

KINROSS

Fort Knox

**ANNUAL ACTIVITY REPORT
for
REPORTING YEAR 2013**



Fort Knox Gold Mine - 6 Millionth Ounce Pour
December 18th, 2013

March 6, 2014

TABLE OF CONTENTS

1.	INTRODUCTION	3
2.	SUMMARY OF ACTIVITIES	4
3.	PERMITTING ACTIVITIES	5
4.	LAND STATUS	6
5.	SAFETY	6
6.	MINE OPERATIONS	8
7.	MILL OPERATIONS	11
8.	HEAP LEACH.....	13
9.	TAILINGS STORAGE FACILITY (TSF).....	14
10.	FRESH WATER SUPPLY RESERVOIR AND WETLANDS	20
11.	RECLAMATION	21
12.	FINANCIAL ASSURANCE	25
13.	MINE WATER USEAGE (WATER BALANCE).....	25
14.	EXPLORATION	28
15.	COMMUNITY AFFAIRS	29

1. INTRODUCTION

Fairbanks Gold Mining, Inc. (FGMI), a wholly owned subsidiary of Kinross Gold Corporation, has prepared this annual report to comply with the conditions described in Section 11.b. of the Amended and Restated Millsite Lease ADL Nos. 414960 and 414961 and the ADEC Waste Management Permit 2006-DB0043 for the Fort Knox Mine.

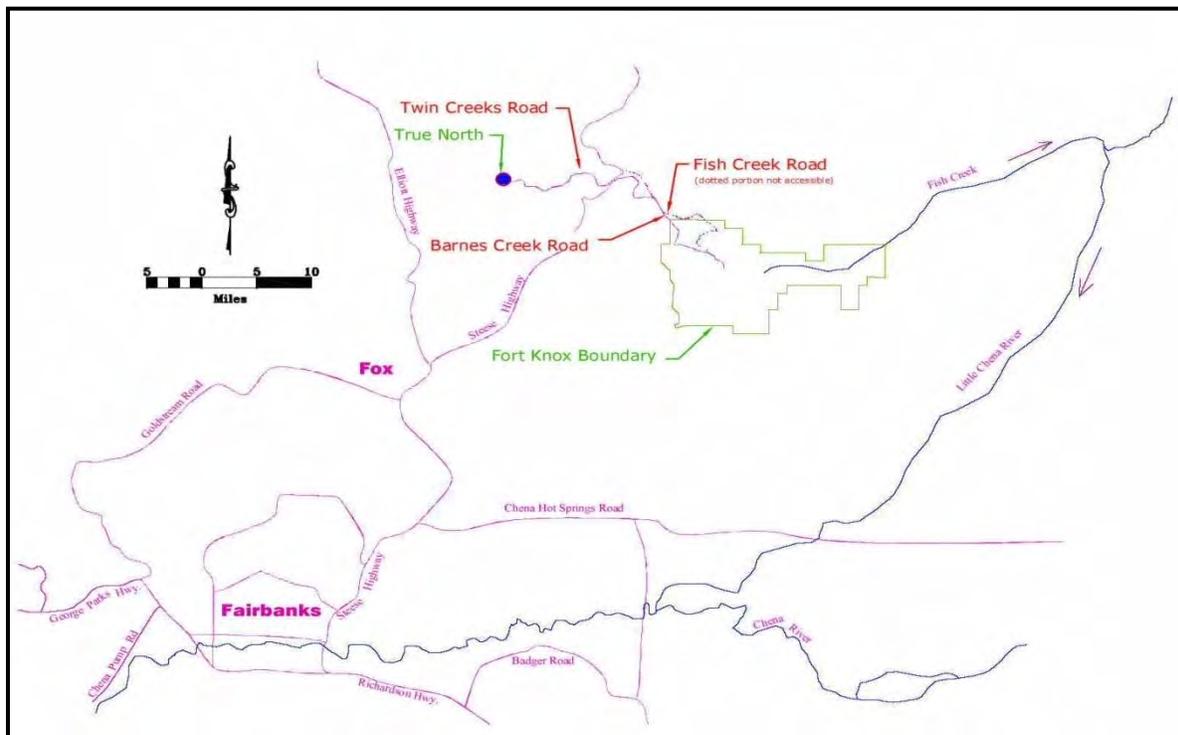
The Fort Knox mine includes the Fort Knox open pit mine, mill, tailings storage facility, water storage reservoir and the Walter Creek Heap Leach facility. Major reclamation activities at the True North Mine were completed in 2012. Post-closure monitoring and maintenance activities continue at True North. These facilities are located within the Fairbanks North Star Borough, approximately 25 highway miles northeast of Fairbanks, Alaska (Figure 1).

The milling and mining operations at Fort Knox continue to operate 24-hours a day, 365 days a year. As of the end of 2013, FGMI employed 629 people. Fort Knox recovered 428,822 ounces, which produced 421,641 gold equivalent ounces in 2013. Fort Knox achieved a significant milestone in December when the mine poured its six-millionth ounce since the mine began operation in 1996.



This report describes the permitting, mining, milling, heap leach and reclamation activities during calendar year 2013 and planned activities for 2014.

Figure 1: Facility Locations



2. SUMMARY OF ACTIVITIES

In 2013, Fort Knox had a range of activities underway in the areas of production, construction, and permitting. In summary, these activities included:

- Construction of Stage 3 of the Walter Creek Heap Leach was completed;
- Construction of Stage 4 of the Walter Creek Heap Leach continued with the placement of sub-base and liner near completion by the end of the construction season;
- US Corps of Engineers issued a Notice of Violation (NOV) on February 20, 2013 for an unauthorized discharge of material on 0.28-acre of wetland at the Yellow Pup Waste Rock Dump that was discovered on January 7, 2013. NOV discussion is found on page 10 of the Mine Operations section;
- Repair of the localized liner failure of Stage 4 of the Walter Creek Heap Leach that was discovered on May 31, 2013. Failure discussion is found on page 13 of the Heap Leach section;
- Construction of the second Carbon-in-Column (CIC) facility was completed and commissioned in July;
- Submittal of a Title V permit modification request to ADEC in August for the installation of two mercury emissions control systems at the mill processes that were not included in the original permit;
- Construction of the new fuel island was completed and commissioned in March;
- Received ADEC approval for decommissioning of the former Fish Creek Fuel Island and completed decommissioning activities in October. Onsite land farming of the contaminated material began at the Yellow Pup Waste Rock Dump;
- Construction of mercury emissions control equipment for the carbon regeneration kiln, electrowinning, and induction furnace processes and;
- True North reclamation completed in August 2012 and is under post-closure monitoring.



In 2014, the major activities planned include:

- Complete construction of Stage 4 of the Walter Creek Valley Fill Heap Leach;
- Initiate construction of Stage 5 of the Walter Creek Valley Fill Heap Leach;
- Obtain approvals of the Fort Knox reclamation and closure plan from ADNR and ADEC;
- Obtain necessary permits to expand the Walter Creek Valley Heap Leach from 161 million tons to 307 million tons;
- Construction of the remaining 25-foot raise of the TSF dam;
- Obtain approvals for the expansion of the Barnes Creek Waste Rock Dump and the Walter Creek Valley Fill Heap Leach, and;

- Obtain approval to reroute the RS2477 trail that will be disrupted by the Barnes Creek Waste Rock Dump expansion.

3. PERMITTING ACTIVITIES

The following is a list of the approved plans and permits issued to FGMI in 2013:

- In March, ADNR issued the seasonal burning permit;
- In April, ADNR issued approval to the Plan of Operations Modification for 2013 Heap Leach clearing and parking lot construction;
- In May, Alaska Department of Revenue issued the annual Mining License;
- In May, ACOE issued a permit modification approval for clearing and grubbing 0.13-acre of wetland for subgrade borrow area for the heap leach liner system;
- In June, ADNR issued the Certificate of Approval to Operate a Dam for the Fort Knox Tailings Dam;
- In June, ADNR issued the Temporary Certificate of Approval to Operate a Dam for the Walter Creek Heap Leach Pad Dam
- In June, ADF&G issued a trapping permit for nuisance beaver at the Fish Creek fishery;
- In June, ADNR issued an Extension of the Fort Knox Mine Project Final Plan of Operations Amendment Approval to March 31, 2014;
- In August, ADEC approved the former Fish Creek Fuel Island Decommissioning Plan;
- In August, ADEC issued an administrative extension to the Alaska Multi Sector General Permit (MSGP) for Storm Water Discharges until the new MSGP is issue, and;
- In August, ADNR issued the Temporary Certificate of Approval to Operate a Dam for the Walter Creek Heap Leach Pad Dam.



