FINAL PERMANENT CLOSURE PLAN
GOOSEBERRY MINE
STOREY COUNTY, NEVADA

Submitted to:
Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701

Submitted by:
AMEC Earth & Environmental, Inc.
780 Vista Boulevard, Suite 100
Sparks, Nevada 89434

December 2007
AMEC Project No. 6-417-000720

December 6, 2007
AMEC Project No. 6-417-000720

Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701

Attention: Mr. Sam Jackson
Bownfields Program Manager

Re: FINAL PERMANENT CLOSURE PLAN
Gooseberry Mine, Storey County, Nevada

Dear Mr. Jackson:

Enclosed are two hard copies and one electronic copy of AMEC Earth & Environmental, Inc.'s (AMEC's) draft final permanent closure plan for the Gooseberry Mine. This plan contains a description of the closure activities to take place at the site with future development activities considered. Much of the plan deals with the closure of mine process and waste facilities such as the heap leach pad, tailings and materials associated with the mill. The plan is general in nature regarding the removal of buildings and structures that may be salvaged or reused. Of special note is our proposed reuse of the waste rock dump for parking or low load bearing structures rather than the regrading and capping associated with typical closure activities. This has been proposed to try to maximize building space at the site. In addition, structural plugs for the shafts have been designed and presented. The purpose of these plugs is to allow for more useable land after closure activities have been completed.

This Final Permanent Closure Plan is intended as a guide. We envision that a prospective developer may wish to develop site plans that modify the proposed work. However, the plan presented herein should provide the guidance needed by both Storey County and a prospective developer on the issues to be managed at the site and how they may be addressed.

Respectfully submitted,

AMEC Earth & Environmental, Inc.

Brett Whitford, C.E.M.
Environmental Services Manager

Reviewed by,

John Dyer, C.E.M.
Senior Project Manager

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances.

BW/JD/mm

Enclosures

J:\Clerical\2007\Nov_07\6417000720_NDEP\Final_Closure_Plan.doc

AMEC Earth & Environmental, Inc.
780 Vista Boulevard, Suite 100
Sparks, Nevada
USA 89434-6656
Tel + 1 (775) 331-2375
Fax + 1 (775) 331-4153
www.amec.com

TABLE OF CONTENTS

SECTION PAGE

1. INTRODUCTION 1
   1.1 General 1
   1.2 Statement of Purpose 1
2. SITE LOCATION AND BACKGROUND INFORMATION 1
   2.1 Site Location 1
      2.1.1 Site Climatology 2
      2.1.2 Overall Site Geology 2
   2.2 Groundwater Depth and Quality 2
   2.3 Surface Water 2
3. FACILITY DESCRIPTION 2
   3.1 Facility Status 2
   3.2 Process Flow Charts and Process Components 3
   3.3 Liners and Leak Detection Systems 3
   3.4 Mine Waste and Sources Requiring Closure 3
      3.4.1 Heap Leach Pad 4
      3.4.2 Tailings Ponds 4
      3.4.3 Mill Wastes 4
      3.4.4 Waste Rock 5
      3.4.5 Miscellaneous Mine Wastes 5
      3.4.6 Jello Pile Wastes 5
      3.4.7 Petroleum Wastes 5
      3.4.8 Cyanide Mixing Tanks 5
      3.4.9 Landfill 5
      3.4.10 Investigative Derived Waste 6
      3.4.11 Miscellaneous Wastes and Contaminant Sources 6
   3.5 Well Logs 7
4. SOURCE CHARACTERIZATION PROGRAM 7
5. INDIVIDUAL SOURCE STABILIZATION PROGRAM 8
   5.1 Waste Rock 8
   5.2 Mine Shafts 8
   5.3 Heap Leach Pad (HLP) 8
      5.3.1 Capping Approach 8
      5.3.2 Pregnant Pond 9
      5.3.3 Barren Pond (Evaporation Pond) 9
      5.3.4 Diversions 9
   5.4 Tailings Impoundments 9
      5.4.1 Mill Leach Tailings Ponds 10
      5.4.2 Reworked Tailings Pond and Landfill 10
      5.4.3 Asamera Tailings Pond (ATP) 10
   5.5 Jello Pile Residuals 10
   5.6 Mill and Miscellaneous Mine Wastes 11
   5.7 Petroleum Wastes 12
   5.8 Cyanide Mixing Tanks 12
   5.9 Miscellaneous Wastes 12

TABLE OF CONTENTS
(CONTINUED)

SECTION		PAGE
6.	**PROCESS FACILITIES**	**13**
7.	**ANCILLARY BUILDINGS**	**14**
8.	**SOURCE STABILIZATION**	**14**
9.	**MONITORING PLAN**	**15**

LIST OF FIGURES

1 Site Location Map
2 Site Aerial Photograph

LIST OF APPENDICES

A Climatological Data
B Geologic Information
C Process Flow Charts
D Closure Drawing Sheets
E Report of Findings Gooseberry Mine Brownfields Project
F Shaft Closure Plan
G Draft Technical Specifications

1. INTRODUCTION

1.1 General

The Gooseberry Mine operated as an underground mine from about 1906 until 1992. Storey County obtained control of the site through tax foreclosure from Palace Resources Inc. in 2005. The site is located immediately adjacent to the Reno-Tahoe Industrial Park (the largest industrial park in the United States). The Gooseberry site location and former use as an industrial/mining site is thought to be compatible with surrounding land use and have potential for industrial redevelopment. Storey County wishes to divest itself of this site and return it to productive land.

The Nevada Division of Environmental Protection (NDEP) assisted Storey County by obtaining assessment funding for the site through a special grant from the U.S. E.P.A. Brownfields Program (Brownfields). This closure plan draws upon the data and information obtained through the use of the grant funding.

1.2 Statement of Purpose

The purpose of this Final Permanent Closure Plan (FPCP) is to identify the environmental issues at the site that have the potential to degrade waters of the state. This plan follows the guidelines for FPCP preparation as published by the NDEP. This document presents an assessment of onsite hazardous materials and the future management of these materials. AMEC understands that, unlike more remote mine sites in Nevada, this site may be redeveloped in the future and the Final Closure Plan should reflect future land reuse.

This Final Permanent Closure Plan is intended as a guide. Project specific modifications to proposed treatments should be incorporated into the plan as necessary to satisfy the requirements of any proposed development as well as to comply with State regulations.

2. SITE LOCATION AND BACKGROUND INFORMATION

2.1 Site Location

The site is located in Sections 25 and 36, T19N, R22E in Storey County, Nevada (refer to Figures 1 and 2) and is approximately 10 miles south of Interstate 80 from of the Tracy/Clark exit.

2.1.1 Site Climatology

Appendix A contains a reprint of the climatology section from the Plan of Operations prepared by Asamera Minerals in 1988. Updated climate data from the Virginia City and Stations is also provided. The largest variable for the site is precipitation. The site is higher in elevation than Reno, but not as high as Virginia City. Its location within the Virginia Range may provide some orographic enhanced precipitation during some precipitation events may be shadowed out by the up wind peaks of the Range.

2.1.2 Overall Site Geology

The overall site geology may be found in Appendix B that contains a reprint of the geology section of the Plan of Operations developed by Asamera in 1988.

2.2 Groundwater Depth and Quality

Groundwater was not encountered during assessment activities conducted by AMEC. However, the Plan of Operations (Asamera, 1988) indicated that groundwater existed at depths of 15-25 feet below grade within alluvial deposits and at varying depths in bedrock fracture zones within the project area. This reported condition may exist during wet periods when migrating meteoric water is perched on the bedrock–alluvium interface. Anecdotal information within files found at the Bureau of Land Management, Carson District Office (BLM) indicates that the depth to consistent groundwater is at least 500 feet below grade. Based on the data obtained and reviewed by AMEC, there does not appear to be a permanent or arealy extensive aquifer below the site. Water quality data was not identified in site files held by the BLM or the NDEP.

2.3 Surface Water

The closest perennial surface water body is the Truckee River located ten miles south of the site. There are some mapped springs to the north and east of the site. These springs are located over a mile from the project site.

3. FACILITY DESCRIPTION

3.1 Facility Status

The entire facility is inactive. Most valuable commodities and equipment have been removed from the site and would require replacement in order to make the facility functional as a mine.

3.2 Process Flow Charts and Process Components

Appendix C contains copies of process flow charts obtained from the NDEP files. There were two process circuits in the Gooseberry mill. These included the Heap Leach Pad (HLP) process circuit and the underground mine ore process circuit. The HLP and the mine ore circuit used a Merrill-Crowe process that had a 150 gpm capacity to extract metals. The NDEP files indicate that the Merrill-Crowe circuit may have been replaced with a carbon circuit at some point during operations. The mine ore circuit consisted of a ball mill, flotation, agitator, solution mixing and metal recovery.

The capacities of the process containers in the mill building are not all known. However, we estimate that there is about 100 cubic yards of residual process material remaining in or associated with the mill. There are four tailings ponds on site. Figure 2 shows the location of the tailings ponds, process ponds, landfill and former biopad.

Heap leaching consisted of placement of agglomerated tailings onto 30 mil HDPE lined heap leach pad. The drainage system within the pad consists of a series of corrugated slotted pipe that is embedded in a course sand drainage layer. This system discharges into an HDPE lined collection ditch that surrounds three sides of the HLP. These ditches transfer solution flow to a HDPE lined pregnant pond (PP). The PP has a capacity of about 200,000 gallons and solution was pumped from this pond back to the mill building for processing. The PP has an overflow ditch to an HDPE lined pond. This pond acted as both a barren pond and a storm water storage facility.

3.3 Liners and Leak Detection Systems

The pregnant and barren ponds are lined ponds with leak detection and recovery systems. The ponds are lined with a single geomembrane liner. Leak detection systems consist of an underdrain that was constructed of PVC pipe and reported to a fifty five gallon drum. Drawings of the leak detection system are in the NDEP files for the site.

The HLP is also a lined facility as described above. The facility was reportedly built on an engineered subgrade with a 30-40 mil HDPE liner deployed over eight to ten cells. The variability in the thickness of liner and number of cells is due to the inconsistencies in various documents pertaining to the site. AMEC is unaware of a leak detection system for this facility.

The East and West Mill Tailings ponds are also single lined facilities. These facilities do not have a leak detection system or apparent underdrain system.

3.4 Mine Waste and Sources Requiring Closure

The following describes the mine wastes and sources that require closure.

3.4.1 Heap Leach Pad

The heap leach pad (HLP) shown on Figure 2 and Sheet 2 (Appendix D) is located to the south of the mill complex. According to plans held within the NDEP files it was constructed using 30 but possibly 40-mil HDPE liner and an overlying drainage layer. Agglomerated tailings were placed on the heap leach pad to a stack height of approximately twenty five feet. The agglomerated material consisted of tailings from a large storage facility located to the south of the heap leach pad. This material was mined with a dredge and stockpiled at the northern edge of the facility. This stockpile was called the surge pile (Asemara, 1988) and a significant amount of material is still present in this pile, as shown on the topographic map presented as Sheet 6 in Appendix D. The dredged material was then conveyed to the agglomerator which produced cementitious pellets that reportedly ranged from three eighths of an inch to about an inch in diameter. These agglomerated pellets were then placed on the HLP. An agglomeration flow sheet is located in Appendix C. It is apparent from the present state of the material on the heap leach pad that the durability of the agglomerated pellets was not sufficient.

The present configuration of the HLP allows for ponding of water to the top surface and the generation of leachate during wet periods. Based on the results of leachate sampling from 2006, leachate from the HLP does not meet present discharge standards for cyanide, silver and total dissolved solids.

Two ponds are associated with the HLP, a pregnant pond and a barren/storm pond. According to the Asamera Plan of Operations (APOO, 1988), the pregnant pond has a capacity of 200,000 gallons. However, the present pond has a significant amount of material that has washed into it, causing a significant loss of capacity. The pregnant pond was constructed using 30 mil PVC liner material. A leak detection sump was installed below the pond. A monitoring port consists of a pipe that leads to a 55 gallon drum. This drum is located about 150 feet east of the pond.

The barren/storm pond is located to the south of the HLP. This pond has a capacity of 1.5 million gallons. It was constructed using a 30 mil HDPE liner (Asamera, 1988).

3.4.2 Tailings Ponds

There are four tailings ponds on the mine site. Two of these facilities are lined (East and West Mill Leach Tailings Ponds) and the other two are not (reworked tailings and Asamera tailings). The tailings in the lined facilities will require removal and management. The other two facilities need to also be closed by regrading and capping.

3.4.3 Mill Wastes

As stated above there is approximately 100 cubic yards of waste materials in and immediately adjacent to the mill building. This material consists of partially processed ore.

3.4.4 Waste Rock

The waste rock dump is located to the east of the mine shafts and mill building. The rock sampled and analyzed through the assessment performed by AMEC (refer to Appendix E) indicated that it is relatively benign and could be developed upon.

3.4.5 Miscellaneous Mine Wastes

Drums containing apparent ore/waste rock are located on the north side of the Reagent Storage Building (RSB). This material should be managed along with the mill wastes. South of the RSB is a pallet of samples from the mill. These samples should also be managed as standard waste since the packaging volume is significant. Drill core located in the vicinity of the core shack and explosives bunker should be managed as standard wastes due to the volume of packaging.

3.4.6 Jello Pile Wastes

There is a significant volume (>1,000 cubic yards) of “jello pile” residuals associated with the former location of this named waste pile. It is apparent that either runoff or process water (or combination of both) mobilized cyanide and other chemicals of concern. This material is located in an area that would otherwise be available for redevelopment. Therefore, the material will be removed and placed in a waste containment facility.

3.4.7 Petroleum Wastes

Petroleum contaminated media are located in the vicinity of the former generators, biopad and the above ground fuel storage tanks area. The assessment activities performed by AMEC (refer to Appendix E) did not develop enough data to define the total extent of contaminated media with petroleum concentrations in excess of 100 mg/kg. However, sufficient data was developed to allow for the development of a remediation plan for this material as described herein.

3.4.8 Cyanide Mixing Tanks

Residual material with excessive concentrations of cyanide is present in the cyanide mixing tanks at the site. These tanks are located to the north of the mill building.

3.4.9 Landfill

A landfill is located to the west of the Reworked Tailings (RWT). This landfill consists of at least two cells. The eastern cell has some cover material over it, while the western cell remains

open. Most of the debris observed in this facility consists of metal scrap, empty drums and containers. According to Mr. Dennis LaPraire (former mine engineer and NDEP employee) the landfill was primarily used for discarding empty containers. Soil samples collected and analyzed in the immediate vicinity of the landfill did not indicate that a significant discharge of analytes assessed for had occurred.

3.4.10 Investigative Derived Waste

Investigative derived waste includes soil and mine waste generated during the investigation performed by AMEC (refer to Appendix E).

3.4.11 Miscellaneous Wastes and Contaminant Sources

There are several contaminant sources on both the private and BLM portions of the site. A brief description of each of these is presented below.

Private Land

a. Acid Batteries – A stockpile of acid batteries is located in a boneyard area between the decline shaft and the water tanks.

b. Asbestos Containing Building Materials - There are twenty fixed buildings on site. Many of the buildings are of metal construction with concrete foundations. However, a number of buildings have building materials that do not consist of metal, glass, wood or plastic. These materials are all suspected of containing asbestos and will require analysis and potentially abatement prior to demolition. Asbestos may also be associated with the onsite trailers and mechanical equipment such as hoist brakes and electrical panels.

c. Transformers - The Reagent Storage Building (RSB) contains five non-mounted electrical transformers. The dielectric fluid in the transformers is not PCB containing. A downed transformer is also located in the lined ditch between the pregnant pond and barren/storm pond.

d. Waste Filters and Crucibles – A round lined waste container is located to the north of the RSB. This facility contains waste filters and crucibles. These materials will require disposal in a Class I waste facility.

e. Lead Based Paint – Given the potential age of many of the structures onsite, it is likely that they have lead based paint coated surfaces.

BLM Land

The following items of concern were noted on BLM Land. Although the Brownfields program provides for private/local government assessment and remediation funding these items are mentioned herein since they are a part of the overall mine site environment and will require closure/removal actions.

a. Drums – There are numerous drums of mine wastes and chemicals located on the northern portion of the site. These drums of materials should be characterized and properly managed

b. Fuel Tank – An apparent above ground fuel tank is located to the east of the laboratory building. This tank will be removed along with the contaminated soil associated with it.

c. Open Dump – The northern portion of the site contains four shacks and a couple of trailers. An open dump is located to the north of a cluster of three shacks. The surface of the dump is characterized by what appears to be primarily household type wastes with some industrial waste. Numerous debris piles are also associated with this area of the site. The materials in the dump and debris piles should be removed and disposed of at a permitted facility.

d. Septic Tanks – Septic tanks are known to exist in association with the Shower, Administration and Laboratory Buildings. These facilities will need to be closed per Storey County requirements. The laboratory septic system should be assessed for the discharge of hazardous pollutants.

3.5 Well Logs

AMEC understands that test wells and exploration borings were installed at the mine site. However, we do not have logs for all the wells or borings. A search of available logs from the Nevada Division of Water Resources Web Site revealed no logs for this site or associated sections of land.

4. SOURCE CHARACTERIZATION PROGRAM

AMEC conducted a site characterization study for NDEP. A copy of the report is presented in Appendix E.

5. INDIVIDUAL SOURCE STABILIZATION PROGRAM

5.1 Waste Rock

Although the waste rock analyzed during the characterization study performed by AMEC appears to have the potential to generate a leachate that does not meet drinking water standards for all analytes listed as Profile II parameters, it is relatively benign material. Presently, the Reagent Storage Building exists on the waste rock dump and the exposed slopes of the dump appear to be relatively stable. Also, the topographic profile of the dump is relatively flat (3 to 4 percent grade with a middle slope break). Given that the desire of Storey County is to have the site redeveloped as an industrial property, the waste rock dump could be incorporated into site redevelopment plans. These plans should include development of an impervious surface over the dump (parking area) with drainage that is contained until it is routed completely off of the facility. Further geotechnical assessment is required for the design of a parking area or other use of the waste rock dump as redeveloped land. This assessment will need to focus on identifying the eastern limits of the dump and its overall characteristics. In the event that the waste rock dump is not utilized in this manner, an alternative proposal will need to be submitted to the NDEP.

5.2 Mine Shafts

Appendix F presents a conceptual closure plan for the two mine shafts on site. The plan includes the design of structural plugs that can be installed in the shafts once the infrastructure around them has been removed. Implementation of this plan or an updated version should allow for redevelopment of the site over the top of these features.

5.3 Heap Leach Pad (HLP)

5.3.1 Capping Approach

Appendices D and G contain plans and specifications for the closure of the HLP. This plan is atypical of many pad closures since the pad retains the potential to generate a leachate that has excessive concentrations of cyanide as well as silver and other constituents. In addition, the HLP closure plan has to consider the existing waste containment cells within it. These cells hold wastes previously interred by the BLM. These wastes include those from the mill leach tailing pond and Jello Pile waste. The proposed capping plan also includes the placement of tailings from the two MLTP ponds.

In general terms, the top of the heap leach pad will be re-graded to minimize the potential for ponding of meteoric water. Care shall be taken during grading operations not to disturb the existing waste containment cells (SRK, 2004). Tailings from the mill leach tailings ponds (MLTPs) will be placed on the western portion of the pad where percolation trenches currently

exist. Tailings from the Reworked Tailings and Asamera Tailings ponds will be used to buttress the HLP and provide side slopes that extend from the current 1:1 (horizontal:vertical) form to a 3:1 slope. Once the buttress material has been placed, the entire surface of the HLP shall be compacted to minimize the potential for percolation of meteoric water into the waste. A final cover of two feet of soil will be used to cap the entire facility. This approach allows for the wastes encapsulated at the top of the pad to remain undisturbed while providing a surface that has better surface water drainage and is more resistive to erosion. Establishment of vegetation on the HLP will follow BLM guidance regarding application, seed mix and maintenance.

The perimeter ditches surrounding the existing pad will be re-established and the potential leachate generated from the HLP will be directed to a relined barren pond (Evaporation Pond).

5.3.2 Pregnant Pond

About a third of the pregnant pond capacity has been lost due to sedimentation. This equates to about 300 to 350 cubic yards of material. This material will be removed from the pond and placed on the heap leach pad as part of the closure operations. The existing liner will be removed and disposed of in a landfill. The pond excavation will be backfilled with compacted fill and the natural drainage path from the HLP to the barren pond will be re-established. Backfill specifications are presented in Appendix G.

5.3.3 Barren Pond (Evaporation Pond)

The barren pond will be relined with 80-mil HDPE geomembrane. This pond will serve as an evaporation pond that will receive incidental leachate from the HLP. This leachate will not be directly open to the atmosphere. It will be within a matrix that consists of geotextile, tailings and rock to allow for evaporation but not exposure of the leachate to human or animal contact.

5.3.4 Diversions

Appendices D and G contain plans and specifications for diversion structures that will route storm water around the HLP and other waste management facilities.

5.4 Tailings Impoundments

As stated above there are four tailings impoundments that exist on the site. They include the east and west mill leach tailings ponds (MLTPs), the reworked tailings pond and the Asamera Pond. The MLTPs will both be closed using a removal and disposal approach. While the other ponds will be closed in place. The work to be performed on these facilities is based on their individual characteristics.

5.4.1 Mill Leach Tailings Ponds

As described in Section 5.3, the material in the MLTPs will be placed on the heap leach pad. Liner materials will be removed from the ponds and disposed of in an off-site landfill. Soil below the liners will be observed for evidence of staining from leakage of process water. In the event that no apparent leakage is observed the excavations will be backfilled. If apparent leakage is observed, then samples of the stained material will be obtained and analyzed for Profile II constituents. Contaminated media, if encountered, will be addressed under an amendment to this closure plan.

5.4.2 Reworked Tailings Pond and Landfill

Material from the reworked tailings pond will be removed and placed against the sides of the HLP to establish a slope that is more resistant to erosion. The present surface topography of this area is very hummocky with significant depressions. These depressions hold meteoric water that may percolate through the material and form a leachate of undesired water quality. Therefore, the existing dam material will be pushed down to allow for positive drainage of the area. The residual material (post mining for HLP closure fills) will be covered with two feet of growth media. Establishment of vegetation on the Reworked Tailings Pond and landfill will follow BLM guidance regarding application, seed mix and maintenance. Appendix D contains a grading plan for these facilities.

Following grading activities, vegetation shall be established to increase evapotranspiration and stabilize the soil. A seed mix that contains seed from fast growing plants as well as long term successive species as approved by the BLM shall be applied to the reclaimed area.

5.4.3 Asamera Tailings Pond (ATP)

The ATP will be closed by establishing a flatter downstream slope on the dam and a storm water diversion channel along the south side of the facility. Grading plans for this facility are located in Appendix D. Once grading is completed, a BLM approved reclamation seed mix shall be applied per applicable means.

5.5 Jello Pile Residuals

The impacted material resulting from the migration of leachate from the Jello Pile was not fully assessed. The prescribed closure for this material consists of the following.

1. Over excavate the area assessed by AMEC at least five feet horizontally and vertically in each direction. Following excavation, resample the remaining material at the bottom of the excavation at approximate primary compass points and the center of the excavation bottom.

The samples shall be analyzed for Profile II constituents and the results of the analyses shall be used to determine if additional excavation of material is warranted.

2. Excavated material shall be stockpiled on and encapsulated with Visqueen until the final volume of material is known. The volume of excavated contaminated material should be assessed via survey.

3. Since it is known that there is at least 1,000 cubic yards of excessively contaminated material associated with this location it has been concluded that there is not sufficient room on the HLP for disposal. Therefore, an alternative waste containment cell is proposed. The east Mill Leach Tailings Pond (MLTP) could be encapsulated, thus saving room on the HLP for Jello Pile residual wastes. However, there are several reasons for proposing the alternative method of waste management as follows:

   a. The east MLTP location conflicts with the overall plan of regrading the HLP and establishment of surface water diversion and drainage.

   b. The age and type of construction for the MLTPs liners may have lead them to be compromised.

   c. The concentration of contaminants associated with the materials in the MLTPs is generally greater and of a higher environmental threat than the Jello Pile residuals. Therefore, we would be placing all like materials on the HLP.

The Jello Pile residuals containment cell shall be designed as an amendment to this plan and shall consist of a fully lined/encapsulating containment cell. General specifications for the design and construction of this waste containment cell are presented in Appendices D and G.

5.6 Mill and Miscellaneous Mine Wastes

There are mine wastes present in tanks, vats and holding facilities within and associated with the Mill Building. There are also mine wastes located immediately south and north of the Reagent Storage Building (RSB). The material within and associated with the Mill should be removed and placed on the heap leach pad along with the mill leach tailings. Material located in drums to the north of the RSB shall also be placed on the heap leach pad and the drums discarded as standard waste. The wastes south of the RSB primarily consist of bagged samples of material from the Mill that were apparently for assay. These materials should be disposed of with the Jello Pile residuals. By placing these materials with the Jello Pile residuals the packaging will not interfere will compaction efforts that are required for the materials placed on the HLP.

5.7 Petroleum Wastes

Above ground fuel storage tanks shall be removed from the site and disposed of in accordance with applicable regulations and fire codes. Petroleum contaminated soil with a concentration in excess of 100 mg/kg of Total Petroleum Hydrocarbons as assessed using EPA Method 8015 modified shall be removed from the site and disposed of at a appropriately permitted facility. The Lockwood Landfill is one of such facilities that is local to the site. Petroleum contaminated soils were identified in association with the above ground fuel storage tanks located to the south east of the Mill Building, the former biopad, and the generator facility to the west of the Mill Building. Petroleum stained soils were also observed on the BLM portion of the site associated with the compressor building and an aboveground fuel tank located to the east of the laboratory and south of the maintenance building.

Following removal of the apparent petroleum contaminated soil, confirmation samples shall be obtained and analyzed in order to demonstrate that the excessively contaminated soil has been removed from each of the impacted areas. Excavated areas shall be backfilled with clean fill and the fill should be placed in compacted lifts such that these areas can be redeveloped. See Appendix G for backfill specifications.

5.8 Cyanide Mixing Tanks

The residual material in the cyanide mixing tanks shall be removed. This includes a 55 gallon drum of material located immediately south of the tanks. The tanks will then be triple rinsed and the rinsate collected for disposal. All residuals and rinsate shall be disposed of at an appropriately permitted facility. Once the tanks have been cleaned they can then be transported for disposal or recycling.

5.9 Miscellaneous Wastes

The following describes removal and disposal actions to take place regarding the miscellaneous wastes described in Section 3.

a. Acid Batteries and Transformers – Acid batteries and transformers shall be removed from the site and either disposed of through recycling or disposed of at a facility permitted to accept these waste streams.

b. Waste Filters and Crucibles – These materials should be removed from the site and disposed of at a permitted facility.

c. Hazardous Building Materials – As stated above there are twenty buildings on site-not counting at least four trailers. Prior to demolition of these structures, a survey shall be performed to assess for asbestos containing building materials (ACBMs). If the buildings

are to be demolished whereby, grinding or torching of paint is a part of the process, then a lead based paint assessment is also needed. Prior to demolition, ACBMs requiring removal/abatement shall be removed by a licensed abatement contractor under the supervision of an asbestos consultant. Regulated asbestos containing wastes shall be disposed of in a permitted facility following appropriate procedures and regulations.

Lead based paint may remain on building materials that are disposed of or reused. However, grinding and sand blasting related activities will generate a regulated lead waste. In addition, cutting paint coated materials with a torch or burning paint off of surfaces will generate lead fumes. If these types of practices are proposed during the demolition of the buildings, a lead based paint assessment will need to be performed. Based on the results of this assessment special waste management and health and safety protocols will need to be followed in order to remain compliant with applicable regulations.

d. Septic Tanks – Septic Tanks shall be closed per Storey County requirements. Wastes removed from the laboratory septic system shall be analyzed for cyanide and TCLP 13 RCRA primary metals as well as any other analysis required by Storey County or regulatory authority. In the event that the results of these analyses indicate that the septic material is hazardous it shall be disposed of in a permitted facility.

e. North Dump – Material in the north dump (associated with the shacks at the north end of the site) shall be removed and disposed of at a permitted landfill. During removal of the waste, a Nevada Certified Environmental Manager shall be present to assess the material for items that may be considered as hazardous wastes. If identified, these potentially hazardous wastes shall be managed appropriately.

f. Investigative Derived Waste – Labeled containers of investigative derived wastes were stockpiled at the heap leach pad. None of the materials assessed are considered to be hazardous wastes. Therefore, those materials may be placed on the heap leach pad along with other wastes to be deposited there.

6. PROCESS FACILITIES

Process facilities at the Gooseberry Mine include the Crusher Plant, Mill and Laboratory. Section 5 includes discussions regarding the removal of process wastes associated with the Mill and Laboratory septic system. AMEC conducted a brief tour of the laboratory in 2006. During that tour no significant inventory of reagents or chemicals were noted. However, prior to demolition of the laboratory, the facility should be inspected for chemicals.

The refinery portion of the Mill building has been stripped of plates, chemical baths and related equipment. No further assessment is suggested for this portion of the process facilities.

7. ANCILLARY BUILDINGS

The ancillary buildings and facilities at the site will be demolished. These facilities include water tanks, explosives magazine, conveyors and storage bins. Foundations will need to be removed in order to make way for redevelopment. Section 5 presents a discussion regarding the assessment and management of hazardous building materials (lead paint and asbestos) that may be present in these structures.

There may be salvage value in the steel structures. Therefore, AMEC does not wish to specify how the demolished buildings will be disposed of.

The power and water to the facility has long been removed. However, some water pipe remains on the surface.

The north wooden head frame and the shacks located on BLM Land may be considered historic structures. Removal of these structures should be coordinated through the State Historic Preservation Office.

8. SOURCE STABILIZATION

The closure activities described in Section 5 provide a means of stabilizing the waste materials at the site. Through regrading, encapsulating, capping, and contouring the waste materials, direct infiltration of meteoric water will be significantly reduced.

The heap leach pad has the greatest potential to generate leachate. Recontouring of this facility and placement of cover soil will minimize the potential for the formation of leachate. Analysis of samples by SRK, Inc. (SRK, 2004), indicates that the material on the HLP has a permeability of 2.3×10^{-6} cm/s. Provided that the top of the HLP is recontoured to shed water rather than pond water, as it presently does, the potential for leachate formation is minimized. Although it is minimized the potential exists for some leachate to form. For this reason, the present Barren Pond will be converted to an evaporation pond that will receive leachate from the HLP should it produce any following implementation of this plan.

Other mine waste sources (tailings and waste rock) should not impact waters of the state based on the following. Assessment activities performed to date indicate that degradation to soil in the immediate vicinity of these materials has not occurred. Also, the depth to permanent groundwater is at least 500 feet. The groundwater that does exist in the subsurface is not of sufficient quantity to provide a beneficial use. For this reason, a water pipeline was constructed from the Truckee River to provide water during operations at the mine.

9. MONITORING PLAN

No groundwater monitoring wells exist at the Gooseberry Mine site. Given the hydrogeologic conditions it would be extremely difficult to place monitoring wells that would provide samples and data that would reflect potential impacts from past mining activities. Therefore, no groundwater monitoring is proposed. The monitoring proposed consists of visual assessments of the reclamation activities proposed herein.

Monitoring Type: Visual assessment of all facilities within the fenced mine waste containment area, see Sheets 2 and 4, Appendix D. These facilities include:

- Heap leach pad and associated evaporation pond, Jello Pile waste containment cell, tailings impoundments (Asamera and Reworked) and the landfill. Assessment activities shall include recording of vegetation establishment, erosion of cap and cover material, presence of observed leachate, condition of evaporation pond and depth to water.

In the event that water is present in the evaporation pond, a sample shall be obtained for analysis of the list of constituents known as Profile 1.

- Monitoring and Reporting Frequency: Quarterly

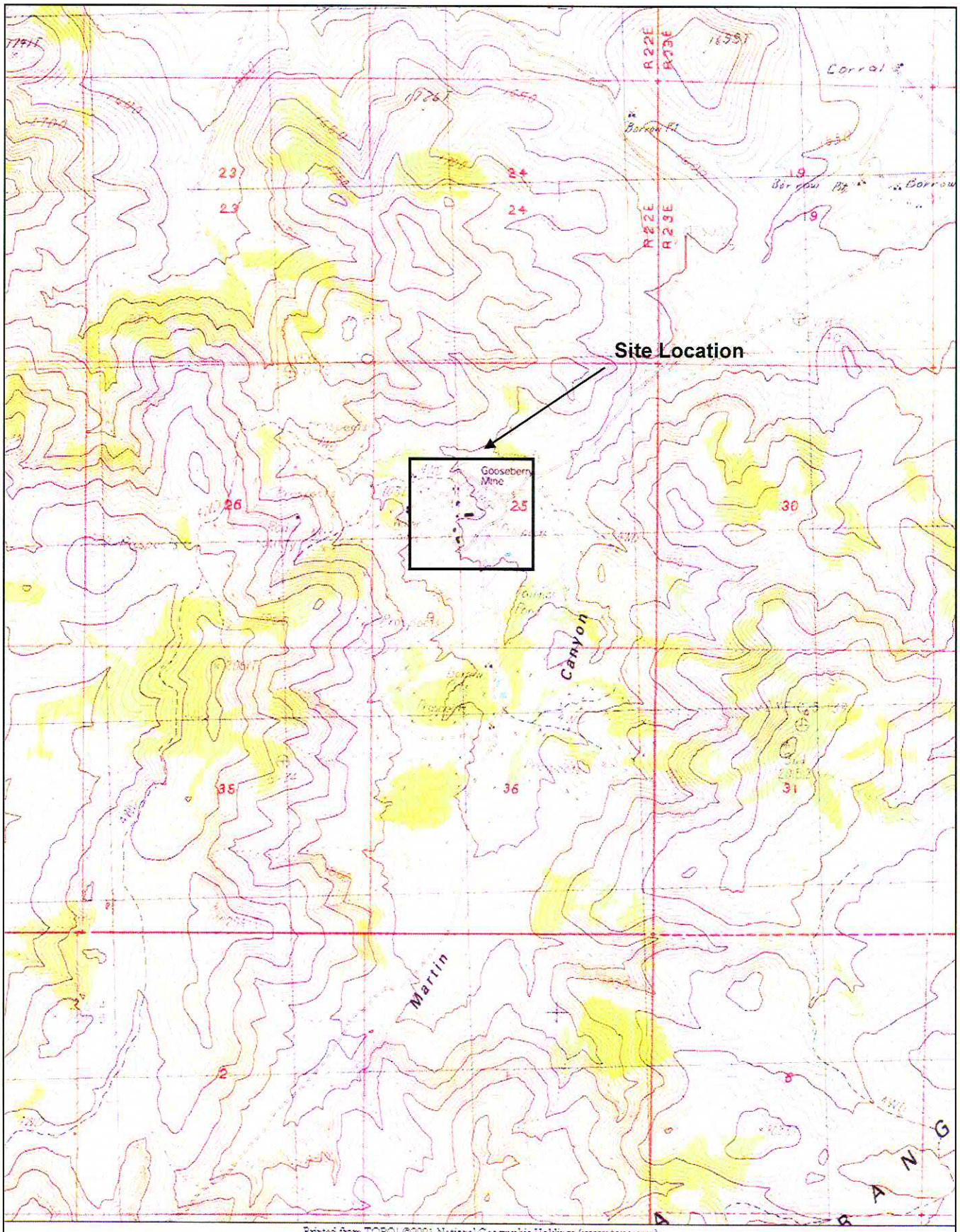
- Corrective Actions: In the event that monitoring activities indicate that containment has been breached, the NDEP shall be notified of the nature and extent of the breach and waste release. The breach shall then be repaired with concurrence from the NDEP.

- Duration of Monitoring: Monitoring of the site shall be conducted for a period of no less than fifteen (15) years.

J:\Clerical\2007\Nov_07\6417000720_NDEP\Final_Closure_Plan.doc

GOOSEBERRY MINE
BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA

amec



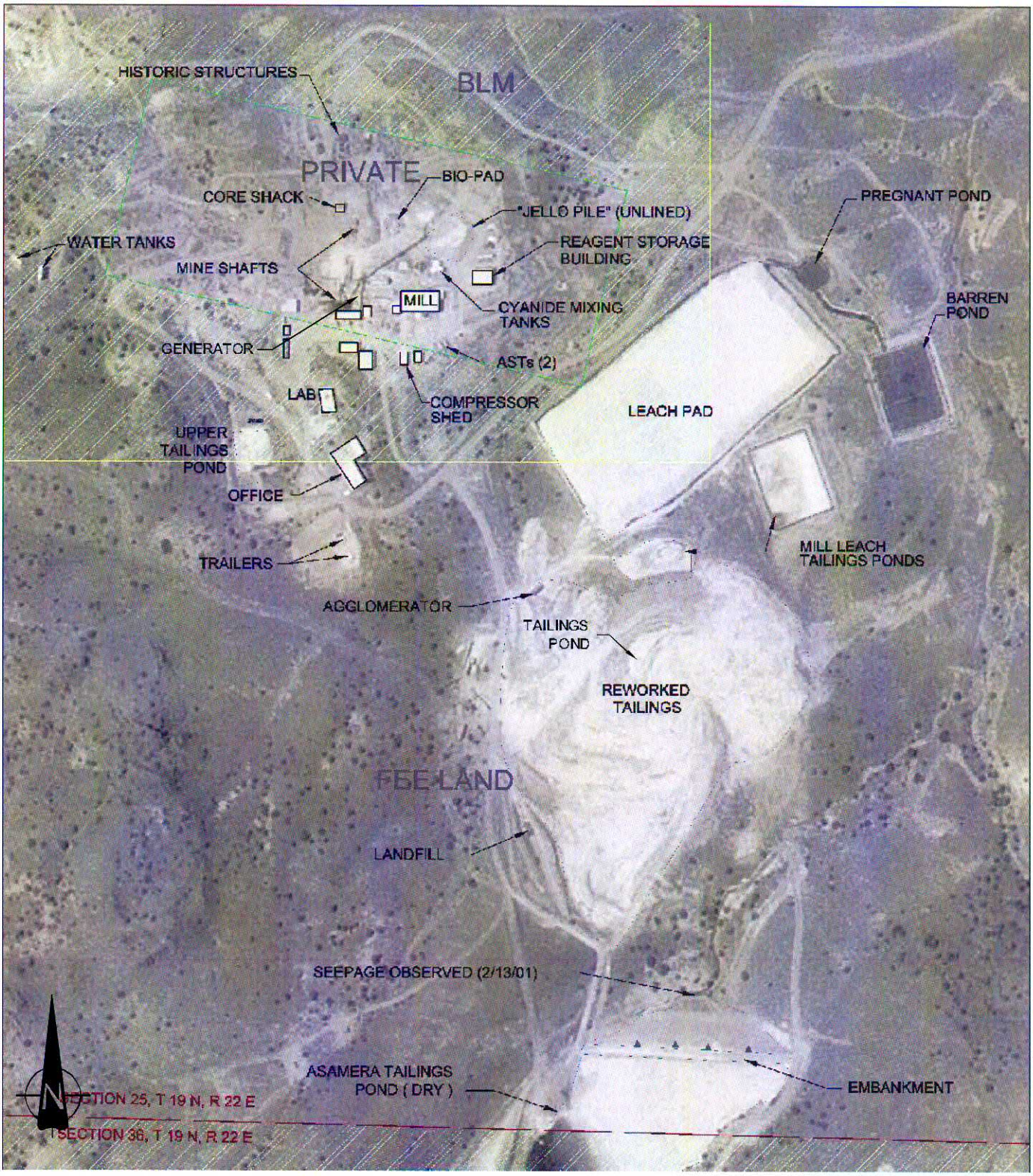
Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

amec
780 Vista Blvd, Suite 100
Sparks, Nevada
USA 89433-6656
Tel 1+(775) 331-2375

JOB NO.	6-417-000720
DRAWN	dls
DATE	06/2007
SCALE	AS INDICATED

FIGURE 1
Vicinity Map
Gooseberry Mine Site
Storey County, Nevada

J:\Clerical\2007\June_07\6417000720_Gooseberry_Mine\Figure 1.doc

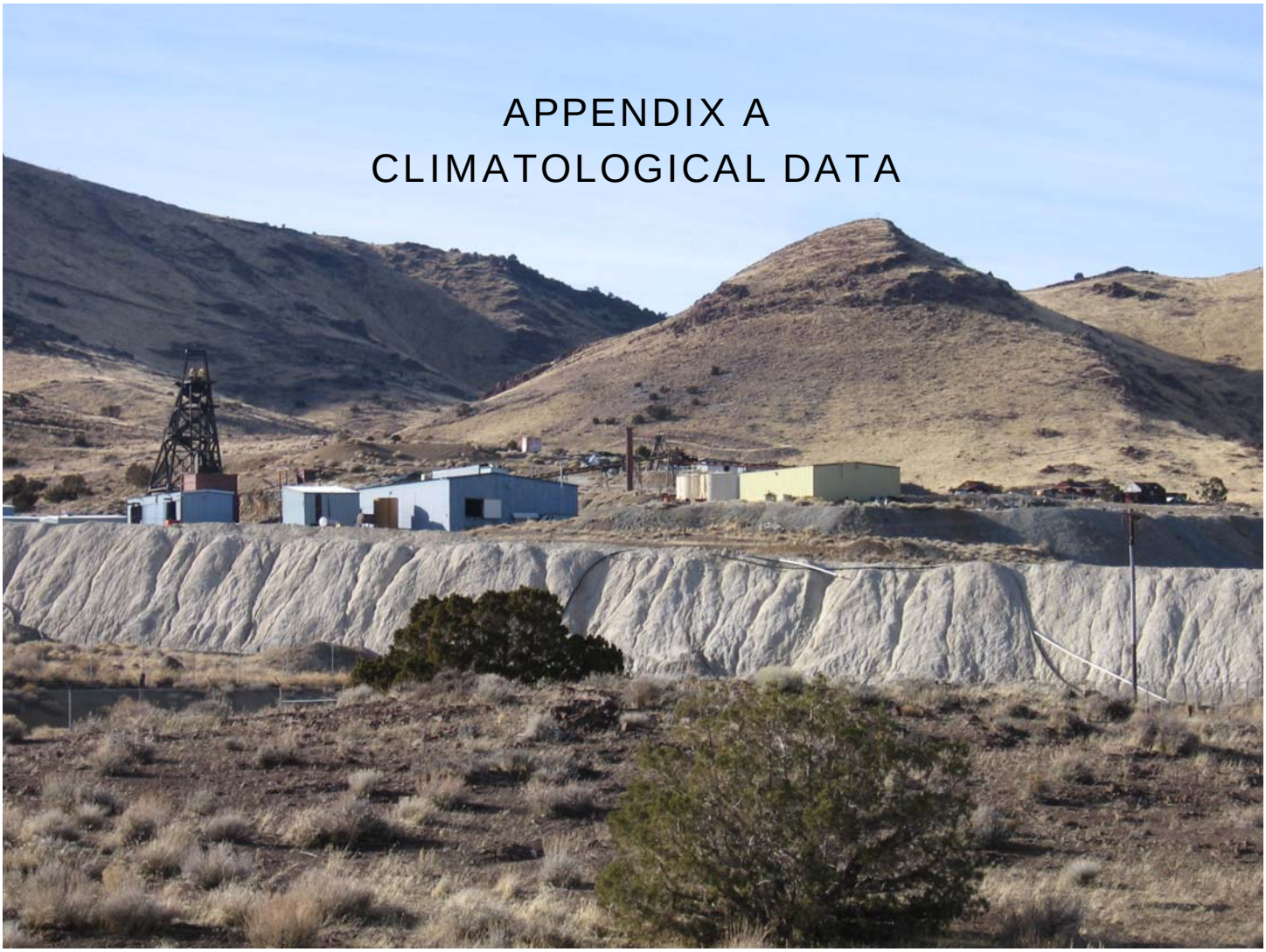


AMEC Earth & Environmental 780 Vista Boulevard, Suite 100 Sparks, Nevada 89434-6656	amec	CLIENT LOGO	CLIENT NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION

PROJECT GOOSEBERRY MINE, STOREY CO., NEVADA	DWN BY: LM-pdx	DATUM: --	DATE: MARCH 2007
TITLE SITE MAP	CHK'D BY: DS-reno	REV. NO.: 1	PROJECT NO: 7-417-000720
	PROJECTION: --		FIGURE No. FIGURE 2

K:\AMEC US OFFICES\Sparks\Gooseberry_Mine\Figure_02_SITE_MAP.DWG - 8.5x11 - Apr. 20, 2007 12:00pm - laura.mccoy

APPENDIX A
CLIMATOLOGICAL DATA



GOOSEBERRY MINE
BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA

GO-NEVADA.COM
Nevada's Best Travel Info

Book by December 3rd Houseboating.org Early Bird Special!
The Lake Powell Early Bird Special offers savings of up to $2000 off your house

Nevada

Home Destinations Lodging Camping Activities Sightseeing Books & Map

Virginia City Topics

Introduction

Accommodations
Lodging
RV Parks / Camping
RV Rental

Activities
Golfing
Skiing
Guides / Outfitters
Outdoor Gear

Sightseeing
Attractions / Parks
Sightseeing Tours

Additional Info
Tourism Resources
Nearby Destinations
Transportation
Weather
Photo Gallery

Virginia City - Weather

Weather information for the Virginia City area is provided below. Average temperatures, climate details and current forecasts are included.

REST EASY WITH OUR LOWEST RATES GUARANTEED. BOOK NOW
Guaranteed Lowest

Climate

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. High	40	43	48	54	63	73	82	81	72	61	48	41
Avg. Low	23	25	29	34	42	50	58	57	49	40	29	23
Precipitation	2.1	2.1	1.9	.7	.9	.7	.3	.4	.6	.8	1.7	1.7

Forecast

Go-Nevada.com Weather

change location

Currently go hourly

F

RealFeel: F
Humidity: %
Winds:

Outlook 15-day forecast

/ F
extended forecast

/ F
extended forecast

/ F
extended forecast

US Radar more maps

US Radar

POWERED BY AccuWeather.com

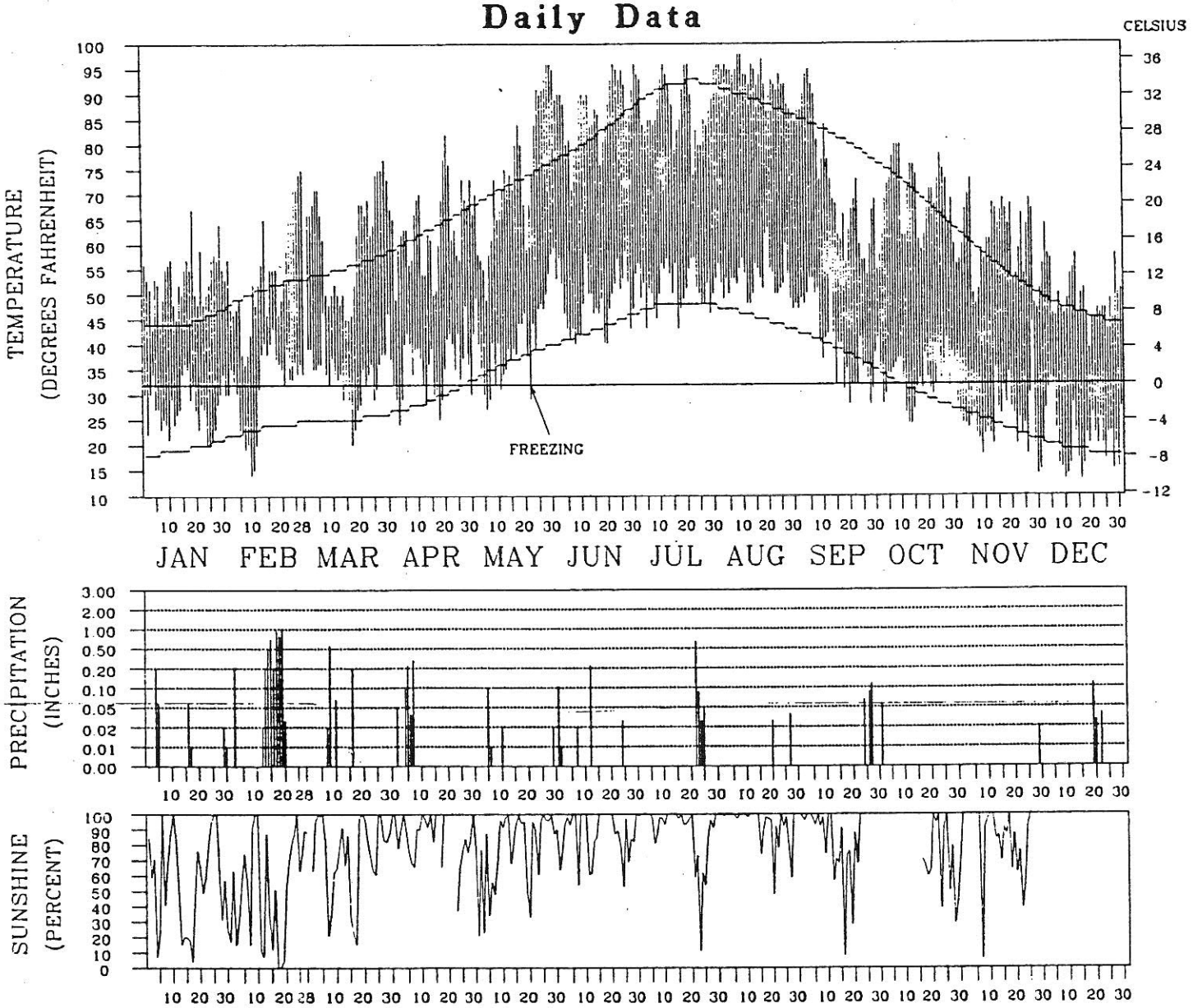
More weather by AccuWeather®

ISSN 0198-3326

1986 LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA

RENO,
NEVADA

Daily Data



TEMPERATURE DEPICTS NORMAL MAXIMUM, NORMAL MINIMUM AND ACTUAL DAILY HIGH AND LOW VALUES (FAHRENHEIT)
PRECIPITATION IS MEASURED IN INCHES, SCALE IS NON-LINEAR
SUNSHINE IS PERCENT OF THE POSSIBLE SUNSHINE

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NORTH CAROLINA, 28801

Kenneth D. Wadlen
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

noaa
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

METEOROLOGICAL DATA FOR 1986

RENO, NEVADA

LATITUDE: 39°30' N LONGITUDE: 119°47' W ELEVATION: FT. GRND 4404 BARO 4402 TIME ZONE: PACIFIC WBAN: 23185

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F:													
Averages													
-Daily Maximum	53.2	54.2	61.5	63.2	73.9	86.8	87.7	93.0	72.6	69.0	61.0	49.7	6[illegible].8
-Daily Minimum	27.3	31.3	33.9	35.1	40.8	48.1	51.0	52.9	40.0	32.8	24.9	20.8	36.6
-Monthly	40.3	42.8	47.7	49.2	57.4	67.5	69.4	73.0	56.3	50.9	43.0	35.3	52.7
-Monthly Dewpt.	27.8	28.2	29.6	27.5	30.7	36.5	41.3	39.5	32.5	29.5	21.2	22.7	30.5
Extremes													
-Highest	67	75	77	82	96	96	96	98	95	90	73	64	99
-Date	19	28	29	21	30	23	21	10	5	10	5	3	AUG 10
-Lowest	20	14	20	24	27	40	43	47	28	24	14	13	13
-Date	25	9	17	3	6	20	17	30	29	14	30	16	DEC 16
DEGREE DAYS BASE 65 °F:													
Heating	757	618	528	469	285	32	5	0	291	430	654	913	4982
Cooling	0	0	0	0	53	112	148	253	39	0	0	0	605
% OF POSSIBLE SUNSHINE	55	54	75	79	77	88	89	93					
AVG. SKY COVER (tenths)													
Sunrise - Sunset	8.2	7.4	6.8	5.4	5.7	2.7	3.1	2.9	4.2	2.9	3.8	5.6	4.9
Midnight - Midnight	7.4	6.6	6.1	5.3	4.9	2.5	2.4	2.8	3.8	2.5	3.2	5.1	4.4
NUMBER OF DAYS:													
Sunrise to Sunset													
-Clear	3	5	6	7	8	20	20	18	14	19	15	9	144
-Partly Cloudy	5	2	7	14	12	8	4	10	9	7	10	9	97
-Cloudy	23	21	18	9	11	2	7	3	7	5	5	13	124
Precipitation .01 inches or more	6	10	4	5	5	4	4	2	3	1	1	3	48
Snow, Ice pellets 1.0 inches or more	0	0	1	0	0	0	0	0	0	0	0	0	1
Thunderstorms	0	0	1	1	1	5	6	2	0	0	0	0	16
Heavy Fog, visibility 1/4 mile or less	2	0	1	0	0	0	0	0	0	0	0	0	3
Temperature °F													
-Maximum													
90° and above	0	0	0	0	7	11	13	26	5	0	0	0	62
32° and below	0	0	0	0	0	0	0	0	0	0	0	0	0
-Minimum													
32° and below	26	12	11	11	6	0	0	0	8	13	27	30	144
0° and below	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG. STATION PRESS. (mb)	869.6	864.5	866.2	865.2	864.4	865.9	867.3	866.9	864.5	868.6	870.6	869.3	866.9
RELATIVE HUMIDITY (%)													
Hour 04	88	75	73	69	63	65	68	59	68	72	70	83	71
Hour 10 (Local Time)	72	60	51	40	30	23	28	24	36	39	43	64	43
Hour 16	41	46	33	28	23	17	22	17	28	24	26	43	29
Hour 22	73	66	54	48	41	35	41	30	47	49	51	74	51
PRECIPITATION (inches):													
Water Equivalent													
-Total	0.40	4.84	0.88	0.77	0.26	0.31	0.86	0.07	0.28	0.06	0.02	0.19	8.94
-Greatest (24 hrs)	0.26	1.45	0.59	0.36	0.11	0.25	0.78	0.04	0.21	0.06	0.02	0.15	1.45
-Date	4- 5	18-19	8	6- 7	31	12	22-23	27	26-27	1	29	19-20	FEB 18-19
Snow, Ice pellets													
-Total	0.0	T	1.4	0.4	T	0.0	0.0	0.0	T	0.0	0.2	0.6	2.6
-Greatest (24 hrs)	0.0	T	1.0	0.4	T	0.0	0.0	0.0	T	0.0	0.2	0.6	1.0
-Date		19-20	16	1	6				27		29	19-20	MAR 16
WIND:													
Resultant													
-Direction (!!!)	136	212	221	286	269	274	272	269	272	041	258	160	26[illegible]
-Speed (mph)	1.[illegible]	2.5	2.4	4.0	3.6	3.2	4.0	2.7	3.1	0.4	0.7	0.5	[illegible]
Average Speed (mph)	5.4	8.8	7.9	9.8	9.5	9.0	8.7	7.7	8.3	6.2	6.6	4.0	[illegible]
Fastest Mile													
-Direction (!!!)	SW	SW	W	SW	NW	NE	SW	SE	18	SE	NW	S	NW
-Speed (mph)	40	46	38	46	49	33	35	33	35	39	40	40	49
-Date	22	18	8	15	31	12	16	27	26	29	5	5	MAY 31
Peak Gust													
-Direction (!!!)	SE	W	S	SW	NW	NE	SW	SE	W	S	NW	S	S
-Speed (mph)	52	66	66	58	49	51	45	37	54	49	45	56	6[illegible]
-Date	16	18	7	15	31	12	22	27	24	29	5	5	MAR [illegible]

(!!!) See Reference Notes on Page 68

NORMALS, MEANS, AND EXTREMES

RENO, NEVADA

LATITUDE: 39°30'N LONGITUDE: 119°47'W ELEVATION: FT. GRND 4404 BARO 4402 TIME ZONE: PACIFIC WBAN: 23185

	(a)	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F:														
Normals														
-Daily Maximum		44.8	51.1	55.8	63.3	72.3	81.8	91.3	88.7	81.4	70.0	55.6	46.2	66.9
-Daily Minimum		19.5	23.5	25.4	29.4	36.9	43.0	47.7	45.2	38.9	30.5	23.8	18.9	31.9
-Monthly		32.2	37.3	40.6	46.4	54.6	62.4	69.5	67.0	60.2	50.3	39.7	32.5	49.4
Extremes														
-Record Highest	45	70	75	83	89	96	101	104	105	101	91	77	70	105
-Year		1967	1986	1966	1981	1986	1985	1980	1983	1950	1980	1980	1963	AUG 1983
-Record Lowest	45	-16	-12	-2	13	18	25	33	24	20	8	1	-16	-16
-Year		1949	1962	1945	1956	1964	1954	1976	1962	1965	1971	1958	1972	DEC 1972
NORMAL DEGREE DAYS:														
Heating (base 65°F)		1017	773	756	558	333	124	16	59	171	456	759	1008	6030
Cooling (base 65°F)		0	0	0	0	11	46	156	117	27	0	0	0	357
% OF POSSIBLE SUNSHINE	39	65	68	75	80	82	85	92	93	92	83	71	64	79
MEAN SKY COVER (tenths)														
Sunrise - Sunset	44	6.4	6.4	6.1	5.6	4.9	3.6	2.3	2.3	2.6	4.0	5.8	6.2	4.7
MEAN NUMBER OF DAYS:														
Sunrise to Sunset														
-Clear	44	8.5	6.8	8.2	8.8	12.1	16.8	22.3	22.1	20.7	15.7	9.3	8.2	159.4
-Partly Cloudy	44	7.1	7.5	9.2	10.0	9.8	7.6	6.1	6.3	5.7	7.7	7.8	7.8	92.6
-Cloudy	44	15.4	14.0	13.6	11.1	9.1	5.6	2.6	2.6	3.7	7.7	12.8	15.0	113.2
Precipitation .01 inches or more	44	6.1	5.9	6.4	4.1	4.3	3.1	2.4	2.3	2.5	3.0	5.0	6.0	51.0
Snow, Ice pellets 1.0 inches or more	44	2.1	1.5	1.6	0.5	0.3	0.0	0.0	0.0	0.*	0.2	0.8	1.3	8.3
Thunderstorms	44	0.0	0.*	0.1	0.3	1.9	2.6	3.6	2.9	1.2	0.5	0.0	0.0	13.3
Heavy Fog Visibility 1/4 mile or less	44	2.2	0.8	0.3	0.1	0.1	0.0	0.*	0.1	0.1	0.2	0.7	2.8	7.4
Temperature °F														
-Maximum														
90° and above	23	0.0	0.0	0.0	0.0	1.5	7.2	20.8	16.9	4.8	0.1	0.0	0.0	51.3
32° and below	23	3.2	0.3	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.7	7.8
-Minimum														
32° and below	23	27.8	24.7	24.8	19.2	6.7	0.7	0.0	0.2	4.7	18.9	24.1	28.0	179.6
0° and below	23	1.0	0.*	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.0
AVG. STATION PRESS. (mb)	14	868.1	866.5	864.0	864.8	864.7	865.6	866.8	866.6	866.4	868.0	867.3	868.7	866.5
RELATIVE HUMIDITY (%)														
Hour 04 (Local Time)	23	79	74	70	67	66	66	65	67	70	73	75	77	71
Hour 10 (Local Time)	23	70	59	49	39	33	31	28	30	35	42	58	67	45
Hour 16 (Local Time)	23	51	40	34	28	25	22	19	20	23	28	42	52	32
Hour 22 (Local Time)	23	73	63	56	49	44	40	36	39	47	56	66	72	53
PRECIPITATION (inches):														
Water Equivalent														
-Normal		1.24	0.95	0.74	0.46	0.74	0.34	0.30	0.27	0.30	0.34	0.60	1.21	7.49
-Maximum Monthly	45	4.13	4.84	2.02	2.04	2.89	1.31	1.06	1.65	2.31	2.14	3.08	5.25	5.25
-Year		1969	1986	1952	1958	1963	1965	1971	1965	1982	1945	1983	1955	DEC 1955
-Minimum Monthly	45	T	T	0.03	T	T	0.00	0.00	0.00	0.00	T	0.00	0.01	0.00
-Year		1966	1967	1972	1985	1985	1959	1951	1957	1974	1966	1959	1976	SEP 1974
-Maximum in 24 hrs	45	2.37	1.55	1.21	1.64	1.29	0.79	0.80	0.97	0.91	1.55	1.33	2.16	2.37
-Year		1943	1962	1943	1958	1963	1969	1949	1965	1982	1962	1981	1955	JAN 1943
Snow, Ice pellets														
-Maximum Monthly	45	20.0	23.5	29.0	7.5	14.1	0.2			1.5	5.1	16.5	25.6	29.0
-Year		1956	1969	1952	1958	1964	1970			1982	1971	1985	1971	MAR 1952
-Maximum in 24 hrs	45	12.0	13.9	16.9	7.3	9.0	0.2			1.5	3.7	15.4	14.9	16.9
-Year		1956	1959	1952	1958	1962	1970			1982	1971	1985	1971	MAR 1952
WIND:														
Mean Speed (mph)	44	5.6	6.2	7.7	8.2	7.9	7.5	6.9	6.4	5.7	5.3	5.5	5.2	6.5
Prevailing Direction through 1963		S	S	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	S	SW	WNW
Fastest Mile														
-Direction (!!!)	26	SW	SW	SW	SW	NW	N	SW	W	W	SW	S	SW	SW
-Speed (MPH)	26	80	66	80	48	48	50	44	47	43	74	51	63	80
-Year		1968	1975	1966	1982	1986	1985	1962	1984	1970	1985	1963	1963	JAN 1965
Peak Gust														
-Direction (!!!)	3	SE	W	SE	SW	NW	N	W	W	W	SW	SW	S	SW
-Speed (mph)	3	52	66	70	58	49	58	51	55	54	81	62	56	81
-Date		1986	1986	1984	1986	1986	1985	1985	1984	1986	1985	1984	1986	OCT 1985

(!!!) See Reference Notes on Page 6B.

PRECIPITATION (inches)

RENO, NEVADA

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	ANNUAL
1957	1.20	0.80	0.26	0.21	0.33	0.06	0.03	0.00	0.61	1.27	0.58	1.52	7.37
1958	0.78	1.70	1.76	2.04	0.25	0.45	0.22	0.56	0.49	T	0.38	0.24	8.87
#1959	0.64	2.80	0.07	T	1.84	0.00	0.05	0.09	0.04	T	0.00	0.45	5.98
1960	1.21	1.19	0.59	0.05	T	T	0.87	T	T	0.18	1.45	0.24	5.78
1961	0.80	0.30	0.40	0.27	0.91	0.56	0.30	0.47	0.39	0.15	0.64	0.18	5.37
1962	0.35	3.69	0.84	T	1.40	0.04	0.38	0.08	0.10	1.55	0.02	0.60	9.05
1963	2.51	1.09	0.41	0.82	2.89	1.10	T	0.17	0.18	0.24	1.44	0.08	10.93
1964	0.68	0.01	0.72	0.53	1.79	0.29	0.13	0.02	0.00	0.04	0.63	2.89	7.73
1965	1.64	0.01	0.98	0.27	0.18	1.31	0.35	1.65	0.50	0.02	1.62	1.19	9.72
1966	T	0.20	0.04	0.03	0.33	0.03	T	0.02	0.10	T	1.07	1.45	3.27
1967	2.11	T	1.93	0.35	0.47	0.59	0.57	1.22	0.82	0.04	0.22	0.55	9.47
1968	1.11	0.92	0.84	0.02	0.30	0.16	0.05	0.13	0.15	0.01	0.73	1.03	5.45
1969	4.13	1.74	0.07	0.10	0.20	1.29	0.17	T	0.01	0.40	0.04	2.07	10.22
1970	1.73	0.32	0.19	0.60	T	0.88	0.05	0.02	0.01	0.03	1.47	1.65	6.95
1971	0.75	0.33	1.54	0.59	2.38	0.09	1.06	0.09	0.10	0.44	0.24	2.97	10.58
1972	0.37	0.14	0.03	0.14	1.02	0.18	0.01	0.14	0.30	1.30	1.00	0.89	5.52
1973	1.54	1.66	0.73	0.13	0.75	0.07	0.27	0.48	0.01	0.56	1.74	1.27	9.21
1974	1.60	0.34	1.16	0.23	0.01	T	0.33	0.19	0.00	0.69	0.27	0.56	5.38
1975	0.32	1.74	1.59	0.62	0.21	0.21	0.03	1.03	0.92	0.15	0.12	0.01	6.05
1976	0.16	1.20	0.36	0.20	0.10	T	0.96	0.62	1.10	0.28	0.07	0.01	5.06
1977	0.67	0.71	0.19	T	1.24	1.03	0.07	0.01	0.01	0.14	0.23	2.54	6.84
1978	1.66	0.98	1.49	0.20	0.31	0.07	0.19	0.15	0.68	0.08	1.30	0.82	7.93
1979	0.66	0.82	0.52	0.41	0.16	T	0.58	0.38	T	0.31	0.17	2.02	6.03
1980	2.77	1.90	0.76	0.51	0.78	0.12	0.54	0.32	0.48	0.14	0.28	0.60	9.20
1981	0.85	0.21	0.58	0.21	0.57	T	0.01	0.36	0.07	0.64	2.13	1.05	6.68
1982	1.20	0.41	1.14	0.34	0.10	1.07	0.04	0.09	2.31	1.65	1.71	1.04	11.10
1983	1.72	1.58	1.31	1.35	0.21	0.53	T	0.78	0.84	0.36	3.08	1.47	13.23
1984	0.36	0.22	0.20	0.24	0.06	0.34	0.45	0.02	0.04	0.60	1.68	0.07	4.28
1985	0.24	0.68	1.07	T	T	0.12	T	0.01	0.63	0.46	1.23	0.55	4.99
1986	0.40	4.84	0.88	0.77	0.26	0.31	0.86	0.07	0.28	0.06	0.02	0.19	8.94
Record Mean	1.33	1.08	0.78	0.46	0.62	0.36	0.28	0.26	0.31	0.42	0.69	1.05	7.65

See Reference Notes on Page 68.

