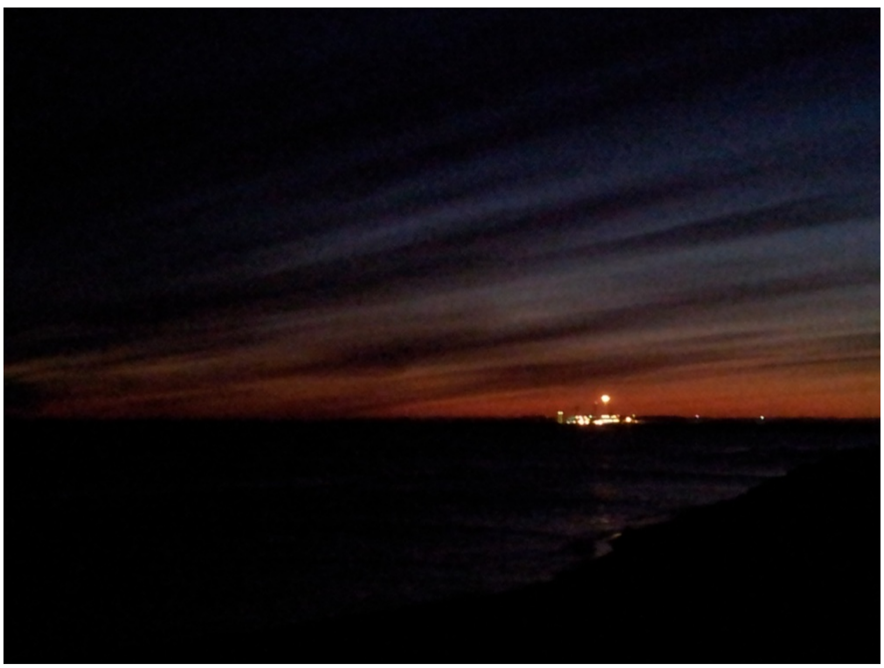
Alaska Gold Company LLC
A BSNC Company

NANUUQ GOLD PROJECT

Annual Monitoring Report
January - December 2013

Including Fourth Quarter



Submitted to:

Alaska Department of Environmental Conservation

and

Alaska Department of Natural Resources

Submitted by:

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P.O. Box 640
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Introduction

This annual monitoring report has been prepared by Alaska Gold Company (AGC) in accordance with Alaska Department of Natural Resources (ADNR) Reclamation Plan Approval (RPA) F20129578.

This report covers monitoring activities at the Nanuuq Gold Project (Figure 1), which is comprised of the Rock Creek Mine and Mill and the Big Hurrah site for the time period of January 1, 2013 through December 31, 2013.

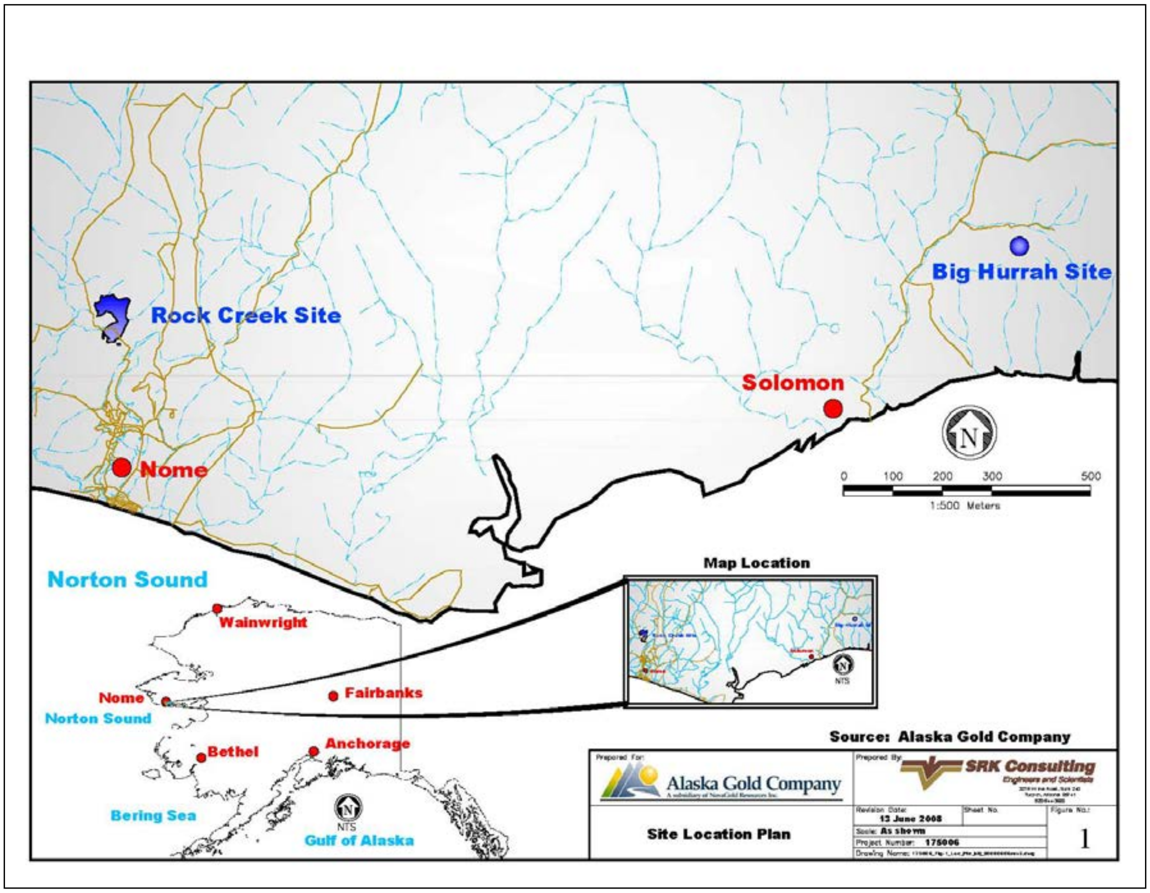

Figure 1. Nanuuq Gold Project locations.

Summary

The Rock Creek Mine was placed into Care and Maintenance status in November 2008. That status continued throughout 2013 and the Big Hurrah site remains inactive. AGC, LLC conducted redevelopment planning throughout 2013.

Nanuuq Activities

Activities were limited to care and maintenance, plus evaluation of site facilities as part of project economic evaluation.

Disturbance and Reclamation

No additional land was disturbed or reclaimed during 2013.

Solid Waste Landfill

The solid waste landfill was not used. Nothing was added or removed.

Stormwater Management

Stormwater is managed under the Multi Sector General Permit (MSGP). Visual inspections of all diversion structures, outfalls, and Best Management Practices (BMPs) are conducted as described in the updated Rock Creek Storm Water Pollution Prevention Plan (SWPPP). BMPs performed as designed and intended. Additional BMPs were implemented – most notably during spring breakup – as conditions required (Figure 2). Diversion channels (DC) 1, 2, and 3 were excavated of snow and ice during the second week of May. Additional snow occurred soon thereafter, which partially refilled DC3 above the pit and thickener. As melt occurred, runoff overtopped sections of the ditch. The ditch was reexcavated sufficiently to return runoff to the ditch as-soon-as-possible. Additional BMPs in the form of a pipe diversion of pit access road runoff were installed to deliver this runoff to the tailing pipeline containment ditch. This water was routed to the lined drainage relief at the south end of the stockpile and released to the tundra for dispersion and infiltration. Very satisfactory results were obtained.

As has occurred in the past two years following the 2011 engineered breach of DC1 at Rock Creek, runoff above the causeway exceeded culvert capacity. Three six inch pumps were operated at the Rock Creek ponds to help maintain the upstream water surface at reasonable levels until runoff rates abated and upstream water level began to drop without pumping. Some clear seepage was observed at the downstream causeway toe, which indicated no deleterious piping occurred.

Weekly BMP inspections were conducted throughout the period of melt – roughly May 15 through October 8, 2013. Inspection records are retained onsite.

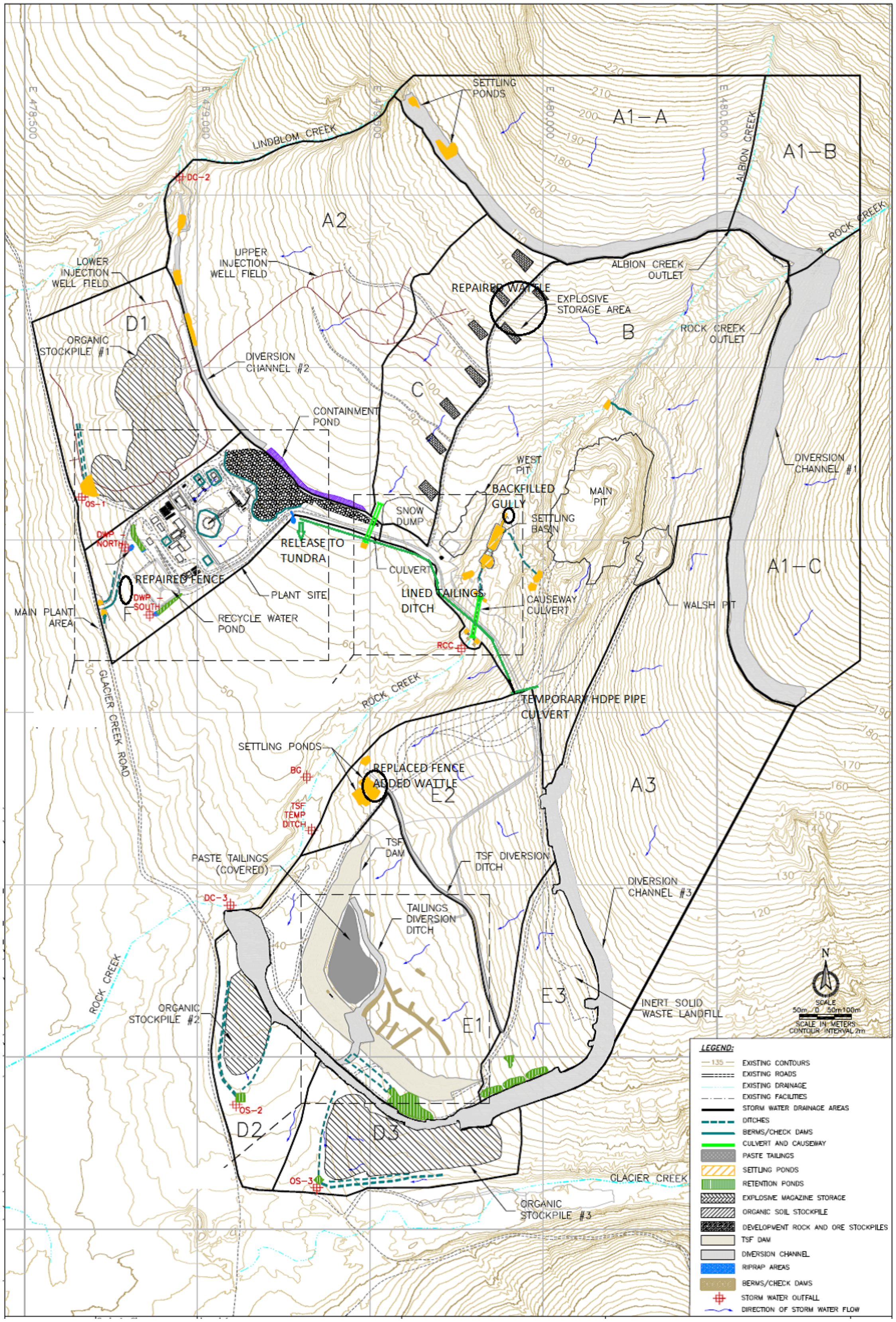

Figure 2. Rock Creek Mine SWPPP structures.

Water Treatment Plant (WTP)

The WTP was in care and maintenance status and was not operated during 2013.

Injection Well Field (IWF)

The IWF (upper and lower, Figure 3) was in care and maintenance status and was not operated during 2013.

