2013 Freshet Geotechnical Site Inspection, Minto Mine, YT

Prepared for

Minto Explorations Ltd.

Prepared by

SRK Consulting (Canada) Inc.
1CM002.012.005
July 2013

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Project No: 1CM002.012.005

File Name: 2013GeotechInsp_Report_1CM002-012-005_20130725FNL_PM

srk consulting

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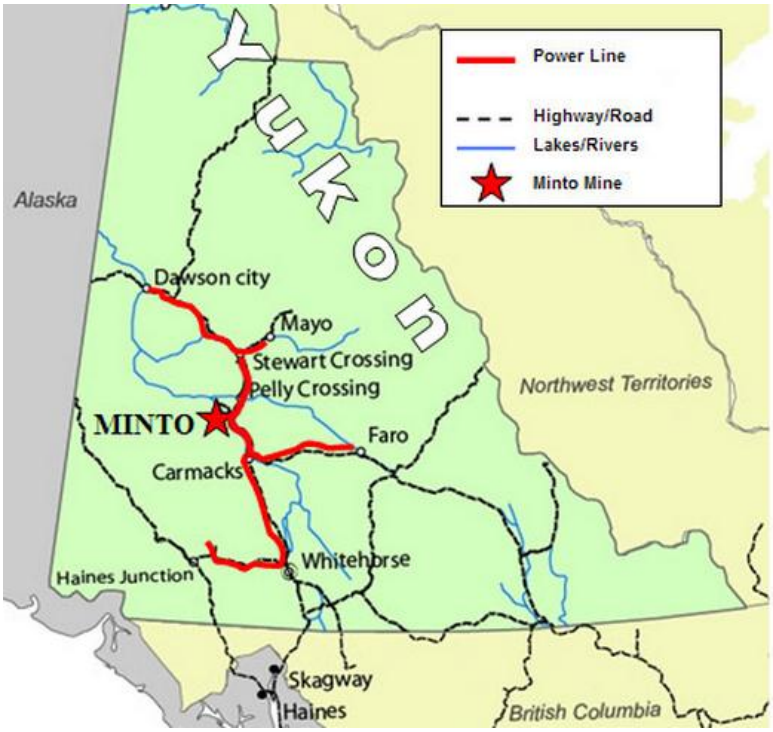
1 Introduction

On May 27 and 28, 2013, SRK Consulting (Canada) Inc. completed a geotechnical inspection of the Minto Mine site (Figure 1). The purpose of the inspection was to document the physical condition of the site based on visual observations and to provide geotechnical assessment, noting potential signs of physical instability such as erosion, differential settlement, sloughing or bulging of material, seepage, and so on. The inspection is documented in the photographic compilation provided in Appendix A. This report summarizes the findings and recommendations.

This is the second geotechnical inspection of the site by SRK. The first inspection was completed in September 2012 (SRK 2012c). Previous inspections were completed by EBA, a Tetra Tech Company. Their latest inspection was completed on August 25, 2011. The 2011 and 2012 inspection documents were reviewed by SRK before the site visit, and, where possible, were used to assess changes in condition and recent performance.

This report is in partial fulfillment of the requirements of the existing Quartz Mining Licence QML 0001 and Water Licence QZ96-006, Amendment 8.

- Clause 12 of the quartz mining licence requires that an engineer complete an annual inspection of the physical stability of all engineered structures, works, and installations located at the site by August 1 of each year. Schedule C, Clause 12, of the licence also requires that the Southwest Dump and Main Waste Dump be inspected during spring thaw.
- Clause 82 of the water licence requires that physical inspections be completed after the spring thaw in May/June of each year and again before the onset of winter in September of each year. This report fulfills the requirements of the spring thaw inspection.



Source: Capstone Mining (http://capstonemining.com/s/Minto.asp)

Figure 1: Site Location

2 Conditions

The geotechnical inspection was completed by Peter Mikes, PEng, of SRK. Eamon Mauer of Minto Explorations Ltd. was SRK's primary contact for information about the activities during the past year.

Weather during the site inspection was sunny, with temperatures estimated at 10-20°C. The site was generally dry or slightly moist, with wet patches in low-lying areas. No snow was present, so the ground surface was visible, except at the Minto Creek Detention Structure (MCDS) area. The MCDS is located at the toe of the Mill Valley Fill in an area that receives little direct sunlight. The snow depth in this area was up to approximately 1 m in depth.

3 Scope

Table 1 provides a list of the facilities that were included as part of the inspection and a list of design reports and monitoring guidance documents that were used to guide the inspections. In addition, previous years' inspection reports were available for review before the site inspection.

As part of the inspection, instrumentation data was reviewed to check for indications of unusual performance or change in trends. Section 4 of this report presents a list of data reviewed, including the last data collection date.

Table 1: Facilities Inspected and Guidance Documents

Facility	Design Reports	Monitoring/Inspection Guidance Documents
Dry Stack Tailings Storage Facility (DSTSF)	EBA 2007. Geotechnical Design Report, Dry Stack Tailings Storage Facility, Minto Mine, Yukon. EBA File: 1200173. January 2007.	EBA 2011a. Revision 2011-1 Operation, Maintenance, and Surveillance Manual, Dry Stack Tailings Storage Facility, Minto Mine, YT. EBA File: W14101068.001. January 2011. OMS Manual includes operational inspection frequency and instrumentation triggers for action.
Mill Valley Fill (MVF)	EBA 2011b. Waste Rock and Overburden Management Plan, Phase IV Development, Minto Mine YT. EBA File: W14101068.015. September 9, 2011. EBA 2011c. Upstream Water Management for the Mill Valley Fill Expansion and Dry Stack Tailings Storage Facility. EBA File: W14101168.013. September 14, 2011.	None
Main Waste Rock Dump (MWD)	EBA 1998. Geotechnical Evaluation Proposed Main Waste Dump, Minto Project, Yukon Territory. EBA File: 0201-95-11509. April 1998.	None
Southwest Waste Dump (SWD)	EBA 2008d. Geotechnical Design Proposed Southwest Waste Dump, Minto Mine, Yukon. EBA File: W14101068.005. September 2008.	EBA 2008d contains minimum monitoring requirements for physical inspections, deformation surveys, and instrumentation monitoring. Instrumentation monitoring plan includes a schedule and threshold warning levels.

Facility	Design Reports	Monitoring/Inspection Guidance Documents
Reclamation Overburden Dump (ROD)	EBA 2008a. Geotechnical Design Proposed Reclamation Overburden Dump, Minto Mine, Yukon. EBA File: W14101068.004. February 2008. EBA 2010. Reclamation Overburden Dump Expansion Geotechnical Design Report. EBA File: W14101068.0040. June 29, 2010.	Performance monitoring and annual inspection requirements detailed in the EBA 2010 design report.
Ice-Rich Overburden Dump (IROD)	EBA, 2006a. Geotechnical Design Ice-Rich Overburden Dump, Minto Mine, Minto, YT. EBA file: 1200173. January 2006. EBA, 2007. Ice-Rich Overburden Dump Containment Berm Inspection Report, Minto Mine Site, Minto Yukon. EBA File: 1200173.001. June 19, 2007.	Long-term monitoring and annual inspection requirements are listed in the EBA 2006 design report.
Ore Stockpiles	none	none
Mill and Camp Site	EBA 1994. Geotechnical Evaluation Mill and Camp Site, Minto Project, Yukon. EBA File: 0201-11509. Dec. 1994.	none
Mill Water Pond (MWP)	Not available	EBA 1997. Construction Quality Assurance Manual for Waste Dumps, Tailings/Water Dam, Mill Water Pond, and Diversion Ditch, Minto Project, Yukon. EBA File 0201-95-11509. August, 1997.
Fuel Containment Facility	Not available	Not available
South Diversion Ditch (SDD)	EBA 2006b. Design Drawings, South Diversion Ditch & Collection Pond. IFC. July 2006. EBA 2012. Pipe Design for South Diversion Ditch Realignment, Minto Mine, YT. EBA File: W14101068.013. May 4, 2012. SRK 2013. South Diversion Ditch Realignment and Overflow Spillway. SRK Project No.: 1CM002.006.200, February 1, 2013.	none
Minto Creek Detention Structure (MCDS)	EBA 2011e. Minto Project: Minto Creek Detention Structure Seepage Monitoring Program. EBA File: W14101068.001. October 25, 2011.	EBA 2011e contains monitoring requirements including frequency, triggers, and responses.
Water Storage Pond Dam (WSP)	EBA 1995. Geotechnical Design Tailings/Water Dam, Minto Project, Yukon. EBA File: 0201-95-11509. Dec. 1995. EBA 2008b. As-built Construction Report, Water Retention Dam, Minto Mine, Minto, YT. EBA File: 1200173.001. April 2008.	EBA 2008c. Draft Operation, Maintenance and Surveillance Manual, Water Retention Dam, Minto Mine, Minto, YT. EBA File: W14101068.002. April 2008.
Big Creek Bridge	Not available	Not available

4 Monitoring and Instrumentation Data

Table 2 lists instrumentation data reviewed as part of the inspection, with the date of the most recent reading. Instrumentation plots are provided in Appendix B. Data that has not been updated since the last geotechnical inspection is not included in the appendix.

Table 2: Summary of Instrumentation Data

Facility	Instrumentation Type	List of Active Instrumentation	Last Reading Date
Dry Stack Tailings Storage Facility and Mill Valley Fill (DSTSF and MVF)	Survey Hubs	DSSH10, DSSH11, DSSH12, DSSH14, DSSH15, DSSH17.	June 2013
	Inclinometers	DSI-13, DSI-14, DSI-15, DSI-16, DSI-17, DSI-18, DSI-19, DSI-20, DSI-21	May 2013
	Piezometers	DSP-5A, DSP-5B, DSP-6A, DSP-6B	April 2013
	Ground Temperature Cables	DST-10, DST-11, DST-13, DST-14, DST-15	April 2013
Main Waste Rock Dump (MWD)	Inclinometers	MDI-1, MDI-2	Nov. 2012
South Waste Dump (SWD)	Survey Hubs	SWD-01, SWD-01A, SWD-02, SWD-02A, SWD-03A, SWD-04A, SWD-05A	June 2013
	Inclinometers	SDI-1, SDI-2, SDI-3	Nov. 2012
	Piezometers	SDP-1, SDP-2, SDP-3, SDP-4	Sept. 2012
	Ground Temperature Cables	SDT-1, SDT-2, SDT-3, SDT-4	June 2012
Mill Water Pond (MWP)	Survey Hubs	MWPSH-1, MWPSH-2, MWPSH-3, MWPSH-4	May 2009
	Ground Temperature Cables	MWPT-1, MWPT-2	April 2012
Water Storage Pond Dam	Survey Hubs	WSDH-2, WSDH-3, WSDH-4, WSDH-5, WSDH-6	Dec. 2012
	Piezometers	WDP-2, WDP-3, WDP-3A, WDP-4, WDP-5, WDP-6, WDP-7, WDP-8, WDP-9, WDP-10, WDP-11, WDP-12, WDP-13	Sept. 2012
	Ground Temperature Cables	WDT-1, WDT-2, WDT-3, WDT-4, WDT-5, WDT-6, WDT-7, WDT-8	July 2012

4.1 Dry Stack Tailings Storage Facility

Movements in the DSTSF were first identified in early 2009. A detailed assessment and history of the physical stability associated with these movements is provided in the letter report “Detailed Review of Foundation Performance at Select Mine Waste Facilities and Main Pit South Wall” (SRK 2012a).

The Mill Valley Fill was designed to mitigate the movement and construction of the facility, which began in January 2012 and was nearly completed by March 2013. In the spring of 2013, a geotechnical drilling program was completed at the DSTSF. It included the installation of nine inclinometers, four piezometers, and five ground-temperature cables.

Ground temperature profiles from the functional instrumentation are provided in Figures 1 and 2 of Appendix B. Temperature profiles from previous instrumentation that have malfunctioned are included in the "2012 Geotechnical Annual Review" (SRK 2012c). The profiles indicate that warm permafrost is present at all locations of the instrumentation, except in the lower portions of DST-11 and DST-13. DST-11 is located near the crest of the DSTSF, while DST-13 is located approximately 300 m east of the DSTSF in an undisturbed location. At this time, only one month of data has been collected and it is uncertain whether the unfrozen zones are below the permafrost or whether the warmer temperatures are due to drilling influence.

Piezometer water levels are presented in Figure 3 of Appendix B. The temperature profiles indicate the sensors are likely in frozen ground, and as a result, may not be accurate. In addition, barometric pressure was not recorded when a piezometer reading was collected. Barometric pressure is required in the calculation of the water elevations. The piezometric data assumes an estimated barometric pressure.

Profiles and time-displacement plots from the recently installed inclinometers are presented in Figures 4 to 6 in Appendix B. Initial inclinometer results (Table 3) within the DSTSF show continued movement in the same north-northwest direction as the results from previous inclinometers. The maximum initial average velocity is 2.4 mm/day at DSI-13, which is located at the centre of the DSTSF near the crest.

Table 3: DSTSF Inclinometer Summary

Inc. ID	Location in the DSTSF	Install Date	Date Last Read	Days	Total Disp. (m)	Average. Velocity (mm/day)	Shear Depth (m)	Disp. Dir. (Azi.)	Status
13-DSI-13	Crest, centre	4/12/13	5/19/13	37	0.09	2.4	80	5	Functional
13-DSI-14	About 150 m north	4/06/13	5/18/13	42	0.04	0.9	40	11	Functional
13-DSI-15	About 150 m north	3/16/13	4/16/13	31	0.01	0.3	33	23	Probe cannot run past 25 m
13-DSI-16	Eastern crest	4/10/13	5/23/13	43	0.03	0.6	70	352	Functional
13-DSI-17	About 150 m northeast	3/27/13	5/26/13	60	0.03	0.5	39	33	Functional
13-DSI-18	About 250 m northeast	3/22/13	5/25/13	64	0.02	0.2	72	269	Functional
13-DSI-19	About 400 m northeast	3/18/13	5/24/13	67	0.00	0.1	n/a	n/a	Functional
13-DSI-20	About 50 m northwest	4/18/13	5/18/13	30	0.02	0.6	27	14	Functional
13-DSI-21	Top south side	4/18/13	5/23/13	35	0.00	0.0	n/a	n/a	Functional

Note(s): (1) Inc.: Inclinometer
(2) Disp.: Displacement
(3) Disp. Dir.: Displacement Direction
(4) Azi.: Azimuth

Survey hub movement data is presented in Figures 7 and 8 of Appendix B. The survey hub data was last reported in November 2012 in the "Deformation Monitoring Plan and Report" (Minto 2012a). Movement rates on the west side of the facility, which is bounded by the buttress, have decreased slightly, while the rates on the east side are generally steady or have increased slightly. The increase in movement may be due to the placement of approximately 2 m of overburden over the facility.

Table 4: DSTSF Survey Hub Summary

Survey Hub	Movement Rate[1] – Nov. 2012 (mm/day)	Average Movement Rate – Jan. to June 2013 (mm/day)
DSSH 10	1.5	1.9
DSSH 11	0.9	0.9[2]
DSSH 12	3.0	2.7
DSSH 14	4.2	3.0
DSSH 15	2.7	2.2
DSSH 17	1.2	1.4

Note(s):

(1) Source: Minto 2012a.

(2) Data up to March 2013.

4.2 Main Waste Dump

Two inclinometers, MDI-1 and MDI-2, are located at the Main Waste Dump. Profiles and time displacement plots are presented in Figure 9 of Appendix B. There are no noticeable changes in trends compared to the data presented in "Mine Waste Structures – Deformation Monitoring Plan and Report" (Minto 2012b).

4.3 Southwest Waste Dump

The minimum requirements for the monitoring frequency and instrumentation threshold warning levels are noted in the design report (EBA 2008d). The monitoring requirements were developed before the observation of deformation movements and the installation of additional instrumentation to monitor the movements.

A detailed assessment and history of the physical stability associated with the South Waste Dump (SWD) movements are provided in the letter report "Detailed Review of Foundation Performance at Select Mine Waste Facilities and Main Pit South Wall" (SRK 2012b). The initial indication of movement in the Main Pit south wall was observed by Minto in April 2009. A waste rock buttress was subsequently designed and is in the process of construction. The SWD has shown trends in movements similar to those of the Main Pit south wall, but with a delay of about one month and at significantly lower magnitudes.

The temperature cables, inclinometers, and piezometers installed at the SWD are intended to monitor foundation conditions along the toe of the slope. Survey hubs were also installed in March 2011 to monitor surface movements along the southeast perimeter.

Survey hub movement data is presented in Figure 10 of Appendix B. There is noticeable movement at all hub locations. Movements in the northeast corner of the dump (SWD-1, SWD-1A, and SWD 2A) were previously reported to be related to the movements of the south wall of the Main Pit (EBA 2011d). The movement of these hubs has generally slowed, which may be related to the south wall buttress construction. Movement of SWD-02A, however, continues at a rate of approximately 0.6 mm/day. Movements of the survey hubs further to the south have also increased. These movements are believed to be related to the placement of additional waste materials on the dump.

Inclinometer plots including profiles and time displacement graphs for the SWD are presented in Figures 11 and 12 of Appendix B. The last inclinometer reading available was taken in November 2012. As a result, there is no data available to investigate the increase in movement at the south end of the SWD.

No new ground temperature information is available since the last site inspection in 2012 (SRK 2012c).

Instrumentation readings have been collected infrequently at the SWD. Given the recent increase in movement, a minimum monthly collection frequency should be established. Also, the monitoring program established in the EBA design report (EBA 2008d) should be reviewed and updated. The monitoring program needs to include guidance on inspection frequencies and instrumentation criteria (triggers) that would initiate action.

4.4 Mill Water Pond

Instrumentation at the MWP (Mill Water Pond) consists of survey hubs and ground temperature cables. Locations of the instrumentation are shown in Figure 14 of Appendix A.

The last survey of the survey hubs (MWPSH-1 to 4) was completed in 2009. Previous inspection reports note that the hubs have been removed. Settlement surveys are required as part of the CQA manual (EBA 1997) under Water Use Licence QZ96-006 and are included in Appendix 7 of that document. The CQA recommends a minimum quarterly survey frequency for the first year and, depending on results, biannually thereafter. It is recommended that the hubs be reinstalled and monitored monthly until consistent results are obtained. The frequency can then be reduced to biannual.

No ground temperature data has been recorded since April 29, 2012. The pond monitoring program (EBA 1997) states that the reading frequency was to be re-evaluated after the third year of service. Up to April 2012, readings were generally recorded monthly. It is recommended that readings be taken at least quarterly because the data to date indicates that the active layer continues to deepen.

4.5 Water Storage Pond

Instrumentation within the dam at the WSP (Water Storage Pond) consists of eight ground temperature cables, thirteen vibrating wire piezometers, and five survey hubs. No ground temperature data or piezometric data are available since the last inspection in September 2012. Survey hub movement data is presented in Figure 13 of Appendix B. No significant movement was observed.

5 Results and Recommendations

Findings of the inspection are documented in the photographic compilation of figures in Appendix A. Nineteen figures provide a record of observations across the site.

A summary of the recommendations is provided in Table 5. Recommendations with a high priority for action are highlighted.

Table 5: Summary of Recommendations

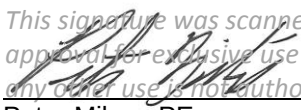
Area	Appendix A Figure #	Recommendation
General	-	Create a site-wide geotechnical monitoring plan that details: • Inspection and instrumentation monitoring frequencies, • Roles and responsibilities of personnel assigned to monitor the facility and ensure safe operations and conditions, • Surveillance procedures and requirements, • Inspection and Instrumentation criteria (triggers) that require action, • Operation/emergency procedures in case the instrumentation triggers are reached. At facilities where monitoring guidance is in place, insufficient data collection has generally taken place in past year.
	-	Record barometric pressures when collecting vibrating wire piezometers readings to allow for accurate calculation of pore pressures.
Dry Stack Tailings Storage Facility	2	Regrade the DSTSF overburden surface to promote runoff once the final cover design has been determined and cover the remaining areas of exposed tailings on the south edge of the facility.
	4 - 5	Rehabilitate the Tailings Diversion Ditch to capture and convey water along the entire length of the ditch and construct an engineered discharge.
Main Waste Dump	6	As part of regular site inspections, continue to monitor the slough location and the area where tension cracks were noted in the 2011 and 2012 inspections. Check for signs of additional movement or instabilities.
Southwest Waste Dump	-	Complete reading of the survey hub and slope inclinometers on at least a monthly basis and continue monitoring ground movement rates. Notify SRK of any other observations or increases in movement that indicate instability.
	7	One large ponded area of water was noted. Before placing the next lift, regrade this area to promote runoff.
	8	Continue to monitor erosion at the culvert outlet located near the W-15 Detention Structure and maintain a photographic record to inspect for changes in condition.
	8	Continue to monitor sediment accumulation in the culvert at the inlet and outlet. Maintain a photographic record to inspect for changes in condition.
	8	The next time a liner crew is on site, repair the liner defects and anchor system for the W-15 detention structure. Consider placement of a safety berm or snow fencing to prevent further damage to the liner.

