE PH47-1  
FALL 2014 – DEADWOOD SLIDE  
STANDPIPE PIEZOMETERS  
INSTRUMENTATION READING SUMMARY**

Date Monitored: September 18, 2014

INSTRUMENT #	DATE INITIALIZED	TIP DEPTH (m)	GROUND ELEV. (m)	CURRENT STATUS	MAXIMUM WATER LEVEL BGS (m)	MEASURED WATER LEVEL BGS (m)	PREVIOUS READING (m)	CHANGE IN WATER LEVEL SINCE PREVIOUS READING (m)
SP10-1	November 4, 2010	9.66	559.54	Blocked at 1.7 mBGS	4.60 on November 4, 2010	N/A	N/A	N/A
SP10-3	November 4, 2010	8.90	565.44	Destroyed	1.14 on May 27, 2011	N/A	N/A	N/A
SP10-5	April 27, 2010	2.92	561.27	Active	0.63 on July 27, 2011	1.86	1.31	-0.55

Figure 15-16-304-PH47 in section D provides a sketch of the approximate locations of the monitoring instrumentation for this site.

**TABLE PH47-2  
FALL 2014 – DEADWOOD SLIDE  
VIBRATING WIRE PIEZOMETERS  
INSTRUMENTATION READING SUMMARY**

Date Monitored: September 18, 2014

INSTRUMENT	DATE INITIALIZED	TIP ELEV. (m)	GROUND ELEV. (m)	CURRENT STATUS	MAXIMUM GROUNDWATER ELEVATION (m)	GROUNDWATER ELEV. (m)	GROUNDWATER ELEV. (m)	CHANGE IN WATER LEVEL SINCE PREVIOUS READING (m)
VW10-1 (100D10918)	April 27, 2011	553.50	562.00	Operational	560.59 m on June 2, 2014 (1.41 mBGS)	560.33 (1.67 mBGS)	560.59 (1.41 mBGS)	-0.26
VW10-2 (100D10917)	April 27, 2011	555.17	560.96	Non-operational	558.96 m on June 2, 2014 (2.00 mBGS)	N/A	558.96 (2.00 mBGS)	N/A

Figure 15-16-304-PH47 in section D provides a sketch of the approximate locations of the monitoring instrumentation for this site.