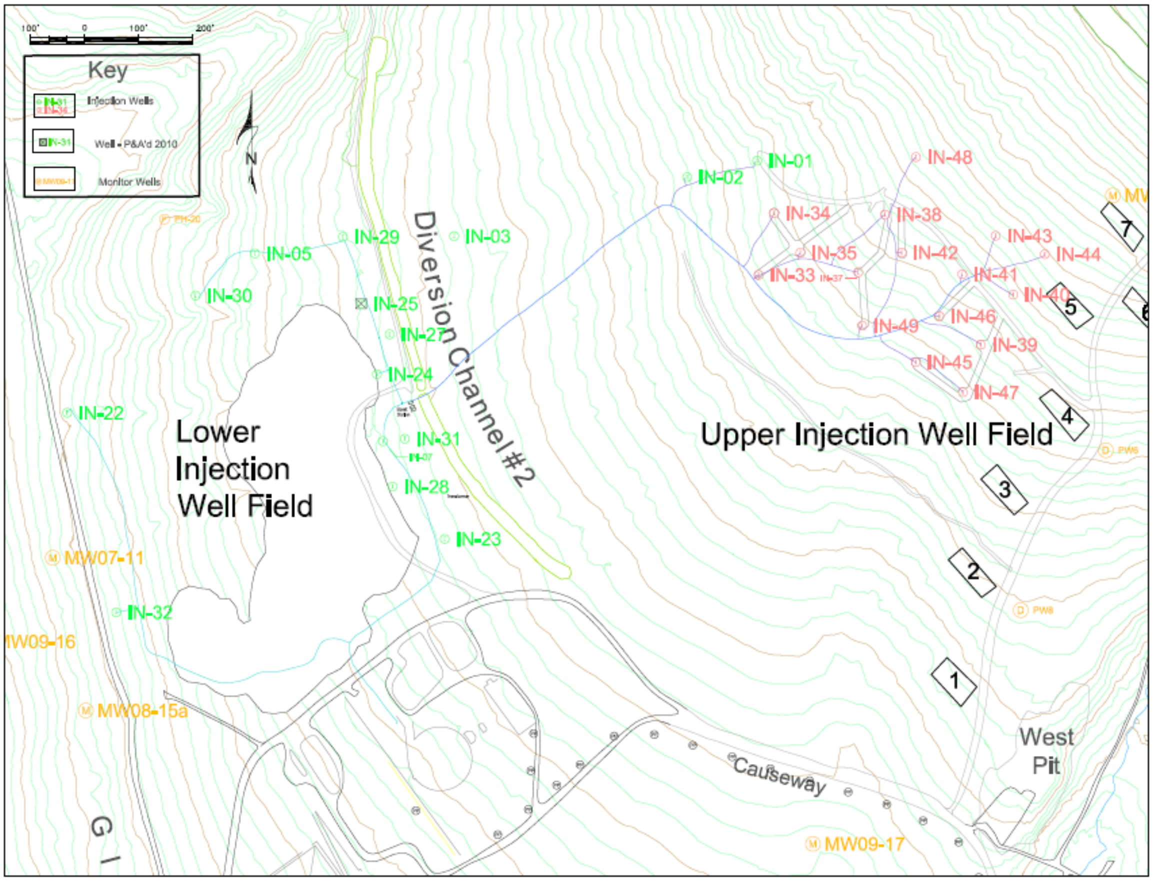

Figure 3. Nanuuq Injection Well Field (IWF).

Reportable Spills

Reportable spills are regulated by ADEC according to the following criteria:

- To Water: Any release of oil to water must be reported immediately (i.e., as soon as the person has knowledge of the discharge).
- To Land:
  - Any release of oil in excess of 55 gallons must be reported immediately (i.e., as soon as the person has knowledge of the discharge).

  - Any release of oil in excess of 10 gallons but less than 55 gallon must be reported within 48 hours after the person has knowledge of the discharge.
  - A person in charge of a facility or operation shall maintain and provide to DEC on a monthly basis, a written record of any discharge of oil from 1 to 10 gallons.
- To Impermeable Secondary Containment Areas
  - Any release of oil in excess of 55 gallons must be reported within 48 hours after the person has knowledge of the discharge.

There were no reportable spills during 2013.

Water Quality Monitoring

Environmental monitoring of water quality is conducted by AGC according to:

- Closure plan requirements
- Monitoring Plan (November 2008) as amended following Phase 1 closure completion, Final Temporary Closure Plan (TCP, Revised Version – April 26, 2010)
- Underground Injection Control (UIC) Permit AK-5X27-001-A
- Alaska Pollutant Discharge Elimination System (APDES) Permit AK0053627

The analytical monitoring program includes; water chemistry sampling of surface water groundwater, and treated water. During the period, no development rock or tailings were produced, and none required analytical sampling. And, no water was treated and discharged, and thus none was available to sample.

Water samples for water chemistry analysis were submitted to SGS labs in Anchorage. Table 1 shows the parameters analyzed.

Table 1. Water chemistry sampling parameters.

Parameter	Ground Water TCP	Surface Water TCP	Surface Water APDES Permit	Contained Water TCP	Treated Water UIC Permit	Treated Water APDES Permit
Aluminum*	X	X	X	X	X	X
Antimony*	X	X	X	X	X	X
Arsenic*	X	X	X	X	X	X
Barium*	X	X	X	X	X	X
Beryllium*	X	X	X	X	X	X
Cadmium*	X	X	X	X	X	X
Calcium*	X	X	X	X	X	X
Chromium*	X	X	X	X	X	X
Cobalt*	X	X	X	X	X	X
Copper*	X	X	X	X	X	X
Iron*	X	X	X	X	X	X

Lead*	X	X	X	X	X	X
Magnesium*	X	X	X	X	X	X
Manganese*	X	X	X	X	X	X
Molybdenum*	X	X	X	X	X	X
Nickel*	X	X	X	X	X	X
Phosphorus*	X	X	X	X	X	X
Potassium*	X	X	X	X	X	X
Selenium*	X	X	X	X	X	X
Silicon*	X	X	X	X	X	X
Silver*	X	X	X	X	X	X
Sodium*	X	X	X	X	X	X
Strontium*	X	X	X	X	X	X
Thallium*	X	X	X	X	X	X
Tin*	X	X	X	X	X	X
Vanadium*	X	X	X	X	X	X
Zinc*	X	X	X	X	X	X
pH**	X	X	X	X	X	X
Conductivity	X	X	X	X	X	X
Total Dissolved Solids	X	X	X	X	X	X
Alkalinity	X	X	X	X	X	X
Acidity	X	X				
Ammonia-N	X	X		X		
Chloride	X	X	X	X	X	X
Fluoride	X	X	X	X	X	X
Sulfate	X	X	X	X	X	X
Cyanide (total)	X	X		X	X	
Cyanide (WAD)	X	X	X	X	X	X
Mercury	X	X	X	X		X
Total Suspended Solids	X	X	X	X		X
Nitrate/Nitrite-N	X	X		X	X	
Chlorine**			X			X
Chronic Whole Effluent Toxicity (WET)						X
*Metals analyzed for total and dissolved concentrations,**Chlorine and pH are measured in-house due to short analytical holding times for these parameters						

10.1 Contained Water

During 2013, there was no contained water at the Nanuuq site.

10.2 Pit Lake

During 2013, there was no mining activity in the main pit. The main pit is not actively dewatered at this time. Water levels in the pit vary seasonally, rising as a result of snowmelt runoff and summer precipitation, and falling through winter. The Pit Lake is sampled on a quarterly basis during periods of open water. The Pit Lake was sampled during spring, summer, and fall quarters. Pit water level has not been quantitatively monitored; but as evidenced by lath placed at water's edge each sampling, water level raised a few tenths of a foot from breakup to freeze up. Several feet of freeboard remained.

10.3 Surface Water

Surface water at the Nanuuq Gold Project is sampled quarterly when flow is present. During 2013, samples were collected during all four quarters. Sample sites are limited to regional sites upstream and downstream on the Snake River and Glacier Creek at the bridge. Site samples are collected according to the APDES permit at, above, and below the confluence of DC3 and Rock Creek – when there is a discharge from outfall 001. There was no discharge from outfall 001 during the quarter. Regional sites were sampled.

Table 2. Rock Creek surface water sampling sites.

Site ID	Location	Description
SABC	Snake River above Balto Creek	Snake River above minesite (quarterly TCP; monthly APDES)
SRTB	Snake River at Teller Highway Bridge	Snake River at Teller Bridge (quarterly TCP, monthly APDES)
GLAC	Glacier Creek	Glacier Creek at Glacier Creek Bridge
DC3 Upstream (DC3-A)	Rock Creek	Upstream of DC3 confluence (APDES)
DC3 Discharge (DC3-B)	DC3	At confluence of DC3 & Rock Creek
DC3 Downstream (DC3-C)	Rock Creek	Downstream of the DC3 confluence (ADPES)

10.3.1 Rock Creek Regional

Snake River and Glacier Creek sites were sampled in spring, summer, and fall quarters. Water quality was excellent and stream water was clear.

10.3.2 Rock Creek Site

No discharge occurred from outfall 001 and no samples were collected from Rock Creek.

10.3.3 Rock Creek APDES Permit

No discharge from outfall 001 occurred during the year and no samples were collected.

10.3.4 Big Hurrah

There are six surface water sample locations in the vicinity of Big Hurrah. When collected, samples are obtained from various regional creeks above and below the mine site and above and below the proposed pit. Big Hurrah surface water locations are listed in Table 8.

There is currently no requirement in the TCP for surface water monitoring at Big Hurrah and none was conducted.

Table 3. Big Hurrah surface water sample locations.

Sample ID	Location	Description
BHBL	Lower Big Hurrah Creek	Big Hurrah Creek below mine site
BHRU	Upper Big Hurrah Creek	Big Hurrah Creek above mine site
HUFF	Huff Creek	Huff Creek tributary to Big Hurrah Creek above mine site
LHRL	Lower Little Hurrah Creek	Mouth of Little Hurrah Creek below proposed pit
LHRU	Upper Little Hurrah Creek	Little Hurrah Creek above proposed pit
LIDA	Linda Vista Creek	Linda Vista Creek tributary to Big Hurrah below mine site

10.4 Dissolved Surface Water Chemistry

Surface water was monitored during second, third, and fourth quarters. Ice conditions precluded first quarter sampling. Second quarter sampling occurred soon after breakup.

TCP monitoring does not include collection of stream flow measurements. In the absence of stream flow information, interpretation of surface water chemistry involves some uncertainty. Stream flow is dependent on contributing area of surface watersheds, which is in turn dependent on precipitation, snow melt, groundwater flux, and their temporal and spatial variation. However, general statements can be made regarding surface water quality dissolved concentrations given that samples were collected at times of no precipitation and at reasonably similar stream discharge among quarters. Stream flow variation is controlled during each quarter monitoring event on Snake River by sampling the stations on the same day.

Third quarter flows were qualitatively higher than during second and fourth quarters. Given the technical difficulties, dangers, and expense of obtaining stream flow measurements and the purposes of the monitoring program, water chemistry information alone is sufficient.

10.4.1 Total Dissolved Solids (TDS)

TDS was low and uniform among stations, indicating contributing tributary area between the upstream and downstream stations is similar chemically to the upper watershed (Figure 4). Data on trace metals for the Glacier Creek watershed suggest Glacier Creek has somewhat dissimilar chemistry.

Sampling in third and fourth quarters occurred when the ground was unfrozen and groundwater base flow was unimpeded. Perhaps for this reason – plus any other undifferentiated contribution – TDS increased by a maximum of 30 ppm or roughly 30% in the second half of the year.

TDS remained fairly constant upstream to downstream on the Snake River (SABC to SRTB, Figure 4). This suggests relatively uniform dissolved concentrations in input from the intervening contributing area.