Area	Appendix A Figure #	Recommendation
Reclamation Overburden Dump	9	Install a rip-rap channel down the slope to minimize slope erosion. Regrade areas near the exiting erosion channels to direct runoff to the rip-rap channel.
	9	Monitor the ponded water to ensure that the 40 m offset from the dump toe is maintained as stipulated in the design report (EBA 2008a).
	9	Survey dump toe annually to confirm that it is within the permitted boundary.
Mill and Camp Site	13	Regrade the area above the erosion channels on the camp pad to promote runoff away from these areas.
	13	In addition to the surface regrading, fill the channel by the carpenter's shop with rip-rap or a half culvert to provide a path for the water to drain. In place of the surface grading, consider constructing a small ditch near the slope crest to direct runoff to the drop channel or half culvert.
Mill Water Pond	-	Re-establish survey hubs and collect monthly data until results are consistent. Reduce monitoring frequency to biannual thereafter.
	-	Resume ground temperature cable readings with a minimum quarterly monitoring frequency.
	14	Patch tears in the liner system the next time that a liner crew is on site. Fill the voids under the tears before patching.
	14	Continue to monitor the condition of the liner under the by-pass pipe supports.
	15	Clean out sediments accumulated in the surface runoff ponds and culverts.
South Diversion Ditch	17	Remove ditch obstructions such as road fill, vegetation, GCL to increase the flow capacity.
	17	Cover the exposed liner as per the channel design.
	17	Construct the pipeline intake structure and overflow spillway to the Area 2 open pit as per the IFC design drawings provided in the memorandum "South Diversion Ditch Realignment and Overflow Spillway" (SRK 2013).
Water Storage Pond Dam	19	Continue regular monitoring of the dam, noting specifically the clarity of the seepage and flow exiting the stilling basin and the seepage rate through the weir.
	19	The discharge point of the water (from the pit, water treatment plant, etc.) influences the seepage pump data at W-3 in the seepage pump house. Options to obtain accurate seepage measurements should be explored such as moving the discharge point a further downstream of the pump house. The issue should be resolved prior to 2014 spring melt.
	19	Review and update the Operation, Maintenance, and Surveillance Manual for the dam.
Big Creek Bridge	20	Continue regular annual monitoring of sediment accumulation in the culverts. If sediments continue to accumulate, clean them out.

Note(s):

(1) High priority actions are highlighted in blue.

This report, ***"2013 Freshet Geotechnical Site Investigation"***, was prepared by



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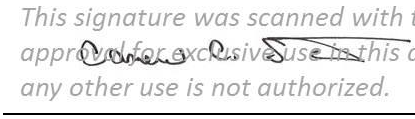
Senior Consultant

and reviewed by



Cam Scott, PEng
Principal Consultant

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

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Appendix A: Photographic Report

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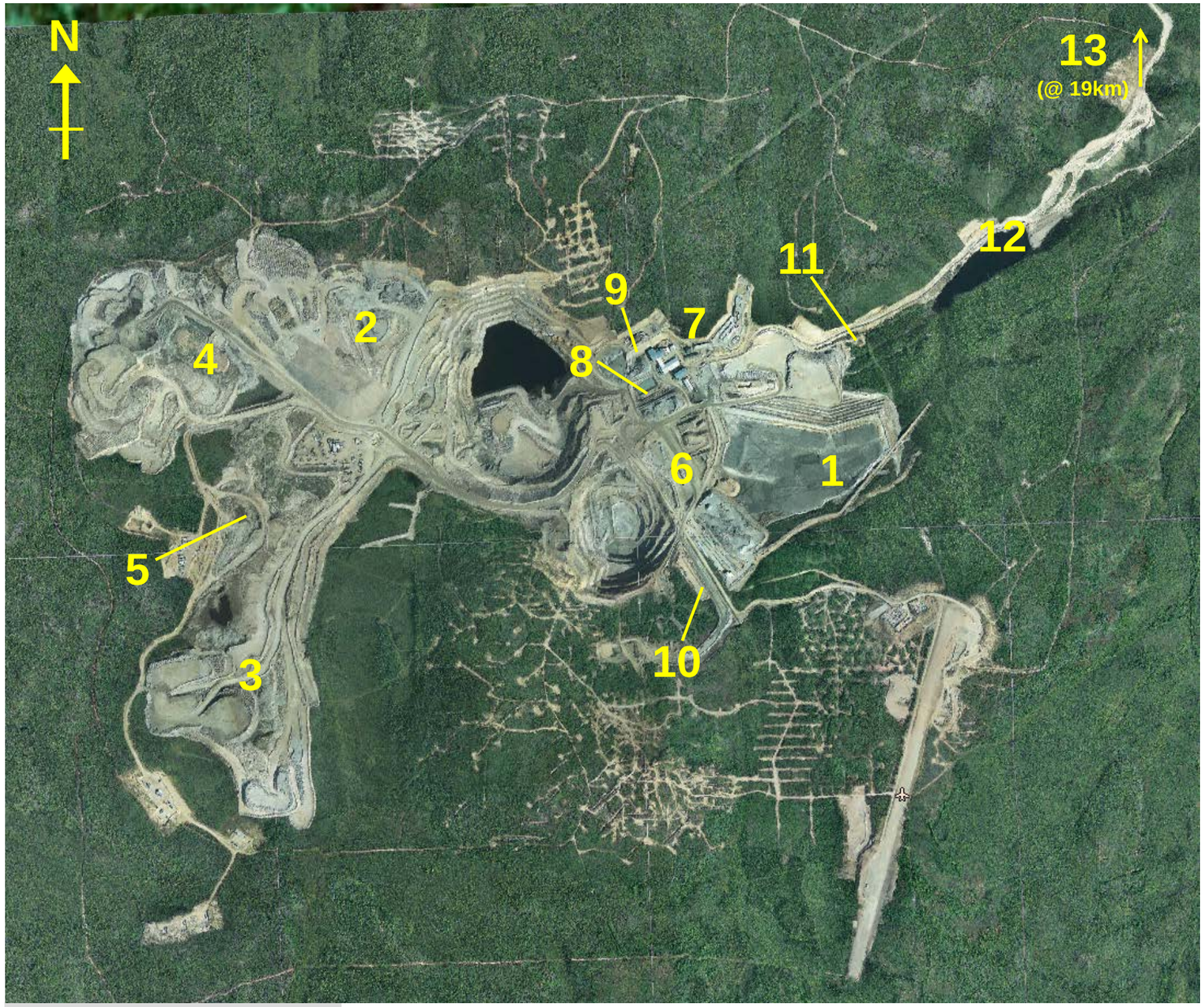

2012 Orthophoto.

Inspection Area Number

srk consulting
VANCOUVER

CAPSTONE MINING CORP.
MINTO MINE
OPERATED BY MINTO EXPLORATIONS LTD.

Job No: 1CM002.012.05

Filename: Minto 2013 FreshetSite Inspection.pptx

Minto Mine

2013 Freshet Geotech Inspection

Minto Mine 2013
Geotechnical Inspection Areas

Date:	Approved:	Figure:
June 2013	PHM	1

1 Dry Stack Tailings Storage Facility – Tailings Cover

(a) Dry Stack Tailings Storage Facility surface from north east corner.

- Since the last inspection, approximately 2 m overburden has been placed over the entire tailings surface. It is understood that this is a temporary cover that was designed to have a 2% grade.
- In general, there are a significant amount of thaw bulbs, surface cracking and differential settlement of the material, which can be expected as the overburden was placed during winter. It is recommended that the surface be regraded in the fall once the frozen material has thawed.
- The pink box near the center of the photo is a protective cover for a recently installed inclinometer.

(b) One small area of ponded water was observed at the southern end of the facility measuring approximately 10m x 5m. The water was clear and likely attributed to recent precipitation events.

(c) Tailings remains exposed at surface on the south slope of the facility adjacent to the Tailings Diversion Ditch. Water was also observed to be impounded against the DSTSF on the south side of the facility at various locations as shown in photos (c) and (d). The water can be attributed to melting snow, recent precipitation and from water not captured by, or flowing under, the tailings diversion ditch. Seep locations and areas where the water was observed to flow beneath the tailings are noted on Figures 4 and 5.

Recommendations

- The recently placed overburden material was placed during winter and will likely experience differential settlement due to thawing of frozen materials over the summer. In the fall, the grading and surface water management of the surface of the facility should be reviewed and areas graded as required to promote runoff.
- The remaining areas of exposed tailings should be covered and the uphill area south of the DSTSF should be regraded as required to control surface drainage, avoid ponding, and limit infiltration of water into the tailings as per Clause 36 and 37 of the water license QZ96-006, Amendment 8.

2012 Orthophoto

Photograph vantage point

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1 Dry Stack Tailings Storage Facility – Waste Rock Shell & Mill Valley Fill

- Photos show the condition of the waste rock shell and slopes.
- The slopes appear to consistent with original placement: no signs of slumping, bulging or tensions cracks were observed.
- The small sinkhole (1.5 m diameter, 0.5 m depth) noted in the 2012 inspection has been filled in.
- Seepage from the toe of the Mill Valley Fill (MVF) near the Minto Creek Detention Structure (MCDS) is documented in Figure 18.

(a) Aerial view of the north end of the DSTSF showing the waste rock shell and the extent of the MVF placement on October 2, 2012.
(b) View of the MVF taken from the NE corner of the DSTSF.
(c) North-east end of the waste rock shell looking east.
(d) East end of the waste rock shell looking north
(e) View of the MVF area looking north east.
(f) View of the north-east slope of the MVF taken from the northern corner of the MVF.

Photograph vantage point

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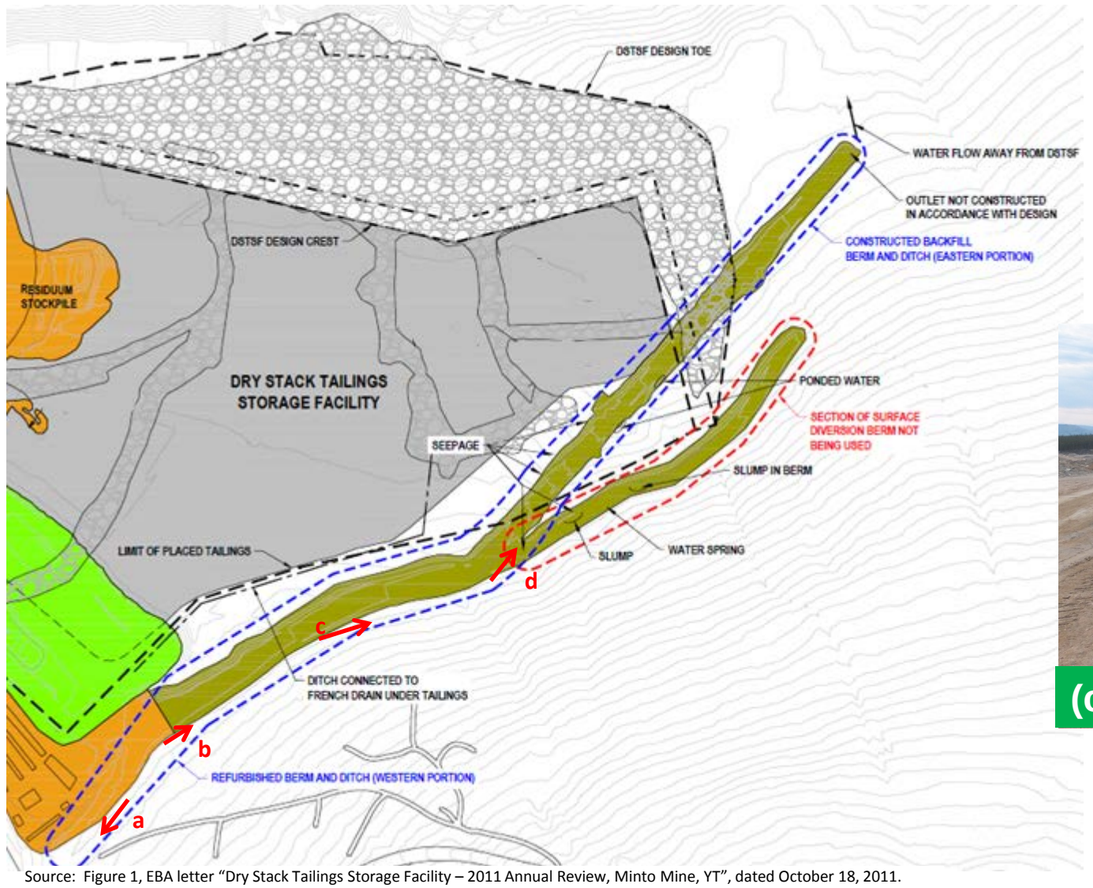
1 Dry Stack Tailings Facility – Surface Diversion Berm – Western Portion



Source: Figure 1, EBA letter "Dry Stack Tailings Storage Facility – 2011 Annual Review, Minto Mine, YT", dated October 18, 2011.

Photograph vantage point

- In general, the western portion of the berm and ditch was functional at the time of inspection, with conditions deteriorating towards the east. East of the location of Photo (d), the ditch is in very poor condition. Details on the eastern portion of the ditch are provided in Figure 5.
- Conditions are similar to those observed to the 2012 inspection.
- Two seeps were observed below the berm near the locations noted in the 2011 inspection and on the plan in this figure.

(a) An energy dissipation area at the upstream portion of the ditch at the end of a 3" pipeline from the South Diversion Ditch Area. The rip-rap in the ditch is underlain by layers of geotextile and liner. The area remains unchanged compared to 2012 photographs.

(b) Tension cracks are present on the berm side of the ditch over a significant length of the ditch.

(c) Looking downstream in the western portion of the ditch. Tension cracks visible along the road. Two small seep enters the ditch (locations noted in yellow). There is minor sloughing of the side-slopes at these locations, but the sloughing has not significantly impacted the flow capacity of the ditch.

(d) View of the ditch looking downstream at the point where the ditch crosses the south wing portion of the diversion system (outlined in red in the figure plan).

- The ditch near this location and further downstream is not well formed, with sediments building up in the channel, and the liner sagging down the channel sides.
- Liner sections are over-lapped, but not welded. Gaps are present between some sections allowing water to pass through.
- Water was also observed to flow over the sides of the liner in places.

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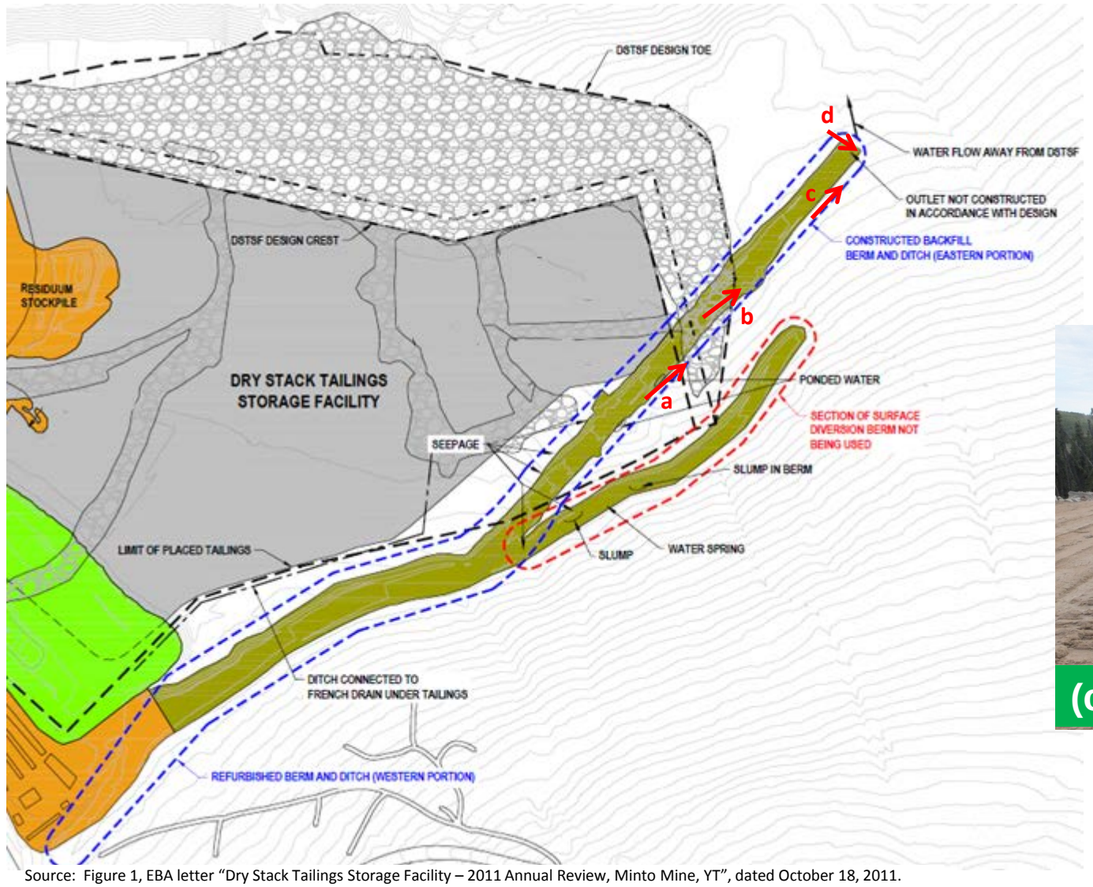
1 Dry Stack Tailings Facility – Surface Diversion Berm – Eastern Portion



Source: Figure 1, EBA letter "Dry Stack Tailings Storage Facility – 2011 Annual Review, Minto Mine, YT", dated October 18, 2011.

Photograph vantage point

Conditions of the channel are unchanged compared to the 2012 inspection. The eastern portion of the ditch is in poor condition. At the time of the inspection, it is estimated that approximately half of the flow was lost along the east portion of the ditch.

- The channel is undersized in many locations;
- The channel bed has settled resulting in areas of ponding water;
- The liner has torn in many locations;
- The anchoring of the liner has failed resulting in the liner slumping down the sides of the channel,
- There are gaps in the liner resulting in water flowing beneath the liner and over the sides of the liner.
- As noted in the 2011 and 2012 inspection, the discharge point of the ditch (Photo (d)) was also not constructed in accordance with the March 23, 2010 Issued for Use Drawing TDD-01, where flow should discharge into a lined stilling basin.
- The vegetation surrounding the discharge point is stressed with many leaning dead trees in the area.

Recommendations

- The surface diversion berm should be rehabilitated to capture and convey water along the entire length of the ditch.
- The ditch discharge should be constructed to an engineered design.

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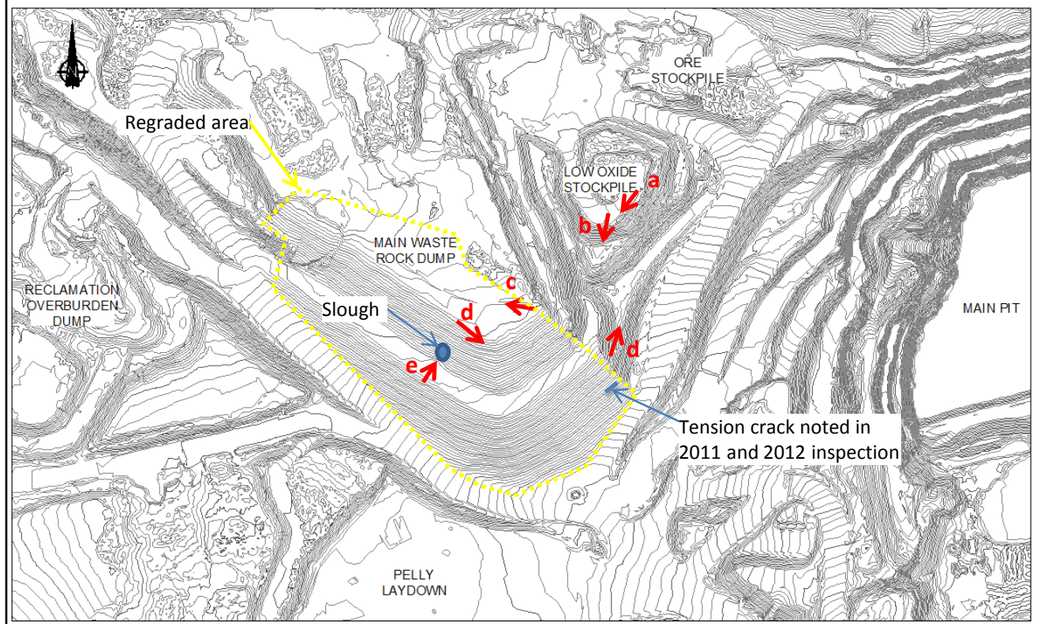
2 Main Waste Rock Dump

- Reclamation activities at the dump started in 2011 with re-contouring of portions of the dump slopes. The regraded area is noted in the plan below. The regraded slopes have been covered and revegetated with different vegetation prescriptions placed on different portions of the cover.
- The tension crack noted in the 2011 and 2012 inspection at the location noted in the plan below was not observed during the May 2013 inspection. The crack may have been hidden by vegetation.

- Photo (a) show a tension crack found near the crest of the Low Oxide Stockpile. The crack is parallel to the slope that is dumped at an angle of repose.
- Photo (b) shows the southeast end of the Main Waste Dump that is dumped at an angle of repose, no signs of instability were observed.
- Photo (c) shows a diversion channel excavated near the crest to direct runoff away from the reclamation plots.
- Photo (d) shows the regraded slopes and vegetation growth on the south end of the dump.
- Photo (e) shows small surficial sloughing of the cover material. The extent of the Failure is outlined in yellow. Minor bulging of material is present at the base of the slope. No action required.

Recommendations

- The slough, as well as the area where tension cracks were noted in the 2011 and 2012 inspections should continue to be monitored as part of regular site inspections for signs of additional movement or instabilities.



Source: Figure 1, EBA letter "Main Waste Rock Dump – 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

Photograph vantage point

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		Date: June 2013 / Approved: PHM / Figure: 6

3 Southwest Waste Dump

- The construction method of the dump is described in the 2011 annual review as follows: "Minto is utilizing a series of benches and setbacks during dump construction. Benches of finer grained non ice-rich waste have been constructed back of the overall crest of the facility. These benches are being and will continue to be capped with coarse waste rock until the ultimate dump dimensions are achieved. Therefore, the exterior slope will be constructed with coarse waste rock only."

- Tension cracks were observed in the southern end of the dump in the location located on the plan and noted in photo (b). Photo 2 was taken of the slope located adjacent of the cracks. A series of cracks are offset from the crest by approximately 5 m and extend over a distance of 60 m in total. The crack is 20mm wide at the widest location.
- No other signs of instability (slumping, bulging, tension cracks, differential settlement) were observed. Erosion was observed at the outlet of the culvert located north east of the dump (see Figure 8).
- Construction of the dump appears to be in accordance of the method described above.
- Safety berms were present throughout the dump.
- Ponded water was observed in one location (Photo (a)),

Recommendations

- Prior to placement of the next bench, areas with ponded water should be regraded to promote runoff and drain the large ponded areas.
- The tension cracks along the crest should continue to be monitored semi-annually as part of the regular geotechnical inspections for signs of additional movement.