AVERAGE TEMPERATURE (deg. F)

RENO, NEVADA

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	ANNUAL
1957	25.8	38.9	42.4	45.7	53.5	64.9	68.6	65.0	61.5	46.8	36.5	35.2	48.7
1958	34.3	41.2	37.0	45.1	59.2	61.4	68.4	72.0	60.2	52.6	38.7	37.7	50.7
#1959	36.5	33.9	42.6	50.3	51.3	65.3	72.9	66.8	57.4	51.8	39.6	29.4	49.8
1960	27.5	36.1	44.3	48.2	51.7	65.2	70.4	65.5	61.0	48.9	40.1	32.1	49.3
1961	33.4	40.7	41.6	47.0	53.4	66.6	69.4	69.1	55.9	49.7	36.5	31.7	49.6
1962	26.7	34.1	39.6	50.1	51.5	61.7	67.0	61.5	60.8	51.2	40.8	33.9	48.3
#1963	28.2	44.4	40.5	41.8	57.2	59.0	65.1	64.7	63.3	52.4	40.2	35.1	49.3
1964	32.5	34.2	37.7	45.3	51.9	61.3	70.7	66.9	58.1	55.3	38.0	36.0	49.0
1965	33.6	40.1	43.2	49.6	54.0	59.2	66.1	65.8	54.9	52.4	41.6	29.9	49.2
1966	33.4	34.8	43.4	50.2	60.7	63.7	65.7	67.5	58.7	49.6	41.0	34.0	50.2
1967	37.0	40.3	40.6	40.3	54.9	59.9	69.6	71.0	62.6	51.0	42.7	28.3	49.8
1968	31.7	42.4	42.4	44.6	52.8	62.9	73.0	64.5	59.6	50.6	40.8	31.4	49.7
1969	37.0	34.2	40.7	48.4	58.1	62.0	70.8	68.8	63.4	45.3	39.0	36.7	50.4
1970	37.3	42.0	41.4	44.1	58.0	65.1	73.0	71.5	57.2	48.0	45.4	29.2	51.0
1971	33.0	36.9	40.9	45.9	50.9	59.7	71.5	70.7	56.5	45.8	37.5	26.6	48.0
1972	25.5	40.2	47.1	46.2	56.9	65.1	70.7	67.6	56.6	48.5	38.0	25.1	49.0
1973	28.4	37.7	37.9	43.8	58.8	64.3	70.1	67.4	58.5	49.2	42.8	38.3	49.8
1974	31.6	36.2	42.8	46.5	54.9	63.9	67.0	65.7	61.4	49.3	40.4	31.1	49.2
1975	32.3	34.1	38.4	39.9	54.2	62.4	70.4	64.8	64.2	49.5	35.9	33.8	48.3
1976	32.1	35.0	38.3	44.5	57.5	61.1	69.0	62.1	62.0	51.3	42.4	30.5	48.8
1977	32.3	40.0	38.1	51.3	48.5	68.6	69.5	69.8	60.7	52.2	41.9	38.3	51.0
1978	37.1	38.4	47.2	45.3	52.3	61.6	69.5	67.2	57.6	53.5	37.2	24.9	49.3
1979	28.9	36.9	41.9	46.9	57.1	63.9	69.9	67.7	64.2	54.0	38.0	35.5	50.4
1980	36.9	40.6	38.5	49.8	54.4	60.8	71.3	67.5	63.0	50.9	41.8	36.2	51.0
1981	36.1	38.8	41.7	50.7	57.5	68.3	67.9	69.4	64.7	46.9	42.5	39.0	52.0
1982	28.5	40.3	40.2	44.0	55.0	61.8	70.4	68.8	57.0	46.9	36.2	32.3	48.5
1983	34.2	38.6	40.5	43.8	53.3	62.5	67.2	69.9	62.9	54.1	41.2	38.8	50.6
1984	31.9	37.2	44.3	45.8	59.4	61.7	73.4	69.8	63.1	46.2	33.6	30.7	50.3
1985	30.6	37.0	38.7	52.7	58.5	68.9	73.4	63.0	57.4	50.4	34.8	31.0	50.6
1986	40.3	42.8	47.7	49.2	57.4	67.5	69.4	73.0	56.3	50.9	43.0	38.2	52.1
Record Mean	32.0	36.8	41.3	47.4	54.9	62.7	70.2	68.4	60.7	50.9	40.8	33.4	50.0
Max	43.7	49.2	54.8	62.4	70.5	79.9	89.4	87.7	79.1	67.9	55.2	45.4	65.4
Min	20.3	24.4	27.8	32.4	39.3	45.5	51.0	49.2	42.2	33.8	26.4	21.4	34.5

See Reference Notes on Page 68.

HEATING DEGREE DAYS Base 65 deg. F

RENO, NEVADA

SEASON	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1957-58	1	45	116	556	845	916	943	658	861	589	176	139	5845
1958-59	20	0	155	377	782	839	875	867	686	435	415	58	5509
#1959-60	6	44	244	404	757	1096	1156	832	638	497	405	42	6121
1960-61	5	78	127	493	742	1015	970	674	721	531	352	55	5763
1961-62	9	7	267	470	848	1024	1178	858	780	440	409	118	6408
1962-63	7	110	127	422	718	957	1134	572	750	691	237	182	5907
#1963-64	38	62	82	389	738	921	1002	887	840	585	400	135	6079
1964-65	6	28	203	296	802	892	968	695	667	454	336	174	5521
1965-66	34	31	298	383	694	1079	974	838	664	439	135	105	5674
1966-67	45	45	184	473	715	951	859	685	750	737	317	177	5938
1967-68	1	3	87	429	663	1132	1025	650	694	606	369	113	5772
1968-69	0	91	180	441	721	1033	861	856	745	494	208	104	5734
1969-70	5	12	79	605	772	871	851	638	724	622	216	90	5485
1970-71	0	0	234	519	585	1102	985	780	739	567	429	164	6104
1971-72	9	13	264	588	819	1184	1216	709	548	558	259	54	6221
1972-73	8	25	249	503	803	1229	1127	760	834	630	199	87	6455
1973-74	7	36	193	483	659	819	1027	800	680	545	310	73	5632
1974-75	52	42	120	478	733	1046	1006	858	818	746	332	113	6344
1975-76	26	65	51	477	868	961	1012	863	821	610	224	138	6116
1976-77	15	116	116	419	670	1062	1002	695	828	405	509	30	5867
1977-78	10	12	154	392	687	821	858	739	544	582	387	113	5299
1978-79	21	62	234	347	826	1236	1113	781	709	536	247	91	6203
1979-80	9	28	56	339	805	908	865	701	813	451	319	152	5446
1980-81	13	35	79	430	688	885	890	727	715	424	228	48	5162
1981-82	12	7	83	554	669	800	1123	687	760	623	307	133	5758
1982-83	15	11	278	556	855	1006	947	732	752	630	371	77	6230
1983-84	40	8	104	332	708	805	1019	801	637	570	183	133	5340
1984-85	0	8	111	575	753	1056	1060	781	810	359	266	45	5824
1985-86	5	12	230	446	896	1039	757	618	528	469	285	32	5317
1986-87	5	0	291	430	654	913							

See Reference Notes on Page 6B.

COOLING DEGREE DAYS Base 65 deg. F

RENO, NEVADA

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
1969	0	0	0	0	2	19	193	136	35	0	0	0	385
1970	0	0	0	0	6	100	256	210	7	0	0	0	579
1971	0	0	0	0	0	11	217	197	15	0	0	0	440
1972	0	0	0	0	12	65	191	113	4	0	0	0	385
1973	0	0	0	0	13	75	173	117	3	0	0	0	381
1974	0	0	0	0	2	47	118	71	20	0	0	0	258
1975	0	0	0	0	4	43	199	66	33	3	0	0	348
1976	0	0	0	0	0	25	144	34	33	0	0	0	236
1977	0	0	0	0	6	141	154	167	32	0	0	0	500
1978	0	0	0	0	0	16	166	139	19	0	0	0	340
1979	0	0	0	0	9	63	169	122	38	3	0	0	404
1980	0	0	0	0	2	32	218	119	25	1	0	0	397
1981	0	0	0	2	4	153	112	151	80	0	0	0	502
1982	0	0	0	0	2	45	188	135	47	0	0	0	417
1983	0	0	0	0	15	9	115	170	49	0	0	0	358
1984	0	0	0	0	16	42	164	132	51	0	0	0	405
1985	0	0	0	0	3	157	173	126	6	0	0	0	465
1986	0	0	0	0	53	112	148	253	39	0	0	0	605

See Reference Notes on Page 6B.

SNOWFALL (inches)

RENO, NEVADA

EASON	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	TOTAL
1957-58	0.0	0.0	0.0	2.0	3.1	3.1	1.0	4.6	10.0	7.5	0.0	0.0	31.3
1958-59	0.0	0.0	0.0	0.0	4.1	T	0.5	22.1	0.1	0.0	0.1	0.0	26.9
#1959-60	0.0	0.0	T	0.0	0.0	1.8	15.4	3.0	T	0.6	T	0.0	20.8
1960-61	0.0	0.0	0.0	0.4	2.0	T	2.6	T	1.1	0.6	0.0	0.0	6.7
1961-62	0.0	0.0	0.0	T	8.7	0.7	3.5	13.3	12.3	T	9.0	0.0	47.5
1962-63	0.0	0.0	0.0	T	T	T	1.7	0.0	3.4	5.9	T	T	11.0
1963-64	0.0	0.0	0.0	0.0	3.1	1.0	4.7	1.0	9.2	6.6	14.1	0.0	39.7
1964-65	0.0	0.0	0.0	0.0	5.2	8.0	5.2	T	4.6	T	T	0.0	23.0
1965-66	0.0	0.0	0.0	T	2.2	9.8	T	1.4	0.4	T	0.0	0.0	13.8
1966-67	0.0	0.0	0.0	0.0	T	5.8	12.4	T	15.6	6.8	1.5	0.0	42.1
1967-68	0.0	0.0	0.0	0.0	T	1.9	12.4	2.2	3.5	T	T	0.0	20.0
1968-69	0.0	0.0	0.0	0.0	1.3	9.1	10.7	23.5	1.9	0.3	T	0.0	46.8
1969-70	0.0	0.0	0.0	0.0	T	2.8	T	0.6	1.8	2.3	T	0.2	7.7
1970-71	0.0	0.0	0.0	0.2	T	15.4	11.4	4.9	7.0	3.3	5.3	0.0	48.5
1971-72	0.0	0.0	T	5.1	0.2	25.6	5.7	0.7	0.2	1.0	0.0	0.0	38.5
1972-73	0.0	0.0	0.0	T	T	8.8	11.9	8.2	6.5	0.7	T	0.0	36.1
1973-74	0.0	0.0	0.0	0.0	2.5	6.8	8.7	1.0	5.5	2.6	T	0.0	28.1
1974-75	0.0	0.0	0.0	0.0	0.0	4.0	2.7	19.0	12.1	4.8	2.2	T	44.8
1975-76	0.0	0.0	0.0	T	1.7	T	0.3	15.8	7.8	2.7	T	0.0	28.3
1976-77	0.0	0.0	0.0	0.0	0.0	0.5	0.7	1.4	1.2	T	2.9	0.0	6.7
1977-78	0.0	0.0	0.0	0.0	0.5	5.6	0.3	5.1	0.2	0.1	0.4	0.0	12.2
1978-79	0.0	0.0	T	0.8	9.7	9.1	6.4	3.9	0.2	1.1	0.3	0.0	31.5
1979-80	0.0	0.0	0.0	0.3	T	2.1	4.7	6.1	7.6	1.2	T	0.0	22.0
1980-81	0.0	0.0	0.0	T	T	T	3.9	T	2.2	T	0.0	0.0	6.1
1981-82	0.0	0.0	0.0	1.1	2.0	0.1	12.5	2.3	6.7	0.8	0.5	0.0	26.0
1982-83	0.0	0.0	1.5	0.0	8.6	1.8	1.5	1.0	3.0	2.9	3.5	0.0	23.8
1983-84	0.0	0.0	0.0	0.0	5.7	0.5	6.7	1.5	0.1	T	0.0	0.0	14.5
1984-85	0.0	0.0	0.0	3.4	3.0	1.3	4.3	0.8	7.0	T	T	0.0	19.8
1985-86	0.0	0.0	T	1.2	16.5	1.4	0.0	T	1.4	0.4	T	0.0	20.9
1986-87	0.0	0.0	T	0.0	0.2	0.6							
Record Mean	0.0	0.0	T	0.4	2.3	4.3	5.9	4.7	4.9	1.4	1.0	T	24.9

See Reference Notes on Page 6B.

REFERENCE NOTES

RENO, NEVADA

GENERAL
T - TRACE AMOUNT.
BLANK ENTRIES DENOTE MISSING/UNREPORTED DATA.
# INDICATES A STATION OR INSTRUMENT RELOCATION.
SEE STATION LOCATION TABLE ON PAGE 8.

SPECIFIC
PAGE 2
PM - INCLUDES LAST DAY OF PREVIOUS MONTH

PAGE 3
(a) - LENGTH OF RECORD IN YEARS, ALTHOUGH INDIVIDUAL MONTHS MAY BE MISSING.
* LESS THAN .05
NORMALS - BASED ON THE 1951-1980 RECORD PERIOD.
EXTREMES - DATES ARE THE MOST RECENT OCCURRENCE.
WIND DIR. - NUMERALS SHOW TENS OF DEGRESS CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM.
RESULTANT DIRECTIONS ARE GIVEN TO WHOLE DEGREES.

EXCEPTIONS

PAGE 3
1. PERCENT OF POSSIBLE SUNSHINE IS THROUGH 1973 AND 1984 TO DATE.
PAGES 4A, 4B, 6A
RECORD MEANS ARE THROUGH THE CURRENT YEAR, BEGINNING IN 1888 FOR TEMPERATURE
1870 FOR PRECIPITATION
1943 FOR SNOWFALL

FEB 1986
RENO, NEVADA
NAT'L WEA SER FCST OFC
601 S. ROCK BLVD.

ISSN 0198-3334

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

CANNON INTERNATIONAL AP

LATITUDE 39°30' LONGITUDE 119°47' ELEVATION (GROUND) 4404 FEET TIME ZONE PACIFIC 23185

DATE 1	TEMPERATURE °F MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEPARTURE FROM NORMAL 5	AVERAGE DEW POINT 6	DEGREE DAYS BASE 65°F HEATING (SEASON BEGINS WITH JULY) 7A	COOLING (SEASON BEGINS WITH JAN) 7B	WEATHER TYPES 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW 8	SNOW ICE PELLETS OR ICE ON GROUND AT 0400 INCHES 9	PRECIPITATION WATER EQUIVALENT (INCHES) 10	SNOW, ICE PELLETS (INCHES) 11	AVERAGE STATION PRESSURE IN INCHES ELEV. 4400 FEET ABOVE M.S.L. 12	WIND (M.P.H.) RESULTANT DIR. 13	RESULTANT SPEED 14	AVERAGE SPEED 15	FASTEST MILE SPEED 16	FASTEST MILE DIRECTION 17	SUNSHINE MINUTES 18	PERCENT OF TOTAL POSSIBLE 19	SKY COVER (TENTHS) SUNRISE TO SUNSET 20	MIDNIGHT TO MIDNIGHT 21	DATE 22
01	57	30	44	9	25	21	0		0	0.00	0.0	25.550	24	2.3	7.0	15	S	385	63	8	6	01
02	47	35	41	6	27	24	0		0	0.22	T	25.520	18	8.3	14.3	44	SE	93	15	9	6	02
03	46	32	39	4	26	26	0		0	T	T	25.530	31	2.4	10.2	33	SE	185	30	10	7	03
04	47	30	39	3	25	26	0		0	0.00	0.0	25.660	29	0.1	4.0	7	W	338	55	9	8	04
05	49	23	36	0	23	29	0		0	T	T	25.560	32	6.4	11.1	25	NW	461	74	8	7	05
06	38	22	30	-6	17	35	0		T	0.00	0.0	25.595	36	6.2	8.3	14	NW	351	56	7	6	06
07	36	19	28	-8	16	37	0		0	T	T	25.510	07	2.7	6.0	12	NE	93	15	9	7	07
08	38	20	29	-7	11	36	0		0	0.00	0.0	25.510	05	5.5	7.0	15	N	572	91	2	3	08
09	42	14*	28*	-9	11	37	0		0	0.00	0.0	25.570	11	1.2	3.6	6	NE	630	100	0	0	09
10	52	15	34	-3	13	31	0		0	0.00	0.0	25.480	29	7.9	11.2	31	W	632	100	2	1	10
11	48	20	34	-3	14	31	0		0	0.00	0.0	25.460	36	1.2	5.5	13	W	71	11	10	8	11
12	52	31	42	5	28	23	0		0	0.02	T	25.310	19	7.8	11.7	44	S	44	7	10	10	12
13	56	38	47	10	28	18	0		0	0.22	0.0	25.400	23	5.3	10.0	41	W	555	87	5	8	13
14	65	40	53	15	38	12	0		0	0.53	0.0	25.240	19	12.5	16.6	41	S	221	34	10	10	14
15	46	38	42	4	36	23	0		0	0.75	0.0	25.160	18	13.3	15.3	35	S	75	12	10	10	15
16	55	40	48	10	34	17	0		0	0.22	0.0	25.335	18	11.4	15.1	27	S	332	51	9	8	16
17	55	43	49	11	40	16	0	1	0	0.96	0.0	25.310	19	11.3	14.9	32	W	0	0	10	10	17
18	55	37	46	8	39	19	0		0	0.83	0.0	25.340	25	8.6	12.7	46	SW	0	0	10	10	18
19	46	36	41	3	35	24	0	1	0	1.06	T	25.300	19	6.2	11.5	28	SW	30	5	10	10	19
20	49	35	42	4	29	23	0		0	0.03	T	25.550	28	6.0	9.4	26	SE	342	52	9	7	20
21	53	32	43	5	28	22	0		0	0.00	0.0	25.740	11	1.1	5.6	10	W	455	69	8	7	21
22	59	39	49	10	30	16	0		0	0.00	0.0	25.770	29	4.2	9.0	20	NW	530	80	8	7	22
23	65	33	49	10	36	16	0		0	0.00	0.0	25.810	03	0.7	5.7	8	N	575	87	9	6	23
24	71	33	52	13	38	13	0		0	0.00	0.0	25.790	22	1.6	3.8	14	NW	666	100	0	0	24
25	71	36	54	15	36	11	0		0	0.00	0.0	25.820	03	0.8	5.0	10	N	420	63	9	7	25
26	71	34	53	14	36	12	0		0	0.00	0.0	25.760	18	1.9	3.7	8	S	491	73	8	7	26
27	74	36	55	16	37	10	0		0	0.00	0.0	25.700	27	0.5	4.3	11	NE	600	89	8	8	27
28	75*	34	55*	16	34	10	0		0	0.00	0.0	25.610	24	1.5	4.0	15	NW	595	88	1	2	28
	SUM 1518	SUM 875				TOTAL 618	TOTAL 0	NUMBER OF DAYS		TOTAL 4.84	TOTAL T	FOR THE MONTH: 25.530	21	2.5	8.8	46	SW	TOTAL 9742	% FOR MONTH 208	SUM 186		
	AVG. 54.2	AVG. 31.3	AVG. 42.8	DEP. 5.4	AVG. 28.2	DEP. -155	DEP. 0	PRECIPITATION > .01 INCH	10	DEP. 3.89						DATE: 18		POSSIBLE 18013		AVG. 7.4	AVG. 6.6	

NUMBER OF DAYS				SEASON TO DATE	
MAXIMUM TEMP.		MINIMUM TEMP.		TOTAL	TOTAL
≥ 90°	≤ 32°	≤ 32°	≤ 0°	4003	0
0	0	12	0	DEP. -256	DEP. 0

SNOW, ICE PELLETS > 1.0 INCH	0
THUNDERSTORMS	0
HEAVY FOG	0
CLEAR 5	PARTLY CLOUDY 2 CLOUDY 21

GREATEST IN 24 HOURS AND DATES			
PRECIPITATION		SNOW, ICE PELLETS	
1.45	18-19	trace	19-20+

GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE	
T	07+

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT.
+ ALSO ON EARLIER DATE(S).
HEAVY FOG: VISIBILITY 1/4 MILE OR LESS.
BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.

DATA IN COLS 6 AND 12-15 ARE BASED ON 21 OR MORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. ONE OF THREE WIND SPEEDS IS GIVEN UNDER FASTEST MILE: FASTEST MILE - HIGHEST RECORDED SPEED FOR WHICH A MILE OF WIND PASSES STATION (DIRECTION IN COMPASS POINTS). FASTEST OBSERVED ONE MINUTE WIND - HIGHEST ONE MINUTE SPEED (DIRECTION IN TENS OF DEGREES). PEAK GUST - HIGHEST INSTANTANEOUS WIND SPEED (A / APPEARS IN THE DIRECTION COLUMN). ERRORS WILL BE CORRECTED AND NOTED IN SUBSEQUENT PUBLICATIONS.

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE, NORTH CAROLINA, 28801

Kenneth D. Hadeen
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

noaa
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

FEB 1986
RENO, NEVADA

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

FEB 1986 RENO, NEVADA 23185

DATE	A.M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P.M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12
01																								
02							T	0.02	0.03	0.09	T		0.02	0.05	0.01									
03												T	T	T	T									
04																								
05																T		T	T	T	T			
06																								
07										T	T	T	T	T	T									
08																								
09																								
10																								
11																								
12						T	T	T	T	T	T							T	T	T	T	T	0.01	0.01
13	0.10	0.08	T	T	T	0.04	T																	T
14	T	T	0.01	0.01	T		T	T	T	T	T			T	0.01	0.05	0.18	0.16	0.11	T	T	T		
15	T	0.02	0.04	0.16	0.02	0.05	0.01	T	T	0.01	0.07	0.01	0.01	T	0.01	0.01	0.07	0.05	0.03	0.02	0.01	0.02	0.10	0.03
16	0.05	0.07	T									T	T		T	0.01	0.01	0.01	0.01	0.02	0.01	0.02	T	0.01
17	0.08	0.05	0.05	0.06	0.02	0.03	0.03	0.01	T	0.01	0.05	0.03	0.02	0.01	0.06	0.06	0.04	0.04	0.13	0.09	0.03	0.04	0.01	0.01
18	T	T	T	0.01	T	T	0.01	T	0.01	0.01	0.02	0.02	T	T	0.01	0.06	0.02	0.05	0.07	0.08	0.09	0.04	0.12	0.21
19	0.13	0.13	0.12	0.12	0.03	0.02	0.02	T	T	0.03	T	0.02	0.01	0.04	0.04	0.02	0.02	0.04	0.09	0.08	0.02	0.02	0.03	0.03
20	0.02	0.01	T						T	T	T													
21																								
22																								
23																								
24																								
25																								
26																								
27																								
28																								

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.03	0.05	0.06	0.08	0.12	0.17	0.22	0.26	0.30	0.35	0.40	0.47
ENDED: DATE	19	19	19	19	19	19	19	19	19	19	19	19
ENDED: TIME	0119	0009	0009	0009	0009	0009	0015	0034	0054	0115	0143	0159

THE PRECIPITATION AMOUNTS FOR THE INDICATED TIME INTERVALS MAY OCCUR AT ANY TIME DURING THE MONTH. THE TIME INDICATED IS THE ENDING TIME OF THE INTERVAL. DATE AND TIME ARE NOT ENTERED FOR TRACE AMOUNTS.

SUBSCRIPTION PRICE AND ORDERING INFORMATION AVAILABLE FROM:
THE NATIONAL CLIMATIC DATA CENTER, FEDERAL BUILDING
ASHEVILLE, NORTH CAROLINA 28801
ATTN: PUBLICATIONS

RENO, NEVADA
USCOMM - NOAA - ASHEVILLE, NC 320

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC DATA CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

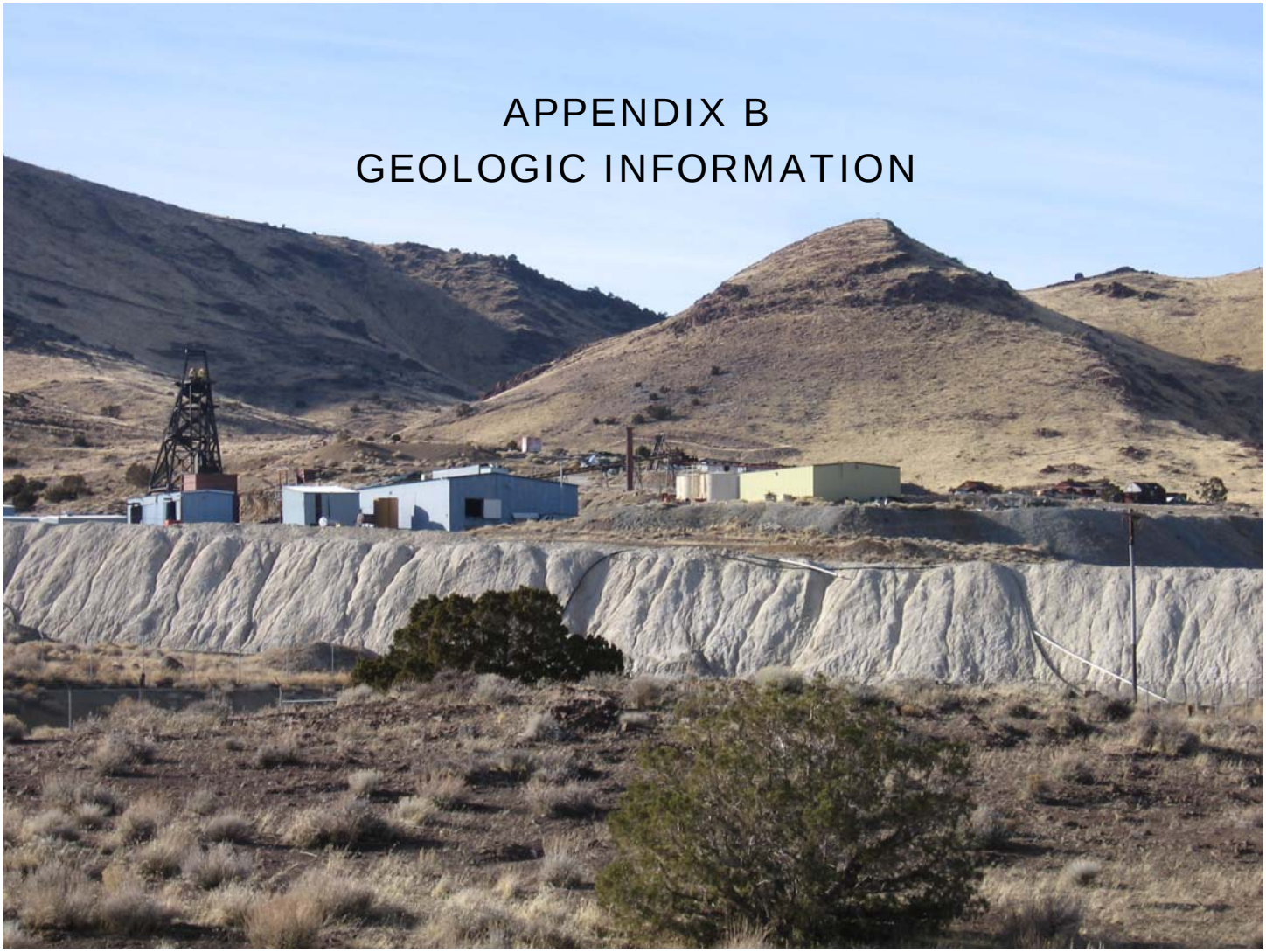
AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM 210

U.S.MAIL

FIRST CLASS

APPENDIX B
GEOLOGIC INFORMATION



GOOSEBERRY MINE
BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA

3.0 DESIGN CRITERIA

3.1 Topography

The project site is at 5,350 feet above sea level where surrounding relief rises some 1,000 feet. The dip of the leach pad area is approximately 6.4 percent. Map 4 shows the topography on and around the project sites on 1 inch equals 50 feet. Map 2 is the USGS quadrangle including all waterways, streams, springs, and seeps around the project. The lone drinking water source presently or historically developed is located at the current mill, in the form of bottled water. No other potable water is near the project site.

3.2 Geology & Mineralogy

Gold and silver mineralization at the Gooseberry Mine is restricted to a narrow, pinching and swelling calcite-quartz vein. The vein, which averages 7.5 feet in width, has a very weak expression on the surface. Underground, over 3,000 feet of strike length and 1,150 feet of dip length have been exposed. The average strike of the vein is N65°W and generally dips 80° to the south. Local changes in strike and/or dip created dilation zones which caused the pinching and swelling nature of the vein. This also created voids into which mineralizing solutions entered forming ore shoots. These ore shoots plunge shallowly to the west and can have strike lengths up to 800 feet and dip lengths of up to 500 feet.

Mineralization occurred in at least three stages. A barren massive calcite was deposited first. A second stage dominated by quartz was accompanied by pyrite, argentite, electrum and native gold. The third stage was barren massive calcite. Calcite makes up 80 to 90 percent of the vein throughout the mine.

The Gooseberry vein crosscuts a series of dacite and andesite volcanic flows called the Kate Peak Formation. The unaltered Kate Peak Formation is up to 1,500 feet thick in areas adjacent to the mine.

The Kate Peak flows have been altered to a propylitic alteration assemblage in an envelope up to 400 feet thick around the vein.

This description of the ore body geology is included to describe the type of material from which the mill tailings

resulted. Generally, flotation recovery of gold and silver values from an original ore feed at 7.5 Ag oz./ton, 0.17 Au oz./ton resulted in tailings at 1.00 Ag oz./ton, 0.025 Au oz./ton. Report 3.1 is a 32 element ICP of a sample taken from the mill tailings.

3.3 Lithology

The stratigraphy of Gooseberry can be generalized as being within a sequence of Tertiary volcanic flows, flow breccias, tuff breccia, laharic flows, volcanic conglomerates and agglomerates locally intruded by pyroxene andesites to rhyodacites. Intercalated sedimentary beds of shale, shaley sandstone, waterlain ash fall tuff and lenses of diatomite are also included within this collection of units and are collectively characterized as the Kate Peak Formation.

A field investigation of the site was conducted by Wahler Associates in 1983 to provide lithology and to test physical properties of materials in the general site area. The field investigation program consisted of geologic mapping, backhoe and dozer trenching work and drilling exploration. The field program was directed to assess the foundation conditions and availability of borrow materials.

Mapping was performed using a 1"-200' topographic base provided by Asamera Minerals (U.S.) Inc. Trenching and test pitting work was performed using a Caterpillar D-9 equipped with a single ripper and a Dynahoe backhoe. This work was performed on November 15 to 18, 1983. The test pits were logged by A.S. Buangan, engineering geologist with Wahler Associates. A total of 29 test pits were excavated and logged. The locations of the test pits are shown on Figure 3.1 and the test pit logs are included in Reports 3.2. Samples were obtained and transported to the Palo Alto laboratory for testing.

Drilling was performed on December 9-10, 1983, using a CME75 hollow-stem auger supplied by Erickson-Ford Drilling Co., of Boise, Idaho, under subcontract to Asamera Minerals (U.S.), Inc. Two holes were drilled in the channel foundation area to depths of 25 and 35 feet. Undisturbed samples were obtained by pushing 3-inch diameter thin-wall tubes and transported to Palo Alto for laboratory testing. Disturbed samples were also obtained using the standard penetration test. In the proposed impoundment area, 4 auger holes were drilled to assess the depth of potential borrow materials. These hole depths ranged from 15 to 30 feet.

The locations of these holes are shown on Figure 3.1 and the boring logs are included in Report 3.2. Map 3 includes soils information at the site and Report 3.3 describes the soils located on the map.

3.4 Surface and Ground Water Hydrology

A previous study on the ground water supply for Gooseberry Mine and vicinity was performed by Hydro-Search, Inc. in 1976 (1976a and 1976b). This investigation indicates that ground water occurrence in the Kate Peak Formation is related to fracture permeability and alteration, rather than to intergranular porosity. For example, the Well #4A, principal water bearing fractured rocks were encountered at depth intervals of 150 to 190 feet, 265 to 285 feet, 300 to 372 feet, and 455 to 485 feet. Pumping tests in this well indicated a low transmissivity value (608 gpd/ft). The apparent lack of influence of pumping on water levels in nearby wells suggests that fractures contributing ground water to Well #4A are not in efficient hydraulic communication with the overall fracture system in the surrounding rocks. This well and other wells south of the proposed impoundment were abandoned because of low yield and low production.

During our investigation on November 18, 1983, water levels were measured at 155 feet in Well #4A and 95 feet in Well #3. On December 9, 1983, water levels were measured at 150 feet in Well #4A, 108 feet in Well #4 and 79 feet in Well #3. Ground water was also encountered in exploration borings drilled on December 9 and 10, 1983, at depths of 19.5 feet (DH-1), 18.6 feet (DH-2), 14.5 feet (DH-3) and 14.0 feet (DH-4). These borings were located near the stream channel. Ground water occurs in the weathered bedrock and appears to be confined along the contact of the decomposed volcanics and the rockier zones.

A strong seepage area was noted during field exploration along the toe of the south portion of the existing pond and is apparently related to seepage along the contact of the natural materials and embankment materials of the tailings impoundment.

In test pits located in the channel (TP-12 and TP-13), strong flows were encountered in the alluvial materials. Slow seeps were also noted in the decomposed dacite adjoining the drainage channel at shallow depths.

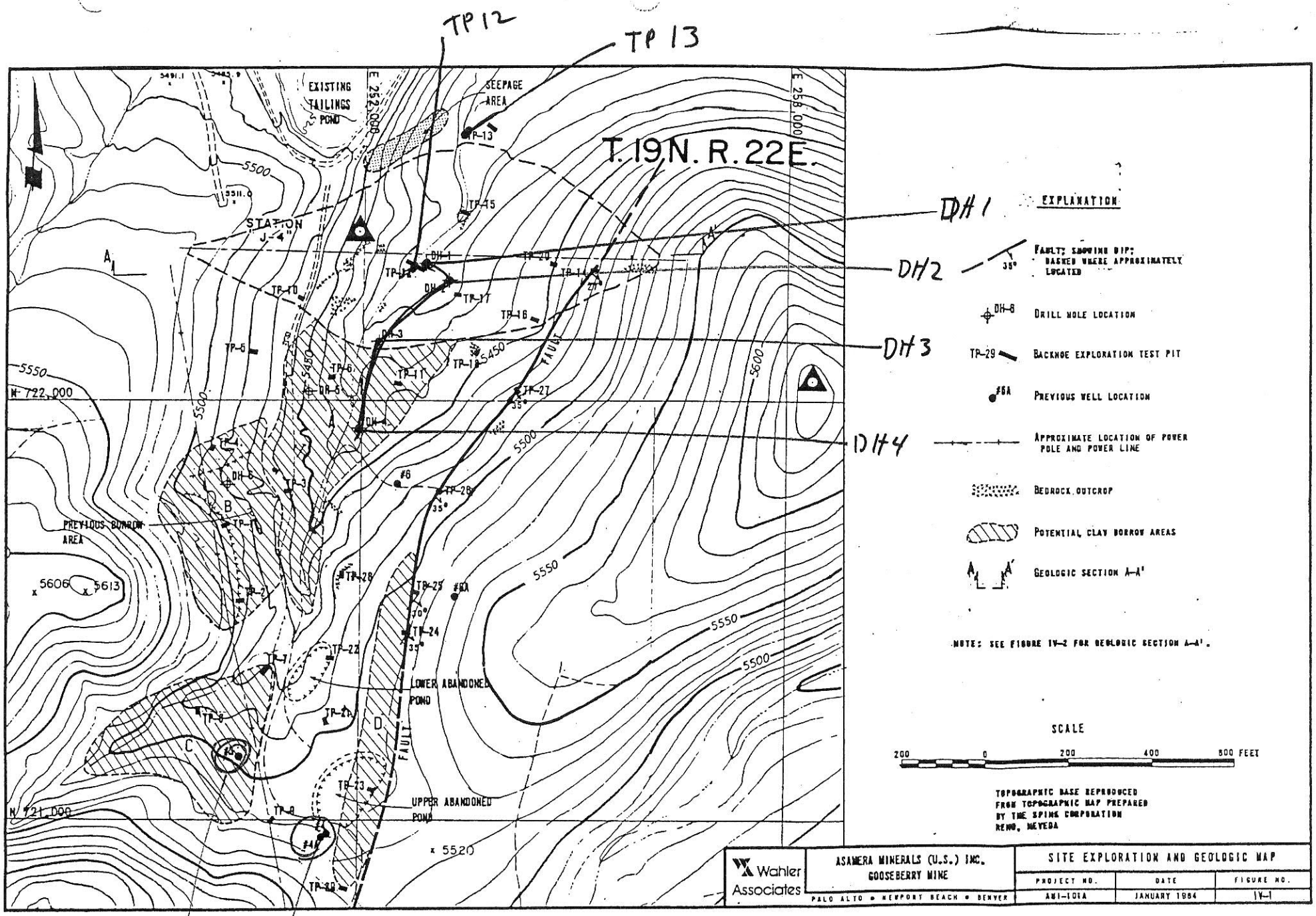

TP 12
TP 13
DH 1
DH 2
DH 3
DH 4
#3
#4A
T.19N. R.22E.
EXISTING TAILINGS POND
SEEPAGE AREA
STATION J-4
PREVIOUS BORROW AREA
LOWER ABANDONED POND
UPPER ABANDONED POND
FAULT
E 252,000
E 258,000
N 722,000
N 721,000
5500
5550
5600
5450
5606
5613
5520
EXPLANATION
FAULT; SHOWING DIP; DASHED WHERE APPROXIMATELY LOCATED
DRILL HOLE LOCATION
BACKHOE EXPLORATION TEST PIT
PREVIOUS WELL LOCATION
APPROXIMATE LOCATION OF POWER POLE AND POWER LINE
BEDROCK OUTCROP
POTENTIAL CLAY BORROW AREAS
GEOLOGIC SECTION A-A'
NOTE: SEE FIGURE IV-2 FOR GEOLOGIC SECTION A-A'.
SCALE
200 0 200 400 600 FEET
TOPOGRAPHIC BASE REPRODUCED FROM TOPOGRAPHIC MAP PREPARED BY THE SPINK CORPORATION RENO, NEVADA
Wahler Associates
PALO ALTO • NEWPORT BEACH • DENVER
ASAMERA MINERALS (U.S.) INC.
GOOSEBERRY MINE
SITE EXPLORATION AND GEOLOGIC MAP
PROJECT NO. AMI-101A
DATE JANUARY 1984
FIGURE NO. IV-1

FIGURE 3.1

The project site is located in Storey County, Nevada, about six miles south of Clark and twenty miles east of Reno. The nearest weather station operated by the Weather Bureau is located in Reno.

This part of Nevada is generally arid to semi-arid, due primarily to the shadowing effect of the Sierra Nevada Mountains. Most of the approximately seven inches average annual precipitation (1921 to 1950 data, U.S. Department of Commerce, 1960) falls as light snow during the winter months and as infrequent, but high intensity, thunderstorms during the summer.

The design flood for the tailings project derives from such thunderstorm. It is likely that the precipitation would occur with an intensity great enough to preclude a significant amount of seepage into the soil; rather, the water would tend to run off as sheet flow. The 100-year, 24-hour storm precipitation is estimated at 2.8 inches (U.S. National Weather Services, 1973). The 25 year, 24-hour storm precipitation is estimated at 2.2 inches.

3.5 **Climate**

The Gooseberry Mine is located some seven miles south of the Truckee River drainage in the semi-arid Pah Rah Mountains. Temperatures, on a whole, are mild, but the difference between the high and low often exceeds 45 degrees. Afternoon highs may exceed 90 degrees with night lows rarely over 60 degrees.

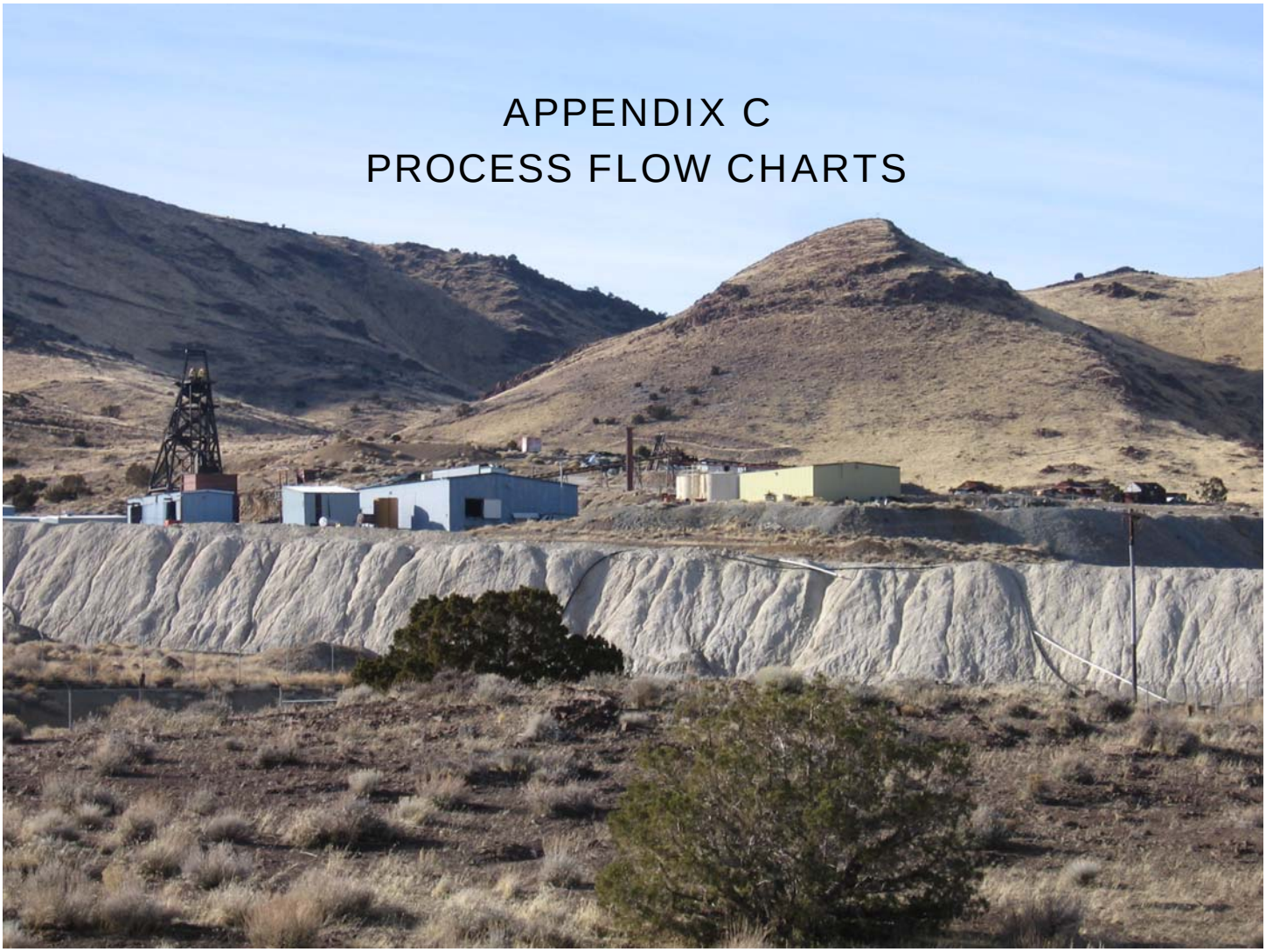
Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is September 16 and the average last occurrence in the spring is June 1.

More than half of the precipitation occurs mainly as mixed rain and snow, and falls from December to March. Although there is an average of about 25 inches of snow a year, it seldom remains on the ground for more than three or four days at a time. Summer rain comes mainly as brief thunderstorms in the middle and late afternoons. While precipitation is scarce, considerable water is available from the high altitude reservoirs in the Sierra Nevada where precipitation is heavy.

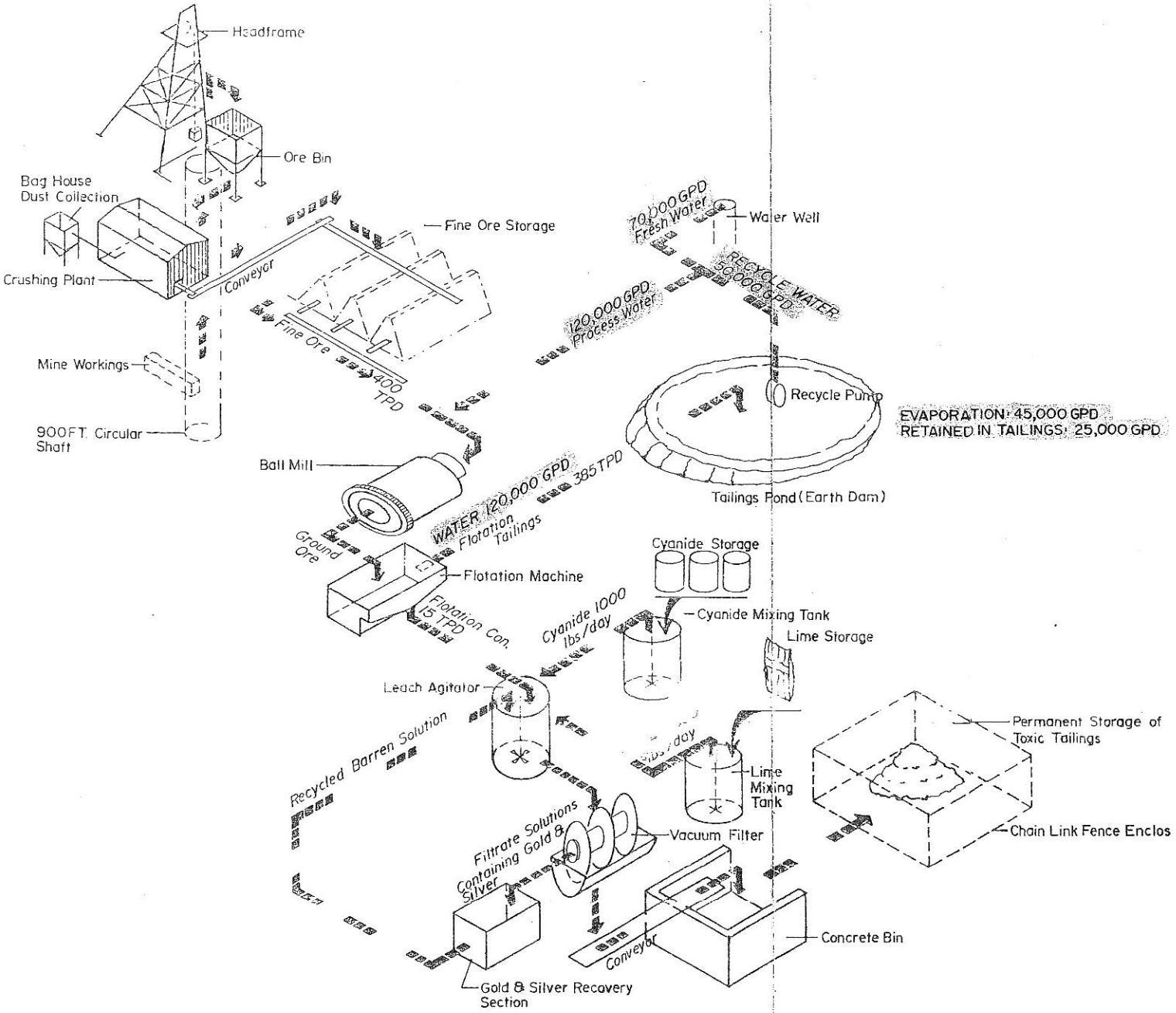
Humidity is very low during the summer months and moderately low during the winter. Fogs are rare and usually confined to the early morning hours of midwinter. Sunshine is abundant throughout the year.

Report 3.4 includes climatological data for the nearest weather station located in Reno, Nevada.

APPENDIX C
PROCESS FLOW CHARTS



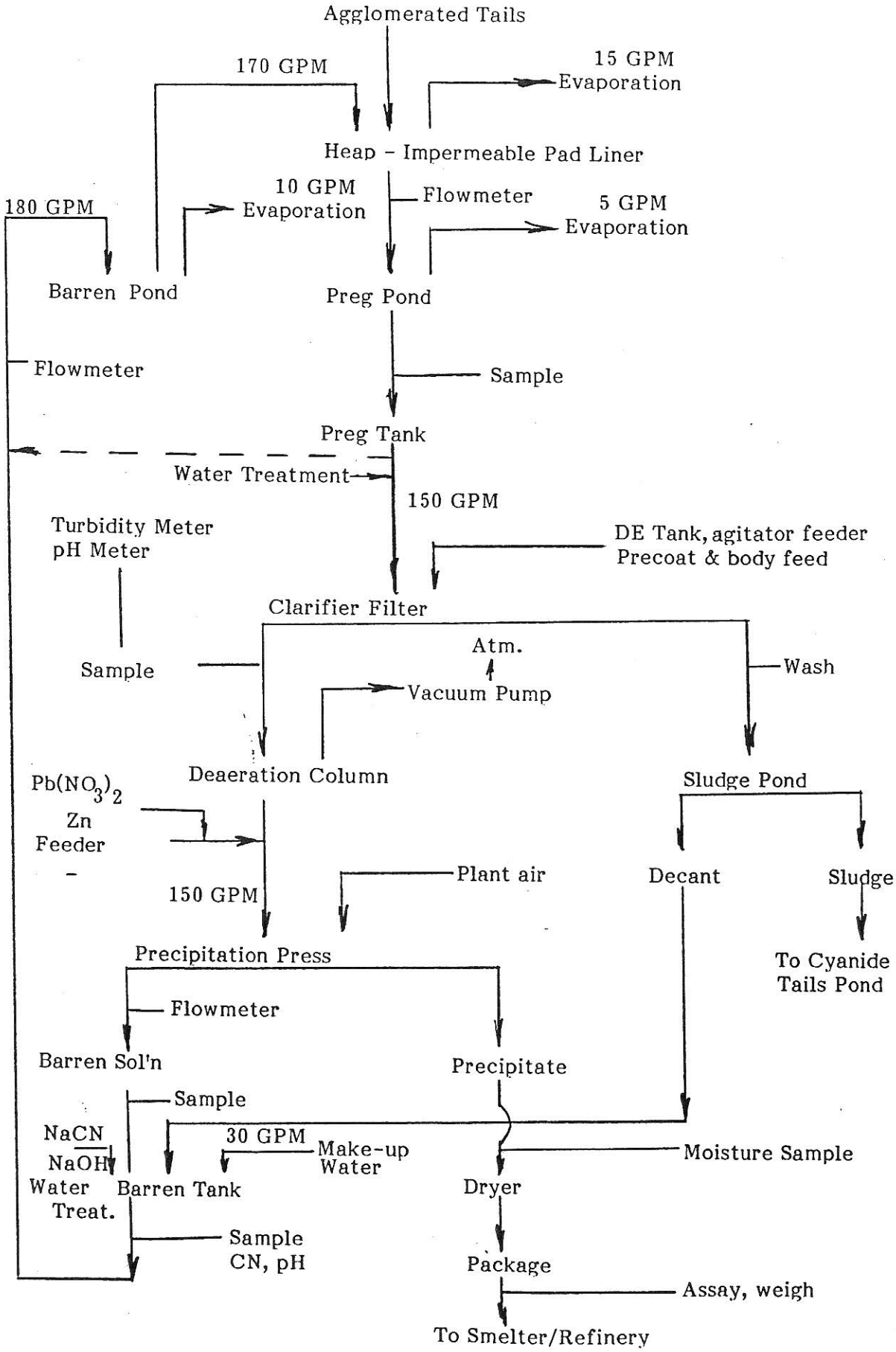
GOOSEBERRY MINE
BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA



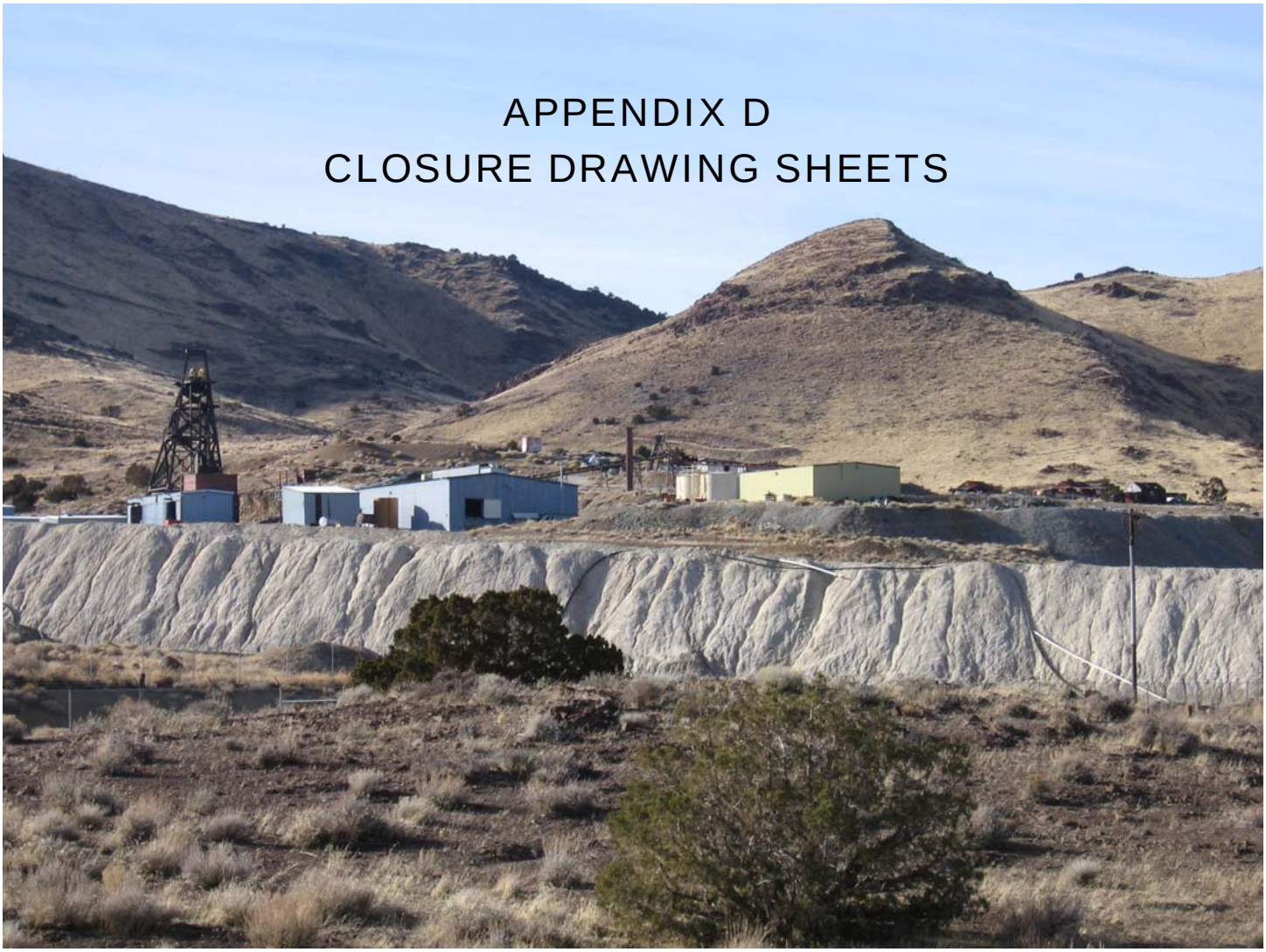
Flow Chart
of
Gooseberry Mine and Ore Processing Plant

GOOSEBERRY
Heap Leach

Recovery Plant flowsheet



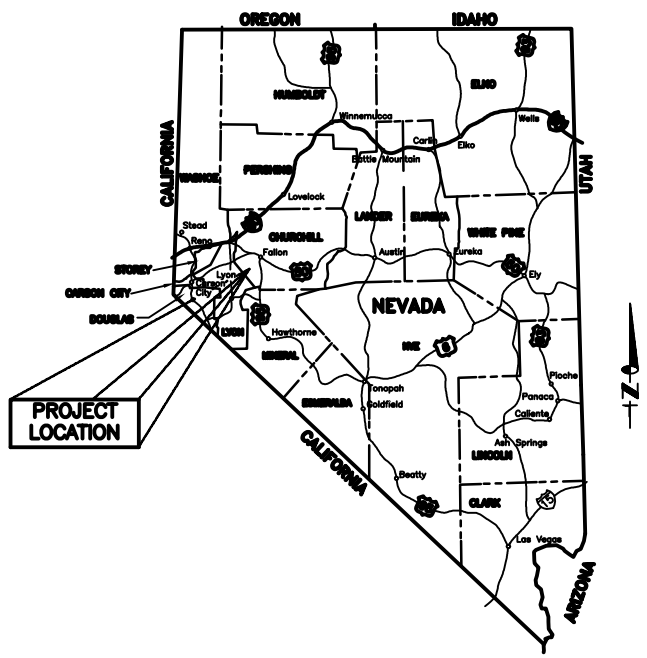
APPENDIX D
CLOSURE DRAWING SHEETS



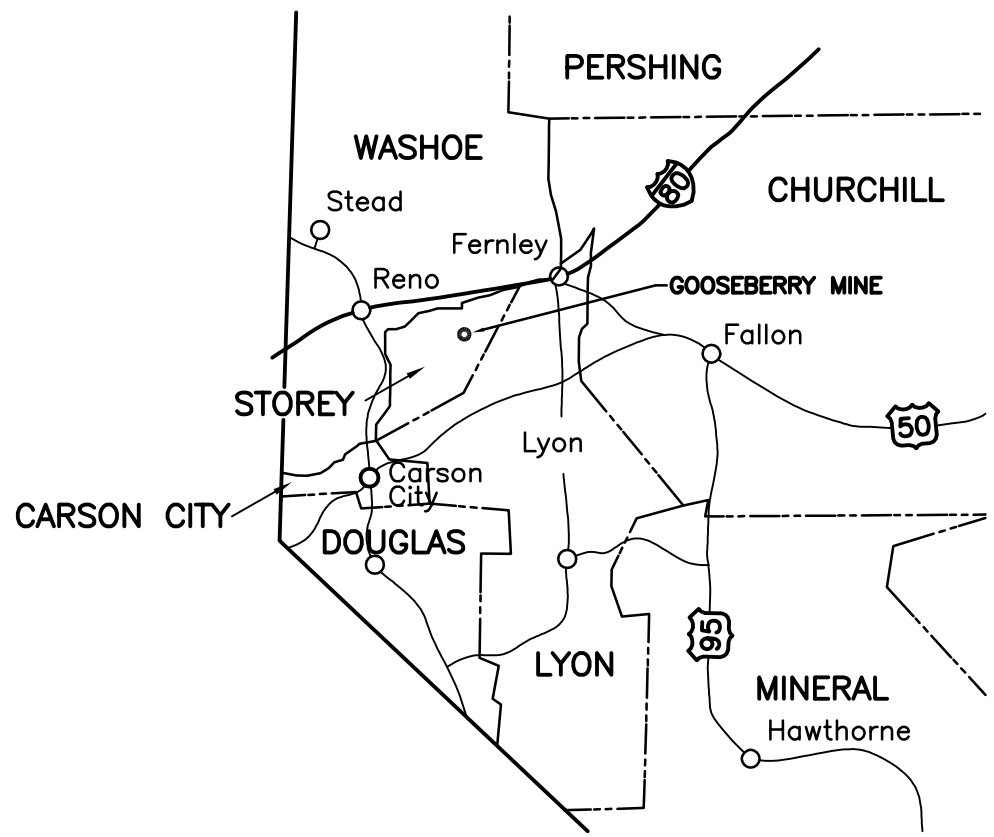
GOOSEBERRY MINE
BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA

amec

STATE OF NEVADA
DIVISION OF ENVIRONMENTAL PROTECTION
GOOSEBERRY MINE HEAP LEACH PAD & TAILINGS CLOSURE
STOREY COUNTY, NEVADA
NOVEMBER 2007



VICINITY MAP
N.T.S.



LOCATION MAP
SCALE: NTS

SHEET INDEX

1.	CV01	COVER SHEET
2.	SITE	SITE PLAN
3.	GRD1	PRELIMINARY GRADING & UNDER DRAINS
4.	GRD2	HEAP LEACH PAD & EVAPORATION POND GRADING
5.	GRD3	ASAMERA TAILING POND GRADING & DRAINAGE DITCH
6.	GRD4	REWORKED TAILING POND GRADING
7.	PRO1	DRAINAGE DITCH PROFILE & SECTIONS
8.	DT01	DETAIL SHEET
9.	DT02	DETAIL SHEET
10.	DT03	DETAIL SHEET

REVISIONS:

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

COVER SHEET

PROJECT:
GOOSEBERRY MINE
STOREY COUNTY, NEVADA
STOREY COUNTY, NEVADA

DESIGNER: MPF
DRAWN BY: DTC

PROJECT NO.
05-2007-005

005-CV01

SHEET NO.
1
of 10

SITE PLAN

SCALE: 1"=200'

LEGEND FOR NON-ANNOTATED FEATURES:

- INDEX CONTOUR
- APPROXIMATE INDEX
- INDEX DEPRESSION
- INTERMEDIATE CONTOUR
- APPROXIMATE INTERMEDIATE
- INTERMEDIATE DEPRESSION
- EDGE OF PAVEMENT
- DIRT ROAD
- JEEP/FOOT TRAIL
- CURB LINE
- GUTTER/CONCRETE EDGE
- GUARD-RAIL
- RAILROAD
- FENCE
- NEW FENCE
- RETAINING WALL
- FENCE ON RW
- BLOCK WALL
- MEDIAN WALL
- STONE WALL
- TRENCH/STOPE
- TAILINGS/TOE
- PIPELINE
- WATER EDGE
- INTERMITTENT DRAINAGE
- DITCH
- MISCELLANEOUS BOUNDARIES
- TREELINE
- BRUSHLINE
- N,E,Z CONTROL POINT
- Z ONLY CONTROL POINT
- SURVEY MONUMENT
- POWER POLES
- POLE ANCHOR
- TRANSMISSION TOWER
- LIGHT POLE
- POST/POLE
- SIGN
- FIRE HYDRANT
- MANHOLE
- VALVE COVER
- TRAFFIC SIGNAL
- R.R./CROSSWALK SIGNAL
- MAIL BOX
- MISC. OBJECT
- METER
- MARSH
- PROSPECT/EXCAVATION
- SHAFT
- UTIL. VAULT/BOX
- METER BOX
- BUILDING
- DECK
- COVERED AREA
- SHED
- BLDG. UNDER CONSTR.
- PROPOSED CONT-INDEX
- PROPOSED CONT-INTER
- 5390 CONTOUR LABEL
- BORING LOCATION

REVISIONS:

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

SITE PLAN

PROJECT:
GOOSEBERRY MINE
STOREY COUNTY, NEVADA
STOREY COUNTY, NEVADA

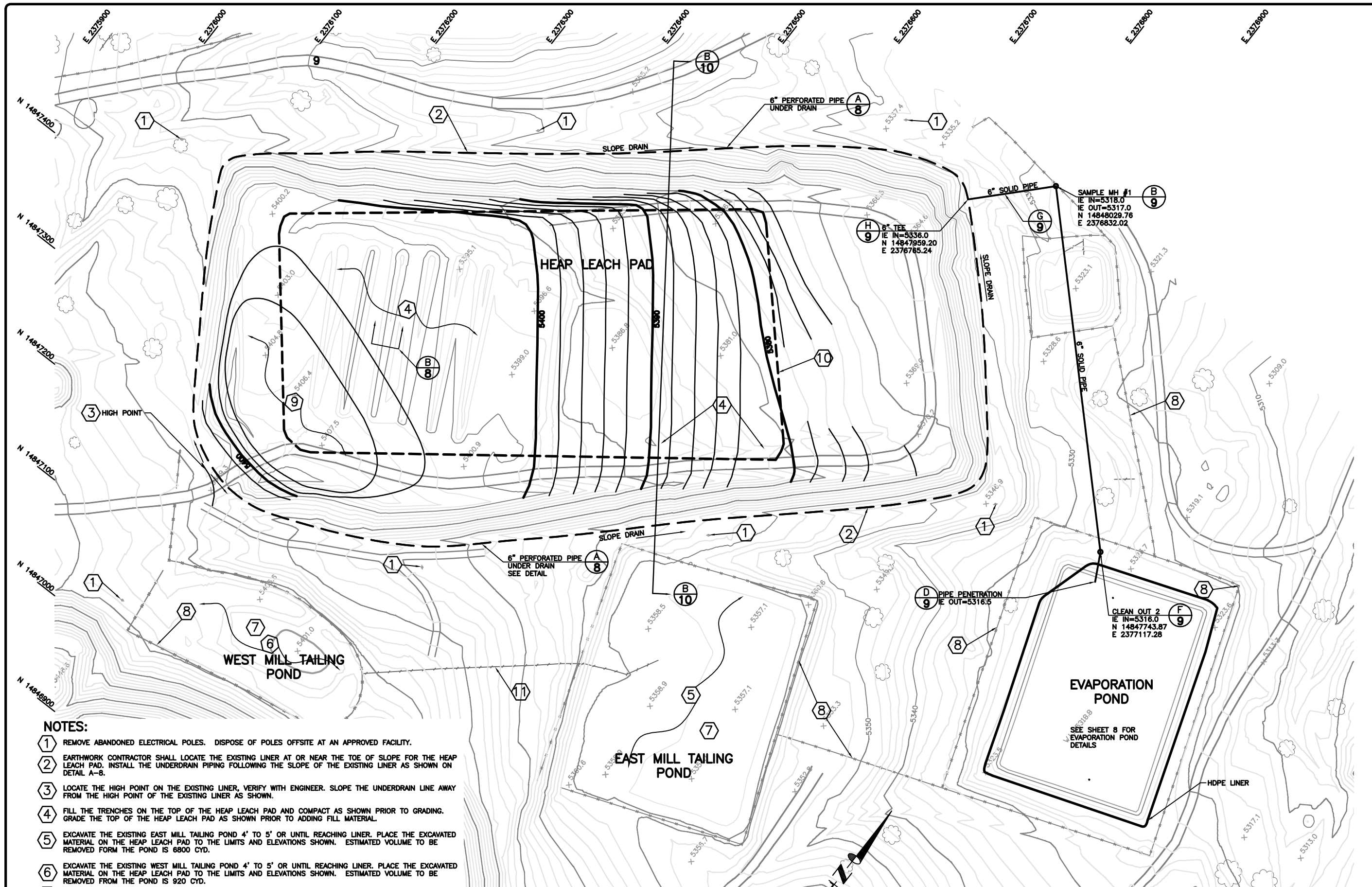
DESIGNER: MPF
DRAWN BY: DTC

PROFESSIONAL ENGINEER STATE OF NEVADA
ADEL MABROUK
EXP:
CIVIL
No.18518 NEVADA

PROJECT NO.
05-2007-005

005-SITE

SHEET NO.
2
of 10



NOTES:

1. REMOVE ABANDONED ELECTRICAL POLES. DISPOSE OF POLES OFFSITE AT AN APPROVED FACILITY.
2. EARTHWORK CONTRACTOR SHALL LOCATE THE EXISTING LINER AT OR NEAR THE TOE OF SLOPE FOR THE HEAP LEACH PAD. INSTALL THE UNDERDRAIN PIPING FOLLOWING THE SLOPE OF THE EXISTING LINER AS SHOWN ON DETAIL A–8.
3. LOCATE THE HIGH POINT ON THE EXISTING LINER, VERIFY WITH ENGINEER. SLOPE THE UNDERDRAIN LINE AWAY FROM THE HIGH POINT OF THE EXISTING LINER AS SHOWN.
4. FILL THE TRENCHES ON THE TOP OF THE HEAP LEACH PAD AND COMPACT AS SHOWN PRIOR TO GRADING. GRADE THE TOP OF THE HEAP LEACH PAD AS SHOWN PRIOR TO ADDING FILL MATERIAL.
5. EXCAVATE THE EXISTING EAST MILL TAILING POND 4' TO 5' OR UNTIL REACHING LINER. PLACE THE EXCAVATED MATERIAL ON THE HEAP LEACH PAD TO THE LIMITS AND ELEVATIONS SHOWN. ESTIMATED VOLUME TO BE REMOVED FORM THE POND IS 6800 CYD.
6. EXCAVATE THE EXISTING WEST MILL TAILING POND 4' TO 5' OR UNTIL REACHING LINER. PLACE THE EXCAVATED MATERIAL ON THE HEAP LEACH PAD TO THE LIMITS AND ELEVATIONS SHOWN. ESTIMATED VOLUME TO BE REMOVED FROM THE POND IS 920 CYD.
7. REMOVE THE POND LINER FROM EAST & WEST MILL TAILING PONDS AND DISPOSE OFF SITE.
8. REMOVE THE EXISTING FENCE. COORDINATE THE LIMITS OF REMOVAL WITH THE FENCE INSTALLATION SHOWN ON SHEET 4.
9. GRADE THE TAILINGS ON THE SOUTHWEST CORNER OF THE HEAP LEACH PAD TO THE ELEVATIONS SHOWN.
10. PLACE EXCAVATED MATERIAL FROM THE PONDS WITHIN THE LIMITS SHOWN. PLACE TAILINGS ALONG THE SIDES OF THE POND MATERIAL AS NEEDED TO OBTAIN THE GRADES SHOWN.
11. REMOVE THE EXISITING DRAIN PIPE & BACKFILL TRENCH TO GRADE AS REQUIRED.