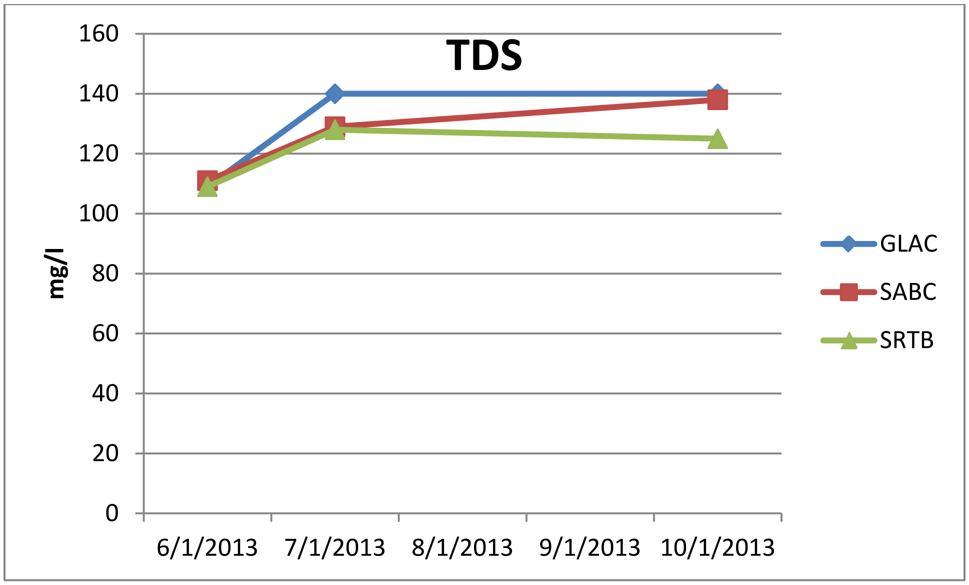

Figure 4. TDS observed at surface water monitoring stations.

Dissolved trace metal chemistry is a component of TDS – a minor component – but one generally of high interest. We have included information in this annual report on the four trace metals, which will also be discussed in the subsequent section on groundwater dissolved chemistry. These metals are arsenic, iron, manganese, and antimony. In groundwater monitoring data, these four metals at times exceed the most stringent Alaska Water Quality Standards (AWQS) for all uses. To supplement the groundwater analysis, we have included these metals in this discussion of surface water dissolved chemistry to determine – as best possible – if an offsite increase in these metals is detectable in surface waters.

10.4.2 Dissolved Arsenic

First, dissolved arsenic shows no change upstream to downstream (SABC to SRTB, Figure 5). Glacier Creek has distinctly different arsenic concentration and trend from Snake River (Figure 5). This could be a function of runoff production and contributing area at the specific time of sampling. Glacier Creek has no discernible contribution from the Rock Creek property.

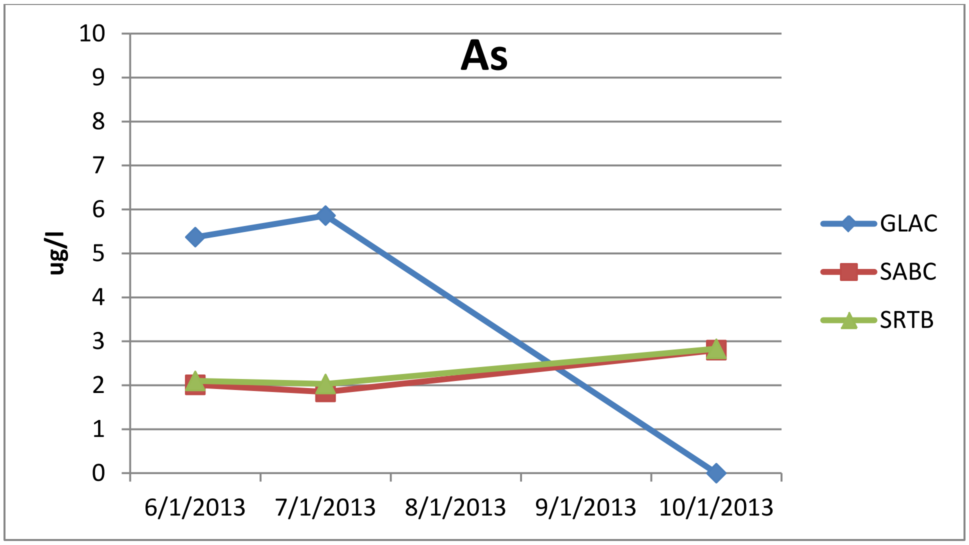

Figure 5. Dissolved arsenic at surface water monitoring locations.

10.4.3 Iron

Iron was not detected in total or dissolved forms in Glacier Creek.

To better understand the behavior of iron in Snake River we have included total iron in this analysis along with dissolved. Among all stations there was only one hit for dissolved iron, which was recorded at the downstream Snake River site SRTB (Figure 6).

The occurrence of dissolved iron downstream on Snake River can be attributed to total suspended solids (TSS), which follows the same trend as total iron concentration upstream to downstream (Figure 7). Due to the correlation of TSS to total iron, and total iron to dissolved iron, the logical explanation for the higher October concentrations would be bank erosion in the intervening reach.

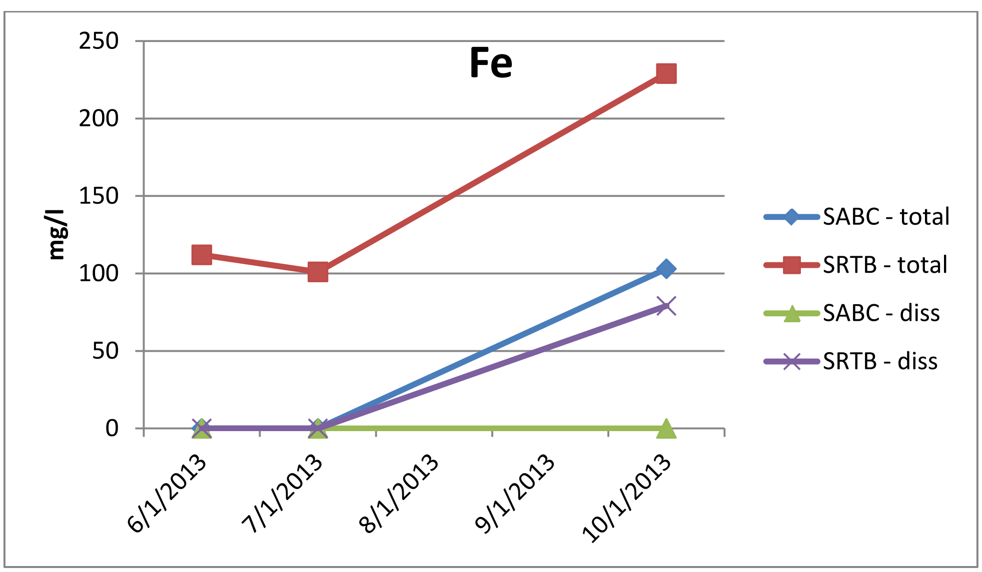

Figure 6. Dissolved and total iron at Snake River surface water monitoring locations.

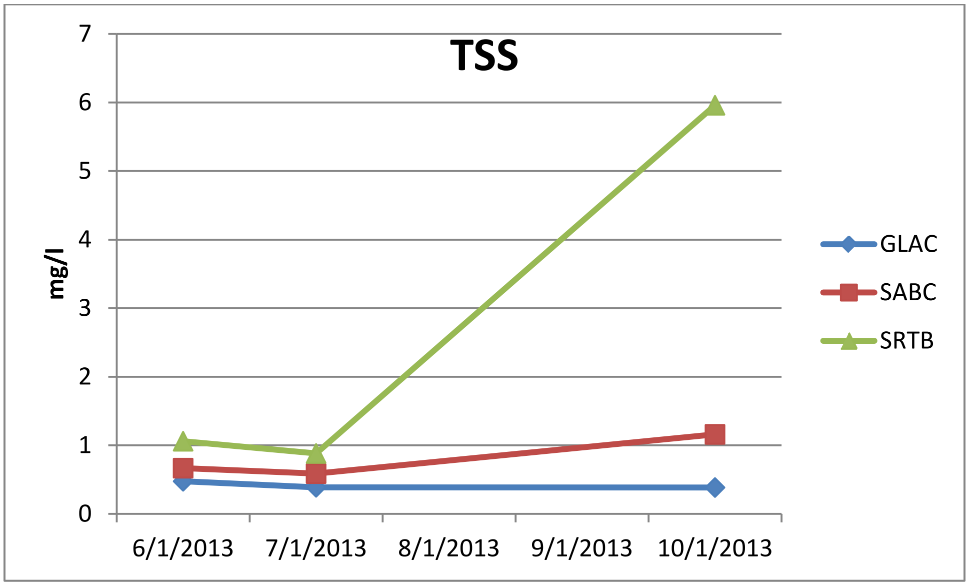

Figure 7. Total suspended solids at surface water monitoring stations.

10.4.4 Dissolved Manganese

Dissolved manganese did exhibit an increase from upstream to downstream (Figure 8). While Glacier Creek and upstream Snake River showed barely detectable manganese, downstream Snake River is relatively elevated. The time trend does not mirror TSS, so it is possible there is a groundwater contribution of manganese to stream flow in the lower reach of the Snake River. This will be discussed further in the following section on groundwater chemistry.

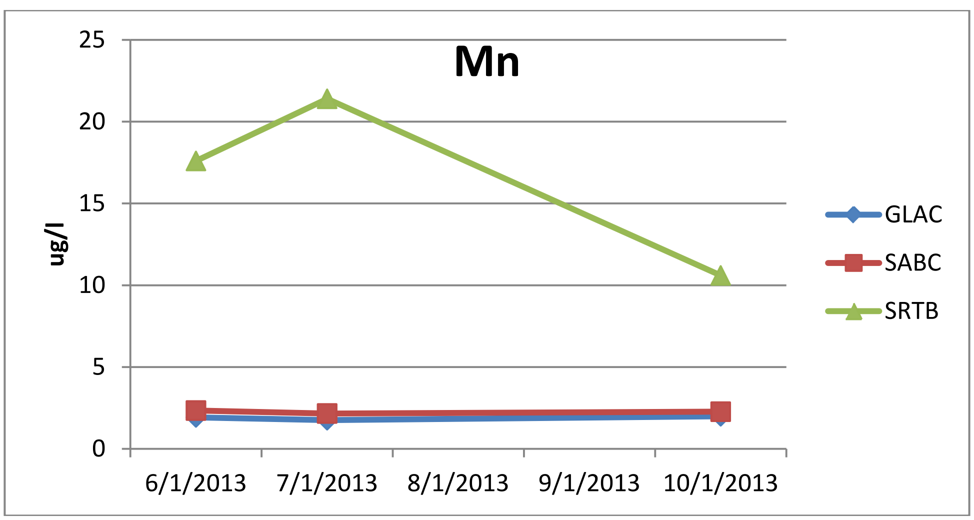

Figure 8. Dissolved manganese at surface water monitoring locations.

10.4.5 Dissolved Antimony

Dissolved antimony shows a very consistent time trend upstream to downstream on Snake River (Figure 9), the upstream station having the higher concentration. All concentrations are extremely low at less than 1 ppb. Glacier Creek only recorded one positive hit for antimony (Q3 sample).

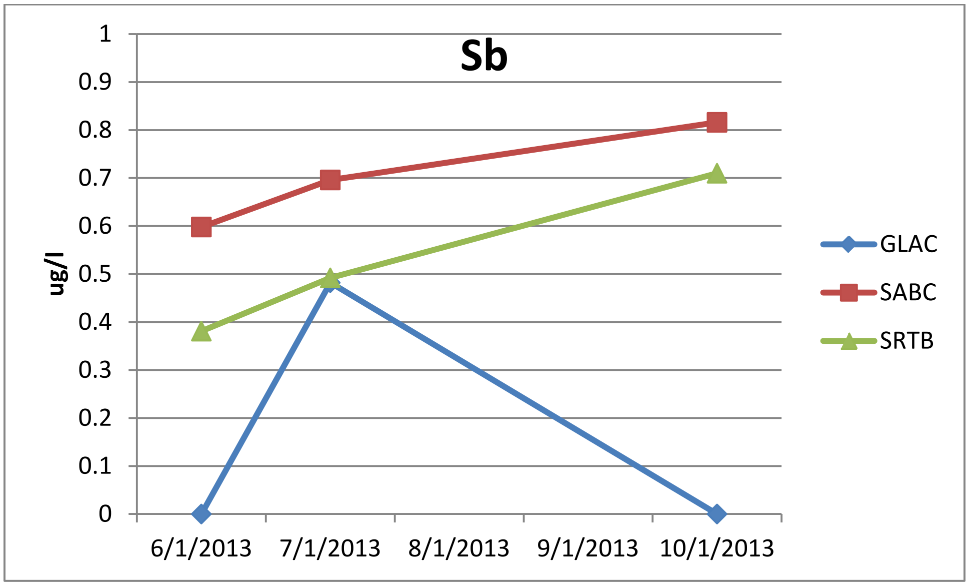

Figure 9. Dissolved antimony at surface water monitoring locations.