2012 Orthophoto

Photograph vantage point

Note: Photo taken Oct. 2, 2012

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3 Southwest Waste Dump

Photos (a) shows the outlet of the culvert at the NE corner of the dump and east of the Pelly Laydown area.

- Based on equipment tracks in the area, it appears that the large diameter boulders have been placed along the slope to mitigate erosion. The area should be monitored at least annually with a photographic record maintained to observed for changes.
- The appearance of the rip-rap/boulders downstream of the culvert are unchanged compared to previous photos taken in 2012.

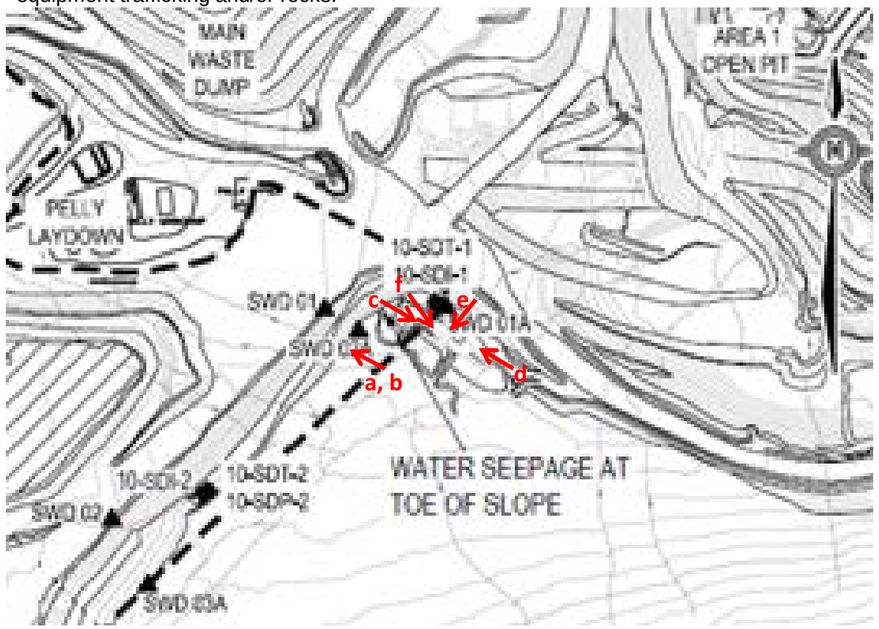
Photo (b) shows sediment accumulating inside of the culvert, with some cobbles present with diameters up to 8 inches observed.

Photos (c) to (f) show the W-15 Detention Structure Area. The conditions of the area are the same as that reported in 2012. Due to high water levels as shown in (c), photos (d) to (f) are from the 2012 inspection.

- Water continues to seep from the toe of the fill slope into the W-15 Detention Structure Area. The water was clear, with low turbidity.
- Sediment is accumulating at the west end of the pond. The weight of the sediment appears to have stretched the liner and resulted in a large tear from along the crest of the berm at the anchorage point.
- There are 3 punctures in the liner located near the crest west of the pump (Punctures shown in photo (e)). The punctures were caused by either equipment damage or rocks raveling down the slope.
- Photo (d): The inlet line for the pump is placed on a layer of rip-rap placed directly on the liner. A large boulder is in the foreground of the photo directly on the liner.

Recommendations

- Continue monitoring of sediment accumulation in the culvert and erosion at the outlet. A photographic record should be maintained to inspect for changes in condition.
- The liner anchor system on the west side of the facility should be repaired the next time a liner crew is on site. At the same opportunity the holes in the liner should be repaired.
- Placement of a safety berm or snow fencing should be considered to prevent further damage to the liner from equipment trafficking and/or rocks.



Source: Figure 1, EBA letter "Southwest Waste Dump– 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

Photograph vantage point

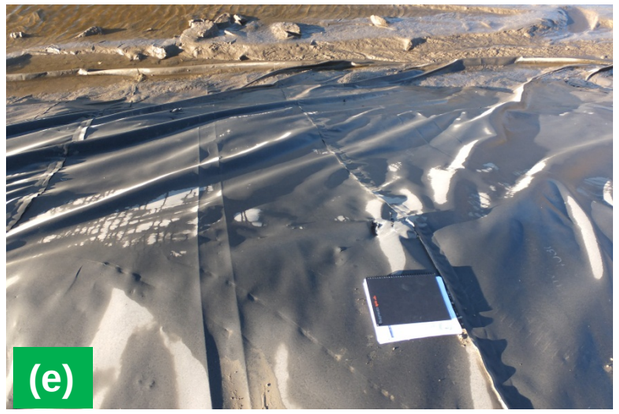


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			Figure: **8**

4 Reclamation Overburden Dump

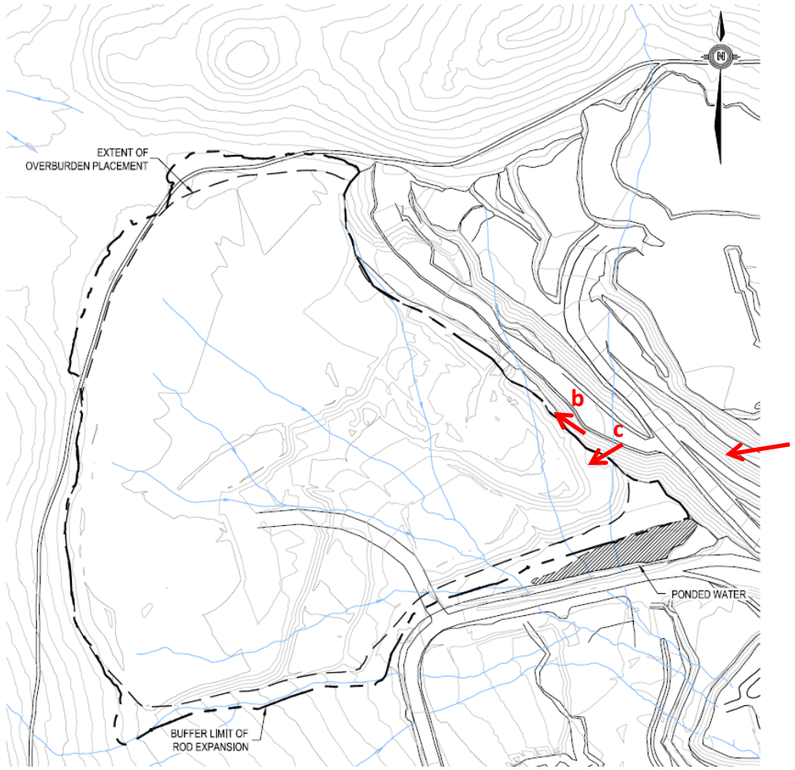
- Conditions of the dump are similar to conditions reported in the 2011 and 2012 site inspections. Slumping, settlement and tension cracks are expected in the dump as it is constructed with frozen overburden with thawing expected.

a) Overview of the ROD and the ponded water adjacent to the Dyno Access Road southeast of the ROD. Two small erosional channels were observed (circled in yellow) to be in similar condition as reported in previous inspection.
b) Photo shows recent placement of overburden/organic material on the dump, the source of the material can be seen in the background of photo (c).
c) Localized slumping of the perimeter slope. Discontinuous tension cracks and differential settlement observed along the perimeter crest. Ground undulation is typically 0.3 m and is prevalent throughout the facility.

Recommendations

Recommendations are the same as those mentioned in the 2011 and 2012 inspections:

- Installation of a rip-rap channel down the slope to minimize slope erosion. Areas near the exiting erosion channels should be regraded to direct runoff to the rip-rap channel.
- Monitoring of the ponded water to ensure that the offset from the dump toe is maintained as stipulated in the design report.
- The toe of the dump should be surveyed annually to confirm it is within the permitted boundary.



Source: Figure 1, EBA letter "Reclamation Overburden Dump – 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

Photograph vantage point

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		Date: June 2013	Approved: PHM / Figure: **9**

5 Ice Rich Overburden Dump

- A containment berm constructed of coarse waste rock is present on the north, east and south sides of the dump.
- Photo (a) shows outside slope of the berm, while Photos (b) through (d) show the inside slope and ice rich overburden material.

- No signs of instability were observed along the containment berm.
- Minor amounts of pooled water were observed against the berm, with water levels appearing to be dropping (see photo (d) in the lower left corner). This indicates that the berm is functioning as intended by allowing most water to drain to the outside of the facility.

2012 Orthophoto

Photograph vantage point

srk consulting VANCOUVER	CAPSTONE MINING CORP. MINTO MINE OPERATED BY MINTO EXPLORATIONS LTD.	2013 Freshet Geotech Inspection
		Ice Rich Overburden Dump
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6 Ore Stockpiles

- The ore stockpile area was investigated briefly in passing. All slopes appeared in good condition: no slumping, bulges, cracks, or other signs of instability were observed.

Photograph vantage point

Orthophoto taken in 2011

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		Ore Stockpiles
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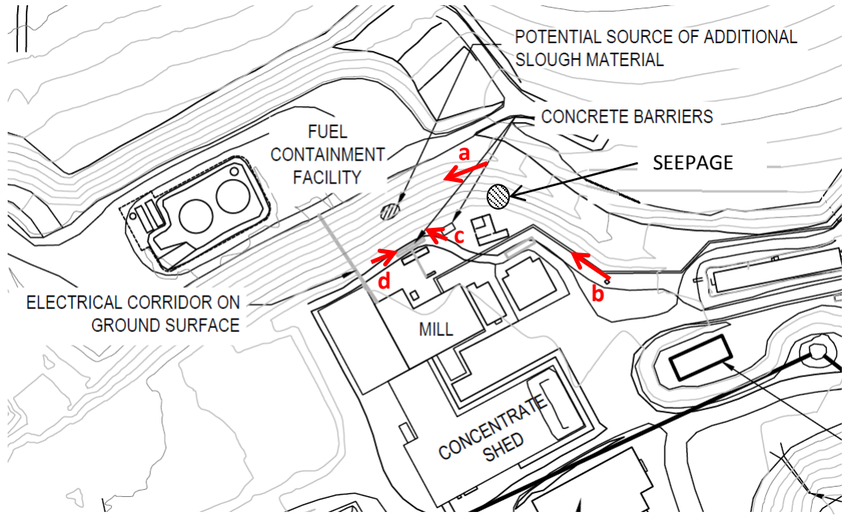
7 Mill and Camp Site

a) Slope above the main mill site appears stable.
- Safety berms at the top of the slope are in good condition.
- Eroded sand/gravel is generally present at the base of the slope with occasional cobbles/boulders up to 300 mm.

b) East end of the mill slope looking northwest. The two small seeps noted in 2011 and 2012 were not observed to be flowing at the time of this inspection, however, the base of the slope in this area was observed to be wet. The seep locations are circled in yellow in photo (d) and is noted in the plan below.

c) As noted in previous inspections, a small slough is present near the center of the slope approximately 10 m east of the electrical corridor.

d) The 2012 inspection noted some larger rocks that have raveled down the slope and the concrete barriers at the toe were approaching the capacity for containment. The area around the concrete barriers appear to have been cleared since the last inspection with the large rocks removed.



Photograph vantage point

Source: Figure 1, EBA letter "Mill & Camp Site – 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

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		Figure: **12**	

7 Mill and Camp Site

a) & b) Slope above the main camp site appears stable.
- Eroded sand/gravel is generally present at the base of the slope with occasional cobbles/boulders up to 300 mm.

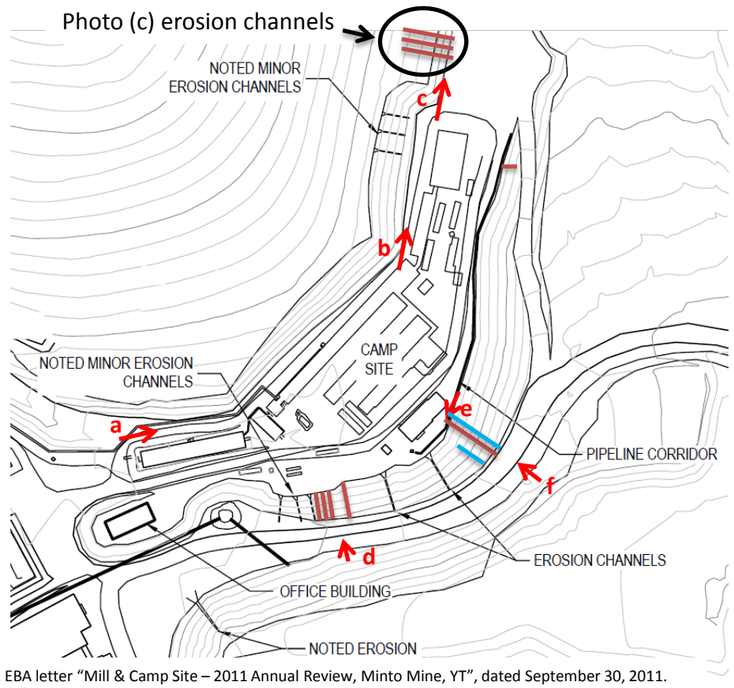
c) Minor erosion channels present at the north end of the camp area. Three minor erosion channels were noted in the 2011 in this area marked on the plan below.

d) Erosion channels present south of the camp site pad near the flags. No changes compared to the photographs taken during the 2012 inspection.

e) & f) Erosion channels present south of the camp site near the carpenters shop. The scarp of the erosion channel appears to have receding and now undercuts the utilidor. There appears to have been pooled water in the area . Actions are required to prevent further erosion of the area.

Note: Since the 2011 inspection, fill was placed below the main access road as part of the Mill Valley Fill pad that have covered over the erosion channels noted in the figure below.

Recommendations
- The area above the erosion channels on the camp pad should be regraded to promote runoff away from the channels.
- The channel by the carpenter's shop should be filled with rip-rap or a "half culvert to provide a path for the water to drain". It appears that no action has been taken in the past year and that further erosion channels have developed.
- It is recommended that these actions be completed in the following year. In place of the surface grading, a small ditch could be constructed near the slope crest to direct runoff to the drop channel or half-culvert.



Source: Figure 1, EBA letter "Mill & Camp Site – 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

Photograph vantage point

Erosion Channels added in 2011 site visit

Erosion Channels added in 2012 site visit

Erosion Channels added in 2013 site visit

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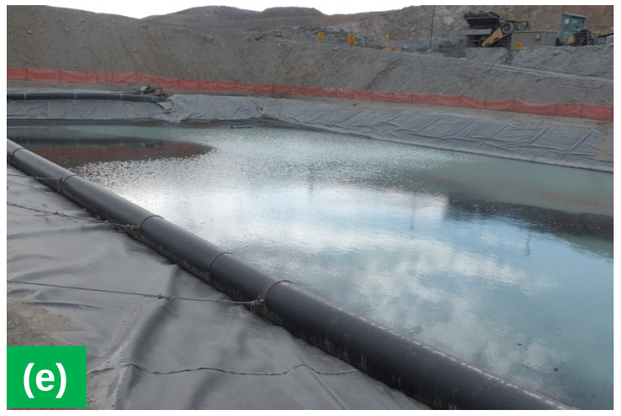
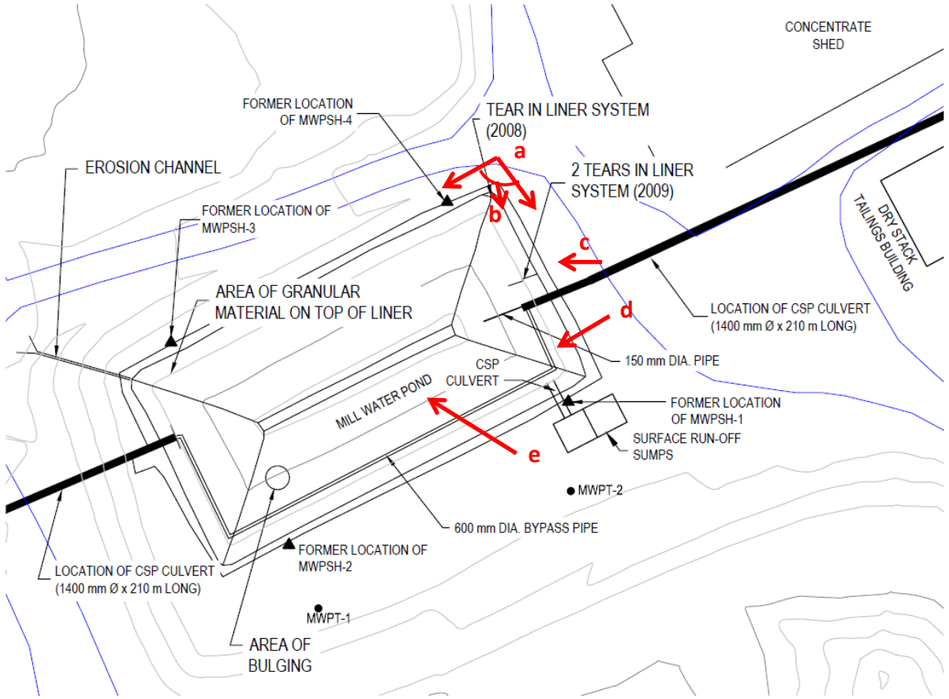
8 Mill Water Pond

It is understood that the Mill Water Pond is no longer in service. Conditions of the Mill Water Pond are unchanged compared to the Sept. 2012 inspection.

a) Panoramic view of the mill pond. Tears in the liner system are the same as that reported in the previous inspection. No new tears or liner defects were observed.
b) View of the tear in the liner at the north corner of the pond. The tear is approximately 1m in length and first noted in the 2008 inspection.
c) Two tears in the liner midway along the northeast edge of the pond. These tears were first observed in the 2009 inspection. The largest tear is approximately 1.5m in length and is parallel to the slope. The smaller tear (white arrow) is approximately 0.5m in length and is orientated across the slope. A void is present beneath the slope that in previous EBA inspections has been noted to be increasing in size due to water penetration from surface.
d) View of the south east side of the pond and by-pass pipe.
• The bypass pipe and metal clamps are resting on pieces of plywood, while the 2011 review notes that they were resting directly on the liner. Placement on plywood is an improvement, but particular attention should be made at each support for liner damage in future inspections.
e) View of the inlet culvert on the east side of the pond with a small flow of water entering the pond.





Photograph vantage point

Source: Figure 1, EBA letter "Mill Water Pond – 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

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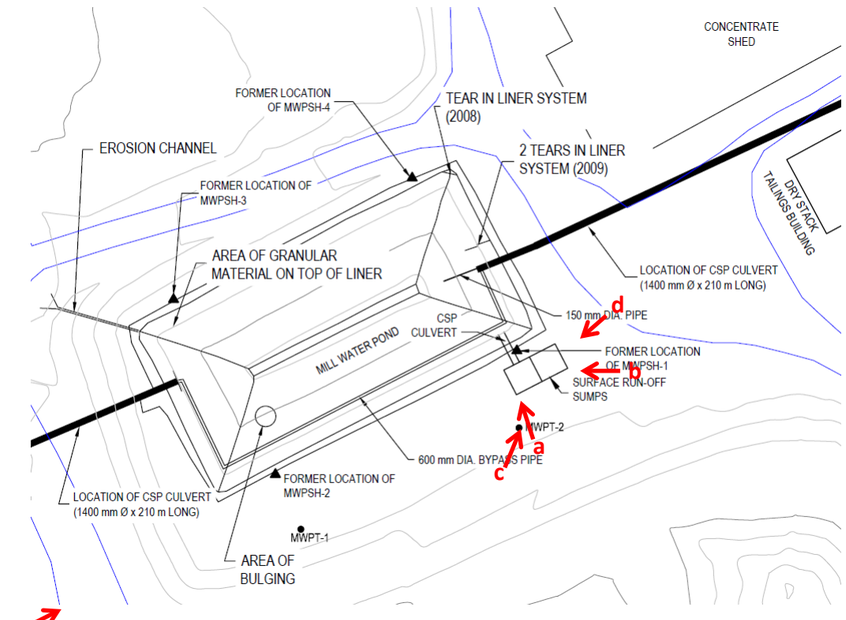
8 Mill Water Pond

- Photos show the condition of the surface runoff ponds south east of the mill water pond. Conditions are unchanged compared to the Sept. 2012 inspection.
- There are significant sediments in both ponds, each culvert, and outside the ponds to the east. It is recommended that each pond/culvert be cleaned.

Recommendations

- The liner tears should be patched the next time a liner crew is onsite. For the liner tear noted in Photo (c), Figure 14, sand should be placed to fill the void beneath the tear.
- The liner condition beneath the bypass pipe supports should continue to be monitored.
- The sediments accumulated in the surface runoff ponds and culverts should be cleaned out.