The following is a list of the planned permitting activities for FGMI in 2014:

- Obtain approval from Fire Marshal for fuel island modification for addition of two emergency storage tanks (approval issued on January 31, 2014);
- Obtain approvals and permits to initiate drilling on Parcel B and portions of the NOAA Withdrawal;
- Obtain permit for Yellow Pup Waste Rock Dump Expansion over the TSF South Pond tailings;
- Obtain permits to expand the Walter Creek Heap Leach from 161 million tons to 307 million tons;
- Obtain necessary permits to expand the Barnes Creek Waste Rock Dump to the northwest;
- Obtain a revised Title V permit which includes the mill's mercury control systems from ADEC
- Obtain approval for in-lieu fee mitigation for approximately 9 acres of wetlands in the TSF South Pond drainage from ACOE; and
- Obtain approval for the Fort Knox Reclamation and Closure Plan from ADNR, ADEC and ACOE.

4. LAND STATUS

The project area encompasses approximately 8,001.4 acres, of which there are no federal lands. The project area includes the Amended and Restated Millsite Lease, Upland Mining Lease, private land. The Amended and Restated Millsite Lease contains 5,828.3 acres of State of Alaska land. FGMI private land holding is 2,173.1 acres, which includes the private land of the Upland Mining Lease (1,179.5 acres).

5. SAFETY

PEOPLE

The year 2013 saw many great safety accomplishments within the various departments. The administration group (i.e., warehouse, safety, environmental, accounting, human resources, engineering, surveying, geology, exploration) has not had a loss time incident since April 2005 and has worked four years without a reportable incident. Mill maintenance has not had a loss time incident since July 2003. Mill operation's has worked 1 year without a reportable incident. Mobile Equipment Maintenance has not had a loss time incident since December 2006. Mine operations achieved 1 year without a loss time incident.

Keeping safety at the forefront of everything we do at Fort Knox is our first and most important priority. Ongoing safety initiatives, including employee-driven safety teams such as See it Own it Solve it (SOS), STOP audits, field level risk assessment, JHA's (Job Hazard Analysis) and awards programs that focus on and encourage safe behavior are leading us into another great year in 2014.

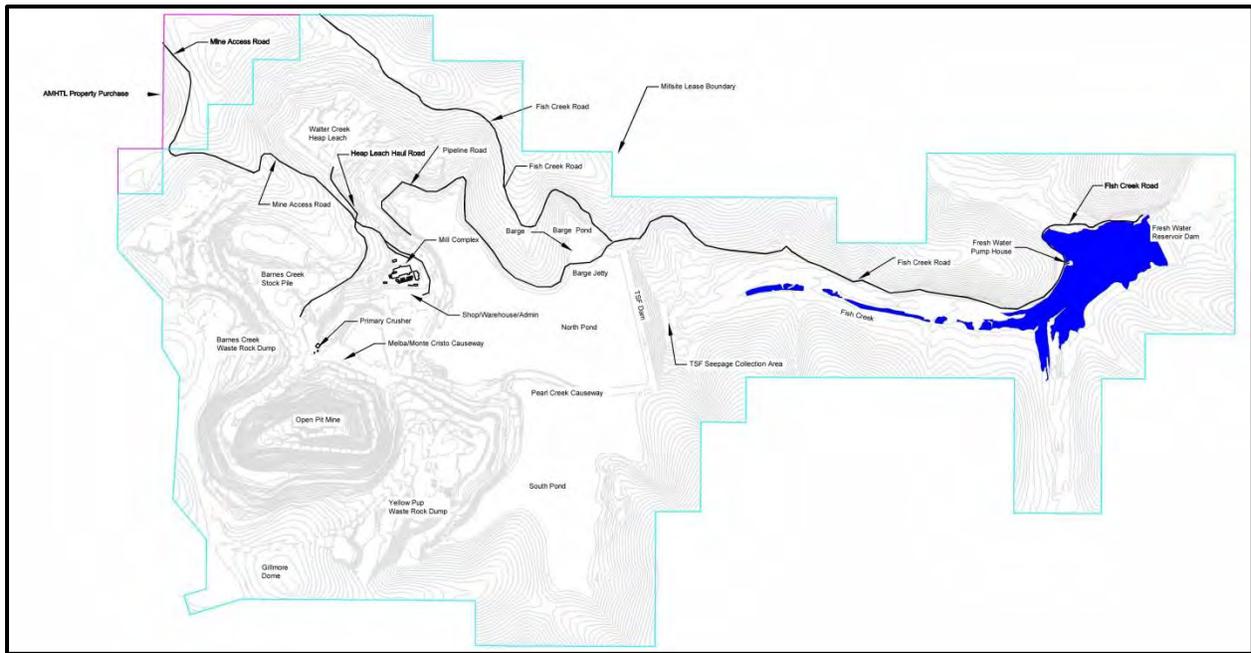
MINE ACCESS

FGMI continues to maintain the mine access roads from the Steese Highway to Fort Knox and True North (Figure 1). The road surface is graded to insure a smooth running surface and proper drainage. During the winter months, the Fort Knox road is kept free of snow and is sanded as necessary to maintain safe operating conditions. The True North road is plowed for snow as needed during the winter months since access to the site is not routinely required. In the summer months, FGMI uses calcium chloride and water for dust suppressants on the Fort Knox access and mine-site roads. These measures have limited the amount of fugitive dust on these roads. There were no complaints of road dust received in 2013. Similarly, there were no complaints of noise in 2013.

FGMI Security continues to patrol the mine site and access roads to ensure the safety of our employees, contractors, guests, and the public. Access is limited based on need and function. Safety training is tailored in a similar manner.



Figure 2: Local Roads and Mine Facilities



Recreational Trails

During the initial Millsite Lease application process a series of public meetings were held to identify trail systems that would potentially be affected by mining activities. In 2011, Fort Knox initiated meetings with ADNR Trails and Easement Section to start the process of rerouting trails for future use. Meetings with ADNR continued in 2013. A formal application was submitted to the Trails and Easement Section with an alternate route in 2013. As part of this process, a public notice and comment period are planned for 2014.



6. MINE OPERATIONS

PIT PRODUCTION

In 2013, FGMI mined 63.28 million tons of ore and waste from the Fort Knox pit with an average production rate of 173.4 thousand tons per day (Table 1).

Table 1: Fort Knox Annual Mining Rates

Year	Mill Ore (Million Tons)	Transition Grade Ore (Million Tons)	Leach Grade Ore (Million Tons)	Waste (Million Tons)	Total (Million Tons)
1996	.96	.36	0	15.36	16.68
1997	12.57	4.88	0	14.93	32.38
1998	13.83	5.27	0	14.19	33.29
1999	14.10	4.09	0	12.16	30.35
2000	15.51	2.20	0	17.89	35.60
2001	12.09	1.24	0	12.62	25.95
2002	11.73	.86	0	12.00	24.59
2003	11.08	2.09	0	17.43	30.60
2004	10.80	6.80	0	24.09	41.69
2005	13.23	5.86	0	44.16	63.25
2006	12.39	3.68	0	35.00	51.07
2007	11.71	10.31	0	23.92	45.94
2008	12.78	3.82	13.3	16.40	46.30
2009	11.96	4.11	12.70	20.03	48.80
2010	11.95	1.35	8.52	20.59	42.41
2011	3.96	.13	4.76	25.70	34.55
2012	10.42	3.19	14.98	34.53	63.12
2013	9.38	4.88	9.59	39.43	63.28
Total	200.45	65.12	63.85	400.43	729.85

Mining operations continue 24-hours a day, 365-days per year at the Fort Knox Mine. Ore and waste are mined using standard drilling and blasting techniques with shovel and haul truck fleets to move the material. Blast holes are sampled and assayed for production grade control purposes and material is hauled to the rock dumps, primary crusher, heap leach, or low-grade stockpiles depending on grade.