In summary, the only dissolved constituent that appears to have potentially higher concentration from groundwater discharge in the reach between the upstream and downstream Snake River monitoring stations is manganese. This is discussed relative to site groundwater conditions in section 10.6.

10.5 Groundwater

AGC's groundwater monitoring program was developed to help identify potential effects – if any – of (1) TSF seepage, (2) injection to the IWF, or (3) seepage from the RWP on local groundwater (Table 4). Monitoring well designation as "A" or "B" refers to deep and shallow screened interval, respectively, for closely spaced wells.

Groundwater samples are collected quarterly. Well MW08-14B was purged and sampled by bailer, resulting in less effective purging than achieved by dedicated pumps in all other wells. Excel spreadsheets of the water chemistry data for the four quarters of 2013 are provided in the electronic appendix to this report.

Groundwater wells at Big Hurrah were not sampled.

Table 4. Groundwater monitoring locations.

Well Sample ID	Location	Description
MW03-05	Above Rock Creek culvert	Background monitoring well
MW07-11	South of Lower Injection Well Field	Down-gradient of Injection Well Field
MW08-15A	South of Lower Injection Well Field	Down-gradient of Injection Well Field
MW08-14A,B	South of RWP	Down-gradient of RWP

10.6 Dissolved Groundwater Chemistry

There are three main areas of potential impacts under investigation in the groundwater monitoring program.

- TSF (well MW03-05 down gradient)
- Injection fields (wells MW07-11 & MW08-15A down gradient)
- Recycle water ponds (wells MW08-14A & B down gradient)

Of these three facilities, only the IWF remains, the Recycle Water Pond (RWP) has been reclaimed and the TSF has been largely reclaimed. Most importantly, the TSF no longer retains water. The IWF has not operated since completion of Phase 1 reclamation in September 2012.

The Temporary Closure Plan Revision #2 (April 26, 2010) contains a list of Upper Tolerance Limit (UTL) concentrations that trigger additional investigation. Those UTLs were established for several wells – none of which remain in the approved monitoring plan. Monitoring data collected during 2013 are therefore only compared to Alaska Water Quality Standards (AWQS). Standards are listed below for drinking/stock/irrigation/freshwater aquatic life uses – whichever is lowest (Table 5). These numbers do not constitute AQWS that necessarily apply to groundwater at Rock Creek, but serve as indicators of concentrations of potential interest.

Hardness was set at 330 ppm for those parameters so dependent.

Table 5. Lowest Alaska water quality standards - all uses considered - for comparison to monitoring results.

Parameter	AWQS (μg/l)	Use
Aluminum	87	Chronic Aquatic
Antimony	6	Drinking
Arsenic	10	Drinking
Barium	2000	Drinking
Beryllium	4	Drinking
Cadmium	5	Drinking
Chromium	100	Drinking
Cobalt	50	Irrigation
Copper	25	Chronic Aquatic
Iron	1000	Chronic Aquatic
Lead	9	Chronic Aquatic
Manganese	200	Irrigation
Molybdenum	10	Irrigation
Nickel	142	Chronic Aquatic
Selenium	5	Chronic Aquatic
Strontium	8 pCi/l	Drinking
Thallium	2	Drinking
Vanadium	100	Irrigation
Zinc	325	Chronic Aquatic

pH	6.0 – 8.5	Drinking
Total Dissolved Solids	500 mg/l	Drinking
Ammonia-N	~9.6 (mg/l, pH=7)	Chronic Aquatic
Fluoride	1000	Irrigation
Cyanide (free)	5.2	Chronic Aquatic
Mercury	.77	Chronic Aquatic
Nitrate/Nitrite-N	10,000	Drinking

Concentrations listed in Table 5 were periodically exceeded in 2013 monitoring data, as is consistent with past monitoring (Table 6). Additional discussion is provided below.

Table 6. 2013 groundwater quality which exceeded numbers in Table 5.

Parameter	Q1	Q2	Q3	Q4
Antimony				Pit
Arsenic	TSF, IWF	TSF, RWP, IWF, Pit	TSF, RWP, IWF, Pit	TSF, RWP, IWF, Pit
Iron		RWP, IWF	RWP (deep)	RWP (deep), IWF
Manganese		RWP (shallow)	RWP (shallow)	RWP (shallow)
TDS	RWP	RWP		RWP

2013 is the first full year of data collected following completion of Phase 1 reclamation. And as mentioned above, the upper and lower Injection Well Fields have been inactive throughout 2013. Histograms are included below in order to compare the pre-mining dataset available for wells MW03-05 (TSF) and MW07-11 (IWF), with the 2013 monitoring data. Conclusions are only preliminary and no rigorous statistical comparisons are undertaken at this time. But general comments are made based on visual examination of these data.

10.6.1 Dissolved Arsenic

TSF downgradient dissolved metals exceeded the Table 5 number for arsenic in all quarters of 2013 (well MW03-05, Table 6, Figure 10). This is consistent with past monitoring and reflects no change in observed conditions. Other than relatively low dissolved arsenic in spring, this parameter remained constant throughout the year at roughly 95 ppm.

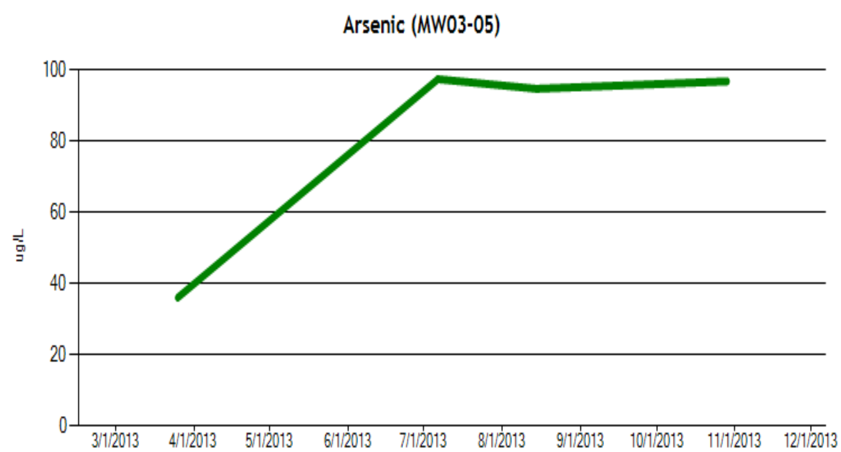

Figure 10. Dissolved arsenic in well MW03-05 downgradient of TSF.

The same trend was observed below the reclaimed RWP (well MW08-14A, Table 6, Figure 11) and IWF (wells MW07-11 & MW08-15A, Table 6, Figure 12 & 13, respectively). However, while the time trend is very similar among all three areas, the Q2 through Q4 measurements range from 15 to 325 ppm. That is, the dissolved arsenic concentration between the three areas ranges by over an order of magnitude, but is nearly constant within. Interestingly, arsenic concentrations in the two IWF downgradient wells vary by a factor of 2.

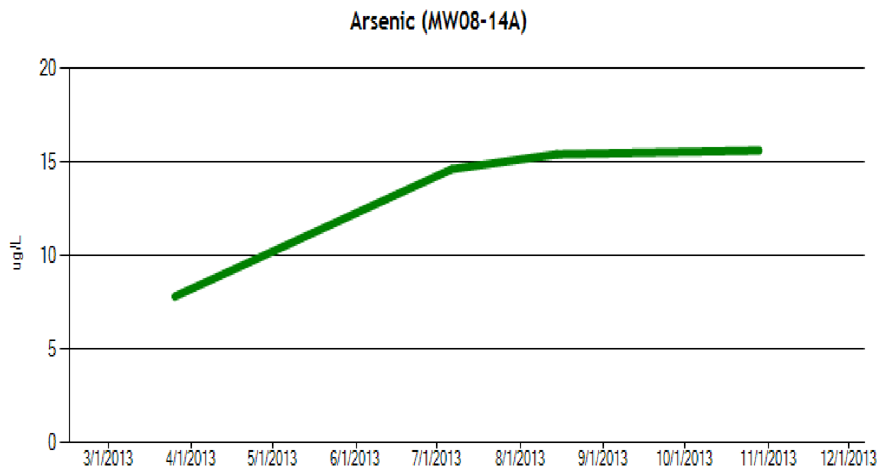

Figure 11. Dissolved arsenic in well MW08-14A downgradient of the reclaimed RWP.

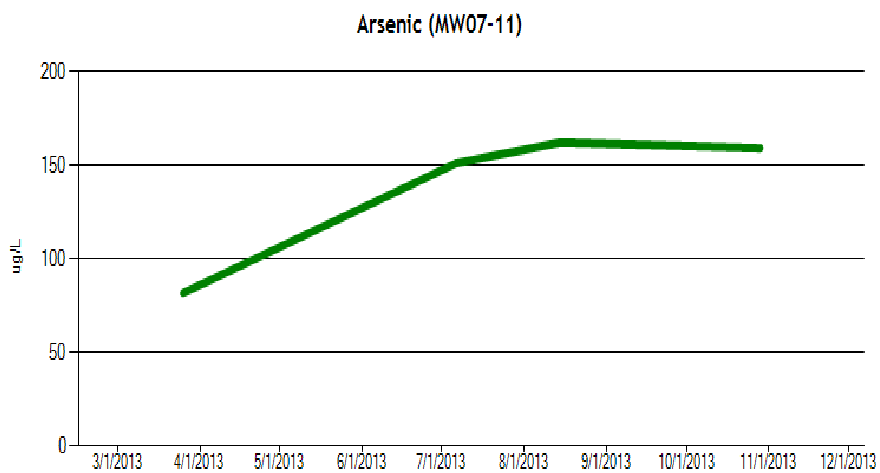

Figure 12. Dissolved arsenic in well MW07-11 downgradient of the inactive IWF.

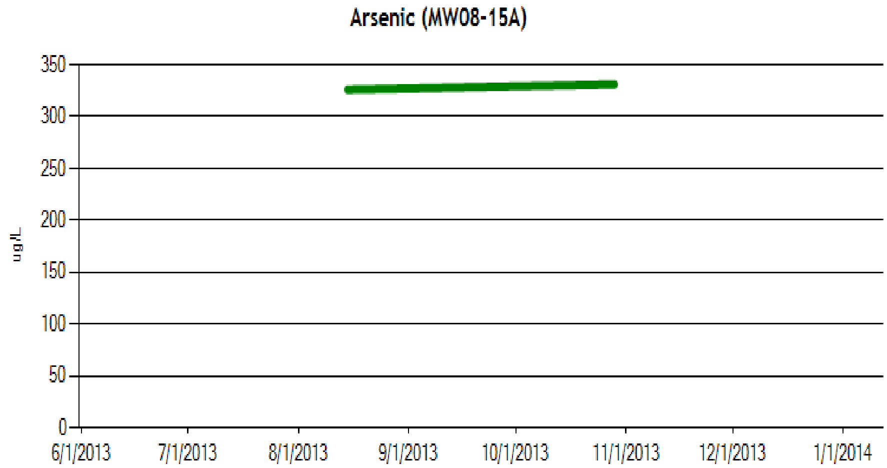

Figure 13. Dissolved arsenic in well MW08-15A downgradient of the inactive IWF.

Two of the wells monitored in 2013 were completed and monitored prior to mining operations; i.e., MW03-05 (TSF) and MW07-11 (IWF). The other wells monitored in 2013 were completed during or following mining (2008). The baseline dataset for these two wells provides the opportunity for before/after comparison. Four samples are now available in the 2013 post-mining dataset – which is too limited for statistical testing – but useful for visual comparison.

Dissolved arsenic below the reclaimed TSF appears consistent before/after mining (Figure 14).