Source: Figure 1, EBA letter "Mill Water Pond – 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

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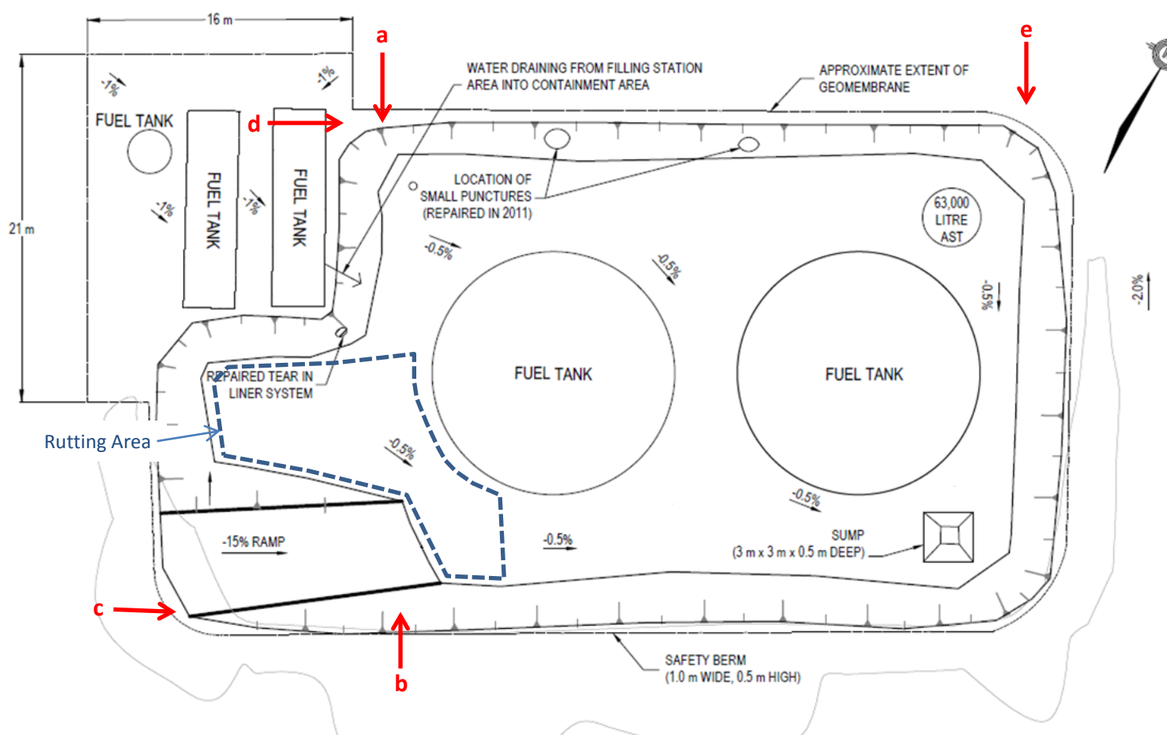
9 Fuel Containment Facility



Observations

- Photos (a) to (e) show the condition of the liner on each side of the facility.
- Conditions of the facility appear to be the same as reported in the 2012 review.
- No tears or defects in the liner were observed.
- Ponded water is present throughout the facility.
- No ponded water was observed at the filling station area northwest of the containment area. The area appears to drain into containment area as per design.
- Ruts are present at the base of the ramp and at the western portion of the facility as seen in Photo (b). The rutting appear to be unchanged compared to the 2012 inspection photos.

Recommendations

- No actions required.
- As noted in the previous inspections, the bedding layer over the geomembrane (150mm thick) was not meant for heavy equipment. Vehicle access should be limited to the occasional visit with low ground pressure equipment.

Source: Figure 1, EBA letter "Fuel Containment Facility – 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

Photograph vantage point

srk consulting VANCOUVER

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Fuel Containment Facility

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10 South Diversion Ditch

Source: 2012 Orthophoto

Photograph vantage point

HDPE pipe partially obstructed by road fill

HDPE pipe partially obstructed by GCL

- The South Diversion Ditch was inspected between the areas shown in Photos (a) to (e) adjacent to the Airport Laydown area. The pipeline intake structure at the photo (e) location diverts water to the confluence area located near the Main Pit. The pipeline alignment was not inspected during the site visit.
- The upper portion of the channel is a lined ditch constructed to the design outlined in the "South Diversion Ditch Collection Pond IFC drawings, Figures SD1 through SD3, dated July 2007.
- Since the last inspection in September 2012, the elevation of the UG Portal Access road has been raised. In some areas, rockfill from the construction Portions of the rockfill (photos b, c, and e) have raveled down into the channel reducing the channel flow capacity. The ditch along the Airport Access Road was also upgraded with an rip-rap lined channel.
- No signs of instability were noted along the side-slopes.
- The vegetation noted in the last inspection is still present, but less prevalent in the photos due to the time year.

a) View of the inlet structure at the upstream end of the ditch. The Airport Access Road ditch can also been seen in the background.
b) View from the inlet structure looking downstream. The impact of the road construction can be seen in the photo, the channel width has been significantly reduced in areas (from the design base width of 1.8m down to near 0.0 m.
c) View looking upstream at the opposite of the channel restriction caused by road construction.
d) Exposed liner the top of the SE near STA 0+600.
e) View of the inlet structure to two 16" HDPE diversion pipes. Road construction has partially obstructed one of the HDPE pipes. GCL has been placed (exposed at surface) around the vicinity of the intake and is also partially obstructing the second HDPE pipeline.

Recommendations

- Ditch obstructions should be removed to increase flow to the design capacity. The noted obstructions include: road fill, vegetation, and GCL covering the HDPE pipe.
- The exposed liner should be covered as per the original channel design (EBA, 2007).
- The pipeline intake structure and an overflow spillway to the Area 2 open pit should be constructed as per the IFC design drawings provided in the SRK memorandum entitled "South Diversion Ditch Realignment and Overflow Spillway" dated February 1, 2013".

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		South Diversion Ditch
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11 Minto Creek Detention Structure

- Photos (a) to (c) were taken during the 2012 inspection to show the condition of the Minto Creek Detention Structure (MCDS) as during the 2013 inspection, a significant portion of the MCDS was covered by snow as seen in photos (d) and (e).
- No signs of instability (bulges, cracks, settlement, sloughing, surficial erosion) were observed during the 2013 inspection.
- Photo (a) shows a depression near the downstream toe of the structure noted during the 2012 inspection. The area was covered by snow during the 2013.
- A seep was observed flowing overtop of the snow from the Mill Valley Fill toe to the MCDS. The outfall of the seep into the MCDS can be seen in Photo (e). The seepage water was clear with no signs of sediment accumulation on the snow lined channel.

Source: 2012 Orthophoto.

Photograph vantage point

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12 Water Storage Pond Dam

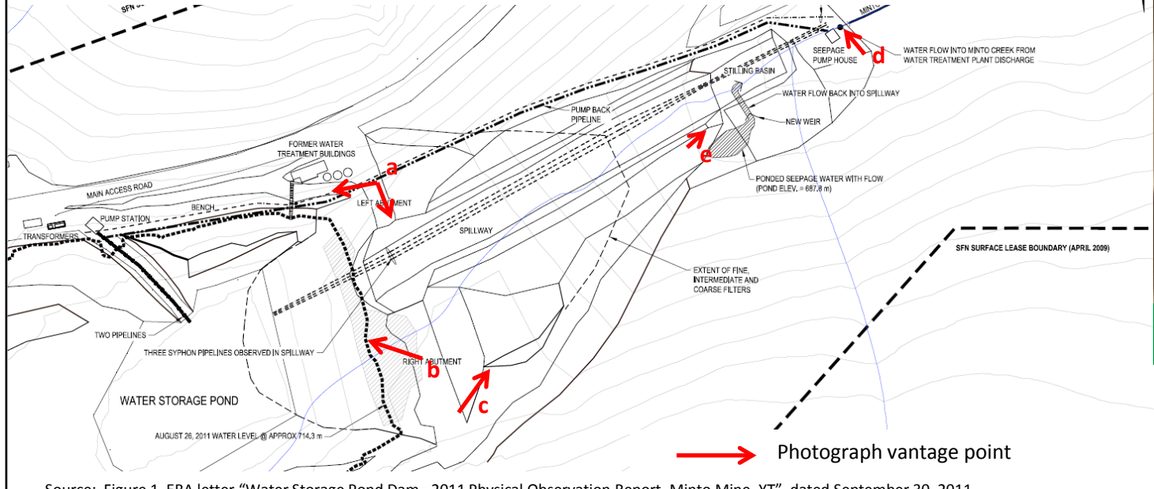
- Prior to the site visit, documents related to the WSP were reviewed. The current version of the Operation, Maintenance, and Surveillance Manual for the dam was last updated in 2008. Many of the emergency contacts listed in the manual are out of date. It is recommended that the manual be reviewed and updated.
- Conditions of the dam are unchanged since the 2012 Geotechnical Annual Review issued by SRK in Nov. 2012. The WSP water level is significantly lower than the last inspection and is was estimated to be approximately 711m.

a) View of the upstream impoundment. The crest, upstream slope and abutments show no signs of instability (settlement, bulging, slumping).
b) View of a culvert outlet and WSP bank immediately east of the water treatment building. The area appears to have been undercut in the past, with additional fill placed to secure the slope, beneath the culvert a layer of geotextile was placed and secured with rip-rap.
c) View of the downstream slope and spillway. Three 200 mm diameter siphon pipelines are present in the spillway that run from the WSP to the pump house. No signs of instability, settlement or erosion were observed on the downstream slopes or abutment areas.
d) View of the stilling basin upstream of the seepage pump house.
- The seepage water was clear with no turbidity. No accumulation of sediments were observed.

e) View of the ponded seepage water at the downstream toe of the dam.
- Condition of the seepage water appears unchanged compared to the 2012 inspection.
- Water flow could not be heard in the rockfill adjacent to the seep.
- The water was clear with no turbidity. Rocks in the pond contain a thin coating of fine rusty-brown sediments. The sediments are thought to be due flushing of weathered rip-rap from local run-off on the downstream toe during a high precipitation on May 12, 2013. See report for further discussion.
- A weir is present on the downstream side of the ponded seepage water to measure/monitor flow from the dam two. The estimated flow rate at the time of inspection was 1 L/s.

Recommendations

- Continue regular monitoring of the dam, noting specifically the clarity of the seepage and flow exiting the stilling basin, and the seepage rate through the weir.
- A review of the seepage pump data and the flow rates measured at W-3 in the seepage pump house indicates that the pump data is influenced by discharge from other sources (the pit, water treatment plant, etc.). Options to obtain accurate seepage measurements should be reviewed. One solution would be to move the discharge point of water a minimum of 20 m down stream of the sump. The issue should be resolved prior to 2014 spring melt
- The OMS manual should be reviewed and updated.



Source: Figure 1, EBA letter "Water Storage Pond Dam– 2011 Physical Observation Report, Minto Mine, YT", dated September 30, 2011.

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2013 Freshet Geotech Inspection

Water Storage Pond Dam

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Filename: Minto 2013 FreshetSite Inspection.pptx

Minto Mine

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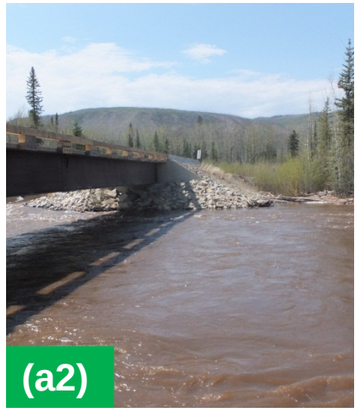
13 Big Creek Bridge


(a1)


(a2)


(b1)

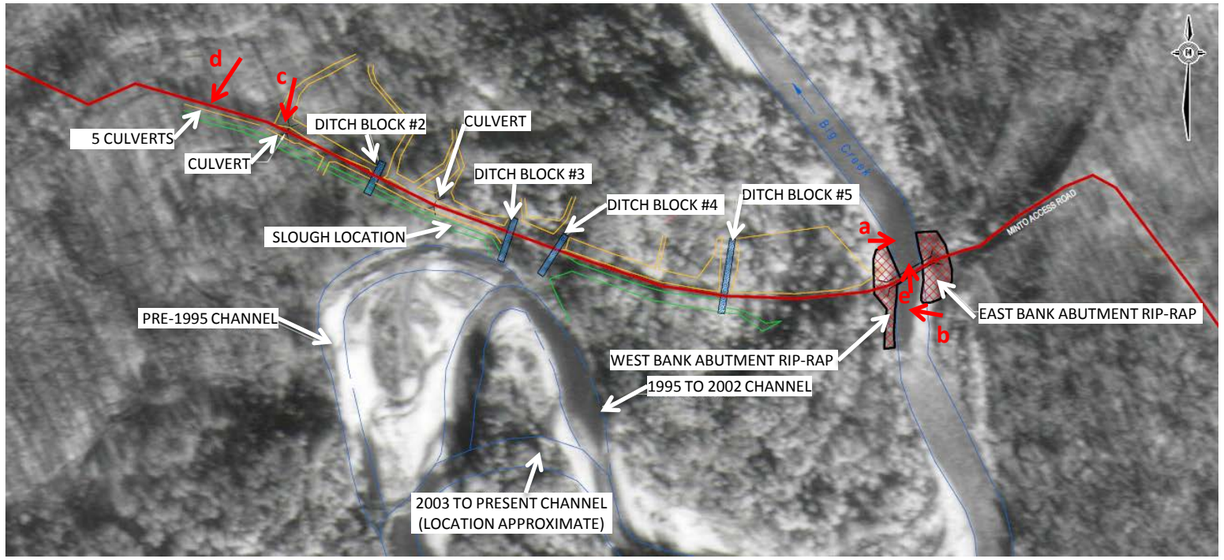

(b2)

- Photos (a) and (b) show east and west abutments, respectively. The creek water level was high and turbid. The bridge abutments and road approaches are in good condition, no signs of instability were observed.
- Consistent with the 2011 inspection, Ditch Block #1 (closure berm) has not been constructed, Ditch Blocks #2 through #4 are in good condition.
- Ditch Block #5 has overtopped during the on the south side of the rock.
- The first culvert west of the bridge is in satisfactory condition. The culvert was half submerged with water and sediment accumulation was unable to be observed. The north end of the culvert has been dented by a large rock. It appears that a compacted bedding layer has not been placed outside the culvert.
- Photo (c) shows a slough in the roadside ditch south east of the first culvert. It is unclear if this slough was present during the 2012 inspection. No action is required as there is no blockage in ditch flow, but the area should continue to be monitored.
- Photo (d) shows a photo of accumulated sediment in the second culvert from the bridge. This photo was taken during the 2012 inspection as the culvert was half submerged with water during the 2013 inspection. The sediment was accumulating and backing up inside the culvert. Sediment accumulation should continue to be monitored and cleaned out if sediments continue to accumulate.
- Photo (e) shows a power pole that has tilted due to the high water level on the main transmission line to the Minto site.


(c)


(d)

Note: Photo taken Sept 30, 2012



Source: Figure 1, EBA letter "Big Creek Bridge– 2011 Annual Review, Minto Mine, YT", dated September 30, 2011.

Photograph vantage point

Recommendations

- Continue regular annual monitoring of sediment accumulation in the culverts, and clean out if sediments continue to accumulate.


(e)

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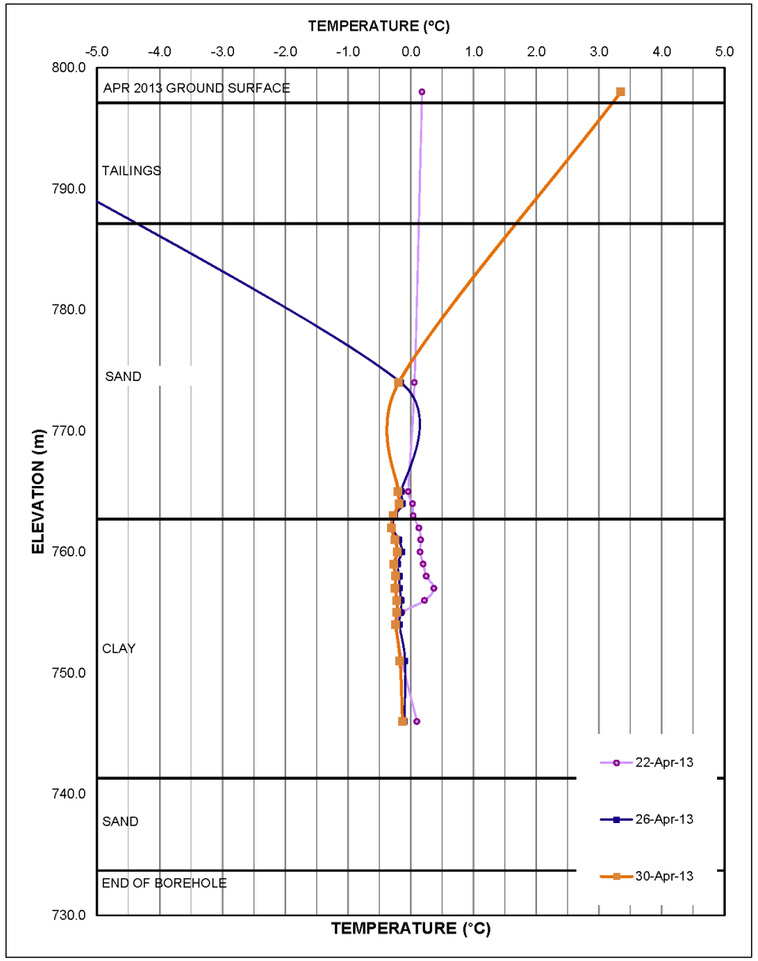
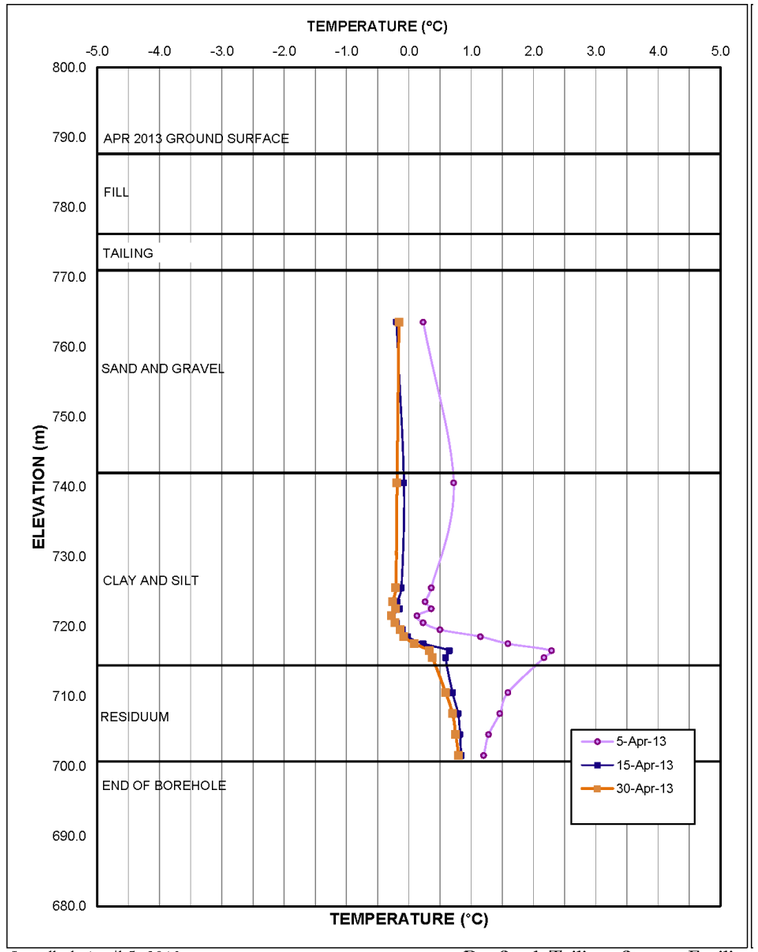
Appendix B: Monitoring Instrumentation Data