PRELIMINARY GRADING

SCALE: 1"=50'

REVISIONS:

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786–5873
FAX (775) 786–6138

PRELIMINARY GRADING AND UNDER DRAINS

PROJECT: GOOSEBERRY MINE
STOREY COUNTY, NEVADA

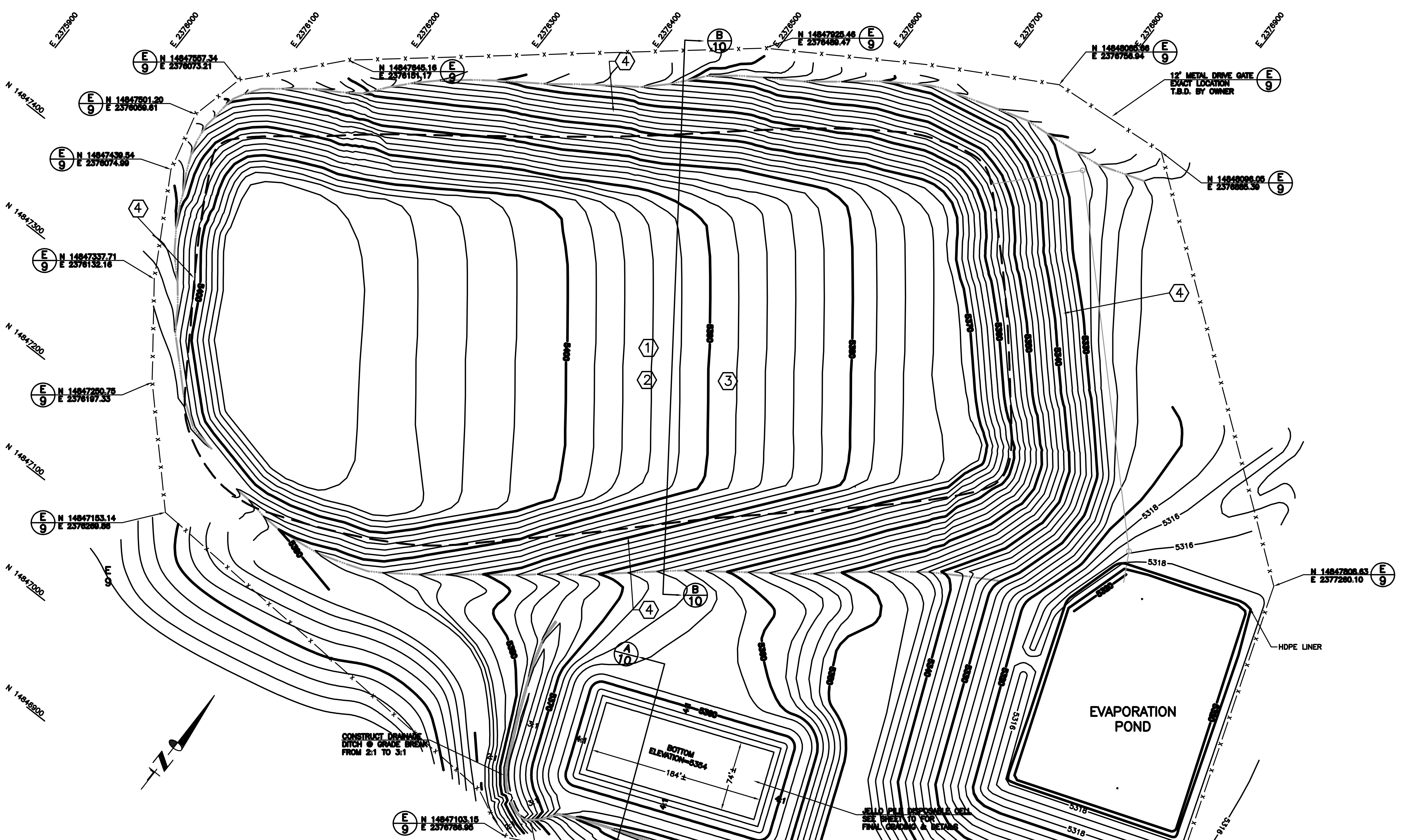
DESIGNER: MPF
DRAWN BY: DTC

PROFESSIONAL ENGINEER–STATE OF NEVADA
ADEL MABROUK
EXP:
CIVIL
No.18518 NEVADA

PROJECT NO.
05–2007–005

005-GRD1

SHEET NO.
3
of 10



NOTES:

1. GRADING FOR THE HEAP LEACH PAD IS BASED ON THE ESTIMATED FILL FROM THE PONDS. FINAL GRADES WILL BE ADJUSTED AS REQUIRED BASED ON ACTUAL FILL VOLUMES.
2. COMPACT THE TAILINGS PRIOR TO PLACING 2' COVER WITH A 10 TON MINIMUM VIBRATOR COMPACTOR A MINIMUM OF THREE PASSES. WATER MAY BE ADDED ONLY AS NEEDED TO FACILITATE COMPACTION & TO PREVENT DUST DURING COMPACTION.
3. PROVIDE A MINIMUM 2' COVER WITH CLEAN FILL MATERIAL ABOVE THE TAILINGS AND FILL.
4. SIDE SLOPES ON THE HEAP LEACH PAD SHALL BE NO STEEPER THAN 3:1.

FINAL COVER
HEAP LEACH PAD

SCALE: 1"=50'

REVISIONS:

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

HEAP LEACH PAD & EVAPORATION POND GRADING

PROJECT: GOOSEBERRY MINE
STOREY COUNTY, NEVADA
STOREY COUNTY, NEVADA

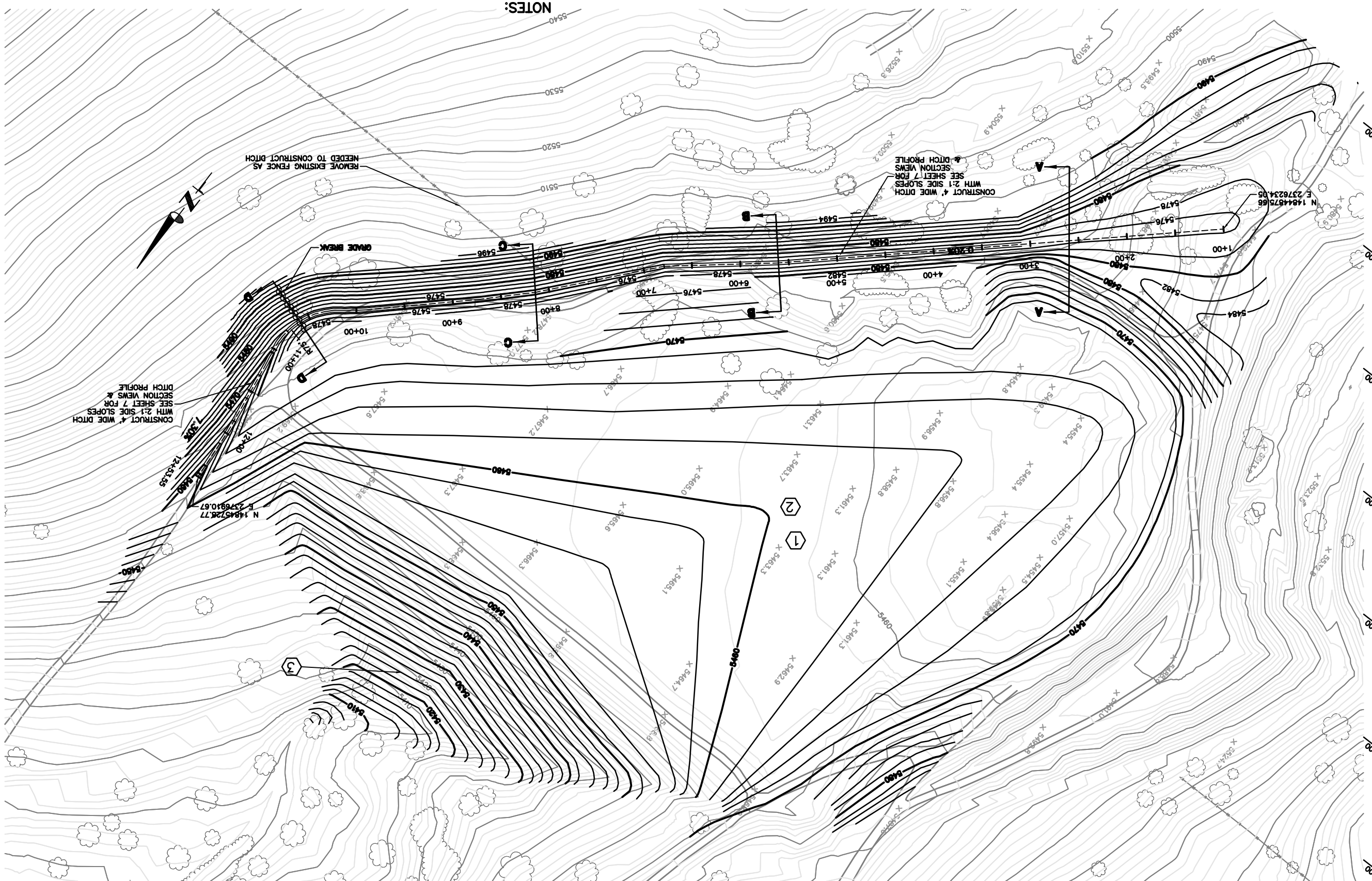
DESIGNER: MPF
DRAWN BY: DTC

PROFESSIONAL ENGINEER STATE OF NEVADA — ADEL MABROUK — EXP: ____ — CIVIL — No.18518

PROJECT NO. 05-2007-005

005-GRD2

SHEET NO. 4 of 10



ASAMERA TAILING POND & NEW DRAINAGE DITCH

SCALE: 1"=50'

NOTES:

1. GRADING SHOWN IS FOR FINISHED GRADE. CONTRACTOR SHALL GRADE THE TAILING TO AT LEAST 2' BELOW THE ELEVATIONS SHOWN.
2. PLACE FILL IN THE POND IN 1' FOOT MAXIMUM LIFTS, COMPACTED TO 85% MAXIMUM UNIT WEIGHT TO 1' FOOT BELOW THE FINAL ELEVATION SHOWN.
3. SLOPE ON REGRADED DAM SHALL BE NO GREATER THAN 3:1

ASAMERA TAILING POND GRADING & DRAINAGE DITCH

PROJECT:

GOOSEBERRY MINE
STOREY COUNTY, NEVADA
STOREY COUNTY, NEVADA

DESIGNER: MPF
DRAWN BY: DTC

ADEL HARBOUK
CIVIL
No. 18518
STATE OF NEVADA
PROFESSIONAL ENGINEER

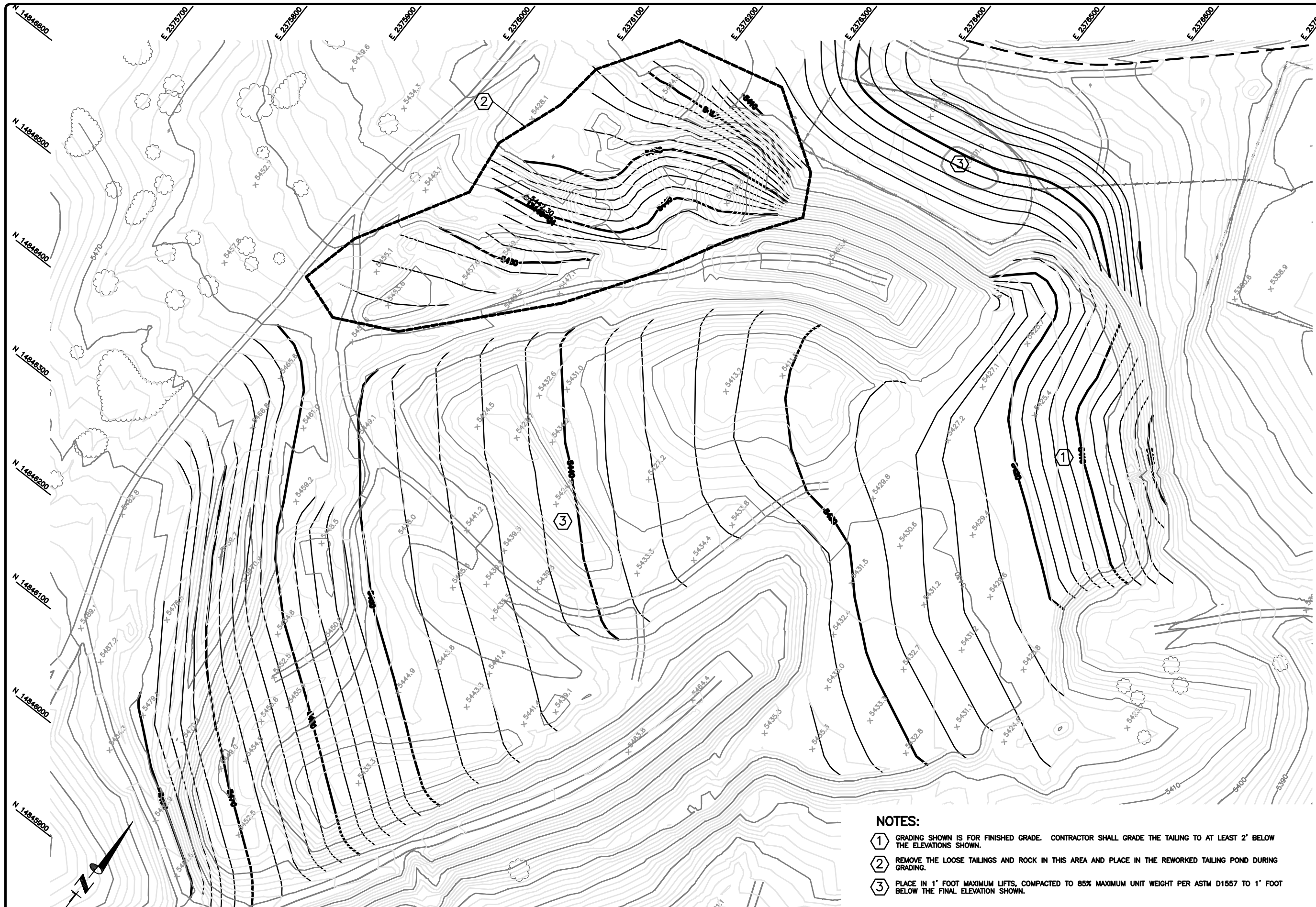
PROJECT NO.
05-2007-005

006-GRD3

SHEET NO.
5
of 10

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

REVISIONS:



NOTES:

1. GRADING SHOWN IS FOR FINISHED GRADE. CONTRACTOR SHALL GRADE THE TAILING TO AT LEAST 2' BELOW THE ELEVATIONS SHOWN.
2. REMOVE THE LOOSE TAILINGS AND ROCK IN THIS AREA AND PLACE IN THE REWORKED TAILING POND DURING GRADING.
3. PLACE IN 1' FOOT MAXIMUM LIFTS, COMPACTED TO 85% MAXIMUM UNIT WEIGHT PER ASTM D1557 TO 1' FOOT BELOW THE FINAL ELEVATION SHOWN.

REWORKED TAILING POND

SCALE: 1"=50'

REVISIONS:

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

amec

REWORKED TAILING POND GRADING

PROJECT:
GOOSEBERRY MINE
STOREY COUNTY, NEVADA
STOREY COUNTY, NEVADA

DESIGNER: MPF
DRAWN BY: DTC

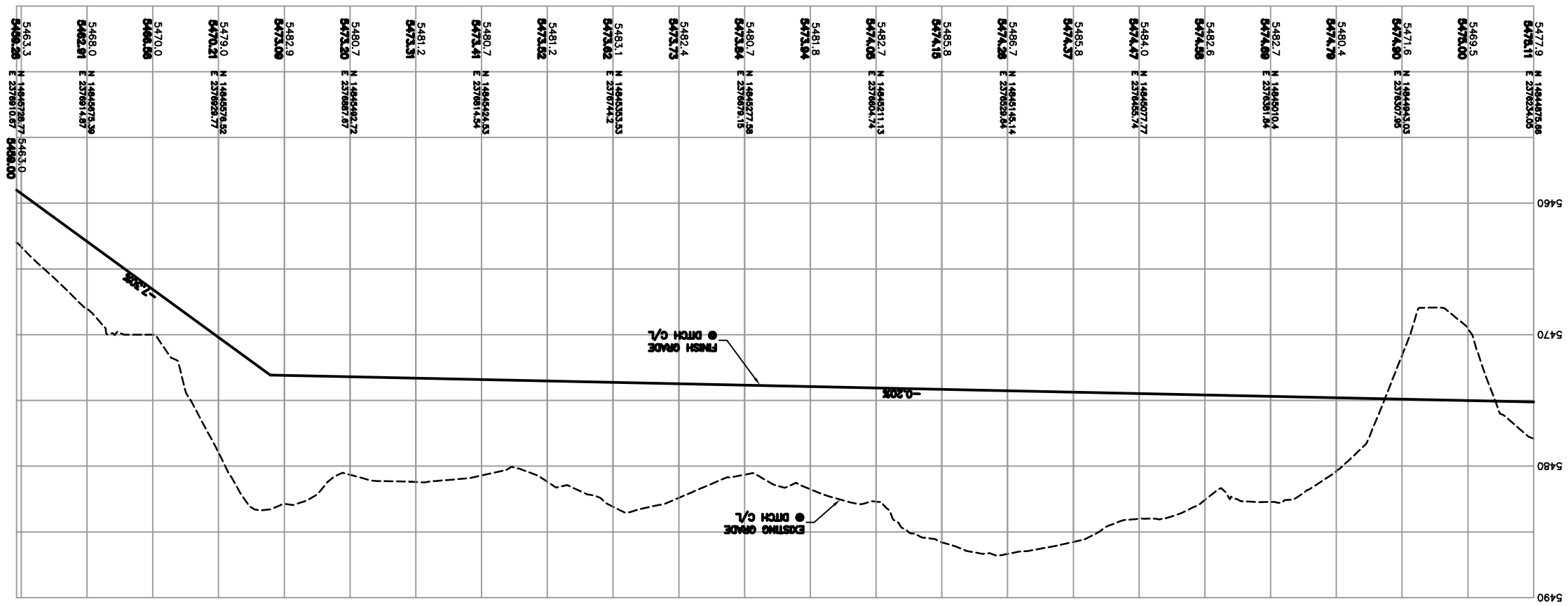
PROFESSIONAL ENGINEER-STATE OF NEVADA
ADEL MABROUK
EXP:
CIVIL
No.18519

PROJECT NO.
05-2007-005

005-GRD4

SHEET NO.
6
of 10

DITCH C/L PROFILE VIEW



50 25 0 50 100

37.5 12.5

HORZ. SCALE: 1" = 50'

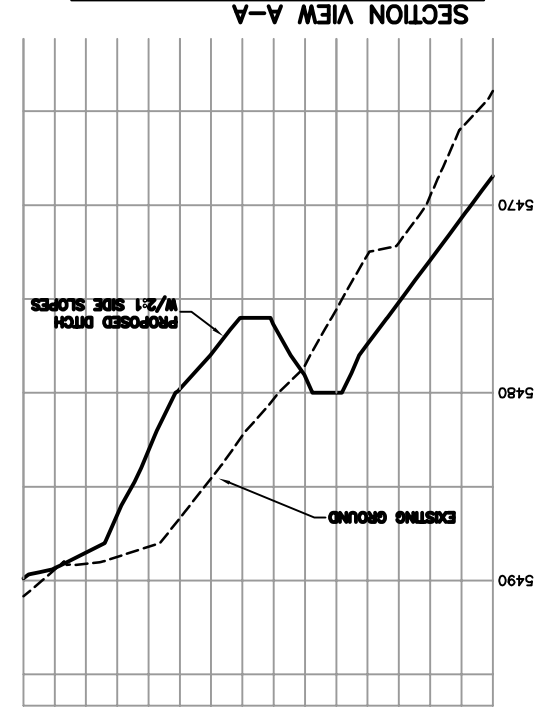
VERT. SCALE: 1" = 5'

SECTION VIEW A–A

STA: 2+59.71

SCALE: HOR. 1"=30'

VERTICAL 1"=5'

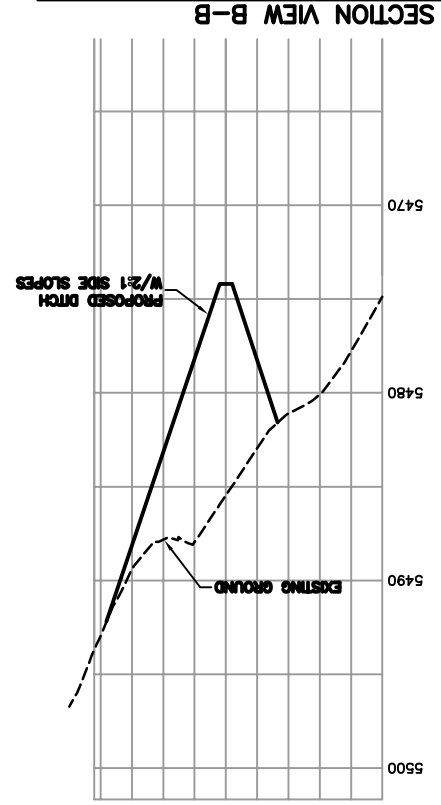


SECTION VIEW B–B

STA: 5+60.63

SCALE: HOR. 1"=30'

VERTICAL 1"=5'

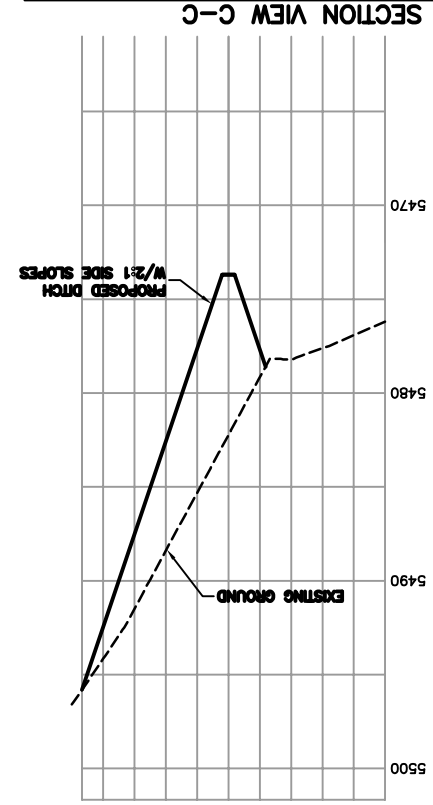


SECTION VIEW C–C

STA: 8+14.34

SCALE: HOR. 1"=30'

VERTICAL 1"=5'

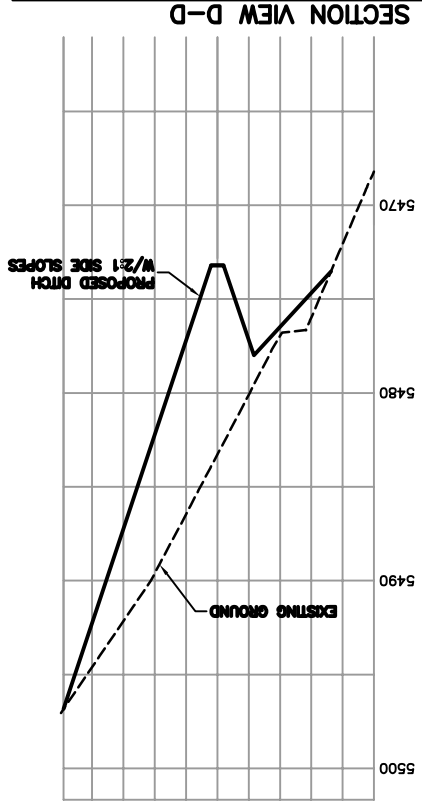


SECTION VIEW D–D

STA: 10+60.76

SCALE: HOR. 1"=30'

VERTICAL 1"=5'



AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

amec

REVISIONS:

DRAINAGE DITCH PROFILE & SECTIONS

PROJECT:

GOOSEBERRY MINE
STOREY COUNTY, NEVADA
STOREY COUNTY, NEVADA

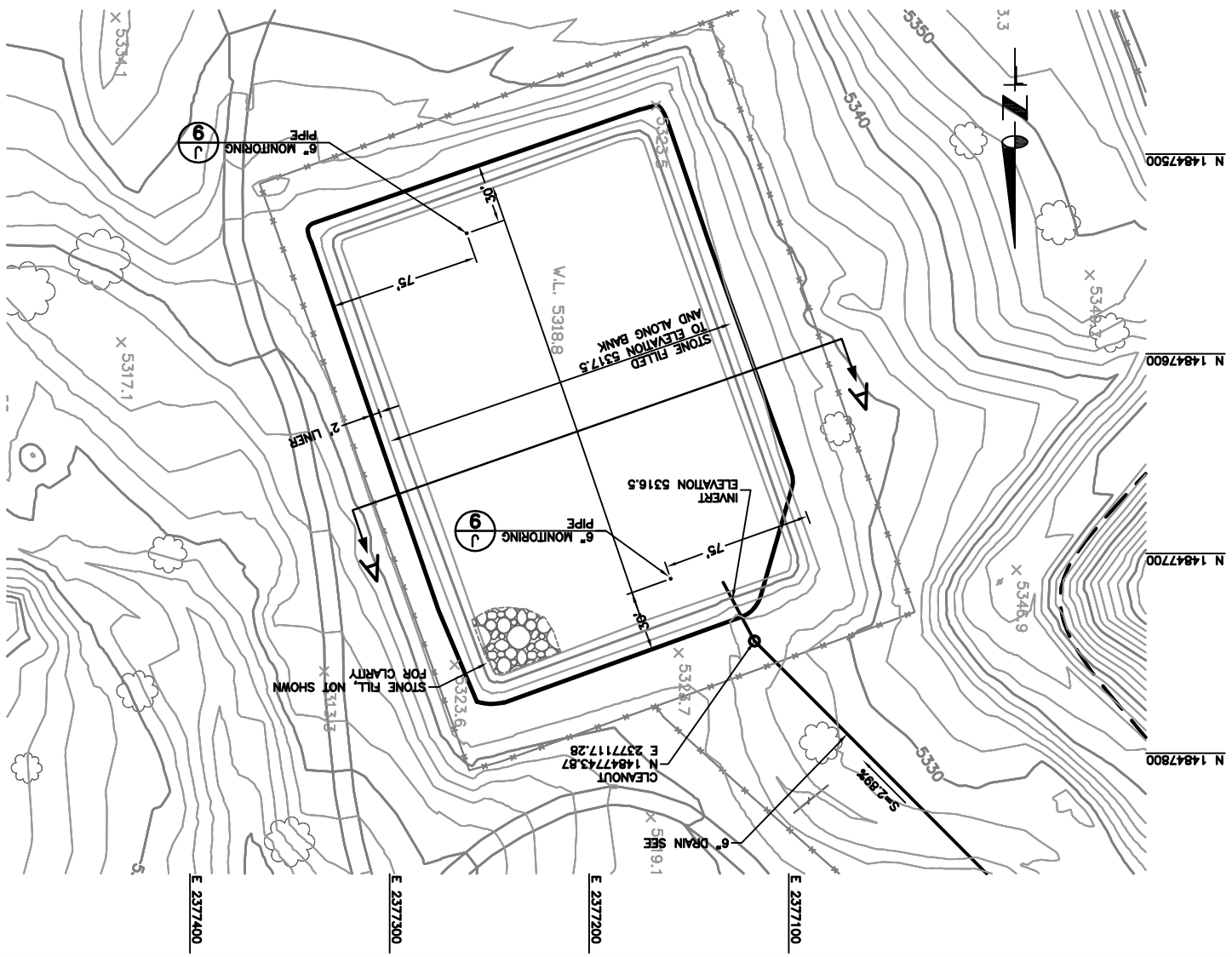
DESIGNER: MPF
DRAWN BY: DTC

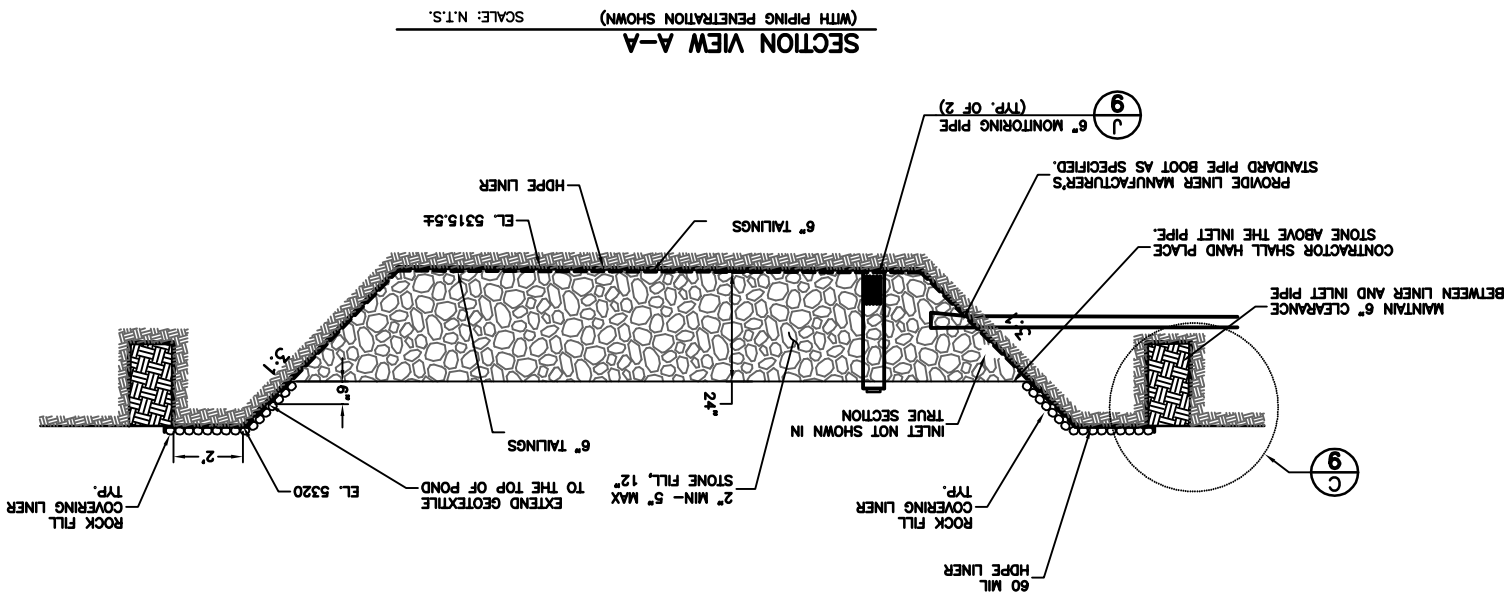
PROFESSIONAL ENGINEER STATE OF NEVADA
ADEL HANNOUK
No. 18185
DATE
SIGN

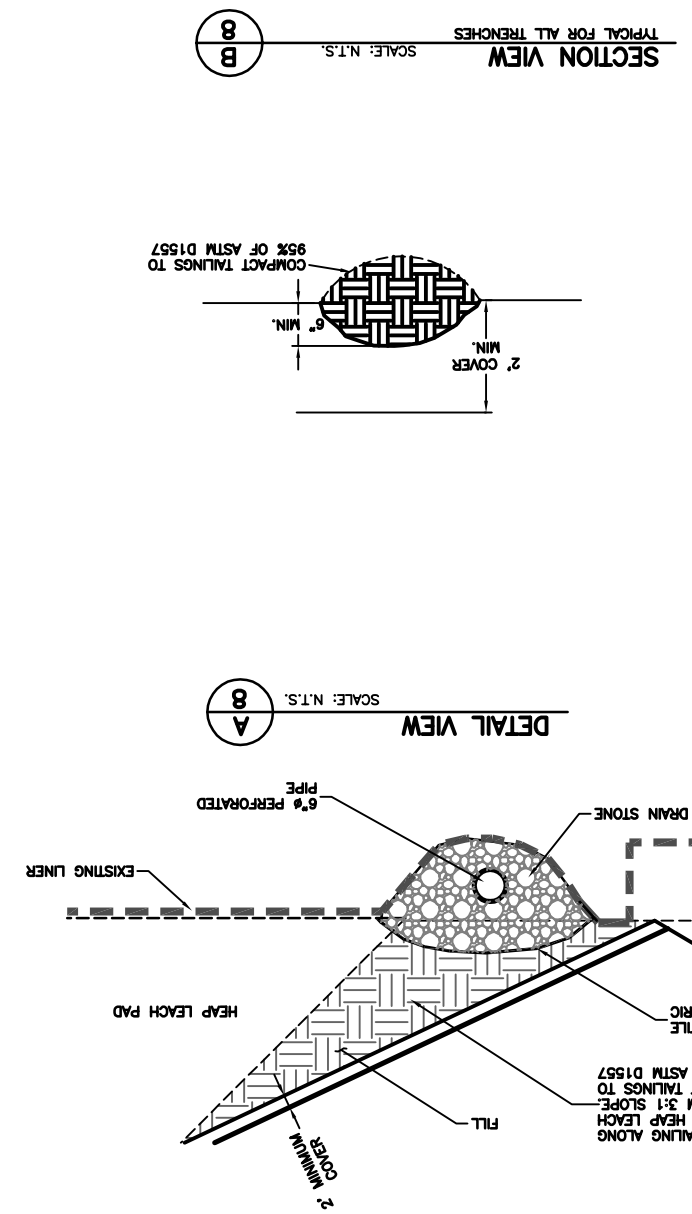
PROJECT NO. 05-2007-005

006-PR01

SHEET NO. 7 of 10







DETAIL SHEET

GOOSEBERRY MINE
STOREY COUNTY, NEVADA
STOREY COUNTY, NEVADA

PROJECT:

DESIGNER: MPF
DRAWN BY: DTC

ADEL HARBUCK
CIVIL
No. 18519
STATE OF NEVADA
PROFESSIONAL ENGINEER

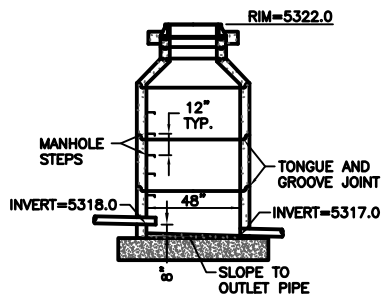
PROJECT NO. 05-2007-005

006-DT01

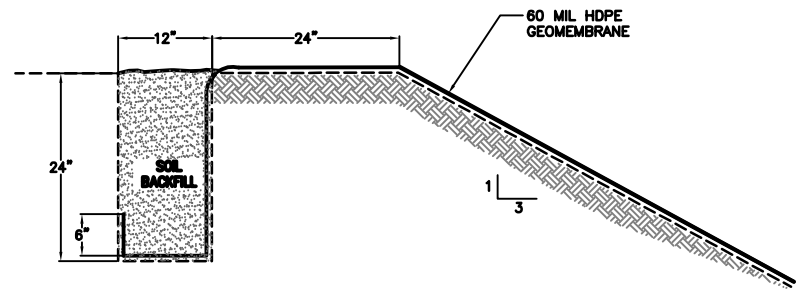
SHEET NO. 8 of 10

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

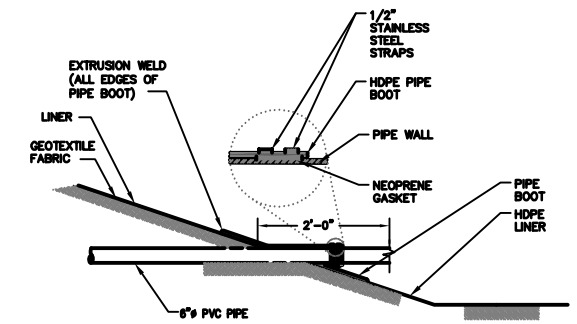
REVISIONS:



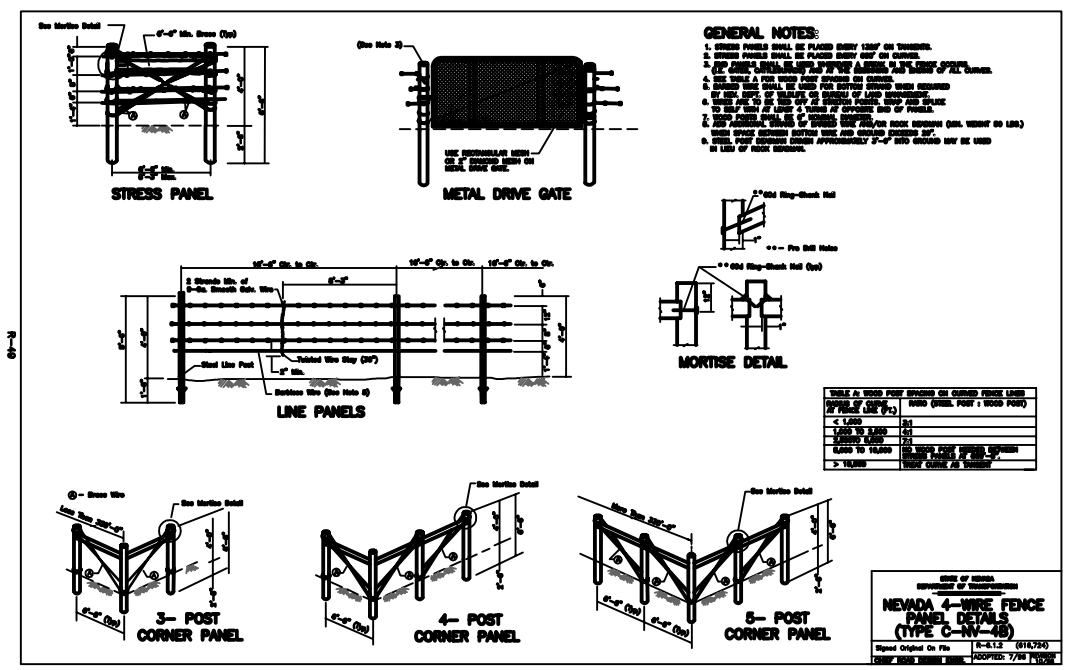
SAMPLE MANHOLE #1 — N.T.S. — B/9



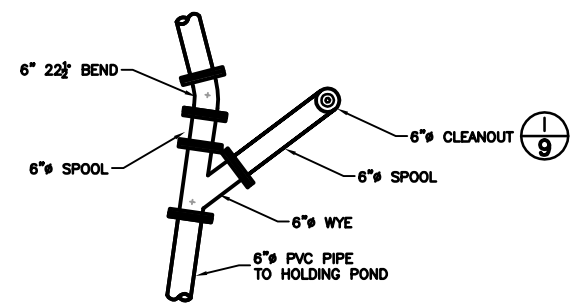
HDPE LINER ANCHOR TRENCH — N.T.S. — C/9



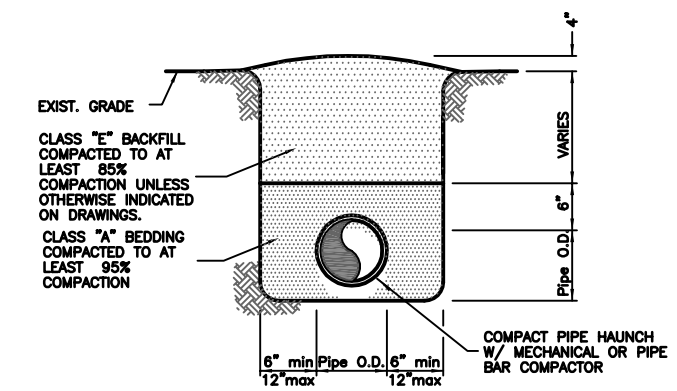
PIPE PENETRATION — N.T.S. — D/9



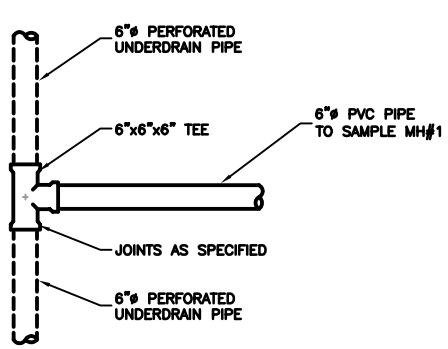
FIELD FENCE — N.T.S. — E/9



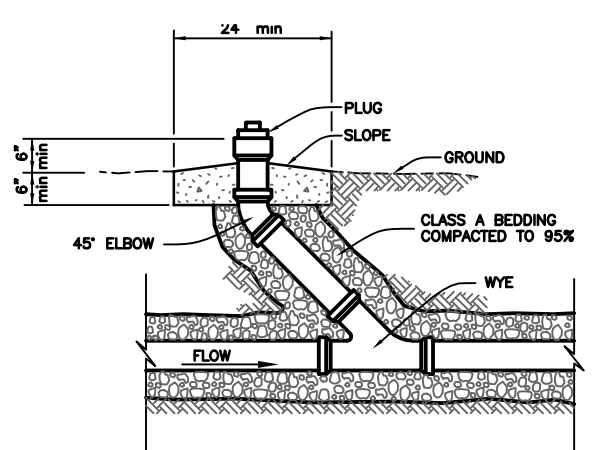
CLEANOUT PLAN VIEW — N.T.S. — F/9



PIPE TRENCH — N.T.S. — G/9

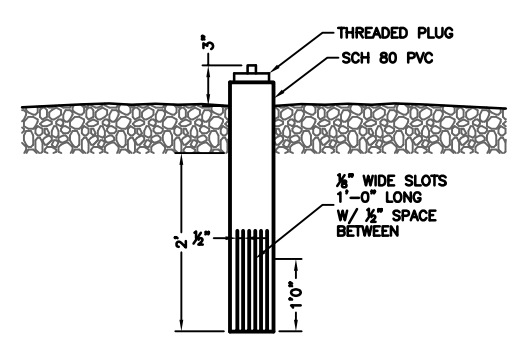


TIE IN TO UNDERDRAIN — N.T.S. — H/9



NOTE: PIPE & FITTINGS SIZE SAME AS MAIN LINE

CLEANOUT DETAIL — N.T.S. — I/9



6" MONITORING PIPE — N.T.S. — J/9

REVISIONS:

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

DETAIL SHEET

PROJECT: GOOSEBERRY MINE
STOREY COUNTY, NEVADA

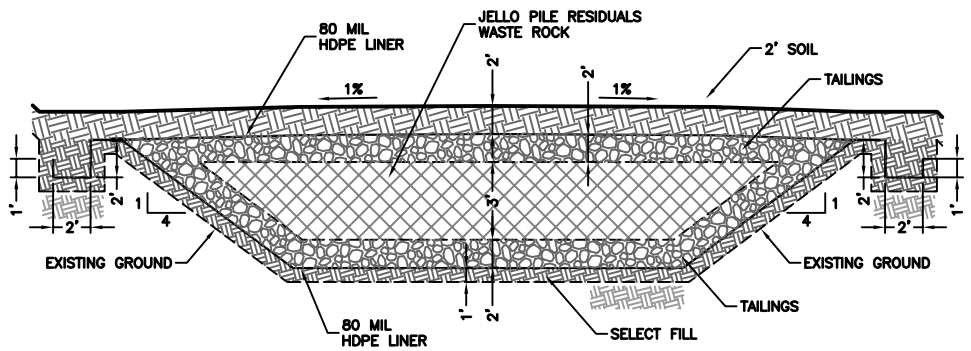
DESIGNER: MPF
DRAWN BY: DTC

PROFESSIONAL ENGINEER - STATE OF NEVADA
ADEL MABROUK
EXP:
CIVIL
No. 18518
DIVISION

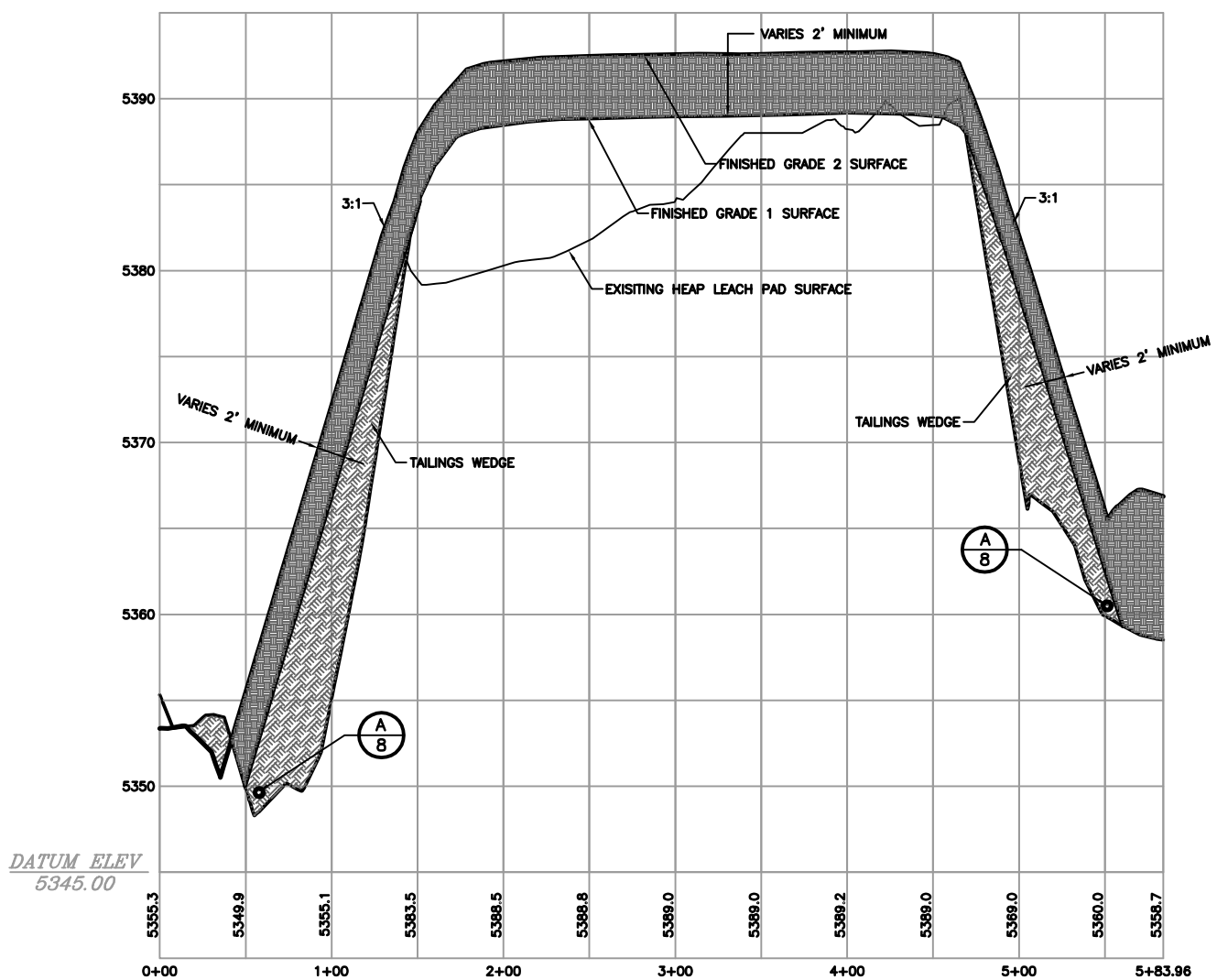
PROJECT NO. 05-2007-005

005-DT02

SHEET NO. 9 of 10



JELLO PILE DISPOSAL CELL SECTION VIEW N.T.S. (A/10)



HEAP LEACH PAD SECTION VIEW (B/10)
SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=5'

REVISIONS:

AMEC Infrastructure, Inc.
9450 DOUBLE R BOULEVARD
RENO, NEVADA 89521
PHONE (775) 786-5873
FAX (775) 786-6138

DETAIL SHEET

PROJECT:
GOOSEBERRY MINE
STOREY COUNTY, NEVADA

DESIGNER: MPF
DRAWN BY: DTC

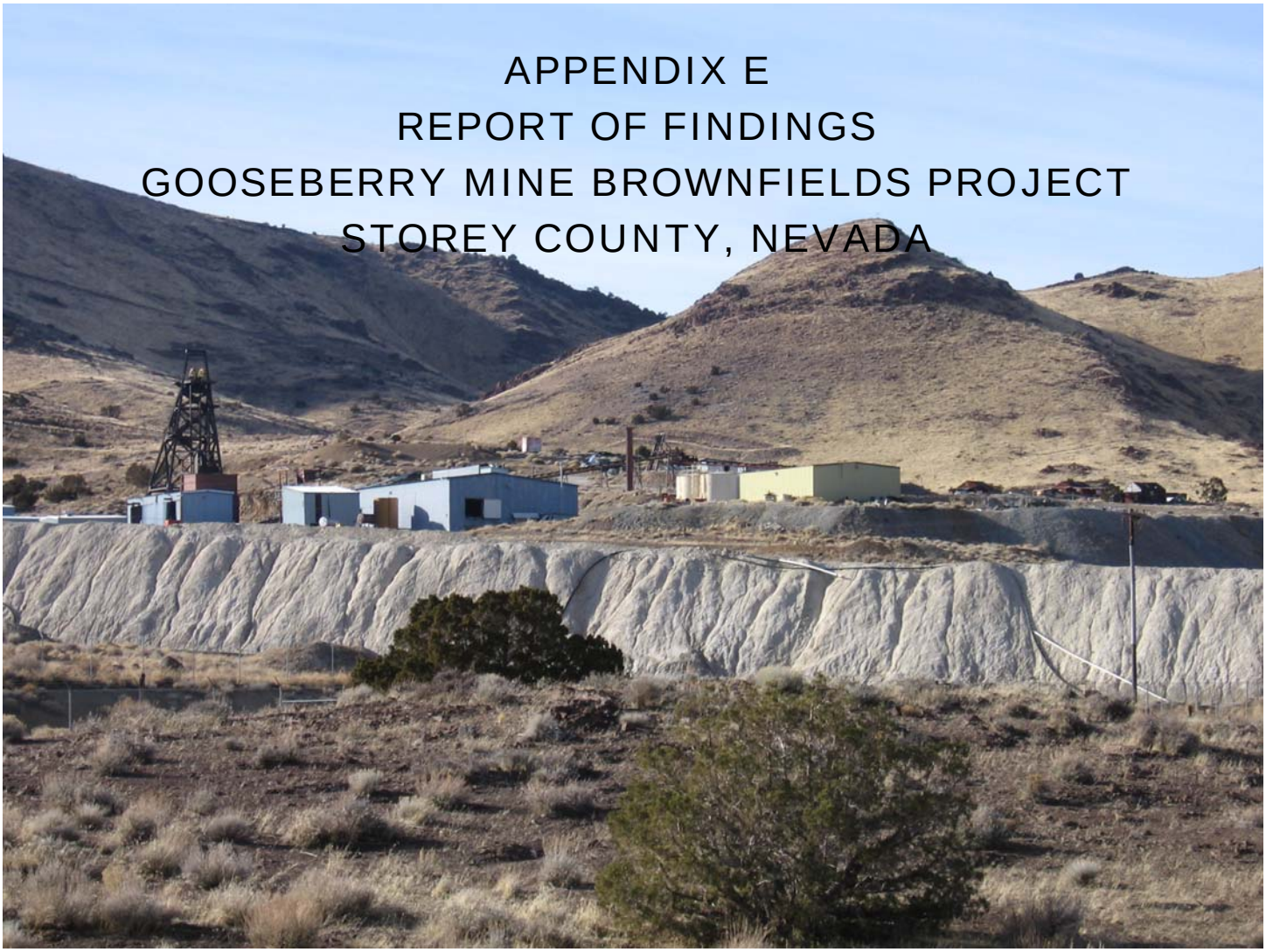
PROFESSIONAL ENGINEER-STATE OF NEVADA
ADEL MABROUK
EXP: _____
CIVIL
No.18518

PROJECT NO.
05-2007-005

005-DT03

SHEET NO.
10
of 10

APPENDIX E
REPORT OF FINDINGS
GOOSEBERRY MINE BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA



Submitted to:
Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701

Submitted by:
AMEC Earth & Environmental, Inc.
780 Vista Boulevard, Suite 100
Sparks, Nevada 89434

December 2007
AMEC Project No. 6-417-000720

REPORT OF FINDINGS
GOOSEBERRY MINE BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA

Submitted to:

Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701

Submitted by:

AMEC Earth & Environmental, Inc.
780 Vista Boulevard, Suite 100
Sparks, Nevada 89434

November 2007
AMEC Project No. 6-417-000720

November 30, 2007
AMEC Project No. 6-417-000720

Nevada Division of Environmental Protection
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701

Attention: Mr. Sam Jackson

Re: REPORT OF FINDINGS
Gooseberry Mine Brownfields Project
Storey County, Nevada

Dear Mr. Jackson:

Attached is the Report of Findings for the Gooseberry Mine Assessment Project. This task was authorized by the Nevada Division of Environmental Protection (NDEP) on August 4, 2006, for the Gooseberry Mine Brownfields Assessment Cooperative Agreement BF-96953101, NDEP Contract #06-015. Previously, AMEC Earth & Environmental, Inc. (AMEC) proposed a Sampling and Analysis Plan (SAP dated May 31, 2006). This SAP was approved by NDEP and EPA Region IX. This report summarizes the implementation of the SAP and the findings of the assessment activities performed.

The report outlines our field activities, sampling protocol, results of sample analyses, findings, conclusions and recommendations. If you have any questions or comments, or require additional information, please do not hesitate to contact our office at (775) 331-2375.

Respectfully submitted,

AMEC Earth & Environmental, Inc.

Reviewed by,

Don L. Swigonski
Project Manager

John Dyer
Senior Project Manager

Date signed: _____
EM Expiration Date: 4/14/09

I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein. I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances.

DLS/JD/mm

Enclosures

J:\Clerical\2007\June_07\6417000720_Gooseberry_Mine\Report_of_Findings.doc

AMEC Earth & Environmental, Inc.
780 Vista Boulevard, Suite 100
Sparks, Nevada
USA 89434-6656
Tel + 1 (775) 331-2375
Fax + 1 (775) 331-4153
www.amec.com

TABLE OF CONTENTS

SECTION PAGE

1. INTRODUCTION 1
2. SITE DESCRIPTION 1
   2.1 Operational History 1
   2.2 Site and Sampling Area Description 2
   2.3 Previous Work 3
   2.4 Geological Information 4
3. CHARACTERIZATION ACTIVITIES 5
   3.1 Soil and Groundwater Assessment, General Procedures 7
   3.2 Soil Sampling: Drilling Program 7
      3.2.1 Management of Investigative Derived Waste 8
      3.2.2 Discharge from Heap Leach Pad 9
      3.2.3 Discharge from Ponds 9
      3.2.4 Discharge from Landfill 9
      3.2.5 Discharge from Reworked Tailings Pond 10
      3.2.6 Groundwater Assessment 10
   3.3 Soil Sampling: Test Pit Excavations 10
      3.3.1 Generator Building 11
      3.3.2 Biopad 11
      3.3.3 Aboveground Diesel and Gasoline Storage Tanks (ASTs) 11
      3.3.4 Jello Pile 11
      3.3.5 Natural Drainages 12
      3.3.6 Reagent Storage Building 12
   3.4 Other Materials Sampled 13
      3.4.1 Mill Tanks 13
      3.4.2 Cyanide Mixing Tanks 13
      3.4.3 Electrical Transformers 13
      3.4.4 Waste Rock Leakage and Asamera Tailings Dam Leakage 13
      3.4.5 Mill Leach Tailings Ponds 14
      3.4.6 Waste Rock 14
      3.4.7 Abandoned Drums 14
4. RESULTS OF SAMPLE ANALYSES 15
   4.1 Soil Sampling, Drilling Program 15
      4.1.1 Discharge from Heap Leach Pad 15
      4.1.2 Discharge from Ponds 15
      4.1.3 Discharge from Landfill 16
      4.1.4 Discharge from Reworked Tailings Pond 16
   4.2 Soil Sampling, Test Pit Program 16
      4.2.1 Generator Building 16
      4.2.2 Biopad 17
      4.2.3 Aboveground Diesel and Gasoline Storage Tanks (ASTs) 17
      4.2.4 Jello Pile 17
      4.2.5 Natural Drainages 18
      4.2.6 Reagent Storage Building 18
   4.3 Other Materials Sampled 18
      4.3.1 Mill Tanks 18
      4.3.2 Cyanide Mixing Tanks 19

TABLE OF CONTENTS
(CONTINUED)

SECTION PAGE

4.3.3 Abandoned Electrical Transformers 19
4.3.4 Waste Rock Drainage and Asamera Tailings Dam Seepage 19
4.3.5 Mill Leach Tailings Ponds 20
4.3.6 Waste Rock 20
4.3.7 Abandoned Drums 20
5. SUMMARY OF ASSESSMENT FINDINGS 21
5.1 RCRA-Exempt Wastes 21
5.1.1 Mill Tanks 21
5.1.2 Discharge from Reworked Tailings Pond 21
5.1.3 Jello Pile 21
5.1.4 Waste Rock 21
5.1.5 Mill Leach Tailings Ponds 22
5.2 Non-Exempt Wastes 22
5.2.1 Landfill Area 22
5.2.2 Aboveground Storage Tanks 22
5.2.3 Generator Building 22
5.2.4 Biopad 23
5.2.5 Natural Drainages 23
5.2.6 Discharge from Ponds 23
5.2.7 Discharge from the Heap Leach Pad 23
5.2.8 Abandoned Electrical Transformers 24
5.2.9 Abandoned Drums 24
6. DATA VALIDATION 24
7. CONCLUSIONS 25
8. RECOMMENDATIONS 26
8.1 Premise of Recommendations 26
8.2 Nonexempt Waste 26
8.2.1 Landfill 27
8.3 Exempt Wastes 27
8.3.1 Heap Leach Pad 27
8.3.2 Mill Vat and Tank Material 28
8.3.3 Reworked Tailings 29
8.3.4 Asamera Tailings 29
8.3.5 Waste Rock 29
8.3.6 Surface Stabilization 29
8.3.7 Monitoring 30
8.4 Other Environmental Concerns 30
8.4.1 Mine Shafts 30
8.4.2 Acid Batteries 30
8.4.3 Process Material Samples 30
8.4.4 Oily and Assay Wastes 31
8.4.5 Lead-Based Paint and Asbestos 31

TABLE OF CONTENTS
(CONTINUED)

LIST OF TABLES

Table 1	Site Locations, Activities, Chemical of Concern and Environmental Issues
Table 2	Soil Sample Locations and Analyses
Table 3	Analytical Methods, Parameters and Reference Standards
Table 4	Heap Leach Pad Analytical Results Summary
Table 5	Pond Area Soil Samples Analytical Results Summary
Table 6	Discharge from Landfill Analytical Results Summary
Table 7	Generator Building Analytical Results Summary
Table 8	Biopad Analytical Results Summary
Table 9	Aboveground Storage Tanks Analytical Results Summary
Table 10	Jello Pile Analytical Results Summary
Table 11	Natural Drainages Analytical Results Summary
Table 12	Reagent Storage Building, Analytical Results Summary
Table 13	Other Materials Analytical Results Summary
Table 14	Cyanide Mixing Tanks Analytical Results Summary
Table 15	Electrical Transformers Analytical Results Summary
Table 16	Waste Rock Drainage and Tailings Dam Analytical Results Summary
Table 17	Waste Rock Analytical Results Summary
Table 18	Drums at Historic Structures Analytical Results Summary

LIST OF FIGURES

Figure 1	Site Map
Figure 2	Sample Location Map, All Locations
Figure 3	Groundwater Exploration Location Map
Figure 4	Other Materials Sampled
Figure 5	Generator Sample Locations
Figure 6	AST Sample Locations
Figure 7	Biopad Sample Locations
Figure 8	Jello Pile Sample Locations
Figure 9	Reagent Storage Building Sample Locations
Figure 10	Mill Tank Sample Locations

LIST OF APPENDICES

Appendix A	Soil Boring Logs
Appendix B	Test Pit Logs
Appendix C	Selected Site Photographs
Appendix D	Laboratory Data
Appendix E	Data Quality Review and Validation Report

LIST OF ACRONYMS

ABA	Acid Base Accounting
AST	Aboveground Storage Tank
bgs	Below Ground Surface
BLM	Bureau of Land Management
BWPC	(Nevada) Bureau of Water Pollution Control
BTEX	Benzene, Ethylbenzene, Toluene and Total Xylenes
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
DQR	Data Quality Review
DVR	Data Validation Report
DWR	(Nevada) Department of Water Resources
EPA	U.S. Environmental Protection Agency
NAC	Nevada Administrative Code
NDEP	Nevada Division of Environmental Protection
NRS	Nevada Revised Statutes
O & M	Operations and Maintenance
ORO	Oil Range Organics
PPT	Parts per thousand (or pounds per thousand pounds)
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
TPH	Total Petroleum Hydrocarbons
VOCs	Volatile Organic Compounds

1. INTRODUCTION

AMEC Earth & Environmental, Inc. (AMEC) has been retained by the Nevada Division of Environmental Protection (NDEP) to implement the Revised Sampling and Analysis Plan for the Gooseberry Mine, Storey County, Nevada, Gooseberry Mine Closure Assessment, dated May 31, 2006. This report presents the results of field investigation, sampling protocol, results of sample analyses, observations, conclusions and recommendations for additional work. The site is located approximately 6 miles south of Interstate 80 at exit 32 (Figure 1, Vicinity Map).

AMEC prepared a scope of work dated July 27, 2006. This scope of work was approved by NDEP in a letter dated August 4, 2006. This scope of work included two primary phases of work the first was the implementation of the sampling and analysis plan. The second phase included the development of a closure plan for the heap leach pad. This document is specific for the first phase of work. The deliverables for the second phase of work are provided under a separate submittal.

2. SITE DESCRIPTION

2.1 Operational History

Gooseberry Mine operations began in approximately 1910 owned and was operated by the Martins of Fresno, California, for a period of approximately 50 years. According to Dennis LaPrarrie (former employee at Gooseberry), the Martins did not process ore on site. It was operated by APCO from 1974 to approximately 1976; and by West Coast Oil and Gas from 1976 to 1981. ASAMERA Minerals, Inc. (ASAMERA) acquired the site in 1982, and sold it to Pallas Resources in 1992. Pallas Resources operated the site until 1999. This site was later acquired by Storey County for back taxes.

Gooseberry is an underground mine which exploited a near vertical vein of quartz dolomite within a host rock of porphyritic dacite. As of 1969, the vertical shafts of the mine extended to a depth of more than 1,300 feet with several thousand feet of drifts at various levels (Rose, 1969). The mine ore produced mainly silver and gold. Other minerals in association with the ore include pyrite, chalcopyrite, and tetrahedrite. According to Rose (1969), the early production history of the mine is not available.

According to Dennis LaPrarrie the deepest level of the mine was 1,375 feet. There are two primary shafts, a vertical shaft and an older decline shaft. Tunnels branch off the decline shaft at about 100 foot intervals. The first tunnel on the vertical shaft begins at about 500’ below grade.

The Gooseberry Mine site is typical of other industrial sites in that it was a self-sufficient mining and milling operation with ancillary support facilities. The support facilities included an

equipment repair shop, housing, chemical and spare equipment storage building, administration, laboratory and waste disposal.

Table 1 provides information on the various areas of the site where chemicals of concern may exist. The site activity column summarizes the potential environmental impacts associated with the remaining wastes and chemicals previously used at the site. The table also provides a list of the chemicals potentially associated with each of the support facilities and the potential environmental issues associated with them. This table also provides information of the status of the materials associated with the facilities relative to being exempt from RCRA hazardous waste regulations. The locations referred to in the table are depicted in Figure 2, Site Map.

Interviews of personnel involved with the site indicated that at the time ASAMERA operated the property, the assessed gold concentrations in older tailings pond were high enough to support heap leaching. Therefore, the tailings were mined, agglomerated into pellets and placed on the heap leach pad. According to Dennis LaPrarrie the pad did not perform well, due to low percolation rates. As a result, explosives were placed in the western portion of the pad and detonated in an attempt to “fluff up” the material. However, the detonation ruptured the liner. Soon thereafter, the site was sold to Pallas Resources.

2.2 Site and Sampling Area Description

The site and sampling area includes 90 acres and is located in an area of Storey County that rapidly is becoming industrialized. The site is bordered on the north by a mountain, on the west by a mountain, on the south by a ridge and drainage divide, and on the east by an unnamed valley. The site and sampling area is located in Martin Canyon, an ephemeral drainage that ultimately discharges to the Truckee River. The site vicinity and sampling areas are depicted in Figures 1 through 4.

The 90-acre site consists of private fee land (47.6 acres), private patented claims (20.9 acres), and public land administered by the Carson City District of the BLM (21.4 acres). Currently, the private lands are under the control of Storey County. The county obtained the property for unpaid taxes from the bankrupt former owner, Pallas Resources.

Significant site features are depicted in Figure 2, Site Map. The majority of the structures at the site are located on Storey County property. For this project, the structures and facilities of focus include the following.

- Mine/mill complex
- A significant portion of the heap leach pad and associated ponds
- Tailings facilities
- Landfill and other lesser areas of dumping
- Waste rock dump

2.3 Previous Work

In order to assess the history of previous investigations and work performed at the site, AMEC reviewed records and documents housed with the BLM Carson City District and NDEP's Bureau of Mining. In addition, AMEC interviewed Mr. Gene McLelland (McLelland Laboratory) and Mr. Dennis LaPrarrie.