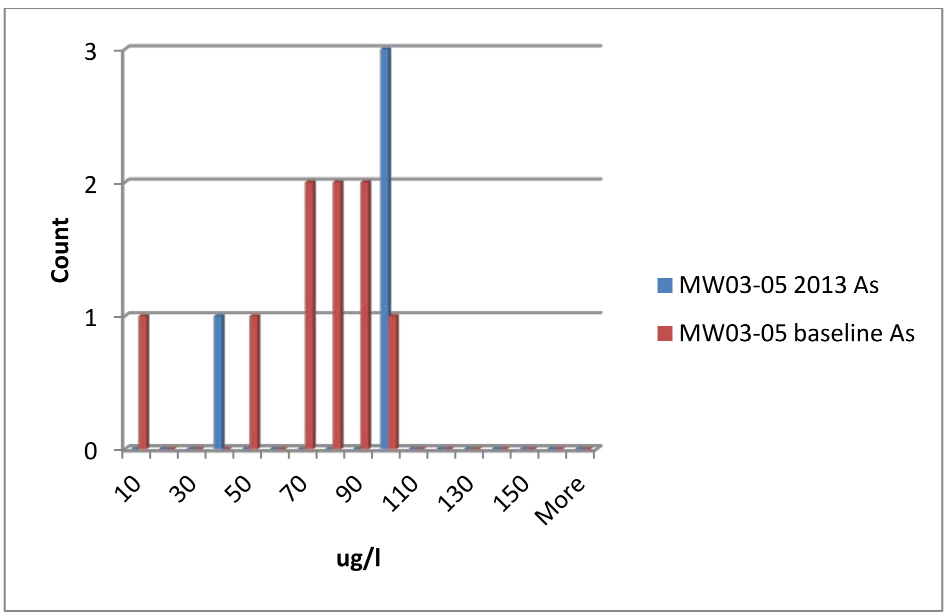

Figure 14. Before/after dissolved arsenic downgradient of the reclaimed TSF.

Downgradient data for the inactive IWF collected in 2013, during a period of extended inactivity (described as 'hiatus'), plot above the baseline dataset (Figure 15). Further monitoring is suggested at this well.

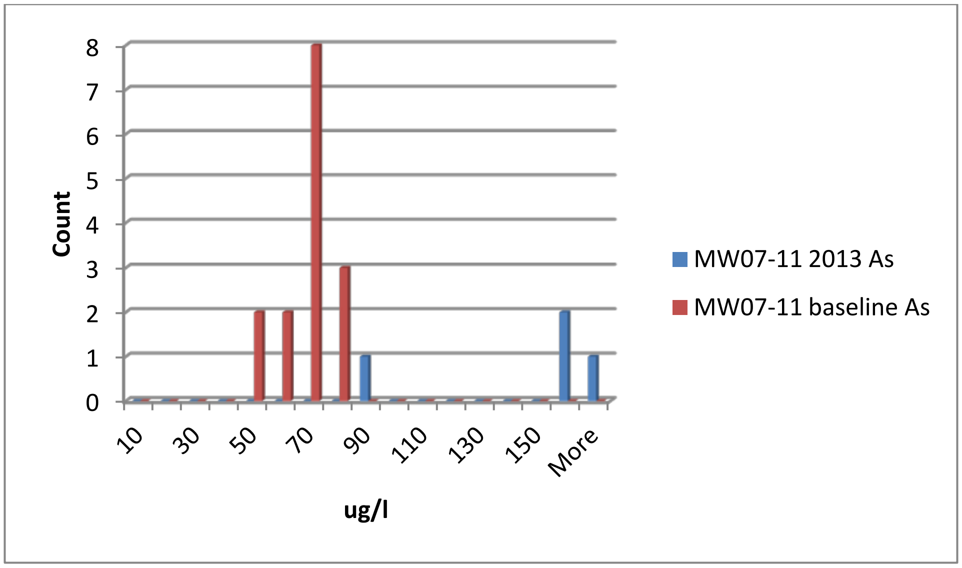

Figure 15. Before/'hiatus' dissolved arsenic downgradient of the inactive IWF.

10.6.2 Dissolved Iron

With the exception of the – once again – relatively low concentrations in Q1, dissolved iron was fairly constant to slightly declining in the magnitude of 1000 to 850 mg/l downgradient of the TSF (MW03-05, Figure 16) and IWF (MW07-11, Figure 17). Contrastingly, the RWP downgradient well (MW08-14A, Figure 18) and the other IWF downgradient well (MW08-15A, Figure 19) show a very similar pattern to that shown above, but twice the concentration (2000 mg/L). And as was seen above with arsenic, the two IWF Downgradient wells vary by a factor of 2 – MW08-15A again being the higher.

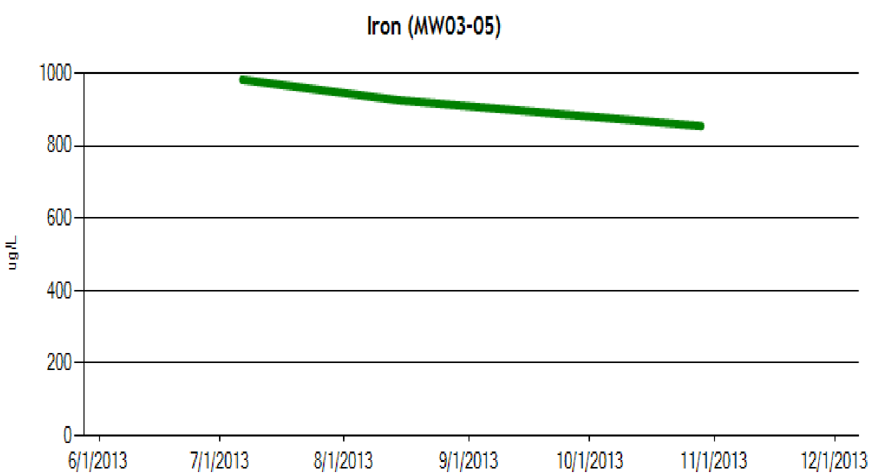

Figure 16. Dissolved iron in well MW03-05 downgradient of the reclaimed TSF.

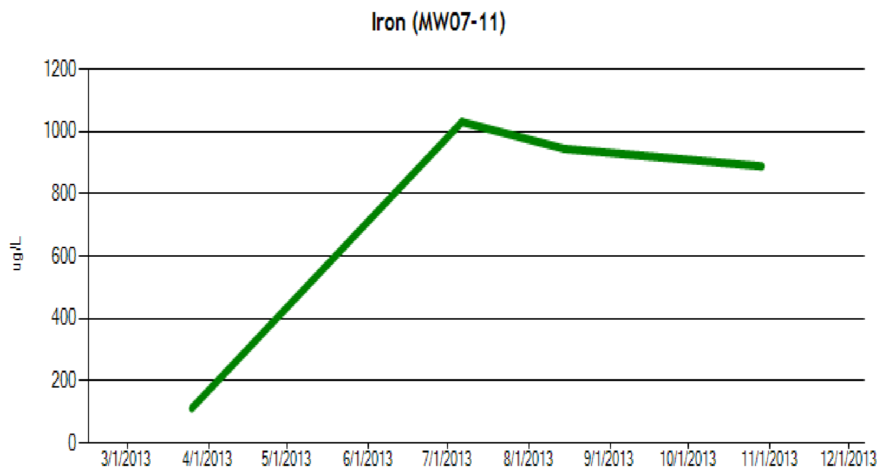

Figure 17. Dissolved iron in well MW07-11 downgradient of the inactive IWF.

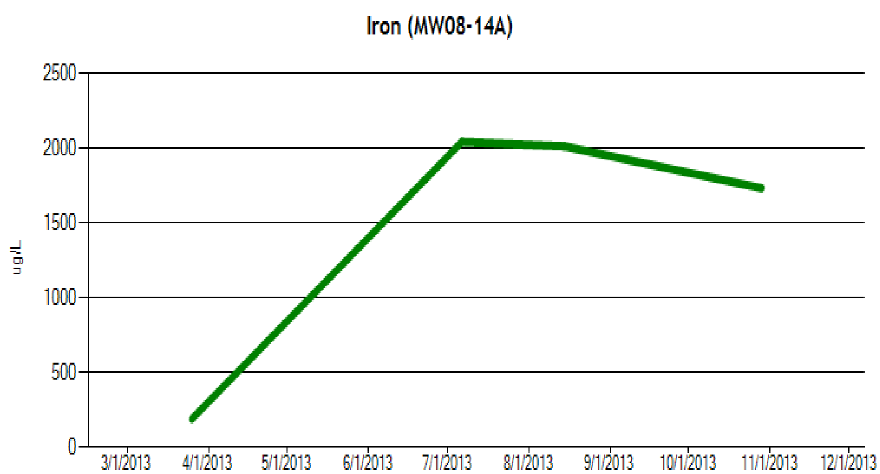

Figure 18. Dissolved iron in well MW08-14A downgradient of the reclaimed RWP.

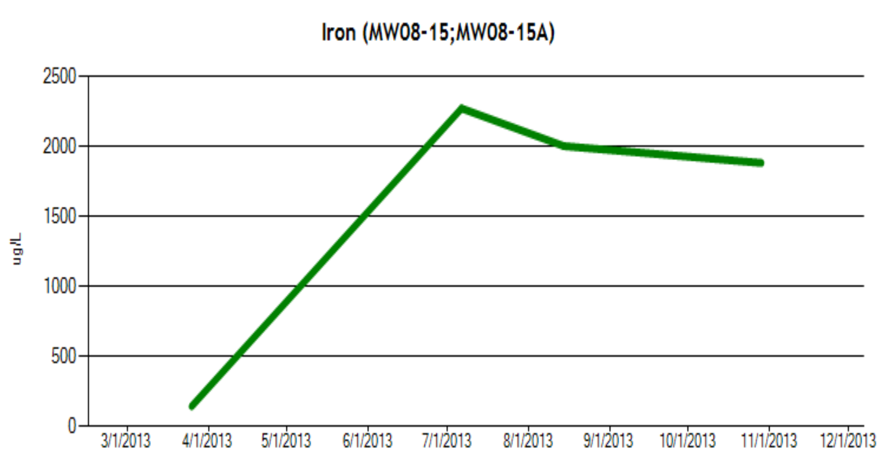

Figure 19. Dissolved iron in well MW08-15(A) downgradient of the inactive IWF.

Post-mining iron concentrations downgradient of the TSF and IWF are both largely greater than baseline data (Figures 20 & 21). Iron is generally soluble in local disturbed soils and would be a logical constituent to observe in post-mining groundwater. Continued data collection will further describe the before/after conditions regarding iron in solution.

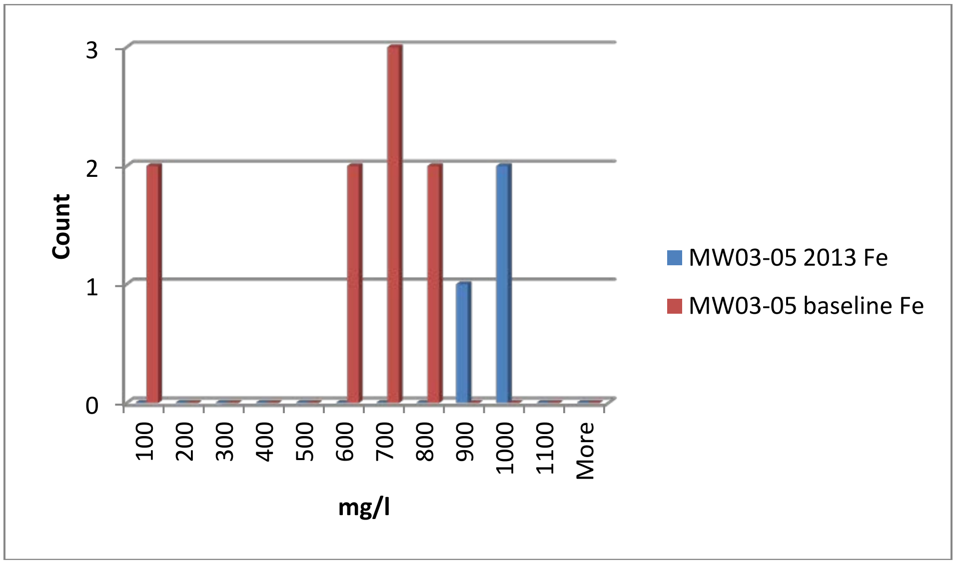

Figure 20. Before/after dissolved iron downgradient of the reclaimed TSF.