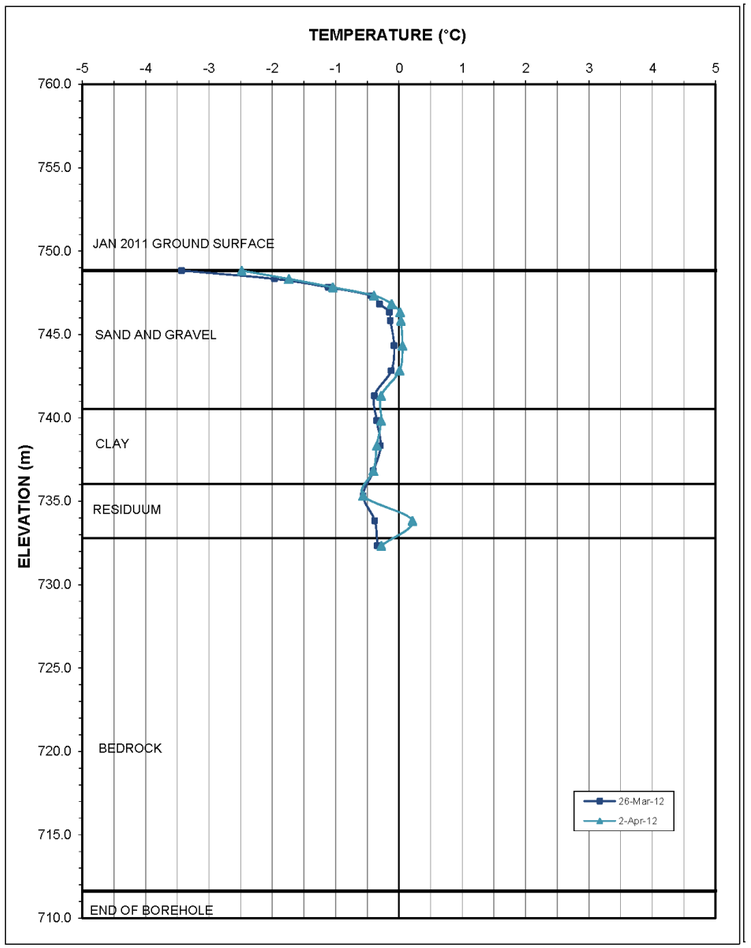
Installed: April 17, 2013

Dry Stack Tailings Storage Facility
Ground Temperature Profile - DST-10



Installed: April 5, 2013

Dry Stack Tailings Storage Facility
Ground Temperature Profile - DST-11



Dry Stack Tailings Storage Facility
Ground Temperature Profile - DST-12

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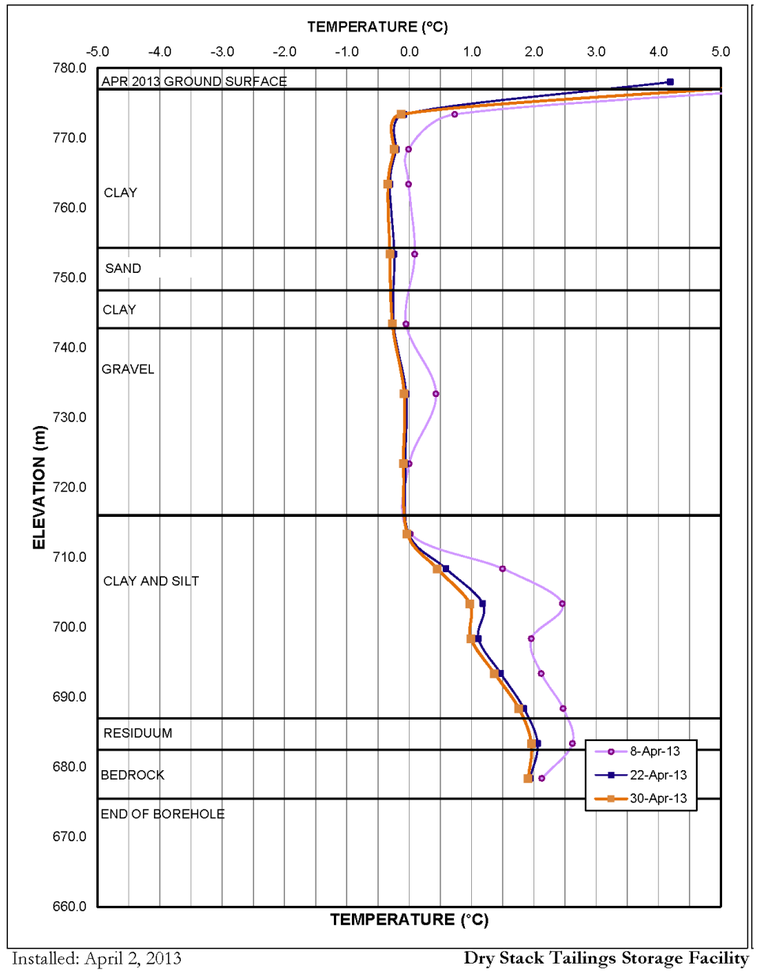
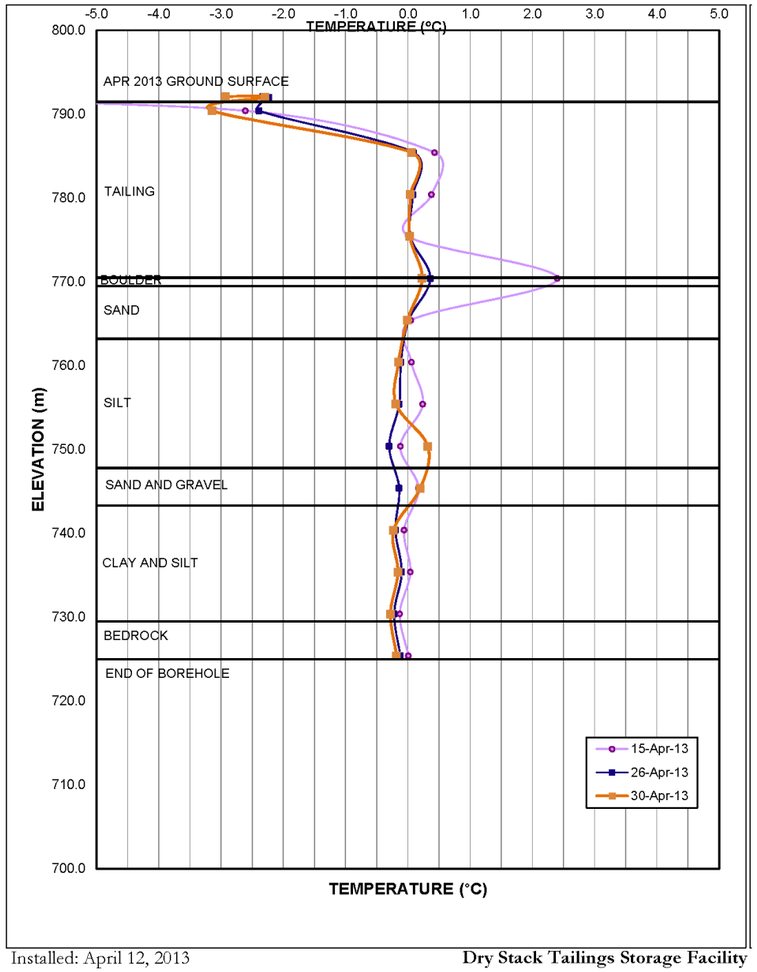


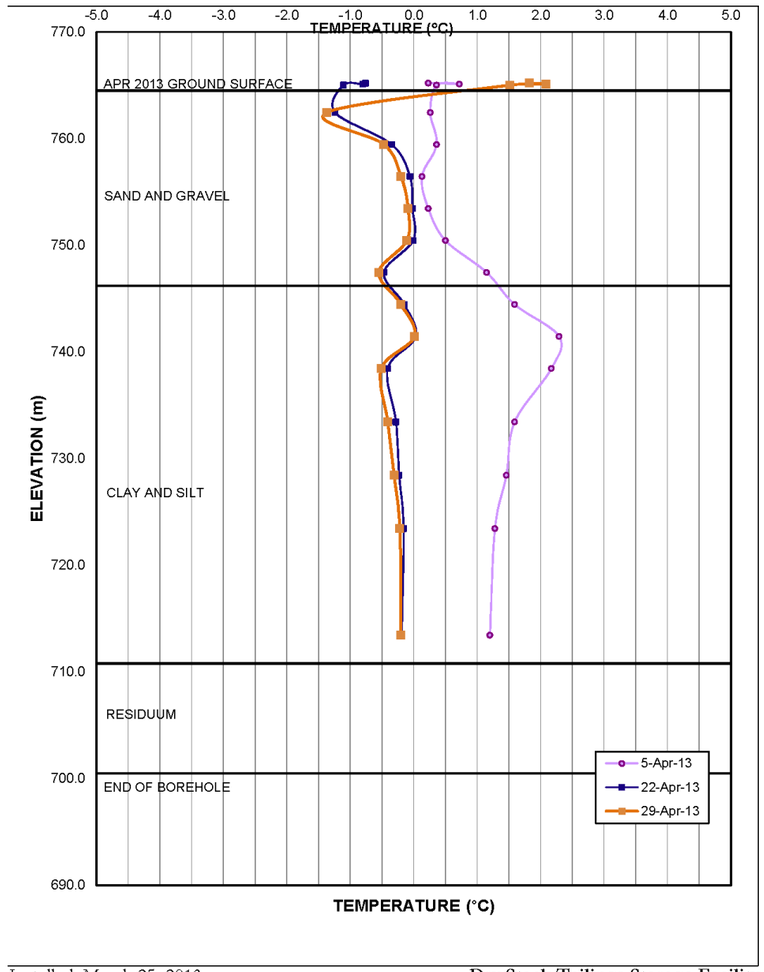
Installed: April 2, 2013

Dry Stack Tailings Storage Facility
Ground Temperature Profile - DST-13



Installed: April 12, 2013

Dry Stack Tailings Storage Facility
Ground Temperature Profile - DST-14



Installed: March 25, 2013

Dry Stack Tailings Storage Facility
Ground Temperature Profile - DST-15

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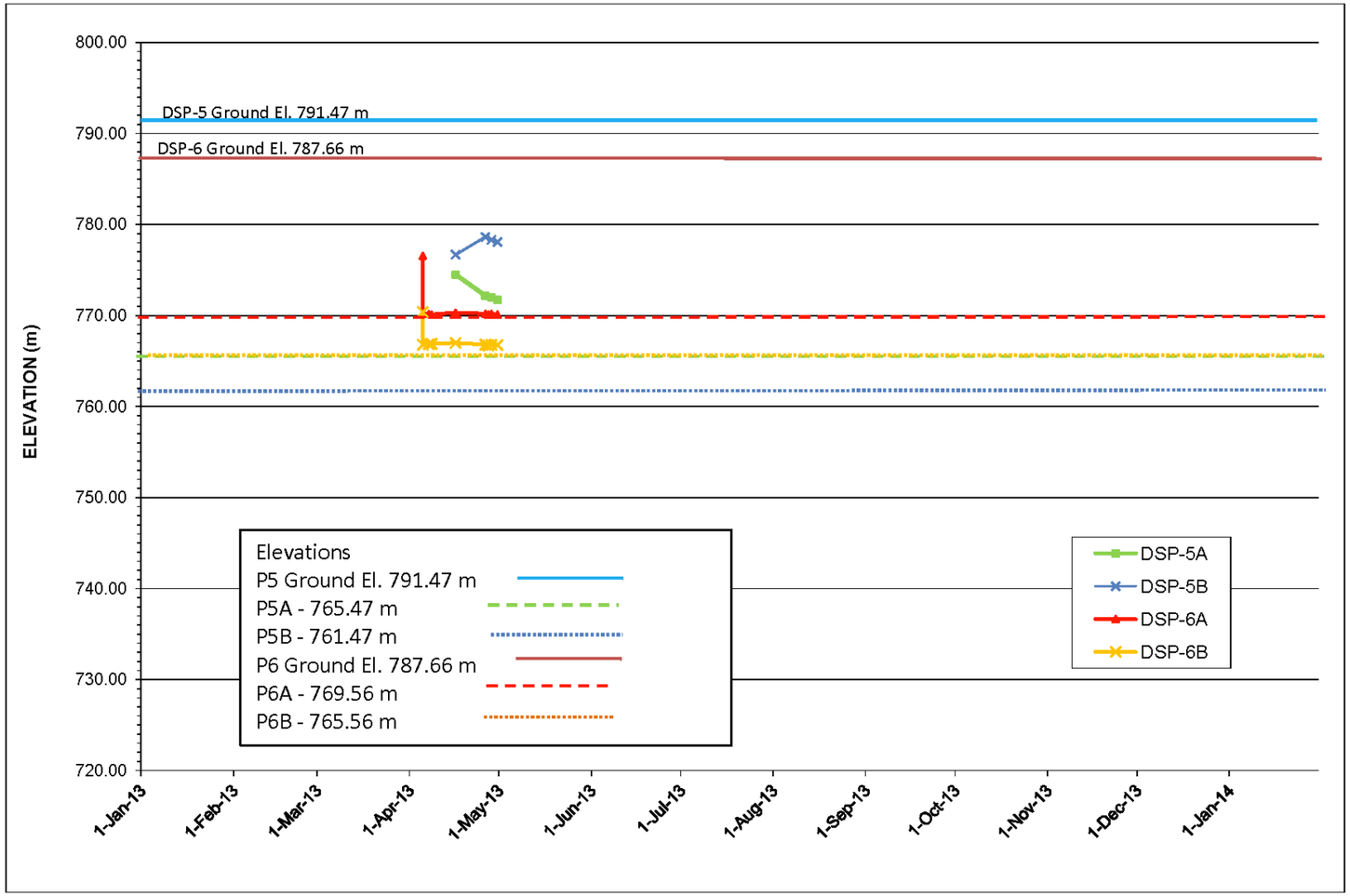
DSTSF Thermistors (2 of 2)

Job No: 1CM002.012.005
Filename: Minto 2013 Site Inspection.ppt

Minto Mine

Date: July 2013
Approved: PHM
Figure: **2**



Dry Stack Tailings Storage Facility
Instrument Water Elevation - DSP-5A, DSP-5B, DSP-6A, DSP-6B

Notes:

- Water elevations may not be accurate. The piezometer sensors are thought to be located in frozen soil, and accurate barometric pressures were not available at the time of reading.
- DSP-5 sensors are installed in the same borehole as the DST-14 ground temperature cable provided in Figure 2.
- DSP-5 piezometer sensors are installed in the same borehole as the DST-11 ground temperature cable provided in Figure 1.

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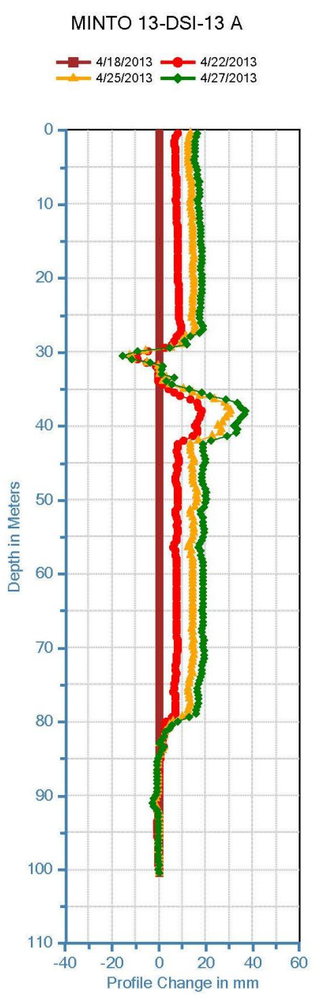
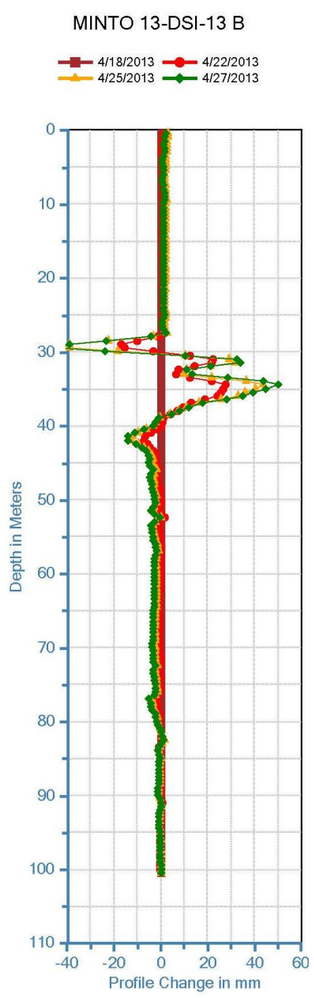
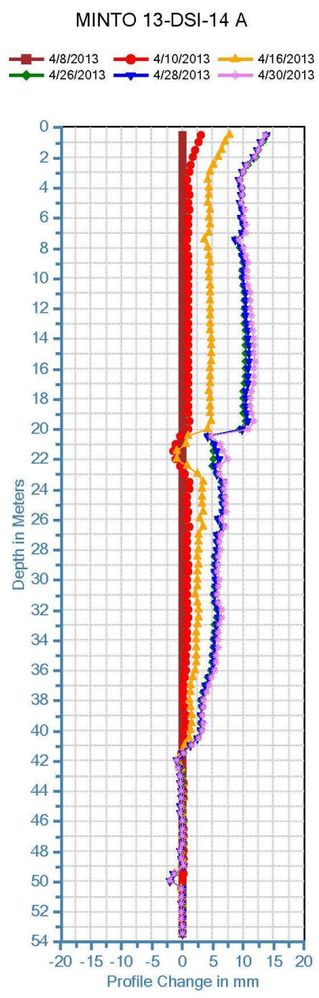
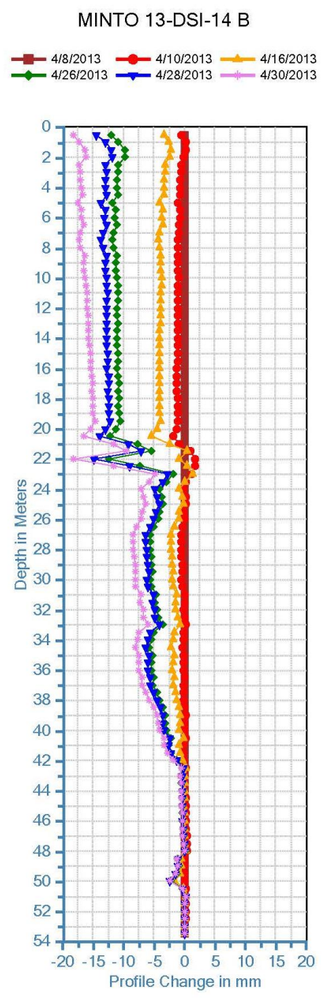
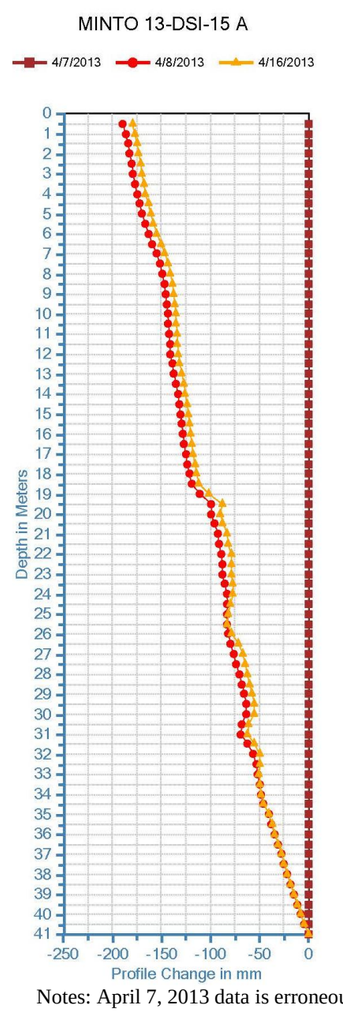
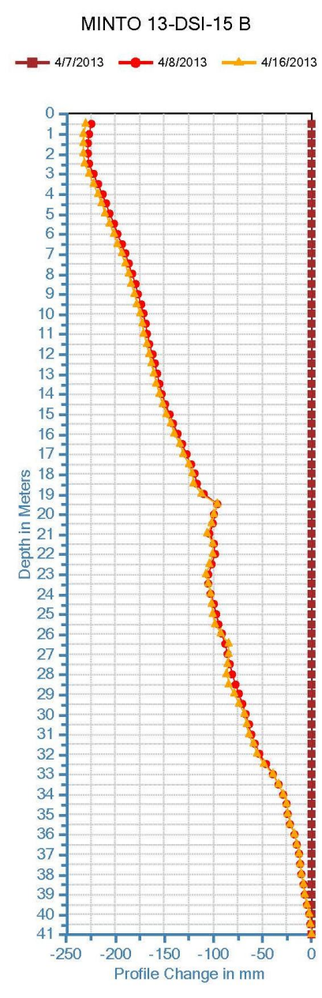




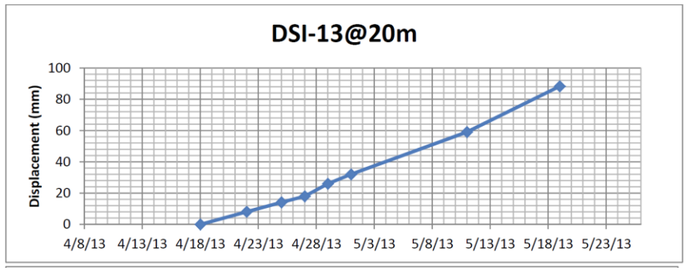




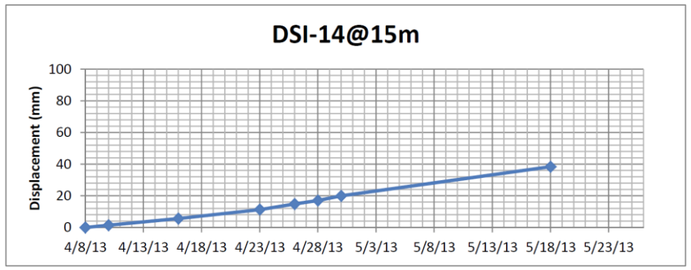




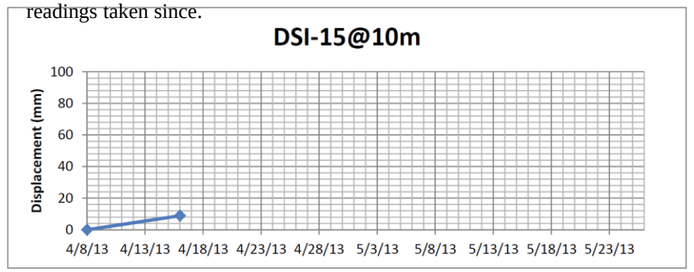
Notes: April 7, 2013 data is erroneous.
Inclinometer probe got stuck in hole at a depth of 23 m on April 23 with no readings taken since.