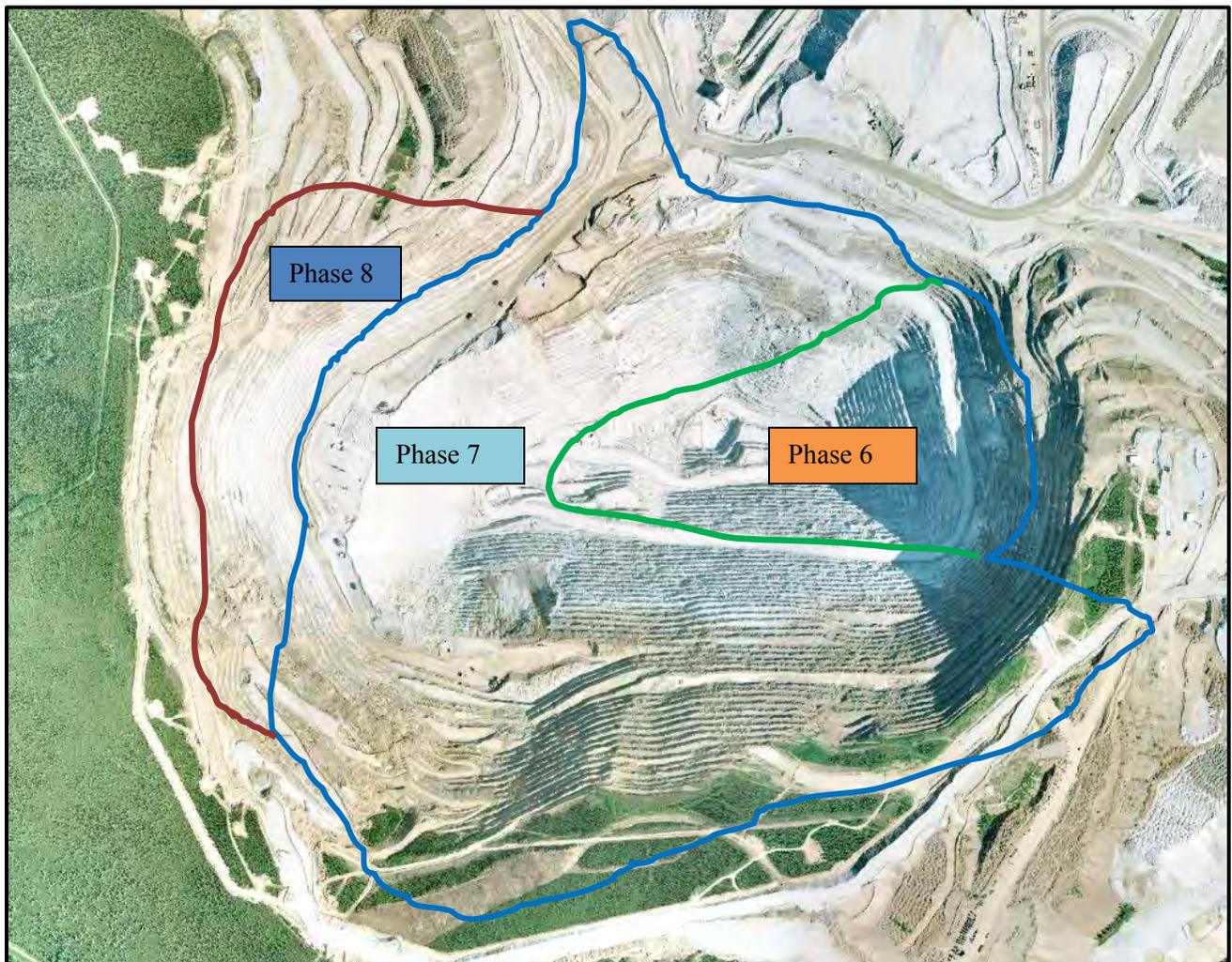
In 2013, mining within the Fort Knox open pit occurred in Phase 7 (Figure 3). Phase 7 stripping commenced in the 4th quarter of 2008. Stripping continued into 2012 before sustained ore was achieved. Additional stripping will continue in 2014 to continue sustained ore feed to the mill. Mining in Phase 7 will continue until late 2017. The mill is scheduled to operate until late 2017.

In 2016, the final pit layback area known as Phase 8 is scheduled to begin mining activities. The vast majority of ore delivered from Phase 8 is stacked as run-of-mine on the leach pad and a small contingent will be processed in the mill just before decommissioning. This phase of the pit is planned to deliver ore from 2017 until mining activities end in 2020.

The remainder of the Fort Knox pit consists of 254 million tons of waste and 138 million tons of ore with the current economic guidance. The Fort Knox pit is divided into two remaining phases, Phase 7 and Phase 8. Each phase is an expansion of the existing pit. As stated above, Phase 7 will be mined out by the end of 2017. Currently, the mill is scheduled for decommissioning in 2017 at the completion of mining Phase 7.

The legacy low grade stockpile reserves on site will be exhausted in 2016. As mining activities continue, run-of-mine ore will be stacked on the pad in the stacking seasons and new short-term stockpiles will form in the winter months.

Figure 3: Fort Knox Pit Phases



The planned pit production for 2014 is summarized in Table 2.

Table 2: Planned Mining Tons for 2014

(Tons x 1,000)	Mill Grade	Low Grade	Leach Stockpile	Waste	Total
Fort Knox	8.32	5.49	1.76	38.23	53.80

A 0.28-acre wetland located in the Yellow Pup Waste Rock Dump area was encroached upon during the first week of January 2013 and was discovered during a January 7th engineering survey. The encroachment occurred when material was brought to tie the 1800 lift fill-level to the existing hillside (to reduce safety concerns for potential dump failure). The US Army Corps of Engineers (USAOE) was notified and a NOV was issued on February 20, 2013 for the unauthorized discharge of dredged and/or fill material into waters of the United States, including wetlands. The NOV did not include any other enforcement actions and stated that USAOE accepted Fort Knox's January 24, 2013 after-the-fact (ATF) permit application. As required by the NOV, Fort Knox submitted a signed Tolling Agreement on March 1, 2013.

PIT DEWATERING

As of the end of 2013, the dewatering system included a total of 25 in-pit wells and three causeway wells (located north and out of the pit in the Barnes Creek/Fish Creek drainage) for a total of 28 dewatering sources. Through the course of 2013, one well was taken offline (DW 243), two new wells (DW 324 and 328) were brought online, and DW 331 was brought online and subsequently lost. The average pumping rate from the dewatering system in 2013 was 657 gpm with 434 gpm from the pit wells and 223 gpm from the causeway wells. The total pumping rate for 2013 was approximately 19% lower than the 2012 rate, with the pit well production decreasing by 15% and the causeway wells increasing by 26%. Select piezometers are monitored twice weekly for changes in water levels and the remaining piezometers are monitored quarterly. The Fish Creek Aquifer and surrounding hydrological influences were modeled during 2013. Total water pumped to the tailing impoundment from dewatering in 2013 was 730 acre feet (237,799,667 gallons). Roughly 229,658,860 gallons (705 acre feet) were pumped from the causeway wells directly to the Mill.

Since the Tailings Storage Facility (TSF) design did not have capacity to contain all water until the end of mine life, an Alaska Pollutant Discharge Elimination System (APDES) permit application was submitted to the Alaska Department of Environmental Conservation (ADEC), Division of Water in early 2012. ADEC granted FGMI an APDES permit in August 2012 and effective October 2012 to discharge non-process and non-contact groundwater extracted from pit dewatering wells into the Old Fish Creek Channel from which it will flow to the freshwater reservoir. Since receiving the APDES permit, there has been no discharge of dewatering well water and no formal plans to do so have been made. In order to accommodate storage of all water, plans are currently being developed to construct another TSF dam raise of 15 feet or less to provide the additional storage capacity required.

