



THURBER ENGINEERING LTD.

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

FALL 2015

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 May 23, 2015 by Mr. Chad Gray, C.E.T. and Mr. Niraj Regmi, G.I.T., both of Thurber Engineering Ltd. (Thurber). Vibrating wire VW10-1 is no longer operational.

A Sinco dip meter was used to read the standpipe piezometers. The vibrating wire piezometer was 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 0.30 m, since the previous reading in spring 2015. The reading is summarized in Table PH47-1.

Table PH47-2 summarizes the previous vibrating wire piezometer readings.



3. RECOMMENDATIONS

3.1 Future Work

The remaining instrument should be read again during the spring 2016 program.

3.2 Instrumentation Repairs

No instrumentation repairs are required at this time.



**TABLE PH47-1
FALL 2015 – DEADWOOD SLIDE
STANDPIPE PIEZOMETERS
INSTRUMENTATION READING SUMMARY**

Date Monitored: September 17, 2015

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	1.66	1.36	-0.30

Figure 15-16-360-PH47 in section D provides a sketch of the approximate locations of the monitoring instrumentation for this site.

**TABLE PH47-2
FALL 2015 – DEADWOOD SLIDE
VIBRATING WIRE PIEZOMETERS
INSTRUMENTATION READING SUMMARY**

Date Monitored: September 17, 2015

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

Figure 15-16-360-PH47 in section D provides a sketch of the approximate locations of the monitoring instrumentation for this site.