Average velocity: 2.4 mm/day



Average velocity: 0.9 mm/day



Average velocity: 0.3 mm/day

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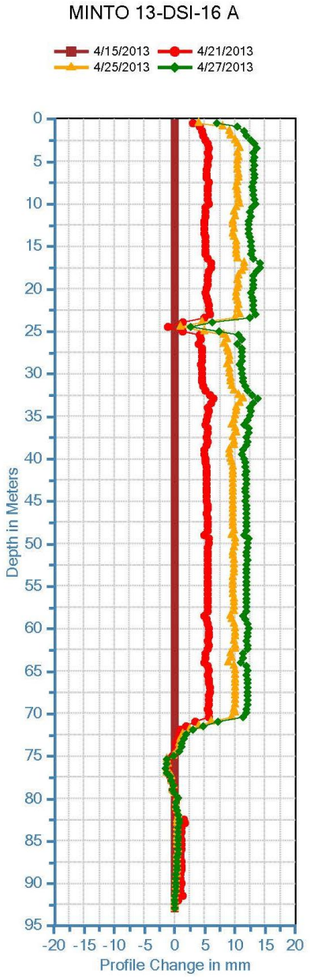
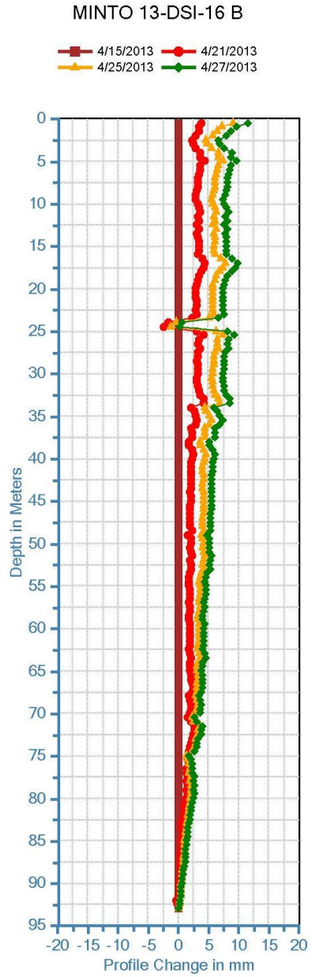
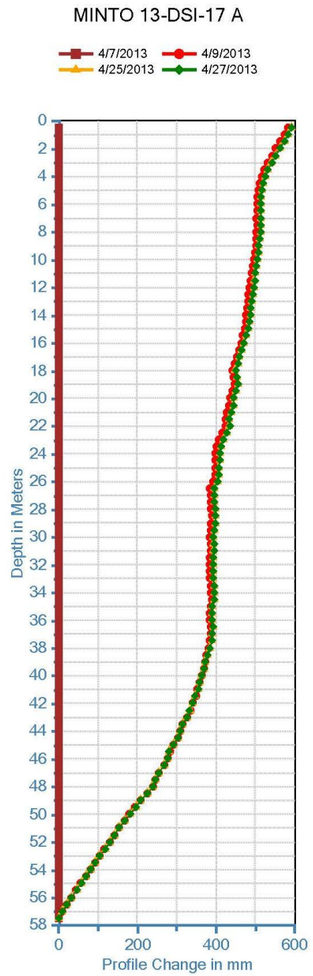
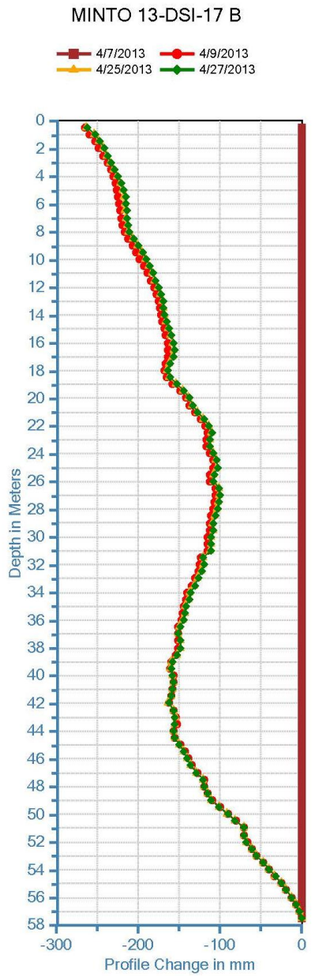
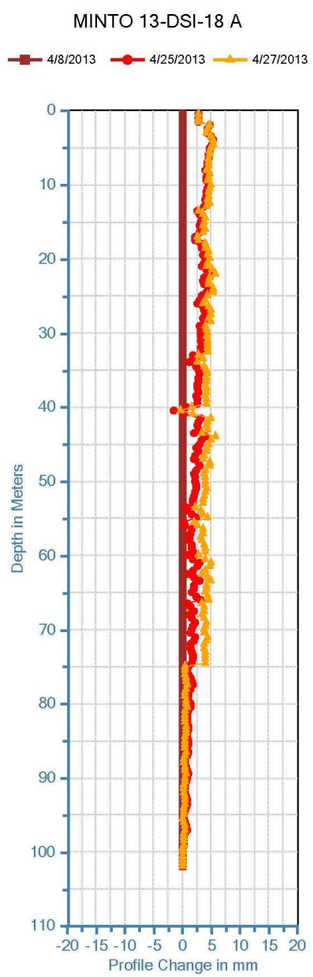
		Date: July 2013 / Approved: PHM / Figure: **4**

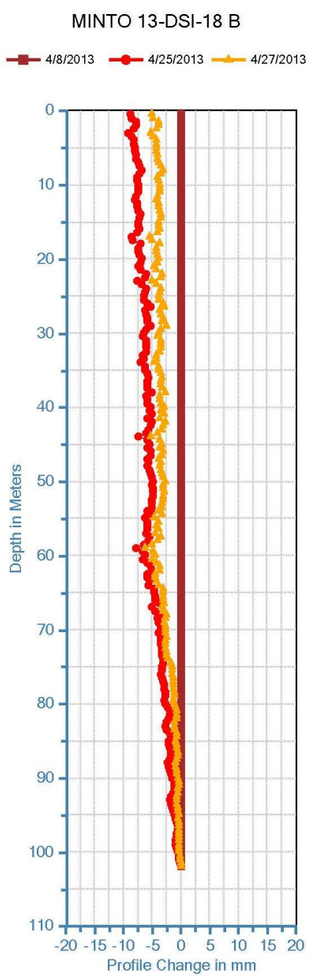




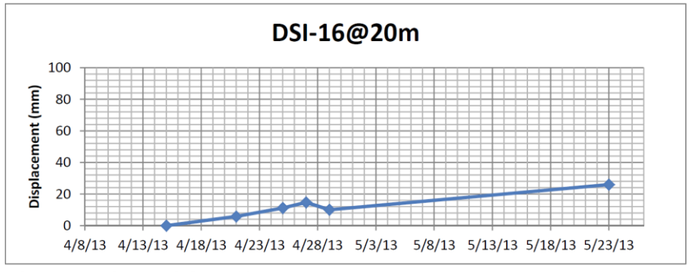




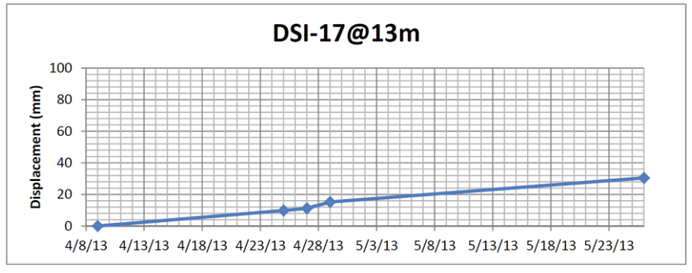




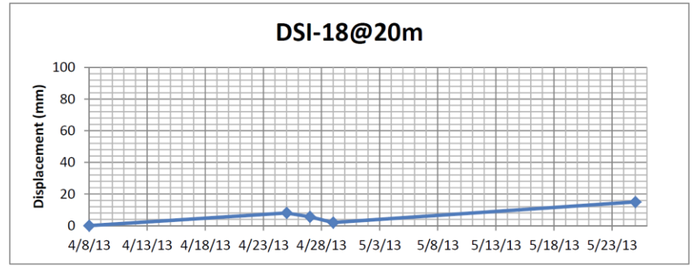
Note: April 7, 2013 data is erroneous



Average velocity: 0.6 mm/day



Average velocity: 0.5 mm/day



Average velocity: 0.2 mm/day

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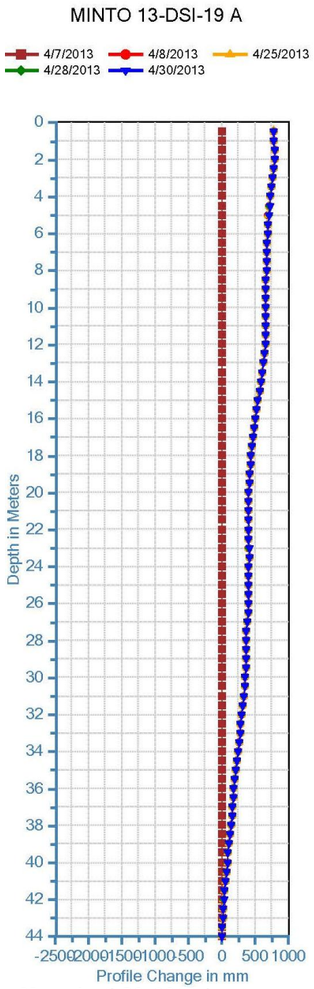
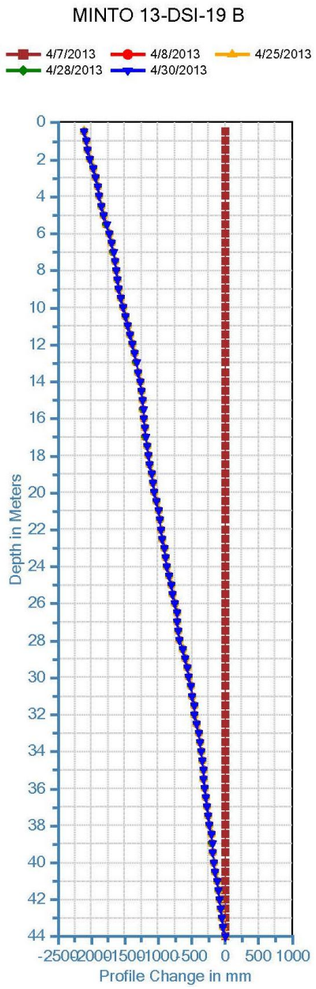
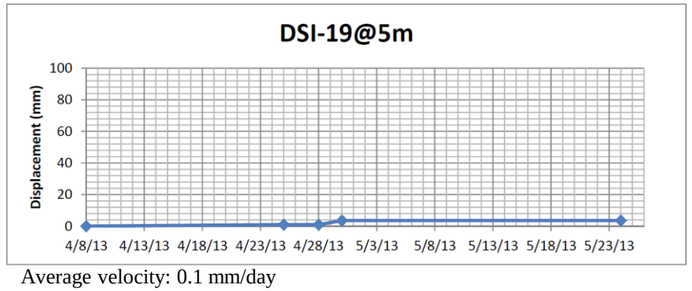
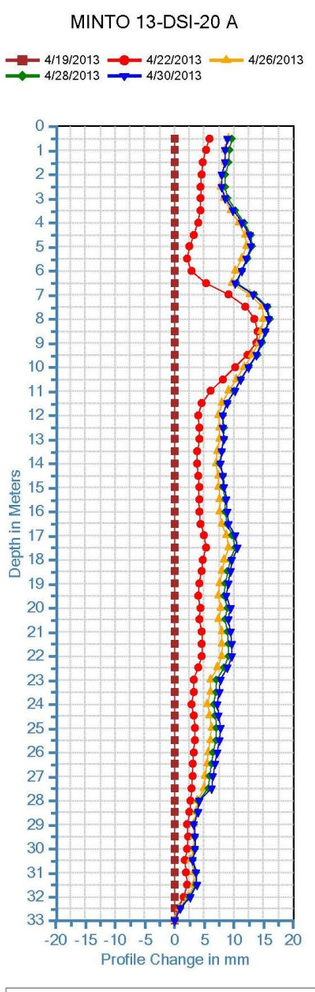


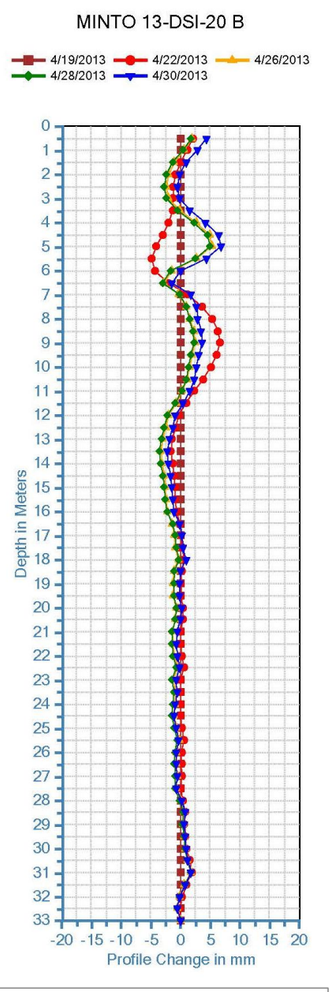


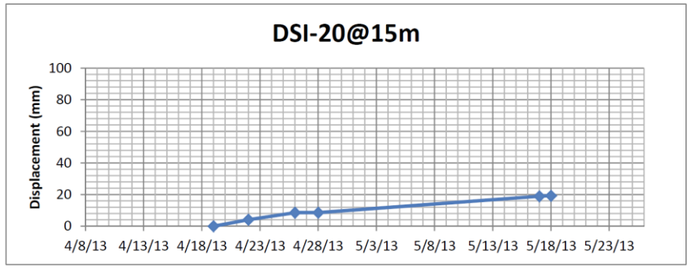
Note: April 30, 2013 data is erroneous



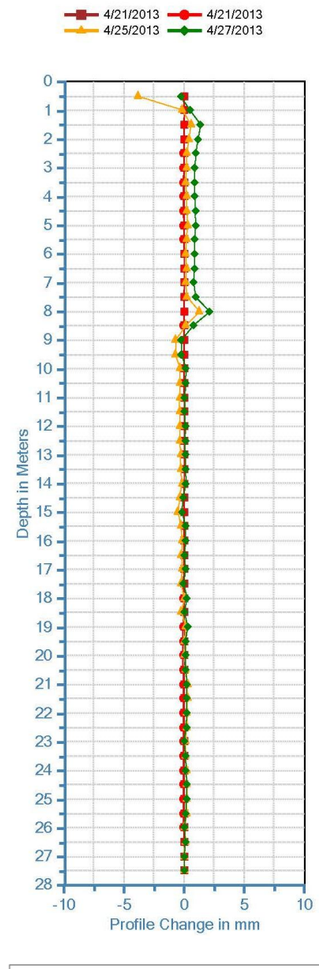
Average velocity: 0.1 mm/day

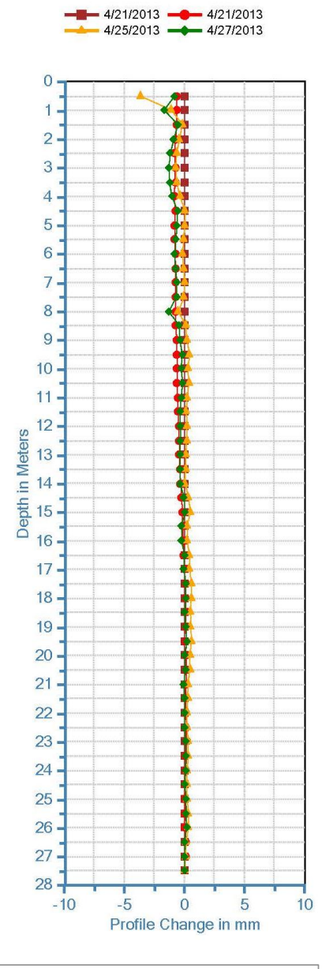


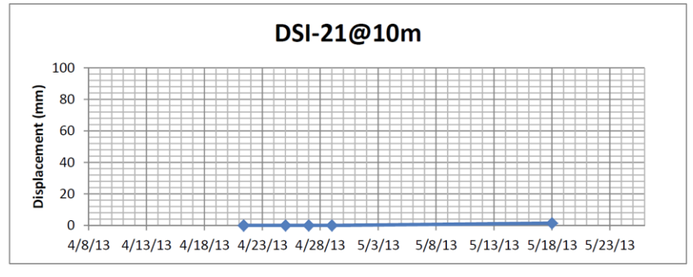




Average velocity: 0.6 mm/day







Average velocity: 0.0 mm/day

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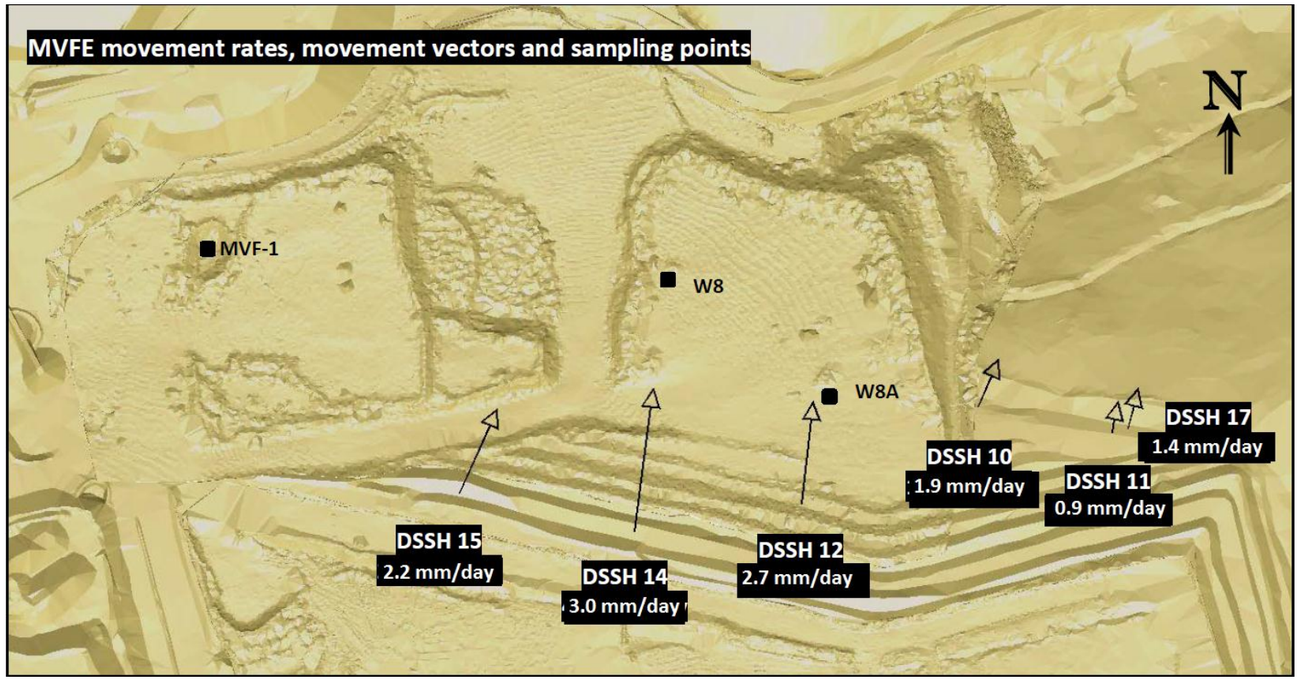
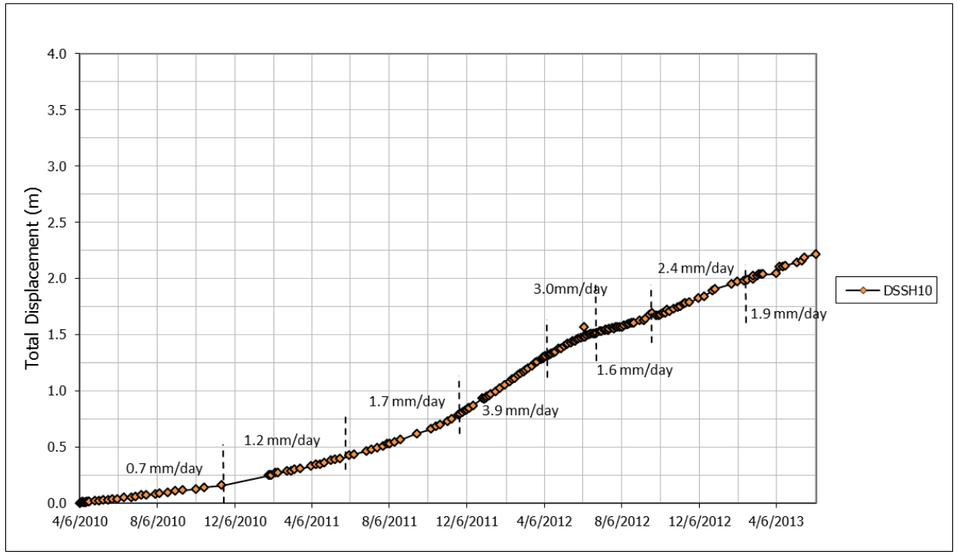
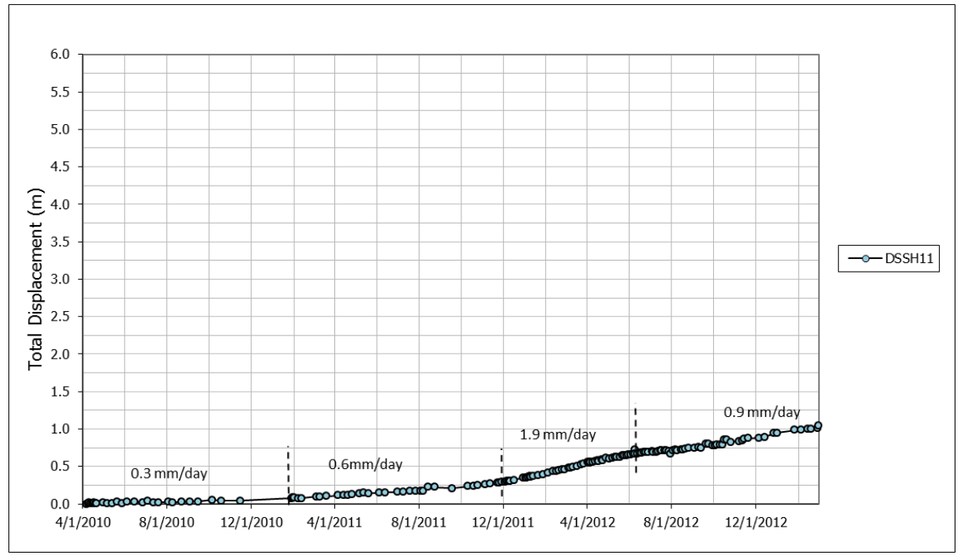
Job No: 1CM002.012.005 Filename: Minto 2013 Site Inspection.ppt	Minto Mine	**DSTSF Inclinometers (3 of 3)**
		Date: July 2013 / Approved: PHM / Figure: **6**