7. MILL OPERATIONS

The Fort Knox mill has a daily milling capacity of between 36,000 and 50,000 tons depending on the hardness of the ore. Mill feed is first crushed to minus 6 inches in the primary gyratory crusher located near the Fort Knox pit and then conveyed 2,600 feet to a coarse-ore stockpile located near the mill. The crushed material is conveyed to a semi-autogenous (SAG) mill. The SAG mill operates in open circuit and feeds two ball mills. The ball mills operate in closed circuit through cyclone packs. The cyclone packs regulate the size of material that is allowed to move beyond the grinding circuit. A gravity gold recovery circuit operates in conjunction with the grinding circuit. It consists of three Knelson concentrators.

Correctly sized material flows into a high rate thickener and then into leach tanks where cyanide is used to dissolve the gold. Activated carbon is used in the carbon-in-pulp circuit to absorb the gold from the cyanide solution. Carbon particles loaded with gold are removed from the slurry by carbon screens and are transferred to the gold recovery circuit. In this circuit, the gold is stripped from the carbon using a strong alkaline cyanide solution in conjunction with high temperature and high pressure. The gold is recovered from this solution by electro-winning, where it is plated onto a cathode. The gold is removed from the cathode mechanically and melted into doré bars for shipment to an offsite refinery for final processing.

Some hard ore of a critical size is rejected from the SAG mill in order to increase throughput. This material is crushed and stockpiled for use on the Walter Creek Heap Leach Facility. Mill tailings are discharged into the TSF below the mill. Table 3 displays a summary of the tonnage milled from November 1996 through December 31, 2012.

The mill continues to focus on operational improvements to increase throughput, recovery, efficiency and reliability.



Interior of New CIC2 Facility

Table 3: Fort Knox Annual Milling Rates

Year	Mill Production (Million Tons)
1996	0.77
1997	12.16
1998	13.74
1999	13.82
2000	14.99
2001	15.66
2002	15.26
2003	15.08
2004	14.59
2005	14.38
2006	14.84
2007	14.02
2008	15.11
2009	14.14
2010	14.56
2011	14.88
2012	14.55
2013	13.96
Total	246.51

The projected mill throughput for 2014 is approximately 14.55 million tons and gold production is estimated at 236,659 ounces.



Construction of the second Carbon-In-Column (CIC2) facility was completed in 2013 and became operational in July. With the addition of the CIC2, Fort Knox is able to process a total of 16,000 gallons per minute (gpm) of pregnant solution from the Walter Creek Heap Leach Facility, where previously, Fort Knox was only processing 8,000 gpm.

Construction of two mercury emissions deep-bed carbon systems were completed in 2013 for the carbon regeneration kiln, electrowinning, and induction furnace processes. The emissions control systems were installed to comply with EPA's mercury emission standards for gold mine ore processing and production processes.

8. HEAP LEACH

The Walter Creek Valley Heap Leach Facility was brought into production in 2009. Construction of the in-heap storage pond was completed and the loading of heap leach ore was initiated. On October 13, 2009, ADNR issued a Certificate of Approval to operate the heap leach dam. On October 14, 2009, FGMI began filling the in-heap storage pond. In November 2009, FGMI had the first gold pour from heap leach production. In 2013, approximately 32.8



million tons of ore were placed on the heap leach. Since the loading of heap leach ore began in 2009, a total of approximately 104.4 million tons have been placed on the heap leach, and 451,009 ounces of gold have been produced.

In 2011, construction of Stage 3 of the heap leach pad began and its construction completed in 2013. The Stage 4 construction of the heap leach pad began in 2012 and is scheduled for completion in 2014. The Stage 5 construction began in 2012 with clearing and grubbing, and construction will continue in 2014. Projected heap leach ore placement for 2014 is 26.3 million tons. The heap leach gold production for 2014 is estimated to be 153,868 ounces.

On May 31, 2013, Fort Knox personnel discovered localized overliner material, that was placed in the fall of 2012, on Stage 4 of the heap leach pad, had slumped pulling the liner out of the anchor trench at the top of the slope and ripping the liner above the level of ore placement. No solution was or had been applied to this area. Samples taken from the monitoring wells did not show any evidence of cyanide and no solution escaped containment. The engineer on record (Knight Piésold Consulting) investigated the incident, provided oversight of the repair project, and recommended actions to prevent recurrence. The damaged liner section repair project was completed by late-August 2013, and the Stage 4 Repair Construction Completion Report was provided to DNR.

A barren solution spill took place adjacent to the heap leach facility on July 20, 2013, and impacted 1,876 feet of a storm drainage ditch that runs along the eastern portion of the heap leach facility to the TSF. The spill was caused when a 12-inch barren solution distribution pipe broke at the solution pipe header located in the upper northeast corner of the heap leach facility. Approximately 5,625 gallons of barren solution containing 7.04 pounds of cyanide [0.3 pounds cyanide per ton of solution (150 ppm)] flowed (during a heavy rain) from the heap leach containment downstream from the pipe header into the unlined storm water drainage ditch. Soil sampling was performed (36 samples) to determine the impact to the ditch, and the analytical results showed that cyanide levels were well below the Alaska's 27 mg/kg soil cleanup level for cyanide. The barren solution spilled to the ditch was contained in the TSF. There was no discharge or impact to waters of the United States. There was no discharge or impact to

undisturbed land and there were no injuries. Laboratory results supported the conclusion that the storm drainage ditch impacted by the process solution release did not require remediation. The final spill report was submitted to ADEC on August 8, 2013. To prevent recurrence, the barren solution pipe was reconfigured with the pipe's header away from the edge of the containment liner and should a leak develop, the flow will be directed toward the heap leach pad and away from the edge of the heap leach containment.

9. TAILINGS STORAGE FACILITY (TSF)

The TSF consists of deposited tailings, decant pond, dam, seepage interception system, and the seepage monitoring system. The tailings depositional area is within the Fish Creek drainage and includes portions of the Walter Creek, Pearl Creek, and Yellow Pup drainages.

The TSF has three distinct ponds: the barge pond, north pond and south pond where the decant water pools. These ponds are located within the tailings deposition area upstream of the TSF dam. The barge pond is approximately 18 acres. The north pond fluctuates in size but covers an area that generally ranges from 300 to 400 acres. The south pond will fluctuate slightly, but should remain close to 245 acres. A bathymetric survey conducted in September 2013 showed the decant pond contains approximately 4,174 acre-feet of water.



The TSF dam is approximately 4,390 feet long and 352 feet tall at the crest. It impounds all of the tailings generated by the mill. The TSF and the mill form a closed system for process water. Water used in the mill is pumped from the decant pond and process water which has had the cyanide level reduced to low levels is returned to the decant pond in the tailings slurry.

TAILINGS DEPOSITION

During the 2011 through 2013 construction seasons, tailings were deposited along the dam face by spigoting. The main tailings line ran along the upstream dam face at the 1505 elevation of the engineered random fill. The tailings flowed into 8-inch spigot pipes evenly spaced along the dam face. The purpose of the spigoting is to develop a beach 300 to 500 feet in width against the upstream face of the dam. The beach will improve the dam's Factor of Safety and enhance its long term stability.

TSF DAM RAISE

Construction of a 52-foot raise of the TSF dam began in 2011 by raising the dam 27 feet. The raising of the dam 52 feet is necessary to accommodate the planned production through the end of the current mine life. Increases in planned production with the addition of Phase 7 would have exceeded the capacity of the TSF without the 52-foot raise. The dam raise is a modified centerline construction as depicted in Figure 4.

- Identify a location and install a test borehole for a new interceptor well;
- Collect data and review the hydrogeologic data; and
- Provide a design for a new interceptor well.

The new interceptor well will be designed (hydrogeologic data provided during the drilling of the test hole) to pump 60 gpm and a completed depth at 580 ft below grade surface (bgs).

There was great focus on the efficiency of the interceptor system during 2014. Based on a review of target water depths, flow rates and performance, five pumps were replaced and one well had new drop pipe installed.

There were no new interceptor wells installed in 2013 and no interceptor wells were decommissioned.

A line of groundwater monitoring wells located immediately downstream of the interception system is monitored to insure that no process water is escaping the system and moving downstream.