In 2003 the BLM contracted with Ecology and Environment Inc. (E&E) to perform and assessment of potentially responsible parties. Their report dated November 2003 provided information regarding past ownership. This document also contained information regarding operations of one of the former owners (ASAMERA) within the report. This report did not contain information regarding sampling and analysis of materials at the site.

Both NDEP and BLM files contain documentation regarding a pregnant solution release event at the site. According to the documentation the release occurred in August of 1992 following a storm event which caused solution to overtop the ponds associated with the heap leach pad. Following this event, the operator (ASAMERA) reportedly obtained soil samples for analysis from the wash into which the solution migrated. Their letter to the NDEP indicated that the release did not pose an environmental hazard based on the analysis of two samples. Data in this report are considered unreliable since ASAMERA obtained the samples themselves, did not provide a diagram of sample or spill locations and did not supply back-up documentation.

SRK Inc. (SRK) conducted a limited investigation and removal action that was documented in a report titled "Final Report-Hazardous Waste Mitigation and Drum/Container Removal, Gooseberry Mine, Storey County, Nevada", dated December 6, 2004. This work was performed for the BLM.

SRK analyzed samples collected at the site on July 6 and July 9, 2004. The sampling was performed to characterize containerized and uncontained wastes left by the previous operators at numerous locations at the site. The containerized wastes were sampled in order to characterize them for removal and disposal. The un-contained wastes were sampled and analyzed to develop management options.

Containerized wastes consisted of the following.

- Petroleum (fuels, oils, and greases)
- Xanthates (a salt of xanthic acid as of sodium or potassium, used as a flotation collector for copper, silver, and gold)
- Cyanide (several formulations found in laboratory)
- Paints (oil and latex)
- Perchloric acid
- Lead nitrate

- Carbon with lead
- Caustic soda
- Sodium hypochlorite
- Zinc dust
- Lead oxide
- Ethylene glycol

During the SRK limited investigation, samples of uncontained mine waste were collected and analyzed from the heap leach pad, 'jello pile' (cyanide processed leach/tailings), upper tailings pond, and biopad. Surface composite samples were collected from the HLP, 'jello pile' and upper tailings pond. These samples were analyzed for Profile II constituents following a Nevada Meteoric Water Mobility Procedure (MWMP), acid base accounting (ABA) and eight primary RCRA metals using an acid digestion Environmental Protection Agency (EPA) (method 3050B followed by EPA method 600 series). Near surface grab samples (<12 inch in depth) were collected from these features for analysis of WAD Cyanide. A subsurface sample was also collected from the 'jello pile' and upper tailings pond for analysis of WAD Cyanide. A surface composite sample was collected from the bio-pad and analyzed for Total Petroleum Hydrocarbons (TPH) extractable and purgeable, and benzene, ethylbenzene, toluene and total xylenes (BTEX) using method SW8015B.

Based on the analytical results, the containerized wastes were removed from the site and disposed at permitted facilities. The un-containerized wastes (jello-pile, bio-pad and tailings pond materials) were placed in capped cells constructed on top of the HLP. The data presented in this report is considered to be acceptable for characterization purposes since the work was performed for and under the direction of a federal agency (the BLM).

In February 2006, AMEC collected two water samples from the pregnant pond located east of the HLP at the site. Both samples were analyzed for Nevada Profile I analytes including WAD Cyanide and gold. Sample results indicated the solution being discharged from the HLP contains elevated concentrations of at least eleven drinking water or discharge parameters. Given the continuous discharge of solution from the HLP for the foreseeable future, it was suggested that action be implemented to stem the discharge of the water to the subsurface or render it less detrimental to the environment.

2.4 Geological Information

The site is located about 5,400 feet above mean sea level. Geology in the site vicinity consists of alluvium ranging in thickness from one foot to greater than 40 feet, underlain by Pleistocene age volcanic basalt, andesite, and dacite rock to a depth of approximately 950 feet. These volcanics are underlain by the Coal Valley formation, a Pliocene age sandstone, tuff, shale, and diatomite rock. The Gooseberry operation mined the Kate Peak volcanic rock formation

(approximately 1,500 feet in thickness) located beneath the Coal Valley formation at an approximate depth of 1,450 feet.

One curved northwest to east striking fault of unknown age is mapped by Bonham (1969) as being located approximately 0.8 mile west and 0.4 mile south of the Gooseberry mine shafts. In addition, the mine is reported to be located on a fault that was not mapped by Bonham. Our review of available geologic mapping indicates that no active faults have been mapped at the site.

Terry Neumann of the BLM indicated the depth to groundwater within the mine is reported to be between 500 to 700 feet below ground surface (bgs) (personal communication Neumann, 2006). The direction of deep groundwater flow at the site is unknown, but is most likely controlled by the subsurface rock fractures.

There may be areas of perched groundwater or an aerially restricted aquifer at the site (NDEP Permit# NEV88017 Fact Sheet). This fact sheet references previous studies performed by Hydro-Search (1975) and exploration drilling data presented in the Asamera Plan of Operations dated 1988. According to the fact sheet, shallow groundwater is present at depths ranging from 14 to 19 feet and is in weathered bedrock along the contact of decomposed volcanic sediment and rockier zones. In addition, a spring has been reported near the Asamera Tailings Pond. During a site visit conducted by AMEC, BLM, and NDEP representatives, water was noted in the piezometers placed in the crest of the Asamera tailings pond.

Several water wells are located at least one half mile up-gradient of the site in Martin Canyon. Mr. Dennis LaPrarrie indicated that these wells never produced significant quantities of water.

3. CHARACTERIZATION ACTIVITIES

Prior to implementation of surface disturbance an archeological survey was performed on the areas to be disturbed. No issues of cultural significance we identified at the locations to be sampled. A copy of the cultural resource assessment report is presented in Appendix A.

Samples were collected of waste determined to be categorically exempt from Resource Conservation and Recovery Act (RCRA) hazardous waste regulations (exempt wastes). These solid wastes include all materials “from the extraction, beneficiation and processing of minerals, including overburden”, 40 CFR 261.4. These materials include the waste rock, tailings and waste materials stored in the mill tanks and cyanide mixing tanks. Analyses include the analytes on the Profile I or Profile II, along with pH, and acid/base generation potential (acid-base accounting or ABA). Samples to be analyzed for metals are first extracted via Meteoric Water Mobility Procedure (MWMP) extraction. The MWMP simulates the leaching potential of metals in waste materials in contact with precipitation. The analytes in the Profile I and II lists (enumerated in Table 2) include many rock forming elements that, when concentrated, pose a

threat to human health and the environment. Profiles I and II also includes analysis for weak acid disassociative (WAD) cyanide. Kinetic acid mine drainage prediction techniques (ABA) is used to assess if the material has sufficient buffering capacity such that leachate will not produce an acid mine drainage situation.

In addition, samples were collected from waste materials that were believed to be potentially hazardous in nature and subject to RCRA regulations (non-exempt wastes). Non-exempt waste materials were analyzed for "characteristically hazardous wastes" or regulated wastes. These materials included soils or rock that may have been in contact with exempt materials and therefore may have had regulated substances leached into them from the exempt wastes. These analyses included Toxicity Characteristic Leaching Potential (TCLP) extraction followed by appropriate analysis of the extract for regulated metals based on the chemicals of concern at the sampling location. This simulates the leaching potential of metals in waste materials. Other analytes included total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and ethylene glycol, as appropriate. Samples collected for characterization of exempt wastes were analyzed for WAD Cyanide. Samples collected for characterization of non-exempt wastes were analyzed for total Cyanide. Table 1 provides an overview of the chemicals of concern and their locations.

Prior to performing field work, a Health and Safety Plan (HASP) specific to the site and site activities was prepared by an AMEC Certified Industrial Hygienist (CIH). The HASP was reviewed by the AMEC field coordinator and all on site personnel.

All sampling was conducted, to the extent practicable, in accordance with the Sampling and Analysis Plan (SAP) prepared by AMEC in May 2006 and approved by NDEP and Region IX USEPA. The SAP provided an overview of targeted sampling locations, sample collection depths, and sample analyses. Deviations to the SAP are as follows:

- The SAP indicated that soil samples would be collected at depths of 5, 10 and 15 feet below ground surface (BGS), or from the bedrock/soil interface, whichever was shallower. Approximately half the borings encountered bedrock at depths shallower than 15 feet, and in many cases, less than 10 feet bgs. In these cases, samples were collected from the sampling depths that were reached, unless bedrock was encountered within one to two feet of the indicated depth, in which case, the sample was collected from the soil/bedrock interface. For example, if bedrock were encountered at 17 feet in a borehole, the sample from 5 feet bgs was collected then a sample from 17 feet bgs was collected. The sample from 15 feet was placed into the cuttings drum for disposal.

- Six borings were chosen to be drilled to 40 feet bgs, or bedrock or groundwater, whichever was shallower. If groundwater were encountered, up to three monitoring wells were to be installed and groundwater samples collected. Groundwater was not encountered in any of the six borings. Monitoring wells were not installed and groundwater was not sampled.

- Boring B-20 was inaccessible by the drill rig. Samples were collected by tracked excavator.

- The term "caustics" in the SAP was believed by field personnel to indicate ABA rather than pH. Samples from borings B-21, B-22 and B-23 (landfill area) and test pits TP-RS-1, TP-RS-2 and TP-RS-3 (around the reagent storage building) were therefore analyzed for ABA characteristics.

- In accordance with the SAP, test pits were to have samples collected from 1 foot bgs and 5 feet bgs, or at the soil/bedrock contact, whichever was shallower. Test pits placed in the drainages encountered bedrock at depths shallower than 5 feet. In these cases, samples were collected at 1 foot bgs and at the soil/bedrock interface.

3.1 Soil and Groundwater Assessment, General Procedures

A total of 18 borings were drilled at various locations across the site using a truck mounted sonic drill rig with support vehicle. Twenty six test pits were excavated at various areas across the site. Four areas were sampled by hand auger or other methods. Table 2 presents an overview of the sample locations across the site, the type of sampling methods, anticipated sampling depths and analytes. Figures 3, 4 and 5 show soil sampling locations, groundwater exploratory borehole locations and other materials sampled, respectively. The sample depths listed in Table 2 were the target depths anticipated prior to field activities. Actual sample depths were dependent on the depth at which bedrock was encountered. Table 3 presents analytical methods, parameters and reference standards used during this project.

In addition to the soil sampling locations, six locations were chosen to explore for the presence of groundwater (see Figure 3). Had groundwater been encountered, three of these borings would have been finished as groundwater monitoring wells. The borings were drilled to depths of 40 feet below ground surface (bgs) or to bedrock, whichever was shallower. Borings were left open for at least 24 hours to help assess the presence of groundwater. No groundwater was encountered in any borehole drilled or in any test pit excavated. Therefore, no groundwater monitoring wells were constructed nor were groundwater samples collected.

3.2 Soil Sampling: Drilling Program

The sonic rig used to drill the borings cut a continuous core of soil and rock. The drill stem was pulled from the borehole at five foot intervals and the plastic sleeve containing the core was removed from the core barrel. The plastic was slit open and soils from discrete sample depths were collected using a decontaminated stainless steel trowel. Soils were placed directly into sample containers supplied by the analytical laboratories.

All sample containers were labeled in the field with the sample ID, time and date of collection, and the collector's initials then placed on ice into an insulated cooler. Sample identities were designated by borehole or test pit (B- or TP-), then borehole number or test pit number or location designation, then depth of sample. For example, Sample B-17-5 was collected from borehole B-17 from five feet below ground surface (bgs). Sample TP-BP-1-1 was collected from test pit TP-BP-1 (Test Pit- Biopad- 1) from one foot bgs.

The samples were delivered from the field directly to the laboratories by AMEC personnel. Alpha Analytical Inc., of Sparks, Nevada, performed all organic analyses except for ethylene glycol which Alpha sub-contracted to Zalco Labs in Bakersfield, California. Western Environmental Testing Laboratory (WETLAB) of Sparks, Nevada, performed all inorganic analyses with the exception of the acid balance analyses which were sub-contracted to Green Analytical Laboratories, Inc. in Durango, Colorado.

Chains of custody were maintained as each sample was collected and kept with the samples until delivery to appropriate laboratory personnel.

In general, soils consisted of sandy silts/silty sands with abundant gravels and cobbles. Exceptions to this were the former biopad area, the jello pile and the waste rock pile. The biopad soils consisted of variegated clays mixed with waste rock. Jello pile soils consisted of multi-colored clays and silts with gravel and waste rock.

Waste rock materials consisted of grey, angular gravel to cobble sized clasts in a silt/sand matrix.

During drilling and test pit excavation activities, borehole and test pit logs were prepared in the field. A PID meter was used to monitor drill cuttings, open borehole atmosphere and samples for volatile vapors in the areas where TPH and/or VOCs were anticipated, including the ASTs, biopad, landfill area and the generator building. A photographic record was made during field activities. Borehole logs are attached as Appendix A. Test Pit logs are attached as Appendix B. Selected site photographs are attached as Appendix C.

3.2.1 Management of Investigative Derived Waste

Drill cuttings were placed in 55 gallon drums, labeled and remain on site. Test pits were backfilled with the material excavated. Analysis of samples obtained from the borings and excavations were used to assess whether special management of these materials is warranted.

3.2.2 Discharge from Heap Leach Pad

Two soil borings were drilled at locations B-12 and B-26 (Figure 4). Borehole B-12 was drilled to total depth of 6 feet. Refusal was encountered at about 3 feet below ground surface (bgs). The borehole was advanced another three feet to help determine that bedrock had been encountered rather than a boulder. A soil sample was collected from three feet bgs immediately above the bedrock contact.

Borehole B-26 was drilled to a total depth of 17 feet before encountering bedrock. Soil samples were collected from 5 feet bgs and 15 feet bgs. All samples were analyzed for TCLP RCRA metals, total cyanide and acid-base accounting (ABA).

3.2.3 Discharge from Ponds

Seven borings were drilled down slope from the ponds and drainage channel at locations B-13 through B-19, as shown on Figure 4. Borings B-13, B-14, B-15 and B-18 were drilled to total depths of between 6 and 11 feet bgs. Bedrock was encountered in each of these borings at depths of 3 to 7 feet bgs. Up to seven feet of rock core was cut before terminating each boring. A soil sample was collected from soil immediately above the bedrock contact.

Borings B-16, B-17, and B-19 were drilled to depths ranging from 22 to 26 feet bgs. Bedrock was encountered at depths of 20 to 22 feet. Samples were collected from depths of 5 feet and 15 feet bgs and from immediately above the bedrock contact.

Boring B-20, intended to be part of this drilling/sampling group, was inaccessible by drill rig and was instead assessed by excavator.

All soil samples from these locations were analyzed for TCLP RCRA metals and total cyanide.

3.2.4 Discharge from Landfill

Three borings, B-21, B-22 and B-23 were drilled down slope of the landfill as shown in Figure 4. Boring B-21 was drilled to 19 feet. Borings B-22 and B-23 were drilled to 22 feet bgs. Bedrock was encountered at 17 feet in B-21 and at 20 feet in B-22 and B-23.

At each boring, soil samples were collected from 5 feet and 15 feet bgs and at the bedrock contact. All samples were analyzed for VOCs, TCLP RCRA metals, total cyanide, total petroleum hydrocarbons (THP)-extractable as diesel range organics (DRO) and oil range organics (ORO), and for TPH-purgeable as gasoline range organics (GRO), and for ABA.

3.2.5 Discharge from Reworked Tailings Pond

Two borings, B-24 and B-25 as shown on Figure 4, were drilled in the reworked tailings pond. B-25 was drilled to 18.5 feet, 3.5 feet into bedrock. Soil samples were collected from 5 and 15 feet bgs and at the top of the bedrock.

Three attempts were made to drill Boring B-24. Bedrock was encountered at 2 to 3 feet in each location. A sample from the bedrock/soil interface was collected. All soil samples from these borings were analyzed for TCLP RCRA metals, total cyanide and ABA.

3.2.6 Groundwater Assessment

Borings were drilled to bedrock or 40 feet bgs, whichever was shallower at the six locations shown on Figure 3. Bedrock was encountered at depths shallower than 40 feet bgs in all borings except borings GW-4 and GW-5 which were drilled to 40 feet. Groundwater was not encountered in any of the borings. No monitoring wells were installed.

3.3 Soil Sampling: Test Pit Excavations

A track mounted excavator was used to conduct test pit assessment of the areas described in this section.

Samples collected from shallow depths in test pits (2 feet deep or less) were collected by stainless steel trowel directly from the bottom of the pit. Samples from greater depths were collected from the backhoe bucket. Samples were placed directly into containers supplied by the analytical laboratories.

All sample containers were labeled in the field with the sample ID, time and date of collection, and collector's initials, and then placed on ice into an insulated cooler. The samples were delivered directly to the laboratories by AMEC personnel.

The target test pit depths were 5 feet with samples collected at depths of 1 foot and 5 feet bgs. Many of the test pits were terminated at shallower depths due to encountering bedrock. In test pits where bedrock was encountered, soil samples were collected from 1 foot bgs and immediately above the bedrock contact.

3.3.1 Generator Building

Three test pits were excavated in the generator area as shown in Figure 6. The test pits were designated TP-G-1, TP-G-2 and TP-G-3. Additional test pits could not be excavated due to limited excavator access around the generator building.

TP-G-1 was excavated to a depth of 5 feet bgs. TP-G-2 and TP-G-3 were terminated at 3.5 feet bgs due to bedrock refusal in TP-G-2 and a concrete slab at TP-G-3. Soil samples were analyzed for ethylene glycol and TPH, including GRO, DRO, and ORO, and for benzene, ethylbenzene, toluene and total xylenes (BTEX).

3.3.2 Biopad

Five test pits (TP-BP-1 through TP-BP-5) were excavated in the biopad area as shown in Figure 8. All five pits were excavated to the target depth of 5 feet. Soils consisted of grey waste rock and variously colored clays (red-brown, green and purple) to 5 feet. No bedrock was encountered.

Soil samples were analyzed for TPH including GRO, DRO, and ORO, and for BTEX.

3.3.3 Aboveground Diesel and Gasoline Storage Tanks (ASTs)

Five test pits (test pits TP-AST-1 through TP-AST-5) were excavated around the two ASTs as shown in Figure 7. The test pits were excavated to the target depths of 5 feet. Soils consisted of silty sands with gravel and some cobbles. TP-AST-1 encountered fill material consisting of woody debris, paper, silty soils, brick and concrete to about 4 feet, which was underlain by silty sand with some gravel. Bedrock was not encountered.

Soil samples were analyzed for TPH including GRO, DRO, and ORO, and for BTEX.

3.3.4 Jello Pile

Eight test pits (TP-JP- 1 through TP-JP-8) were excavated in the jello pile as shown in Figure 9. The test pits were excavated to the target depth of 5 feet. Soils consisted of a thin surface layer of silty gravel underlain by a green to grey “crust”. Beneath the crust was multi-colored granular material, with silt, sand and gravel. Bedrock was not encountered.

Samples were analyzed for Profile II analytes.

3.3.5 Natural Drainages

One test pit (TP-6) was placed in the natural drainage east of the mill area as shown on Figure 4. The test pit was excavated to 3.5 feet where bedrock was encountered. Soils consisted of a thin layer of topsoil underlain by silty clay/clayey silt with some sand and gravel.

Soil samples were collected from 1 foot and 3.5 feet bgs. The soil samples were analyzed for TCLP RCRA metals and total cyanide.

One test pit (TP-7) was placed in the natural drainage east of TP-6 as shown on Figure 4. The test pit was excavated to 3.5 feet where bedrock was encountered. Soils consisted of a thin layer of topsoil underlain by silty clay/clayey silt with some sand and gravel.

Soil samples were collected from 1 foot bgs and 3.5 feet bgs. The soil samples were analyzed for TCLP RCRA metals and total cyanide.

Two test pits (TP-10 and TP-11) were excavated in the drainage located east of the pregnant and barren ponds as shown in Figure 2. TP-10 was excavated to a depth of 5.5 feet. Soils consisted of silt, sand and gravel with cobbles. Bedrock was encountered at 5.5 feet bgs. Soil samples were collected from 1 foot and 3.5 feet bgs. Samples were analyzed for TCLP RCRA metals and total cyanide.

TP-11 was excavated to a depth of 3.5 feet. Soils consisted of fine to coarse sand with some gravel in a silt matrix. Bedrock was encountered at 3.5 feet.

Soil samples were collected at 1 foot bgs and 3.5 feet bgs. Samples were analyzed for TCLP RCRA metals and total cyanide.

3.3.6 Reagent Storage Building

Three test pits (TP-RS-1 through TP-RS-3) were excavated to the target depth of 5 feet and placed around the reagent storage building as shown in Figure 10. Soils consisted of grey angular waste rock in a brown silt matrix. No bedrock was encountered.

Soil samples were analyzed for VOCs, TCLP RCRA metals and total cyanide. Since the material encountered around the reagent storage building was waste rock, the samples were also analyzed for ABA.

A metal storage box that contained tailings samples was located east of the Reagent Storage Building. A tailings sample, designated RS Box, was collected and analyzed for Profile II analytes.

3.4 Other Materials Sampled

A hand auger was used to sample residual materials in the mixing tanks, cyanide blending tanks, and material in the tailings ponds. Samples were collected from the one to two foot depth interval. These areas are shown on Figure 5, Other Materials Sampled.

3.4.1 Mill Tanks

Eleven storage tanks are located in the mill building. Of these, only four contained any residual waste materials. Samples of the material from the four tanks were collected using a hand auger.

A cyanide vat is located outside the south wall of the mill building. A sample of the vat material was collected using a hand auger.

Figure 11 is a diagram of the mill building tanks. The seven tanks located on the second floor of the building and the outside cyanide vat are shown. The four empty tanks located on the first floor are not represented.

The samples were analyzed for Profile II analytes, and total RCRA metals.

3.4.2 Cyanide Mixing Tanks

Samples were collected from the three cyanide mixing tanks north of the mill building as shown on Figure 2. The samples were analyzed for weak acid disassociative (WAD) cyanide.

3.4.3 Electrical Transformers

Six disconnected electrical transformers are stored in the reagent storage building. Samples of the dielectric fluid were collected from each transformer and analyzed for PCBs.

3.4.4 Waste Rock Leakage and Asamera Tailings Dam Leakage

One test pit (TP-8) was placed in the drainage at the base of the waste rock pile as shown on Figure 4. The test pit was excavated to a depth of 5 feet. Soils consisted of 6 inches of topsoil, underlain by clayey silt and silty gravel. Hard grey clay was encountered at 5 feet. Soil samples were collected from 1 foot and 5 feet bgs, and analyzed for Profile II analytes.

Two samples (TP-9-1 and TP-9-2) were collected from the base of the tailings dam as shown on Figure 4. The samples were collected from one foot and two feet bgs using a hand auger. The samples were analyzed for Profile II analytes and total cyanide.

3.4.5 Mill Leach Tailings Ponds

One sample each was collected from the two mill leach tailings ponds (samples LP-1 and LP-2) and two samples from the Asamera tailings pond (ATP-1 and ATP-2), as shown in Figure 5. Samples LP-1 and LP-2 were collected from 1 to 2 feet bgs using a hand auger.

The Asamera tailings pond material was dry on the sample date. Sample ATP-1 was collected at one foot bgs and Sample ATP-2 at 5 feet bgs using a hang auger.

All the samples were analyzed for Profile II analytes and ABA.

3.4.6 Waste Rock

Two composite samples (WR-1 and WR-2) were collected from the waste rock pile. Sample WR-1 was collected from the base of the waste rock pile. WR-2 was collected from the top of the waste rock pile. WR-1 and WR-2 collection areas are shown on Figure 10. Each composite sample was comprised of five aliquots, collected at variable depths to 6 feet. The samples were analyzed for Profile II analytes. Three samples of waste rock were collected around the reagent storage building (Samples TP-RS-1-1, TP-RS-1-5, TP-RS-2-1, TP-RS-2-5, TP-RS-3-1 and TP-RS-3-5) and analyzed for ABA.

3.4.7 Abandoned Drums

One sample of the contents was collected from each of five abandoned drums located north of the biopad as shown on Figure 5. The samples were analyzed for the TCLP 7/11 (7 RCRA metals and 11 volatile organic compounds), TPH as GRO, DRO, and ORO, VOCs and pH.

4. RESULTS OF SAMPLE ANALYSES

4.1 Soil Sampling, Drilling Program

4.1.1 Discharge from Heap Leach Pad

Soil samples collected from boring B-12 and B-26, located immediately outside the boundaries of the heap leach pad, were analyzed for RCRA metals, total cyanide and ABA. Table 4 presents the results of the sample analyses. Figure 4 shows the locations of the borings.

Cyanide was detected at a concentration of 0.28 mg/L in sample B-12-5. This concentration is below the USEPA PRG limit of 1,200 mg/kg in soils. Cyanide was reported as not detected in all other samples.

Metals were reported in the following samples at the following concentrations:

Mercury was detected at 0.029 and 0.022 mg/L respectively in samples B-26-5 and B-26-17. All other metals were reported as not detected. The reported metal concentrations were below the TCLP limit of 0.4 mg/L for mercury.

4.1.2 Discharge from Ponds

Soil samples collected from borings B-13, B-14, B-16, B-17, B-18 and B-19 (located down slope of the pregnant and barren ponds and the drainage channel connecting the two) were analyzed for TCLP metals and total cyanide. Table 5 presents the results of sample analyses from these borings. Figure 4 shows the locations of the borings.

Total cyanide was detected in samples B-13-5 (0.36 mg/kg), B-17-5 (1.5 mg/kg), B-17-15 (1.5 mg/kg), B-17-20 (0.22 mg/kg), B-16-5 (2.6 mg/kg), B-16-23 (0.27 mg/kg), and B-19-5 (0.22 mg/kg). These are below the USEPA PRG value of 1,200 mg/kg. Samples B-16-5, B-17-5 and B-17-15 were also analyzed for WAD cyanide. Each were reported as not detected for WAD cyanide.

Barium was reported at 2.2 mg/L and 2.1 mg/L in Samples B-17-15 and B-16-15, respectively. Mercury was reported at 0.013 mg/L and 0.016 mg/L in Samples B-17-20 and B-16-23, respectively. These values are below the TCLP limits of 0.4 mg/kg for mercury and 100 mg/kg for barium. No other metals were detected at or above the laboratory MDL.

4.1.3 Discharge from Landfill

Soil samples from borings B-21, B-22 and B-23 (located down slope form the landfill) were analyzed for total cyanide, TCLP RCRA metals, VOCs (including the BTEX compounds) and TPH. Table 6 presents results of sample analyses from the landfill area. Figure 4 shows the locations of the borings.

TPH, BTEX and total cyanide were reported as not detected. Each metal, except for mercury, was reported as not detected. Mercury which was detected in concentrations of 0.029 mg/L (B-21-15,), 0.02 mg/L (B-22-5), 0.01 mg/L (B-22-15), 0.011 mg/L (B-22-19), 0.01 mg/L (B-23-5) and 011 mg/L (B-23-15). The mercury concentrations are all below the TCLP limit of 0.4 mg/kg.

4.1.4 Discharge from Reworked Tailings Pond

Soil samples from borings B-24 and B-25 (collected from below the tailings pond materials) were analyzed for TCLP RCRA metals, total cyanide and ABA. Table 4 presents the results of sample analyses from the reworked tailings pond. Figure 4 shows the locations of the borings.

Cyanide was reported as not detected in each sample. Sample B-24-5 contained barium (87 mg/L), chromium (2.2 mg/L) and lead (9.6 mg/L). These concentrations are all below the TCLP limit of 100 mg/L (barium), 5.0 mg/L (chromium), and above the TCLP limit of 5.0 mg/L for lead. ABA was reported as 218 parts per thousand (ppt) $CaCO_3$ per ton of parent material for sample B-24-5 and 73.4 ppt for sample B-25-15.

4.2 Soil Sampling, Test Pit Program

4.2.1 Generator Building

Soil samples collected from test pits (TP-G-1, TP-G-2, and TP-G-3) excavated around the Generator Building were analyzed for ethylene glycol, TPH and BTEX. Table 7 presents the results of sample analysis from the generator area. Figures 4 and 6 show the generator building and the test pit locations.

BTEX, GRO and ethylene glycol were reported as not detected. DRO were reported in all the samples at concentrations ranging from 41 to 370 mg/kg. ORO were reported in all samples at concentrations ranging from 69 to 4,300 mg/kg. Sample TP-G-1-1 contained a total of 371 mg/kg TPH. At the five foot depth, the concentration increased to 4,340 mg/kg. Hydrocarbon concentrations decreased with depth in samples from the remaining test pits.

4.2.2 Biopad

Soil samples collected from test pits TP-BP-1 through TP-BP-5 excavated in the biopad area were analyzed for GRO, DRO, ORO and BTEX. Table 8 presents the analytical results of the biopad samples. Figures 4 and 8 show the biopad area and the test pit locations.

BTEX and GRO were reported as not detected.

DRO were reported in one sample (TP-BP-1-5) at a concentration of 37 mg/kg. ORO were reported in seven of the 10 samples at concentrations ranging from 11 to 350 mg/kg. TP-BP-1-1 contained 42 mg/kg at one foot bgs and 387 mg/kg TPH in TP-BP-1-5. The samples from the remaining four test pits had reported TPH concentrations ranging from not detected to 53 mg/kg.

4.2.3 Aboveground Diesel and Gasoline Storage Tanks (ASTs)

Soil samples collected from test pits TP-AST-1 through TP-AST-5 excavated around the above ground storage tank area were analyzed for TPH and BTEX. Table 9 presents the analytical results for soil samples collected around the AST. Figures 4 and 7 show the location of the above ground tanks and the test pits.

BTEX and GRO were reported as not detected. DRO were detected in nine of the ten samples in concentrations ranging from 10 to 590 mg/kg. ORO were detected in all samples at concentrations ranging from 28 to 6,000 mg/kg. Hydrocarbon concentrations decreased with depth at all locations where samples contained reportable concentrations of hydrocarbons. Samples from test pit AST-4 were the only ones that contained TPH concentrations below 100 mg/kg. All the remaining samples contained TPH concentrations above 100 mg/kg.

4.2.4 Jello Pile

Soil and waste material samples collected from test pits TP-JP-1 through TP-JP-8 excavated in the former jello pile area were analyzed for Profile II analytes. Table 10 presents the results of the jello pile sample analyses. Figures 4 and 9 show the location of the former jello pile and the test pit locations.

Analytes exceeding drinking water standards were arsenic (1 sample), iron (2 samples), manganese (12 samples), mercury (1 sample), nitrate + nitrite (15 samples), pH (2 samples), selenium (6 samples), and TDS (16 samples).

WAD cyanide was reported in all samples and ranged in concentration from 0.019 mg/L to 0.91 mg/L. Five of the samples contained WAD cyanide above the standard of 0.2 mg/L.

4.2.5 Natural Drainages

Soil samples were collected from test pits TP-6, TP-7, TP-10 and TP-11 excavated in the bottoms of natural drainages at selected locations on the site. These samples were analyzed for TCLP metals and total cyanide. Table 11 presents the results of sample analyses for samples collected from the natural drainages. Figure 4 shows the location of the natural drainage test pit locations.

Mercury was reported above the laboratory MDL at a concentration of 0.37 mg/L in Sample TP-11-3.5. These values are below the TCLP limit of 0.4 mg/L. Silver was detected in Samples TP-6-1 and TP-6-3-5 at a concentration of 0.014 and 0.015 mg/L, respectively.

4.2.6 Reagent Storage Building

Soil samples were collected form test pits TP-RS-1, TP-RS-2 and TP-RS-3 excavated around the exterior of the reagent storage building. These samples were analyzed for TCLP metals, total cyanide and ABA. Table 12 presents the results of sample analyses from the reagent storage building area. Figures 4 and 10 show the locations of the reagent storage building and the test pit locations.

Cyanide, VOCs and metals were reported as not detected in each sample. The ABA was calculated as more than 20 parts per thousand (ppt) $CaCO_3$ per ton of parent material in samples RS-1-1, RS-2-5 and RS-3-1, indicating that the material is likely not acid generating.

4.3 Other Materials Sampled

4.3.1 Mill Tanks

Residual materials remaining in the four mill tanks were collected and analyzed for Profile II analytes and total RCRA metals. Table 13 presents the sample results from the mill building tanks. Figures 5 and 11 show the locations of the mill building and storage tanks.

The samples from each tank contained total arsenic at concentrations ranging between 210 and 310 mg/kg. The reported concentrations for arsenic ranged from not detected to 20 mg/L using the MWMP and Profile II analysis.

Total lead concentrations ranged from 66 to 400 mg/kg. Lead was reported as not detected in the Profile II analysis.

Total mercury concentrations ranged from 2.1 to 2.6 mg/kg with the Profile II concentrations ranging from 0.37 to 1.4 mg/L.

Total silver concentrations ranged from 58 to 130 mg/kg with the Profile II concentrations ranging from 14 to 39 mg/L.

WAD cyanide ranged from 6.6 to 38 mg/L. The pH ranged from 9.52 to 10.02. TDS ranged from 17,000 to 130,000 mg/L.

The pH of the material in the south cyanide tank was reported as 9.66. Profile II concentrations of arsenic, mercury, selenium and silver and TDS were 0.18, 0.61, 0.53, 0.89 mg/L and 2,700 mg/L, respectively. All exceed the applicable drinking water standards.

4.3.2 Cyanide Mixing Tanks

Samples of residual materials in the three mixing tanks were collected and analyzed for WAD cyanide. Table 14 presents the results of the cyanide analyses. Figure 5 shows the location of the cyanide mixing tanks.

WAD cyanide concentrations in the samples were 79 mg/L for Tank 1, 15 mg/L for Tank 2 and 12 mg/L for Tank 3. These all exceed the standard of 0.2 mg/L.

4.3.3 Abandoned Electrical Transformers

Dielectric fluids were collected from the transformers and analyzed for PCBs. Table 15 presents results of sample analyses from the electrical transformers. The transformers are stored in the reagent storage building. Figure 5 shows the location of the reagent storage building.

PCBs were reported as not detected in each sample.

4.3.4 Waste Rock Drainage and Asamera Tailings Dam Seepage

Soil samples collected from the drainage at the base of the waste rock (TP-8-1) and from the base of the tailings (TP-9-1) were analyzed for Profile II analytes. Table 16 presents the results of sample analyses from the base of the waste rock and the base of the tailings dam. Figure 4 shows the location of these test pits.

WAD cyanide was reported as not detected in Samples TP-8-1 and TP-8-2. Metals concentrations were reported as below the drinking water standard.

Mercury and TDS were the only analytes whose concentrations exceeded their drinking water standards in samples collected from TP-9.

4.3.5 Mill Leach Tailings Ponds

Samples of tailings remaining in the two mill leach tailings ponds were analyzed for Profile II analytes and ABA. Table 13 presents results of sample analyses from the mill leach tailings ponds. Figure 5 shows the locations of sample points LP-1 and LP-2.

ABA results for Samples LP-1 and LP-2 were 71.4 ppt and 48.5 ppt $CaCO_3$ per ton of parent material indicating that the tailings are likely not acid generating materials. Both samples had detections for the following metals: antimony, arsenic, cobalt, copper, iron, lead, mercury, molybdenum, nickel, phosphorus, potassium, selenium, silver, and zinc. WAD cyanide was reported at 1.6 mg/L and 0.47 mg/L in samples LP-1 and LP-2, respectively, above the drinking water standard of 0.2 mg/L. TDS was reported at 22,000 and 28,000 mg/L in samples LP-1 and LP-2, respectively. Both exceed the drinking water standard of 1,000 mg/L. Sulfates were reported at 3,300 and 13,000 mg/L, samples LP-1 and LP-2. Both exceed the drinking water standard of 500 mg/L. The pH was reported at 10.37 and 9.36 for LP-1 and LP-2.

4.3.6 Waste Rock

Samples of waste rock were collected from test pits WR-1 and WR-2 and analyzed for Profile II analytes. Table 17 presents the results of sample analyses of the waste rock area. Figures 5 and 10 show the location of the waste rock and the test pit locations.

Sample WR-1 had an antimony concentration of 0.01 mg/L. Sample WR-2 had a manganese concentration of 0.14 mg/L, of nitrate + nitrite of 64 mg/L, a selenium concentration of 0.12 mg/L and of TDS of 1,900 mg/L. All these are above the drinking water standards. WAD cyanide was reported at a concentration of 0.02 and 0.042 mg/L, below the standard of 0.2 mg/L. The resulting pH of this sample was 4.32.

All other analytes were reported either as not detected or at concentrations below applicable drinking water standards.

4.3.7 Abandoned Drums

Samples collected from the drums were analyzed for TCLP metals, WAD cyanide, TPH, VOCs and pH. Table 18 presents the analytical results.

Metals, WAD cyanide, VOCs, and ORO were reported as not detected in all samples collected from the drums. DRO were reported at 4.3 mg/kg in Sample DR-5. GRO were reported at 12 mg/kg (DR-1), 7.0 mg/kg (DR-4) and 16 mg/kg (DR-5). The pH ranged from 8.21 to 10.83.

5. SUMMARY OF ASSESSMENT FINDINGS

The following is an overview of contamination by contaminant class or analyte.

5.1 RCRA-Exempt Wastes

5.1.1 Mill Tanks

Samples were collected from the four tanks that contained material and analyzed for Profile II analytes and total concentrations for the eight RCRA metals. Few metals were detected in the Profile II analysis because the reporting limits had been increased due to matrix interferences. Samples with elevated total metal concentrations had MDLs of 0.1 to 1.0 mg/L for lead, a value well above the drinking water standard. In some sample reports, aluminum had an MDL of 45 mg/L, a value 225 times higher than the drinking water standard. Other metals had MDLs between these two extreme examples.

The mill tank materials exceeded drinking water standards for TDS, sulfates, chloride, copper, iron, mercury, nitrate + nitrite, selenium, silver, and WAD cyanide.

5.1.2 Discharge from Reworked Tailings Pond

Sample B-24-5 had analyte concentrations in excess of the TCLP limits for lead. No other analytes exceeded the TCLP limits for samples collected from this area.

5.1.3 Jello Pile

Analytes from the Profile II list that exceeded drinking water standards include arsenic (1 sample), iron (2 samples), manganese (12 samples), mercury (1 sample), nitrate + nitrite (15 samples), pH (2 samples), selenium (6 samples), WAD cyanide (5 samples) and TDS (16 samples).

5.1.4 Waste Rock

Analytes from the waste rock analyses that exceeded drinking water standards include antimony, manganese, nitrate+nitrite, selenium, TDS and pH. ABA values reported on waste rock collected around the reagent storage building ranged from 71 to 152 parts per thousand (ppt) indicating that the material is not likely to be an acid generating material. The pH of Sample WR-2 via analysis MWMP and Profile II indicates that some waste rock has the potential to be acid generating.

5.1.5 Mill Leach Tailings Ponds

The ABA results indicate that the tailings are not likely to be acid producing materials. One or both samples had concentrations of the following analytes above the drinking water standards: aluminum, antimony, arsenic, copper, iron, manganese, mercury, nickel, selenium, silver, sulfate, TDS, and WAD cyanide.

5.2 Non-Exempt Wastes

5.2.1 Landfill Area

Total cyanide, TPH, and all but mercury were reported as not detected for all samples. Mercury was reported in six samples but at concentrations below the TCLP limit.

5.2.2 Aboveground Storage Tanks

BTEX compounds were reported as not detected in all samples collected from the AST area. DRO was detected in nine of the ten samples collected and analyzed in concentrations ranging from 10 to 590 mg/kg. ORO was reported in concentrations ranging from 28 to 6,000 mg/kg.

Based on findings to date, it is estimated that at least 600 cubic yards of soil contaminated with petroleum hydrocarbons in excess of 100 mg/kg are present around the ASTs. However, additional investigation is necessary to fully define the extent and volume of contaminated soils.

Per Nevada regulations, 100 mg/kg of TPH is a general remediation goal for petroleum spills in soil that do not have other specifically regulated compounds. Exceedance of 100 mg/kg also is the Action Level that triggers an assessment for closure purposes of the risk of residual petroleum in soil to groundwater.

5.2.3 Generator Building

BTEX compounds, ethylene glycol and GRO were reported as not detected in all samples. DRO were detected in all the samples at concentrations ranging from 41 to 370 mg/kg. ORO were detected in all the samples in concentration ranging from 69 to 4,300 mg/kg.

Based on findings to date, it is estimated that at least 500 cubic yards of soils contaminated with petroleum hydrocarbons are present in the generator building area. The south and west sides of the building were not accessible to the track hoe. Additional investigation is necessary to fully define the extent and volume of contaminated soils.

5.2.4 Biopad

BTEX compounds and GRO were reported as not detected in all the samples. DRO were reported at a concentration of 37 mg/kg in one sample. ORO were reported in seven of the ten samples in concentrations ranging from 11 to 350 mg/kg. The analytical results indicate that soils contaminated with petroleum hydrocarbons in concentrations higher than 100 mg/kg are concentrated in the area of test pit TP-BP-1. In the summer of 2004, SRK removed much of the biopad material from its original location and placed the material into capped cells constructed on the HLP. The petroleum hydrocarbons remaining in the biopad area likely represent some residual contamination left behind during the 2004 removal activity.

Based on findings to date, it is estimated that at least 150 cubic yards of soils contaminated with petroleum hydrocarbons in concentrations greater than 100 mg/kg remain in the biopad area. Additional investigation is necessary to fully delineate the extent and volume of contaminated soils.

5.2.5 Natural Drainages

Mercury was the only analyte reported above the laboratory's reporting limit, but at concentrations below the TCLP limit of 0.4 mg/L

5.2.6 Discharge from Ponds

Seven samples had reported total cyanide concentrations ranging between 0.22 and 2.6 mg/kg. These concentrations are below the USEPA PRG value of 1,200 mg/kg in soil. The samples with reported total cyanide values were re- analyzed for WAD cyanide. WAD cyanide was reported as not detected.

Barium and mercury were reported in concentrations below their respective TCLP limits. All other metals were reported as not detected in the remaining samples.

5.2.7 Discharge from the Heap Leach Pad

Total cyanide was reported at a concentration of 0.28 mg/kg in sample B-12-5, below the USEPA PRG value of 1,200 mg/kg in soil. The TCLP RCRA metals were reported at concentrations below the TCLP limits.

5.2.8 Abandoned Electrical Transformers

PCBs were reported as not detected for all samples collected from the transformers.

5.2.9 Abandoned Drums

Metals, WAD cyanide, VOCs and ORO were reported as not detected in all samples collected from the drums. DRO were reported at 4.3 mg/kg in sample DR-5. GRO were reported at 12 mg/kg (sample DR-1), 7.0 mg/kg (sample DR-4) and 16 mg/kg (sample DR-5). The pH ranged from 8.21 to 10.83. The materials in the drums are not considered hazardous waste.

6. DATA VALIDATION

AMEC chemists and data validation technicians conducted data quality review on 90% of the sample analyses. The remaining 10% were subjected to full data validation to evaluate data usability. The data quality review and full data validation were performed in general accordance with:

- EPA, 2005. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Data Review, EPA540/R-04/009.
- EPA, 2004. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA540/R-04/004.
- EPA, 2004. SW-846 Test Methods for Evaluating Solid Wastes, Update IIIB.
- EPA, 1992. Guidance for Data Usability in Risk Assessment (Part A), EPA540/R-92/003.
- American Public Health Association (APHA), 1998. Standard Methods for the Examination of Water and Wastewater. 20th Edition.
- AMEC, 2006. Revised Sampling and Analysis Plan for Gooseberry Mine, Storey County, Nevada.

The EPA guidelines listed above were written specifically for the Contract Laboratory Program (CLP), and have been modified for the purposes of this data validation where they differ from EPA Method SW-846 method-specific quality control requirements.

The laboratory's certified analytical report (CAR) and supporting documentation were reviewed to assess the following:

- Chain of custody (COC) compliance;
- Holding time compliance;
- Calibration compliance;
- Presence or absence of laboratory contamination as demonstrated by method blanks;
- Accuracy and bias as demonstrated by recovery of surrogate spikes, laboratory control samples (LCS), and matrix spike (MS) samples;
- Analytical precision as relative percent difference (RPD) of analyte concentration between laboratory duplicates or MS and matrix spike duplicates (MSD);
- Proper qualitative identification and quantitation of target analytes (evaluated for full validation); and
- Insofar as possible, the degree of conformance to method requirements and good laboratory practices.

The Data Validation performed by AMEC resulted in no data being rejected. The full Data Validation Report is attached to this report as Appendix A.

7. CONCLUSIONS

Based on the findings of our field investigation, we conclude the following:

- Cyanide contamination appears to be confined to the mill building vats, cyanide mixing vats, the south cyanide vat and the tailings ponds. Total cyanide in samples collected from borings down slope of the ponds contained total cyanide concentrations between 0.22 and 2.6 mg/L. WAD cyanide on these samples was reported as not detected with respect to the laboratory MDL of 0.2 mg/L. It is unknown whether higher levels of cyanide are present in soils directly beneath or along side the ponds.
- TPH concentrations in soil samples obtained from the vicinity of the generator building exceed 1,000 mg/kg. The petroleum hydrocarbons present are DRO and ORO. No BTEX or GRO were detected above the laboratory MDLs.
- Maximum TPH concentration in soil samples obtained from the vicinity of the AST area exceeds 1,000 mg/kg. The petroleum hydrocarbons present are DRO and ORO. No BTEX or GRO were detected above the laboratory MDLs.

- Maximum TPH concentration in soil samples obtained from the vicinity of the biopad area exceeds 100 mg/kg. The petroleum hydrocarbons present are DRO and ORO. No BTEX or GRO were detected above the laboratory MDLs.

- Based on field observations and review of analytical results, the volume of material associated with jello pile is estimated as 8,150 cubic yards, assuming a maximum depth of 10 feet.

- Four borings were drilled to 40 feet bgs in an attempt to sample groundwater. Groundwater was not encountered in any borehole. Therefore groundwater quality was not assessed.

8. RECOMMENDATIONS

AMEC's scope of work indicated that we would provide recommendations for further assessment or management of the contaminated material identified at the site as well as provide preliminary recommendations for the closure of the remainder of the site. Therefore, these recommendations go beyond the material presented herein and incorporate information from other submittals and provided to NDEP by AMEC.

These recommendations cover both exempt and non-exempt wastes as well as site facilities.

8.1 Premise of Recommendations

The private portions of the Gooseberry mine site are under the control of Storey County. The Bureau of Land Management controls the majority of land immediately surrounding the site as well as a rectangular block "inholding" that surrounds the former mine operational area.

Storey County would like to sell the property they control so that it can be converted into an industrial site. Presently, the Reno Tahoe Industrial Park is under development. This development is expanding to the south and will be immediately east of the subject site. Thus, it is hoped that the site could be made attractive to industrial redevelopment. In order to make the site attractive for redevelopment, the site needs to be environmentally safe and provide sufficient contiguous developable land.

8.2 Nonexempt Waste

The assessment activities performed in the vicinity of the heap leach pad, tailings impoundments, ponds, and landfill did not reveal evidence of a significant release of regulated chemicals to the subsurface environment. Therefore, no further action is recommended with regards to the potential releases from these facilities.

Regulated petroleum contaminated material was identified in the vicinity of the generator facility, above ground storage tanks and former biopad. Given that the majority of the petroleum contaminated soil is oil range hydrocarbons and that BTEX compounds were not identified in the samples analyzed, further characterization and risk analysis may indicate that the material could remain in place during site redevelopment. Otherwise, such petroleum impacted soils would need to be excavated and disposed of or treated at a permitted facility. AMEC considered this latter option in the development of the Cost Estimate, Closure and Environmental Remediation, dated April 2, 2007.

Residuals within the cyanide tanks should be removed and disposed of as hazardous wastes prior to decommissioning of the tanks.

The material present in the drums located north of the reagent storage building was not found to contain hazardous constituents and may be managed as standard wastes. In addition, the transformers in the reagent storage building should also be managed as petroleum/mineral oil containing waste.

8.2.1 Landfill

There appears to be at least two cells associated with the landfill. The eastern area was essentially filled and the western trench has been partially filled. Since contaminants of concern were not identified in soil adjacent to this facility, we recommend that the landfill be capped and covered. The exposed trench will need to be filled with soil to grade and cover material should be placed so as to promote positive drainage away from the containment cell. Given the proximity and relative elevation of the landfill respective of the reworked tailings, consideration should be given to routing run-on and run-off such that water does not negatively impact both facilities

8.3 Exempt Wastes

Exempt wastes that require further management and closure activities include tailings in the four tailings facilities, the heap leach pad, the pregnant and barren ponds, material in tanks and vats in the mill building, jello pile residuals and waste rock.

8.3.1 Heap Leach Pad

The closure design for this facility has been submitted to NDEP under a separate cover.

In developing the design we considered an engineered cap that would essentially eliminate the long term potential for leachate generation from the facility. In addition, we evaluated using a

soil cover that would be a passive barrier to leachate generation. Both of these types of cover have issues associated with them. The engineered cap would be very expensive to implement, while the passive barrier would require an excessive amount of fill to be placed on the pad (Applied Soil Water Technologies, LLC, 2007). Therefore, the prescriptive cover design calls for buttressing the present pad to generate side slopes of 3:1 and capping the facility with native soil to a minimum depth of two feet. The existing material on the Heap Leach Pad (HLP) will be compacted prior to the placement of fill in order to minimize infiltration. The buttress material will consist of tailings from the reworked tailings facility. Capping the material in this manner will minimize the amount of residual reworked tailings that require capping as well as prevent potential damage to the existing waste containment cells in the HLP. If leachate forms in the HLP and is discharged, a collection system will deliver it to a lined evaporation basin.

Jello pile residuals have impacted over a thousand cubic yards of host waste rock material. This is in a potentially prime area for future redevelopment, thus disturbance of this material is very likely. Therefore, it is suggested that this material be removed and encapsulated. A discussion of encapsulation is below.

The material in the Mill Leach Tailings Ponds produces a leachate that would impact waters of the state. In addition, this material may pose a threat to the environment through inhalation or ingestion. Therefore, it is recommended that this material be encapsulated. Presently the material is in lined ponds. These ponds could be covered with an engineered cap to prevent meteoric water from entering the wastes and the facilities “bathtubbing”. This approach would place further restrictions on land use at the site. Also, this approach does not address other wastes that require containment.

A second option would be to remove the material and place it in/on/or associated with the heap leach pad. The western portion of the pad was not used by the BLM for the disposal of other mill leach tailings and the jello pile. This area of the pad could be used to install a third waste disposal cell. Capping this portion of the HLP may also aid in reducing the potential for leachate generation from the pad once it is closed. This concept would require new designs for the closure of the HLP and increase overall closure cost. It should be noted that the cost of moving theses waste and placing them in the HLP was considered in the Cost Estimate, Closure and Environmental Remediation, dated April 2, 2007.

8.3.2 Mill Vat and Tank Material

Rock flour located in the tanks and vats associated with the mill should be removed and placed in containment. Consideration should be given to placing this material in the HLP along with the other material discussed herein. The volume of material remaining in these storage structures is estimated to be on the order of 25 to 50 cubic yards. This volume is not expected to affect HLP re-grading or final cover design.

8.3.3 Reworked Tailings

Following the placement of required tailings as buttress material on the HLP, the remaining tailings will be covered with a minimum of two feet of soil. The berms that form the south and east sides of the facility will be knocked down and regraded to a 3:1 slope. The berms should be removed to promote positive drainage off of the remaining tailings. Observations made during the field work portion of this project indicated that most of the reworked tailings have already been removed from this area. The amount remaining consists of a thin veneer (one to three feet) lying over bedrock. The volume of reworked tailings anticipated to be stored on the HLP is not expected to significantly alter re-grading plans or final cover design.

8.3.4 Asamera Tailings

The tailings dam should be pushed down to 3:1 slopes and the tailings covered with a minimum of two feet of soil. Presently a significant drainage discharges into this facility. This drainage will need to be diverted along the southern portion of the facility. AMEC's Initial Geotechnical Assessment, Final Report, dated May 2006 contains anticipated flows that the diversion structure should be designed for.

8.3.5 Waste Rock

At present, the top of the waste rock dump is a relatively flat surface. The sides of the dump appear to be relatively stable and the analysis of the waste rock indicates that it is relatively benign with respect to potential for the generation of toxic or acidic leachate. Therefore, we recommend that the top slope of the dump be preserved for potential future redevelopment. Since the dump consists of uncontrolled fills, up to forty feet deep, the types of redevelopment would consist of non-critical and non-settlement sensitive structures such as parking facilities that would be paved to minimize infiltration. Further evaluation and geotechnical design associated with the side slopes could be performed in order to buttress them from failure in the future.

8.3.6 Surface Stabilization

The facilities to be capped and closed as described in this section should be reseeded with a BLM approved seed mixture. Placement of the seed should follow standard, state of practice procedures at the time the work is performed.

8.3.7 Monitoring

Since the site is under the regulation of the Bureau of Mining, monitoring of the closure of the facility will be required. This monitoring will need to be performed for a period of up to thirty years. In the event that wastes are exposed in the future or otherwise escape containment, remedial efforts will be needed to restore containment.

8.4 Other Environmental Concerns

Other environmental concerns at the site include, mine shafts, acid batteries, process material samples, discarded oily and assay wastes, lead-based paint and asbestos. A brief discussion regarding the management of these issues follows.

8.4.1 Mine Shafts

There are two shafts on-site. Presently both are secured with fencing. However, they remain open. The locations of the shafts are in prime portions of the site for redevelopment. A geophysical assessment (AMEC's Initial Geotechnical Assessment, Final Report, dated May 2006) of the area in the vicinity of the shafts indicates that there is competent rock within a relatively shallow depth of these shafts. This rock would allow for the design and emplacement of a structural plug that would allow for future development over these features

8.4.2 Acid Batteries

East of the core shack and northern shaft is a former equipment lay-down area. This area contains numerous heavy acid batteries. These batteries should be removed and properly disposed of.

8.4.3 Process Material Samples

Two totes are located to the south of the Reagent Storage Building. These totes contain samples of rock flower from the mill. These materials should be disposed of along with the materials in the vats and tanks in the mill.

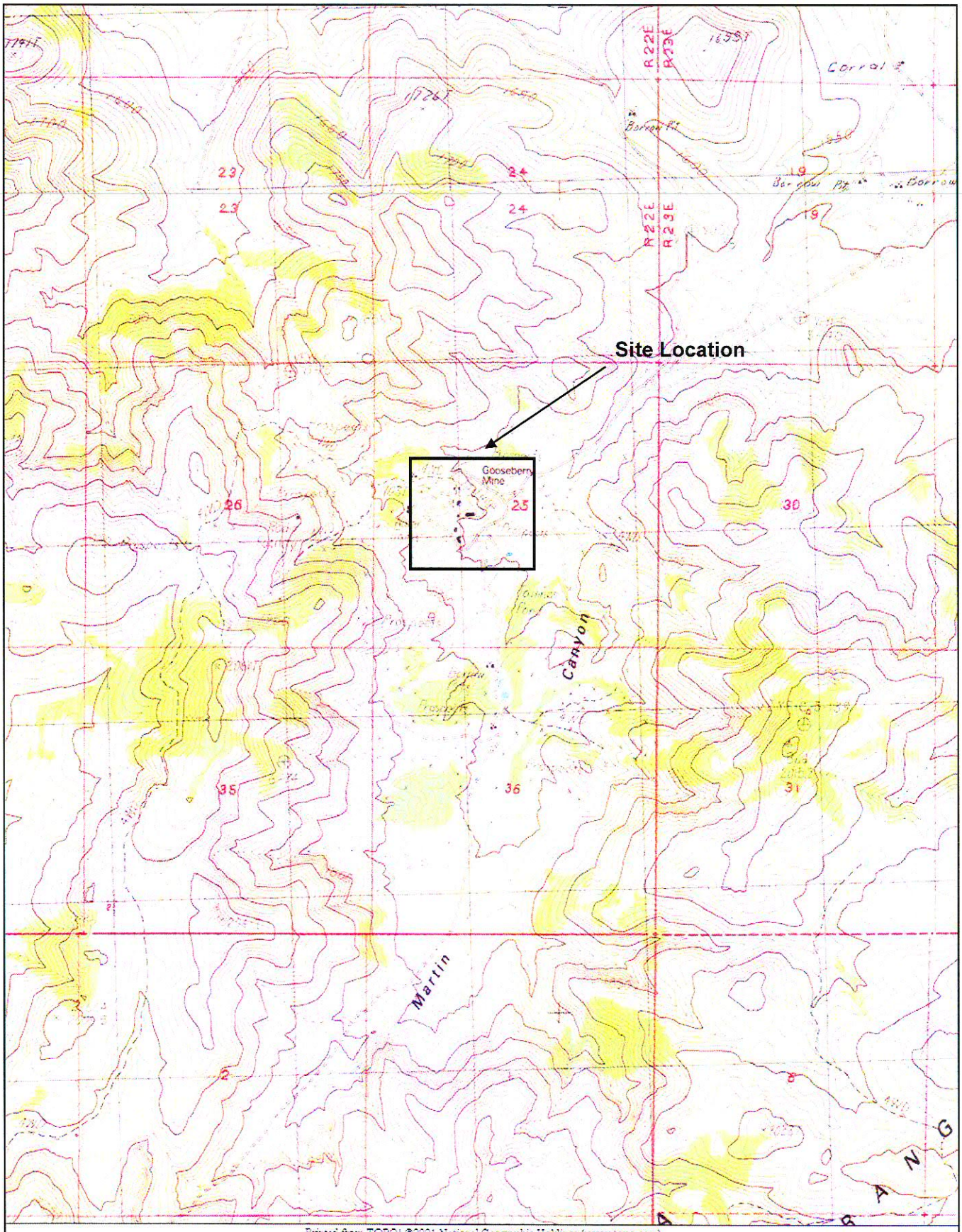
8.4.4 Oily and Assay Wastes

A high density polyethylene (HDPE) fabricated container is located to the north of the reagent storage building. This container holds what appears to be oily wastes as well as used crucibles. This material should be disposed as a regulated waste.

8.4.5 Lead-Based Paint and Asbestos

Prior to demolition of the on-site structures, a lead-based paint and asbestos survey should be performed. In the event these materials are present, appropriate abatement or demolition practices should be performed in compliance with applicable worker safety and hazardous materials management regulations.