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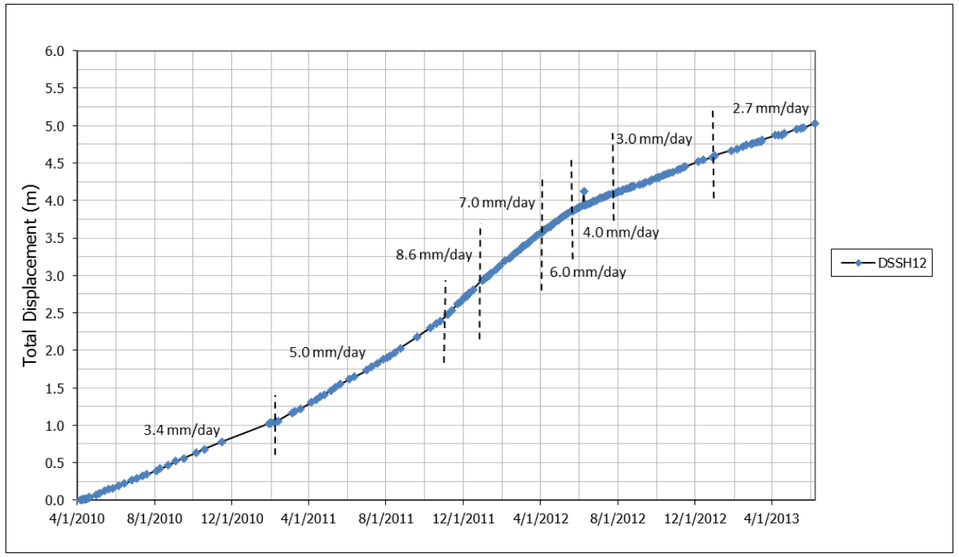
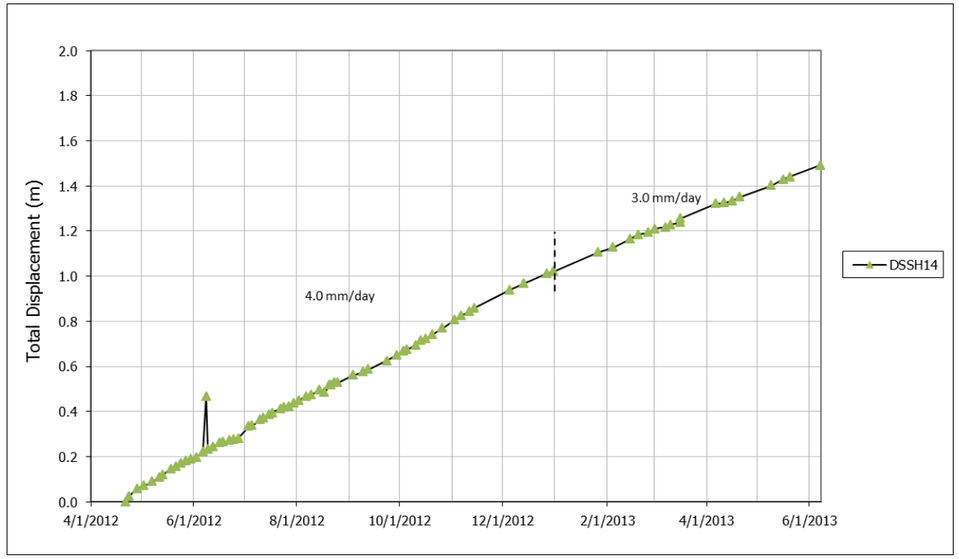
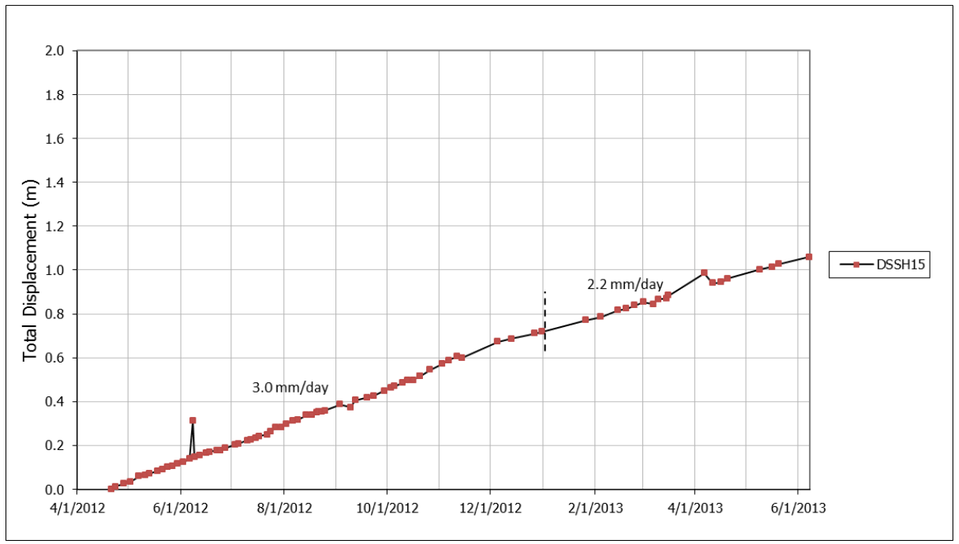
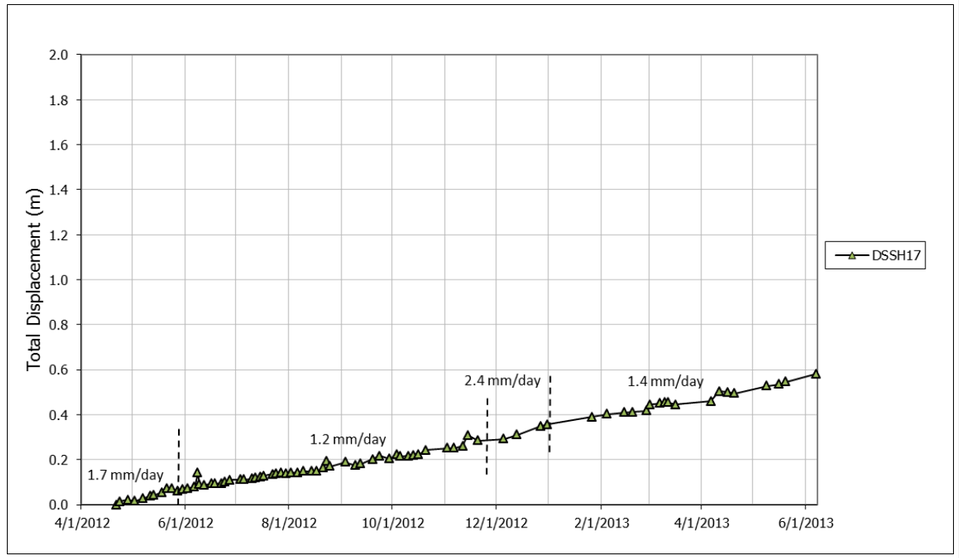
		DSTSF Survey Hubs (1 of 2)	
Job No: 1CM002.012.005 Filename: Minto 2013 Site Inspection.ppt	Minto Mine	Date: July 2013	Approved: PHM / Figure: **7**









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2013 Geotechnical Annual Review

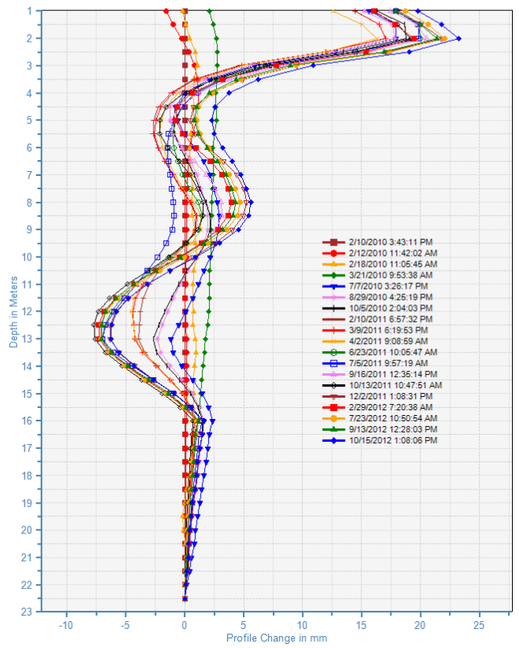
DSTSF Survey Hubs (2 of 2)

Job No: 1CM002.012.005
Filename: Minto 2013 Site Inspection.ppt

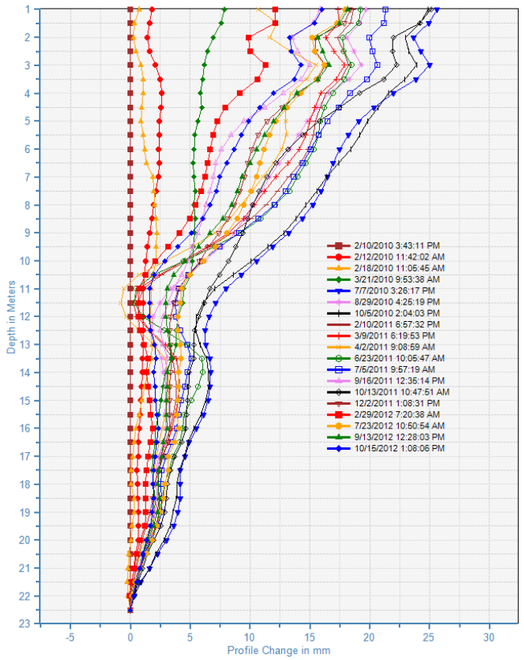
Minto Mine

Date: July 2013
Approved: PHM
Figure: **8**

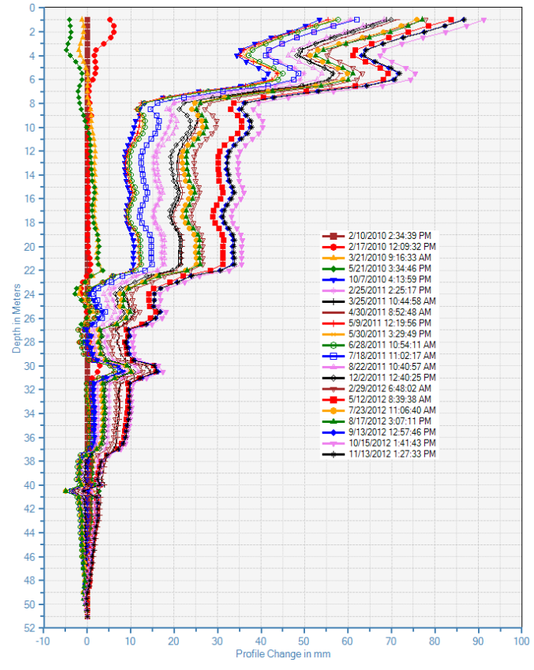
MINTO MDI1 A



MINTO MDI1 B



MINTO MDI2 A



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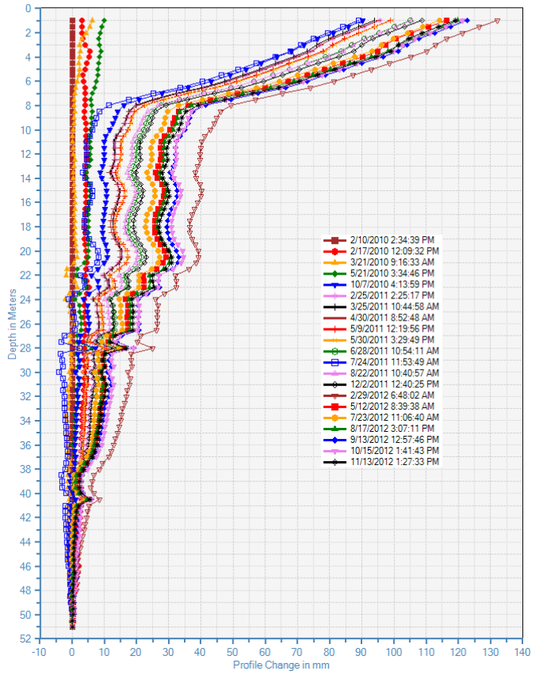
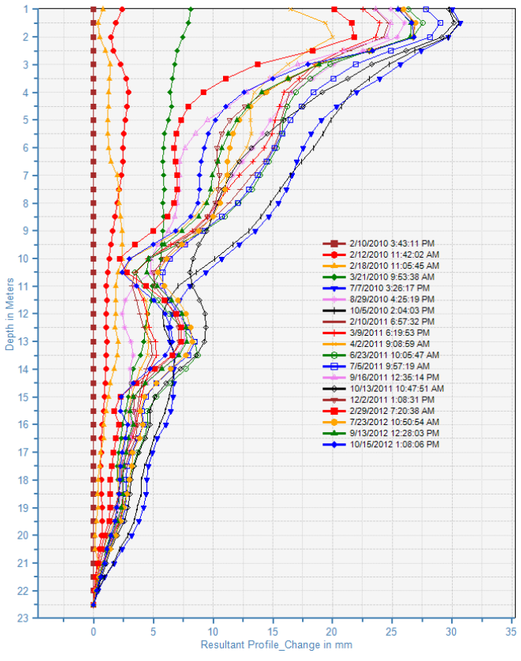
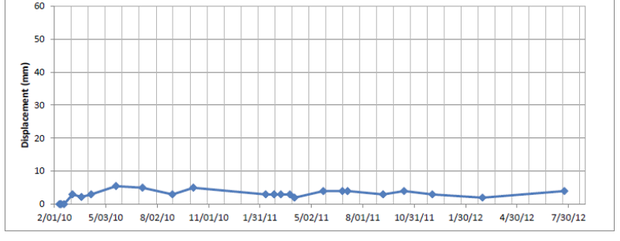


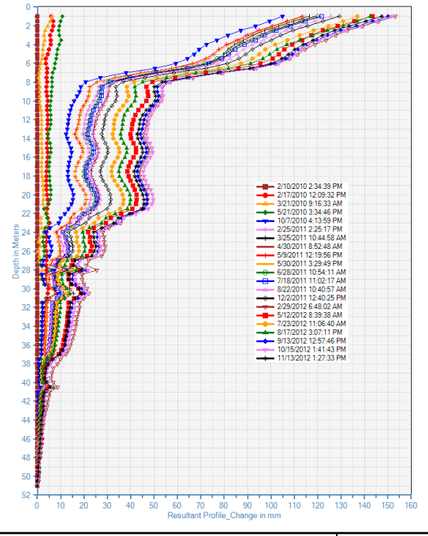
MINTO MDI1 Magnitude



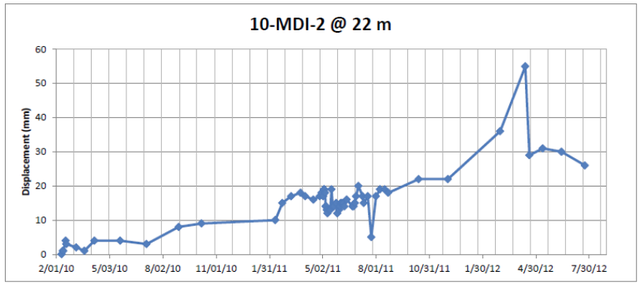
10-MDI-1 @ 16 m



MINTO MDI2 Magnitude



10-MDI-2 @ 22 m



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2013 Geotechnical Annual Review

Main Waste Dump Inclinometers

Job No: 1CM002.012.005

Filename: Minto 2013 Site Inspection.ppt

Minto Mine

Date: July 2013

Approved: PHM

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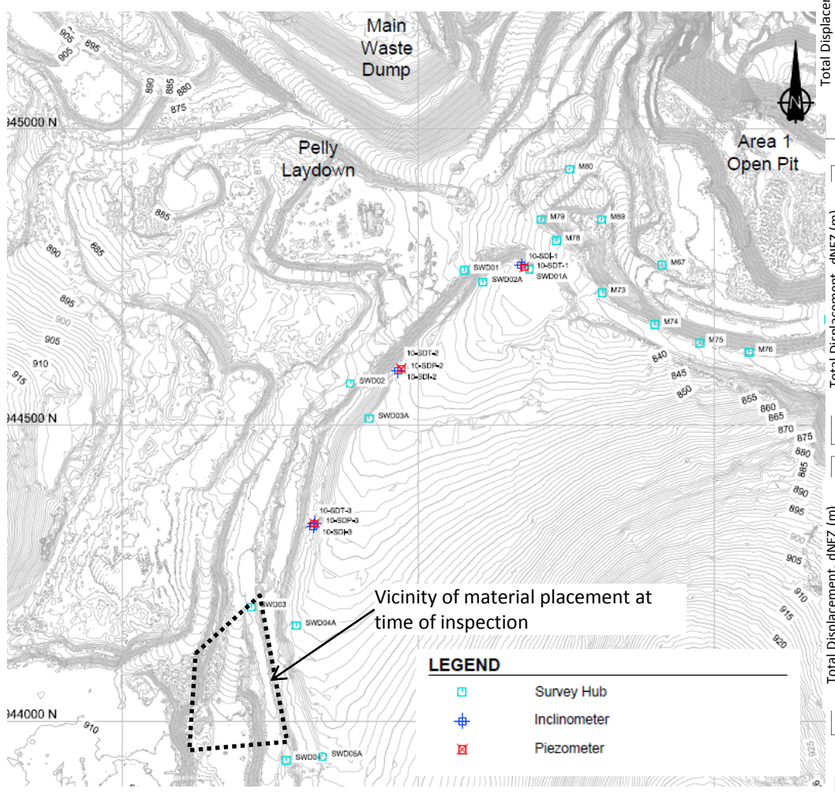