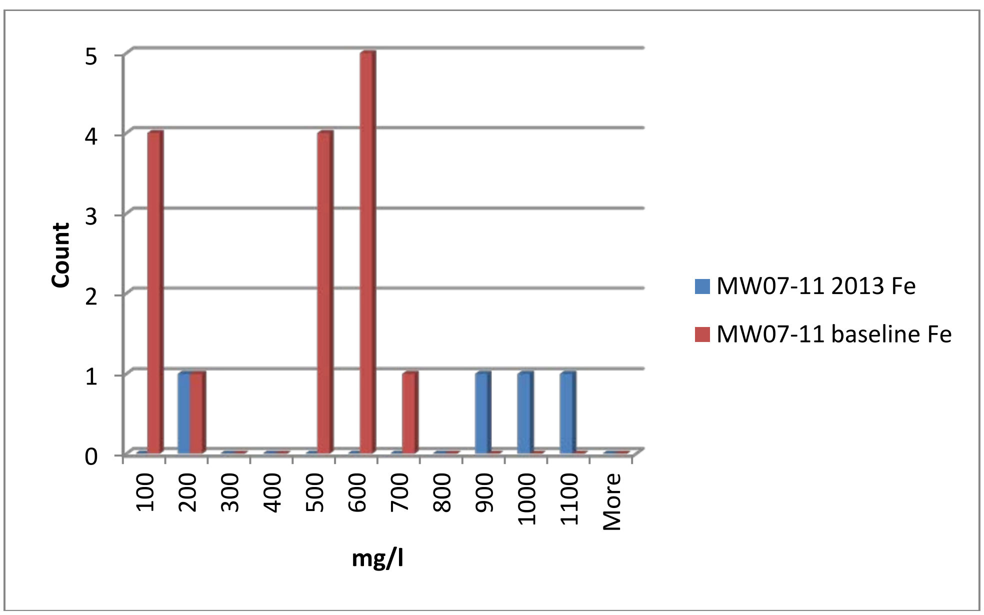

Figure 21. Before/'hiatus' dissolved iron downgradient of the inactive IWF.

10.6.3 Dissolved Manganese

Dissolved manganese downgradient of the reclaimed TSF showed minimal variability around a central tendency of the low 30s ppb (Figure 22).

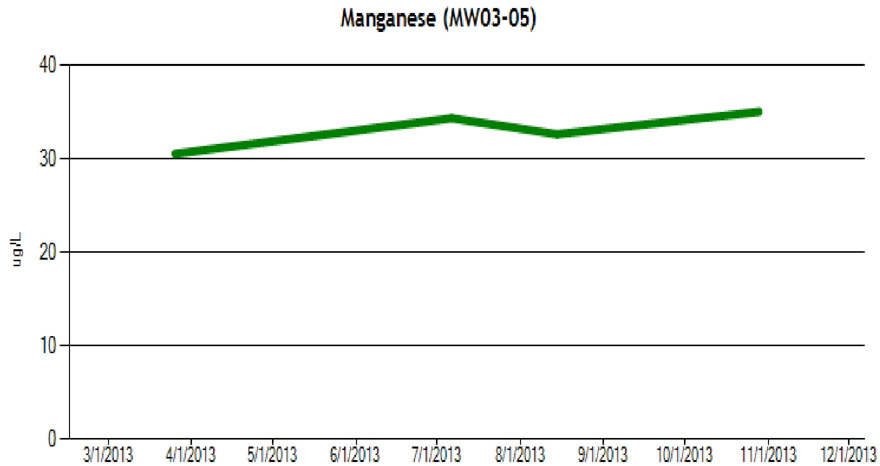

Figure 22. Dissolved manganese in well MW03-05 downgradient of reclaimed TSF.

Downgradient of the inactive IWF dissolved manganese also showed fairly low variability, but around quite disparate central tendencies by well. Once again, MW07-11 is the lower concentration (Figure 23), while MW08-15(A) is higher by a factor of almost 5 (~23 vs ~110 ppb, Figure 24).

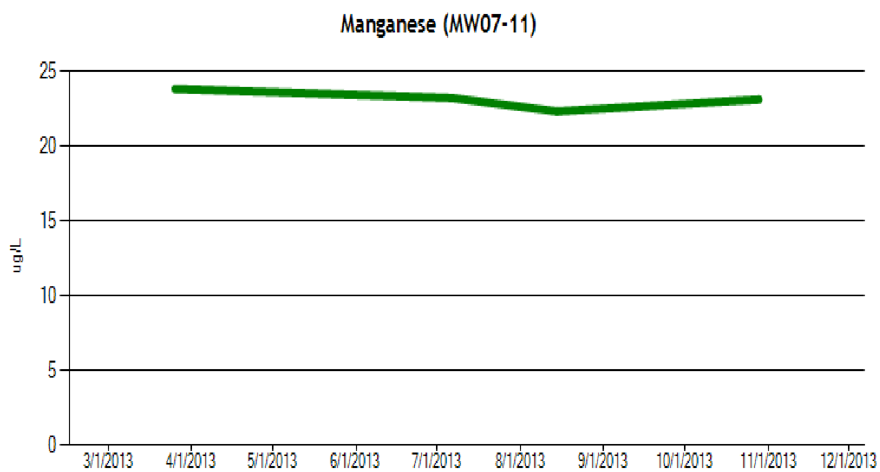

Figure 23. Dissolved manganese in well MW07-11 downgradient of inactive IWF.

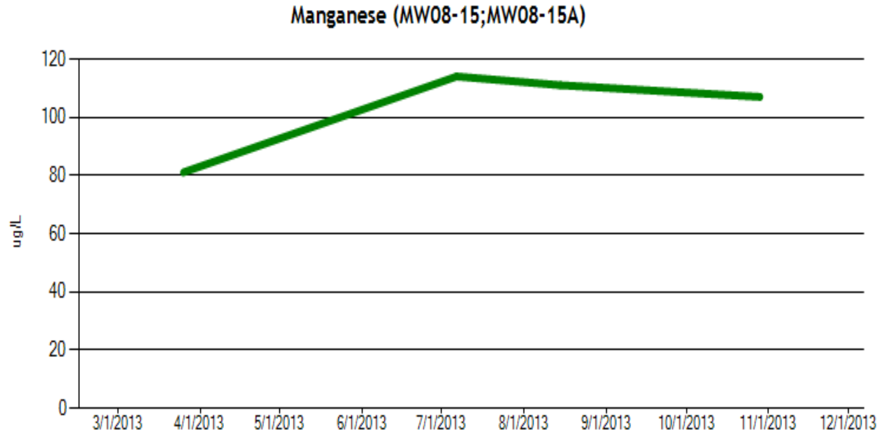

Figure 24. Dissolved manganese in well MW08-15(A) downgradient of inactive IWF.

Dissolved manganese in well MW08-14A downgradient of the reclaimed RWP showed low variability around the central tendency of approximately 90 ppb (Figure 25) – not dissimilar to well MW08-15(A) discussed above.

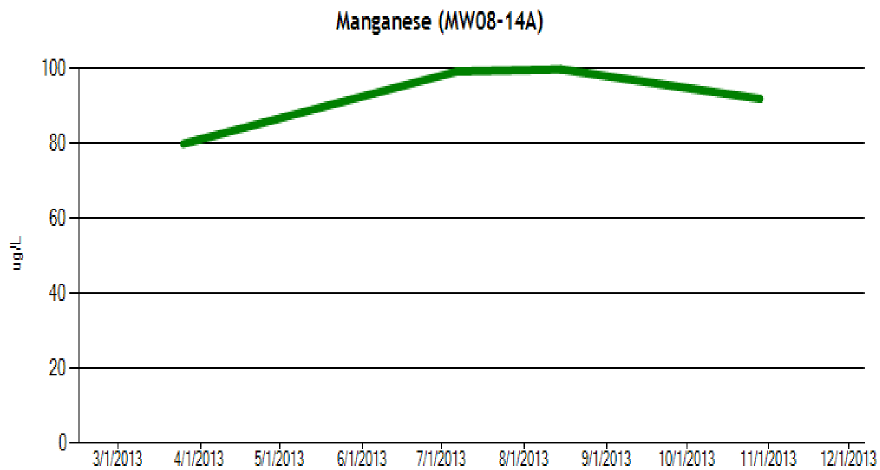

Figure 25. Dissolved manganese in well MW08-14A downgradient of the reclaimed RWP.

Dissolved manganese does not replicate the behavior of iron. Rather, the post-mining data plot within or slightly below pre-mining data (Figures 26 & 27). Based on these preliminary data, there would not appear to be a difference in dissolved manganese concentrations before and after mining and associated activity, and there is no apparent reason to suspect the relatively elevated dissolved manganese concentrations detected at the downstream Snake River station is due to mine seepage impacts.

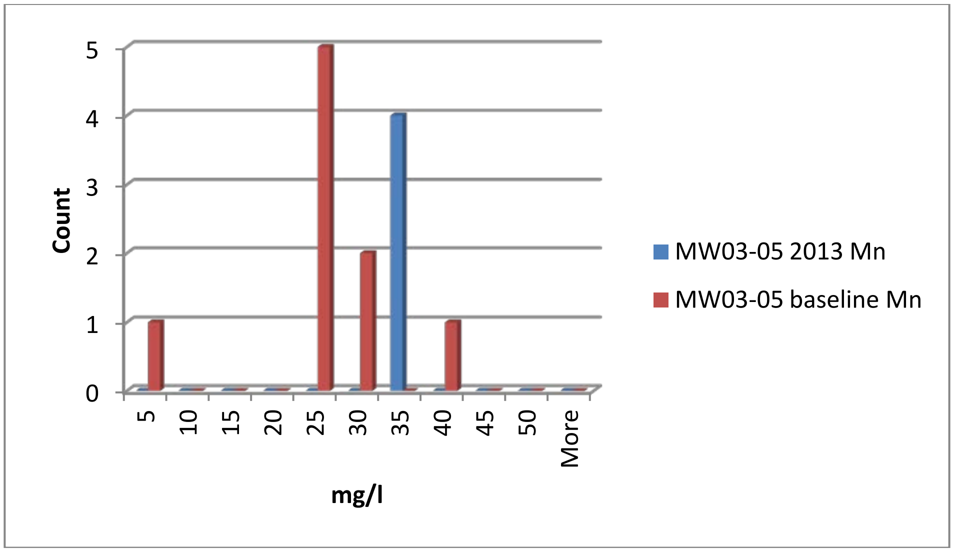

Figure 26. Before/after dissolved manganese downgradient of the reclaimed TSF.

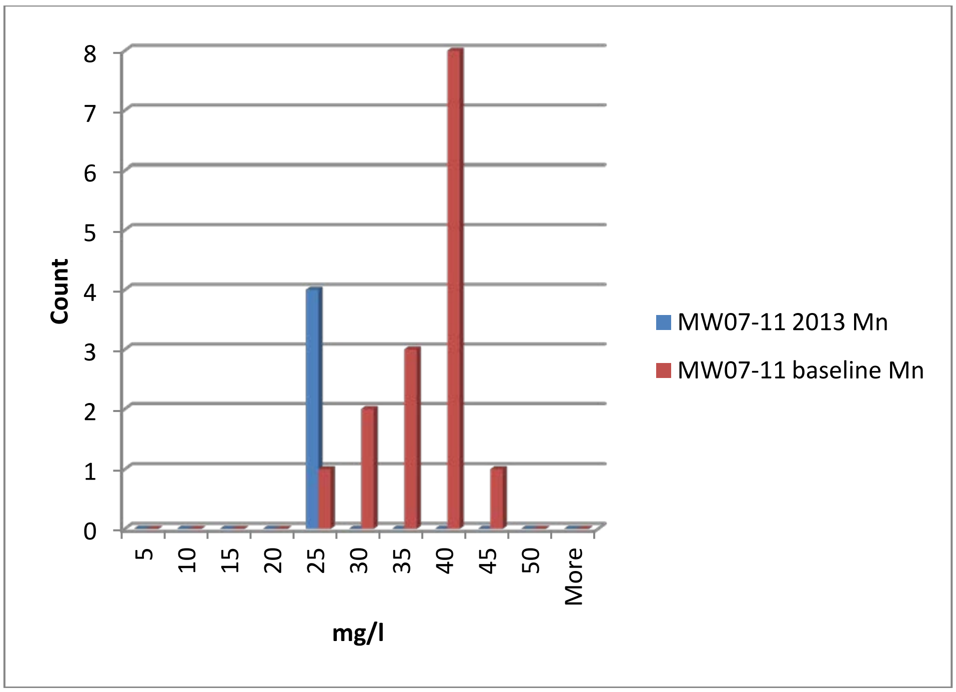

Figure 27. Before/'hiatus' dissolved manganese downgradient of the inactive IWF.