FIGURES



Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

amec

780 Vista Blvd, Suite 100
Sparks, Nevada
USA 89433-6656
Tel 1+(775) 331-2375

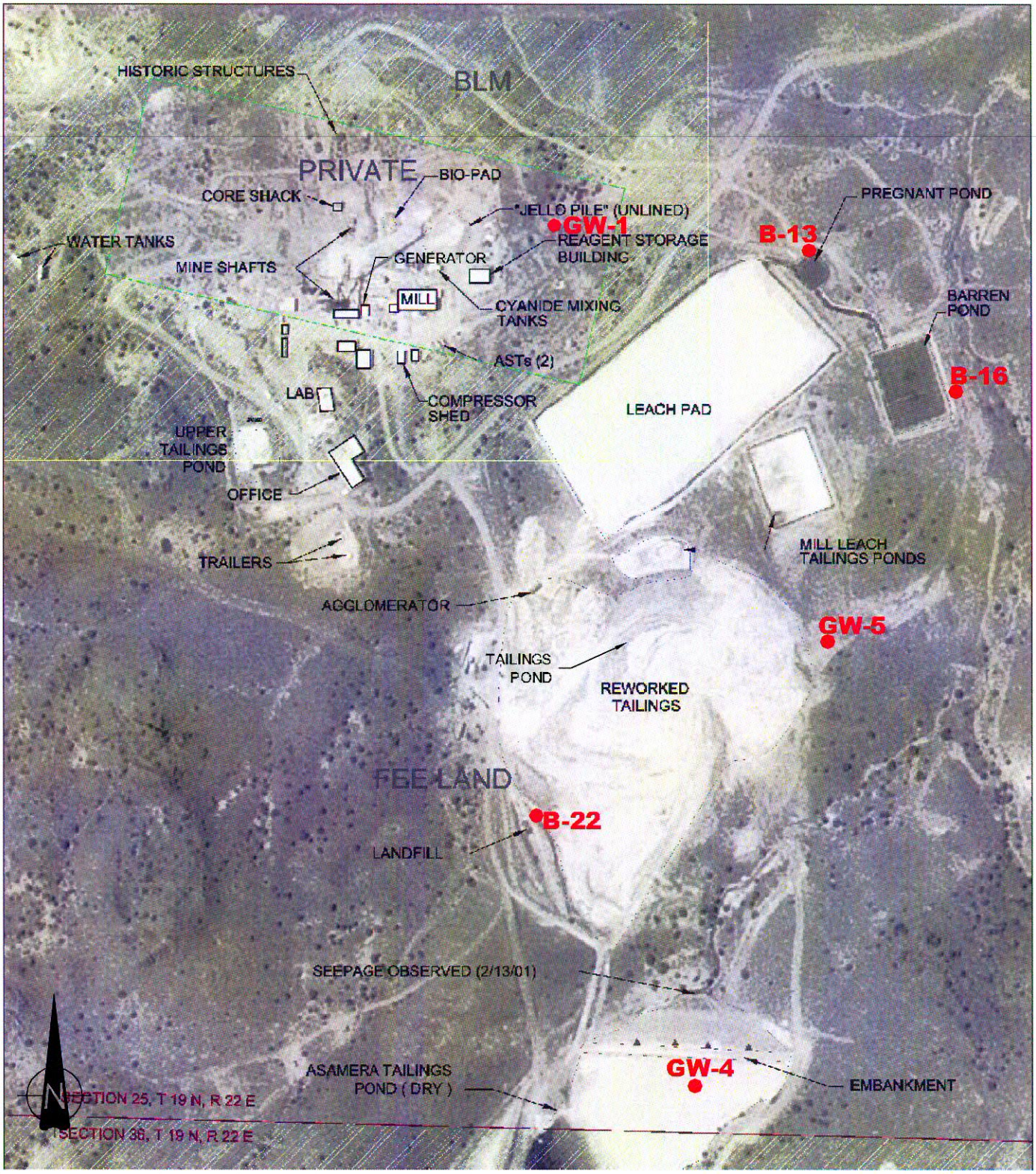
JOB NO.	6-417-000720
DRAWN	dls
DATE	06/2007
SCALE	AS INDICATED

FIGURE 1
Vicinity Map
Gooseberry Mine Site
Storey County, Nevada

J:\Clerical\2007\June_07\6417000720_Gooseberry_Mine\Figure 1.doc

AMEC Earth & Environmental 780 Vista Boulevard, Suite 100 Sparks, Nevada 89434-6656	amec	CLIENT LOGO	CLIENT NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION
PROJECT GOOSEBERRY MINE, STOREY CO., NEVADA		DWN BY: LM-[illegible]	DATUM: -- / DATE: MARCH 2007
TITLE SITE MAP		CHK'D BY: DS-[illegible] / REV. NO.: 1	PROJECT NO: 7-417-000720
		PROJECTION: --	FIGURE No. FIGURE 2

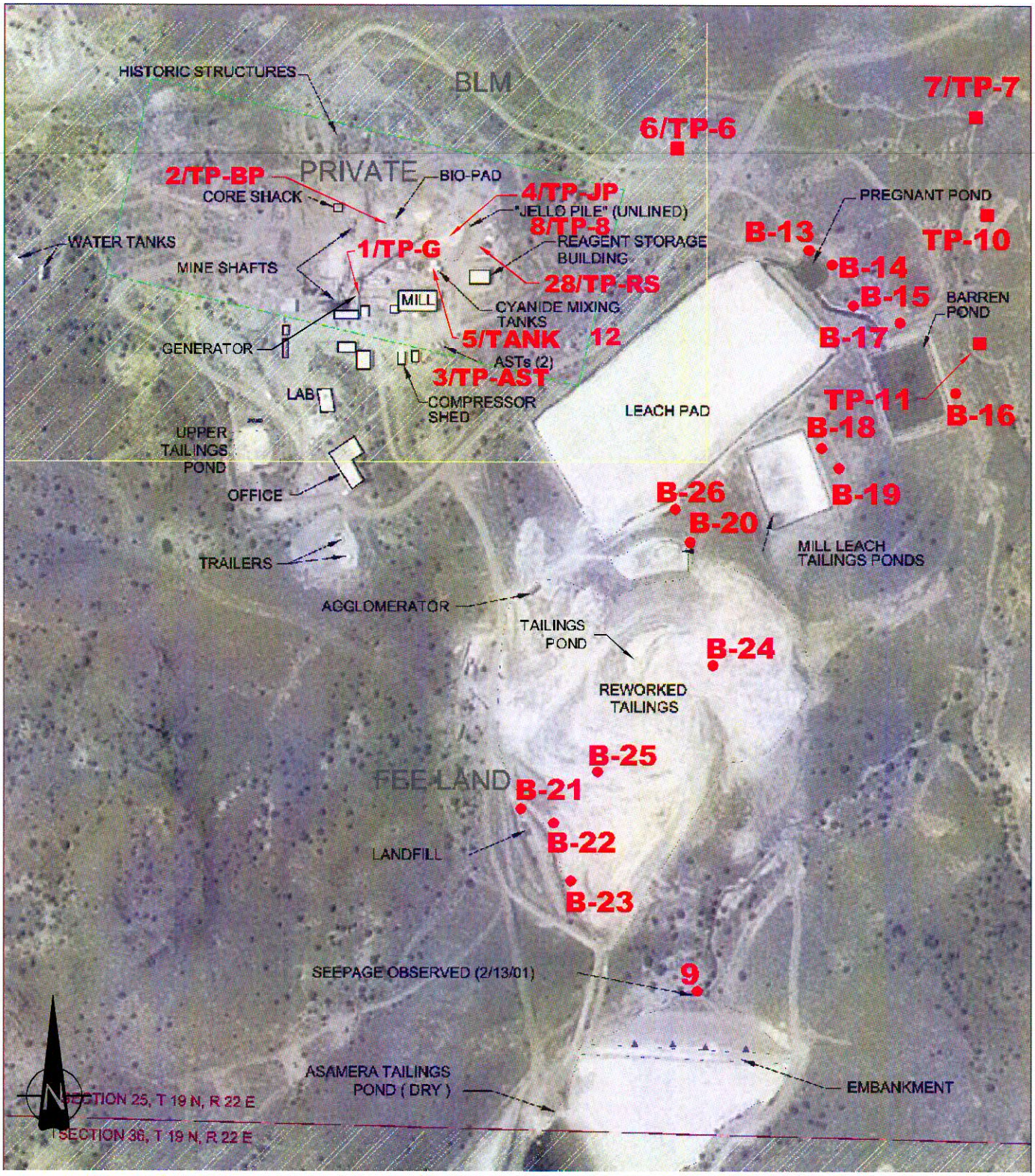
K:\AMEC US OFFICES\Sparks\Gooseberry_Mine\Figure_02_SITE_MAP.DWG -- 8.5x11 -- Apr. 20, 2007 12:00pm -- laura.mccoy



AMEC Earth & Environmental 780 Vista Boulevard, Suite 100 Sparks, Nevada 89434-6656	amec	CLIENT LOGO	CLIENT NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION

PROJECT GOOSEBERRY MINE, STOREY CO., NEVADA	DWN BY: LM-pcx	DATUM: --	DATE: MARCH 2007
TITLE GROUNDWATER EXPLORATION LOCATION MAP	CHK'D BY: MB-pcx/DS-pcx	REV. NO.: 2	PROJECT NO: 7-417-000720
	PROJECTION: --		FIGURE No. FIGURE 3

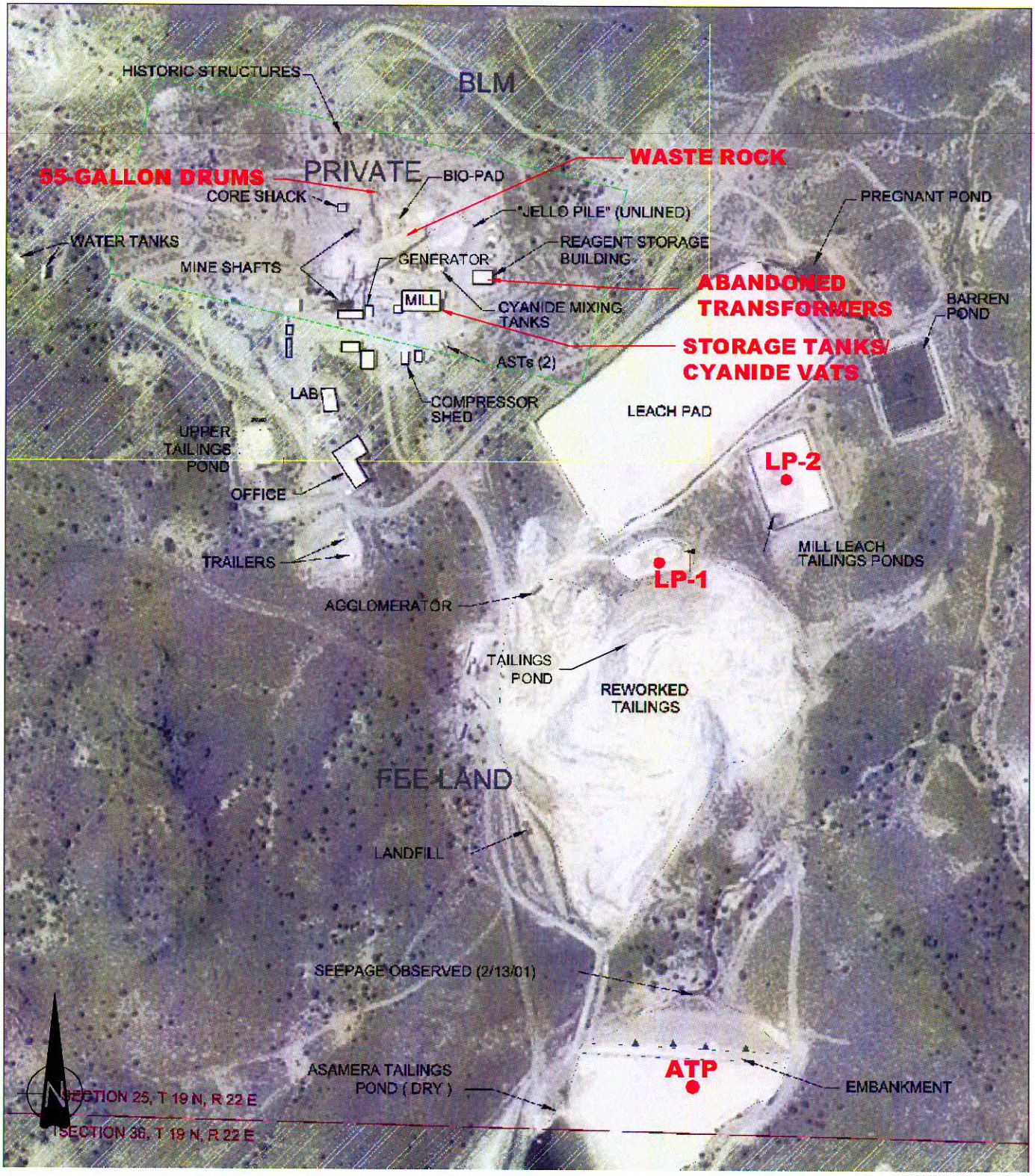
K:\AMEC US OFFICES\Sparks\Gooseberry_Mine\Figure_03_GW_sample_locations_R2.DWG - 8.5x11 - Apr. 20, 2007 12:02pm - laura.mccoy



AMEC Earth & Environmental 780 Vista Boulevard, Suite 100 Sparks, Nevada 89434-6656	amec	CLIENT LOGO	CLIENT NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION

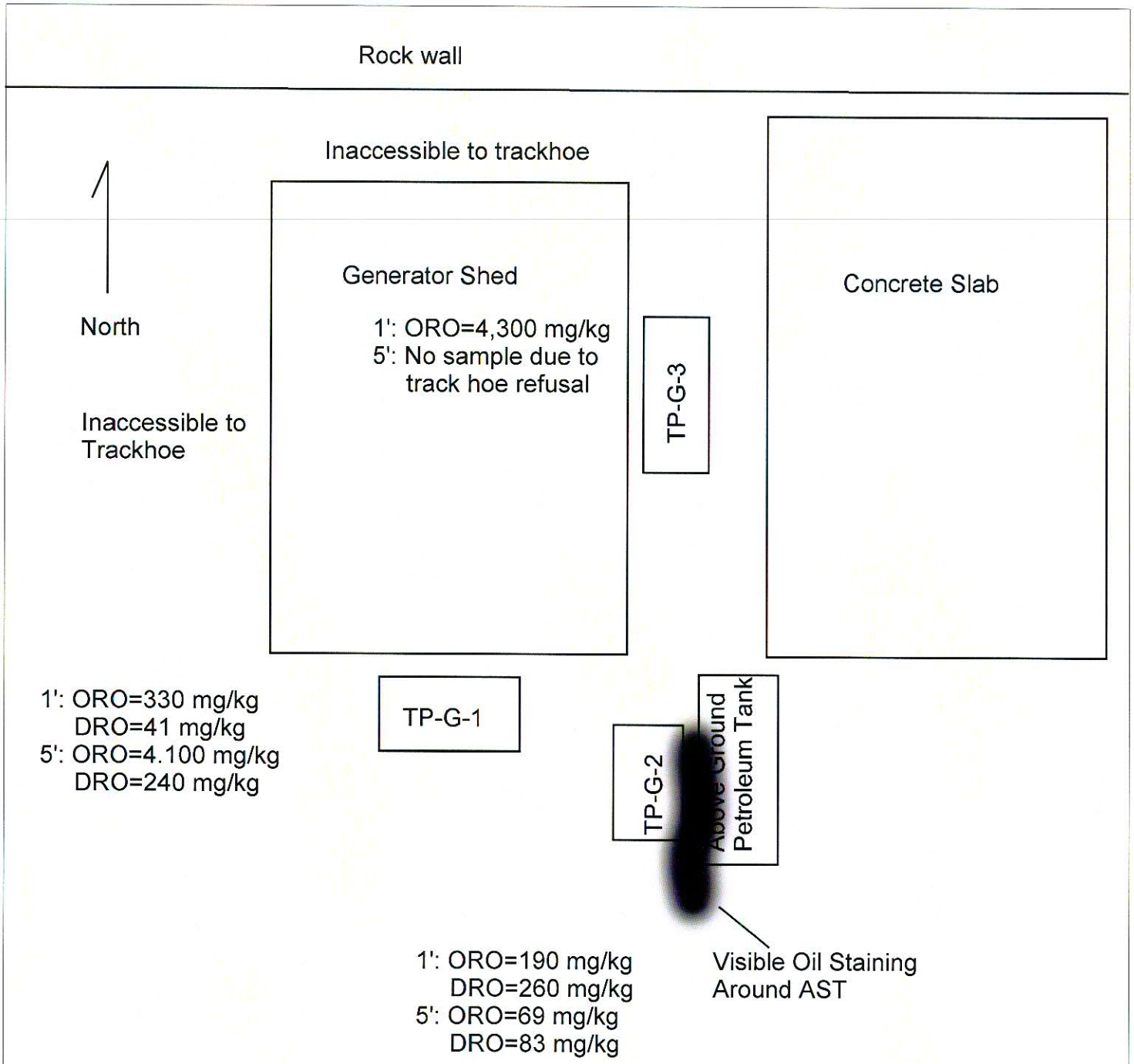
PROJECT GOOSEBERRY MINE, STOREY CO., NEVADA	DWN BY: LM-[illegible]	DATUM: --	DATE: MARCH 2007
TITLE SOIL SAMPLING LOCATION MAP	CHK'D BY: MB-[illegible]/DS-[illegible]	REV. NO.: 3	PROJECT NO: 7-417-000720
	PROJECTION: --		FIGURE No. FIGURE 4

K:\AMEC US OFFICES\Sparks\Gooseberry_Mine\Figure_04_soil_sample_locations_R2.DWG – 8.5x11 – Apr. 20, 2007 12:05pm – laura.mccoy



AMEC Earth & Environmental 780 Vista Boulevard, Suite 100 Sparks, Nevada 89434-6656	amec	CLIENT LOGO	CLIENT NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION
PROJECT GOOSEBERRY MINE, STOREY CO., NEVADA		DWN BY: LM-[illegible]	DATUM: -- / DATE: MARCH 2007
TITLE OTHER MATERIALS SAMPLED		CHK'D BY: MB-[illegible]/DS-[illegible] / REV. NO.: 3	PROJECT NO: 7-417-000720
		PROJECTION: --	FIGURE No. FIGURE 5

K:\AMEC US OFFICES\Sparks\Gooseberry_Mine\Figure_05_Other _Materials_Sampled_R1.DWG - 8.5x11 - Apr. 20, 2007 12:07pm - laura.mccoy

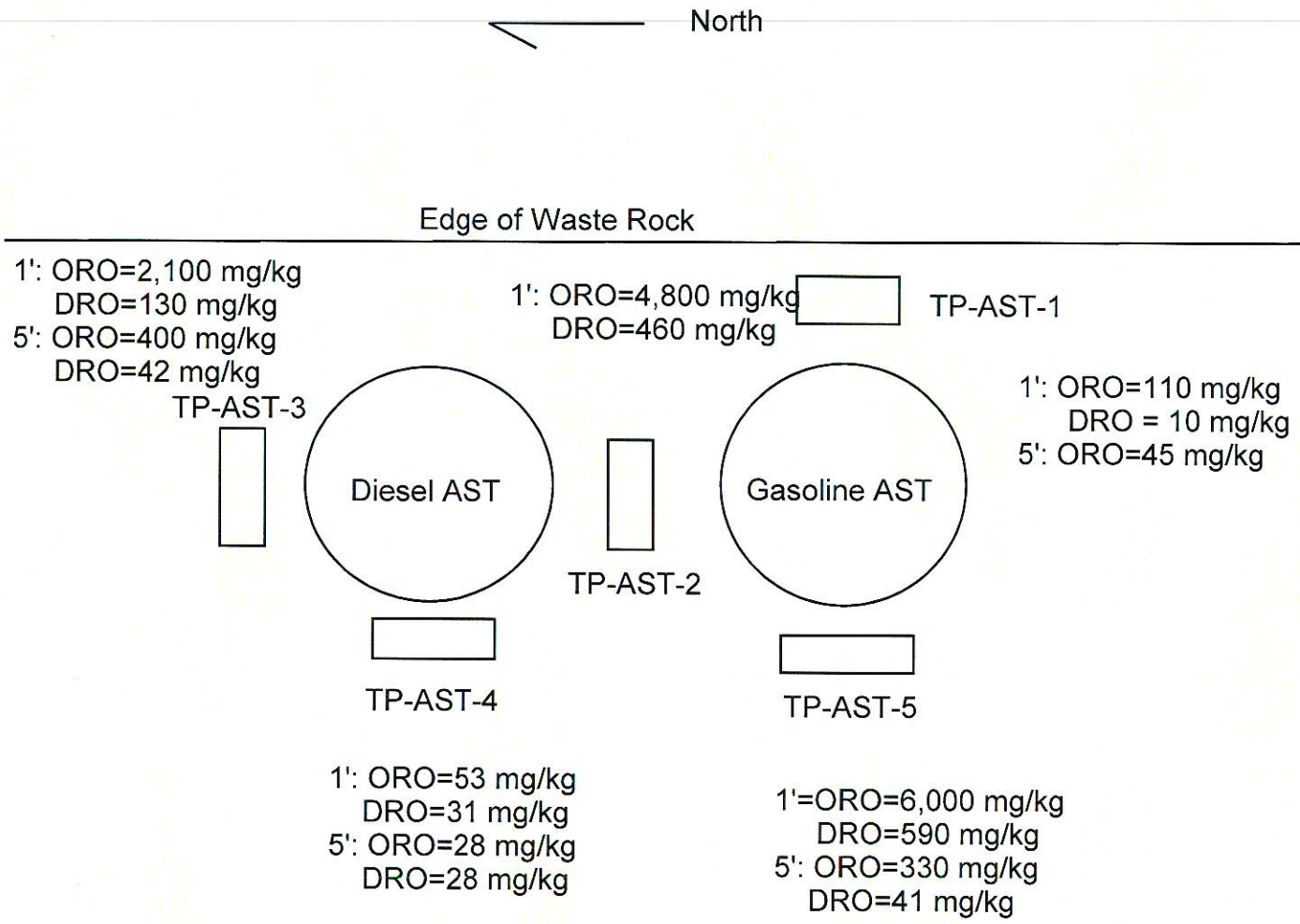


Note: Only those analytes ketected are noted. Refer to Figure 2 for the location of the generator building to the rest of the property.

amec
780 Vista Blvd, Suite 100
Sparks Nevada
USA 89434-6656
Tel 1+(775) 331-2375

JOB NO.	4-417-000720
DESIGN:	dls
DRAWN:	dls
DATE:	3-28-07
SCALE:	1" = 7 feet

Figure 6
Generator Sample Locations
Gooseberry Mine
Storey County, Nevada

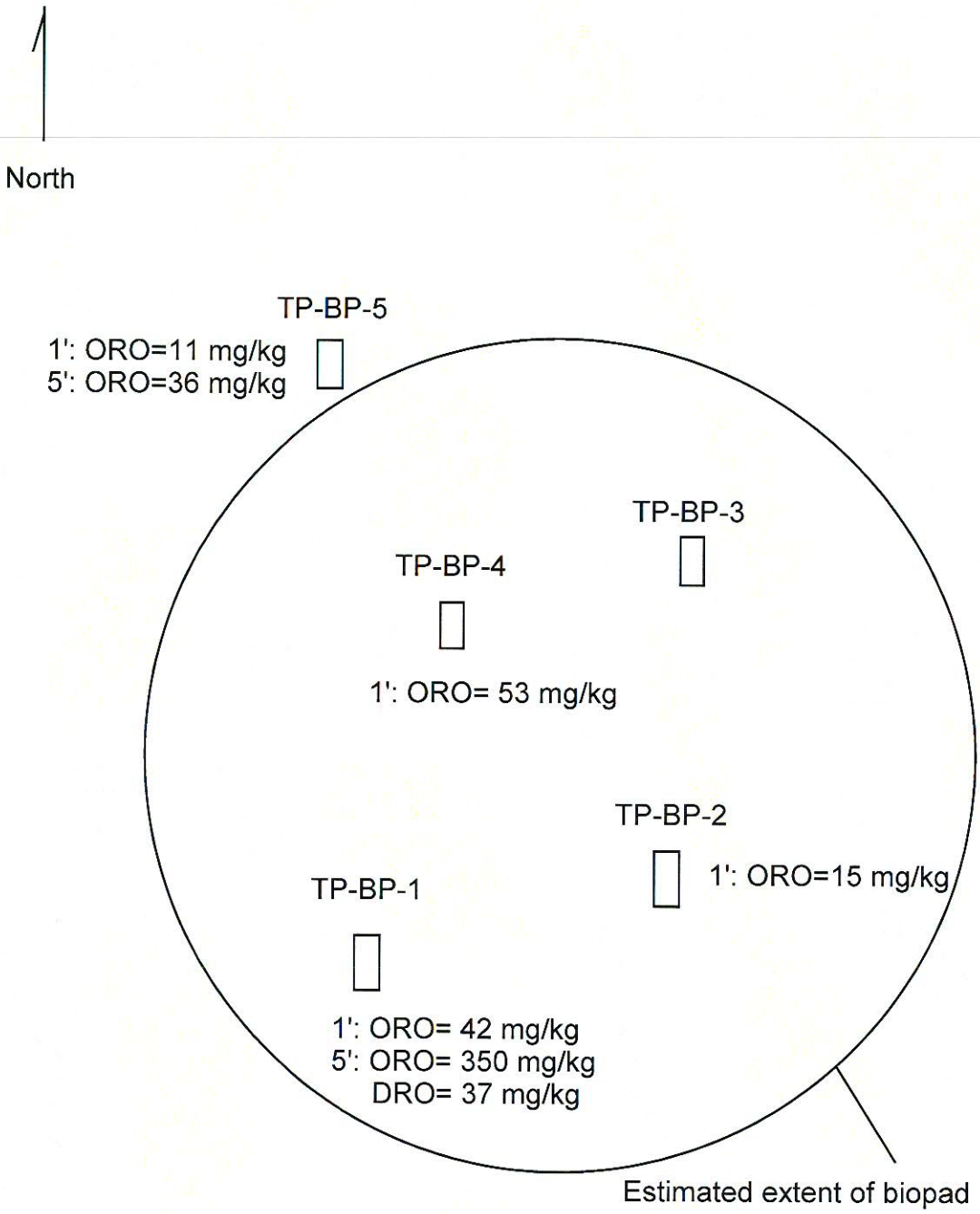


Note: Only those analytes detected are noted. Refer to Figure 2 for the locatio of the ASTs in relation to the property.

amec
780 Vista Blvd, Suite 100
Sparks Nevada
USA 89434-6656
Tel 1+(775) 331-2375

JOB NO.	4-417-000720
DESIGN:	dls
DRAWN:	dls
DATE:	3-28-07
SCALE:	1" = 7 feet

Figure 7
AST Sample Locations
Gooseberry Mine
Storey County, Nevada

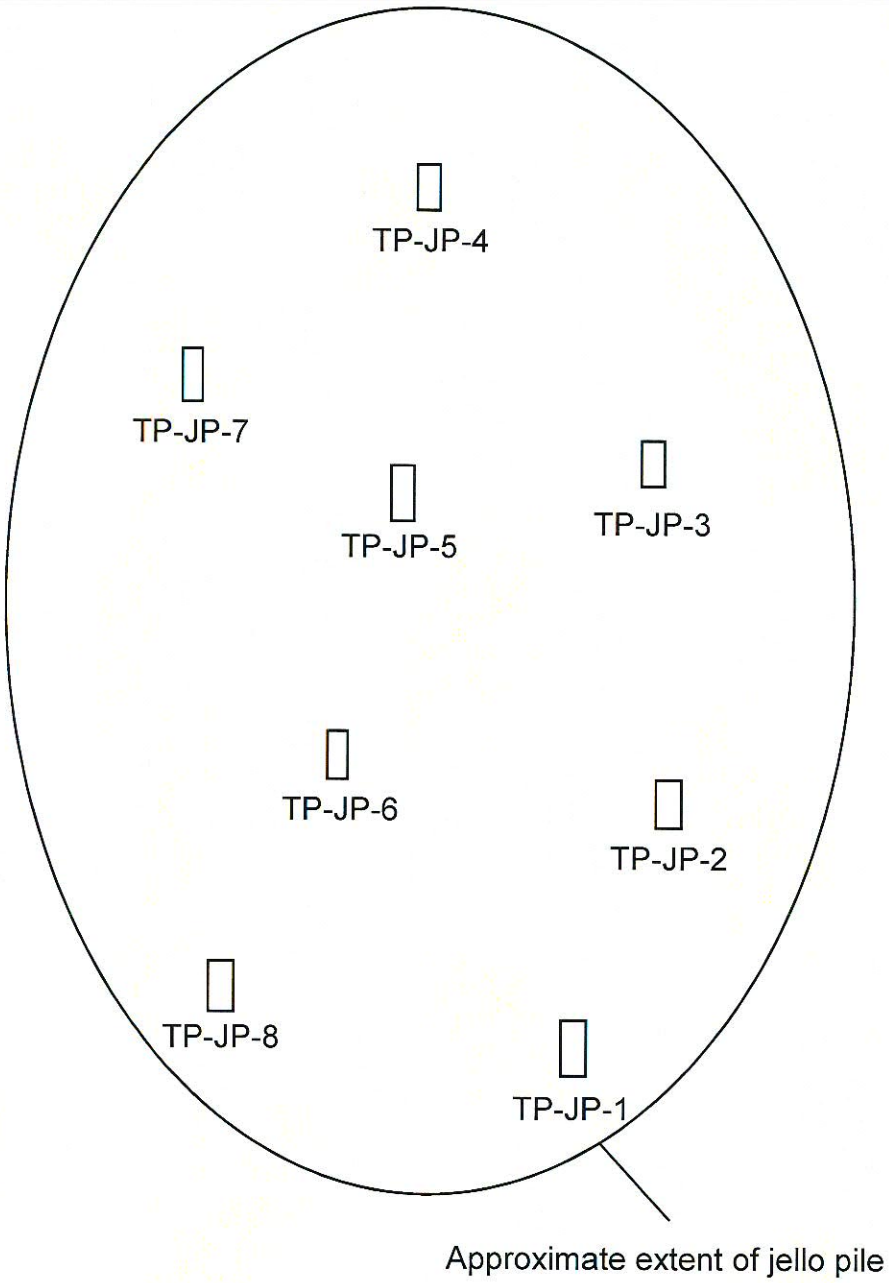


Note: Only those anlaytes detected are noted. Refer to Figurre 2 for the location of the biopad to the rest of the property.

amec
780 Vista Blvd, Suite 100
Sparks Nevada
USA 89434-6656
Tel 1+(775) 331-2375

JOB NO.	4-417-000720
DESIGN:	dls
DRAWN:	dls
DATE:	3-28-07
SCALE:	1" = 20 feet

Figure 8
Biopad Sample Locations
Gooseberry Mine
Storey County, Nevada

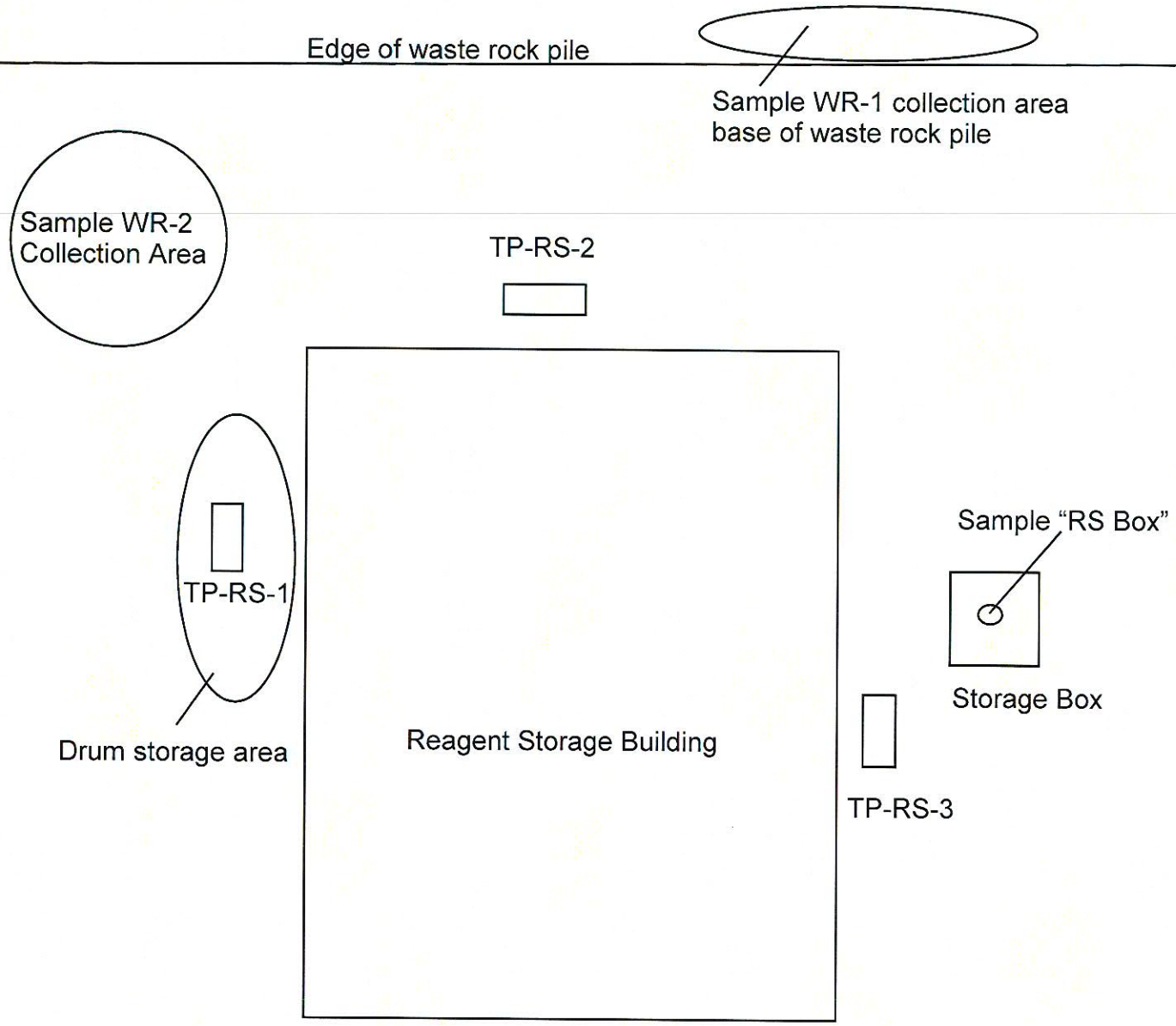


Refer to Figure 2 for the location of the jello pile to the rest of the property.

amec
780 Vista Blvd, Suite 100
Sparks Nevada
USA 89434-6656
Tel 1+(775) 331-2375

JOB NO.	4-417-000720
DESIGN:	dls
DRAWN:	dls
DATE:	3-28-07
SCALE:	1" = 35 feet

Figure 9
Jello Pile Sample Locations
Gooseberry Mine
Storey County, Nevada



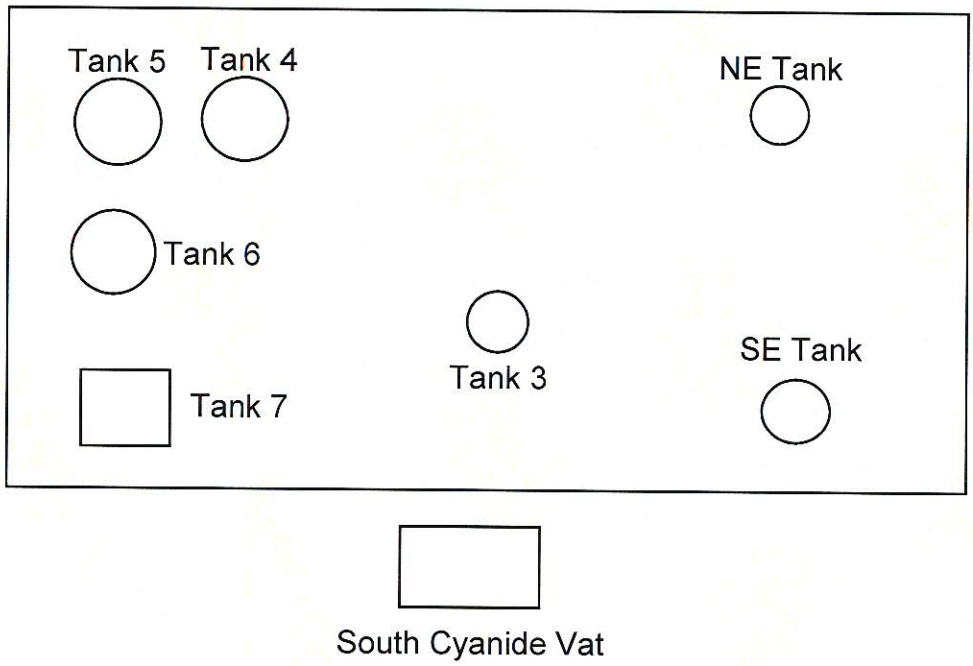
Refer to Figure 2 for the location of the reagent storage building to the rest of the property.

amec
780 Vista Blvd, Suite 100
Sparks Nevada
USA 89434-6656
Tel 1+(775) 331-2375

JOB NO.	4-417-000720
DESIGN:	dls
DRAWN:	dls
DATE:	3-28-07
SCALE:	As Indicated

Figure 10
Reagent Storage Building Sample Locations
Gooseberry Mine
Storey County, Nevada

North



Refer to Figure 2 for the location of the mill building to the rest of the property.

amec
780 Vista Blvd, Suite 100
Sparks Nevada
USA 89434-6656
Tel 1+(775) 331-2375

JOB NO.	4-417-000720
DESIGN:	dls
DRAWN:	dls
DATE:	3-28-07
SCALE:	1" = 20 feet

Figure 11
Mill Tanks Sample Locations
Gooseberry Mine
Storey County, Nevada

TABLES

Table 1
SITE LOCATIONS, ACTIVITIES, CHEMICALS OF CONCERN AND ENVIRONMENTAL ISSUES
Gooseberry Mine, Storey County, Nevada

Location	Activity	Chemicals of Concern	RCRA Exempt	Environmental Issues
Shafts	Mining	None	NA	Conduit to groundwater
Mill building	Ore processing	Asbestos, Cyanide, Metals	Yes	Waste management
Aboveground Storage Tanks (ASTs)	Fueling	Petroleum	No	Soil contamination
Reagent storage	Chemical storage	Alcohols, Naptha, Xanthates, Zinc	No	Soil contamination
Jello pile residual	Waste disposal	Cyanide, Metals	Yes	Soil contamination
Heap leach pad and ponds	Processing	Cyanide, Metals, pH	Yes	Leachate, Dust
Tailing storage	Waste disposal	Cyanide, Metals	Yes	Leachate Erosion/Containment
Waste rock dump	Waste disposal	Metals, pH	Yes	Leachate
Cyanide mixing tanks	Processing	Cyanide	No	Waste management
Bio pad	Waste disposal	Petroleum	No	Residual soil contamination
Landfill	Waste disposal	Alcohols, Naptha, Petroleum, Solvents, Xanthates	No	Soil contamination, Leachate, Vectors
Miscellaneous	Chemical/battery storage/drums	Acids, Alcohols, Lead, Petroleum	No	Soil contamination
NA = Not applicable				

Table 2
SOIL SAMPLING LOCATIONS AND ANALYSES
Gooseberry Mine, Storey County, Nevada

Sample Location/Sample Series[1]	Issue	Chemicals of Concern	Sampling Method[2]	Number of Proposed Samples[3]	Sample Interval (feet)
1/TP-G	Generator	Ethylene glycol petroleum	Excavation/grab	10	1, 5
2/TP-BP	Biopad	Petroleum	Excavation/grab	10	1, 5
3/TP-AST	Aboveground Storage tanks	Petroleum	Excavation/grab	10	1, 5
4/TP-JP	Jello pile	Profile II	Excavation/grab	16	1, 5
5/Tank	Cyanide blending tank	Metals/cyanide	Hand auger	4	1
6/TP-6	Natural drainage	Metals/cyanide	Excavation/grab	2	1, 5
7/TP-7	Natural drainage confluence	Metals/cyanide	Excavation/grab	2	1, 5
8/TP-8	Natural drainage with waste rock fill	Profile II /ABA	Excavation/grab	2	1, 5
9/ATP	Tailings fluid seepage	Profile II/cyanide	Hand auger	2	1
10, 11/B-10,B-11	Drainage[6]	Metals/cyanide	Excavation/grab	3 each (total 6)	1, 5, 10
12, 26/B-12,B-26	Discharge from heap leach pad	Metals/cyanide /ABA	Drilling/sampler	3 each (total 6)	5, 15, 25[7]
13, 14, 15, 16, 17, 18, 19, 20/B-13 to B -20	Discharge from ponds	Metals/cyanide	Drilling/sampler	3 each (total 24)	5, 15, 25[7]
21, 22, 23/B-21 to B-23	Discharge from landfill	VOCs/ petroleum/acids/ metals/cyanide	Drilling/sampler	3 each (total 9)	5, 15, 25[7]
24, 25/B-25,b-25	Discharge from unlined tailings pond	Metals/cyanide /ABA	Drilling/sampler	1 each (total 2)	Unknown[7]
28/TP-RS	Reagent storage	VOCs/ caustics/metals/ cyanide	Excavation/grab	6	1, 5

1 Refer to Figures3 and 4.
2 Specifies type of equipment to be used to access sampling points and type of sample to be obtained.
3 Anticipated maximum number of samples to be obtained for analysis.
4 Refer to Section 2.3 for list of chemicals identified at site. Also potential for RCRA metals, chlorinated solvents and petroleum exist in this area.
5 Samples to be analyzed for solvents and petroleum products based on visual assessment and RTO readings at site.
6 Location of drainage downgradient of 1992 solution discharge.
7 A sample will be collected at bedrock soil contact.
8 Sample will be collected at 1 to 5 feet below tailings.

Table 3
ANALYTICAL METHODS, PARAMETERS AND REFERENCE STANDARDS
Gooseberry Mine, Storey County, Nevada

Analyte Class	Method	Parameters	MCL [1,2] (mg/L)	Nevada Standard[2] (mg/L)	Method Detection Limit
MWMP	MWMP/NDEP	MWMP	--	--	--
PROFILE					
I	EPA 310.1	Alkalinity	--	--	1.0
I, II	EPA 6010/6020	Aluminum	0.05-0.2	0.05-0.2	0.20
I, II	EPA 6010/6020	Antimony	0.006	0.146	0.005
I, II	EPA 6010/6020	Arsenic	0.010	0.050	0.005
I, II	EPA 6010/6020	Barium	2	2	0.005
I, II	EPA 6010/6020	Beryllium	0.004	0.004	0.004
II	EPA 6010/6020	Bismuth	--	--	0.005
I, II	EPA 6010/6020	Boron	--	--	0.10
I, II	EPA 6010/6020	Cadmium	0.005	0.005	0.005
I, II	EPA 6010/6020	Calcium	--	--	0.50
I, II	EPA 300.0	Chloride	250	250-400	0.50
I, II	EPA 6010/6020	Chromium	0.1	0.1	0.005
II	EPA 6010/6020	Cobalt	--	--	0.005
I, II	EPA 6010/6020	Copper	1.3	1.3	0.01
I, II	EPA 300.0	Fluoride	2.0-4.0	20.-4.0	0.13
II	EPA 6010/6020	Gallium	-	-	0.005
I, II	EPA 6010/6020	Iron	0.3	0.3-0.6	0.3
I, II	EPA 6010/6020	Lead	0.015	0.015	0.005
II	EPA 6010/6020	Lithium	--	--	0.005
I, II	EPA 6010/6020	Magnesium	--	125-150	0.50
I, II	EPA 6010/6020	Manganese	0.05	0.05-0.10	0.005
I, II	EPA 7470	Mercury	0.002	0.002	0.001
II	EPA 6010/6020	Molybdenum	--	--	0.005
I, II	EPA 6010/6020	Nickel	--	0.1	0.01
I, II	EPA 300.0	Nitrate+Nitrite	10	10	0.25
I, II	EPA 150.1	pH	6.5-8.5	6.5-8.5	1.0
II	EPA 365.1	Phosphorus	--	--	0.10
I, II	EPA 6010/6020	Potassium	--	--	0.50
II	EPA 6010/6020	Scandium	--	--	0.005
I, II	EPA 6010/6020	Selenium	0.05	0.05	0.005
I, II	EPA 6010/6020	Silver	0.10	0.10	0.005
I, II	EPA 6010/6020	Sodium	--	--	0.50
II	EPA 6010/6020	Strontium	--	--	0.02
I, II	EPA 300.0	Sulfate	250	250-500	0.50
I, II	EPA 6010/6020	Thallium	0.002	0.002	0.002
II	EPA 6010/6020	Tin	--	--	0.005
I, II	EPA 6010/6020	Titanium	--	--	10
I, II	EPA 160.1	TDS	500	500-1000	0.003
II	EPA 6010/6020	Vanadium	--	--	0.005
I, II	SM4500CN	WAD Cyanide	0.2	0.2	0.1
I, II	EPA 6010/6020	Zinc	5	5	NA
ABA	Sobek	ANP	--	--	NA
		AGP	--	--	NA
		NNP	--	--	NA

Table 3
ANALYTICAL METHODS, PARAMETERS AND REFERENCE STANDARDS
Gooseberry Mine, Storey County, Nevada

Analyte Class	Method	Parameters	MCL [1,2] (mg/L)	Nevada Standard[2] (mg/L)	Method Detection Limit
		Total Sulfur	--	--	NA
		Sulfate Sulfur	--	--	NA
		Pyritic Sulfur	--	--	NA
		Non-Ext. Sulfur	--	--	NA
		ANP:AGP	--	--	NA
RCRA Metals	EPA 6010/6020	Arsenic	0.010	0.050	0.005
	EPA 6010/6020	Barium	2	2	0.005
	EPA 6010/6020	Cadmium	0.1	0.1	0.005
	EPA 6010/6020	Chromium	0.1	0.1	0.005
	EPA 6010/6020	Lead	0.015	0.015	0.005
	EPA 7470/7471	Mercury	0.002	0.002	0.0002
	EPA 6010/6020	Selenium	0.05	0.05	0.005
	EPA 6010/6020	Silver	0.10	0.10	0.005
Cyanide	SM4500CN	WAD Cyanide	0.2	0.2	
TPH	EPA 3550/8015M	TPH-E (Jet fuel)	--	--	
	EPA 3550/8015M	TPH-E (DRO)	--	--	0.50
	EPA 3550/8015M	TPH-E (ORO)	--	--	0.50
	EPA 5030/8021	TPH (GRO)	--	--	0.50
	EPA 5030/8021	Benzene	0.005	0.005	0.001
	EPA 5030/8021	Toluene	1	1	0.001
	EPA 5030/8021	Ethylbenzene	0.7	0.7	0.001
	EPA 5030/8021	m,p-Xylene	10	10	0.001
	EPA 5030/8021	o-Xylene	10	10	0.001
VOCs	EPA 8240/TCLP	various	various	various	Various

-- No available standard
ABA Acid Base Accounting
AGP Acid Generating Potential
ANP Acid Neutralizing Potential
MCL Maximum Contaminant Level
mg/L Milligrams per liter
Metals analyses conducted on TCLP extracts
MWMP Meteoric Water Mobility Procedure
NNP Net Neutralizing Potential
RCRA Resource Recovery and Conservation Act
SM Standard Methods
TDS Total Dissolved Solids
TPH Total Petroleum Hydrocarbons
VOCs Volatile Organic Compounds
WAD CN Weak Acid Dissociable Cyanide
1 EPA National Primary and Secondary Drinking Water Standards, June 2003
2 Used for reference purposes only

Table 4
DISCHARGE FROM HEAP LEACH PAD AND REWORKED TAILINGS POND
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Location	Sample Number	Collection Date	Analytes[1]									
			ABA	CN	As	Ba	Cd	Cr	Pb	Ag	Se	Hg
Heap Leach Pad	B-12-5	12-21-06	17	0.28	ND[2]	ND	ND	ND	ND	ND	ND	ND
	B-26-5	1-8-07	24.3	ND	ND	ND	ND	ND	ND	ND	ND	0.029
	B-26-16	1-8-07	85.8	ND	ND	ND	ND	ND	ND	ND	ND	0.022
Reworked Tailings Pond	B-24-5	12-19-06	218	ND	<1.5	87	<0.25	4.4	9.6	ND	ND	<0.10
	B-25-15	12-19-06	73.4	ND	ND	ND	ND	ND	ND	ND	<2.5	ND
Reporting Limits:[3]				0.2	1.0	2.0	0.1	0.5	1.0	0.4	0.5	0.01
Reporting Units:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Analytical Method:				2	SW846	SW846	SW846	6010B	6010B	6010B	6010B	7470A

Notes:

1 ABA = Acid Base Accounting

2 ND = Not Detected at or above the method reporting limit

3 Reporting limits may vary. Refer to analytical reports

Metals: (TCLP) CN = Total Cyanide, As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Ag = Silver, Se = Selenium, Hg = Mercury

Table 5
DISCHARGE FROM PONDS
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Location	Sample ID	Collection Date	Analytes[1]								
			Total CN	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
Pregnant Pond	B-13-5	12-19-06	0.36	ND[2]	ND	ND	ND	ND	ND	ND	ND
Pregnant Pond/Overflow Channel	B-14-5	12-19-06	ND	ND	ND	ND	ND	ND	ND	ND	ND
	B-17-5	12-20-06	1.5	ND	ND	ND	ND	ND	ND	ND	ND
	B-17-15	12-20-06	1.5	ND	2.2	ND	ND	ND	ND	ND	ND
	B-17-20	12-20-06	0.22	ND	ND	ND	ND	ND	0.013	ND	ND
	B-17-22	12-20-06	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barren Pond	B-16-5	12-20-06	2.6	ND	ND	ND	ND	ND	ND	ND	ND
	B-16-15	12-20-06	ND	ND	2.1	ND	ND	ND	ND	ND	ND
	B-16-23	12-20-06	0.27	ND	ND	ND	ND	ND	0.016	ND	ND
Mill Leach Tailing Pond End	B-18-4	12-21-06	ND	ND	ND	ND	ND	ND	ND	ND	ND
	B-19-5	12-21-06	0.22	ND	ND	ND	ND	ND	ND	ND	ND
	B-19-15	12-21-06	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mill Leach Tailings Pond West	B-20-5	1-25-07	ND	ND	ND	ND	ND	ND	ND	ND	ND
Reporting Limit (mg/L):[3]			0.2	1.0	2.0	0.1	0.5	1.0	0.01	0.4	0.5

Notes:

1 **Metals: (TCLP) As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Ag = Silver, Se = Selenium, Hg = Mercury**

2 **ND = Not detected at or above the method reporting limit**

3 **Reporting limits may vary. Refer to analytical reports**

CN = Total Cyanide

Table 6
DISCHARGE FROM LANDFILL
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	Collection Date	Analytes[1]													
		ABA	CN	As	Ba	Cd	Cr	Pb	Ag	Se	Hg	ORO	DRO	GRO	VOCs
B-21-5	1-8-07	307	ND[2]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-21-10	1-8-07	352	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-21-15	1-8-07	180	ND	ND	ND	ND	ND	ND	ND	ND	0.029	ND	ND	ND	ND
B-22-5	1-8-07	209	ND	ND	ND	ND	ND	ND	ND	ND	0.020	21	ND	ND	ND
B-22-15	1-8-07	65	ND	ND	ND	ND	ND	ND	ND	ND	0.010	ND	ND	ND	ND
B-22-19	1-8-07	60	ND	ND	ND	ND	ND	ND	ND	ND	0.011	ND	ND	ND	ND
B-23-5	1-8-07	66.8	ND	ND	ND	ND	ND	ND	ND	ND	0.010	ND	ND	ND	ND
B-23-15	1-8-07	43.4	ND	ND	ND	ND	ND	ND	ND	ND	0.011	ND	ND	ND	ND
B-23-22	1-8-07	48.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Reporting Limits:[3]			0.20	1.00	2.00	0.10	0.50	1.00	0.50	0.40	0.010	10	10	10	20-80
Reporting Units:			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/kg	mg/kg	mg/kg	µg/kg
Analytical Method:			9014	9014	9014	9014	6010B	6010B	6010B	6010B	7470B	8015B	8015B	8015B	8062B

Notes:

1 CN = Total Cyanide

2 ND = Not Detected at or above the method reporting limit

3 Reporting limits may vary. Refer to analytical reports

Metals (TCLP): As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Ag = Silver, Se = Selenium, Hg = Mercury

Petroleum: ORO = Oil Range Organics, DRO = Diesel Range Organics, GRO = Gasoline Range Organics, VOC = Volatile Organic Compounds

Table 7
GENERATOR BUILDING
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	Collection Date	Analytes[1]							
		EG	DRO	ORO	GRO	B	T	E	X
TP-G-1-1	1-26-07	ND[2]	41	330	ND	ND	ND	ND	ND
TP-G-1-5	1-26-07	ND	240	4,100	ND	ND	ND	ND	ND
TP-G-2-1	1-26-07	ND	260	190	ND	ND	ND	ND	ND
TP-G-2-5	1-26-07	ND	83	69	ND	ND	ND	ND	ND
TP-G-2-10*	1-26-07	ND	200	220	ND	ND	ND	ND	ND
TP-G-3-1	1-26-07	ND	370	4,300	ND	ND	ND	ND	ND
Reporting Limit:[3]		15 mg/kg	10–100 mg/kg	10–100 mg/kg	10–100 mg/kg	20 µg/kg	20 µg/kg	20 µg/kg	20 µg/kg

Notes:

1 BTEX = Benzene, Toluene, Ethylbenzene and Xylene

2 ND = not detected at or above the method reporting limit

3 Reporting limits may vary. Refer to analytical reports

DRO = Diesel Range Organics

EG = Ethylene Glycol

GRO = Gasoline Range Organics

ORO = Oil Range Organics

*** TP-G-2-10 = Duplicate of TP-G-2-1**

Table 8
BIOPAD
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	Collection Date	Analytes[1]						
		ORO	DRO	GRO	B	T	E	X
TP-BP-1-1	1-26-07	42	ND[2]	ND	ND	ND	ND	ND
TP-BP-1-5	1-26-07	350	37	ND	ND	ND	ND	ND
TP-BP-2-1	1-26-07	15	ND	ND	ND	ND	ND	ND
TP-BP-2-5	1-26-07	ND	ND	ND	ND	ND	ND	ND
TP-BP-3-1	1-26-07	ND	ND	ND	ND	ND	ND	ND
TP-BP-3-5	1-26-07	ND	ND	ND	ND	ND	ND	ND
TP-BP-3-10*	1-26-07	11	ND	ND	ND	ND	ND	ND
TP-BP-4-1	1-26-07	53	ND	ND	ND	ND	ND	ND
TP-BP-4-5	1-26-07	ND	ND	ND	ND	ND	ND	ND
TP-BP-5-1	1-26-07	11	ND	ND	ND	ND	ND	ND
TP-BP-5-5	1-26-07	36	ND	ND	ND	ND	ND	ND
Reporting Limits:[3]		10 mg/kg	10 mg/kg	10 mg/kg	20 µg/kg	20 µg/kg	20 µg/kg	20 µg/kg

Notes:

1 BTEX = Benzene, Toluene, Ethylbenzene and Xylene
2 ND = Not detected at or above the method reporting limit
3 Reporting limits may vary. Refer to analytical reports
DRO = Diesel Range Organics
GRO = Gasoline Range Organics
ORO = Oil Range Organics
*** Duplicate for TP-BP-3-5**

Table 9
ABOVEGROUND STORAGE TANKS
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	Collection Date	Analytes[1]						
		ORO	DRO	GRO	B	T	E	X
AST-1-1	1-26-06	110	10	ND[2]	ND	ND	ND	ND
AST-1-5	1-26-06	45	ND	ND	ND	ND	ND	ND
AST-2-1	1-26-06	4,800	460	ND	ND	ND	ND	ND
AST-1-5	1-26-06	550	42	ND	ND	ND	ND	ND
AST-3-1	1-26-06	2,100	130	ND	ND	ND	ND	ND
AST-3-5	1-26-06	400	32	ND	ND	ND	ND	ND
AST-4-1	1-26-06	53	31	ND	ND	ND	ND	ND
AST-4-5	1-26-06	28	28	ND	ND	ND	ND	ND
AST-5-1	1-26-06	6,000	590	ND	ND	ND	ND	ND
AST-5-5	1-26-06	120	ND	ND	ND	ND	ND	ND
Reporting Limits:[3]		10 mg/kg	10 mg/kg	10 mg/kg	20 μg/kg	20 μg/kg	20 μg/kg	20 μg/kg

Notes:

1 BTEX = Benzene, Toluene, Ethylbenzene and Xylene

2 ND = Not detected at or above the method reporting limit

3 Reporting limits may vary. Refer to analytical reports

DRO = Diesel Range Organics

GRO = Gasoline Range Organics

ORO = Oil Range Organics

Table 10
JELLO PILE
Sample Analytical Results Summary (mg/L)
Gooseberry Mine, Storey County, Nevada

Sample Number	JP-1-1	JP-1-5	JP-2-1	JP-2-5	JP-3-1	JP-3-5	JP-4-1	JP-4-5	JP-5-1	JP-5-5	JP-6-1	JP-6-5	JP-7-1	JP-7-5	JP-8-1	JP-8-5	Reporting Limit[2]
Collection Date	1-25-07	1-25-07	1-25-07	1-25-07	1-25-07	1-25-07	1-25-07	1-25-07	1-26-07	1-26-07	1-26-07	1-26-07	1-26-07	1-26-07	1-26-07	1-26-07	
Analytes[1]																	
Alkalinity	58	34	70	30	38	30	32	32	32	60	38	46	30	46	66	72	1.0
Aluminum	ND[3]	ND	ND	ND	ND	ND	ND	ND	<0.45	<0.45	<0.45	<0.45	<0.45	0.077	0.45	ND	0.045
Antimony	0.0090	0.0042	0.0042	0.0060	0.013	0.0085	0.024	0.011	0.0029	0.02	0.014	ND	0.0037	0.0039	ND	0.0087	0.0025
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.019	0.11	0.081	0.005
Bicarbonate	71	41	85	37	46	37	39	39	39	73	48	56	37	51	66	83	1.0
Barium	0.011	ND	ND	ND	0.012	ND	ND	ND	ND	ND	ND	ND	ND	0.023	0.38	ND	0.010
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
Bismuth	ND	ND	ND	ND	ND	ND	ND	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.010
Boron	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.001
Calcium	230	220	440	390	450	240	470	250	310	61	520	240	72	12	12	130	0.50
Carbonate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4	7.2	2.4	1.0
Chloride	4.9	1.3	7.4	ND	ND	ND	ND	ND	2.5	13	ND	6.8	ND	ND	1.6	6.7	1.0
Chromium	0.0058	ND	ND	0.0076	0.012	0.0073	0.012	0.0065	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.005
Cobalt	0.16	0.11	0.050	0.018	0.045	ND	0.022	ND	ND	0.93	ND	ND	ND	ND	0.067	0.36	0.01
Copper	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.081	ND	0.05
Fluoride	2.5	0.21	ND	ND	ND	ND	ND	ND	0.32	ND	ND	0.75	ND	ND	ND	ND	0.10
Gallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0
Iron	0.40	0.078	0.026	0.043	0.027	0.058	0.22	0.24	0.11	1.6	0.15	ND	0.19	0.32	1.5	2.6	0.010
Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.10
Lithium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0
Magnesium	26	36	400	90	61	27	59	32	66	11	88	59	12	1.6	3.1	24	0.05
Manganese	0.31	0.70	1.8	0.13	0.54	0.035	0.085	0.065	0.14	0.11	0.14	0.24	ND	0.0064	0.044	0.10	0.005
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0065	0.00035	ND	ND	0.00014	0.0013	0.0019	0.00010
Molybdenum	0.69	0.17	ND	0.048	0.14	0.039	0.076	0.066	ND	1.7	0.2	ND	0.14	0.082	0.20	0.49	0.010
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010
Nitrate/Nitrite	72	65	65	100	40	3.1	16	20	64	160	23	39	140	40	34	100	5.0
pH	8.04	7.6	7.97	7.94	7.82	7.87	7.81	7.93	7.66	8.16	7.77	7.77	8.00	8.63	8.92	8.11	NA
Phosphorus	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5
Potassium	10	7.6	10	9.4	15	4.0	13	6.1	5.8	9.2	8.1	7.1	6.2	1.6	1.4	6.4	0.5
Scandium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
Selenium	0.21	0.13	0.59	0.26	1.1	0.10	0.15	0.095	0.12	2.3	0.12	0.14	0.53	0.16	0.91	1.2	0.005
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	ND	0.010	0.12	0.090	0.005

Table 10
JELLO PILE
Sample Analytical Results Summary (mg/L)
Gooseberry Mine, Storey County, Nevada
(CONTINUED)

Sample Number	JP-1-1	JP-1-5	JP-2-1	JP-2-5	JP-3-1	JP-3-5	JP-4-1	JP-4-5	JP-5-1	JP-5-5	JP-6-1	JP-6-5	JP-7-1	JP-7-5	JP-8-1	JP-8-5	Reporting Limit[2]
Collection Date	1-25-07	1-25-07	1-25-07	1-25-07	1-25-07	1-25-07	1-25-07	1-25-07	1-26-07	1-26-07	1-26-07	1-26-07	1-26-07	1-26-07	1-26-07	1-26-07	
Analytes[1]																	
Sodium	800	190	560	210	730	80	200	110	110	990	310	91	470	150	180	670	0.5
Strontium	1.0	0.96	2.2	2.4	4.2	1.9	4.5	2.5	1.7	ND	3.4	ND	ND	0.11	NR	ND	0.1
Sulfate	2,100	1,000	3,900	1,500	2,900	970	1,900	1,100	1,100	1,300	2,200	870	840	230	290	1,800	100
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001
Tin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
Titanium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
TDS	3,800	2,000	5,700	2,800	4,700	1,500	3,000	1,800	1,900	3,400	3,100	1,500	2,000	560	710	3,000	10
Vanadium	ND	0.011	0.22	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	0.017	ND	0.10
WAD Cyanide	0.20	0.053	0.022	0.019	0.06	0.015	0.12	0.047	0.042	0.91	0.052	0.027	0.019	0.039	0.58	0.75	0.010
Zinc	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.027	ND	0.10

Notes:

1 All analytes reported in units of mg/L except pH which are reported as pH units

2 Reporting limits may vary. Refer to analytical reports

3 ND = Not detected; NA = Not applicable

4 NR = Not reported

Table 11
NATURAL DRAINAGES
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Location	Sample Number	Collection Date	Analytes (mg/L)[1]								
			CN	As	Ba	Cd	Cr	Pb	Hg	Se	Ag
Natural Drainage	TP-6-1	1-25-07	ND	ND	ND	ND	ND	ND	ND	ND	0.014
	TP-6-3-5		ND	ND	ND	ND	ND	ND	ND	ND	0.015
Natural Drainage Confluence	TP-7-1	1-25-07	ND	ND	ND	ND	ND	ND	ND	ND	ND
	TP-7-3.5		ND	ND	ND	ND	ND	ND	ND	ND	ND
	TP-7-5*		ND	ND	ND	ND	ND	ND	ND	ND	ND
Drainage	TP-10-1	1-25-07	ND	ND	ND	ND	ND	ND	ND	ND	ND
	TP-10-5		ND	ND	ND	ND	ND	ND	ND	ND	ND
Drainage	TP-11-1	1-25-07	ND	ND	ND	ND	ND	ND	ND	ND	ND
	TP-11-3.5		ND	ND	ND	ND	ND	ND	0.037	ND	ND
		Reporting Limit:[3]	0.2[1]	1.0	2.0	0.1	0.5	1.0	0.010	0.40	0.50

Notes:

1 Metals: (TCLP) As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Ag = Silver, Se = Selenium, Hg = Mercury

2 ND = Not detected at or above the method reporting limit

3 Reporting limits may vary. Refer to analytical reports

CN = Total Cyanide

* TP-7-5 = Duplicate for TP-7-1-3,5

Table 12
REAGENT STORAGE BUILDING
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	Collection Date	Analytes (mg/L)[1]										
		ABA	Total CN	As	Ba	Cr	Cd	Pb	Hg	Se	Ag	VOCs
RS-1-1	1-26-07	71.5	ND[2]	ND	ND	ND	ND	ND	0.028	ND	ND	ND
RS-1-5	1-26-07	152	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RS-2-1	1-26-07	125	ND	ND	ND	ND	ND	ND	0.010	ND	ND	ND
RS-2-5	1-26-07	106	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RS-3-1	1-26-07	115	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
RS-3-5	1-26-07	122	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Reporting Limits:[3]		NA	0.20	1.0	2.0	0.5	0.1	1.0	0.01	0.4	0.5	1 - 80

Notes:

1 CN = Total Cyanide

2 ND = Not detected at or above the method detection limit

3 Reporting limits may vary. Refer to analytical reports

Metals (TCLP): As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Ag = Silver, Se = Selenium, Hg = Mercury

VOC = Volatile Organic Compounds. Reported in units of µg/kg

Table 13
OTHER MATERIALS
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	SETNK Profile II	SETNK RCRA Metals	TNK 4 Profile II	TNK 4 RCRA Metals	TNK 5 Profile II	TNK 5 RCRA Metals	Tank 6 Profile II	Tank 6 RCRA Metals	R5 BOV	South CN Vat Profile II	CN Vat RCRA Metals	ATP1 Profile II	ATP2 Profile II	LP-1 Profile II	LP-2 Profile II	Reporting Limit RCRA Metals [3]	Reporting Limit Profile II [3]
Collection Date	10-9-06	10-9-06	10-9-06	10-9-06	10-9-06	10-9-06	2-14-07	2-14-07	2-14-07	2-14-07	2-14-07	2-14-07	2-14-07	2-14-07	2-14-07	mg/kg	mg/L
Analytes																	
Alkalinity	3,300		16,000		46,000		6,600		150	720		46	34	7,900	1,100		1.0
Aluminum	<4.5		<45.0 [1]		<45.0		ND		0.11	ND		ND	ND	0.55	<0.22		0.045
Antimony	<2.0		12		6.9		4.2		0.035	0.079		0.0026	ND	1.4	0.064		0.0025
Arsenic	<3.0	310	<30	210	20	310	8.5	280	ND	0.18	ND	ND	ND	13	0.20	150	0.05
Bicarbonate	2,200		ND		23,000		2,600		180	530		56	41	2,100	1,000		1.0
Barium	ND [2]	32	ND	32	ND	44	ND	52	0.096	ND	ND	0.018	0.017	ND	ND	50	0.10
Beryllium	<0.1		ND		ND		ND		ND	ND		ND	ND	ND	ND		0.01
Bismuth	<10		<10		<10		ND		ND	ND		ND	ND	ND	<0.5		1.0
Boron	<10		<10		<10		1.2		1.8	0.79		0.25	0.16	ND	0.76		1.0
Cadmium	ND	11	ND	24	ND	3.2	ND	7.8	ND	ND	ND	ND	ND	ND	ND	5.0	0.01
Calcium	<50		<50		<50		ND		400	2.4		250	150	ND	62		5.0
Carbonate	910		8,900		16,000		2,700		ND	170		ND	ND	3,700	140		1.0
Chloride	400		3,100		11,000		2,800		52	210		18	19	64	120		2.0
Chromium	<0.5	42	<0.5	36	<0.5	36	0.57	26	0.065	ND	ND	ND	ND	ND	<0.025	25	0.05
Cobalt	<1.0		4.7		2.7		0.16		ND	ND		ND	ND	0.36	3.0		0.1
Copper	<5.0		77		140		36		0.24	ND		ND	ND	30	ND		5.0
Fluoride	0.91		1.6		2.3		0.42		0.10	0.20		ND	ND	0.95	1.2		0.20
Gallium	<10.0		<10		<10		ND		ND	ND		ND	ND	ND	ND		1.0
Iron	120		35		25		2.4		0.037	ND		ND	0.14	170	12		0.01
Lead	<1.0	270	<1.0	400	<1.0	76	ND	66	NR [4]	ND	ND	NR	NR	0.46	<0.05	50	0.10
Lithium	<10		<10		<10		ND		0.12	ND		ND	ND	ND	ND		1.0
Magnesium	<50		<50		<50		ND		34	0.65		59	36	ND	3.7		5.0
Manganese	<0.5		<0.50		<0.50		ND		0.16	ND		ND	0.060	0.13	ND		0.05
Mercury	0.13	2.4	0.037	2.5	0.14	2.1	0.084	2.5	0.0020	0.0065	0.61	0.0022	0.0022	0.097	0.039	0.50	0.00010
Molybdenum	2.1		27		30		21		0.11	1.0		0.43	0.35	3.9	0.69		0.10
Nickel	<1.0		<1.0		1.2		ND		ND	ND		ND	ND	0.30	0.11		0.10
Nitrate/Nitrite	8.1		39		55		30		11	15		2.6	2.2	38	18		1.0
pH	9.64		10.00		9.52		10.02		8.26	9.66		8.09	7.93	10.37	9.36		NA
Phosphorus	<50		<50		69		17		ND	1.6		ND	ND	5.3	2.9		0.5
Potassium	110		930		1,700		650		61	66		190	100	28	100		5.0
Scandium	<10		<10		<10		ND		ND	ND		ND	ND	ND	ND		1.0

Table 13
OTHER MATERIALS
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada
(CONTINUED)

Sample Number	SETNK Profile II	SETNK RCRA Metals	TNK 4 Profile II	TNK 4 RCRA Metals	TNK 5 Profile II	TNK 5 RCRA Metals	Tank 6 Profile II	Tank 6 RCRA Metals	R5 BOV	South CN Vat Profile II	CN Vat RCRA Metals	ATP1 Profile II	ATP2 Profile II	LP-1 Profile II	LP-2 Profile II	Reporting Limit RCRA Metals [3]	Reporting Limit Profile II [3]
Collection Date	**10-9-06**	**10-9-06**	**10-9-06**	**10-9-06**	**10-9-06**	**10-9-06**	**2-14-07**	**2-14-07**	**2-14-07**	**2-14-07**	**2-14-07**	**2-14-07**	**2-14-07**	**2-14-07**	**2-14-07**		
Analytes																	
Selenium	<3.0	53	30	190	49	160	20	<150	0.24	0.53	ND	ND	ND	16	1.9	150	0.05
Silver	35	130	29	120	39	94	14	110	ND	0.89	58	0.018	ND	250	97	25	5.0
Sodium	3,000		28,000		48,000		8,400		150			75	80	5,300	9,900		0.50
Strontium	<10		<10		<10		ND		2.8	ND		2.5	1.4	ND	0.61		1.0
Sulfate	3,000		46,000		70,000		6,700		1,100	650		1,200	630	3,300	13,000		1,000
Thallium	<6.0		<6.0		<6.0		ND		ND	ND		ND	ND	ND	ND		0.05
Tin	<10		<10		<10		ND		ND	ND		ND	ND	ND	ND		1.0
Titanium	<10		<10		<10		ND		ND	ND		ND	ND	ND	ND		1.0
TDS	17,000		35,000		130,000		27,000		2,400	2,700		1,800	1,000	22,000	28,000		10
Vanadium	<1.0		<1.0		<1.0		0.16		ND	0.070		ND	ND	ND	ND		0.10
WAD Cyanide	38		28		6.6		16		ND	1.2		ND	0.013	1.6	0.47		0.10
Zinc	<1.0		<1.0		1.2		0.35		0.021	0.64		ND	ND	0.18	ND		0.10
ABA												350	368	71.4	48.5		NA

Notes:

1 <45.0 shows actual reporting limit

2 ND = Not Detected at or above the actual reporting limit

3 Standard reporting limits – not all data were reported with standard report limits. See analytical results for actual reporting limits.