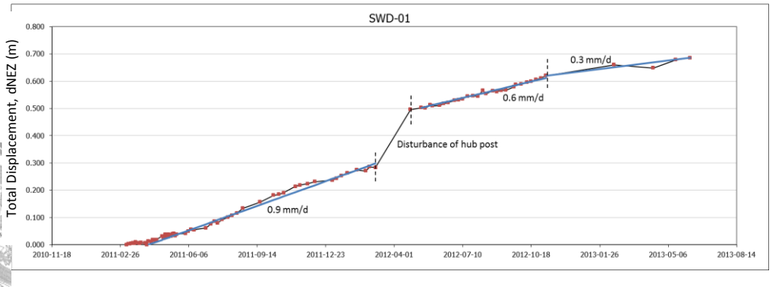

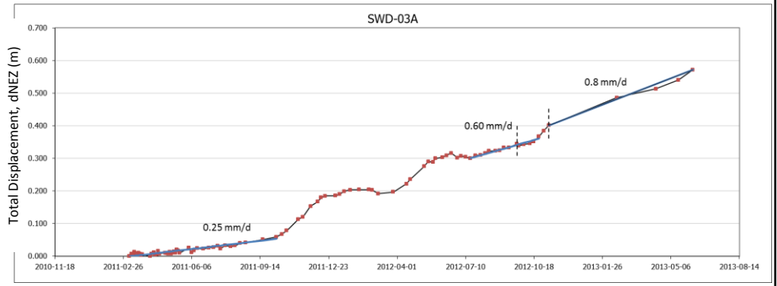

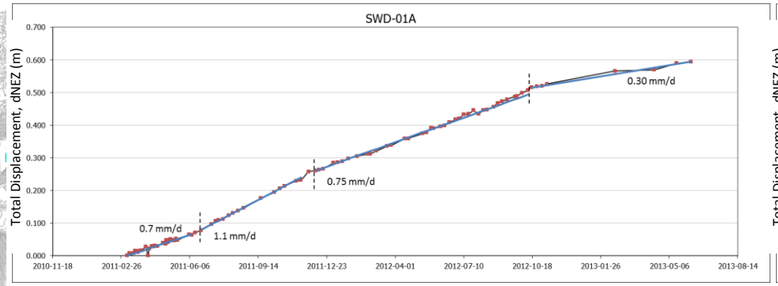

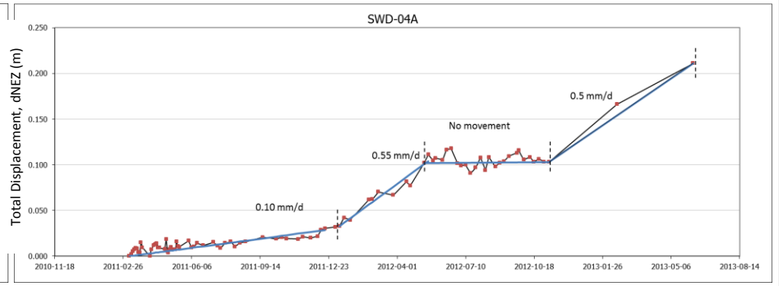

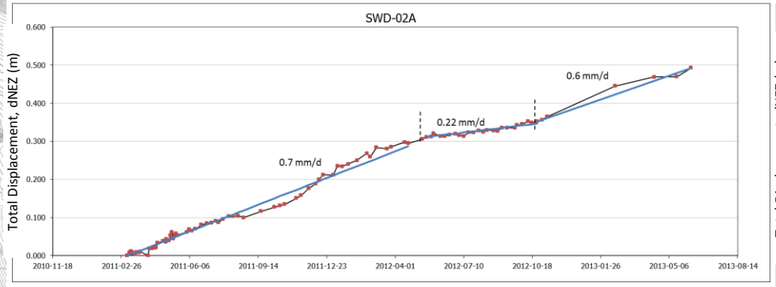

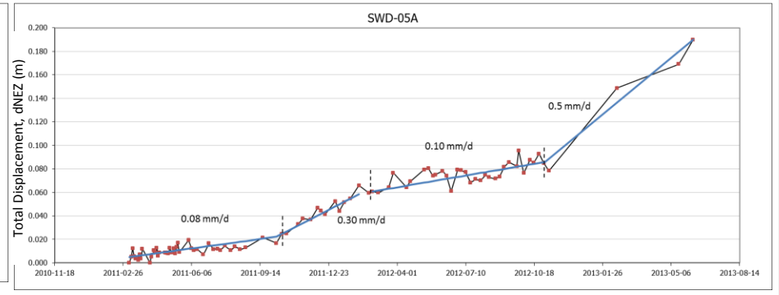

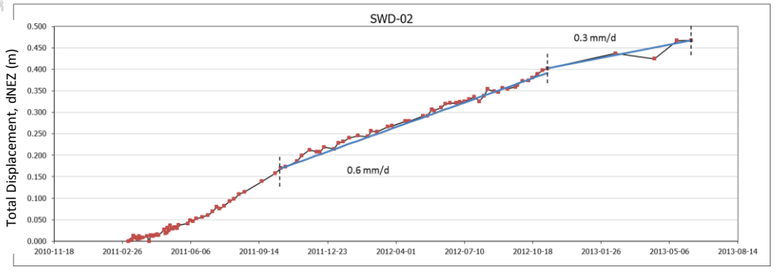

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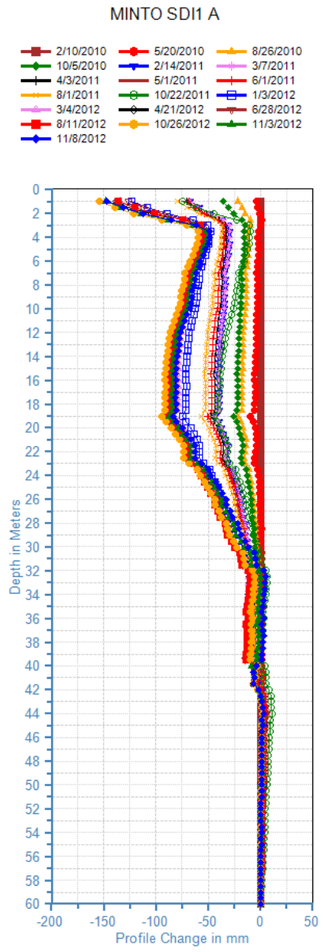
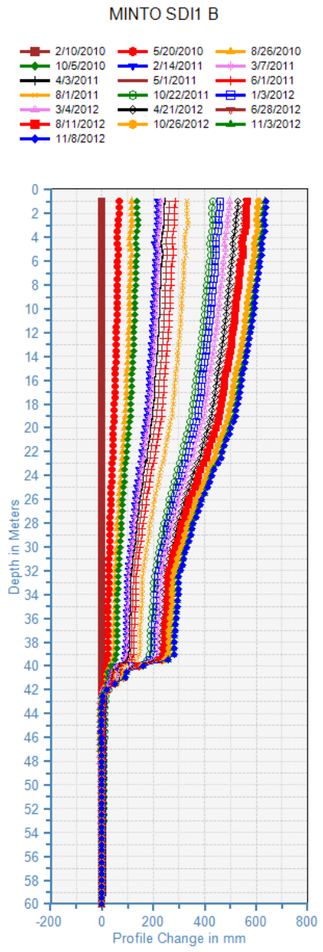
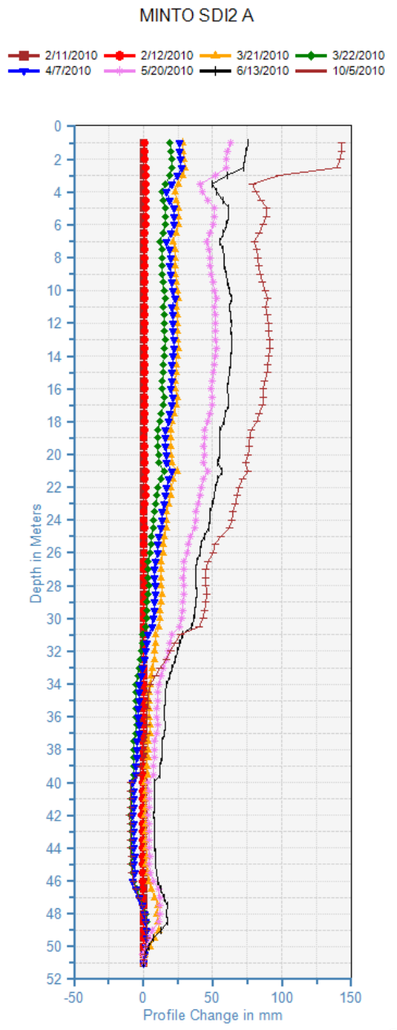
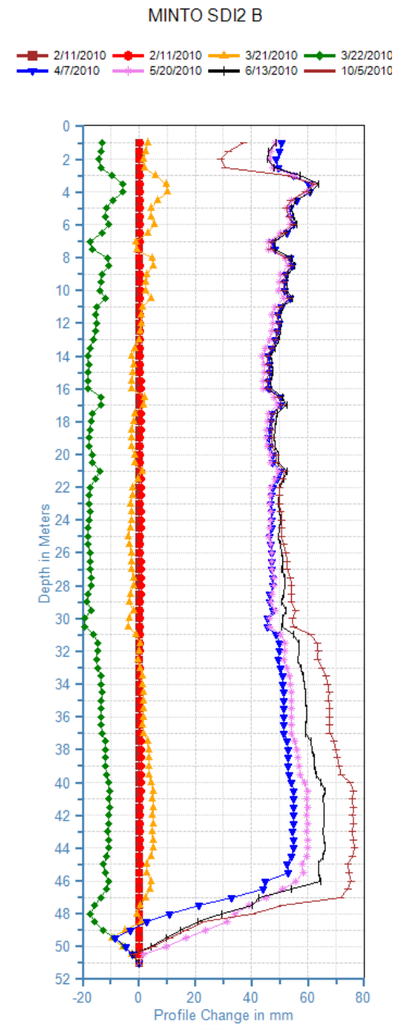
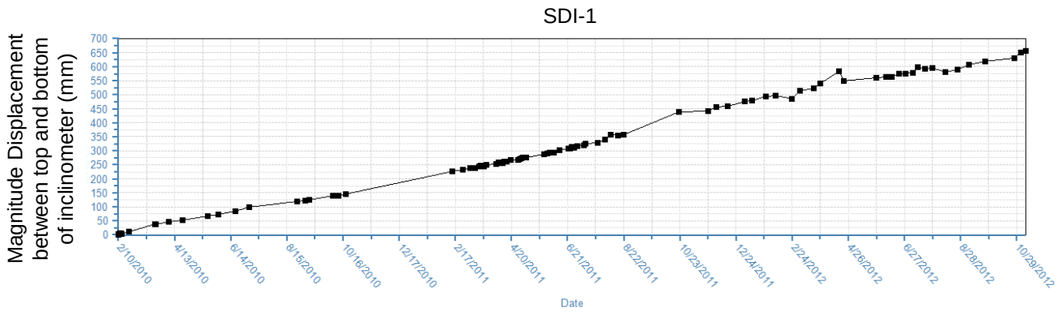
		Southwest Waste Dump Survey Hub Instrumentation
Job No: 1CM002.012.005 Filename: Minto 2013 Site Inspection.ppt	Minto Mine	Date: July 2013 / Approved: PHM / Figure: **10**

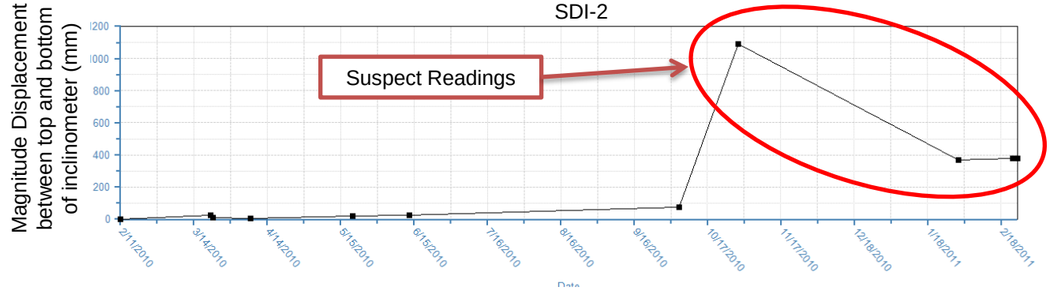












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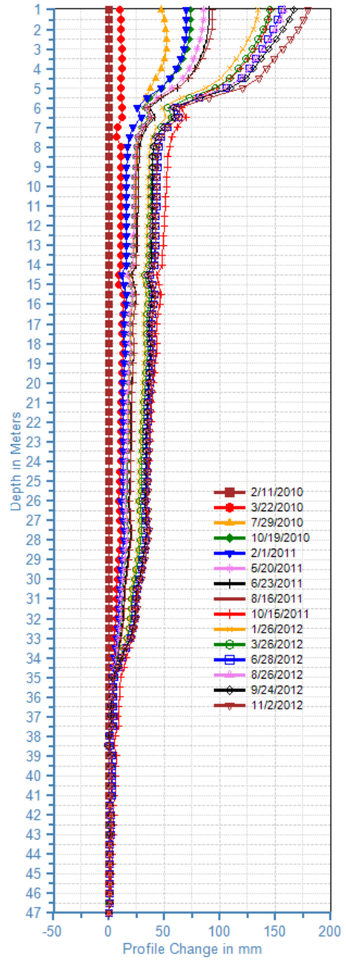
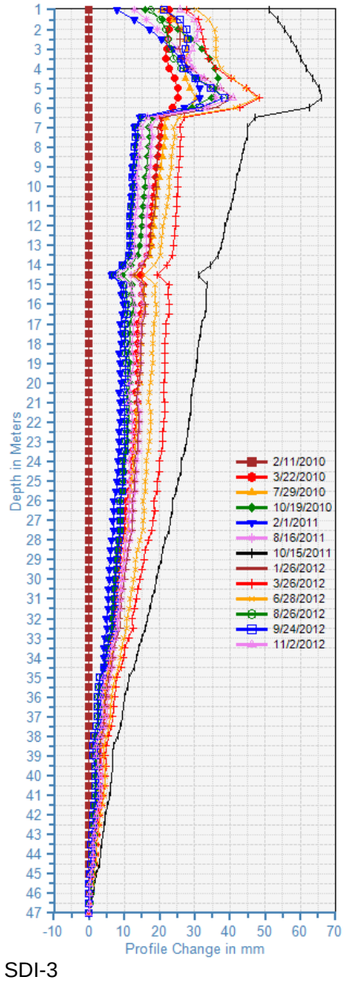
		Southwest Waste Dump Inclinometers (1 of 2)	
Job No: 1CM002.012.005 Filename: Minto 2013 Site Inspection.ppt	Minto Mine	Date: July 2013	Approved: PHM / Figure: **11**

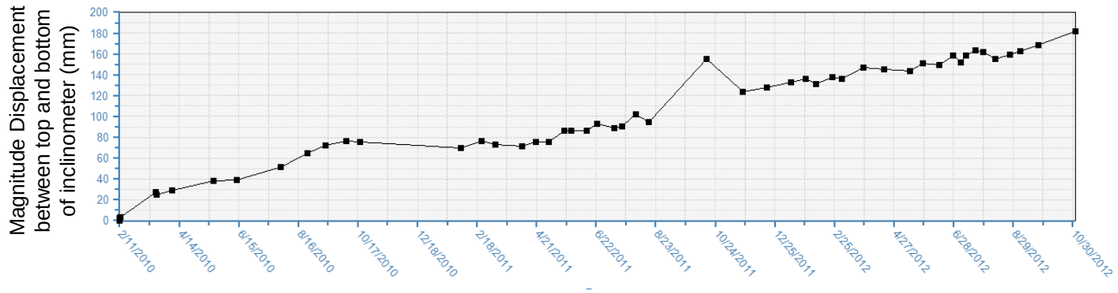
MINTO SDI3 A



MINTO SDI3 B



SDI-3



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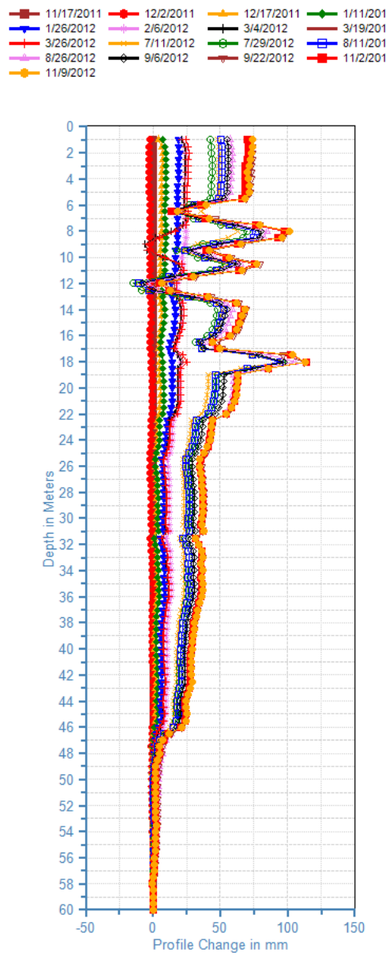

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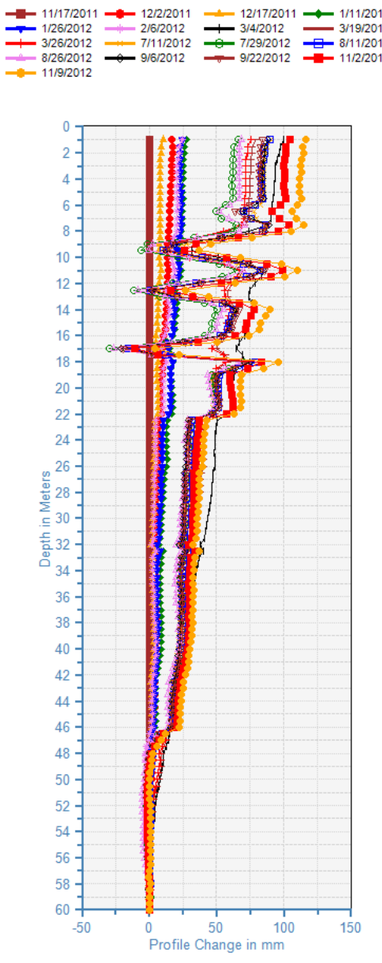
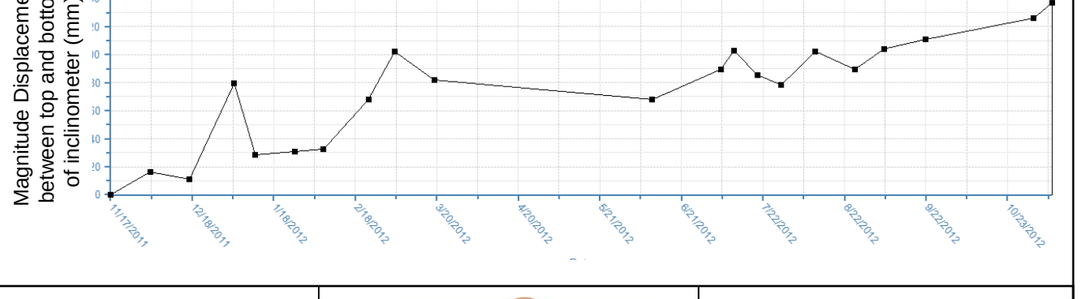


SDI-5



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Southwest Waste Dump Inclinometers (2 of 2)

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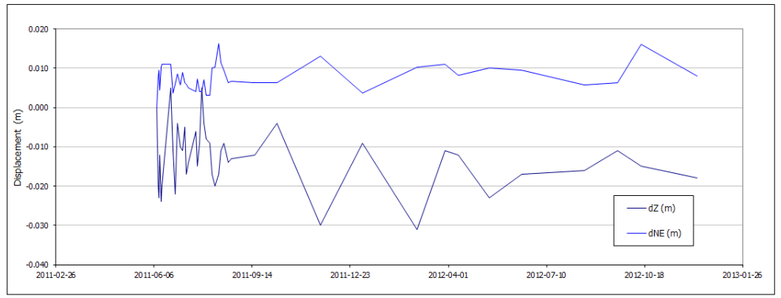
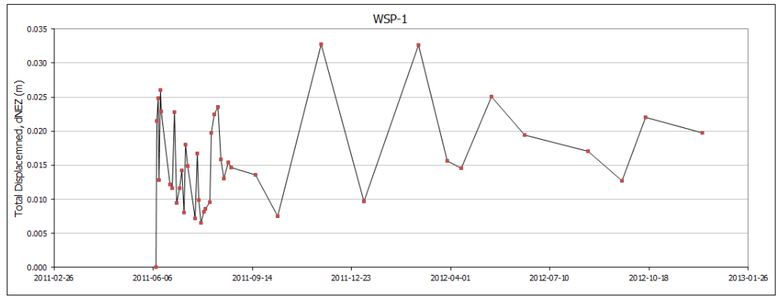
Filename: Minto 2013 Site Inspection.ppt

Minto Mine

Date: July 2013
Approved: PHM
Figure: **12**

WSP-1





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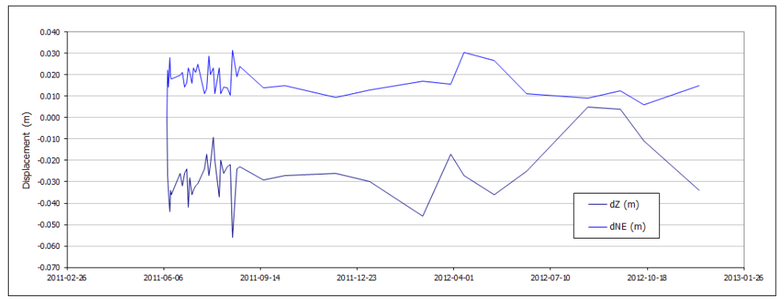
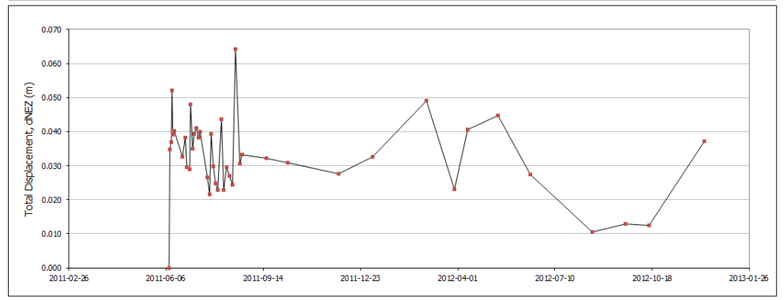
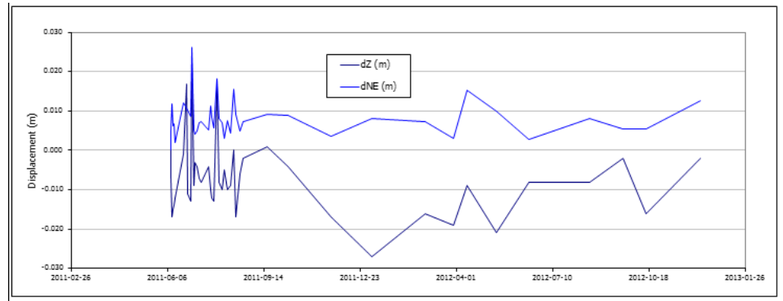
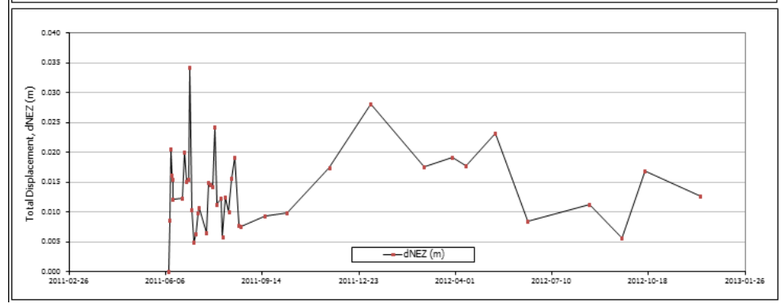


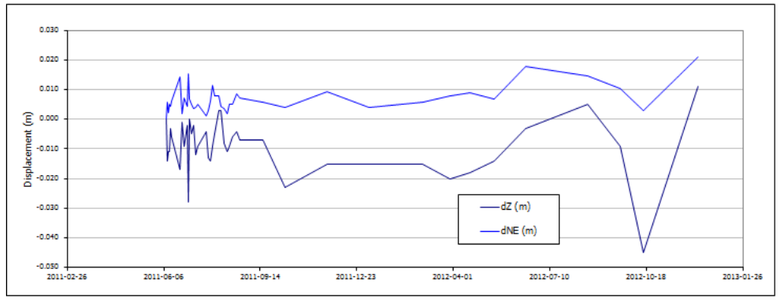


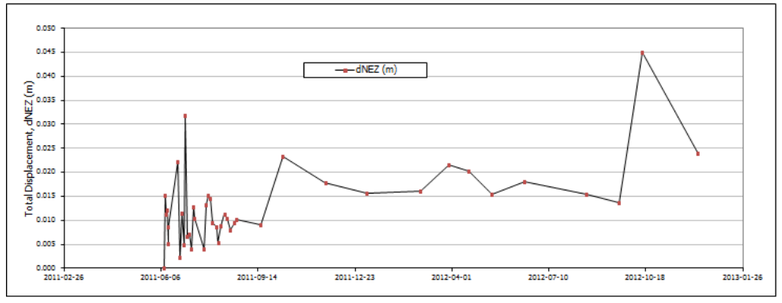
WSP-3



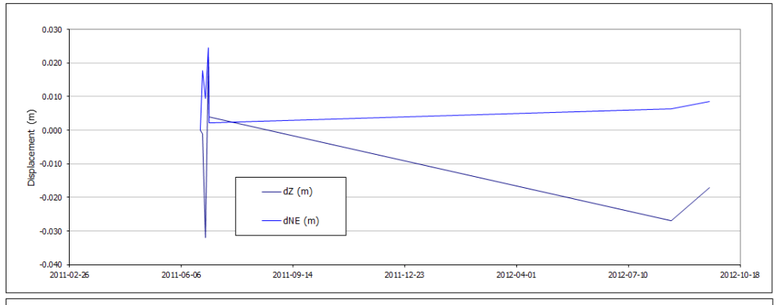


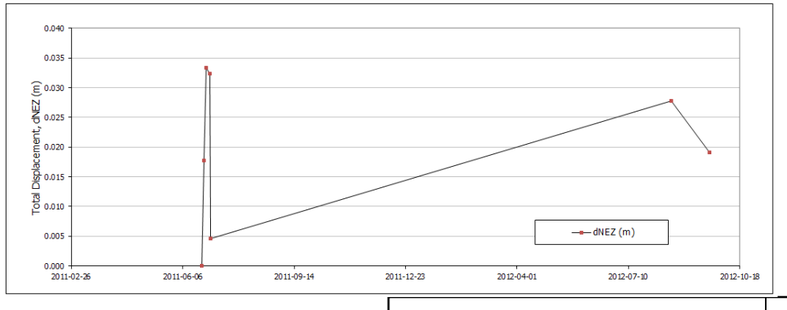
WSP-4





WSP-5





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2013 Geotechnical Annual Review

Water Storage Pond Survey Hubs

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Minto Mine

Date: July 2013
Approved: PHM
Figure: **13**