10.6.4 Dissolved Antimony

Dissolved antimony downgradient of the reclaimed RWP (well MW08-14A) was reported below detection limits (0.5 ppb).

Dissimilar to other parameters noted above, antimony between the two IWF Downgradient wells (MW07-11 & MW08-15) was very similar in magnitude between 0.5 and 0.85 ppb (Figures 28 & 29). Variability through the year was minimal.

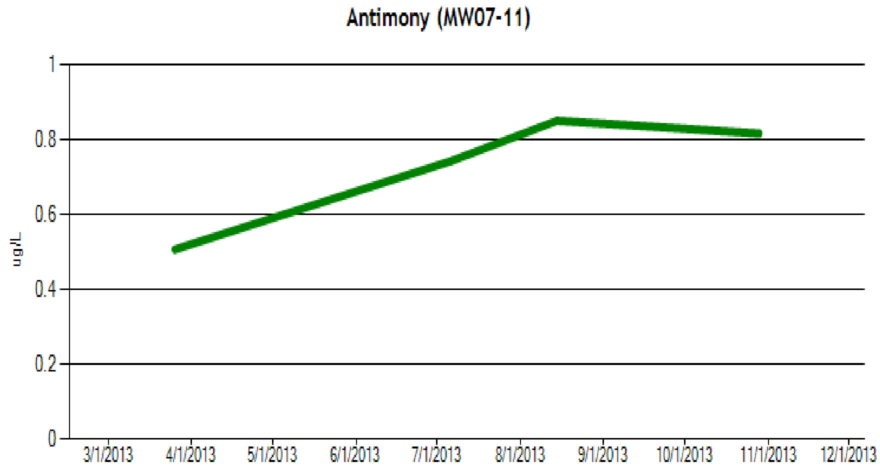

Figure 28. Dissolved antimony in well MW07-11 downgradient of inactive IWF.

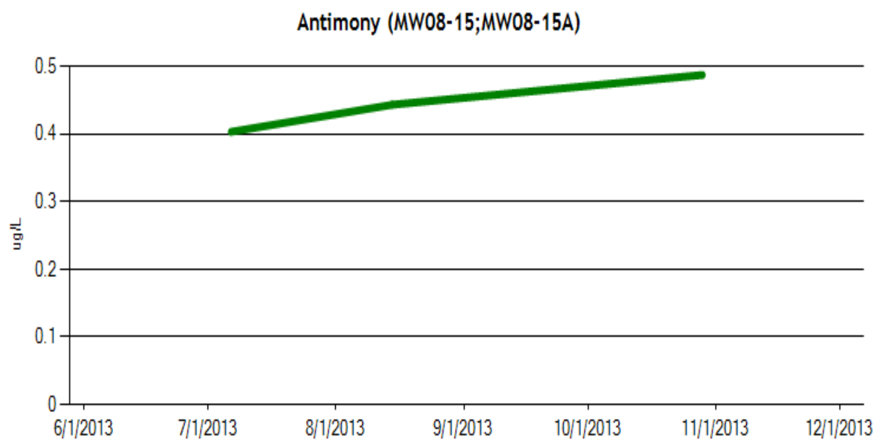

Figure 29. Dissolved antimony in well MW08-15(A) downgradient of inactive IWF.

Dissolved antimony downgradient of the reclaimed TSF exhibited similar magnitude and variability – or lack thereof – as below the inactive IWF (Figure 30).

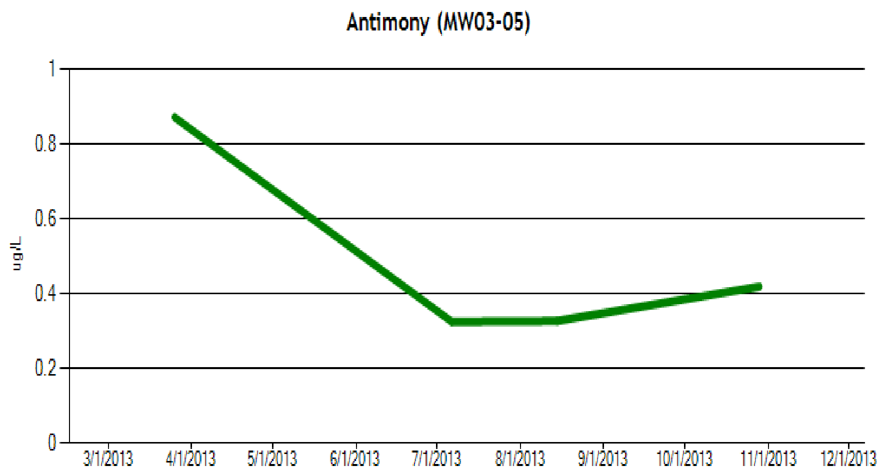

Figure 30. Dissolved antimony in well MW03-05 downgradient of reclaimed TSF.

As noted above for manganese, antimony in solution below the TSF and IWF do not appear to be differentiable before and after mining and associated activities (Figures 31 & 32). Again, additional data would provide more definitive comparisons of the apparent effects of mine development, operation, and closure.

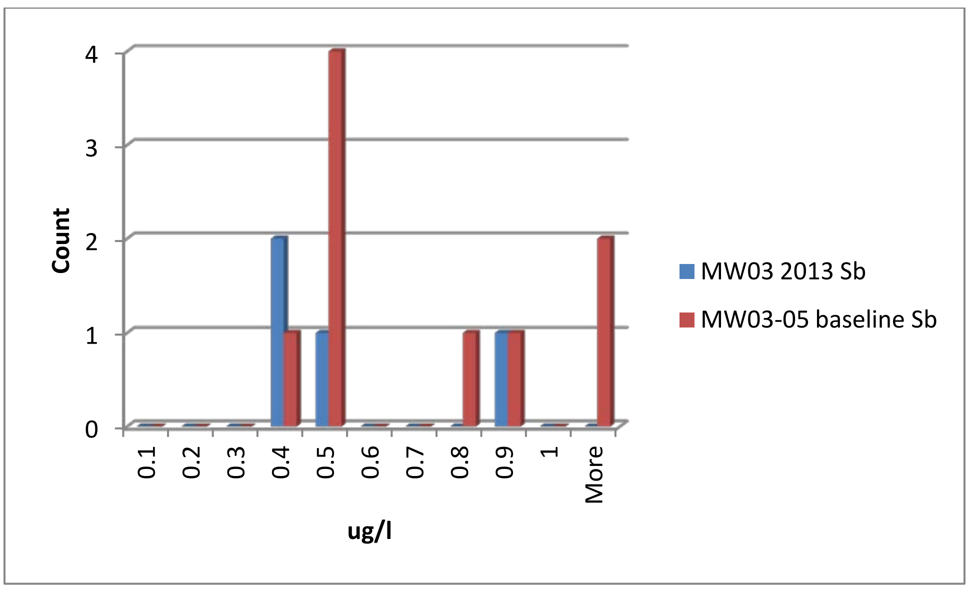

Figure 31. Before/after dissolved antimony downgradient of the reclaimed TSF.

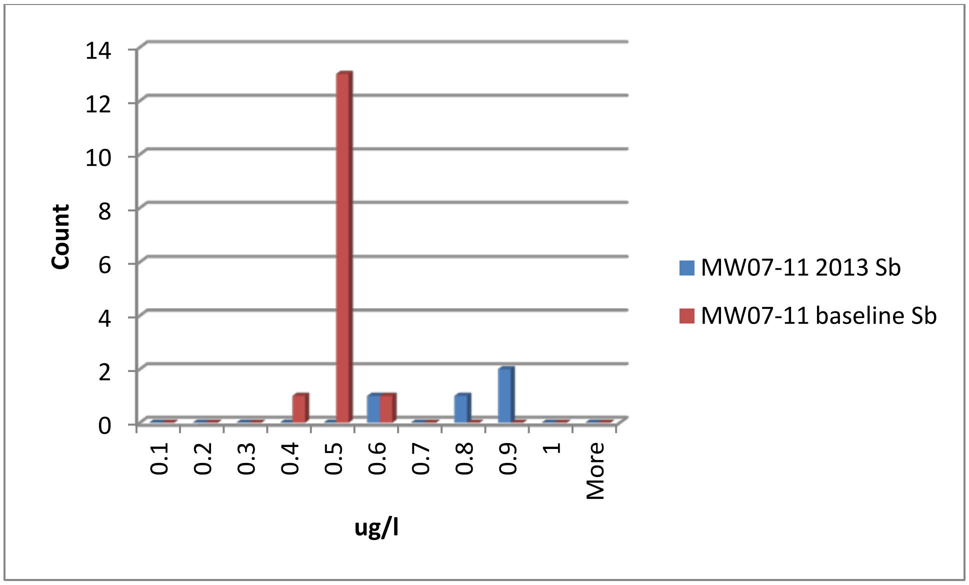

Figure 32. Before/after dissolved antimony downgradient of the inactive IWF.

10.6.5 Total Dissolved Solids

TDS AWQS for drinking water was exceeded slightly below the reclaimed RWP (MW08-14A) and more so in the shallower well 14B (Figure 19). 14A (deep) is a calcium bicarbonate, while 14B (shallow) is a calcium sulfate water.

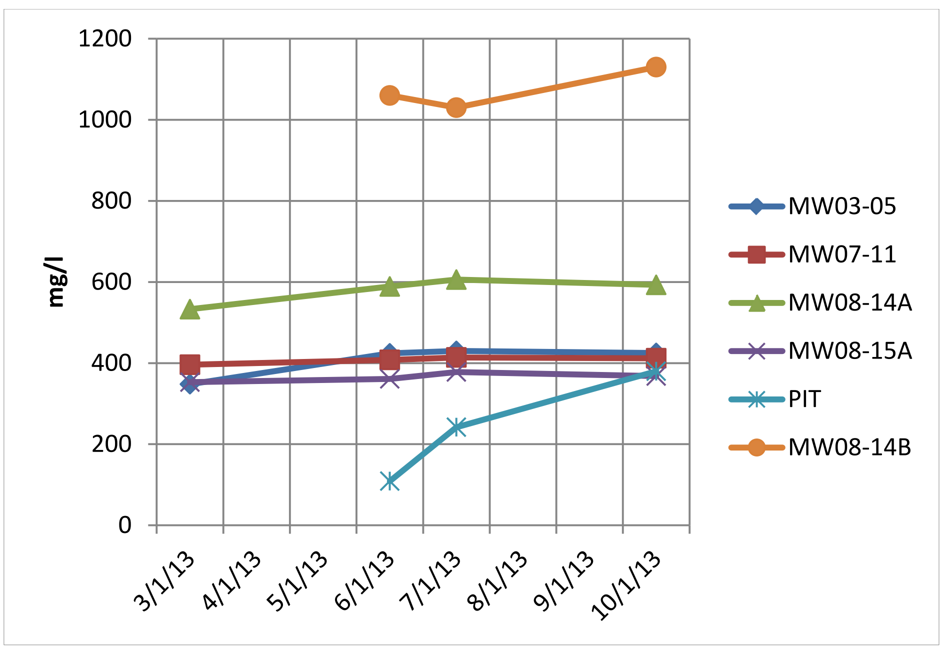

Figure 33. 2013 TDS in all monitored wells.

The pit exhibited lower TDS following breakup, rising to the lower values seen in other monitored groundwater sites during fourth quarter. This is consistent with our understanding of the pit water balance.

10.7 Treated Water Surface Discharge

No water was treated and discharged during 2013.

10.8 Cyanide Monitoring of Tailings

All existing tailings are contained within the reclaimed TSF, and these were capped with plastic liner insitu, during Phase 1 reclamation. The liner was not compromised during 2013, and no new tailings were produced in 2013. Therefore, no tailings monitoring was performed.