4 NR = Not Reported

Table 14
CYANIDE MIXING TANKS
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample ID	CN Tank 1	CN Tank 2	CN Tank 3
Date Collected	10-9-06	10-9-06	2-14-07
WAD CN Concentration (mg/L)	79	15	12

Table 15
ELECTRICAL TRANSFORMERS
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample ID	Date Collected	PCBs (all isomers)	Reporting Limits (all isomers)
T1-10-10	10-10-06	ND	1.0 mg/kg
T2-10-10	10-10-06	ND	1.0 mg/kg
T3-10-10	10-10-06	ND	1.0 mg/kg
T4-10-10	10-10-06	ND	1.0 mg/kg
T5-10-10	10-10-06	ND	1.0 mg/kg
T6-10-10	10-10-06	ND	1.0 mg/kg
TD-10-10	10-10-06	ND	1.0 mg/kg

Table 16
WASTE ROCK LEAKAGE AND ASAMERA TAILINGS DAM LEAKAGE
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	TP-8-1	TP-8-5	TP-9-1	TP-9-2	Reporting Limit[2] (mg/L)
Collection Date					
Analytes[1]					
Alkalinity	42	56	88	78	1.0
Aluminum	0.069	ND[3]	ND	ND	0.045
Antimony	ND	ND	ND	ND	0.0025
Arsenic	0.0071	0.0056	0.015	0.013	0.005
Bicarbonate	51	68	110	95	1.0
Barium	0.013	0.013	0.057	0.06	0.01
Beryllium	ND	ND	ND	ND	0.001
Bismuth	ND	ND	ND	ND	0.1
Boron	ND	ND	0.15	0.18	0.1
Cadmium	ND	ND	ND	ND	0.001
Calcium	15	17	51	120	0.5
Carbonate	ND	ND	ND	ND	1.0
Chloride	3.1	ND	1.4	1.5	1.0
Chromium	ND	ND	ND	ND	0.005
Cobalt	ND	ND	ND	ND	0.01
Copper	ND	ND	ND	ND	0.05
Fluoride	0.26	0.38	0.28	0.36	0.10
Gallium	ND	ND	ND	ND	0.1
Iron	0.06	0.033	ND	ND	0.01
Lead	ND	ND	ND	ND	0.01
Lithium	ND	ND	ND	ND	0.1
Magnesium	1.5	1.9	13	29	0.5
Manganese	ND	0.0053	ND	ND	0.005
Mercury	ND	0.00011	0.00021	0.00015	0.001
Molybdenum	ND	ND	0.012	0.018	0.0001
Nickel	ND	ND	ND	ND	0.01
Nitrate/Nitrite	1.0	0.8	3.4	2.4	0.10
pH	8.05	8.16	8.16	8.06	NA[3]
Phosphorus	ND	ND	ND	ND	0.5
Potassium	ND	ND	7.0	8.6	0.5
Scandium	ND	ND	ND	ND	0.1
Selenium	ND	ND	ND	ND	0.005
Silver	ND	0.0078	ND	ND	0.005
Sodium	5.0	7.0	9.8	29	0.5
Strontium	ND	ND	0.58	1.3	0.1
Sulfate	1.3	3.6	110	400	1.0
Thallium	ND	ND	ND	ND	0.001
Tin	ND	ND	ND	ND	0.1
Titanium	ND	ND	ND	ND	0.1
TDS	120	130	320	710	10
Vanadium	0.021	0.019	0.038	0.046	0.01
WAD Cyanide	ND	ND	ND	ND	0.010
Zinc	ND	ND	ND	ND	0.01

Notes:
1 All analytes reported in units of mg/L except pH which are reported as pH units
2 Reporting limits may vary. Refer to analytical reports
3 ND = Not detected; NA = Not applicable
4 NR = Not reported
5 NA = Not Applicable

Table 17
WASTE ROCK
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	WR-1	WR-2	Reporting Limits[2]
Collection Date	10-11-06	1-26-07	
Analytes (AGP/ANP)[1]			
Alkalinity (total)	78	48	1.0
Aluminum	ND[3]	ND	0.045
Antimony	0.010	0.22	0.0025
Arsenic	0.024	0.10	0.050
Barium	0.019	0.23	0.010
Beryllium	ND	ND	0.0010
Bismuth	NA	ND	0.10
Bicarbonate	95	59	1.0
Boron	ND	ND	0.10
Cadmium	ND	ND	0.0010
Calcium	29	120	0.50
Carbonate	ND	ND	1.0
Chloride	1.5	ND	1.0
Chromium	ND	ND	0.0050
Cobalt	NA	ND	0.010
Copper	ND	ND	0.050
Fluoride	0.19	0.48	0.10
Gallium	NA	ND	0.10
Iron	0.12	ND	0.010
Lead	ND	ND	0.010
Magnesium	2.0	16	0.50
Manganese	0.0060	ND	0.0050
Mercury	0.00021	ND	0.00010
Molybdenum	NA	0.034	0.010
Nickel	ND	ND	0.10
Nitrate and Nitrite	1.69	2.0	1.0
pH	8.14	4.32	NA[3]
Phosphorus	NA	ND	0.50
Potassium	5.1	2.0	0.50
Scandium	NA	ND	0.10
Selenium	0.0095	0.12	0.0050
Silver	ND	ND	0.0050
Sodium	8.2	30	0.50
Strontium	NA	1.2	0.10
Sulfate	18	400	10
Thallium	ND	ND	0.0010
Titanium	NA	ND	0.10
TDS	150	630	10
Vanadium	NA	0.018	0.010
WAD Cyanide	0.020	0.042	0.01
Zinc	ND	ND	0.010

Notes:
1 All analytes reported in units of mg/L except pH which are reported as pH units
2 Reporting limits may vary. Refer to analytical reports
3 ND = Not Detected
4 NR = Not Reported
5 NA = Not Applicable

Table 18
DRUMS
Sample Analytical Results Summary
Gooseberry Mine, Storey County, Nevada

Sample Number	Collection Date	Analytes[1]												
		WAD CN	As	Ba	Cd	Cr	Pb	Ag	Se	pH	VOCs	ORO	DRO	GRO
DR 1	10-10-06	--	ND[2]	ND	ND	ND	ND	ND	ND	8.93	ND	ND	ND	12
DR 2	10-10-06	--	ND	ND	ND	ND	ND	ND	ND	8.80	ND	ND	ND	ND
DR 3	10-10-06	--	ND	ND	ND	ND	ND	ND	ND	8.43	ND	ND	ND	ND
DR 4	10-10-06	ND	ND	ND	ND	ND	ND	ND	ND	10.83	ND	ND	ND	7.0
DR 5	10-10-06	ND	ND	ND	ND	ND	16	ND	0.83	8.21	ND	ND	4.3	16
Reporting Limit:[3]		0.2	1.0	2.0	0.1	0.5	1.0	0.5	0.4	1	3	3	3	5
Reporting Units:		mg/L	mg/L	mg/L	mg/L	mg/L	Mg/L	mg/L	mg/L	SU	mg/L	mg/kg	mg/kg	mg/kg
Analytical Method:		9045B	9045B	9045B	1311/ 6010B	1311/ 6010B	1311/ 6010B	1311/ 6010B	1311/ 6010B	9045B	8260	8015B	8015B	8015B

Notes:

1 **WAD CN = Weak Acid Dissociable Cyanide**
Metals (TCLP): As = Arsenic, Ba = Barium, Cd = Cadmium, Cr = Chromium, Pb = Lead, Ag = Silver, Se = Selenium, Hg = Mercury
Petroleum: ORO = Oil Range Organics, DRO = Diesel Range Organics, GRO = Gasoline Range Organics, VOC = Volatile Organic Compounds

2 **ND = Not detected at or above the method reporting limit**

3 **Reporting limits may vary. Refer to analytical reports**

APPENDIX A

SOIL BORING LOGS

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/21/06

LOCATION

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									dry loose	**TOPSOIL - SILTY SAND**, brown
				G						
5										**BEDROCK**
										Stopped drill at 6'
10										
15										
20										
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-12

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/19/06

LOCATION

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									moist	**TOPSOIL - SILTY SAND/SANDY SILT**, root matter, brown
										SANDY SILT/SILTY SAND WITH GRAVEL AND COBBLES, fine to coarse sand, subangular gravel, light brown
5				G						
									dry loose	**BEDROCK**, rock flour bit jamming note: 35 minutes for 3 feet
10										
										Stopped drill at 11'
15										
20										
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
∇		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-13

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/19/06

LOCATION

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0										**TOPSOIL - ROOT MATTER**, light brown
									dry	**SILTY SAND WITH GRAVEL & COBBLES**, low plasticity, light brown
										note: some clay content at 3 to 4'
5				G						
										Stopped drill at 7' in bedrock
10										
15										
20										
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-14

BORING LOG 50-FOOT DEPTH 6417000720ENV BH GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/20/06

LOCATION East of cyanide ditch

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0										**TOPSOIL - SILTY SAND**, brown
									dry loose	**SANDY GRAVELLY SILT WITH CLAY**, root matter, fine to coarse, light brown
5										**BEDROCK**
10										
15										Stopped drill at 11'
20										
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-15

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/20/06

LOCATION
RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0										**TOPSOIL - SILTY CLAY**, plant matter, medium brown
									dry	**SILT** with some fine to coarse sand, gravel, brown
										SILTY CLAY, some fine gravel, gray
5				G					dry, soft	**SILT** with some gravel, fine to coarse sand, medium brown
									dry	
									~~loose~~	**SILTY CLAY**, some sand, gravel, gray
									dry	
									soft	
10										
									dry	**SANDY SILT**, fine to coarse sand, gravel and cobbles, brown note: rough drilling 11' to 16'
				G						
15										
									dry	**SILTY CLAY**, some sand and gravel, gray
									soft	
20										
				G						**BEDROCK**
25										
										Stopped drill at 26' note: 23' to 26' = bedrock? 3' core
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-16

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/20/06

LOCATION

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									dry	**TOPSOIL - SILT**, some sand, brown
									dry	**SILTY CLAY** with some sand, some gravel, medium to dark brown
5				G					dry loose	**SANDY SILT**, fine to coarse sand and gravel, some cobbles, brown note: grades to more gravel and cobbles
10										
									dry hard	**SILTY CLAY**, some coarse sand and gravel, blocky, mottled, red brown note: duplicate sample collected
15				G						
20									dry loose	**CLAY**, some silt, some sand and pea gravel, medium gray
				G						
25										**BEDROCK?**, 2.5' rock core note: rough drilling 23' to 25.5'
										Stopped drill at 25.5'
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-17

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/21/06

LOCATION

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0										**TOPSOIL**
										SILTY CLAY, some sand, red brown
5										**BEDROCK?**
										Stopped drill at 7'
10										
15										
20										
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-18

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/21/06

LOCATION

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0										**TOPSOIL**
									dry loose	**SILTY SAND/SANDY SILT**, some fine to coarse gravel, some cobbles, light brown note: grades to light brown with more gravel
5				G						
10										
									dry firm	**CLAY**, some sand, gravel, blocky, low to medium plasticity, medium brown note: thin layers of silt
15				G						
										BEDROCK
20				G						
										Stopped drill at 22'
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-19

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/8/07

LOCATION Landfill

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0										**TOPSOIL**, reworked tailings
									dry loose	
				G						
5										
10										
									dry firm	
				G						
15										**ROCK**
										Stopped drill at 18'
20										
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-21

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/3/07

LOCATION Landfill

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									loose	**REWORKED TAILINGS**, very fine light tan to gray
5				G						
10									dry loose	**SILTY SAND, SANDY SILT**, fine to coarse, some gravel and cobbles, medium brown
									hard loose	note: grades to more clayey, blocky, low plasticity
										note: grades to more cobbles up to 8" diameter
15				G						
									dry	**SILTY CLAY**, some sand, fine, some fine gravel, occasional cobbles, low plasticity, gray
20				G					dry loose	**SILTY SAND/SANDY SILT**, fine to coarse, some gravel and cobble, medium gray
25										Stopped drill at 22'
										note: lost core at 19', broke pipe at 22', couldn't retrieve
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
∇		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-22

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/8/07

LOCATION East of Landfill

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									dry loose	**REWORKED TAILINGS**, very fine, light tan-gray
5				G					dry loose	**SILTY SAND/SANDY SILT**, fine to coarse, some gravel and cobbles, medium brown note: grades more clayey, blocky at 12' to 22'
10										
15				G						
20				G						
25										Stopped drill at 22'
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-23

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 12/19/06

LOCATION

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									dry	**REWORKED TAILINGS**, clayey silt sized, some sandy gravel sized, broken rock, blocky, medium gray note: very slow drilling, bit keeps clogging and must be pulled out and cleaned
5										
10										
15				G						
										BEDROCK
20										Stopped drill at 18.5'
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-25

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/8/07

LOCATION

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									dry loose	**SILTY SAND, SANDY SILT**, fine to coarse, some gravel, cobbles, medium orange brown to brown
5									dry loose	**ROCK** note: grades to less gravel/cobbles, light brown
10									dry loose	**CLAYEY SILT** with gravel and cobbles, tailings, some fine to coarse sand, gray
15										**BEDROCK**
20										Stopped drill at 18'
25										
30										
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. B-26

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/9/07

LOCATION ~125' east of waste rock wall

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									dry	**TOPSOIL**, silty clay, brown
									dry hard	**CLAY**, blocky, low plasticity, orange yellow brown
5									stiff dry loose	**SANDY SILT**, fine to coarse, some gravel, brown
10									dry moderately hard	**SILTY CLAY**, blocky, some fine to coarse sand, fine gravel, medium brown note: grades to light orange brown
15										
20				G						
25									dry stiff	**CLAY**, some silt/sand, blocky, low plasticity, orange brown
30									dry loose	**SILTY CLAY**, some fine to coarse sand, some fine gravel, medium brown-tan
35									dry stiff hard	**CLAY**, blocky, orange-yellow brown
40										Stopped drill at 37' note: hard drilling in clay
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. GW-1

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 DATE 12/19/06

LOCATION Asamera tailings pond (dry)

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0									dry loose	**TAILINGS**, fine, medium gray
5										
10										
15										
20										note: drilling much slower 20' to 25'
25				G					dry dense	**SANDY SILT**, fine to coarse, some clay, medium brown
30									dry dense	**TAILINGS**, fine, medium green note: denser than at surface
35										note: grades to blocky with some orange-brown staining
40				G					loose	note: green tailings
45										Stopped drill at 40'
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. GW-4

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/9/07

LOCATION East of re-worked tailings

RIG TYPE Jeffco Pro-Sonic
BORING TYPE
SURFACE ELEV.
DATUM

Depth in Feet	Drill Rate Min/ft.	Graphical Log	Sample	Sample Type	Blow Count	Dry Density lbs. per Cubic ft.	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	VISUAL CLASSIFICATION
0										**TAILINGS**
									dry dense	**CLAY**, some sand, high plasticity, dark brown-gray
5										
									dry	**GRAVELLY SAND**, medium to coarse, angular, yellow brown
									dry	**SILTY CLAY//SANDY CLAY**, some gravel, dark brown
10									dry	**SANDY GRAVEL**, angular 2" in diameter, medium brown
									dry	**SILTY CLAY/SANDY GRAVEL**, some cobbles, fine to coarse, angular, yellow-orange
15									dry	**SANDY SILT**, some clay, fine to coarse, some gravel to 3" diameter, angular, medium brown
20										
25									dry	**SANDY, GRAVELLY SILT**, fine to coarse angular, brown
30										
										Stopped drill at 32' in bedrock
35										
40										
45										
50										

GROUNDWATER

	DEPTH(ft)	HOUR	DATE
▽		None	
▼			
▼			
▼			

SAMPLE TYPE

A - Drill cuttings; NR - No Recovery
S - 2" O.D. 1.38" I.D. tube sample
U - 3" O.D. 2.42" I.D. tube sample
C - California-style tube sample

LOG OF TEST BORING NO. GW-5

BORING LOG 50-FOOT DEPTH 6417000720ENV BH.GPJ AGRA_PHX.GDT 11/30/07

APPENDIX B

TEST PIT LOGS

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0			G			dry	**TOPSOIL - SILTY CLAY**, some fine to coarse sand, brown
1						dry	**SILTY SANDY GRAVEL**, abundant cobbles, orange-brown
2							
3							
4			G				
5							Stopped trackhoe at 5' in bedrock note: took 40 minutes to dig 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. B-20

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Confluence of 2 drainages
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**SAND**, fine to coarse sand, some gravel and cobbles, brown
1			G				
2							
3							
4							
			G				
5							
							Stopped trackhoe at 5.5' in bedrock
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-10

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Confluence of 2 drainages
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**SAND**, fine to coarse sand, some gravel, brown
1			G				
2			G				
3							**GRAVEL WITH SAND**, coarse sand
							Stopped trackhoe at 3.5' in bedrock
4							
5							
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-11

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Pothole in drainage

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

SURFACE ELEV.
DATUM

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0							**TOPSOIL - SILT**, dark brown
						dry	**SILT** with some sand, brown
1			G				
2							
3			G				
							Stopped trackhoe at 3.5' on bedrock
4							
5							
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-6

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 DATE 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Confluence of stream
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0							**SILTY SAND**, brown
						dry	**COBBLES IN SILT, SAND AND GRAVEL**, brown
1			G				
2							
3			G				
							Stopped trackhoe at 3.5' in bedrock
4							
5							
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-7

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Base of Waste Rock
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0							**TOPSOIL**
						dry firm	**CLAYEY SILT**, red brown
1			G				
						dry	**SILTY GRAVEL**, some fine to coarse sand, brown-gray
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-8

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION AST's

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0							**FILL**, wood, brick, cloth, trash in silty matrix
			G				
1							
2							
3							
4						dry	**SILTY SAND**, some gravel, cobbles, brown
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-AST-1

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION AST's

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**SILTY GRAVEL**, brown
			G				
1						dry	**SANDY SILT/SILTY SAND** with gravel and cobbles, brown
2							
3							
4							note: increase in cobble content
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-AST-2

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION AST's

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0			G			dry	**SILTY GRAVEL**, brown
1						dry loose	**SANDY SILT/SILTY SAND** with gravel and some cobbles, brown
2							
3							
4			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-AST-3

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION AST's

SURFACE ELEV.
DATUM

GROUNDWATER

DEPTH	HOUR	DATE

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0			G			dry	**SILTY GRAVEL**, brown
1						dry loose	**SANDY SILT/SILTY SAND** with gravel, brown
2							
3							
4			G			dry	**SILTY CLAY**, some sand, brown
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-AST-4

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION AST's

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**SILTY GRAVEL**, brown
			G				
1							
						dry	**SANDY SILT/SILTY SAND** with gravel and cobbles, brown
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-AST-5

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Generator Shed

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0			G			dry loose	**SILTY GRAVEL**, brown
1							**SANDY SILT/SILTY SAND** with some gravel
2							
3							
4			G				**SILTY CLAY/CLAYEY SILT**
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-G-1

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Generator Shed

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**SILTY GRAVEL**, brown
			G				
1						dry loose	**SILTY SAND** with gravel, brown
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-G-2

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Generator Shed

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry loose	**SILTY GRAVEL**, brown
			G				
1						dry	**SILTY SAND/CLAYEY SAND**, brown
2							
			G				
3							Trackhoe refusal at 3' on concrete slab
4							
5							
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-G-3

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Jello Pile

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0							**SANDY GRAVEL**
			G				
1							**GREY CRUST**
2						dry	**SILTY SAND/SANDY SILT** with some cobbles, dark brown
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-JP-1

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Jello Pile
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
∇			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0			G			dry	**GRAVELLY SAND**, fine to coarse sand, brown
1						dry	**GRAVEL WITH SAND AND SILT**, rust red
2							
3							
						dry	**SANDY GRAVEL** with some silt, green
4			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-JP-2

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Jello Pile
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**SANDY GRAVEL**, brown
			G			dry loose	**GRAVEL WITH SAND AND SILT**, dark grey, green, purple
1							
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-JP-3

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/25/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Jello Pile
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**SILTY GRAVEL**, brown
			G			dry loose	**SILTY CLAY**, dark green to black
1							
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-JP-4

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Jello Pile

SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**SILTY GRAVEL**, brown
			G				**CRUST**, green and grey
1							
							GRAVEL AND COBBLES, granular, grey-yellow
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-JP-5

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Jello Pile
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
∇			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0							**CRUST**, grey-brown-orange
			G				
1							
2							**SILTY SAND** with some cobbles, granular, orange-red
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-JP-6

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Jello Pile
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
∇			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0							**CRUST**, grey-purple
			G				
1							**ROCK**, angular with some fines, green-grey
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-JP-7

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Jello Pile
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0							**CRUST**, grey-green
			G				
1							**ROCK**, angular with some fines, rust red
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-JP-8

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Reagent Storage
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry	**WASTE ROCK**, angular, grey
			G				
1							
2							
3						dry firm	**SILTY CLAY**, some sand, blocky, brown
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-RS-1

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Reagent Storage
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry loose	**WASTE ROCK**, silt matrix, angular, brown
			G				
1							
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-RS-2

GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

PROJECT Gooseberry Mine
Storey County, Nevada

amec

JOB NO. 6-417-000720 **DATE** 1/26/07

BACKHOE TYPE Hitachi 135 Trackhoe
LOCATION Reagent Storage
SURFACE ELEV.
DATUM

GROUNDWATER

	DEPTH	HOUR	DATE
▽			
▼			

Depth in Feet	Graphical Log	Sample	Sample Type	Moisture Content Percent of Dry Weight	Unified Soil Classification	REMARKS	SOIL DESCRIPTION
0						dry loose	**WASTE ROCK**, silt matrix, angular, brown
			G				
1							
2							
3							
4							
			G				
5							Stopped trackhoe at 5'
6							
7							
8							
9							
10							

SAMPLE TYPE
B - Undisturbed Block Sample
D - Disturbed Bulk Sample
U - 3" O.D. 2.42" I.D. tube sample
A - Drill Cuttings
G - Grab sample

LOG OF TEST PIT NO. TP-RS-3

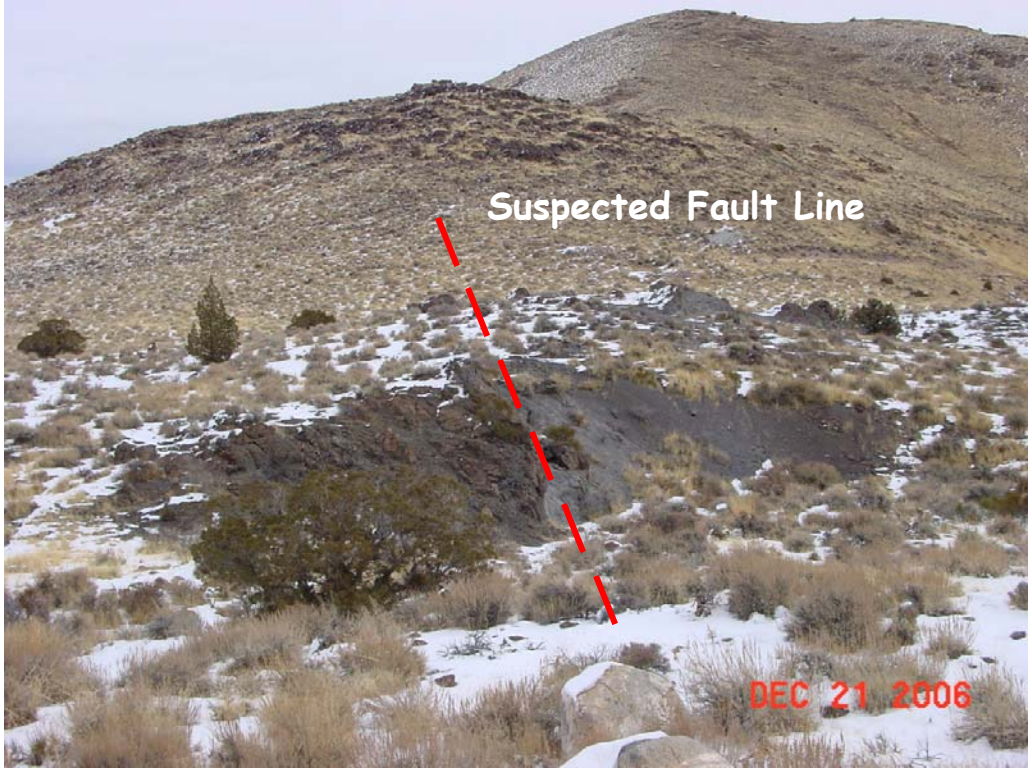
GEOTECH_TP_T-4580 6417000720ENV TP.GPJ AGRA_PHX.GDT 9/21/07

APPENDIX C

SELECTED SITE PHOTOGRAPHS

Photograph 1 – Ground conditions during drilling activities.

Photograph 2 – Drum used to store cuttings.



Photograph 3 – Outcrop near TP-11 showing suspected fault line.

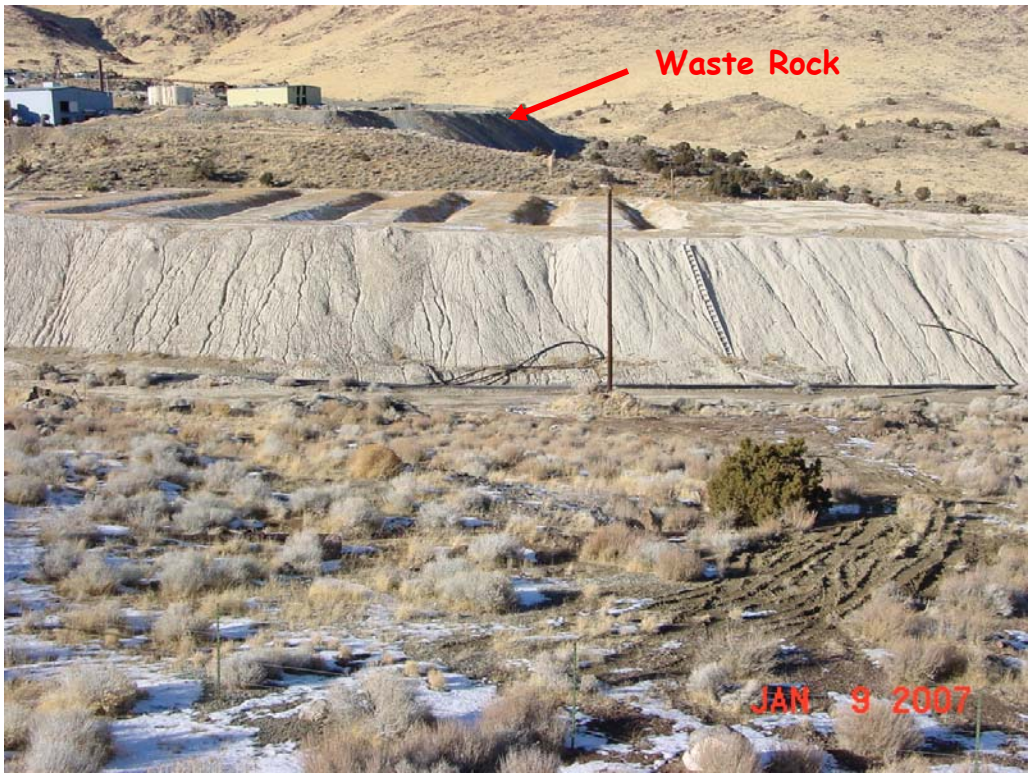
Photograph 4 – Sonic drill rig and support truck on Boring B-18.

Photograph 5 – View to the north across tailings pond.

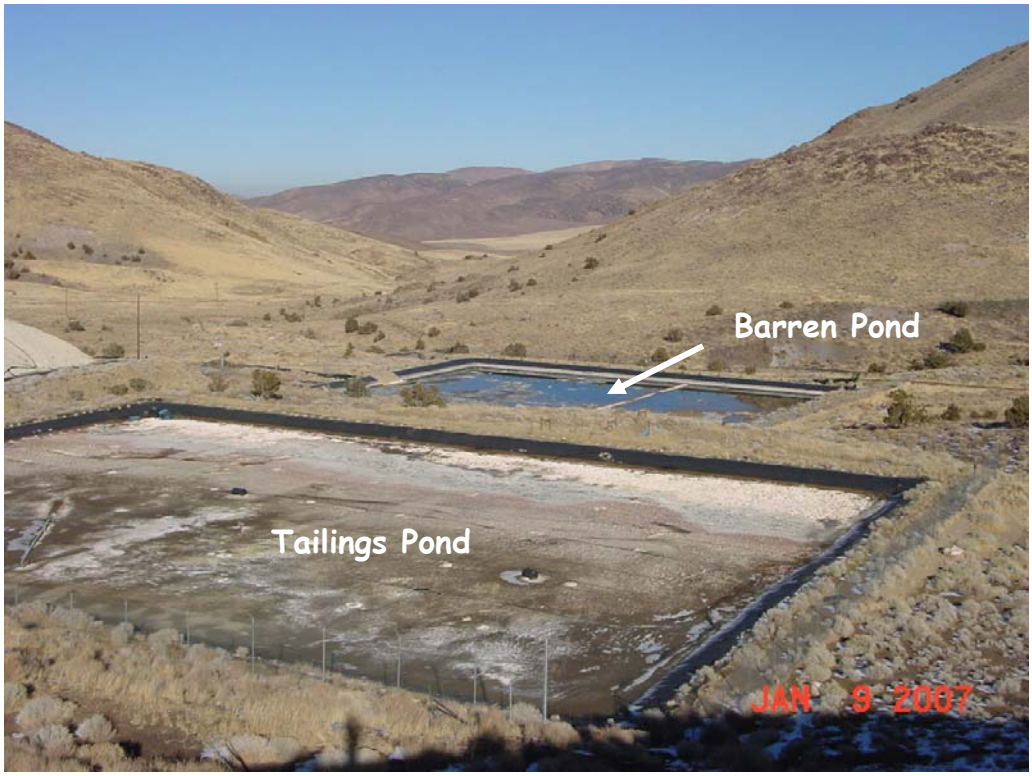
Photograph 6 – Sonic rig soil cores.

Photograph 7 – Bedrock outcrop at Boring B-24.

Photograph 8 – Bedrock outcrop at reworked tailings pond.



Photograph 9 – Heap leach pad with waste rock pile in background.



Photograph 10 – View to northwest across tailings pond and barren pond.

Photograph 11 – Abandoned transformers in the Reagent storage building.

Photograph 12 – Cyanide mixing tanks.

Photograph 13 – Drum storage on the north side of the Reagent storage building.

Photograph 14 – Mill tanks inside mill building.

APPENDIX D

LABORATORY DATA

APPENDIX D

LABORATORY DATA

INORGANIC RESULTS FROM B-21 AND B-23 SHOWN IN TABLE 6

RESULTS FROM B-26 SHOWN IN TABLE 4

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

1/26/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford

OrderID: *0701051*

Dear: Brett Whitford

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/8/2007. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Specializing in Soil, Hazardous Waste and Water Analysis.

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701051

General Comments

None

Specific Comments

None

Subcontracting Comments

The analysis for Acid Base Accounting was performed by Green Analytical Laboratories of Durango, CO. The report is attached.

Data Qualifier Legend

B – Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT – Sample held beyond the accepted holding time

J – The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M – Reported value is estimated; The sample matrix interfered with the analysis

N – There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC – Not calculated due to matrix interference

Q – Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA – Reported value was caclulated using the method of Standard Additions.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford
Phone: (775) 331-2375 Fax: (775) 331-4153
PO\Project: *Gooseberry /6417000720*

Date Printed: 1/26/2007
OrderID: *0701051*

AMEC Earth and Environmental - 701051

Customer Sample ID: B-23-5 **Collect Date/Time:** 1/8/2007 09:15
WETLAB Sample ID: 0701051-001 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-23-15 **Collect Date/Time:** 1/8/2007 09:40
WETLAB Sample ID: 0701051-002 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.011	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-23-22 **Collect Date/Time:** 1/8/2007 10:10
WETLAB Sample ID: 0701051-003 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW845 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-21-5 **Collect Date/Time:** 1/8/2007 13:00
WETLAB Sample ID: 0701051-004 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-21-10 **Collect Date/Time:** 1/8/2007 13:15
WETLAB Sample ID: 0701051-005 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007

Customer Sample ID: B-21-10 **Collect Date/Time:** 1/8/2007 13:15
WETLAB Sample ID: 0701051-005 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-21-15 **Collect Date/Time:** 1/8/2007 13:30
WETLAB Sample ID: 0701051-006 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-26-5 **Collect Date/Time:** 1/8/2007 14:15
WETLAB Sample ID: 0701051-007 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.029	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-26-16 **Collect Date/Time:** 1/8/2007 15:00
WETLAB Sample ID: 0701051-008 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.022	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: Field Blank **Collect Date/Time:** 1/8/2007 12:00
WETLAB Sample ID: 0701051-009 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.01	mg/kg	0.01	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/19/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/19/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/19/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007
Acid Base Accounting	N/A	See Attached			

QUALITY CONTROL REPORT

Sample ID: 701051
Reported: 01/26/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide WAD	4500CNI	mg/L	<0.010	0.097	0.100	97	0.096	0.094	2

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide WAD	4500CNI	mg/L	701-051-1	<0.010	0.096	96	96	01/17/07

Metals QC
Optima 4300DV

Batch:	T070126-1A	Matrix:	water

Sample ID:	701-065-4	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0834	92	0.0875	5	0.090	0.0876	97	1/26/2007
As	6010B	<0.10	mg/L	<0.10	1.00	1.0300	104	1.0700	4	1.00	1.0000	100	1/26/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0700	98	1.0900	2	1.00	0.9860	99	1/26/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	1.0200	102	1.0400	2	1.00	0.9840	98	1/26/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	1.0100	101	1.0100	0	1.00	0.9750	98	1/26/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	1.0300	103	1.0500	2	1.00	0.9870	99	1/26/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	1.0200	102	1.0300	1	1.00	0.9380	94	1/26/2007

Samples 701-051-(1-8) are associated with QC batch T070126-1A

Metals QC
CETAC M-6000A

Batch:	Hg070126-1A
Matrix:	TCLP

		Date Analyzed:	1/26/07
Sample ID:	701-051-8	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	0.22	2.00	2.09	94	2.03	3	2.00	1.98	99

Samples 701-051-(1-8) are associated with QC batch Hg070126-1A

Metals QC
Optima 4300DV

Batch:	T070118-1A	Matrix:	water

Sample ID:	701-065-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0987	110	0.0868	13	0.090	0.0867	96	1/19/2007
As	6010B	<0.10	mg/L	<0.10	1.00	1.0181	102	0.9854	3	1.00	0.9919	99	1/19/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0326	103	0.9797	5	1.00	0.9940	99	1/19/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	1.0225	102	0.9761	5	1.00	0.9845	98	1/19/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	1.0360	104	0.9857	5	1.00	0.9951	100	1/19/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	1.0147	102	0.9754	4	1.00	0.9824	98	1/19/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9580	96	0.9290	3	1.00	0.9315	93	1/19/2007

Sample 701-051-9 is associated with QC batch T070118-1A

Metals QC
CETAC M-6000A

Batch:	Hg070119-1A
Matrix:	TCLP

		Date Analyzed:	1/19/07
Sample ID:	701-065-1	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	2.16	104	2.27	5	2.00	2.05	103

Sample 701-051-9 is associated with QC batch Hg070119-1A

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-051
Report Due Date: 1-22-07

Client Amec
Address 780 Vista Blvd
City, State & Zip
Contact B. Whitford
Phone 331-2375
Fax 331-4153
P.O. Number
Collector's Name Swigert
Project Name Groundwater
Project Number 64170011720

Turnaround Time
Standard X 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Fax Results (Y) N To: Client Billing
Email Results (Y) N To: Client Billing
Compliance Monitoring Y N
Fax Results to State EPA Y N

Sample Type Codes
DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ____

			Sample Type	Containers	Analyses Requested: TCLP Rcra metals	CN	ASTD									Spl. No.
B-23-5	1-8-07	9:15	SO	1	X	X	X									1
B-23-15	1-8	9:40	SO	1	X	X	X									2
B-23-22	1-8	10:10	SO	1	X	X	X									3
B-21-5	1-8	13:00	SO	1	X	X	X									4
B-21-10	1-8	13:15	SO	1	X	X	X									5
B-21-15	1-8	13:30	SO	1	X	X	X									6
B-26-5	1-8	14:15	SO	1	X	X	X									7
B-26-14	1-8	15:00	SO	1	X	X	X									8
Field Blank	1-8	12:00	DW	1	X	X	X									9

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature 13 °C	1/8/07	4:39	[signature]	[signature]
Custody Seals Intact? (Y) N (None)				
Number of Containers 9				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

Analytical Laboratories, Inc.

GAL ID No.: 701-050,01-08

January 23, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name:	amec
Project Number:	701-051
Date Received:	01/11/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/11/07.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

For: John Green
Laboratory Director

Enclosure

76 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-050,01-08
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC
PROJECT NUMBER: 701-051

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHOS/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
701-050-01	B-23-5	1/8/2007												
701-050-02	B-23-15	1/8/2007												
701-050-03	B-23-22	1/8/2007												
701-050-04	B-21-5	1/8/2007												
701-050-05	B-21-10	1/8/2007												
701-050-06	B-21-15	1/8/2007												
701-050-07	B-28-5	1/8/2007												
701-050-08	B-28-16	1/8/2007												

For: John Green/Laboratory Director

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-050,01-08
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC
PROJECT NUMBER: 701-051

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
701-050-01		0.006				0.18	67.0	66.8							
701-050-02		0.002				0.07	43.5	43.4							
701-050-03		0.006				0.19	49.1	48.9							
701-050-04		0.054				1.69	309	307							
701-050-05		0.054				1.87	354	352							
701-050-06		0.036				1.14	181	180							
701-050-07		0.021				0.64	24.9	24.3							
701-050-08		0.003				0.08	85.9	85.8							

Jan.23. 2007 11:09AM 970-247-4227 No.7520 P. 19

For: John Gresh, Laboratory Director

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-050,01-08
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC
PROJECT NUMBER: 701-051

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EPPVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
701-050-01										6.703		
701-050-02										4.351		
701-050-03										4.911		
701-050-04										30.89		
701-050-05										35.37		
701-050-06										18.14		
701-050-07										2.494		
701-050-08										8.589		

For John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-050
Report Due Date:
Page ___ of ___

Client Wetlab
Address
City, State & Zip
Contact
Phone
Fax
P.O. Number 701-051
Email

Collector's Name
Project Name AMEC
Project Number

Turnaround Time: Standard ✓ 5-Day Other

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information
Fax Results (Y) N To: Client Billing
Email Results: Y N To: Client Billing
Compliance Monitoring Y N
Fax Results to State EPA Y N

Sample Type Codes
DW Drinking Water
WW – Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ___

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	Analyses Requested: 8014	Spl. No.
B-23-5	1/8/07	9:15	SO	1		01
B-23-15		9:40	SO	1		02
B-23-23		10:10	SO	1		03
B-21-5		13:00	SO	1		04
B-21-10		13:15	SO	1		05
B-21-15		13:30	SO	1		06
B-26-5		14:15	SO	1		07
B-26-10		15:00	SO	1		08

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By:	Samples Received By:
Temperature ___ °C	1/8/07	1:33	[illegible]	UPS - Courier
Custody Seals Intact? Y N None	1/11/07		UPS	[illegible]
Number of Containers ___				

WETLAB's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

RESULTS FROM B-24
SHOWN IN TABLE 4

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
4701 E. Greg Street #119 • Sparks, Nevada 89431 • tel [illegible] • fax [illegible] • www.WETLaboratory.com

1/26/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford

OrderID: *0701065*

Dear: Brett Whitford

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/9/2007. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701065

General Comments

None

Specific Comments

None

Subcontracting Comments

The analysis for Acid Base Accounting was performed by Green Analytical Laboratories of Durango, CO. The report is attached.

Data Qualifier Legend

B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated; The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry*

Date Printed: 1/26/2007
OrderID: *0701065*

AMEC Earth and Environmental - 701065

Customer Sample ID: Field Blank
WETLAB Sample ID: 0701065-001
Collect Date/Time: 1/9/2007 12:00
Receive Date: 1/9/2007 16:25

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SM 4500CNC	<0.010	mg/L	0.010	1/17/2007
Selenium,TCLP	SW846 6010B	<0.40	mg/L	0.40	1/19/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/19/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/19/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Customer Sample ID: B-24-5
WETLAB Sample ID: 0701065-002
Collect Date/Time: 1/9/2007 09:15
Receive Date: 1/9/2007 16:25

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	SW846 7471A	<0.10 M	mg/kg	0.10	1/26/2007
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic	SW846 6010 B	<1.5	mg/kg	1.5	1/26/2007
Barium	SW846 6010B	87	mg/kg	0.500	1/26/2007
Cadmium	SW846 6010B	<0.2500	mg/kg	0.2500	1/26/2007
Chromium	SW846 6010B	4.4	mg/kg	0.2500	1/26/2007
Lead	SW846 6010B	9.6	mg/kg	0.500	1/26/2007
Selenium	SW846 6010B	<2.500	mg/kg	2.500	1/26/2007
Silver	SW846 6010B	<0.2500	mg/kg	0.2500	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: GW-1-20 **Collect Date/Time:** 1/9/2007 11:30
WETLAB Sample ID: 0701065-003 **Receive Date:** 1/9/2007 16:25

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/19/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.015	mg/L	0.010	1/26/2007

Customer Sample ID: GW-5-20 **Collect Date/Time:** 1/9/2007 15:15
WETLAB Sample ID: 0701065-004 **Receive Date:** 1/9/2007 16:25

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/19/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007

QUALITY CONTROL REPORT

Sample ID: 701065
Reported: 01/26/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide WAD	4500CNI	mg/L	<0.010	0.097	0.100	97	0.096	0.094	2

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide WAD	4500CNI	mg/L	701-065-1	<0.010	0.089	96	89	01/17/07

Metals QC
Optima 4300DV

Batch:	T070118-1A	Matrix:	water

Sample ID:	701-065-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0987	110	0.0868	13	0.090	0.0867	96	1/19/2007
As	6010B	<0.10	mg/L	<0.10	1.00	1.0181	102	0.9854	3	1.00	0.9919	99	1/19/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0326	103	0.9797	5	1.00	0.9940	99	1/19/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	1.0225	102	0.9761	5	1.00	0.9845	98	1/19/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	1.0360	104	0.9857	5	1.00	0.9951	100	1/19/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	1.0147	102	0.9754	4	1.00	0.9824	98	1/19/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9580	96	0.9290	3	1.00	0.9315	93	1/19/2007

Sample 701-065-1 is associated with QC batch T070118-1A

Metals QC
CETAC M-6000A

Batch:	Hg070119-1A
Matrix:	TCLP

		Date Analyzed:	1/19/07
Sample ID:	701-065-1	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	2.16	104	2.27	5	2.00	2.05	103

Sample 701-065-1 is associated with QC batch Hg070119-1A

Metals QC
CETAC M-6000A

Batch:	Hg070126-1A
Matrix:	TCLP

		Date Analyzed:	1/26/07
Sample ID:	701-051-8	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	0.22	2.00	2.09	94	2.03	3	2.00	1.98	99

Samples 701-065-(3-4) are associated with QC batch Hg070126-1A

Metals QC
Optima 4300DV

Batch:	T070126-1A	Matrix:	water

Sample ID:	701-065-4	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0834	92	0.0875	5	0.090	0.0876	97	1/26/2007
As	6010B	<0.10	mg/L	<0.10	1.00	1.0300	104	1.0700	4	1.00	1.0000	100	1/26/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0700	98	1.0900	2	1.00	0.9860	99	1/26/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	1.0200	102	1.0400	2	1.00	0.9840	98	1/26/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	1.0100	101	1.0100	0	1.00	0.9750	98	1/26/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	1.0300	103	1.0500	2	1.00	0.9870	99	1/26/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	1.0200	102	1.0300	1	1.00	0.9380	94	1/26/2007

Samples 701-065-(3-4) are associated with QC batch T070126-1A

Metals QC
Optima 4300DV

Batch:	S070126-1A	Matrix:	soil

Sample ID:	701-065-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.0050	mg/kg	-0.512	4.500	4.040	101	3.640	10	4.500	4.380	97	1/26/2007
As	6010B	<0.030	mg/kg	-0.864	50.00	52.500	107	48.100	9	50.00	48.100	96	1/26/2007
Ba	6010B	<0.010	mg/kg	86.700	50.00	138.000	103	122.000	12	50.00	50.700	101	1/26/2007
Cd	6010B	<0.0010	mg/kg	0.083	50.00	43.700	87	39.200	11	50.00	49.100	98	1/26/2007
Cr	6010B	<0.0050	mg/kg	4.380	50.00	53.100	97	48.000	10	50.00	51.300	103	1/26/2007
Pb	6010B	<0.010	mg/kg	9.590	50.00	51.800	84	46.500	11	50.00	47.800	96	1/26/2007
Se	6010B	<0.020	mg/kg	1.830	50.00	47.900	92	42.900	11	50.00	45.300	91	1/26/2007

Sample 701-065-2 is associated with QC batch S070126-1A

Metals QC
CETAC M-6000A

Batch:	Hg070126-2A
Matrix:	soil

		Date Analyzed:	1/26/07
Sample ID:	701-065-2	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7471A	<0.10	mg/kg	<0.10	0.167	0.143	NC	0.136	5	0.167	0.148	89

NC = Not calculated due to matrix interference.

Sample 701-065-2 is associated with QC batch Hg070126-2A

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY

Specializing in Soil, Hazardous Waste and Water Analysis.

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number

Report Due Date:

Page ____ of ____

Client

Address

City, State & Zip

Contact

Phone | Collector's Name

Fax | Project Name

P.O. Number | Project Number

Turnaround Time

Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):

Company ____
Address ____
City, State & Zip ____
Contact ____
Phone ____
Fax ____
Email ____

Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ____

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS											Spl. No.

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature ____ °C				
Custody Seals Intact? Y N None				
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

Analytical Laboratories, Inc.

GAL ID No.: 701-051-01

January 23, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name:	AMEC
Project Number:	701-065
Date Received:	01/11/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/11/07.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Dublin Zufelt

FOR John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-051-01
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC
PROJECT NUMBER: 701-065

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
701-051-01	B-24-5	1/9/2007												

D Zufelt
For: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-051-01
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC
PROJECT NUMBER: 701-065

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
701-051-01		0.007				0.23	218	218							

D Zufelt
For: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-051-01
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC
PROJECT NUMBER: 701-065

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
701-051-01										21.80		

For: John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-~~0458~~
Report Due Date: -051
Page ____ of ____

Client: Wetlab
Address:
City, State & Zip:
Contact:
Phone: | Collector's Name:
Fax: | Project Name: AMEC
P.O. Number: 701-065 | Project Number:
Email:

Turnaround Time: Standard ✓ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company ____
Address ____
City, State & Zip ____
Contact ____
Phone ____
Fax ____
Email ____

Additional Information

Fax Results	(Y)	N	To: (Client)	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water	SD = Solid
WW = Wastewater	(SO) = Soil
SW = Surface Water	HW = Hazardous Waste
MW = Monitoring Well	OTHER: ____

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	ABA (TSulf, CaCO3)									Spl. No.
B-24-5	1/9/07	9:15	SO	1	X									01

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature ____ °C	1/11/07	1:34	[signature]	UPS - Green
Custody Seals Intact? Y N None	1/11/07		UPS	[signature]
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

RESULTS FROM B-12 AND B-24
SHOWN IN TABLE 4

RESULTS FROM B-18 AND B-19
SHOWN IN TABLE 5

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
www.WETLaboratory.com

1/23/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford

OrderID: *0612212*

Dear: Brett Whitford

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 12/21/2006. Additional comments are located on page 2 of this report.

This report includes the Acid Base Accounting resutls.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 612212

General Comments

None

Specific Comments

Samples B-25-5 (0612212-01) and B-24-15 (0612212-02) were canceled per client on 1/10/07.

Subcontracting Comments

The analysis for Acid Base Accounting was performed by Green Analytical Laboratories of Durango, CO. Their report is attached.

Data Qualifier Legend

B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated: The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated: The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry/ 641700072I*

Date Printed: 1/23/2007
OrderID: *0612212*

AMEC Earth and Environmental - 612212

Customer Sample ID: B-18-4
WETLAB Sample ID: 0612212-003

Collect Date/Time: 12/21/2006 10:40
Receive Date: 12/21/2006 16:23

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Customer Sample ID: B-19-5
WETLAB Sample ID: 0612212-004

Collect Date/Time: 12/21/2006 11:45
Receive Date: 12/21/2006 16:23

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	0.22	mg/kg	0.20	1/3/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Customer Sample ID: B-19-15
WETLAB Sample ID: 0612212-005

Collect Date/Time: 12/21/2006 12:15
Receive Date: 12/21/2006 16:23

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/3/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Customer Sample ID: B-12-5
WETLAB Sample ID: 0612212-006

Collect Date/Time: 12/21/2006 14:15
Receive Date: 12/21/2006 16:23

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	0.28	mg/kg	0.20	1/3/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: Field Blank
WETLAB Sample ID: 0612212-007

Collect Date/Time: 12/21/2006 09:30
Receive Date: 12/21/2006 16:23

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SM 4500CNC	<0.010	mg/L	0.010	1/4/2007
Selenium,TCLP	SW846 6010B	<0.40	mg/L	0.40	1/19/2007
Arsenic. TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/19/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/19/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Metals QC
Optima 4300DV

Batch:	T070116-1A	Matrix:	water

Sample ID:	612-212-6	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0886	98	0.0880	1	0.090	0.0887	99	1/17/2007
As	6010B	<0.10	mg/L	<0.10	1.00	0.9877	98	0.9757	1	1.00	0.9842	98	1/17/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0699	92	1.0580	1	1.00	0.9908	99	1/17/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9528	95	0.9449	1	1.00	0.9818	98	1/17/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9659	97	0.9608	1	1.00	0.9901	99	1/17/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9525	95	0.9430	1	1.00	0.9817	98	1/17/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9572	95	0.9437	1	1.00	0.9473	95	1/17/2007

Samples 612-212-(3-6) are associated with QC batch T070116-1A

Metals QC
Optima 4300DV

Batch:	T070118-1A	Matrix:	water

Sample ID:	701-065-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0987	110	0.0868	13	0.090	0.0867	96	1/19/2007
As	6010B	<0.10	mg/L	<0.10	1.00	1.0181	102	0.9854	3	1.00	0.9919	99	1/19/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0326	103	0.9797	5	1.00	0.9940	99	1/19/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	1.0225	102	0.9761	5	1.00	0.9845	98	1/19/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	1.0360	104	0.9857	5	1.00	0.9951	100	1/19/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	1.0147	102	0.9754	4	1.00	0.9824	98	1/19/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9580	96	0.9290	3	1.00	0.9315	93	1/19/2007

Sample 612-212-7 is associated with QC batch T070118-1A

Metals QC
CETAC M-6000A

Batch:	Hg070117-1A
Matrix:	TCLP

		Date Analyzed:	1/19/07
Sample ID:	612-205-7	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	1.91	92	1.72	10	2.00	2.06	103

Samples 612-212-(3-5) are associated with QC batch Hg070117-1A

Metals QC
CETAC M-6000A

Batch:	Hg070117-1B
Matrix:	TCLP

		Date Analyzed:	1/19/07
Sample ID:	612-212-7	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	2.43	118	2.56	5	2.00	2.06	103

Samples 612-212-(6-7) are associated with QC batch Hg070117-1B

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY

Specializing in Soil, Hazardous Waste and Water Analysis

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 www.WETLaboratory.com

Lab Number

Report Due Date:

Client

Address

City, State & Zip

Contact

Phone | Collector's Name

Fax | Project Name

P.O. Number | Project Number

Turnaround Time
Standard_____ 5-Day_____ Other_____

Billing Address (if different than Client Address):
Company _____
Address _____
City, State & Zip _____
Contact _____
Phone _____
Fax _____
Email _____

Fax Results Y N To: Client Billing
Email Results Y N To: Client Billing
Compliance Monitoring Y N
Fax Results to State EPA Y N

Sample Type Codes
DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER _____

			Sample Type	Containers	Analyses Requested												Spl. No.

Instructions/Comments/Special Requirements

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature _____°C				
Custody Seals Intact? Y N None				
Number of Containers _____				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted

Analytical Laboratories, Inc.

GAL ID No.: 701-014

January 23, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name:	Gooseberry Mine
Project Number:	612-212
Date Received:	01/02/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/02/07. Samples #01 & #02 were cancelled per Ginger. Only sample #03 was analyzed.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

For: John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-014
Date Received: 01/03/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: Gooseberry Mine
PROJECT NUMBER: 612-212

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
701-014-03	B-12-5	12/21/2006												

D Zufelt
FOR: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-014
Date Received: 01/03/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: Gooseberry Mine
PROJECT NUMBER: 612-212

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
701-014-03		0.009				0.28	17.3	17.0							

FOR: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-014
Date Received: 01/03/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: Gooseberry Mine
PROJECT NUMBER: 612-212

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
701-014-03										1.727		

D Zufelt
for: John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-014
Report Due Date:

Client WETLAB
Address
City, State & Zip
Contact Binger
Phone
Fax
P.O. Number 6R-2R
Collector's Name
Project Name AMEC
Project Number Gouseberry

Turnaround Time
Standard X 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Fax Results Y N To: Client Billing
Email Results Y N To: Client Billing
Compliance Monitoring Y N
Fax Results to State EPA Y N

Sample Type Codes
DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: _____

			Sample Type	Containers	Analyses Requested: ABA												Spl. No.
B-12-5	12/3/06	1445	SO	1	X												

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature ____°C	1/16/07	1600		UPS - FedEx
Custody Seals Intact? Y N None	1/16/07		UPS	
Number of Containers _____				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

RESULTS FROM B-16 AND B-17 SHOWN IN TABLE 5

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
475 E. Greg Street #115 | Sparks, Nevada 89431 | tel [illegible] | fax [illegible] | www.WETLaboratory.com

1/19/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford

OrderID: *0612205*

Dear: Brett Whitford

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 12/20/2006. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 612205

General Comments

None

Specific Comments

None

Data Qualifier Legend

B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated; The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry / 6417000720*

Date Printed: 1/19/2007
OrderID: *0612205*

AMEC Earth and Environmental - 612205

Customer Sample ID: B-16-5
WETLAB Sample ID: 0612205-001

Collect Date/Time: 12/20/2006 09:45
Receive Date: 12/20/2006 16:58

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	2.6	mg/kg	0.20	12/29/2006
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/11/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/11/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/11/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/11/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/11/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/11/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/11/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/11/2007

Customer Sample ID: B-16-15 **Collect Date/Time:** 12/20/2006 10:20

WETLAB Sample ID: 0612205-002 **Receive Date:** 12/20/2006 16:58

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	12/29/2006
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	2.1	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Customer Sample ID: B-16-23 **Collect Date/Time:** 12/20/2006 11:10

WETLAB Sample ID: 0612205-003 **Receive Date:** 12/20/2006 16:58

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	0.27	mg/kg	0.20	1/3/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	0.016	mg/L	0.010	1/19/2007

Customer Sample ID: B-17-5 **Collect Date/Time:** 12/20/2006 12:10

WETLAB Sample ID: 0612205-004 **Receive Date:** 12/20/2006 16:58

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	1.5	mg/kg	0.20	1/3/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Customer Sample ID: B-17-15 **Collect Date/Time:** 12/20/2006 12:00

WETLAB Sample ID: 0612205-005 **Receive Date:** 12/20/2006 16:58

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	1.5	mg/kg	0.20	1/3/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	2.2	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Customer Sample ID: B-17-20 **Collect Date/Time:** 12/20/2006 13:10

WETLAB Sample ID: 0612205-006 **Receive Date:** 12/20/2006 16:58

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	0.22	mg/kg	0.20	1/3/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	0.013	mg/L	0.010	1/19/2007

Customer Sample ID: Field Blank
WETLAB Sample ID: 0612205-007

Collect Date/Time: 12/20/2006 11:30
Receive Date: 12/20/2006 16:58

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SM 4500CNC	0.030	mg/L	0.010	1/3/2007
Selenium,TCLP	SW846 6010B	<0.40	mg/l	0.40	1/19/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/19/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/19/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Customer Sample ID: B-17-22 **Collect Date/Time:** 12/20/2006 13:25

WETLAB Sample ID: 0612205-008 **Receive Date:** 12/20/2006 16:58

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/3/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/17/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/17/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/17/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/17/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/17/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007

Metals QC
Optima 4300DV

Batch:	T070111-1B	Matrix:	water

Sample ID:	612-200-7 10X	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0839	93	0.0832	1	0.090	0.0865	96	1/11/2007
As	6010B	<0.10	mg/L	<0.10	1.00	0.9535	95	0.9562	0	1.00	0.9718	97	1/11/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	0.8831	87	0.8824	0	1.00	0.9691	97	1/11/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9256	93	0.9305	1	1.00	0.9568	96	1/11/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9476	95	0.9470	0	1.00	0.9679	97	1/11/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9550	92	0.9628	1	1.00	0.9735	97	1/11/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.8993	90	0.9063	1	1.00	0.9146	91	1/11/2007

Sample 612-205-1 is associated with QC batch T070111-1B

Metals QC
CETAC M-6000A

Batch:	Hg070111-1B
Matrix:	TCLP

		Date Analyzed:	1/11/07
Sample ID:	612-200-7 100X	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	<0.10	2.00	2.01	102	2.09	4	2.00	2.11	106

Sample 612-205-1 is associated with QC batch Hg070111-1B

Metals QC
Optima 4300DV

Batch:	T070118-1A	Matrix:	water

Sample ID:	701-065-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0987	110	0.0868	13	0.090	0.0867	96	1/19/2007
As	6010B	<0.10	mg/L	<0.10	1.00	1.0181	102	0.9854	3	1.00	0.9919	99	1/19/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0326	103	0.9797	5	1.00	0.9940	99	1/19/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	1.0225	102	0.9761	5	1.00	0.9845	98	1/19/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	1.0360	104	0.9857	5	1.00	0.9951	100	1/19/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	1.0147	102	0.9754	4	1.00	0.9824	98	1/19/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9580	96	0.9290	3	1.00	0.9315	93	1/19/2007

Sample 612-205-7 is associated with QC batch T070118-1A

Metals QC
CETAC M-6000A

Batch:	Hg070117-1A
Matrix:	TCLP

		Date Analyzed:	1/19/07
Sample ID:	612-205-7	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	1.91	92	1.72	10	2.00	2.06	103

Samples 612-205-(2-8) are associated with QC batch Hg070117-1A

Metals QC
Optima 4300DV

Batch:	T070116-1A	Matrix:	water

Sample ID:	612-212-6	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0886	98	0.0880	1	0.090	0.0887	99	1/17/2007
As	6010B	<0.10	mg/L	<0.10	1.00	0.9877	98	0.9757	1	1.00	0.9842	98	1/17/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0699	92	1.0580	1	1.00	0.9908	99	1/17/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9528	95	0.9449	1	1.00	0.9818	98	1/17/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9659	97	0.9608	1	1.00	0.9901	99	1/17/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9525	95	0.9430	1	1.00	0.9817	98	1/17/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9572	95	0.9437	1	1.00	0.9473	95	1/17/2007

Samples 612-205-(2-6,8) are associated with QC batch T070116-1A

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY

Specializing in Soil, Hazardous Waste and Water Analysis

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0617 | www.WETLaboratory.com

Lab Number

Report Due Date:

Client

Address

City, State & Zip

Contact

Phone | Collector's Name

Fax | Project Name

P.O. Number | Project Number

Turnaround Time
Standard_____ 5-Day_____ Other_____

Billing Address (if different than Client Address):
Company _____
Address _____
City, State & Zip _____
Contact _____
Phone _____
Fax _____
Email _____

Fax Results Y N To: Client Billing
Email Results Y N To: Client Billing
Compliance Monitoring Y N
Fax Results to State EPA Y N

Sample Type Codes
DW = Drinking Water
WW = Wasterwater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: _____

Sample Type	Containers	Analyses Requested															Spl. No.

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature _____°C				
Custody Seals Intact? Y N None				
Number of Containers _____				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted

INORGANIC RESULTS FROM B-22 SHOWN IN TABLE 6

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY

475 E. Greg Street # 119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0017 | www.WETLaboratory.com

1/22/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford

OrderID: *0701021*

Dear: Brett Whitford

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/4/2007. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701021

General Comments

None

Specific Comments

None

Subcontracting Comments

The analysis for Acid Base Accounting was performed by Green Analytical Laboratories of Durango, CO. The report is attached.

Data Qualifier Legend

B -- Blank contamination. Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated; The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry / 6417000720*

Date Printed: 1/22/2007
OrderID: *0701021*

AMEC Earth and Environmental - 701021

Customer Sample ID: B-22-5
WETLAB Sample ID: 0701021-001

Collect Date/Time: 1/3/2007 12:20
Receive Date: 1/4/2007 09:50

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/11/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/22/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/22/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/22/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Mercury, TCLP	SW846 7470A	0.020	mg/L	0.010	1/22/2007

Customer Sample ID: B-22-15 **Collect Date/Time:** 1/3/2007 13:20

WETLAB Sample ID: 0701021-002 **Receive Date:** 1/4/2007 09:50

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/11/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/22/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/22/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/22/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Mercury, TCLP	SW846 7470A	0.010	mg/L	0.010	1/22/2007

Customer Sample ID: B-22-19 **Collect Date/Time:** 1/3/2007 14:15

WETLAB Sample ID: 0701021-003 **Receive Date:** 1/4/2007 09:50

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/11/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/22/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/22/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/22/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Mercury, TCLP	SW846 7470A	0.011	mg/L	0.010	1/22/2007

Customer Sample ID: Field Blank **Collect Date/Time:** 1/3/2007 12:00

WETLAB Sample ID: 0701021-004 **Receive Date:** 1/4/2007 09:50

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SM 4500CNC	<0.010	mg/L	0.010	1/19/2007
Selenium,TCLP	SW846 6010B	<0.40	mg/L	0.40	1/22/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/22/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/22/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Mercury, TCLP	SW846 7470A	0.013	mg/L	0.010	1/22/2007

Metals QC
CETAC M-6000A

Batch:	Hg070122-2A
Matrix:	TCLP

		Date Analyzed:	1/22/07
Sample ID:	701-021-4	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	0.13	2.00	2.10	99	2.31	10	2.00	2.20	110

Samples 701-021-(1-4) are associated with QC batch Hg070122-2A

Metals QC
Optima 4300DV

Batch:	T070122-1A	Matrix:	water

Sample ID:	701-021-3	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0863	96	0.0857	1	0.090	0.0961	107	1/22/2007
As	6010B	<0.10	mg/L	<0.10	1.00	0.9921	99	1.0010	1	1.00	0.9979	100	1/22/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	0.9760	93	0.9738	0	1.00	0.9955	100	1/22/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9574	96	0.9558	0	1.00	0.9884	99	1/22/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9706	97	0.9684	0	1.00	0.9964	100	1/22/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9566	95	0.9592	0	1.00	0.9908	99	1/22/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9560	95	0.9625	1	1.00	0.9526	95	1/22/2007

Samples 701-021-(1-4) are associated with QC batch T070122-1A

WETLAB

WESTERN ENVIRONMENTAL TESTING LABORATORY

Specializing in Soil Hazardous Waste and Water Analysis

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number

Report Due Date:

Client

Address

City, State & Zip

Contact

Phone | Collector's Name

Fax | Project Name

P.O. Number | Project Number

Turnaround Time

Standard_____ 5-Day_____ Other_____

Billing Address (if different than Client Address):

Company _____

Address _____

City, State & Zip _____

Contact _____

Phone _____

Fax _____

Email _____

Fax Results Y N To: Client Billing

Email Results Y N To: Client Billing

Compliance Monitoring Y N

Fax Results to State EPA Y N

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER:_____

Sample Type	Containers	Analyses Requested															Spl. No.

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature _____°C				
Custody Seals Intact? Y N None				
Number of Containers _____				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

GAL ID No.: **701-049,01-03**

January 23, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name:	AMEC / Gooseberry
Project Number:	701-021
Date Received:	01/11/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/11/07.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

for John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-049,01-03
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC / Gooseberry
PROJECT NUMBER: 701-021

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
701-049-01	B-22-5													
701-049-02	B-22-15													
701-049-03	B-22-19													

D Zufelt
for John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-049,01-03
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC / Gooseberry
PROJECT NUMBER: 701-021

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
701-049-01		0.107				3.35	212	209							
701-049-02		0.009				0.27	65.7	65.5							
701-049-03		0.003				0.10	60.1	60.0							

For: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-049,01-03
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC / Gooseberry
PROJECT NUMBER: 701-021

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
701-049-01										21.21		
701-049-02										6.573		
701-049-03										6.013		

FOR: John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-049
Report Due Date:
Page ____ of ____

Client WETLAB
Address on file
City, State & Zip
Contact Ginger
Phone
Fax
P.O. Number ~~to~~ 701-021
Email

Collector's Name
Project Name AMEC
Project Number Gooseberry

Turnaround Time
Standard X 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	(Y)	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ____

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO OF CONTAINERS	Analyses Requested: A334	Spl. No.
B-22-5	1/3/08	1220	SO	1	X	01
B-22-15	↓	1320	SO	1	X	02
B-22-19	↓	1415	SO	1	X	03

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature ____ °C	1/10/07	1:33	[signature]	UPS - Green
Custody Seals Intact? Y N None	1/11/07		UPS	[signature]
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

ETHYLENE GLYCOL RESULTS FOR SAMPLES FROM TP-G TEST PITS SHOWN IN TABLE 7

Thursday, February 08, 2007

Reyna Vallejo
Alpha Analytical, Inc.
255 Glendale Ave.
Sparks, NV 89431

TEL: (775) 355-1044
FAX

RE:

Order No.: 0701322

Dear Reyna Vallejo:

Zalco Laboratories, Inc. received 7 sample(s) on 1/30/2007 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Zalco Laboratories, Inc.
(661) 395-0539

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-001A
Client Sample ID:	AEE07012901-28A	**Collection Date:**	1/26/2007 3:15:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-002A
Client Sample ID:	AEE07012901-29A	**Collection Date:**	1/26/2007 3:20:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-003A
Client Sample ID:	AEE07012901-30A	**Collection Date:**	1/26/2007 3:30:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-004A
Client Sample ID:	AEE07012901-31A	**Collection Date:**	1/26/2007 3:35:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-005A
Client Sample ID:	AEE07012901-32A	**Collection Date:**	1/26/2007 3:45:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-006A
Client Sample ID:	AEE07012901-33A	**Collection Date:**	1/26/2007 3:45:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

RESULTS FROM B-21, B-22 AND B-23 SHOWN IN TABLE 6

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07010450

Report Due By : 5:00 PM On : 11-Jan-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Brett Whitford
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail : brett.whitford@amec.com

Don Swigonski
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail : don.swigonski@amec.com

EDD Required : **No**

Sampled by : Don Swigonski

Report Attention : Brett Whitford
CC Report : Don Swigonski

Job : 6-417-000720/Gooseberry Mine
PO :
Client's COC # : none

Cooler Temp	Samples Received	Date Printed
4 °C	04-Jan-07	04-Jan-07

QC Level : 1 = Final Rpt Only

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	HOLD	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
								Requested Tests							
AEE07010450-01A	Field Blank	AQ	01/03/07 12:00	4	0	5				TPH/E_N		GAS-N		8240	Voas and bottle not marked for preservative.
AEE07010450-02A	B-22-5	SO	01/03/07 12:20	2	0	5			TPH/E_N		GAS-N		8240		One 5g. encore, and one 8oz. soil jar provided.
AEE07010450-03A	B-22-15	SO	01/03/07 13:20	2	0	5			TPH/E_N		GAS-N		8240		One 5g. encore, and one 8oz. soil jar provided.
AEE07010450-04A	B-22-19	SO	01/03/07 14:15	2	0	5		Hold							One 5g. encore, and one 8oz. soil jar provided.

Comments: Samples brought in by client. Frozen ice.