TFS Interceptor System Pump House

Figure 5: Interceptor System

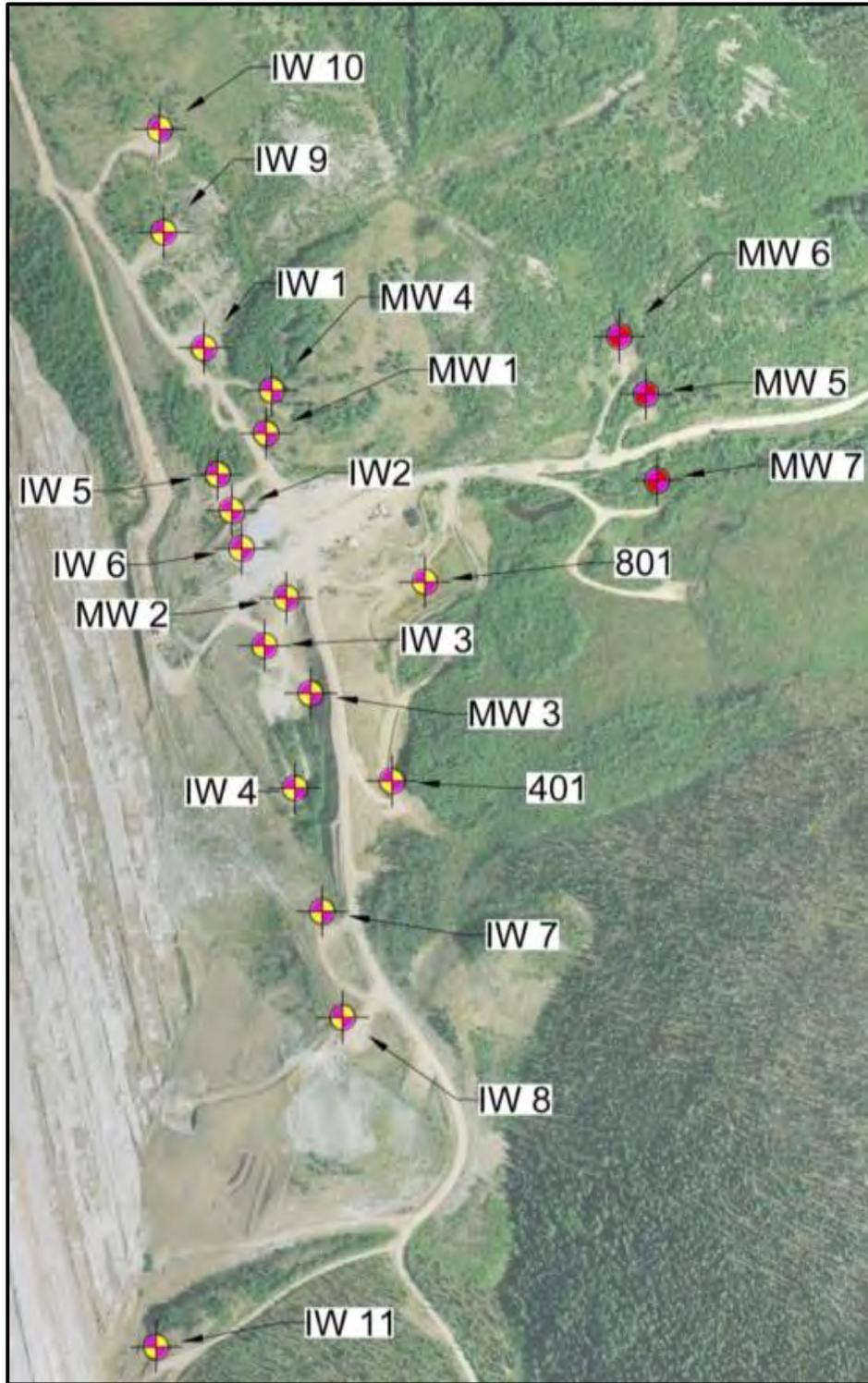


Table 4: TSF Interceptor System Pumping Rates

Well ID	Approximate Average Pumping Rate (gpm)	Well Depth (ft)
IW-1	52	320
IW-2	7.7	329
IW-3	20	310
IW-4	25.6	330
IW-5	88.6	380
IW-6	19.8	380
IW-7	10.3	197
IW-8	150.4	184
IW-11	15	296
MW-1	12.1	305
MW-3	6.24	296
Well 401	7.8	36
Toe Drain (501)	16.8	n/a
Total	432.34	

TSF DECANT AND SEEPAGE METALS CONCENTRATIONS

Arsenic, antimony, selenium and lead concentrations continue to be analyzed in the TSF decant and seepage reclaim (Figures 6, 7, 8, and 9). These metal concentrations increased significantly as a result of introducing True North ore into the mill tailings beginning in 2001 and ending in 2004. Since 2004, the metals have trended down and remained low with the exception of lead. Lead nitrate was used in the milling process in 2008 and 2009 causing the lead concentrations in the decant water to elevate.