10.9 Development Rock Stockpile Seepage Analysis

There are no development rock stockpiles at Rock Creek or Big Hurrah. All development rock at Rock Creek was used in mine construction. There was no mining at Big Hurrah.

10.10 Geochemical Characterization

There is no geochemical characterization data to report. There was no mining activity during 2013.

10.11 Thickener

There was no discharge of paste tailings from the thickener during 2013.

10.12 RPW-1 and RPW-2

Groundwater pumps RPW-1 and RPW-2 were not used during 2013.

Monitoring (Visual)

11.1 Groundwater Elevations

Water levels in the five monitoring wells observed during 2013 have shown general recharge during the year (Table 7).

Table 7. 2013 observed well water elevations.

Date	MW-08-14A	MW08-14B	MW03-05*	MW07-11	MW08-15A
3/15/2013	134.92	134.56	96.05	52.90	81.46
6/26/2013	135.72	134.66	95.93	ND	98.06
7/31/2013	144.04	140.76	96.85	55.45	103.06
10/15/2013	147.17	144.51	97.85	57.15	100.86

* arbitrary datum = 100 fmsl

The lower IWF wells (MW07-11 and MW08-15A) show recharge not observed during 2012 (Figure 34).

Down gradient of the reclaimed TSF (well MW03-05) and RWP (wells MW08-14A & B) recharge is also evident during 3rd quarter (Figures 35 & 36, respectively). Drawdown associated with pumping the RWP liner – as seen in the 2012 data – is no longer evident – although the 2013 data are much less dense with respect to time.

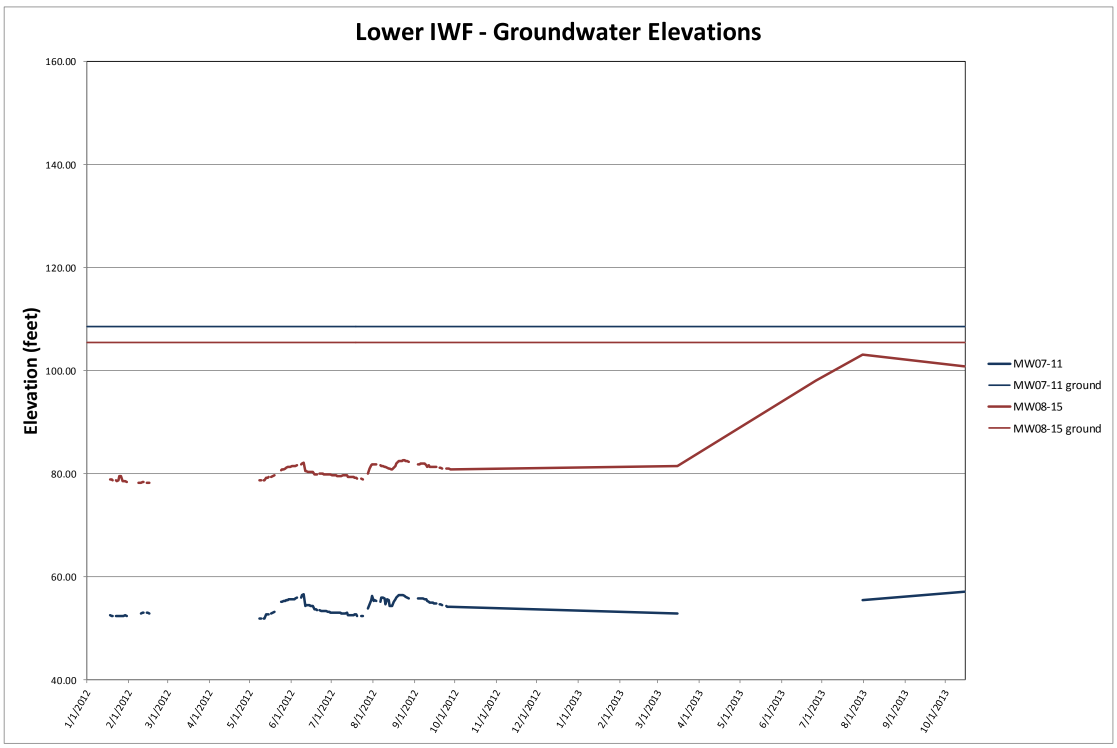

Figure 34. Water levels during 2012 and 2013, MW07-11 and MW08-15A below lower injection well field.

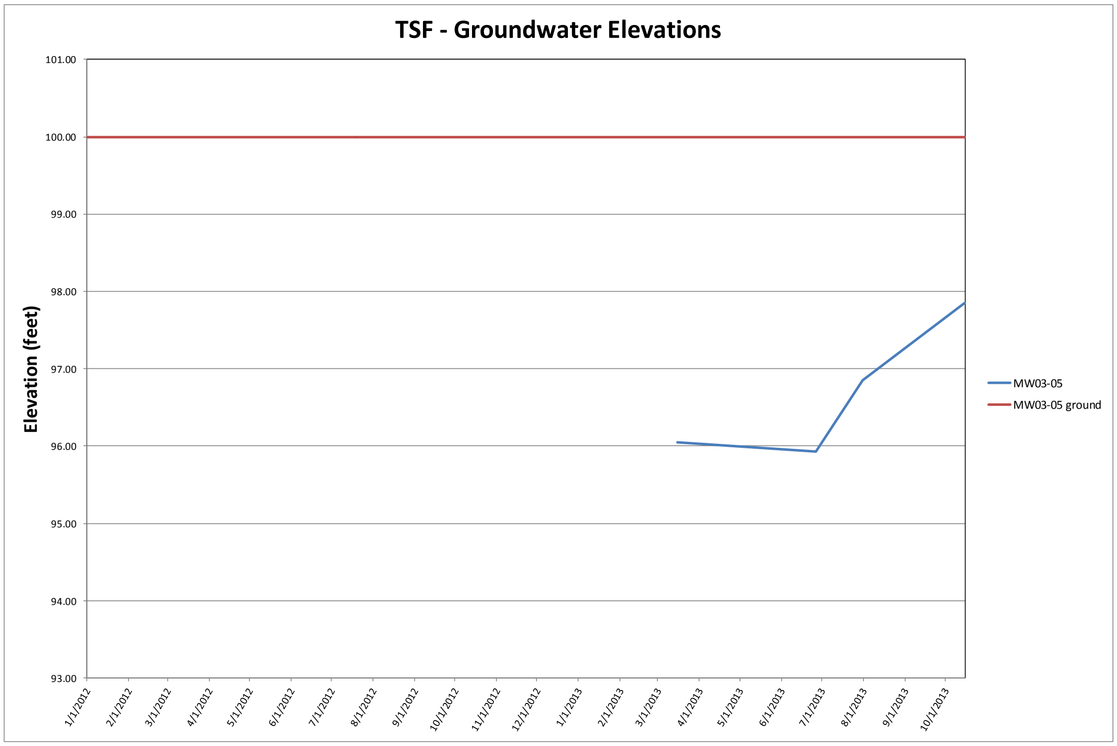

Figure 35. Water levels during 2012 and 2013, MW03-05 below reclaimed tailings storage facility.

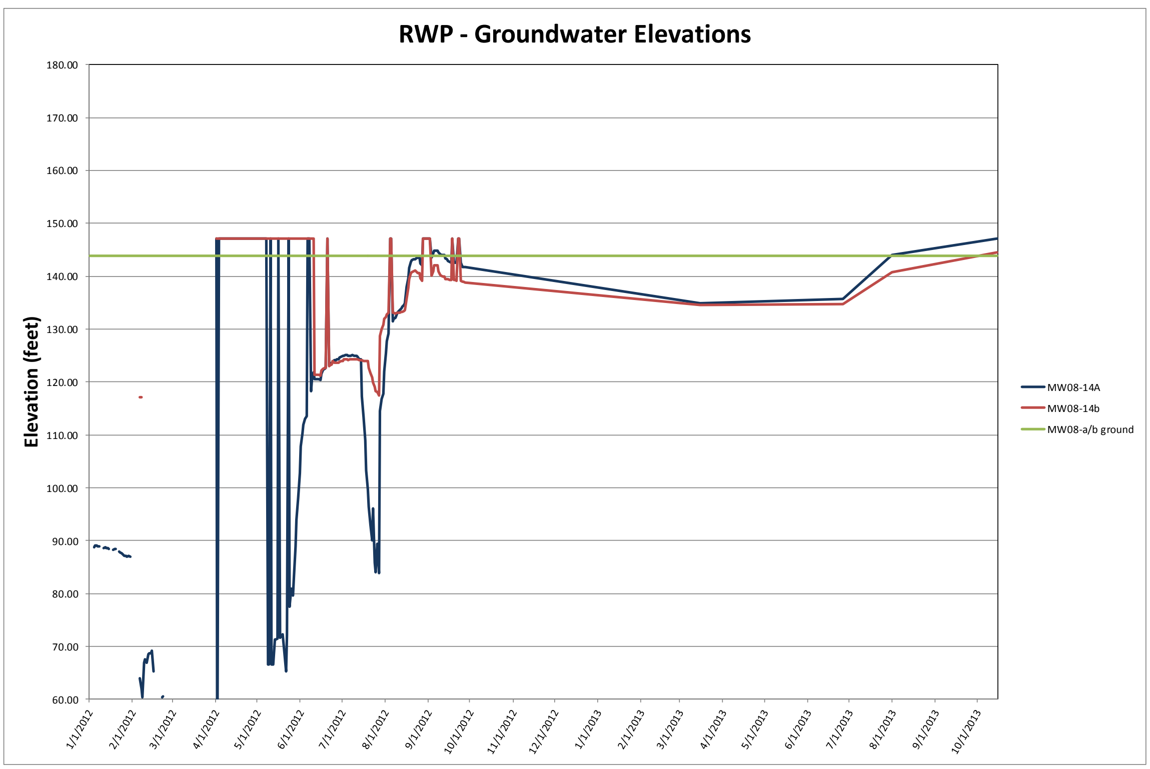

Figure 36. Water levels during 2012 and 2013, MW08-14A and 14B below reclaimed recycle water pond.

11.2 Injection Wells

The IWF was not operated throughout 2013. No water was injected or extracted. No measures were taken to affect the IWFs in any way. All wells were managed in care and maintenance status. Pumps and pipelines were disconnected.

11.3 Pit Dewatering Wells

The pit dewatering wells are not in operation during the temporary closure period. There are no inspections of the wells at this time.

11.4 Monitoring Well Visual Inspections

As part of the groundwater monitoring program all sampled monitoring wells are visually inspected at the time of groundwater sampling. With the exception of heat trace, no damage or unusual conditions were observed during these inspections. Heat trace was replaced in the monitored wells during third quarter 2013 in preparation for first quarter 2014 monitoring.

11.5 SPCC – Containment

Visual checks of fuel containments were conducted during the year. No physical damage was observed in containment structures. The only tanks holding product during the year were (1) the northern diesel bladder, (2) the 3,000 gallon diesel tank, and (3) the admin building day tank. Precipitation accumulated in containments of all tanks (those containing product and those empty) were pumped on a regular as-needed basis. No sheen was observed at any time.

11.6 SWPPP Structures

AGC staff conducts regular weekly site inspections of all storm water BMPs in accordance with the Rock Creek Mine SWPPP – when runoff is observed or possible. Please refer to the earlier discussion in this report regarding BMP maintenance.

11.7 Air Quality

Air quality monitoring is required by Air Quality Control Minor Permits AQ0978MSS01, AQ0978MSS02, and AQ978MG901 for construction, operation, and relocation of a rock crusher. The crusher was not in operation during the year.

11.7.1 Public Access Signage

Signs were in good repair and visible during inspections.

11.8 Wildlife Monitoring

Wildlife sightings included musk oxen, fox, ptarmigan, and moose. Bear tracks were encountered onsite. One musk ox was found dead on powder magazine pad #6 (Figure

3). Inspection by an ADF&G biologist confirmed it as a bear kill. A femur sample was collected by the ADF&G biologist for their research purposes, and the carcass was left insitu where it was rapidly consumed by wildlife.

11.9 Climatic Monitoring

Meteorological monitoring was not conducted during the year.

APPENDIX A

2013Water Chemistry Data in attached spreadsheet transmitted via email