	Signature	Print Name	Company	Date/Time
Logged in by:	Dan Dickinson	Dan Dickinson	Alpha Analytical, Inc.	1/4/07 957

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

amec

AMEC
780 Vista Blvd., Site 100
Sparks, NV 89434
331-2375

CHAIN OF CUSTODY

DATE: 04-Jan-07
COC #: 1
PAGE: 1 OF 1

Project Manager:	Brett Whitford	Project Contact:	Brett Whitford	Bill To:	AMEC	Disposal Instructions:	LAB
Project Name:	Gooseberry Mine	Phone Number:	PH(331-2375		780 Vista BLvd., St 100	Shipment Method:	By AMEC
Project Number:	6-417-000720	Purchase Order No.:	PO#		Sparks, NV 89434	Waybill Number:	N/A

Comments: H=Hold Analysis Request X=Analyze

Preservatives and Containers: 2x1L, 8oz AG; 2x1L, 8oz AG; 2x1L, 8oz AG; 2x1L, 8oz AG; 2x1L, 8oz AG; 2x1L, 8oz AG; 1-25 gram Encore Samplers; 2x1L, 8oz AG; 3x40mL, Na2S2O3; 2x40mL, HCl; 1 or 0.5 L, HNO3, P, 8oz; 1x8oz P w/ NaOH+Asc Acid; 1x1L, P, 8oz; 1x1L, P, H2SO4, 8oz jar w/o pres; 2x40mL, H2SO4, AG, 4oz w/o pres; 2 x 40mL, Na2SO4; 2x1L, 4oz; 4 Oz glass jar, 1 Encore Sampler; 1 or 0.5L, HNO3, P, 8oz AG; 4 Oz glass jar; 4 oz. Glass jar; 4oz glass jar/40 ml vial; 4 Oz glass jar / 40ml vial; 2x1L; 1x500 ml Poly w/ HNO3

Sample Information

AEED700450

Methods for Analysis: Exp. (8330N); Exp.(8330NX)+TNX,MNX,DNX; Exp Low (8330-LN); Exp.Low (8330LX)+TNX,MNX,DNX; Pest. (OLC02.1/ OLM03.2); Herb. (8151); VOC (8260B) Plus MTBE; SVOC (8270); EDB (504.1); MTBE (8021); Metals(ILM04.0), Hardness(130.2); Cyanide (ILM04.0); Cl, SO4 (300.0), Alk. (310.1); Ammonia (350.2) Phosphate (365.2) NO3/NO2 (353.2); TOC (415.1); EDB/MTBE (8260B); PCN (8270PCN); 7/11 TCLP; Metals (ILM04.0); 8015 Modified; VOC (8240); TPH-E; TPH-P; 8270SIM; CAM 17 Metals

RUSH: Extration and hold till notified; 48 hour; 72 hr; Standard

No.	LAB Sample ID	EPA_NO	AMEC ID	Date Sampled	Time Sampled	Matrix	VOC (8240)	TPH-E	TPH-P	Extration and hold till notified	Standard	TOTAL CONTAINERS
1	-01		Field Blank	3-Jan-07	12:00	W	X	X	X		X	3
2	-02		B-22-5	3-Jan-07	12:20	S	X	X	X		X	2
3	-03		B-22-15	3-Jan-07	13:20	S	X	X	X		X	2
4	-04		B-22-19	3-Jan-07	14:15	S	X	X	X	X		2
5												
6												
7												
8												
9												
10												
11												
12												

Sampler's Signature:	Date:	Time:
Relinquished By:	Date: 1/4/07	Time: 9:40
Received By:	Date: 1/4/07	Time: 940
Relinquished By:	Date:	Time:
Received By (LAB):	Date:	Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
Received within holding time:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
AMEC contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	C
Volatile Cooler Temperature:	C

Deliver To:

Alpha Analytical
255 Glendale Avenus
Sparks, NV

Note: Fa email sample check in sheet to Don Swigonski

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153
Date Received 01/04/07

Job#: 6-417-000720/Gooseberry Mine

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B

		Parameter	Concentration		Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**Field Blank**	TPH-E (DRO)	ND		0.50 mg/L	01/03/07	01/06/07
Lab ID :	AEE07010450-01A	TPH-E (ORO)	ND		0.50 mg/L	01/03/07	01/06/07
		TPH-P (GRO)	ND		0.50 mg/L	01/03/07	01/08/07
Client ID :	**B-22-5**	TPH-E (DRO)	ND		10 mg/Kg	01/03/07	01/05/07
Lab ID :	AEE07010450-02A	TPH-E (ORO)	21	G	10 mg/Kg	01/03/07	01/05/07
		TPH-P (GRO)	ND		10 mg/Kg	01/03/07	01/05/07
Client ID :	**B-22-15**	TPH-E (DRO)	ND		10 mg/Kg	01/03/07	01/05/07
Lab ID :	AEE07010450-03A	TPH-E (ORO)	ND		10 mg/Kg	01/03/07	01/05/07
		TPH-P (GRO)	ND		10 mg/Kg	01/03/07	01/05/07

Diesel Range Organics (DRO) C13-C22
G = ORO compounds have varying amounts of recovery.
Gasoline Range Organics (GRO) C4-C13
Oil Range Organics (ORO) C22-C40+
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com
Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/10/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07010450-01A
Client I.D. Number: Field Blank

Sampled: 01/03/07
Received: 01/04/07
Analyzed: 01/08/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L	26	Ethylbenzene	ND	1.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L	27	m,p-Xylene	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L	28	Bromoform	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L	29	o-Xylene	ND	1.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L	30	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L	31	1,3-Dichlorobenzene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L	32	1,4-Dichlorobenzene	ND	1.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L	33	1,2-Dichlorobenzene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L				
10	cis-1,2-Dichloroethene	ND	1.0 µg/L				
11	Chloroform	7.7	1.0 µg/L				
12	1,2-Dichloroethane	ND	1.0 µg/L				
13	1,1,1-Trichloroethane	ND	1.0 µg/L				
14	Carbon tetrachloride	ND	1.0 µg/L				
15	Benzene	ND	1.0 µg/L				
16	1,2-Dichloropropane	ND	1.0 µg/L				
17	Trichloroethene	ND	1.0 µg/L				
18	Bromodichloromethane	ND	1.0 µg/L				
19	cis-1,3-Dichloropropene	ND	1.0 µg/L				
20	trans-1,3-Dichloropropene	ND	1.0 µg/L				
21	1,1,2-Trichloroethane	ND	1.0 µg/L				
22	Toluene	ND	1.0 µg/L				
23	Dibromochloromethane	ND	1.0 µg/L				
24	Tetrachloroethene	ND	1.0 µg/L				
25	Chlorobenzene	ND	1.0 µg/L				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/10/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07010450-02A
Client I.D. Number: B-22-5

Sampled: 01/03/07
Received: 01/04/07
Analyzed: 01/05/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hutchman, Quality Assurance Officer
Sacramento, CA • (916) 366-0089 • Las Vegas, NV • (702) 281-4848 • info@alpha-analytical.com
Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/10/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07010450-03A
Client I.D. Number: B-22-15

Sampled: 01/03/07
Received: 01/04/07
Analyzed: 01/05/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9889 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/10/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: AEE07010450 **Project:** 6-417-000720/Gooseberry Mine

Alpha's Sample ID	Client's Sample ID	Matrix	pH
07010450-01A	Field Blank	Aqueous	2

1/10/07

Report Date

Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Sample Receipt Checklist

Date Report is due to Client : **1/11/2007** Date of Notice : **1/4/2007 9:58:15 AM**

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **AMEC Earth & Environmental**
Project ID : **6-417-000720/Gooseberry Mine**
Project Manager: **Brett Whitford**
Client's EMail: **brett.whitford@amec.com**
Client's Phone: **(775) 331-2375** Client's FAX: **(775) 331-4153**
Work Order Number: **AEE07010450** Date Received: **1/4/2007** Received by: Tara Dickinson

Chain of Custody (COC) Information

Carrier name: Client

Chain of custody present ?	Yes ☑	☐ No	
Custody seals intact on shippping container/cooler ?	Yes ☐	☐ No	Not Present ☑
Custody seals intact on sample bottles ?	Yes ☑	☐ No	Not Present ☐
Chain of custody signed when relinquished and received ?	Yes ☑	☐ No	
Chain of custody agrees with sample labels ?	Yes ☑	☐ No	
Sample ID noted by Client on COC ?	Yes ☑	☐ No	
Date and time of collection noted by Client on COC ?	Yes ☑	☐ No	
Samplers's name noted on COC ?	Yes ☑	☐ No	
Internal Chain of Custody (COC) requested ?	Yes ☐	☑ No	
Sub Contract Lab Used :	None ☑	☐ See Comments	

Sample Receipt Information

Shipping container/cooler in good condition?	Yes ☑	☐ No	Not Present ☐
Samples in proper container/bottle?	Yes ☑	☐ No	
Sample containers intact?	Yes ☑	☐ No	
Sufficient sample volume for indicated test?	Yes ☑	☐ No	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	☐ No	Cooler Temperature
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	☐ No	4°C
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	☐ No	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	☐ No	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes ☐	☐ No	N/A ☑

Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes ☐	☑ No	
Are there client specific Project requirements ?	Yes ☐	☑ No	If YES : see the Chain of Custody (COC)

Comments :

amec

AMEC
780 Vista Blvd., Site 100
Sparks, NV 89434
331-2375

CHAIN OF CUSTODY

DATE: 04-Jan-07
COC #: 1
PAGE: 1 OF 1

Project Manager:	Brett Whitford	Project Contact:	Brett Whitford	Bill To:	AMEC	Disposal Instructions:	LAB
Project Name:	Gooseberry Mine	Phone Number:	PH(331-2375		780 Vista BLvd., St 100	Shipment Method:	By AMEC
Project Number:	6-417-000720	Purchase Order No.:	PO#		Sparks, NV 89434	Waybill Number:	N/A

Comments: H=Hold Analysis Request X=Analyze

Preservatives and Containers

Methods for Analysis

Sample Information

AEED701045D

No.	LAB Sample ID	EPA_NO	AMEC ID	Date Sampled	Time Sampled	Matrix	Exp. (8330N)	Exp.(8330NX)+TNX,MNX,DNX	Exp Low (8330-LN)	Exp.Low (8330LX)+TNX,MNX,DNX	Pest. (OLC02.1/ OLM03.2)	Herb. (8151)	VOC (8260B) Plus MTBE	SVOC (8270)	EDB (504.1)	MTBE (8021)	Metals(ILM04.0), Hardness(130.2)	Cyanide (ILM04.0)	Cl, SO4 (300.0), Alk. (310.1)	Ammonia (350.2) Phosphate (365.2) NO3/NO2 (353.2)	TOC (415.1)	EDB/MTBE (8260B)	PCN (8270PCN)	7/11 TCLP	Metals (ILM04.0)	8015 Modified	VOC (8240)	TPH-E	TPH-P	8270SIM	CAM 17 Metals	Extraction and hold till notified	48 hour	72 hr.	Standard	QC (MS/MSD)	TOTAL CONTAINERS
1	-01		Field Blank	3-Jan-07	12:00	W																					X	X	X						X		3
2	-02		B-22-5	3-Jan-07	12:20	S																					X	X	X						X		2
3	-03		B-22-15	3-Jan-07	13:20	S																					X	X	X						X		2
4	-04		B-22-19	3-Jan-07	14:15	S																					X	X	X			X					2
5																																					
6																																					
7																																					
8																																					
9																																					
10																																					
11																																					
12																																					

RUSH

Sampler's Signature: Date: Time:

Relinquished By: Date: 1.4.07 Time: 9:50

Received By: Date: 1/4/07 Time: 940

Relinquished By: Date: Time:

Received By (LAB): Date: Time:

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
Received within holding time:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
AMEC contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	C
Volatile Cooler Temperature:	C

Deliver To:

Alpha Analytical
255 Glendale Avenus
Sparks, NV

Note: F: email sample check in sheet to Don Swigonski

Green Analytical Laboratories, Inc.

GAL ID No.: 701-049,01-03

January 23, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name: AMEC / Gooseberry
Project Number: 701-021
Date Received: 01/11/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/11/07.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

for: John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-049,01-03
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC / Gooseberry
PROJECT NUMBER: 701-021

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHOS/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
701-049-01	B-22-5													
701-049-02	B-22-15													
701-049-03	B-22-19													

D Zufelt
for John Green, Laboratory Director

Jan. 23. 2007 11:08AM 970-247-4227 No. 7520 P. 13

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-049,01-03
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC / Gooseberry
PROJECT NUMBER: 701-021

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
701-049-01		0.107				3.35	212	209							
701-049-02		0.008				0.27	65.7	65.5							
701-049-03		0.003				0.10	60.1	60.0							

For John Green, Laboratory Director

Jan. 23. 2007 11:08AM 970-247-4227 No. 7520 P. 14

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-049,01-03
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC / Gooseberry
PROJECT NUMBER: 701-021

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CaCO3	SAMPLE TYPE	ELEVATION
701-049-01										21.21		
701-049-02										6.573		
701-049-03										8.013		

FOR: John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #110 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-069
Report Due Date:
Page: ___ of ___

Client WETLAB
Address DN Rio
City, State & Zip
Contact Ginger
Phone
Fax
P.O. Number ~~Fax~~ 701-021
Collector's Name
Project Name AMEC
Project Number Bonneberry
Email

Turnaround Time: Standard 5-Day Other

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW - Drinking Water	SD - Solid
WW - Wastewater	SO Soil
SW - Surface Water	HW Hazardous Waste
MW Monitoring Well	OTHER:

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	ABA									Spl. No.
B-22-5	1/3/07	1220	SD	1	X									01
B-22-15		1320	SD	1	X									02
B-22-19		1415	SD	1	X									03

Analyses Requested

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature ___ °C	1/10/07	1:33	[illegible]	UPS - Green
Custody Seals Intact? Y N None	1/11/07		UPS	Debbie Zufelt
Number of Containers ___				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

1/22/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford

OrderID: *0701021*

Dear: Brett Whitford

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/4/2007. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701021

General Comments

None

Specific Comments

None

Subcontracting Comments

The analysis for Acid Base Accounting was performed by Green Analytical Laboratories of Durango, CO. The report is attached.

Data Qualifier Legend

B – Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT – Sample held beyond the accepted holding time

J – The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M – Reported value is estimated; The sample matrix interfered with the analysis

N – There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC – Not calculated due to matrix interference

Q – Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA – Reported value was caclulated using the method of Standard Additions.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford
Phone: (775) 331-2375 Fax: (775) 331-4153
PO\Project: *Gooseberry / 6417000720*

Date Printed: 1/22/2007
OrderID: *0701021*

AMEC Earth and Environmental - 701021

Customer Sample ID: B-22-5
WETLAB Sample ID: 0701021-001

Collect Date/Time: 1/3/2007 12:20
Receive Date: 1/4/2007 09:50

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/11/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/22/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/22/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/22/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Mercury, TCLP	SW846 7470A	0.020	mg/L	0.010	1/22/2007

Customer Sample ID: B-22-15 **Collect Date/Time:** 1/3/2007 13:20

WETLAB Sample ID: 0701021-002 **Receive Date:** 1/4/2007 09:50

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/11/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/22/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/22/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/22/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Mercury, TCLP	SW846 7470A	0.010	mg/L	0.010	1/22/2007

Customer Sample ID: B-22-19 **Collect Date/Time:** 1/3/2007 14:15

WETLAB Sample ID: 0701021-003 **Receive Date:** 1/4/2007 09:50

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/11/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/22/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/22/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/22/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Mercury, TCLP	SW846 7470A	0.011	mg/L	0.010	1/22/2007

Customer Sample ID: Field Blank
WETLAB Sample ID: 0701021-004

Collect Date/Time: 1/3/2007 12:00
Receive Date: 1/4/2007 09:50

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SM 4500CNC	<0.010	mg/L	0.010	1/19/2007
Selenium,TCLP	SW846 6010B	<0.40	mg/L	0.40	1/22/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/22/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/22/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/22/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/22/2007
Mercury, TCLP	SW846 7470A	0.013	mg/L	0.010	1/22/2007

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-021
Report Due Date: 1-17-06

Client AMEC
Address 780 Vista Blvd #100
City, State & Zip Sparks, NV 89434
Contact Brett Whitford
Phone 331-2375 | Collector's Name Swigonski
Fax 331-4153 | Project Name Grassesbary
P.O. Number | Project Number 6417000720

Turnaround Time
Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company ____
Address ____
City, State & Zip ____
Contact ____
Phone ____
Fax ____
Email ____

Fax Results Y N To: Client Billing
Email Results Y N To: Client Billing
Compliance Monitoring Y N
Fax Results to State EPA Y N

Sample Type Codes
DW = Drinking Water | SD = Solid
WW = Wastewater | SO = Soil
SW = Surface Water | HW = Hazardous Waste
MW = Monitoring Well OTHER: ____

Sample	Time	Date	Sample Type	Containers	Analyses Requested: ASM	Ignitable	RCRA TCLP metals	Hold									Spl. No.
B-22-5	12:20	1-3-07	SO	1	x	x	x										1
B-22-15	13:20	1-3-07	SO	1	x	x	x										2
B-22-19	14:15	1-3-07	SO	1				x									3
Field Blank	12:00	1-3-07	DW	1	x	x	x										4

Instructions/Comments/Special Requirements: 1/10/07 - run B-22-19 per D.S.

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature 8 °C	1.4.07	9:57	[signature]	[signature]
Custody Seals Intact? Y N None				
Number of Containers 4				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

2

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Report Attention : Brett Whitford
CC Report :

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Brett Whitford
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail brett.whitford@amec.com

Job : 6-417-000720/Gooseberry Mine
PO :
Client's COC # : none

WorkOrder : AEE07011050

Report Due By : 5:00 PM On : 17-Jan-07

EDD Required : **No**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	09-Jan-07	11-Jan-07

QC Level : 1 = Final Rpt Only

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
AEE07011050-01A	Field Blank	AQ	01/08/07 12:00	4	0	5			TPH/E_N		GAS-N		8240	Voas not marked for preservative.
AEE07011050-02A	B-23-5	SO	01/08/07 09:15	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-03A	B-23-15	SO	01/08/07 09:40	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-04A	B-23-22	SO	01/08/07 10:10	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-05A	B-21-5	SO	01/08/07 13:00	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-06A	B-21-10	SO	01/08/07 13:15	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-07A	B-21-15	SO	01/08/07 13:30	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.

Comments: Samples brought in by client. Frozen ice. Samples rec'd Tues, 1/9/07, not logged in until Wed. 1/10/07. Samples kept cold and secure until login. Samples rec'd after 4:30, one day added to TAT. Client will call with samping times. : Amended 1/10/07 to add sampling times per Don. TD. Amended to add project number, due to login error. TD

	Signature	Print Name	Company	Date/Time
Logged in by:	Tara Dickinson	Tara Dickinson	Alpha Analytical, Inc.	1/11/07 1336

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

AMENDED

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07011050

Report Due By : 5:00 PM On : 17-Jan-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Brett Whitford
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail : brett.whitford@amec.com

EDD Required : **No**

Sampled by : Client

Report Attention : Brett Whitford
CC Report :

Job : Gooseberry Mine
PO :
Client's COC # : none

Cooler Temp	Samples Received	Date Printed
4 °C	09-Jan-07	10-Jan-07

QC Level : 1 = Final Rpt Only

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
AEE07011050-01A	Field Blank	AQ	01/08/07 12:00	4	0	5			TPH/E_N		GAS-N		8240	Voas not marked for preservative.
AEE07011050-02A	B-23-5	SO	01/08/07 09:15	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-03A	B-23-15	SO	01/08/07 09:40	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-04A	B-23-22	SO	01/08/07 10:10	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-05A	B-21-5	SO	01/08/07 13:00	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-06A	B-21-10	SO	01/08/07 13:15	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.
AEE07011050-07A	B-21-15	SO	01/08/07 13:30	2	0	5		TPH/E_N		GAS-N		8240		One 25g encore and one 8oz jar provided.

Comments: Samples brought in by client. Frozen ice. Samples rec'd Tues. 1/9/07, not logged in until Wed. 1/10/07. Samples kept cold and secure until login. Samples rec'd after 4:30, one day added to TAT. Client will call with samping times. : Amended 1/10/07 to add sampling times, per Don. TD.

	Signature	Print Name	Company	Date/Time
Logged in by:	Nina Dickinson	Nina Dickinson	Alpha Analytical, Inc.	1/10/07 945

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

NV

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07011050

Report Due By : 5:00 PM On : 17-Jan-07

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Brett Whitford
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail . brett.whitford@amec.com

EDD Required : **No**

Sampled by : Client

Report Attention : Brett Whitford
CC Report :

Job : Gooseberry Mine
PO :
Client's COC # : none

Cooler Temp	Samples Received	Date Printed
4 °C	09-Jan-07	10-Jan-07

QC Level : 1 = Final Rpt Only

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W			Sample Remarks
AEE07011050-01A	Field Blank	AQ	01/08/07 12:00	4	0	5			TPH/E_N		GAS-N		8240			Voas not marked for preservative.
AEE07011050-02A	B-23-5	SO	01/08/07 00:00	2	0	5		TPH/E_N		GAS-N		8240				One 25g encore and one 8oz jar provided.
AEE07011050-03A	B-23-15	SO	01/08/07 00:00	2	0	5		TPH/E_N		GAS-N		8240				One 25g encore and one 8oz jar provided.
AEE07011050-04A	B-23-22	SO	01/08/07 00:00	2	0	5		TPH/E_N		GAS-N		8240				One 25g encore and one 8oz jar provided.
AEE07011050-05A	B-21-5	SO	01/08/07 00:00	2	0	5		TPH/E_N		GAS-N		8240				One 25g encore and one 8oz jar provided.
AEE07011050-06A	B-21-10	SO	01/08/07 00:00	2	0	5		TPH/E_N		GAS-N		8240				One 25g encore and one 8oz jar provided.
AEE07011050-07A	B-21-15	SO	01/08/07 00:00	2	0	5		TPH/E_N		GAS-N		8240				One 25g encore and one 8oz jar provided.

Comments: Samples brought in by client. Frozen ice. Samples rec'd Tues, 1/9/07, not logged in until Wed. 1/10/07. Samples kept cold and secure until login. Samples rec'd after 4:30, one day added to TAT. Client will call with samping times. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Nara Dickinson	Nara Dickinson	Alpha Analytical, Inc.	1/10/07 8:20

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

amec

AMEC
780 Vista Blvd., Site 100
Sparks, NV 89434
331-2375

CHAIN OF CUSTODY

DATE: 08-Jan-07
COC #: 2
PAGE: 1 OF 1

Project Manager:	Brett Whitford	Project Contact:	Brett Whitford	Bill To:	AMEC	Disposal Instructions:	LAB
Project Name:	Gooseberry Mine	Phone Number:	PH(331-2375		780 Vista BLvd., St 100	Shipment Method:	By AMEC
Project Number:	6-417-000720	Purchase Order No.:	PO#		Sparks, NV 89434	Waybill Number:	N/A

Comments: H=Hold Analysis Request X=Analyze

Preservatives and Containers

Methods for Analysis

Sample Information

No.	LAB Sample ID	EPA_NO	AMEC ID	Date Sampled	Time Sampled	Matrix	Exp. (8330N)	Exp.(8330N/X)+TNX,MNX,DNX	Exp Low (8330-LN)	Exp.Low (8330LX)+TNX,MNX,DNX	Pest. (OLC02.1/ OLM03.2)	Herb (8151)	VOC (8260B) Plus MTBE	SVOC (8270)	EDB (504.1)	MTBE (8021)	Metals(ILM04.0), Hardness(130.2)	Cyanide (ILM04.0)	Cl, SO4 (300.0), Alk. (310.1)	Ammonia (350.2) Phosphate (365.2) NO3/NO2 (353.2)	TOC (415.1)	EDB/MTBE (8260B)	PCN (8270PCN)	7/11 TCLP	Metals (ILM04.0)	8015 Modified	VOC (8240)	TPH-E	TPH-P	8270SIM	CAM 17 Metals	Extration and hold till notified	48 hour	72 hr	Standard	QC (MS/MSD)	TOTAL CONTAINERS
1	-01		Field Blank	8-Jan-07	12:00	W																					X	X	X						X		4
2	-02	9:10	B-23-5	8-Jan-07	AM	S																					X	X	X						X		2
3	-03	9:40	B-23-15	8-Jan-07	AM	S																					X	X	X						X		2
4	-04	10:10	B-23-22	8-Jan-07	AM	S																					X	X	X						X		2
5	-05	1300	B-21-5	8-Jan-07	PM	S																					X	X	X						X		2
6	-06	1315	B-21-10	8-Jan-07	PM	S																					X	X	X						X		2
7	-07	1330	B-21-15	8-Jan-07	PM	S																					X	X	X						X		2
8																																					
9																																					
10																																					
11																																					
12																																					

Alpha Analytical Sample Receipt

Security Seals? YES NO

Frozen Ice? YES NO

Temperature 4 °C

Sampler's Signature:	Date: 1-8-07	Time: 17:00	
Relinquished By:	Date: 1-8-07	Time: 17:[illegible]	
Received By:	Date:	Time:	
Relinquished By:	Date: 1-9-07	Time: 17:10	
Received By (LAB):	Date: 1/9/07	Time: 1710	

For Lab Use

Does COC match samples:	Y or N
Broken Container:	Y or N
Received within holding time:	Y or N
COC seal intact:	Y or N
Other problems:	Y or N
AMEC contacted:	Y or N
Date contacted:	
Cooler Temperature at receipt:	C
Volatile Cooler Temperature:	C

Deliver To:

Alpha Analytical
255 Glendale Avenus
Sparks, NV

Note: Fi email sample check in sheet to Don Swigonski

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153
Date Received 01/09/07

Job#: 6-417-000720/Gooseberry Mine

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**Field Blank**	TPH-E (DRO)	ND	0.50 mg/L	01/08/07	01/12/07
Lab ID :	AEE07011050-01A	TPH-E (ORO)	ND	0.50 mg/L	01/08/07	01/12/07
		TPH-P (GRO)	ND	0.50 mg/L	01/08/07	01/11/07
Client ID :	**B-23-5**	TPH-E (DRO)	ND	10 mg/Kg	01/08/07	01/12/07
Lab ID :	AEE07011050-02A	TPH-E (ORO)	ND	10 mg/Kg	01/08/07	01/12/07
		TPH-P (GRO)	ND	10 mg/Kg	01/08/07	01/11/07
Client ID :	**B-23-15**	TPH-E (DRO)	ND	10 mg/Kg	01/08/07	01/12/07
Lab ID :	AEE07011050-03A	TPH-E (ORO)	ND	10 mg/Kg	01/08/07	01/12/07
		TPH-P (GRO)	ND	10 mg/Kg	01/08/07	01/11/07
Client ID :	**B-23-22**	TPH-E (DRO)	ND	10 mg/Kg	01/08/07	01/12/07
Lab ID :	AEE07011050-04A	TPH-E (ORO)	ND	10 mg/Kg	01/08/07	01/12/07
		TPH-P (GRO)	ND	10 mg/Kg	01/08/07	01/11/07
Client ID	**B-21-5**	TPH-E (DRO)	ND	10 mg/Kg	01/08/07	01/12/07
Lab ID :	AEE07011050-05A	TPH-E (ORO)	ND	10 mg/Kg	01/08/07	01/12/07
		TPH-P (GRO)	ND	10 mg/Kg	01/08/07	01/11/07
Client ID :	**B-21-10**	TPH-E (DRO)	ND	10 mg/Kg	01/08/07	01/12/07
Lab ID :	AEE07011050-06A	TPH-E (ORO)	ND	10 mg/Kg	01/08/07	01/12/07
		TPH-P (GRO)	ND	10 mg/Kg	01/08/07	01/11/07
Client ID :	**B-21-15**	TPH-E (DRO)	ND	10 mg/Kg	01/08/07	01/12/07
Lab ID :	AEE07011050-07A	TPH-E (ORO)	ND	10 mg/Kg	01/08/07	01/12/07
		TPH-P (GRO)	ND	10 mg/Kg	01/08/07	01/11/07

Diesel Range Organics (DRO) C13-C22
EnCore samples were received and extracted within holding time.
Gasoline Range Organics (GRO) C4-C13
Oil Range Organics (ORO) C22-C40+
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/16/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07011050-01A
Client I.D. Number: Field Blank

Sampled: 01/08/07
Received: 01/09/07
Analyzed: 01/11/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L	26	Ethylbenzene	ND	1.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L	27	m,p-Xylene	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L	28	Bromoform	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L	29	o-Xylene	ND	1.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L	30	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L	31	1,3-Dichlorobenzene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L	32	1,4-Dichlorobenzene	ND	1.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L	33	1,2-Dichlorobenzene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L				
10	cis-1,2-Dichloroethene	ND	1.0 µg/L				
11	Chloroform	ND	1.0 µg/L				
12	1,2-Dichloroethane	ND	1.0 µg/L				
13	1,1,1-Trichloroethane	ND	1.0 µg/L				
14	Carbon tetrachloride	ND	1.0 µg/L				
15	Benzene	ND	1.0 µg/L				
16	1,2-Dichloropropane	ND	1.0 µg/L				
17	Trichloroethene	ND	1.0 µg/L				
18	Bromodichloromethane	ND	1.0 µg/L				
19	cis-1,3-Dichloropropene	ND	1.0 µg/L				
20	trans-1,3-Dichloropropene	ND	1.0 µg/L				
21	1,1,2-Trichloroethane	ND	1.0 µg/L				
22	Toluene	ND	1.0 µg/L				
23	Dibromochloromethane	ND	1.0 µg/L				
24	Tetrachloroethene	ND	1.0 µg/L				
25	Chlorobenzene	ND	1.0 µg/L				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9689 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/16/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07011050-02A
Client I.D. Number: B-23-5

Sampled: 01/08/07
Received: 01/09/07
Analyzed: 01/11/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

EnCore sample was received and extracted within holding time.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/16/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07011050-03A
Client I.D. Number: B-23-15

Sampled: 01/08/07
Received: 01/09/07
Analyzed: 01/11/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

Encore sample was received and extracted within holding time

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NELAP certifications for the data reported - certification #NV16

1/16/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07011050-04A
Client I.D. Number: B-23-22

Sampled: 01/08/07
Received: 01/09/07
Analyzed: 01/11/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

EnCore sample was received and extracted within holding time.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/16/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07011050-05A
Client I.D. Number: B-21-5

Sampled: 01/08/07
Received: 01/09/07
Analyzed: 01/11/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

EnCore sample was received and extracted within holding time.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/16/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07011050-06A
Client I.D. Number: B-21-10

Sampled: 01/08/07
Received: 01/09/07
Analyzed: 01/11/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

EnCore sample was received and extracted within holding time.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/16/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6-417-000720/Gooseberry Mine

Attn: Brett Whitford
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07011050-07A
Client I.D. Number: B-21-15

Sampled: 01/08/07
Received: 01/09/07
Analyzed: 01/11/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

EnCore sample was received and extracted within holding time.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-0089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

1/16/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: AEE07011050 **Project:** 6-417-000720/Gooseberry Mine

Alpha's Sample ID	Client's Sample ID	Matrix	pH
07011050-01A	Field Blank	Aqueous	2

1/16/07
Report Date

RESULTS FROM TEST PIT TP-9
SHOWN IN TABLE 16

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

2/26/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski

OrderID: *0701203*

Dear: Don Swigonski

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/30/2007. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701203

General Comments

None

Specific Comments

None

Data Qualifier Legend

B – Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT – Sample held beyond the accepted holding time

J – The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M – Reported value is estimated; The sample matrix interfered with the analysis

N – There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC – Not calculated due to matrix interference

Q – Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA – Reported value was caclulated using the method of Standard Additions.

SC – Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski
Phone: (775) 331-2375 Fax: (775) 331-4153
PO\Project: *Gooseberry / 6417000720*

Date Printed: 2/26/2007
OrderID: *0701203*

AMEC Earth and Environmental - 701203

Customer Sample ID: TP-9-1
WETLAB Sample ID: 0701203-001

Collect Date/Time: 1/30/2007 10:45
Receive Date: 1/30/2007 12:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	7.9	%	0.1	2/12/2007
Moisture (post-MWMP)	EPA 160.1	17	%	0.1	2/12/2007
pH of Extraction Fluid	EPA 150.1	5.02	pH Units		2/12/2007
pH	EPA 150.1	8.16	pH Units		2/20/2007
Bicarbonate (HCO3)	SM 2320B	110	mg/L	1.0	2/20/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/20/2007
Total Alkalinity	SM 2320B	88	mg/L as CaCO3	1.0	2/20/2007
Chloride	EPA 300.0	1.4	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	0.28	mg/L	0.10	2/23/2007
Sulfate	EPA 300.0	110	mg/L	5.0	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	3.4	mg/L	0.25	2/23/2007
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	2/26/2007
Total Dissolved Solids (TDS)	SM 2540C	320	mg/L	10	2/16/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	2/22/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/20/2007
Barium	EPA 200.7	0.057	mg/L	0.010	2/20/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/20/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Boron	EPA 200.7	0.15	mg/L	0.10	2/20/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/20/2007
Calcium	EPA 200.7	51	mg/L	0.50	2/20/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/20/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Magnesium	EPA 200.7	13	mg/L	0.50	2/20/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Molybdenum	EPA 200.7	0.012	mg/L	0.010	2/20/2007

Customer Sample ID: TP-9-1 **Collect Date/Time:** 1/30/2007 10:45
WETLAB Sample ID: 0701203-001 **Receive Date:** 1/30/2007 12:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/20/2007
Potassium	EPA 200.7	7.0	mg/L	0.50	2/20/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Sodium	EPA 200.7	9.8	mg/L	0.50	2/20/2007
Strontium	EPA 200.7	0.58	mg/L	0.10	2/20/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Vanadium	EPA 200.7	0.038	mg/L	0.010	2/20/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/22/2007
Arsenic	EPA 200.8	0.015	mg/L	0.0050	2/22/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	2/22/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/22/2007
Mercury	EPA 245.1	0.00021	mg/L	0.00010	2/20/2007
Anions	Calculation	4.39	meq/L	0.01	
Cations	Calculation	4.22	meq/L	0.01	
Error	Calculation	2.0	%	1.0	

Customer Sample ID: TP-9-2 **Collect Date/Time:** 1/30/2007 10:55
WETLAB Sample ID: 0701203-002 **Receive Date:** 1/30/2007 12:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	16	%	0.1	2/12/2007
Moisture (pre-MWMP)	EPA 160.1	8.1	%	0.1	2/12/2007
pH of Extraction Fluid	EPA 150.1	5.02	pH Units		2/12/2007
pH	EPA 150.1	8.06	pH Units		2/15/2007
Bicarbonate (HCO3)	SM 2320B	95	mg/L	1.0	2/20/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/20/2007
Total Alkalinity	SM 2320B	78	mg/L as CaCO3	1.0	2/20/2007
Chloride	EPA 300.0	1.5	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	0.36	mg/L	0.10	2/23/2007
Sulfate	EPA 300.0	400	mg/L	25	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	2.4	mg/L	0.25	2/23/2007
Total Cyanide	SW846 9014	4.8	mg/kg	0.40	2/26/2007
Total Dissolved Solids (TDS)	SM 2540C	710	mg/L	10	2/16/2007
WAD Cyanide	SM 4500CN	<0.010	mg/L	0.010	2/22/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/20/2007

Customer Sample ID: TP-9-2 **Collect Date/Time:** 1/30/2007 10:55
WETLAB Sample ID: 0701203-002 **Receive Date:** 1/30/2007 12:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/20/2007
Barium	EPA 200.7	0.060	mg/L	0.010	2/20/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/20/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Boron	EPA 200.7	0.18	mg/L	0.10	2/20/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/20/2007
Calcium	EPA 200.7	120	mg/L	0.50	2/20/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/20/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Magnesium	EPA 200.7	29	mg/L	0.50	2/20/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Molybdenum	EPA 200.7	0.018	mg/L	0.010	2/20/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/20/2007
Potassium	EPA 200.7	8.6	mg/L	0.50	2/20/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Sodium	EPA 200.7	29	mg/L	0.50	2/20/2007
Strontium	EPA 200.7	1.3	mg/L	0.10	2/20/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Vanadium	EPA 200.7	0.044	mg/L	0.010	2/20/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/22/2007
Arsenic	EPA 200.8	0.013	mg/L	0.0050	2/22/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	2/22/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/22/2007
Mercury	EPA 245.1	0.00015	mg/L	0.00010	2/20/2007
Anions	Calculation	10.1	meq/L	0.01	
Cations	Calculation	9.86	meq/L	0.01	
Error	Calculation	1.3	%	1.0	

QUALITY CONTROL REPORT

Sample ID: 701203
Reported: 02/26/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide total	4500CNC	mg/L	<0.010	0.090	0.100	90	0.095	0.093	2

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide total	4500CNC	mg/L	701-203-1	<0.010	0.095	0.100	95	02/26/07

QUALITY CONTROL REPORT

Sample ID: 701203
Reported: 02/26/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Alkalinity	2320B	mg/L	NA	98	100	98	78	78	<1
pH	150.1	SU	NA	7.05	7.00	101	7.10	7.13	<1
pH	150.1	SU	NA	7.09	7.00	101	7.36	7.37	<1
TDS	2540C	mg/L	<10	156	150	104	3300	3500	6
Chloride	300.0	mg/L	<1.0	5.12	5.00	102	2.43	2.42	<1
NO3+NO2 Nitrogen	300.0	mg/L	<0.010	0.508	0.500	102	0.692	0.688	<1
Sulfate	300.0	mg/L	<1.0	9.85	10.0	98	26.6	26.6	<1
Fluoride	300.0	mg/L	<0.10	0.997	1.00	100	1.34	1.31	2
Cyanide WAD	4500CN!	mg/L	<0.010	0.100	0.100	100	0.066	0.070	6

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Chloride	300.0	mg/L	701-203-2	1.54	2.43	1.00	89	02/23/07
NO3+NO2 Nitrogen	300.0	mg/L	701-203-1	0.136	0.692	0.500	111	02/23/07
Sulfate	300.0	mg/L	701-203-1	22.6	26.6	4.00	100	02/22/07
Fluoride	300.0	mg/L	701-203-2	0.358	1.34	1.00	98	02/23/07
Cyanide WAD	4500CN!	mg/L	702-094-1	<0.010	0.066	0.100	NC	02/22/07

Metals QC
CETAC M-6000A

Batch:	Hg070220-1A
Matrix:	water

		Date Analyzed:	2/20/07
Sample ID:	702-120-1	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	<0.10	2.00	1.85	89	1.84	1	2.00	2.02	101

Samples 701-203-(1-2) are associated with QC batch Hg070220-1A

Metals QC
ELAN DRC-e

Batch:	W070220-1B	Matrix:	water

Sample ID:	702-131-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
As	200.8	<5.0	ug/L	<5.0	10.00	11.6658	105	11.7601	1	10.00	9.461	95	2/22/2007
Sb	200.8	<2.5	ug/L	<2.5	10.00	10.0708	100	10.0394	0	10.00	9.6958	97	2/22/2007
Se	200.8	<5.0	ug/L	<5.0	10.00	10.2764	100	10.3880	1	10.00	10.0317	100	2/22/2007
Tl	200.8	<1.0	ug/L	<1.0	10.00	8.6269	86	8.6962	1	10.00	8.8051	88	2/22/2007
Pb	200.8	<2.5	ug/L	<2.5	10.00	9.0838	90	9.0165	1	10.00	9.0387	90	2/22/2007

Samples 701-203-(1-2) are associated with QC batch W070220-1B

Metals QC
Optima 4300DV

Batch:	W070220-1B	Matrix:	water

Sample ID:	702-131-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0842	93	0.0864	3	0.090	0.0912	101	2/20/2007
Al	200.7	<0.045	mg/L	<0.045	1.00	0.9665	93	1.0115	5	1.00	0.9740	97	2/20/2007
B	200.7	<0.020	mg/L	<0.020	1.00	1.0027	100	1.0343	3	1.00	1.0220	102	2/20/2007
Ba	200.7	<0.010	mg/L	0.0260	1.00	0.9122	89	0.9439	3	1.00	1.0125	101	2/20/2007
Be	200.7	<0.0010	mg/L	<0.0010	1.00	0.9765	98	0.9946	2	1.00	1.0243	102	2/20/2007
Bi	200.7	<0.10	mg/L	<0.10	1.00	0.9658	98	0.9851	2	1.00	1.0200	102	2/20/2007
Ca	200.7	<0.50	mg/L	11.6219	10.00	21.1736	96	22.0033	4	10.00	10.1297	101	2/20/2007
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.9355	93	0.9630	3	1.00	1.0398	104	2/20/2007
Co	200.7	<0.010	mg/L	<0.010	1.00	0.9380	94	0.9606	2	1.00	1.0244	102	2/20/2007
Cr	200.7	<0.0050	mg/L	<0.0050	1.00	0.9146	91	0.9440	3	1.00	0.9970	100	2/20/2007
Cu	200.7	<0.050	mg/L	0.2501	1.00	1.1840	93	1.2166	3	1.00	0.9962	100	2/20/2007
Fe	200.7	<0.010	mg/L	0.0211	1.00	0.9060	88	0.9392	4	1.00	0.9482	95	2/20/2007
Ga	200.7	<0.10	mg/L	<0.10	1.00	1.0045	100	1.0219	2	1.00	1.0425	104	2/20/2007
K	200.7	<0.50	mg/L	2.5173	10.00	11.7605	92	12.0988	3	10.00	10.1395	101	2/20/2007
Li	200.7	<0.10	mg/L	<0.10	1.00	0.9210	92	0.9439	2	1.00	1.0034	100	2/20/2007
Mg	200.7	<0.50	mg/L	5.9080	10.00	14.7672	89	15.2157	3	10.00	10.0153	100	2/20/2007
Mn	200.7	<0.0050	mg/L	<0.0050	1.00	0.9599	96	0.9930	3	1.00	1.0267	103	2/20/2007
Mo	200.7	<0.010	mg/L	<0.010	1.00	0.9114	91	0.9315	2	1.00	1.0083	101	2/20/2007
Na	200.7	<0.50	mg/L	14.0348	10.00	23.3462	93	24.1987	4	10.00	10.3256	103	2/20/2007
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.9126	91	0.9313	2	1.00	1.0079	101	2/20/2007
P	200.7	<0.50	mg/L	<0.50	1.00	1.0966	97	1.1293	3	1.00	1.0502	105	2/20/2007
Pb	200.7	<0.010	mg/L	<0.010	1.00	0.9440	94	0.9598	2	1.00	1.0313	103	2/20/2007

Metals QC (Cont.)
Optima 4300DV

Batch:	W070220-1B	Matrix:	water

Sample ID:	702-131-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Sc	200.7	<0.10	mg/L	<0.10	1.0000	0.8974	90	0.9343	4	1.00	1.0111	101	2/20/2007
Sn	200.7	<0.10	mg/L	<0.10	1.0000	0.9513	96	0.9753	2	1.00	1.0208	102	2/20/2007
Sr	200.7	<0.10	mg/L	0.1224	1.0000	1.0608	94	1.0939	3	1.00	1.0178	102	2/20/2007
Ti	200.7	<0.10	mg/L	<0.10	1.0000	0.9602	96	0.9968	4	1.00	1.0196	102	2/20/2007
V	200.7	<0.010	mg/L	0.0136	1.0000	0.9724	96	1.0055	3	1.00	1.0295	103	2/20/2007
Zn	200.7	<0.010	mg/L	<0.010	1.0000	0.9527	95	0.9763	2	1.00	1.0361	104	2/20/2007

Samples 701-203-(1-2) are associated with QC batch W070220-1B

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-203
Report Due Date: 2-13-07
Page ____ of ____

Client AMEC
Address
City, State & Zip
Contact Don Swiponski
Phone 331-9375 | Collector's Name Swiponski
Fax 331-4153 | Project Name Gossham
P.O. Number | Project Number 6417000720
Email

Turnaround Time
Standard 5-Day Other

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ____

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	MW MP	Spl. No.
TP-9-1	1-30	10:45	SO	1	X X X	1
TP-9+2	1-30	10:55	SO	1	X X X	2

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature 15 °C	1-30-07	12:00	Don Swiponski	
Custody Seals Intact? Y N (None)				
Number of Containers 2				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

RESULTS FROM TEST PITS TP-6, TP-7, TP-10 AND TP-11 SHOWN IN TABLE 11

RESULTS FROM TEST PITS TP-JP-1 THROUGH TP-JP-4 SHOWN IN TABLE 10

RESULTS FROM TEST PIT TP-8 SHOWN IN TABLE 16

RESULTS FROM B-20-5 SHOWN IN TABLE 5

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
[illegible] Greg Street #[illegible] Sparks, Nevada [illegible] tel [illegible] fax [illegible] www.WETLaboratory.com

3/30/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski

OrderID: *0701193*

Dear: Don Swigonski

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/25/2007. Additional comments are located on page 2 of this report.

This is an ammended report that includes the corrected results for Total Cyanide on samples 0701193-005 and 0701193-022. We apologize for any inconvenience this may have caused.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701193

General Comments

None

Specific Comments

The matrix spike/matrix spike duplicate (MS/MSD) values for the analysis of WAD Cyanide on sample 0701193-017 and Fluoride on sample 0701193-020 were outside laboratory acceptance criteria; however, the relative percent difference (RPD) value was acceptable, indicating probable matrix interference. The reported results should be considered estimates.

Due to sample matrix it was necessary to analyze for various analytes a dilution on numerous submitted samples. The reporting limits have been adjusted accordingly.

Subcontracting Comments

The analysis for Acid Base Accounting was performed by Green Analytical Laboratories of Durango, CO. Their report is attached.

Data Qualifier Legend

B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated; The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

SC -- Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry Mine*

Date Printed: 3/30/2007
OrderID: *0701193*

Customer Sample ID: TP-6-1
WETLAB Sample ID: 0701193-001
Collect Date/Time: 1/25/2007 09:35
Receive Date: 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/1/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/1/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/1/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/1/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/1/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/1/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/1/2007
Mercury, TCLP	SW846 7470A	0.014	mg/L	0.010	2/1/2007

Customer Sample ID: TP-6-3.5
WETLAB Sample ID: 0701193-002
Collect Date/Time: 1/25/2007 09:45
Receive Date: 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/1/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/1/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/1/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/1/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/1/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/1/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/1/2007
Mercury, TCLP	SW846 7470A	0.015	mg/L	0.010	2/1/2007

Customer Sample ID: TP-10-1 **Collect Date/Time:** 1/25/2007 10:50
WETLAB Sample ID: 0701193-003 **Receive Date:** 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/1/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/1/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/1/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/1/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/1/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/1/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/1/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/1/2007

Customer Sample ID: TP-10-5 **Collect Date/Time:** 1/25/2007 10:50
WETLAB Sample ID: 0701193-004 **Receive Date:** 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/1/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/1/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/1/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/1/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/1/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/1/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/1/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/1/2007

Customer Sample ID: TP-11-1 **Collect Date/Time:** 1/25/2007 11:40
WETLAB Sample ID: 0701193-005 **Receive Date:** 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	0.30	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007

Customer Sample ID: TP-11-3.5 **Collect Date/Time:** 1/25/2007 11:40
WETLAB Sample ID: 0701193-006 **Receive Date:** 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	0.037	mg/L	0.010	2/8/2007

Customer Sample ID: TP-7-1 **Collect Date/Time:** 1/25/2007 12:10
WETLAB Sample ID: 0701193-007 **Receive Date:** 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007

Customer Sample ID: TP-7-3.5 **Collect Date/Time:** 1/25/2007 12:10
WETLAB Sample ID: 0701193-008 **Receive Date:** 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007

Customer Sample ID: TP-7-5 **Collect Date/Time:** 1/25/2007 12:10
WETLAB Sample ID: 0701193-009 **Receive Date:** 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007

Customer Sample ID: TP-8-1 **Collect Date/Time:** 1/25/2007 13:05
WETLAB Sample ID: 0701193-010 **Receive Date:** 1/25/2007 16:30

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	13	%	0.1	2/6/2007
Moisture (pre-MWMP)	EPA 160.1	3.1	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	8.05	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	51	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	42	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	3.1	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	0.26	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	1.3	mg/L	1.0	2/8/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	1.0	mg/L	0.10	2/9/2007
Total Dissolved Solids (TDS)	SM 2540C	120	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	0.069	mg/L	0.045	2/12/2007
Barium	EPA 200.7	0.013	mg/L	0.010	2/12/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/12/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/12/2007
Calcium	EPA 200.7	15	mg/L	0.50	2/12/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/12/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Iron	EPA 200.7	0.060	mg/L	0.010	2/12/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/12/2007

Customer Sample ID: TP-8-1 **Collect Date/Time:** 1/25/2007 13:05
WETLAB Sample ID: 0701193-010 **Receive Date:** 1/25/2007 16:30

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Magnesium	EPA 200.7	1.5	mg/L	0.50	2/12/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Molybdenum	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Potassium	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Sodium	EPA 200.7	5.0	mg/L	0.50	2/12/2007
Strontium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Vanadium	EPA 200.7	0.021	mg/L	0.010	2/12/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/9/2007
Arsenic	EPA 200.8	0.0071	mg/L	0.0050	2/9/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	2/9/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/9/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	1.04	meq/L	0.010	
Cations	Calculation	1.09	meq/L	0.010	
Error	Calculation	2.7	%	1.0	
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: TP-8-5 **Collect Date/Time:** 1/25/2007 13:05
WETLAB Sample ID: 0701193-011 **Receive Date:** 1/25/2007 16:30

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	6.0	%	0.1	2/6/2007
Moisture (post-MWMP)	EPA 160.1	21	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	8.16	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	68	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	56	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	0.38	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	3.6	mg/L	1.0	2/8/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	0.8	mg/L	0.10	2/9/2007

Customer Sample ID: TP-8-5 **Collect Date/Time:** 1/25/2007 13:05
WETLAB Sample ID: 0701193-011 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Dissolved Solids (TDS)	SM 2540C	130	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CN1	<0.010	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/12/2007
Barium	EPA 200.7	0.013	mg/L	0.010	2/12/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/12/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/12/2007
Calcium	EPA 200.7	17	mg/L	0.50	2/12/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/12/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Iron	EPA 200.7	0.033	mg/L	0.010	2/12/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Magnesium	EPA 200.7	1.9	mg/L	0.50	2/12/2007
Manganese	EPA 200.7	0.0053	mg/L	0.0050	2/12/2007
Molybdenum	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Potassium	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Silver	EPA 200.7	0.0078	mg/L	0.0050	2/12/2007
Sodium	EPA 200.7	7.0	mg/L	0.50	2/12/2007
Strontium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Vanadium	EPA 200.7	0.019	mg/L	0.010	2/12/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/9/2007
Arsenic	EPA 200.8	0.0056	mg/L	0.0050	2/9/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	2/9/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/9/2007
Mercury	EPA 245.1	0.00011	mg/L	0.00010	2/7/2007
Anions	Calculation	1.27	meq/L	0.010	
Cations	Calculation	1.31	meq/L	0.010	
Error	Calculation	1.7	%	1.0	
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-25-1.5 **Collect Date/Time:** 1/25/2007 13:40
WETLAB Sample ID: 0701193-012 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	4.8	%	0.1	2/6/2007
Moisture (post-MWMP)	EPA 160.1	22	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/5/2007
pH	EPA 150.1	8.08	pH Units		2/6/2007
Bicarbonate (HCO3)	SM 2320B	61	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	50	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	0.17	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	30	mg/L	1.0	2/8/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	2.6	mg/L	0.10	2/9/2007
Total Dissolved Solids (TDS)	SM 2540C	180	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/12/2007
Barium	EPA 200.7	0.035	mg/L	0.010	2/12/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/12/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/12/2007
Calcium	EPA 200.7	21	mg/L	0.50	2/12/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/12/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Iron	EPA 200.7	0.032	mg/L	0.010	2/12/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Magnesium	EPA 200.7	3.4	mg/L	0.50	2/12/2007
Manganese	EPA 200.7	0.11	mg/L	0.0050	2/12/2007
Molybdenum	EPA 200.7	0.019	mg/L	0.010	2/12/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Potassium	EPA 200.7	3.8	mg/L	0.50	2/12/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Sodium	EPA 200.7	8.8	mg/L	0.50	2/12/2007
Strontium	EPA 200.7	0.18	mg/L	0.10	2/12/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/12/2007

Customer Sample ID: B-25-1.5 **Collect Date/Time:** 1/25/2007 13:40
WETLAB Sample ID: 0701193-012 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Antimony	EPA 200.8	0.0031	mg/L	0.0025	2/9/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/9/2007
Selenium	EPA 200.8	0.013	mg/L	0.0050	2/9/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/9/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	1.82	meq/L	0.010	
Cations	Calculation	1.81	meq/L	0.010	
Error	Calculation	<1.0	%	1.0	

Customer Sample ID: TP-JP-1-1 **Collect Date/Time:** 1/25/2007 01:25
WETLAB Sample ID: 0701193-013 **Receive Date:** 1/25/2007 16:30

MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	9.1	%	0.1	2/6/2007
Moisture (pre-MWMP)	EPA 160.1	5.5	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	8.04	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	71	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	58	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	4.9	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	2.5	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	2100	mg/L	100	2/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	72	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	3800	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	0.20	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/9/2007
Barium	EPA 200.7	0.011	mg/L	0.010	2/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Calcium	EPA 200.7	230	mg/L	0.50	2/9/2007
Chromium	EPA 200.7	0.0058	mg/L	0.0050	2/9/2007
Cobalt	EPA 200.7	0.16	mg/L	0.010	2/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Iron	EPA 200.7	0.40	mg/L	0.010	2/9/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Magnesium	EPA 200.7	26	mg/L	0.50	2/9/2007

Customer Sample ID: TP-JP-1-1 **Collect Date/Time:** 1/25/2007 01:25
WETLAB Sample ID: 0701193-013 **Receive Date:** 1/25/2007 16:30

MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Manganese	EPA 200.7	0.31	mg/L	0.0050	2/9/2007
Molybdenum	EPA 200.7	0.69	mg/L	0.010	2/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/9/2007
Potassium	EPA 200.7	10	mg/L	0.50	2/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Sodium	EPA 200.7	800	mg/L	0.50	2/12/2007
Strontium	EPA 200.7	1.0	mg/L	0.10	2/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Antimony	EPA 200.8	0.0090	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/13/2007
Lead	EPA 200.8	<0.01	mg/L	0.01	2/13/2007
Selenium	EPA 200.8	0.21	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	50.3	meq/L	0.010	
Cations	Calculation	48.6	meq/L	0.010	
Error	Calculation	1.7	%	1.0	

Customer Sample ID: TP-JP-1-5 **Collect Date/Time:** 1/25/2007 01:25
WETLAB Sample ID: 0701193-014 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	5.4	%	0.1	2/6/2007
Moisture (post-MWMP)	EPA 160.1	14	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	7.76	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	41	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	34	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	1.3	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	0.21	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	1000	mg/L	100	2/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	65	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	2000	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	0.053	mg/L	0.010	2/7/2007

Customer Sample ID: TP-JP-1-5 **Collect Date/Time:** 1/25/2007 01:25
WETLAB Sample ID: 0701193-014 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/9/2007
Barium	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Calcium	EPA 200.7	220	mg/L	0.50	2/9/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Cobalt	EPA 200.7	0.11	mg/L	0.010	2/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Iron	EPA 200.7	0.078	mg/L	0.010	2/9/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Magnesium	EPA 200.7	36	mg/L	0.50	2/9/2007
Manganese	EPA 200.7	0.70	mg/L	0.0050	2/9/2007
Molybdenum	EPA 200.7	0.17	mg/L	0.010	2/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/9/2007
Potassium	EPA 200.7	7.6	mg/L	0.50	2/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Sodium	EPA 200.7	190	mg/L	0.50	2/9/2007
Strontium	EPA 200.7	0.96	mg/L	0.10	2/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Vanadium	EPA 200.7	0.011	mg/L	0.010	2/9/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Antimony	EPA 200.8	0.0042	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/13/2007
Selenium	EPA 200.8	0.13	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	26.2	meq/L	0.010	
Cations	Calculation	22.4	meq/L	0.010	
Error	Calculation	7.7	%	1.0	
Lead	SW846 6010B	Null Value	mg/kg	0.010	2/12/2007

Customer Sample ID: TP-JP-2-1 **Collect Date/Time:** 1/25/2007 15:00
WETLAB Sample ID: 0701193-015 **Receive Date:** 1/25/2007 16:30

. MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	16	%	0.1	2/6/2007
Moisture (pre-MWMP)	EPA 160.1	7.7	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	7.97	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	85	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	70	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	7.4	mg/L	5.0	2/16/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	3900	mg/L	100	2/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	65	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	5700	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	0.022	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/9/2007
Barium	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Calcium	EPA 200.7	440	mg/L	0.50	2/9/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Cobalt	EPA 200.7	0.050	mg/L	0.010	2/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Iron	EPA 200.7	0.026	mg/L	0.010	2/9/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Magnesium	EPA 200.7	400	mg/L	0.50	2/9/2007
Manganese	EPA 200.7	1.8	mg/L	0.0050	2/9/2007
Molybdenum	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/9/2007
Potassium	EPA 200.7	10	mg/L	0.50	2/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Sodium	EPA 200.7	560	mg/L	5.0	2/12/2007
Strontium	EPA 200.7	2.2	mg/L	0.10	2/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Vanadium	EPA 200.7	0.22	mg/L	0.10	2/12/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/12/2007

Customer Sample ID: TP-JP-2-1 **Collect Date/Time:** 1/25/2007 15:00
WETLAB Sample ID: 0701193-015 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Antimony	EPA 200.8	0.0042	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.050	mg/L	0.050	2/13/2007
Selenium	EPA 200.8	0.59	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	87.4	meq/L	0.010	
Cations	Calculation	79.4	meq/L	0.010	
Error	Calculation	4.8	%	1.0	

Customer Sample ID: TP-JP-2-5 **Collect Date/Time:** 1/25/2007 15:00
WETLAB Sample ID: 0701193-016 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	6.9	%	0.1	2/6/2007
Moisture (post-MWMP)	EPA 160.1	14	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	7.94	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	37	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	30	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	1500	mg/L	100	2/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	100	mg/L	5.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	2800	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	0.019	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/9/2007
Barium	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Calcium	EPA 200.7	390	mg/L	0.50	2/9/2007
Chromium	EPA 200.7	0.0076	mg/L	0.0050	2/9/2007
Cobalt	EPA 200.7	0.018	mg/L	0.010	2/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Iron	EPA 200.7	0.043	mg/L	0.010	2/9/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Lithium	EPA 200.7	0.20	mg/L	0.10	2/9/2007

Customer Sample ID: TP-JP-2-5 **Collect Date/Time:** 1/25/2007 15:00
WETLAB Sample ID: 0701193-016 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Magnesium	EPA 200.7	90	mg/L	0.50	2/9/2007
Manganese	EPA 200.7	0.13	mg/L	0.0050	2/9/2007
Molybdenum	EPA 200.7	0.048	mg/L	0.010	2/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/9/2007
Potassium	EPA 200.7	9.4	mg/L	0.50	2/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Sodium	EPA 200.7	210	mg/L	0.50	2/9/2007
Strontium	EPA 200.7	2.4	mg/L	0.10	2/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Antimony	EPA 200.8	0.0060	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.050	mg/L	0.050	2/13/2007
Selenium	EPA 200.8	0.26	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	39.0	meq/L	0.010	
Cations	Calculation	36.2	meq/L	0.010	
Error	Calculation	3.6	%	1.0	

Customer Sample ID: TP-JP-3-1 **Collect Date/Time:** 1/25/2007 15:10
WETLAB Sample ID: 0701193-017 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	19	%	0.1	2/6/2007
Moisture (pre-MWMP)	EPA 160.1	7.3	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	7.82	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	46	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	38	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	<0.50	mg/L	0.50	2/9/2007
Sulfate	EPA 300.0	2900	mg/L	100	2/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	40	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	4700	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CN I	0.060 M	mg/L	0.010	2/7/2007

Customer Sample ID: TP-JP-3-1 **Collect Date/Time:** 1/25/2007 15:10
WETLAB Sample ID: 0701193-017 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/9/2007
Barium	EPA 200.7	0.012	mg/L	0.010	2/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Calcium	EPA 200.7	450	mg/L	0.50	2/9/2007
Chromium	EPA 200.7	0.012	mg/L	0.0050	2/9/2007
Cobalt	EPA 200.7	0.045	mg/L	0.010	2/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Iron	EPA 200.7	0.027	mg/L	0.010	2/9/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Magnesium	EPA 200.7	61	mg/L	0.50	2/9/2007
Manganese	EPA 200.7	0.54	mg/L	0.0050	2/9/2007
Molybdenum	EPA 200.7	0.14	mg/L	0.010	2/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/9/2007
Potassium	EPA 200.7	15	mg/L	0.50	2/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Sodium	EPA 200.7	730	mg/L	5.0	2/12/2007
Strontium	EPA 200.7	4.2	mg/L	0.10	2/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Antimony	EPA 200.8	0.013	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.050	mg/L	0.050	2/13/2007
Selenium	EPA 200.8	1.1	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	64.0	meq/L	0.010	
Cations	Calculation	59.7	meq/L	0.010	
Error	Calculation	3.5	%	1.0	

Customer Sample ID: TP-JP-3-5 **Collect Date/Time:** 1/25/2007 15:10

WETLAB Sample ID: 0701193-018 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	7.2	%	0.1	2/7/2007
Moisture (post-MWMP)	EPA 160.1	11	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	7.87	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	37	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	30	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	970	mg/L	100	2/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	3.1	mg/L	0.10	2/9/2007
Total Dissolved Solids (TDS)	SM 2540C	1500	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	0.015	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/12/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Calcium	EPA 200.7	240	mg/L	0.50	2/9/2007
Chromium	EPA 200.7	0.0073	mg/L	0.0050	2/9/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Iron	EPA 200.7	0.058	mg/L	0.010	2/9/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Magnesium	EPA 200.7	27	mg/L	0.50	2/9/2007
Manganese	EPA 200.7	0.035	mg/L	0.0050	2/9/2007
Molybdenum	EPA 200.7	0.039	mg/L	0.010	2/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/9/2007
Potassium	EPA 200.7	4.0	mg/L	0.50	2/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Sodium	EPA 200.7	80	mg/L	0.50	2/9/2007
Strontium	EPA 200.7	1.9	mg/L	0.10	2/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/12/2007

Customer Sample ID: TP-JP-3-5 **Collect Date/Time:** 1/25/2007 15:10
WETLAB Sample ID: 0701193-018 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Antimony	EPA 200.8	0.0085	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/13/2007
Selenium	EPA 200.8	0.10	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	21.0	meq/L	0.010	
Cations	Calculation	17.8	meq/L	0.010	
Error	Calculation	8.3	%	1.0	

Customer Sample ID: TP-JP-4-1 **Collect Date/Time:** 1/25/2007 15:20
WETLAB Sample ID: 0701193-019 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	20	%	0.1	2/6/2007
Moisture (pre-MWMP)	EPA 160.1	7.3	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	7.81	pH Units		2/6/2007
Bicarbonate (HCO3)	SM 2320B	39	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	32	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	1900	mg/L	100	2/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	16	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	3000	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	0.12	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/12/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Calcium	EPA 200.7	470	mg/L	0.50	2/9/2007
Chromium	EPA 200.7	0.012	mg/L	0.0050	2/9/2007
Cobalt	EPA 200.7	0.022	mg/L	0.010	2/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Iron	EPA 200.7	0.22	mg/L	0.010	2/9/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Lithium	EPA 200.7	0.10	mg/L	0.10	2/9/2007

Customer Sample ID: TP-JP-4-1 **Collect Date/Time:** 1/25/2007 15:20
WETLAB Sample ID: 0701193-019 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Magnesium	EPA 200.7	59	mg/L	0.50	2/9/2007
Manganese	EPA 200.7	0.085	mg/L	0.0050	2/9/2007
Molybdenum	EPA 200.7	0.076	mg/L	0.010	2/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/9/2007
Potassium	EPA 200.7	13	mg/L	0.50	2/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Sodium	EPA 200.7	200	mg/L	0.50	2/9/2007
Strontium	EPA 200.7	4.5	mg/L	0.10	2/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Antimony	EPA 200.8	0.024	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/13/2007
Selenium	EPA 200.8	0.15	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	41.3	meq/L	0.010	
Cations	Calculation	37.4	meq/L	0.010	
Error	Calculation	5.1	%	1.0	

Customer Sample ID: TP-JP-4-5 **Collect Date/Time:** 1/25/2007 15:20
WETLAB Sample ID: 0701193-020 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, MWMP PROFILE II,

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	15	%	0.1	2/6/2007
Moisture (pre-MWMP)	EPA 160.1	6.3	%	0.1	2/6/2007
pH of Extraction Fluid	EPA 150.1	5.11	pH Units		2/4/2007
pH	EPA 150.1	7.93	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	39	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	32	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/9/2007
Fluoride	EPA 300.0	<0.10 M	mg/L	0.10	2/9/2007
Sulfate	EPA 300.0	1100	mg/L	100	2/17/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	20	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	1800	mg/L	10	2/7/2007
WAD Cyanide	SM 4500CNI	0.047	mg/L	0.010	2/7/2007

Customer Sample ID: TP-JP-4-5 **Collect Date/Time:** 1/25/2007 15:20
WETLAB Sample ID: 0701193-020 **Receive Date:** 1/25/2007 16:30

, MWMP PROFILE II, MWMP PROFILE II,

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/12/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Calcium	EPA 200.7	250	mg/L	0.50	2/9/2007
Chromium	EPA 200.7	0.0065	mg/L	0.0050	2/9/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Iron	EPA 200.7	0.24	mg/L	0.010	2/9/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Magnesium	EPA 200.7	32	mg/L	0.50	2/9/2007
Manganese	EPA 200.7	0.065	mg/L	0.0050	2/9/2007
Molybdenum	EPA 200.7	0.066	mg/L	0.010	2/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/9/2007
Potassium	EPA 200.7	6.1	mg/L	0.50	2/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/9/2007
Sodium	EPA 200.7	110	mg/L	0.50	2/9/2007
Strontium	EPA 200.7	2.5	mg/L	0.10	2/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/9/2007
Vanadium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Antimony	EPA 200.8	0.011	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/13/2007
Lead	EPA 200.8	<0.01	mg/L	0.01	2/13/2007
Selenium	EPA 200.8	0.095	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	25.0	meq/L	0.010	
Cations	Calculation	20.1	meq/L	0.010	
Error	Calculation	10.9	%	1.0	

Customer Sample ID: Field Bank **Collect Date/Time:** 1/25/2007 12:55
WETLAB Sample ID: 0701193-021 **Receive Date:** 1/25/2007 16:30

, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
pH	EPA 150.1	5.00	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	<1.0	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/8/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/8/2007
Sulfate	EPA 300.0	<1.0	mg/L	1.0	2/8/2007
Nitrate Nitrogen	EPA 300.0	<1.0	mg/L	1.0	2/8/2007
Nitrite Nitrogen	EPA 300.0	<0.010	mg/L	0.010	2/9/2007
Total Dissolved Solids (TDS)	SM 2540C	<10	mg/L	10	2/5/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	2/7/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/12/2007
Barium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/12/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/12/2007
Calcium	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/12/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Magnesium	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Molybdenum	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Potassium	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/12/2007
Sodium	EPA 200.7	<0.50	mg/L	0.50	2/12/2007
Strontium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/12/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/12/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/13/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/13/2007

Customer Sample ID: Field Bank
WETLAB Sample ID: 0701193-021
Collect Date/Time: 1/25/2007 12:55
Receive Date: 1/25/2007 16:30

, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	2/13/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/13/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/7/2007
Anions	Calculation	<0.010	meq/L	0.010	
Cations	Calculation	<0.010	meq/L	0.010	
Error	Calculation	<1.0	%	1.0	

Customer Sample ID: B-20-5
WETLAB Sample ID: 0701193-022
Collect Date/Time: 1/25/2007 14:30
Receive Date: 1/25/2007 16:30

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	0.37	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007

QUALITY CONTROL REPORT

Sample ID: 701193
Reported: 03/30/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Alkalinity	2320B	mg/L as $CaCO_3$	NA	94	100	94	32	32	<1
Alkalinity	2320B	mg/L as $CaCO_3$	NA	94	100	94	260	260	<1
Chloride	300.0	mg/L	<1.0	5.06	5.00	101	1.49	1.52	3
Chloride	300.0	mg/L	<1.0	5.06	5.00	101	1.44	1.45	<1
Cyanide WAD	4500CNI	mg/L	<0.010	0.094	0.100	94	0.109	0.109	<1
Cyanide WAD	4500CNI	mg/L	<0.010	0.092	0.100	92	0.131	0.130	<1
Fluoride	300.0	mg/L	<0.10	0.990	1.0	99	1.44	1.49	3
Fluoride	300.0	mg/L	<0.10	0.990	1.0	99	0.751	0.734	2
NO3+NO2 Nitrogen	300.0	mg/L	<0.10	0.496	0.500	99	0.544	0.571	5
NO3+NO2 Nitrogen	300.0	mg/L	<0.10	0.511	0.500	102	0.722	0.732	1
pH	150.1	SU	NA	7.02	7.00	100	8.05	8.04	<1
pH	150.1	SU	NA	7.10	7.00	101	8.29	8.31	<1
Sulfate	300.0	mg/L	<1.0	9.74	10.0	97	7.59	7.73	2
Sulfate	300.0	mg/L	<1.0	10.1	10.0	101	41.2	41.4	<1
TDS	2540C	mg/L	<10	155	150	103	13400	13300	<1
TDS	2540C	mg/L	<10	156	150	104	4650	4740	2
TDS	2540C	mg/L	<10	156	150	104	1810	1784	1

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Chloride	300.0	mg/L	701-193-11	0.633	1.49	1.00	85	02/09/07
Chloride	300.0	mg/L	701-193-20	0.482	1.44	1.00	95	02/09/07
NO3+NO2 Nitrogen	300.0	mg/L	701-193-11	0.085	0.544	0.500	92	02/09/07
NO3+NO2 Nitrogen	300.0	mg/L	701-193-19	0.165	0.722	0.500	111	02/10/07
Sulfate	300.0	mg/L	701-193-11	3.58	7.59	4.00	100	02/09/07
Sulfate	300.0	mg/L	701-193-15	39.0	41.2	4.00	SC	02/09/07
Fluoride	300.0	mg/L	701-193-11	0.376	1.44	1.00	107	02/09/07
Fluoride	300.0	mg/L	701-193-20	<0.10	0.751	1.00	NC	02/09/07
Cyanide WAD	4500CNI	mg/L	701-193-22	0.018	0.109	0.100	91	01/31/07
Cyanide WAD	4500CNI	mg/L	701-193-17	0.060	0.131	0.100	NC	02/07/07

NC = Not caculated due to matrix interference.
SC = Spike recovery not calculated. Sample concentration >4X the spike amount: Therefore the spike could not be adequately recovered.

