THURBER ENGINEERING LTD.

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

SPRING 2013

SECTION C

SITE PH47: HWY 690:02, DEADWOOD SLIDE

1. OBSERVATIONS

1.1 Field Program and Instrumentation Status

Two standpipe piezometers (SP10-1 and SP10-5) and two vibrating wire piezometers (VW10-1 and VW10-2) were monitored at the Hwy 690:02, Deadwood Slide site on May 31, 2013 by Mr. Chad Gray, C.E.T. and Ms. Jessica Pryer, C.E.T., of Thurber Engineering Ltd. (Thurber). Standpipe piezometer SP10-3 could not be located during the site visit and may have been destroyed during roadway maintenance since the fall 2012 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 increased in standpipe piezometers SP10-1 and SP10-5 by 0.27 m and 0.73 m, respectively, since the previous reading in fall 2012. Standpipe piezometer SP10-3 could not be located during the site visit and may have been destroyed during roadway maintenance since the fall 2012 reading. The results of the standpipe piezometers are summarized in Table PH47-1.

Since the previous reading in fall 2012, the water levels in vibrating wire piezometers VW10-1 and VW10-2 have increased by 0.17 m and 0.49 m, respectively. Table PH47-2 summarizes the vibrating wire piezometer readings.

3. RECOMMENDATIONS

3.1 Future Work

The instruments should be read again during the fall 2013 program.

3.2 Instrumentation Repairs

No Instrumentation repairs are required at this time.

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TABLE PH47-1
SPRING 2013 – DEADWOOD SLIDE
STANDPIPE PIEZOMETERS
INSTRUMENTATION READING SUMMARY

Date Monitored: May 31, 2013

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	Active	4.60 on November 4, 2010	4.53	4.80	0.27
SP10-3	*November 4, 2010*	*8.90*	*565.44*	*Destroyed*	*1.14 on May 27, 2011*	*N/A*	*1.89*	*N/A*
SP10-5	April 27, 2010	2.92	561.27	Active	0.63 on July 27, 2011	1.36	2.09	0.73

Figure PH47-1 in section D provides a sketch of the approximate locations of the monitoring instrumentation for this site.

TABLE PH47-2
SPRING 2013 – DEADWOOD SLIDE
VIBRATING WIRE PIEZOMETERS
INSTRUMENTATION READING SUMMARY

Date Monitored: May 31, 2013

INSTRUMENT	DATE INITIALIZED	TIP ELEV. (m)	GROUND ELEV. (m)	CURRENT STATUS	MAXIMUM GROUNDWATER ELEVATION (m)	GROUNDWATER ELEV. (m) (SPRING 2013)	GROUNDWATER ELEV. (m) (FALL 2012)	CHANGE IN WATER LEVEL SINCE PREVIOUS READING (m)
VW10-1 (100D10918)	April 27, 2011	553.50	562.00	Operational	560.49 m on June 11, 2012 (1.51 mBGS)	560.56 (1.44 mBGS)	560.39 (1.61 mBGS)	0.17
VW10-2 (100D10917)	April 27, 2011	555.17	560.96	Operational	558.89 m on May 27, 2011 (2.07 mBGS)	558.90 (2.06 mBGS)	558.41 (2.55 mBGS)	0.49

Figure PH47-1 in section D provides a sketch of the approximate locations of the monitoring instrumentation for this site.