Figure 6: Average Quarterly Arsenic Concentrations in Decant

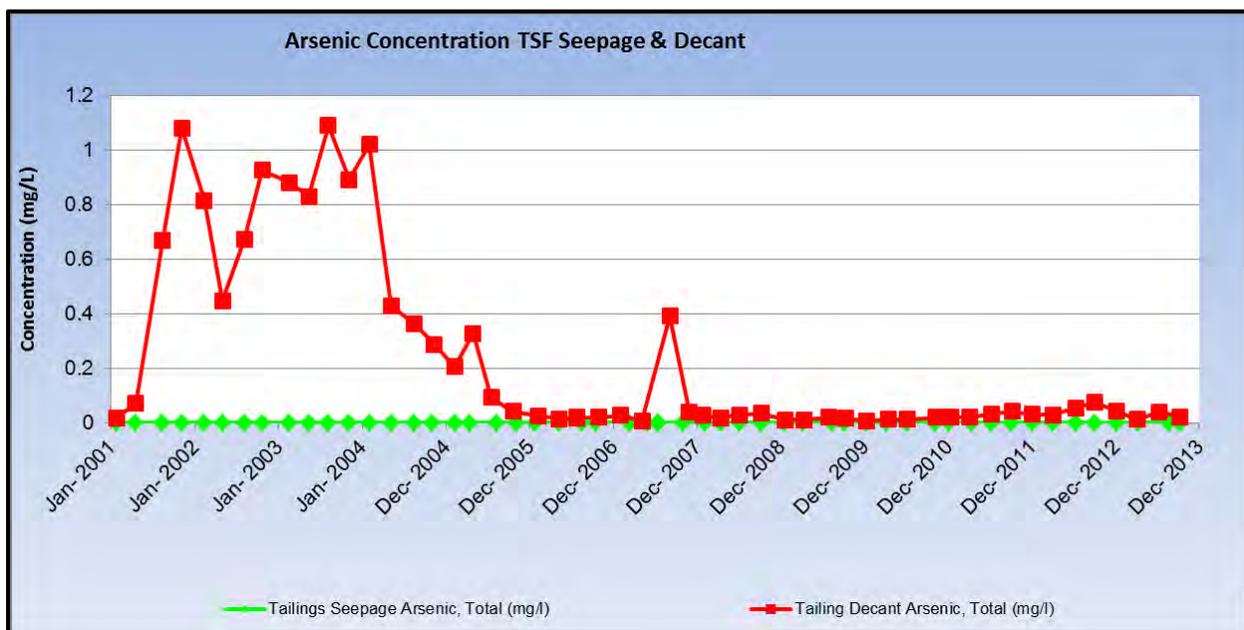


Figure 7: Average Quarterly Lead Concentrations in Decant

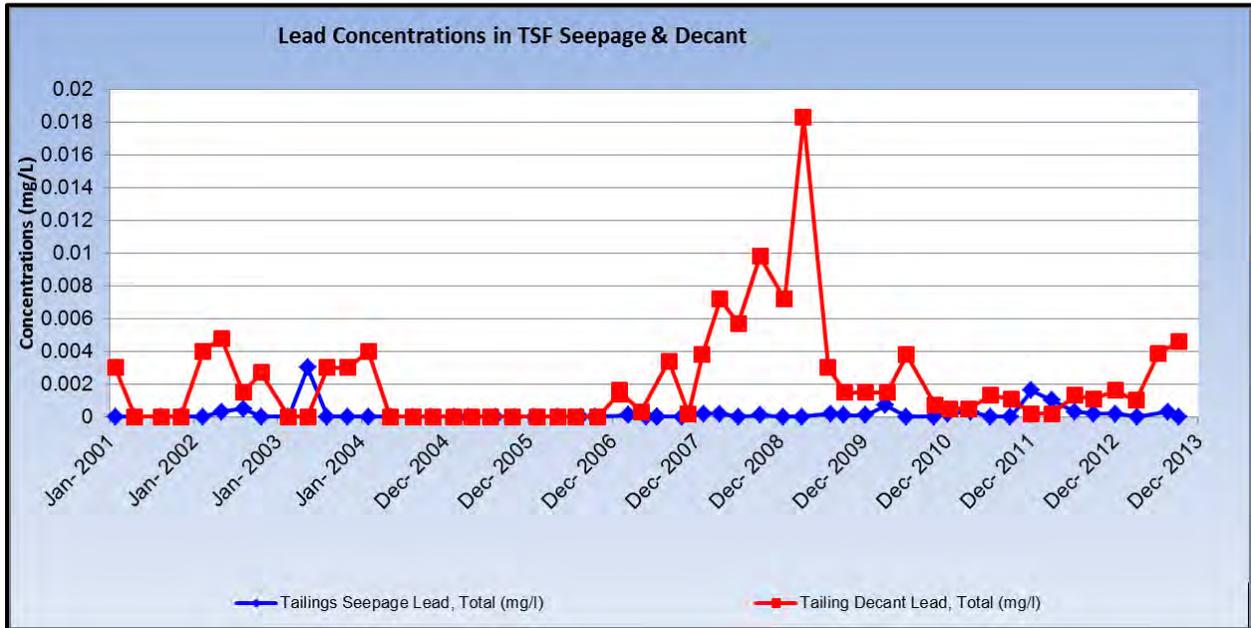


Figure 8: Average Quarterly Antimony Concentrations in Decant

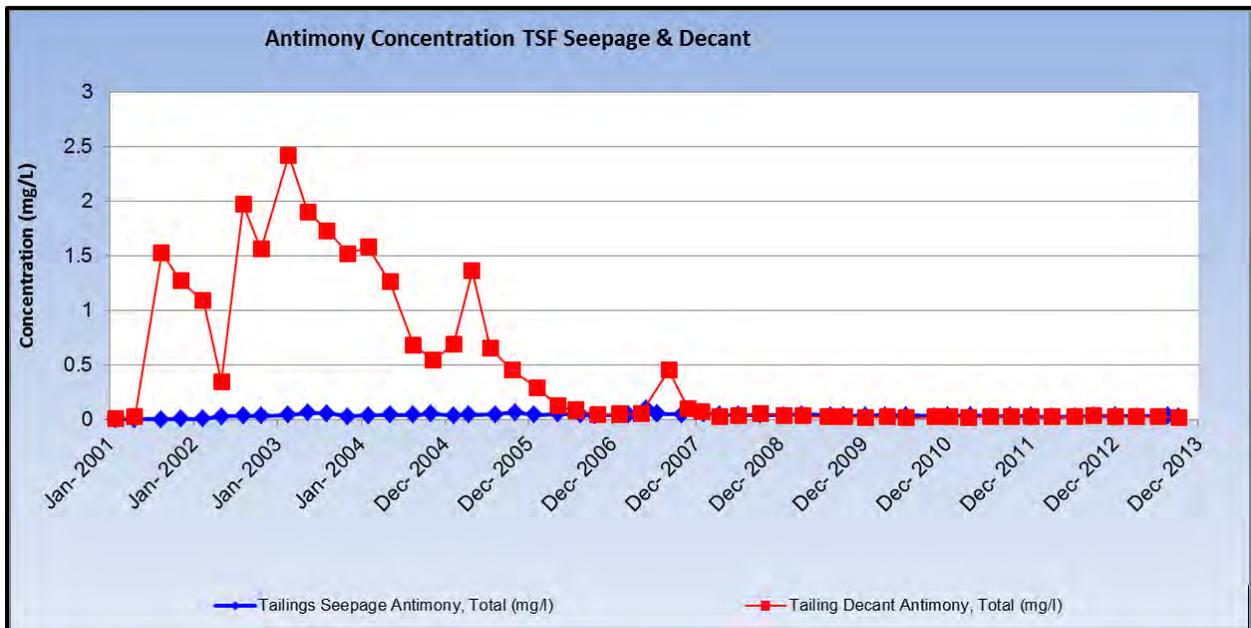
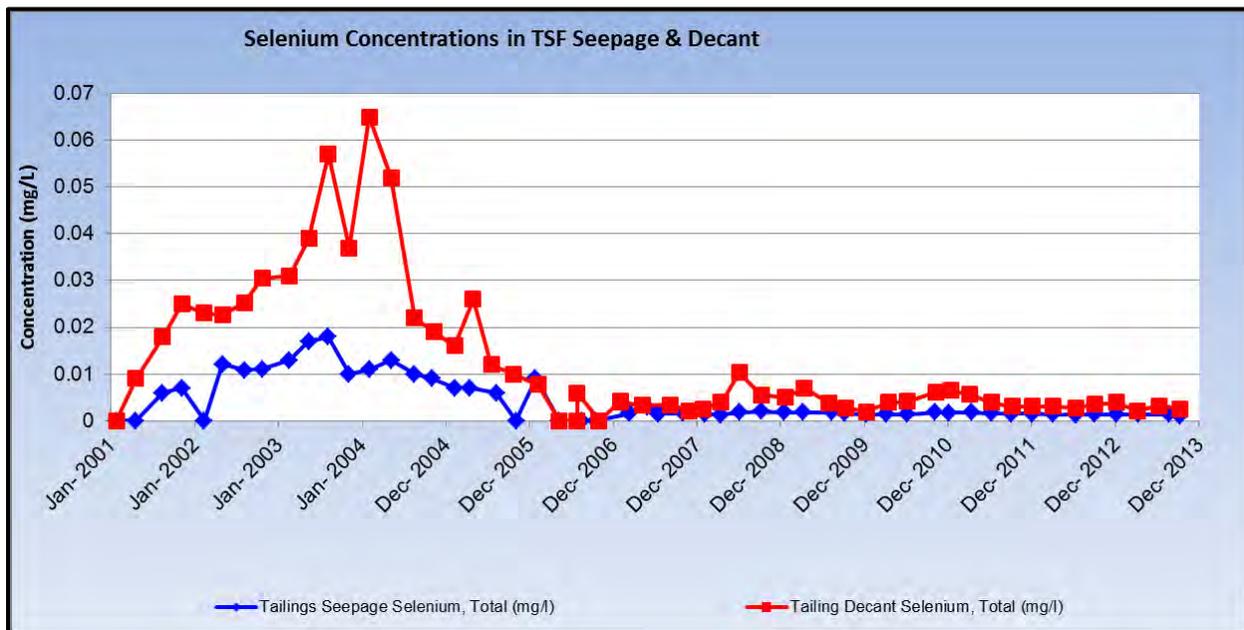


Figure 9: Average Quarterly Selenium Concentrations in Decant



10. FRESH WATER SUPPLY RESERVOIR and WETLANDS

The Alaska Department of Fish and Game (ADF&G) continues with their work on the water supply reservoir (WSR) and associated wetlands. In the 2013 annual technical report prepared by ADF&G summarizing their work on the WSR and wetlands, certain conclusions were stated:



- Self-sustaining populations of Arctic grayling and burbot have been established in the WSR.
- The post-mining goal for the Arctic grayling population was set at 800 to 1,600 fish greater than 200 mm in length, and the spring 2012 population estimate for Arctic grayling was 7,404 fish greater than 200 mm in length, a substantial increase from the 2010 estimate of 3,223 fish. Except for the 2005 Arctic grayling estimate, this is the highest population estimate made since the fresh water pond was built.

- A goal for burbot population was not previously set; however, a small self-sustaining spawning population exists.
- Beaver population management remains a critical component to Arctic grayling population within the developed wetlands and WSR. In 2013, FGMI breached multiple beaver dams and some beavers were removed from the wetlands in the fall.



In June 2012, the Solo Creek causeway on the north side of the WSR had road damage occur above the 12 feet diameter

culvert. Subsequent investigation was inconclusive to the cause of the road damage. Although Solo Creek water continues to flow to the WSR, Fort Knox will continue monitoring the causeway flow in 2014 and will take appropriate action should flow obstruction occur.

11. RECLAMATION

FORT KNOX

In 2013, stabilization at Fort Knox focused on the heap leach borrow area. There was a total of 40 acres that were regraded. (Figure 10).

Figure 10: Heap Leach Borrow Area



Reclamation planned in 2014 includes fertilization of the previously reclaimed borrow areas, as well as any maintenance of revegetation that may be required.

A revised reclamation plan for Fort Knox Mine submitted in November 2013 is currently out for public comment and under review with ADNR.

Growth media is stockpiled for use in final reclamation and closure. It is estimated that approximately 3.6 million cubic yards (cy) are required for final reclamation. Table 5 summarizes the volumes of growth media stockpiled that exist and are planned. A survey to determine the amount of growth media available will be done after the dam raise and heap leach construction has been completed. A portion of the growth media stockpiled and available borrow sources have been used because of its suitability for use as engineered seal and filter material for the TSF dam and engineered sub-base for the heap leach.

Table 5: Fort Knox Growth Media Stockpile and Borrow Quantities

Site	Volume (cy)
Yellow Pup GM Stockpile	1,276,798
Walter Creek GM Stockpile	2,141,590
Tailings South GM Stockpile	291,400
Tailings North GM Stockpile	3,186,400
Barnes Creek	425,029
Total	7,321,217

TRUE NORTH MINE

Production from the True North Mine was terminated at the end of 2004. In 2009, the decision was made to abandon remaining reserves and to not continue with any additional mining at True North. When the decision was made in 2009 to complete final reclamation, there was no approved reclamation plan. ADNR began approving reclamation piece by piece by issuing Miscellaneous Land Use Permits for the planned reclamation activity. FGMI submitted updated reclamation plans for True North in May 2012. The reclamation plan approval was issued by ADNR on July 26, 2012.

Reclamation of True North began in 2005 and encompassed approximately 124 acres. Approximately 100 acres were successfully stabilized. Seed and fertilizer typically were applied on reclaimed disturbance using either a broadcaster mounted on a D4 dozer or by aerial application using a fixed wing aircraft.



Seed and fertilizer also were applied manually in some areas to ensure that vegetative growth is successful. The seed mix applied was comprised of 50% Arctared Red Fescue, 20% Tundra Glaucous Bluegrass, 20% Gruening Alpine Bluegrass, and 10% Tufted Hairgrass. The seed application rate was approximately 11 lbs/acre. Fertilizer was applied at a rate of 300 lbs/acre with a Nitrogen (N) -Phosphorous (P) - Potassium (K) analysis of 20-20-10.

Acreage completed in the summer of 2008 was seeded and fertilized. The True North reclamation performed in 2009 focused on completing the major earthwork. With the mild winter conditions in 2009, earthwork continued through much of the winter.

The largest reclamation project in 2010 was the remediation of the North Shepard dump slump. The scope of the project consisted of excavating the slump material down to the bedrock. Approximately 75,000 cubic yards of the material was hauled away from the slump and placed on the pit floors as growth media. The slump was then graded, scarified, seeded and fertilized. Survey prisms were placed around and on top of the reclaimed area and are being monitored on a regular basis to track any movement. Work in 2010 comprised 148.6 acres graded, placement of 13.8 acres of growth media, and 296.5 acres seeded and fertilized. During 2012, it was noticed some small cracks were starting to form; the area was regraded seeded and fertilized.

Reclamation activities during 2011 were minimal due to the fact that ADNR had not completed the review or approved the True North Reclamation Plans. However, FGMI continued with maintenance of the required areas. A total of 325.7 acres of previously reclaimed acres were fertilized, 5,708 lineal feet of water diversion ditches were repaired, and 2.97 acres of settlement cracks were regraded.

In addition to what was required by the State, FGMI planted 32,860 seedlings covering approximately 100 acres in 2011. By the end of 2011, 398.3 acres were graded, 83.2 acres had growth media placement and 397.1 acres were scarified, seeded and fertilized.



Reclamation activities in 2012 included, clearing of 5.7 acres, 159 acres graded, 198,400 cy of material excavated, 174 acres scarified, 47,400 cy of growth media placed and 2,495 lineal feet (lf) of RS2477 trails installed.

An accelerated construction schedule was implemented in 2012 to accommodate the application of seed and fertilizer. Aerial broadcasting of seed and fertilizer was completed with a helicopter on August 27. There were 159 acres that received seed and 480 acres received fertilizer. Table 6 identifies the True North reclamation work completed.

The True North annual inspection by ADNR was performed on October 2, 2012. During this inspection, ADNR concluded all major earthwork and reclamation appeared to be complete, and FGMI could continue with post-closure monitoring.

During 2013 and in accordance with the True North post-closure status, 14 monitoring wells, two production wells, and three thermistor wells were decommissioned. There were 496 acres

fertilized during the summer. To prevent the erosion of the roads interceptor dips were installed on 5,200 feet of road. Check dams were removed; the ditch was freed of material and regraded. The check dams were reinstalled with granite bullrock. The reoccurring subsidence cracks covering 4.6 acres of the Hindenburg waste rock dump were regraded.

Table 6: Reclamation Work Completed at True North

Area	Graded (acre)	Growth Media Placement (acre)	Scarified (acre)	Seeded and Fertilized (acre)
Dumps				
East Pit Dump	47.5	-	47.5	47.5
Zep and Hindenburg Dump	86.3	-	86.3	86.3
Spruce Creek (within Zep&Hind dump footprint)	10	-	10	10
Mid Shepard Dump	16.28	14.2	14.2	14.2
South Shepard Dump	68.6	-	68.6	68.6
North Shepard Dump	21.3	-	21.3	21.3
East Shepard Dump	4.2	4.2	4.2	8.9
Hindenburg Dump	8.5	-	8.5	8.5
North Central Dump	13.1	-	13.1	13.1
North Louis Dump	17.7	-	17.7	17.7
South Louis Dump	19.2	-	19.2	19.2
Lower AB Dump	13.6	13.6	13.6	13.6
Upper Louis Dump	16.4	-	16.4	16.4
Pits				
Hindenburg Pit	32.4	32.4	32.4	32.4
North Central Pit	12.3	12.3	12.3	12.3
Shepard Pit	38.5	38.5	38.5	38.5
Stockpads				
Upper A Stockpad	5.6	5.6	5.6	5.6
Upper B Stockpad	1.5	1.5	1.5	1.5
Roads				
Louis Road (with-in Louis Dump)	5.7	-	5.7	5.7
ANFO Pad / Explosives Road	16.4	16.4	16.4	16.4
Shop Pad	21.4	-	21.4	21.4
Growth Media				
Shop Pad Growth Media	2.3	-	2.3	2.3
East Pit Growth Media	3	-	3	3
Hindenburg Growth Media	2.2	-	2.2	2.2
Total	483.98	138.7	481.9	486.6

12. FINANCIAL ASSURANCE

As required by ADNR, ADEC and ACOE, the financial assurance amounts were revised and updated to reflect current plans for Fort Knox and True North. The new financial assurance amounts submitted to the agencies are \$96,164,867 for Fort Knox and \$3,066,526 for True North. The financial assurance amount for Fort Knox is subject to revision with agency approval of the revised reclamation plan for Fort Knox. The financial assurance amount currently in place for Fort Knox is \$65,785,767. Table 7 reflects the financial assurance proposed for Fort Knox and in place for True North.

Table 7: Financial Assurance Amounts

Plan/Permit/Lease #	Proposed Amount (\$)
Fort Knox Reclamation and Closure Plan	\$96,164,867
True North Reclamation and Closure Plan	\$3,066,526
<i>Total</i>	<i>\$99,231,393</i>

13. MINE WATER USEAGE (WATER BALANCE)

The Fort Knox water balance tracks water movement throughout the mine-site, including natural processes such as precipitation, evaporation, and seepage as well as mine operation water needs. The water balance that Fort Knox uses was built by a contractor using GoldSim software. GoldSim is a graphical simulation software that enables FGMI to construct complex models simulating the water balance both dynamically (using historic data) and probabilistically (using statistical simulations based on known factors).

The Fort Knox operational water balance focuses on mining and milling activities and is calibrated to recorded data on a regular basis so that site processes may be accurately represented and continually updated to reflect changing mine operations. In this way, confidence in predictive values increases the longer the model is operated and mine planning and the closure design may be continually optimized. Data used in calibration activities includes: tailing pond and fresh water reservoir water levels, seepage rates, precipitation and evaporation records, pumping schedules, production data, mill water flows, tailings deposition schedules, pool bathymetry, and information on mine process changes. The water balance is recalibrated whenever the model shows that the predicted water balance differed from actual measurements by more than four percent.

The water balance is continually updated with the most current information, including natural water inflows/outflows and water use throughout the mine-site. The dynamic nature of the water balance enables FGMI to actively manage water on site, with the goal of minimizing water use and maximizing efficiency. Water uses at Fort Knox are summarized in Table 8. A diagram of the water balance model used by Fort Knox can be found in Figure 11.

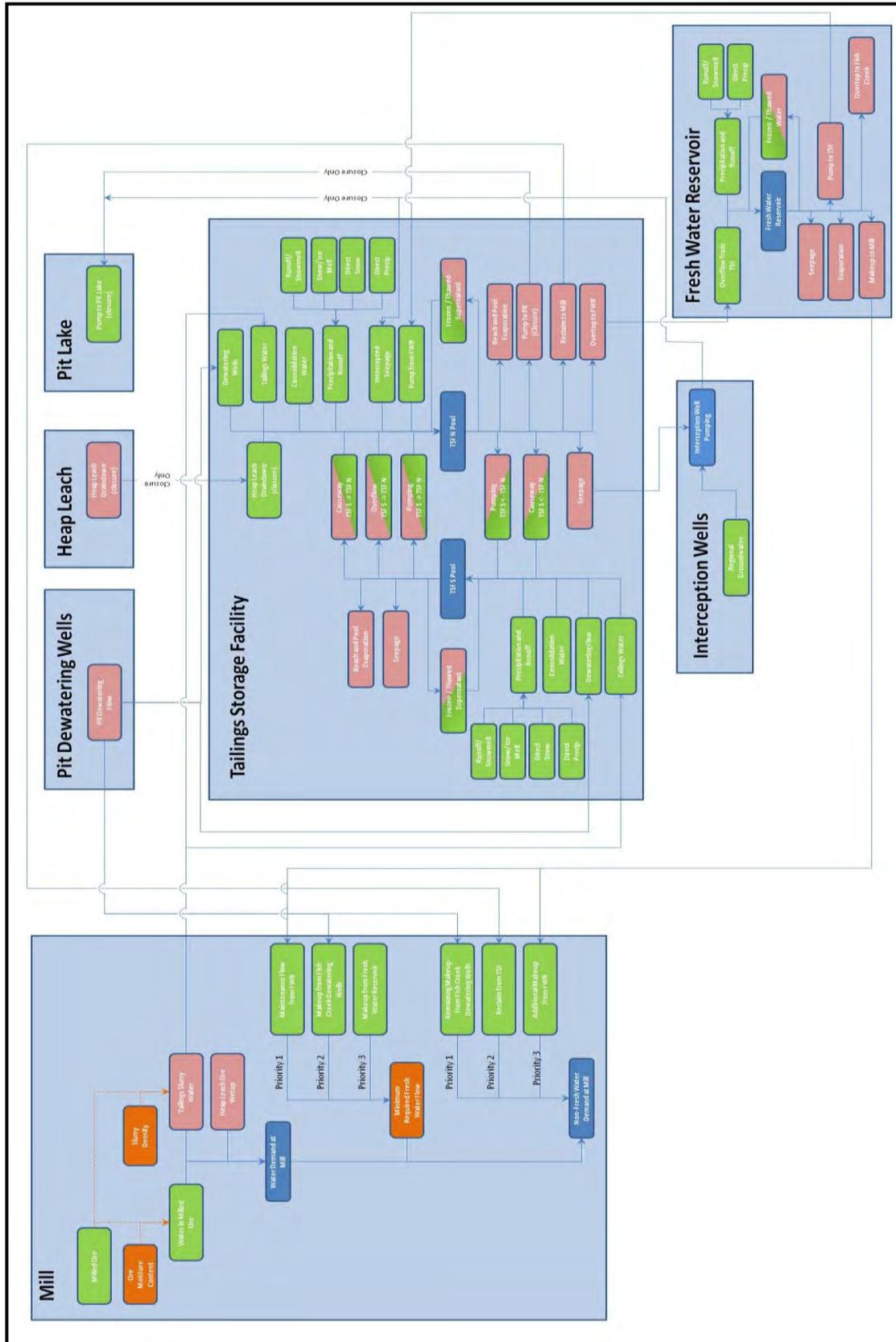
Table 8: Fort Knox Water Balance Summary for 2013

Water Balance Process	Volume (ac*ft/year)
Fresh Water Reservoir (WSR) to Mill	123
Fresh Water Reservoir (WSR) to TSF	1,951
TSF to Mill	13,500
Mill to TSF (Estimated water in tailings slurry)	10,766
Heap Leach	0 (relative to TSF)
Pit Dewater to TSF	730
Seepage Reclaim	2,583



Fort Knox Mine Pit – July 2013

Figure 11: Fort Knox Water Balance Schematic



14. EXPLORATION

FGMI continues with an exploration program in the pit and in the surrounding area with the goal of identifying additional reserves that can further expand the existing pit or lead to development of another operation. Exploration in the vicinity of the Fort Knox mine in 2013 consisted of the following:

- **Gil Project**

In 2013, Fort Knox initialized baseline environmental studies at the Gil Project. These studies include:

- Meteorological monitoring;
- Surface water sampling and monitoring;
- and
- Groundwater sampling.

A meteorological station was installed at the Gil Property. Monitoring was initiated on August 9, 2013 and has been ongoing. Data is collected every fifteen minutes and is reported daily.



Surface water monitoring has been ongoing at 6 sites since 2000. In 2013, 8 additional surface sites were chosen giving a total of 14 surface water monitoring locations. Surface sites are visited monthly. When water is flowing, samples are taken from each of 14 sites. Stream flow data are also taken using a stream flow meter. Groundwater monitoring has been ongoing at 5 wells since 2001. In 2013, 3 additional piezometer, 5 well, and 3 thermistor holes were drilled. After installation of equipment, the wells will be sampled on a monthly basis and the thermistors and piezometers will be read as required.

In 2014, Gil Project work plans call for the following:

- Installation of pumps, piezometers, and thermistors;
- Geophysical and geochemical surveys on the Gil Project to be followed up with a drilling program. The goal of the drilling program is to expand the strike length of known mineralization and test new targets; and
- Drilling, trenching, and reclamation at the Gil Project.

- **NOAA Project**



Fort Knox is pursuing ability to conduct an exploration program on land immediately west of the Fort Knox pit which is a part of the NOAA Withdrawal. The following activities occurred in 2013:

- A confidential radio frequency interference study was conducted and the study concluded that the proposed exploration will not adversely impact NOAA; and

- A cultural resources field survey was conducted on the NOAA ground of interest and the survey indicated no findings of significance in the primary area of interest. The study identified five avoidance areas and recommended a Phase II evaluation survey be conducted at these areas of the 2,000-acre site.

In 2014, NOAA Project anticipated activities include:

- Obtain approval from NOAA and BLM to conduct a mineral assessment program on the NOAA ground of interest;
- Geologic mapping of the ground of interest;
- Conduct soil sampling using hand operated tools on the ground of interest; and
- Drilling and reclamation at the primary area of interest.

15. COMMUNITY AFFAIRS

FORT KNOX EXTERNAL STAKEHOLDER GRIEVANCE PROCEDURE

Stakeholder feedback, be it positive or negative, is instrumental in providing Fort Knox with a platform upon which its operational and social performance can be regularly evaluated and modified to meet commitments to leading practice and continuance improvement. The objective of our grievance procedure is to outline Fort Knox's commitment to demonstrate a transparent and trustworthy approach to issues management and to ensure that stakeholders can effectively communicate with Fort Knox.

External stakeholder grievances should be directed to the Community and Government Relations Manager (907-490-2218) who serves as the primary site point of contact and will work closely with the General Manager and appropriate department managers to monitor the grievance until it is closed.