QUALITY CONTROL REPORT

Sample ID: 701193
Reported: 03/30/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide Total	4500CNC	mg/L	<0.010	0.092	0.100	92	0.109	0.109	<1

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide Total	4500CNC	mg/L	701193-022	0.018	0.109	0.100	91	01/31/07

Metals QC
Optima 4300DV

Batch:	W070209-1A	Matrix:	water

Sample ID:	701-193-14	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0833	94	0.0864	4	0.090	0.0884	98	2/9/2007
Al	200.7	<0.045	mg/L	<0.045	1.00	0.9422	91	0.9813	4	1.00	0.9461	95	2/9/2007
B	200.7	<0.020	mg/L	<0.020	1.00	0.9292	94	0.9801	5	1.00	0.9704	97	2/9/2007
Ba	200.7	<0.010	mg/L	<0.010	1.00	0.8465	84	0.8692	3	1.00	0.9545	95	2/9/2007
Be	200.7	<0.0010	mg/L	<0.0010	1.00	0.9681	97	0.9668	0	1.00	0.9768	98	2/9/2007
Bi	200.7	<0.10	mg/L	<0.10	1.00	0.9276	95	0.9570	3	1.00	0.9722	97	2/9/2007
Ca	200.7	<0.50	mg/L	214.8519	10.00	222.8505	80	229.9316	3	10.00	9.7442	97	2/9/2007
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.8638	86	0.8882	3	1.00	0.9764	98	2/9/2007
Co	200.7	<0.010	mg/L	0.1111	1.00	1.0064	90	1.0330	3	1.00	0.9626	96	2/9/2007
Cr	200.7	<0.0050	mg/L	<0.0050	1.00	0.8844	88	0.9094	3	1.00	0.9473	95	2/9/2007
Cu	200.7	<0.050	mg/L	<0.050	1.00	0.9742	96	1.0059	3	1.00	0.9422	94	2/9/2007
Fe	200.7	<0.010	mg/L	0.0785	1.00	0.9433	86	0.9464	0	1.00	0.9048	90	2/9/2007
Ga	200.7	<0.10	mg/L	<0.10	1.00	0.9769	97	1.0129	4	1.00	0.9935	99	2/9/2007
K	200.7	<0.50	mg/L	7.6244	10.00	17.6279	100	18.0226	2	10.00	9.6437	96	2/9/2007
Li	200.7	<0.10	mg/L	<0.10	1.00	1.0100	97	1.0204	1	1.00	0.9577	96	2/9/2007
Mg	200.7	<0.50	mg/L	36.4281	10.00	44.2083	78	45.3531	3	10.00	9.5827	96	2/9/2007
Mn	200.7	<0.0050	mg/L	0.6991	1.00	1.5951	90	1.6551	4	1.00	0.9683	97	2/9/2007
Mo	200.7	<0.010	mg/L	0.1715	1.00	1.0748	90	1.1045	3	1.00	0.9569	96	2/9/2007
Na	200.7	<0.50	mg/L	191.3784	10.00	201.1264	97	208.0796	3	10.00	9.7802	98	2/9/2007
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.8806	88	0.8964	2	1.00	0.9510	95	2/9/2007
P	200.7	<0.50	mg/L	<0.50	1.00	1.0144	99	1.0421	3	1.00	0.9857	99	2/9/2007
Pb	200.7	<0.010	mg/L	0.0204	1.00	0.9047	88	0.9235	2	1.00	0.9762	98	2/9/2007

Metals QC (Cont.)
Optima 4300DV

Batch:	W070209-1A	Matrix:	water

Sample ID:	701-193-14	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Sc	200.7	<0.10	mg/L	<0.10	1.0000	0.9035	90	0.9059	0	1.00	0.9585	96	2/9/2007
Sn	200.7	<0.10	mg/L	<0.10	1.0000	0.9219	93	0.9549	4	1.00	0.9597	96	2/9/2007
Sr	200.7	<0.10	mg/L	0.9627	1.0000	1.9105	95	1.9478	2	1.00	0.9578	96	2/9/2007
Ti	200.7	<0.10	mg/L	<0.10	1.0000	0.9646	96	0.9783	1	1.00	0.9817	98	2/9/2007
V	200.7	<0.010	mg/L	0.0106	1.0000	0.9544	94	0.9835	3	1.00	0.9690	97	2/9/2007
Zn	200.7	<0.010	mg/L	<0.010	1.0000	0.8980	91	0.9151	2	1.00	0.9744	97	2/9/2007

Samples 701-193-(10-19) are associated with QC batch W070209-1A

Metals QC
CETAC M-6000A

Batch:	Hg070207-1B
Matrix:	water

		Date Analyzed:	2/7/07
Sample ID:	701-193-21 MWMP	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	<0.10	2.00	2.28	118	2.49	9	2.00	2.10	105

Samples 701-193-(18-21) MWMP are associated with QC batch Hg070207-1B

Metals QC
Optima 4300DV

Batch:	T070201-1A	Matrix:	water

Sample ID:	701-193-4	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	0.0002	0.090	0.0871	97	0.0850	2	0.090	0.0866	96	2/1/2007
As	6010B	<0.10	mg/L	0.0053	1.00	0.9701	96	0.9533	2	1.00	0.9511	95	2/1/2007
Ba	6010B	<0.20	mg/L	0.0550	1.00	0.9841	93	0.9657	2	1.00	0.9589	96	2/1/2007
Cd	6010B	<0.010	mg/L	-0.0001	1.00	0.9648	96	0.9516	1	1.00	0.9737	97	2/1/2007
Cr	6010B	<0.050	mg/L	-0.0001	1.00	0.9733	97	0.9577	2	1.00	0.9898	99	2/1/2007
Pb	6010B	<0.10	mg/L	0.0015	1.00	0.9486	95	0.9312	2	1.00	0.9620	96	2/1/2007
Se	6010B	<0.040	mg/L	-0.0056	1.0000	0.9057	91	0.8910	2	1.00	0.8906	89	2/1/2007

Samples 701-193(1-4) are associated with QC batch T070201-1A

Metals QC
CETAC M-6000A

Batch:	Hg070201-1A
Matrix:	TCLP

		Date Analyzed:	2/1/07
Sample ID:	701-190-2	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	2.59	NC	2.63	2	2.00	2.24	112

NC = Not calculated due to matrix interference.

Samples 701-193(1-4) are associated with QC batch Hg070201-1A

Metals QC
Optima 4300DV

Batch:	W070209-1B	Matrix:	water

Sample ID:	702-038-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0852	95	0.0848	0	0.090	0.0884	98	2/9/2007
Al	200.7	<0.045	mg/L	<0.045	1.00	0.8787	88	0.8795	0	1.00	0.9461	95	2/9/2007
B	200.7	<0.020	mg/L	<0.020	1.00	0.9253	95	0.9338	1	1.00	0.9704	97	2/9/2007
Ba	200.7	<0.010	mg/L	0.0250	1.00	0.8985	87	0.8973	0	1.00	0.9545	95	2/9/2007
Be	200.7	<0.0010	mg/L	<0.0010	1.00	0.9870	99	0.9840	0	1.00	0.9768	98	2/9/2007
Bi	200.7	<0.10	mg/L	<0.10	1.00	0.9165	93	0.9236	1	1.00	0.9722	97	2/9/2007
Ca	200.7	<0.50	mg/L	10.7036	10.00	19.8947	92	20.0878	1	10.00	9.7442	97	2/9/2007
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.9145	91	0.9168	0	1.00	0.9764	98	2/9/2007
Co	200.7	<0.010	mg/L	<0.010	1.00	0.9216	92	0.9265	1	1.00	0.9626	96	2/9/2007
Cr	200.7	<0.0050	mg/L	<0.0050	1.00	0.9151	92	0.9171	0	1.00	0.9473	95	2/9/2007
Cu	200.7	<0.050	mg/L	<0.050	1.00	0.9367	93	0.9372	0	1.00	0.9422	94	2/9/2007
Fe	200.7	<0.010	mg/L	0.8414	1.00	1.6926	85	1.7017	1	1.00	0.9048	90	2/9/2007
Ga	200.7	<0.10	mg/L	<0.10	1.00	0.9608	96	0.9615	0	1.00	0.9935	99	2/9/2007
K	200.7	<0.50	mg/L	0.6099	10.00	10.0090	94	10.0275	0	10.00	9.6437	96	2/9/2007
Li	200.7	<0.10	mg/L	<0.10	1.00	0.9246	92	0.9239	0	1.00	0.9577	96	2/9/2007
Mg	200.7	<0.50	mg/L	3.7541	10.00	12.8495	91	12.9024	0	10.00	9.5827	96	2/9/2007
Mn	200.7	<0.0050	mg/L	0.0275	1.00	0.9948	97	1.0016	1	1.00	0.9683	97	2/9/2007
Mo	200.7	<0.010	mg/L	<0.010	1.00	0.8941	89	0.8962	0	1.00	0.9569	96	2/9/2007
Na	200.7	<0.50	mg/L	10.0388	10.00	19.3998	94	19.3785	0	10.00	9.7802	98	2/9/2007
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.8970	90	0.8997	0	1.00	0.9510	95	2/9/2007
P	200.7	<0.50	mg/L	<0.50	1.00	1.0133	92	1.0187	1	1.00	0.9857	99	2/9/2007
Pb	200.7	<0.010	mg/L	<0.010	1.00	0.9163	91	0.9222	1	1.00	0.9762	98	2/9/2007

Metals QC (Cont.)
Optima 4300DV

Batch:	W070209-1B	Matrix:	water

Sample ID:	702-038-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Sc	200.7	<0.10	mg/L	<0.10	1.0000	0.8940	89	0.8938	0	1.00	0.9585	96	2/9/2007
Sn	200.7	<0.10	mg/L	<0.10	1.0000	0.9303	94	0.9384	1	1.00	0.9597	96	2/9/2007
Sr	200.7	<0.10	mg/L	0.1588	1.0000	1.1016	94	1.0923	1	1.00	0.9578	96	2/9/2007
Ti	200.7	<0.10	mg/L	<0.10	1.0000	0.9689	97	0.9771	1	1.00	0.9817	98	2/9/2007
V	200.7	<0.010	mg/L	<0.010	1.0000	0.9646	96	0.9701	1	1.00	0.9690	97	2/9/2007
Zn	200.7	<0.010	mg/L	0.3589	1.0000	1.2736	91	1.2806	1	1.00	0.9744	97	2/9/2007

Samples 701-193-(20-21) are associated with QC batch W070209-1B

Metals QC
ELAN DRC-e

Batch:	W070209-1B	Matrix:	water

Sample ID:	702-038-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
As	200.8	<5.0	ug/L	<5.0	10.00	11.2011	109	10.5441	6	10.00	10.175	102	2/9/2007
Sb	200.8	<2.5	ug/L	<2.5	10.00	10.6805	107	10.3220	3	10.00	10.2838	103	2/9/2007
Se	200.8	<5.0	ug/L	<5.0	10.00	11.7944	117	10.9800	7	10.00	10.2363	102	2/9/2007
Tl	200.8	<1.0	ug/L	<1.0	10.00	9.8431	98	9.3650	5	10.00	9.6784	97	2/9/2007
Pb	200.8	<2.5	ug/L	2.54287	10.00	12.3903	98	11.9506	4	10.00	9.8262	98	2/9/2007

Samples 701-193-(20-21) are associated with QC batch W070209-1B

Metals QC
CETAC M-6000A

Batch:	Hg070208-1A
Matrix:	TCLP

		Date Analyzed:	2/8/07
Sample ID:	701-193-22	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	2.60	130	2.98	14	2.00	2.24	112

Samples 701-193-(5-9,22) are associated with QC batch Hg070208-1A

Metals QC
Optima 4300DV

Batch:	T070208-1A	Matrix:	water

Sample ID:	701-198-10	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0886	99	0.0888	0	0.090	0.0883	98	2/8/2007
As	6010B	<0.10	mg/L	<0.10	1.00	0.9817	98	0.9866	0	1.00	0.9689	97	2/8/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	0.9309	91	0.9223	1	1.00	0.9568	96	2/8/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9073	91	0.9058	0	1.00	0.9386	94	2/8/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9268	92	0.9206	1	1.00	0.9425	94	2/8/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9236	92	0.9196	0	1.00	0.9465	95	2/8/2007
Se	6010B	<0.040	mg/L	<0.040	1.00	0.9092	90	0.9098	0	1.00	0.8931	89	2/8/2007

Samples 701-193-(5-9,22) are associated with QC batch T070208-1A

Metals QC
CETAC M-6000A

Batch:	Hg070207-1A
Matrix:	water

		Date Analyzed:	2/7/07
Sample ID:	701-193-14 MWMP	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	<0.10	2.00	2.04	105	2.41	17	2.00	2.10	105

Samples 701-193-(10-17) MWMP are associated with QC batch Hg070207-1A

Metals QC
ELAN DRC-e

Batch:	W070209-1A	Matrix:	water

Sample ID:	701-193-14	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
As	200.8	<5.0	ug/L	<5.0	10.00	14.1783	114	14.7233	4	10.00	10.175	102	2/9/2007
Sb	200.8	<2.5	ug/L	3.64083	10.00	14.8453	112	14.9831	1	10.00	10.2838	103	2/9/2007
Se	200.8	<5.0	ug/L	128.937	10.00	141.8032	129	141.1024	0	10.00	10.2363	102	2/9/2007
Tl	200.8	<1.0	ug/L	<1.0	10.00	10.0205	100	10.1023	1	10.00	9.6784	97	2/9/2007
Pb	200.8	<2.5	ug/L	<2.5	10.00	10.3570	102	10.7479	4	10.00	9.8262	98	2/9/2007

Samples 701-193-(10-19) are associated with QC batch W070209-1A

Green Analytical Laboratories, Inc.

GAL ID No.: 701-112,01-02

February 5, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name: AMEC - Gooseberry
Project Number: 701-193
Date Received: 01/30/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/30/07.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

For: John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-112,01-02
Date Received: 01/30/07
Date Reported: 02/05/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC - Gooseberry
PROJECT NUMBER: 701-193

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
112-01	TP-8-1	01/25/07												
701-112-02	TP-8-5	01/25/07												

For: John Green, Laboratory Director

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-112,01-02
Date Received: 01/30/07
Date Reported: 02/05/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC - Gooseberry
PROJECT NUMBER: 701-193

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
112-01		0.009				0.27	10.1	9.81							
701-112-02		0.011				0.33	10.1	9.75							

FOR: John Green, Laboratory Director

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-112,01-02
Date Received: 01/30/07
Date Reported: 02/05/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC - Gooseberry
PROJECT NUMBER: 701-193

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
-112-01										1.008		
-112-02										1.008		

For: John Green, Laboratory Director

SAMPLE RECEIVING CHECKLIST

MS

WETLAB Sample ID: 701-193

Y	N	
X	X	**Was the information on the Chain of Custody (COC) complete?**
		If no, what was missing:
		Client Information
X		Analyses requested
		Sample Information circle one: Sample ID Date Col. Time Col. samplers name sample matrix
		Was the client notified of any problems?
		Who did you speak with_____ When_____

	X	**Did the sample containers match the COC?**
		if no, what was incorrect:
X		Number of containers
		Sample Volume
		Preservation
		If there was in-house preservation was it logged in the book?
		Temperature
		Was the client notified of any problems?
		Who did you speak with_____ When_____

Sample B-20-5 rec'd but not on C.O.C.

no analyses requested on samples 1 & 2.

Left msg. 5:10pm 1/2 L.

		Is this standard turn-around-time or RUSH? (circle one)
		if RUSH, was it approved?
		Were the appropriate people in the lab verbally notified?

per Don 1/26/05 run 1st 2 samples for CN & TCLP RCRA metals. Run the same on extra sample B-20-5. AT

X		**Are there special reporting requirements**
X		Does the client need QC?
		Does the client need 'low level' reporting limits for nutrients?
		Does the client need special reporting limits for metals?

	X	**Are there 'short hold' tests?**
		Were samples received 'in hold'
		If yes, is there sufficient time to meet holding times?
		Were the appropriate people in the lab verbally notified?
		Was the client notified of any problems?
		Who did you speak with_____ When_____

Are the samples for NV or CA (circle one)

MS

X	X	**Is there subcontracting?**
X		Has the COC been copied and put in the box?
X		Has a sub-chain been written up?
	X	Is there any special paperwork (i.e. special reporting requirements) that needs to go with the chain?

X		**Is there special pricing for this project?**

Samples logged in by: MS

Login reviewed by: [signature]

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-193
Report Due Date: 2-8-07
Page 1 of 2

Client Amec
Address
City, State & Zip
Contact Don
Phone
Collector's Name
Fax
Project Name
P.O. Number
Project Number
Email don.swigonski@amec.com

Turnaround Time
Standard 5-Day Other

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER:

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	CN	TCLP & SPLP metals	EWMP	Grease & Oil	ATM							Spl. No.
~~10-1 6-1~~ TP-6-1	10-25	9:30	SO	1	X	X										1
~~10-3.5 6-3.5~~ TP-6-3.5		9:45	SO	1	X	X										2
~~TP7-1.5~~		~~10:10~~	SO	1												
10-1 TP-10-1		10:50	SO	1	X	X										3
10-5 TP-10-5		10:50	SO	1	X	X										4
11-1 TP-11-1		11:40	SO	1	X	X										5
11-3.5 TP-11-3.5		11:40	SO	1	X	X										6
7-1 TP-7-1		12:10	SO	1	X	X										7
7-3.5 TP-7-3.5		12:10	SO	1	X	X										8
7-5 TP-7-5		12:10	SO	1	X	X										9
8-1 TP-8-1		13:05	SO	1			X	X	X							10
8-5 TP-8-5		13:05	SO	1			X	X	X							11

Red circled in Sample ID

Instructions/Comments/Special Requirements:
For Gooseberry mine Brownfields

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature 12 °C	1-25-07	16:30	[signature]	[signature]
Custody Seals Intact? Y N None				
Number of Containers 21				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-193
Report Due Date: 2-8-07
Page 2 of 2

Client: AMEC
Address:
City, State & Zip:
Contact: Don
Phone:
Collector's Name:
Fax:
Project Name:
P.O. Number:
Project Number:
Email:

Turnaround Time
Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company ____
Address ____
City, State & Zip ____
Contact ____
Phone ____
Fax ____
Email ____

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	(Y)	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water	SD = Solid
WW = Wastewater	SO = Soil
SW = Surface Water	HW = Hazardous Waste
MW = Monitoring Well	OTHER: ____

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	Metals	Prosize	J2	TCLP Reactivity								Spl. No.
B-25-1.5	1.25	13:40	SO	1	X	X										12
TP-JP-1-1	1.25	1.25	SO	1	X	X										13
TP-JP-1-5	1.25	1.25	SO	1	X	X										14
TP-JP-2-1	1.25	15:00	SO	1	X	X										15
TP-JP-2-5	1.25	15:00	SO	1	X	X										16
TP-JP-3-1	1.25	15:10	SO	1	X	X										17
TP-JP-3-5	1.25	15:10	SO	1	X	X										18
TP-JP-4-1	1.25	15:20	SO	1	X	X										19
TP-JP-4-5	1.25	15:20	SO	1	X	X										20
Field Blank	1.25	12:55	W	1	X	X	X									21
B-20-5	1/25	1430	SO				X	X								22

Instructions/Comments/Special Requirements:
Gravelberry Mine Brown Fields

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature 12 °C	1.25.07	16:30	Don Dingrest	[illegible]
Custody Seals Intact? Y N (None)				
Number of Containers 21				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

RESULTS FOR TEST PITS TP-AST-1
THROUGH TP-AST-5 SHOWN IN TABLE 9

VOC RESULTS FOR TEST PITS TP-RS-1
THROUGH TP-RS-3 SHOWN IN TABLE 12

RESULTS FOR TEST PITS TP-BP-1
THROUGH TP-BP-5 SHOWN IN TABLE 8

AMENDED

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski	Erica Schaefer
TEL : (775) 331-2375	TEL : (775) 331-2375
FAX : (775) 331-4153	FAX : (775) 331-4153
EMail don.swigonski@amec.com	EMail erica.schaefer@amec.com

EDD Required : **No**

Sampled by : Client

Report Attention : Don Swigonski
CC Report : Erica Schaefer

Job : 6417000720
PO :

Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	22-Feb-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests OTHER	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
AEE07012901-01A	TP-RS-1-1	SO	01/26/07 10:45	1	0	5							8240		One 25 gram EnCore
AEE07012901-02A	TP-RS-1-5	SO	01/26/07 10:50	1	0	5							8240		One 25 gram EnCore
AEE07012901-03A	TP-RS-2-1	SO	01/26/07 11:05	1	0	5							8240		One 25 gram EnCore
AEE07012901-04A	TP-RS-2-5	SO	01/26/07 11:10	1	0	5							8240		One 25 gram EnCore
AEE07012901-05A	TP-RS-3-1	SO	01/26/07 11:15	1	0	5							8240		One 25 gram EnCore
AEE07012901-06A	TP-RS-3-5	SO	01/26/07 11:20	1	0	5							8240		One 25 gram EnCore
AEE07012901-07A	TP-BP-1-1	SO	01/26/07 12:00	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-08A	TP-BP-1-5	SO	01/26/07 12:05	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore. Level 4 QC required.
AEE07012901-09A	TP-BP-2-1	SO	01/26/07 12:10	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs. Amended 1/27/07 15:13: Per Don added the field blank for the following analysis': TPH/E, TPH/P, 8240, and ethylene glycol. Per Erica added Erica Schaefer as CC. ES

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	2/22/07 1550

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

AMENDED

CHAIN-OF-CUSTODY RECORD

NV

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Report Attention : Don Swigonski
CC Report : Erica Schaefer

Don Swigonski
TEL : (775) 331-2375
FAX : (775) 331-4153
EMail don.swigonski@amec.com

Erica Schaefer
TEL : (775) 331-2375
FAX : (775) 331-4153
EMail erica.schaefer@amec.com

EDD Required : **No**
Sampled by : Client

Job : 6417000720
PO :
Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	22-Feb-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	OTHER	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
								Requested Tests							
AEE07012901-10A	TP-BP-2-5	SO	01/26/07 12:15	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-11A	TP-BP-3-1	SO	01/26/07 12:20	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-12A	TP-BP-3-5	SO	01/26/07 12:25	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-13A	TP-BP-3-10	SO	01/26/07 12:30	4	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-14A	TP-BP-4-1	SO	01/26/07 12:35	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-15A	TP-BP-4-5	SO	01/26/07 12:40	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-16A	TP-BP-5-1	SO	01/26/07 12:45	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-17A	TP-BP-5-5	SO	01/26/07 12:50	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-18A	TP-AST-1-1	SO	01/26/07 13:15	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-19A	TP-AST-1-5	SO	01/26/07 13:20	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs. Amended 1/27/07 15:13: Per Don added the field blank for the following analysis': TPH/E, TPH/P, 8240, and ethylene glycol. Per Erica added Erica Schaefer as CC. ES

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	2/22/07 1550

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

AMENDED

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

NV

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski	Erica Schaefer
TEL : (775) 331-2375	TEL : (775) 331-2375
FAX : (775) 331-4153	FAX : (775) 331-4153
EMail don.swigonski@amec.com	EMail erica.schaefer@amec.com

EDD Required : No

Sampled by : Client

Report Attention : Don Swigonski
CC Report : Erica Schaefer

Job : 6417000720
PO :

Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	22-Feb-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	OTHER	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
								Requested Tests							
AEE07012901-20A	TP-AST-2-1	SO	01/26/07 13:25	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-21A	TP-AST-2-5	SO	01/26/07 13:30	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-22A	TP-AST-3-1	SO	01/26/07 13:35	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore. Level 4 QC required.
AEE07012901-23A	TP-AST-3-5	SO	01/26/07 13:40	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-24A	TP-AST-4-1	SO	01/26/07 13:45	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-25A	TP-AST-4-5	SO	01/26/07 13:50	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-26A	TP-AST-5-1	SO	01/26/07 13:55	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-27A	TP-AST-5-5	SO	01/26/07 14:00	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-28A	TP-G-1-1	SO	01/26/07 15:15	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs. Amended 1/27/07 15:13: Per Don added the field blank for the following analysis': TPH/E, TPH/P, 8240, and ethylene glycol. Per Erica added Erica Schaefer as CC. ES

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	2/22/07 1550

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

AMENDED

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski	Erica Schaefer
TEL : (775) 331-2375	TEL : (775) 331-2375
FAX : (775) 331-4153	FAX : (775) 331-4153
EMail don.swigonski@amec.com	EMail erica.schaefer@amec.com

EDD Required : No

Sampled by : Client

Report Attention : Don Swigonski
CC Report : Erica Schaefer

Job : 6417000720
PO :

Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	22-Feb-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests OTHER	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
AEE07012901-29A	TP-G-1-5	SO	01/26/07 15:20	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore. Level 4 QC required.
AEE07012901-30A	TP-G-2-1	SO	01/26/07 15:30	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-31A	TP-G-2-5	SO	01/26/07 15:35	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-32A	TP-G-2-10	SO	01/26/07 15:45	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-33A	TP-G-3-1	SO	01/26/07 15:45	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. 1 Soil jar labeled TP-3-10 logged in per COC. Two 4oz jars and one 25 gram EnCore.
AEE07012901-34A	Field Blank	SO	01/26/07 12:00	4	1	5		See Remarks		TPH/E_N		GAS-N		8240	Ethylene glycol subbed to Zalco Labs.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs. Amended 1/27/07 15:13: Per Don added the field blank for the following analysis': TPH/E, TPH/P, 8240, and ethylene glycol. Per Erica added Erica Schaefer as CC. ES

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	2/22/07 1550

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

AMENDED

CHAIN-OF-CUSTODY RECORD

NV

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail don.swigonski@amec.com

Erica Schaefer
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail erica.schaefer@amec.com

EDD Required : **No**

Sampled by : Client

Report Attention : Don Swigonski
CC Report : Erica Schaefer

Job : 6417000720
PO :

Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	29-Jan-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	OTHER	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
AEE07012901-01A	TP-RS-1-1	SO	01/26/07 10:45	1	0	5							8240		One 25 gram EnCore
AEE07012901-02A	TP-RS-1-5	SO	01/26/07 10:50	1	0	5							8240		One 25 gram EnCore
AEE07012901-03A	TP-RS-2-1	SO	01/26/07 11:05	1	0	5							8240		One 25 gram EnCore
AEE07012901-04A	TP-RS-2-5	SO	01/26/07 11:10	1	0	5							8240		One 25 gram EnCore
AEE07012901-05A	TP-RS-3-1	SO	01/26/07 11:15	1	0	5							8240		One 25 gram EnCore
AEE07012901-06A	TP-RS-3-5	SO	01/26/07 11:20	1	0	5							8240		One 25 gram EnCore
AEE07012901-07A	TP-BP-1-1	SO	01/26/07 12:00	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-08A	TP-BP-1-5	SO	01/26/07 12:05	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-09A	TP-BP-2-1	SO	01/26/07 12:10	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-10A	TP-BP-2-5	SO	01/26/07 12:15	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs. Amended 1/27/07 15:13: Per Don added the field blank for the following analysis': TPH/E, TPH/P, 8240, and ethylene glycol. Per Erica added Erica Schaefer as CC. ES

	Signature	Print Name	Company	Date/Time
Logged in by:	C Sauvagean	E. Sauvagean	Alpha Analytical, Inc.	1-29-07 15:58

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski	Erica Schaefer
TEL : (775) 331-2375 x	TEL : (775) 331-2375 x
FAX : (775) 331-4153	FAX : (775) 331-4153
EMail don.swigonski@amec.com	EMail erica.schaefer@amec.com

EDD Required : No

Sampled by : Client

Report Attention : Don Swigonski Job : 6417000720
CC Report : Erica Schaefer PO : Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	29-Jan-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	OTHER	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
								Requested Tests							
AEE07012901-11A	TP-BP-3-1	SO	01/26/07 12:20	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-12A	TP-BP-3-5	SO	01/26/07 12:25	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-13A	TP-BP-3-10	SO	01/26/07 12:30	4	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-14A	TP-BP-4-1	SO	01/26/07 12:35	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-15A	TP-BP-4-5	SO	01/26/07 12:40	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-16A	TP-BP-5-1	SO	01/26/07 12:45	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-17A	TP-BP-5-5	SO	01/26/07 12:50	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-18A	TP-AST-1-1	SO	01/26/07 13:15	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-19A	TP-AST-1-5	SO	01/26/07 13:20	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-20A	TP-AST-2-1	SO	01/26/07 13:25	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs. Amended 1/27/07 15:13: Per Don added the field blank for the following analysis': TPH/E, TPH/P, 8240, and ethylene glycol. Per Erica added Erica Schaefer as CC. ES

	Signature	Print Name	Company	Date/Time
Logged in by:	E Sauvageau	E. Sauvageau	Alpha Analytical, Inc.	1-29-07 15:58

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

AMENDED

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail don.swigonski@amec.com

Erica Schaefer
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail erica.schaefer@amec.com

EDD Required : **No**
Sampled by : Client

Report Attention : Don Swigonski
CC Report : Erica Schaefer
Job : 6417000720
PO :
Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	29-Jan-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests OTHER	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
AEE07012901-21A	TP-AST-2-5	SO	01/26/07 13:30	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-22A	TP-AST-3-1	SO	01/26/07 13:35	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-23A	TP-AST-3-5	SO	01/26/07 13:40	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-24A	TP-AST-4-1	SO	01/26/07 13:45	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-25A	TP-AST-4-5	SO	01/26/07 13:50	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-26A	TP-AST-5-1	SO	01/26/07 13:55	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-27A	TP-AST-5-5	SO	01/26/07 14:00	3	0	5			TPH/E_N		GAS-N		BTXE_N		Two 4oz jars and one 25 gram EnCore.
AEE07012901-28A	TP-G-1-1	SO	01/26/07 15:15	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-29A	TP-G-1-5	SO	01/26/07 15:20	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs. Amended 1/27/07 15:13: Per Don added the field blank for the following analysis': TPH/E, TPH/P, 8240, and ethylene glycol. Per Erica added Erica Schaefer as CC. ES

	Signature	Print Name	Company	Date/Time
Logged in by:	E Sauvaglau	E. Sauvaglau	Alpha Analytical, Inc.	1-29-07 15:58

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

AMENDED

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski	Erica Schaefer
TEL : (775) 331-2375 x	TEL : (775) 331-2375 x
FAX : (775) 331-4153	FAX : (775) 331-4153
EMail don.swigonski@amec.com	EMail erica.schaefer@amec.com

EDD Required : **No**

Sampled by : Client

Report Attention : Don Swigonski
CC Report : Erica Schaefer

Job : 6417000720
PO :
Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	29-Jan-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	OTHER	TPH/E_S	TPH/E_W	TPH/P_S	TPH/P_W	VOC_S	VOC_W	Sample Remarks
AEE07012901-30A	TP-G-2-1	SO	01/26/07 15:30	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-31A	TP-G-2-5	SO	01/26/07 15:35	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-32A	TP-G-2-10	SO	01/26/07 15:45	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-33A	TP-G-3-1	SO	01/26/07 15:45	2	1	5		See Remarks	TPH/E_N		GAS-N		BTXE_N		Ethylene glycol subbed to Zalco Labs. 1 Soil jar labeled TP-3-10 logged in per COC. Two 4oz jars and one 25 gram EnCore.
AEE07012901-34A	Field Blank	SO	01/26/07 12:00	4	1	5		See Remarks		TPH/E_N		GAS-N		8240	Ethylene glycol subbed to Zalco Labs.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs. Amended 1/27/07 15:13: Per Don added the field blank for the following analysis': TPH/E, TPH/P, 8240, and ethylene glycol. Per Erica added Erica Schaefer as CC. ES

	Signature	Print Name	Company	Date/Time
Logged in by:	E Sauvageau	E. Sauvageau	Alpha Analytical, Inc.	1-29-07 15:56

NOTE. Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

NV

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail don.swigonski@amec.com

EDD Required : No

Sampled by : Client

Report Attention : Don Swigonski
CC Report :

Job : 6417000720
PO :

Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	29-Jan-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests OTHER	TPH/E_S	TPH/P_S	VOC_S				Sample Remarks
AEE07012901-01A	TP-RS-1-1	SO	01/26/07 10:45	1	0	5					8240				One 25 gram EnCore
AEE07012901-02A	TP-RS-1-5	SO	01/26/07 10:50	1	0	5					8240				One 25 gram EnCore
AEE07012901-03A	TP-RS-2-1	SO	01/26/07 11:05	1	0	5					8240				One 25 gram EnCore
AEE07012901-04A	TP-RS-2-5	SO	01/26/07 11:10	1	0	5					8240				One 25 gram EnCore
AEE07012901-05A	TP-RS-3-1	SO	01/26/07 11:15	1	0	5					8240				One 25 gram EnCore
AEE07012901-06A	TP-RS-3-5	SO	01/26/07 11:20	1	0	5					8240				One 25 gram EnCore
AEE07012901-07A	TP-BP-1-1	SO	01/26/07 12:00	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-08A	TP-BP-1-5	SO	01/26/07 12:05	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-09A	TP-BP-2-1	SO	01/26/07 12:10	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-10A	TP-BP-2-5	SO	01/26/07 12:15	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. . Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs.

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Sauvageau	Elizabeth Sauvageau	Alpha Analytical, Inc.	1-29-07 11:04

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail don.swigonski@amec.com

EDD Required : No

Sampled by : Client

Report Attention : Don Swigonski
CC Report :

Job : 6417000720
PO :

Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	29-Jan-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	OTHER	TPH/E_S	TPH/P_S	VOC_S				Sample Remarks
								Requested Tests							
AEE07012901-11A	TP-BP-3-1	SO	01/26/07 12:20	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-12A	TP-BP-3-5	SO	01/26/07 12:25	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-13A	TP-BP-3-10	SO	01/26/07 12:30	4	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-14A	TP-BP-4-1	SO	01/26/07 12:35	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-15A	TP-BP-4-5	SO	01/26/07 12:40	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-16A	TP-BP-5-1	SO	01/26/07 12:45	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-17A	TP-BP-5-5	SO	01/26/07 12:50	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-18A	TP-AST-1-1	SO	01/26/07 13:15	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-19A	TP-AST-1-5	SO	01/26/07 13:20	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-20A	TP-AST-2-1	SO	01/26/07 13:25	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs.

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Sauvageau	Elizabeth Sauvageau	Alpha Analytical, Inc.	1-29-07 11:04

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail don.swigonski@amec.com

EDD Required : No

Sampled by : Client

Report Attention : Don Swigonski
CC Report :

Job : 6417000720
PO :

Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	29-Jan-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests OTHER	TPH/E_S	TPH/P_S	VOC_S				Sample Remarks
AEE07012901-21A	TP-AST-2-5	SO	01/26/07 13:30	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-22A	TP-AST-3-1	SO	01/26/07 13:35	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-23A	TP-AST-3-5	SO	01/26/07 13:40	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-24A	TP-AST-4-1	SO	01/26/07 13:45	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-25A	TP-AST-4-5	SO	01/26/07 13:50	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-26A	TP-AST-5-1	SO	01/26/07 13:55	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-27A	TP-AST-5-5	SO	01/26/07 14:00	3	0	5			TPH/E_N	GAS-N	BTXE_N				Two 4oz jars and one 25 gram EnCore.
AEE07012901-28A	TP-G-1-1	SO	01/26/07 15:15	2	1	5		See Remarks	TPH/E_N	GAS-N	BTXE_N				Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-29A	TP-G-1-5	SO	01/26/07 15:20	2	1	5		See Remarks	TPH/E_N	GAS-N	BTXE_N				Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs.

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Sauvageau	Elizabeth Sauvageau	Alpha Analytical, Inc.	1-29-07 11:04

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

NV

Billing Information :
AMEC
780 Vista Blvd. Suite 100

Sparks, NV 894346656

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : AEE07012901

Report Due By : 5:00 PM On : 05-Feb-07

Client:
AMEC Earth & Environmental
780 Vista Blvd., Suite 100

Sparks, NV 89434-6656

Don Swigonski
TEL : (775) 331-2375 x
FAX : (775) 331-4153
EMail don.swigonski@amec.com

EDD Required : No

Sampled by : Client

Report Attention : Don Swigonski
CC Report :

Job : 6417000720
PO :

Client's COC # : 15148, 15149, 15150

Cooler Temp	Samples Received	Date Printed
4 °C	26-Jan-07	29-Jan-07

QC Level : 4 = Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests: OTHER	TPH/E_S	TPH/P_S	VOC_S				Sample Remarks
AEE07012901-30A	TP-G-2-1	SO	01/26/07 15:30	2	1	5		See Remarks	TPH/E_N	GAS-N	BTXE_N				Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-31A	TP-G-2-5	SO	01/26/07 15:35	2	1	5		See Remarks	TPH/E_N	GAS-N	BTXE_N				Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-32A	TP-G-2-10	SO	01/26/07 15:45	2	1	5		See Remarks	TPH/E_N	GAS-N	BTXE_N				Ethylene glycol subbed to Zalco Labs. Two 4oz jars and one 25 gram EnCore.
AEE07012901-33A	TP-G-3-1	SO	01/26/07 15:45	2	1	5		See Remarks	TPH/E_N	GAS-N	BTXE_N				Ethylene glycol subbed to Zalco Labs. 1 Soil jar labeled TP-3-10 logged in per COC. Two 4oz jars and one 25 gram EnCore.

Comments: Samples brought in by client. Frozen ice. Samples received 1/26/07 kept cold and secure until login on 1/29/07. Encores were kep frozen until login on 1/29/07 Samples received after 4:30 pm cutoff time therefore one day added to TAT. : Level IV QC per Don and Randy. Ethylene glycol subbed to Zalco Labs.

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Sauvageau	Elizabeth Sauvageau	Alpha Analytical, Inc.	1-29-07 11:04

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name: Amec
Address: 790 Vista Blvd
City, State, Zip: Sparks, NV
Phone Number: 331-2335 Fax: 331-4153

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA ___ NV ✓ WA ___
ID ___ OR ___ OTHER ___

Page # 1 of 3

15148

Client Name: Amec
PO #:
Job #: 6417000720
Address:
EMail Address:
City, State, Zip:
Phone #: 331-2335
Fax #: 331-4153
Report Attention: Don S

Required QC Level? I II III IV
EDD / EDF? YES ___ NO ___
Global ID # ___

Analyses Required: 8260 | TPH-GRO | TPH-DRO | BTEX

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	8260	TPH-GRO	TPH-DRO	BTEX				REMARKS
10:45	1.26	SO	AFE0701290 1-01	TP-RS-1-1	5		OT/1	X							
10:50			-02	TP-RS-1-5				X							
11:05			-03	TP-RS-2-1				X							
11:10			-04	TP-RS-2-5				X							
11:15			-05	TP-RS-3-1				X							
11:20	1.26	SO	-06	TP-RS-3-5				X							
12:00			-07	TP-BP-1-1			SO-2 OT-1		X	X	X				
12:05			-08	TP-BP-1-5					X	X	X				
12:10			-09	TP-BP-2-1					X	X	X				
12:15			-10	TP-BP-2-5					X	X	X				
12:20			-11	TP-BP-3-1					X	X	X				
12:25			-12	TP-BP-3-5					X	X	X				
12:30			-13	TP-BP-3-10					X	X	X				

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by: Don Swigonski	Don Swigonski	Amec		16:30
Received by: Justin Pascal	Justin Pascal	Alpha	1/26/07	16:50
Relinquished by				
Received by				
Relinquished by				
Received by				

Alpha Analytical Sample Receipt
Security Seals? YES NO
Frozen Ice? (YES) NO
Temperature 4 °C

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:
Name Amec
Address
City, State, Zip
Phone Number Fax

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA ___ NV ✓ WA ___
ID ___ OR ___ OTHER ___

Page # 2 of 3

15149

Analyses Required: BTEX, ATEX, BTEX

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID #

Client Name
Address
City, State, Zip
PO #
EMail Address
Phone #
Job # 641 7000 7120
Fax #
Report Attention Don S.

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	BTEX	ATEX	BTEX					REMARKS
12:35	1-26	SO	-14	TP-BP-4-1	5		SO-2 OT-1								
12:40			-15	TP-BP-4-5			SO-2 OT-1								
12:45			-16	TP-BP-5-1			SO-2 OT-1								
12:50			-17	TP-BP-5-5			SO-2 OT-1								
13:15			-18	TP-AST-1-1											
13:20			-19	TP-AST-1-5											
13:25			-20	TP-AST-2-1											
13:30			-21	TP-AST-2-5											
13:35			-22	TP-AST-3-1											
13:40			-23	TP-AST-3-5											
13:45			-24	TP-AST-4-1											
13:50			-25	TP-AST-4-5											
13:55			-26	TP-AST-5-1											

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	Don Swingwood	Amec	1-26-07	16:50
Received by	Tasha Pascal	Tasha Pascal	Alpha	1/26/07	16:50
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:
Name Amec
Address
City, State, Zip
Phone Number Fax

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA ___ NV ✓ WA ___
ID ___ OR ___ OTHER ___

Page # 3 of 3

15150

Analyses Required

Client Name	P.O. #	Job # 6417000720
Address	EMail Address	
City, State, Zip	Phone #	Fax #

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID #

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	Arsenic	Hg-D	Hg-T	Mn-T				REMARKS
5 00	1-25	SO	-27	TP AST-5-5			SO-2 OT-2	X	X	X					
5 15			-28	TP-G-1-1				X	X	X	X				
5 20			-29	TP-G-1-5				X	X	X	X				
5 30			-30	TP-G-2-1				X	X	X	X				
5 35			-31	TP-G-2-5				X	X	X	X				
5 45			-32	TP-G-2-10				X	X	X	X				
~~5 50~~				~~TP-G-3-5~~											dh
			-33	TP-G-3-1				X	X	X	X				
1200			-34	Field Blank				X	X	X	X				

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	Don Swingomb	Amec	1-26-07	16:55
Received by	[signature]	Tasha Pascal	Alpha	1/26/07	16:50
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

C701322

Alpha Analytical, Inc.
255 Glendale Avenue
Suite 21
Sparks, Nevada 89431-5778
Phone: (775) 355-1044
Fax: (775) 355-0406

SUB CHAIN-OF-CUSTODY RECORD

Work Order : AEE07012901

*Please reference the Work Order number on all reports and invoices.
*Also please include the dates of analysis and detection limits.
Please send the report to Alpha Analytical (Sparks).
Attention To Reyna Vallejo (reyna@alpha-analytical.com).

Report Due By : 5:00 PM
On : 12-Feb-07

Subcontractor:
Zalco Laboratories Inc.
4390 Armour Ave.
Suite 21
Bakersfield, Ca. 93308

TEL: (661) 395-0539
FAX: (661) 395-3069
Acct #:

EDD Required:
No

Required QC:
Final Rpt, MBLK, LCS, MS/MSD, InitCal/ConCal data

29-Jan-07

Alpha's Sample ID	Client's Sample ID	Matrix	Collection Date	Type (#) of Bottles Preserved	Other	Requested Tests x	Sample Comments
AEE07012901-28A	TP-G-1-1	Soil	01/26/07 15:15		4OZG-U (1)	Special requirements or analytes	Ethylene glycol subbed to Zalco Labs.
AEE07012901-29A	TP-G-1-5	Soil	01/26/07 15:20		4OZG-U (1)	Special requirements or analytes	Ethylene glycol subbed to Zalco Labs.
AEE07012901-30A	TP-G-2-1	Soil	01/26/07 15:30		4OZG-U (1)	Special requirements or analytes	Ethylene glycol subbed to Zalco Labs.
AEE07012901-31A	TP-G-2-5	Soil	01/26/07 15:35		4OZG-U (1)	Special requirements or analytes	Ethylene glycol subbed to Zalco Labs.
AEE07012901-32A	TP-G-2-10	Soil	01/26/07 15:45		4OZG-U (1)	Special requirements or analytes	Ethylene glycol subbed to Zalco Labs.
AEE07012901-33A	TP-G-3-1	Soil	01/26/07 15:45		4OZG-U (1)	Special requirements or analytes	Ethylene glycol subbed to Zalco Labs.
AEE07012901-34A	Field Blank	Soil	01/26/07 12:00		250MLAG-U (1)	Special requirements or analytes	Ethylene glycol subbed to Zalco Labs.

Comments: Level IV Data Validation Packet required. Please submit packet to Alpha Analytical.

	Date/Time		Date/Time
Relinquished by: Elizabeth Sauvageau	1-29-07 1533	Received by:	1/30/7 10:15
Relinquished by:		Received by:	

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6417000720

Attn: Don Swigonski
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07012901-01A
Client I.D. Number: TP-RS-1-1

Sampled: 01/26/07
Received: 01/26/07
Analyzed: 01/30/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

2/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6417000720

Attn: Don Swigonski
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07012901-02A
Client I.D. Number: TP-RS-1-5

Sampled: 01/26/07
Received: 01/26/07
Analyzed: 01/30/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV 16.

2/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6417000720

Attn: Don Swigonski
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07012901-03A
Client I.D. Number: TP-RS-2-1

Sampled: 01/26/07
Received: 01/26/07
Analyzed: 01/30/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

2/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6417000720

Attn: Don Swigonski
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07012901-04A
Client I.D. Number: TP-RS-2-5

Sampled: 01/26/07
Received: 01/26/07
Analyzed: 01/30/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV14

2/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6417000720

Attn: Don Swigonski
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07012901-05A
Client I.D. Number: TP-RS-3-1

Sampled: 01/26/07
Received: 01/26/07
Analyzed: 01/30/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

2/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6417000720

Attn: Don Swigonski
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07012901-06A
Client I.D. Number: TP-RS-3-5

Sampled: 01/26/07
Received: 01/26/07
Analyzed: 01/30/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit		Compound	Concentration	Reporting Limit
1	Chloromethane	ND	80 µg/Kg	26	Ethylbenzene	ND	20 µg/Kg
2	Vinyl chloride	ND	20 µg/Kg	27	m,p-Xylene	ND	20 µg/Kg
3	Chloroethane	ND	20 µg/Kg	28	Bromoform	ND	20 µg/Kg
4	Bromomethane	ND	80 µg/Kg	29	o-Xylene	ND	20 µg/Kg
5	Trichlorofluoromethane	ND	20 µg/Kg	30	1,1,2,2-Tetrachloroethane	ND	20 µg/Kg
6	1,1-Dichloroethene	ND	20 µg/Kg	31	1,3-Dichlorobenzene	ND	20 µg/Kg
7	Dichloromethane	ND	80 µg/Kg	32	1,4-Dichlorobenzene	ND	20 µg/Kg
8	trans-1,2-Dichloroethene	ND	20 µg/Kg	33	1,2-Dichlorobenzene	ND	20 µg/Kg
9	1,1-Dichloroethane	ND	20 µg/Kg				
10	cis-1,2-Dichloroethene	ND	20 µg/Kg				
11	Chloroform	ND	20 µg/Kg				
12	1,2-Dichloroethane	ND	20 µg/Kg				
13	1,1,1-Trichloroethane	ND	20 µg/Kg				
14	Carbon tetrachloride	ND	20 µg/Kg				
15	Benzene	ND	20 µg/Kg				
16	1,2-Dichloropropane	ND	20 µg/Kg				
17	Trichloroethene	ND	20 µg/Kg				
18	Bromodichloromethane	ND	20 µg/Kg				
19	cis-1,3-Dichloropropene	ND	20 µg/Kg				
20	trans-1,3-Dichloropropene	ND	20 µg/Kg				
21	1,1,2-Trichloroethane	ND	20 µg/Kg				
22	Toluene	ND	20 µg/Kg				
23	Dibromochloromethane	ND	20 µg/Kg				
24	Tetrachloroethene	ND	20 µg/Kg				
25	Chlorobenzene	ND	20 µg/Kg				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

2/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656
Job#: 6417000720

Attn: Don Swigonski
Phone: (775) 331-2375
Fax: (775) 331-4153

Alpha Analytical Number: AEE07012901-34A
Client I.D. Number: Field Blank

Sampled: 01/26/07
Received: 01/26/07
Analyzed: 02/01/07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit
1	Chloromethane	ND	2.0 µg/L
2	Vinyl chloride	ND	1.0 µg/L
3	Chloroethane	ND	1.0 µg/L
4	Bromomethane	ND	2.0 µg/L
5	Trichlorofluoromethane	ND	1.0 µg/L
6	1,1-Dichloroethene	ND	1.0 µg/L
7	Dichloromethane	ND	2.0 µg/L
8	trans-1,2-Dichloroethene	ND	1.0 µg/L
9	1,1-Dichloroethane	ND	1.0 µg/L
10	cis-1,2-Dichloroethene	ND	1.0 µg/L
11	Chloroform	ND	1.0 µg/L
12	1,2-Dichloroethane	ND	1.0 µg/L
13	1,1,1-Trichloroethane	ND	1.0 µg/L
14	Carbon tetrachloride	ND	1.0 µg/L
15	Benzene	ND	1.0 µg/L
16	1,2-Dichloropropane	ND	1.0 µg/L
17	Trichloroethene	ND	1.0 µg/L
18	Bromodichloromethane	ND	1.0 µg/L
19	cis-1,3-Dichloropropene	ND	1.0 µg/L
20	trans-1,3-Dichloropropene	ND	1.0 µg/L
21	1,1,2-Trichloroethane	ND	1.0 µg/L
22	Toluene	ND	1.0 µg/L
23	Dibromochloromethane	ND	1.0 µg/L
24	Tetrachloroethene	ND	1.0 µg/L
25	Chlorobenzene	ND	1.0 µg/L
26	Ethylbenzene	ND	1.0 µg/L
27	m,p-Xylene	ND	1.0 µg/L
28	Bromoform	ND	1.0 µg/L
29	o-Xylene	ND	1.0 µg/L
30	1,1,2,2-Tetrachloroethane	ND	1.0 µg/L
31	1,3-Dichlorobenzene	ND	1.0 µg/L
32	1,4-Dichlorobenzene	ND	1.0 µg/L
33	1,2-Dichlorobenzene	ND	1.0 µg/L

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-0089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported - certification #NV16

2/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 894346656

Attn: Don Swigonski
Phone: (775) 331-2375
Fax: (775) 331-4153
Date Received 01/26/07

Job#: 6417000720

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration		Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**TP-BP-1-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-07A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	42	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-BP-1-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-08A	TPH-E (DRO)	37	L	10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	350	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-BP-2-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-09A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	15	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-BP-2-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-10A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Client ID :	**TP-BP-3-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-11A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-BP-3-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-12A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-BP-3-10**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-13A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	11	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-BP-4-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-14A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	53	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-BP-4-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-15A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	ND		10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-BP-5-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-16A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	11	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Client ID :	**TP-BP-5-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-17A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	36	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/30/07
		Benzene	ND		20 µg/Kg	01/26/07	01/30/07
		Toluene	ND		20 µg/Kg	01/26/07	01/30/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/30/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/30/07
Client ID :	**TP-AST-1-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-18A	TPH-E (DRO)	10	L	10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	110	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-AST-1-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-19A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	45	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-AST-2-1**	TPH-E (JFRO)	ND		100 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-20A	TPH-E (DRO)	460	L	100 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	4,800	G	100 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-AST-2-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-21A	TPH-E (DRO)	42	L	10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	550	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-AST-3-1**	TPH-E (JFRO)	ND		50 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-22A	TPH-E (DRO)	130	L	50 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	2,100	G	50 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND	O	40 µg/Kg	01/26/07	01/31/07
		Toluene	ND	O	40 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND	O	40 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND	O	40 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND	O	40 µg/Kg	01/26/07	01/31/07

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Client ID :	**TP-AST-3-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-23A	TPH-E (DRO)	32	L	10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	400	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-AST-4-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-24A	TPH-E (DRO)	31		10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	53	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-AST-4-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-25A	TPH-E (DRO)	28		10 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	28	G	10 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-AST-5-1**	TPH-E (JFRO)	ND		100 mg/Kg	01/26/07	01/30/07
Lab ID :	AEE07012901-26A	TPH-E (DRO)	590	L	100 mg/Kg	01/26/07	01/30/07
		TPH-E (ORO)	6,000	G	100 mg/Kg	01/26/07	01/30/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND	O	40 µg/Kg	01/26/07	01/31/07
		Toluene	ND	O	40 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND	O	40 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND	O	40 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND	O	40 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-AST-5-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID	AEE07012901-27A	TPH-E (DRO)	ND		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	120	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-G-1-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-28A	TPH-E (DRO)	41	L	10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	330	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Client ID :	**TP-G-1-5**	TPH-E (JFRO)	ND		100 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-29A	TPH-E (DRO)	240	L	100 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	4,100	G	100 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-G-2-1**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-30A	TPH-E (DRO)	260		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	190	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-G-2-5**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-31A	TPH-E (DRO)	83		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	69	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-G-2-10**	TPH-E (JFRO)	ND		10 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-32A	TPH-E (DRO)	200		10 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	220	G	10 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**TP-G-3-1**	TPH-E (JFRO)	ND		100 mg/Kg	01/26/07	01/29/07
Lab ID :	AEE07012901-33A	TPH-E (DRO)	370	L	100 mg/Kg	01/26/07	01/29/07
		TPH-E (ORO)	4,300	G	100 mg/Kg	01/26/07	01/29/07
		TPH-P (GRO)	ND		10 mg/Kg	01/26/07	01/31/07
		Benzene	ND		20 µg/Kg	01/26/07	01/31/07
		Toluene	ND		20 µg/Kg	01/26/07	01/31/07
		Ethylbenzene	ND		20 µg/Kg	01/26/07	01/31/07
		m,p-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
		o-Xylene	ND		20 µg/Kg	01/26/07	01/31/07
Client ID :	**Field Blank**	TPH-E (JFRO)	ND		0.50 mg/L	01/26/07	01/31/07
Lab ID :	AEE07012901-34A	TPH-E (DRO)	ND		0.50 mg/L	01/26/07	01/31/07
		TPH-E (ORO)	ND		0.50 mg/L	01/26/07	01/31/07
		TPH-P (GRO)	ND		0.50 mg/L	01/26/07	02/01/07

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Diesel Range Organics (DRO) C13-C22

G = ORO compounds have varying amounts of recovery.

Gasoline Range Organics (GRO) C4-C13

Jet Fuel Range Organics (JFRO) C9-C22. JFRO determination is based on its chromatographic fingerprint.

I = DRO concentration may include contributions from heavier-end hydrocarbons (e.g. motor oil) that elute in the DRO range.

O = Reporting Limits were increased due to sample foaming.

Oil Range Organics (ORO) C22-C40+

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Alpha Analytical, Inc. currently holds appropriate and available NDEP certifications for the data reported • certification #NV16.

2/2/07
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16720** Analysis Date: **01/29/2007 18:14**

Sample ID: **MBLK-16720** Units : **mg/Kg** Run ID: **FID_2_070129A** Prep Date: **01/29/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (JFRO)	ND	10								
TPH-E (DRO)	ND	10								
TPH-E (ORO)	ND	10								
Surr: Nonane	107		100		107	44	159			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16720** Analysis Date: **01/29/2007 18:45**

Sample ID: **LCS-16720** Units : **mg/Kg** Run ID: **FID_2_070129A** Prep Date: **01/29/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	88.5	10	100		88	70	130			
Surr: Nonane	116		100		116	44	159			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16720** Analysis Date: **01/29/2007 19:48**

Sample ID: **07012901-27AMS** Units : **mg/Kg** Run ID: **FID_2_070129A** Prep Date: **01/29/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	98.1	10	100	0	98	37	164			
Surr: Nonane	116		100		116	44	159			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16720** Analysis Date: **01/29/2007 20:19**

Sample ID: **07012901-27AMSD** Units : **mg/Kg** Run ID: **FID_2_070129A** Prep Date: **01/29/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	103	10	100	0	103	37	164	98.1	4.5(20)	
Surr: Nonane	120		100		120	44	159			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16718** Analysis Date: **01/29/2007 16:20**

Sample ID: **MBLK-16718** Units : **mg/Kg** Run ID: **FID_4_070129A** Prep Date: **01/29/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (JFRO)	ND	10								
TPH-E (DRO)	ND	10								
TPH-E (ORO)	ND	10								
Surr: Nonane	88.2		100		88	44	159			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16718** Analysis Date: **01/29/2007 16:54**

Sample ID: **LCS-16718** Units : **mg/Kg** Run ID: **FID_4_070129A** Prep Date: **01/29/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	94	10	100		94	70	130			
Surr: Nonane	89.2		100		89	44	159			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16718** Analysis Date: **01/29/2007 18:02**

Sample ID: **07012901-07AMS** Units : **mg/Kg** Run ID: **FID_4_070129A** Prep Date: **01/29/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	96.5	10	100	0	96	37	164			
Surr: Nonane	91.4		100		91	44	159			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16718** Analysis Date: **01/29/2007 18:36**

Sample ID: **07012901-07AMSD** Units : **mg/Kg** Run ID: **FID_4_070129A** Prep Date: **01/29/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	98.9	10	100	0	99	37	164	96.46	2.5(20)	
Surr: Nonane	92.4		100		92	44	159			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16727** Analysis Date: **01/30/2007 15:35**

Sample ID: **MBLK-16727** Units : **mg/L** Run ID: **FID_2_070130A** Prep Date: **01/30/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (JFRO)	ND	0.5								
TPH-E (DRO)	ND	0.5								
TPH-E (ORO)	ND	0.5								
Surr: Nonane	106		100		106	46	148			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16727** Analysis Date: **01/30/2007 15:03**

Sample ID: **LCS-16727** Units : **mg/L** Run ID: **FID_2_070130A** Prep Date: **01/30/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.25	0.5	2.5		90	65	130			
Surr: Nonane	99.6		100		99.6	46	148			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16727** Analysis Date: **01/31/2007 01:01**

Sample ID: **07012654-06AMS** Units : **mg/L** Run ID: **FID_2_070130A** Prep Date: **01/30/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.5	0.5	2.5	0.1016	96	37	164			
Surr: Nonane	111		100		111	46	148			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015**

File ID: Batch ID: **16727** Analysis Date: **01/31/2007 01:32**

Sample ID: **07012654-06AMSD** Units : **mg/L** Run ID: **FID_2_070130A** Prep Date: **01/30/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-E (DRO)	2.35	0.5	2.5	0.1016	90	37	164	2.503	6.2(20)	
Surr: Nonane	110		100		110	46	148			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type MBLK Test Code: EPA Method SW8015B
File ID: 07013008.D Batch ID: MS15S6717B Analysis Date: 01/30/2007 10:59
Sample ID: MBLK MS15S6717B Units : mg/Kg Run ID: MSD_15_070130A Prep Date: 01/30/2007

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	0.195		0.2		97	69	126			
Surr: Toluene-d8	0.205		0.2		103	80	120			
Surr: 4-Bromofluorobenzene	0.194		0.2		97	80	120			

Laboratory Control Spike

Type LCS Test Code: EPA Method SW8015B
File ID: 07013006.D Batch ID: MS15S6717B Analysis Date: 01/30/2007 10:14
Sample ID: GLCS MS15S6717B Units : mg/Kg Run ID: MSD_15_070130A Prep Date: 01/30/2007

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	19.8	2	16		124	58	141			
Surr: 1,2-Dichloroethane-d4	0.382		0.4		96	69	126			
Surr: Toluene-d8	0.406		0.4		102	80	120			
Surr: 4-Bromofluorobenzene	0.41		0.4		102	80	120			

Sample Matrix Spike

Type MS Test Code: EPA Method SW8015B
File ID: 07013011.D Batch ID: MS15S6717B Analysis Date: 01/30/2007 12:07
Sample ID: 07012901-08AGS Units : mg/Kg Run ID: MSD_15_070130A Prep Date: 01/30/2007

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	19.2	2	16	0	120	46	142			
Surr: 1,2-Dichloroethane-d4	0.398		0.4		100	69	126			
Surr: Toluene-d8	0.411		0.4		103	80	120			
Surr: 4-Bromofluorobenzene	0.423		0.4		106	80	120			

Sample Matrix Spike Duplicate

Type MSD Test Code: EPA Method SW8015B
File ID: 07013012.D Batch ID: MS15S6717B Analysis Date: 01/30/2007 12:29
Sample ID: 07012901-08AGSD Units : mg/Kg Run ID: MSD_15_070130A Prep Date: 01/30/2007

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17.4	2	16	0	108	46	142	19.24	10.3(20)	
Surr: 1,2-Dichloroethane-d4	0.4		0.4		99.9	69	126			
Surr: Toluene-d8	0.413		0.4		103	80	120			
Surr: 4-Bromofluorobenzene	0.424		0.4		106	80	120			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **07013008.D** Batch ID: **MS15S6717A** Analysis Date: **01/30/2007 10:59**

Sample ID: **MBLK MS15S6717A** Units : **µg/Kg** Run ID: **MSD_15_070130A** Prep Date: **01/30/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	40								
Vinyl chloride	ND	20								
Chloroethane	ND	20								
Bromomethane	ND	40								
Trichlorofluoromethane	ND	20								
1,1-Dichloroethene	ND	20								
Dichloromethane	ND	40								
trans-1,2-Dichloroethene	ND	20								
1,1-Dichloroethane	ND	20								
cis-1,2-Dichloroethene	ND	20								
Chloroform	ND	20								
1,2-Dichloroethane	ND	20								
1,1,1-Trichloroethane	ND	20								
Carbon tetrachloride	ND	20								
Benzene	ND	20								
1,2-Dichloropropane	ND	20								
Trichloroethene	ND	20								
Bromodichloromethane	ND	20								
cis-1,3-Dichloropropene	ND	20								
trans-1,3-Dichloropropene	ND	20								
1,1,2-Trichloroethane	ND	20								
Toluene	ND	20								
Dibromochloromethane	ND	20								
Tetrachloroethene	ND	20								
Chlorobenzene	ND	20								
Ethylbenzene	ND	20								
m,p-Xylene	ND	20								
Bromoform	ND	20								
o-Xylene	ND	20								
1,1,2,2-Tetrachloroethane	ND	20								
1,3-Dichlorobenzene	ND	20								
1,4-Dichlorobenzene	ND	20								
1,2-Dichlorobenzene	ND	20								
Surr: 1,2-Dichloroethane-d4	195		200		97	69	126			
Surr: Toluene-d8	205		200		103	80	120			
Surr: 4-Bromofluorobenzene	194		200		97	80	120			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **07013005.D** Batch ID: **MS15S6717A** Analysis Date: **01/30/2007 09:52**

Sample ID: **LCS MS15S6717A** Units : **µg/Kg** Run ID: **MSD_15_070130A** Prep Date: **01/30/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Benzene	482	10	400		120	70	140			
Toluene	460	10	400		115	70	130			
Ethylbenzene	465	10	400		116	70	130			
m,p-Xylene	511	10	400		128	70	133			
o-Xylene	524	10	400		131	70	135			
Surr: 1,2-Dichloroethane-d4	337		400		84	69	126			
Surr: Toluene-d8	392		400		98	80	120			
Surr: 4-Bromofluorobenzene	414		400		104	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **07013009.D** Batch ID: **MS15S6717A** Analysis Date: **01/30/2007 11:22**

Sample ID: **07012901-08AMS** Units : **µg/Kg** Run ID: **MSD_15_070130A** Prep Date: **01/30/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Benzene	556	10	400	0	139	57	140			
Toluene	543	10	400	0	136	60	130			M1
Ethylbenzene	537	10	400	0	134	63	134			
m,p-Xylene	573	10	400	0	143	64	136			M1
o-Xylene	585	10	400	0	146	62	138			M1
Surr: 1,2-Dichloroethane-d4	344		400		86	69	126			
Surr: Toluene-d8	405		400		101	80	120			
Surr: 4-Bromofluorobenzene	428		400		107	80	120			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **07013010.D** Batch ID: **MS15S6717A** Analysis Date: **01/30/2007 11:44**

Sample ID: **07012901-08AMSD** Units : **µg/Kg** Run ID: **MSD_15_070130A** Prep Date: **01/30/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Benzene	465	10	400	0	116	57	140	556.1	17.7(20)	
Toluene	444	10	400	0	111	60	130	543.2	20.0(20)	
Ethylbenzene	431	10	400	0	108	63	134	536.7	21.8(20)	R5
m,p-Xylene	461	10	400	0	115	64	136	573	21.8(20)	R58
o-Xylene	483	10	400	0	121	62	138	584.8	19.0(20)	
Surr: 1,2-Dichloroethane-d4	360		400		90	69	126			
Surr: Toluene-d8	405		400		101	80	120			
Surr: 4-Bromofluorobenzene	424		400		106	80	120			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

R5 = MS/MSD RPD exceed the laboratory control limit. Recovery met acceptance criteria.

R58 = MS/MSD RPD exceeded the laboratory control limit.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B**

File ID: **07013109.D** Batch ID: **MS15S6719B** Analysis Date: **01/31/2007 11:25**

Sample ID: **MBLK MS15S6719B** Units : **mg/Kg** Run ID: **MSD_15_070131A** Prep Date: **01/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	10								
Surr: 1,2-Dichloroethane-d4	0.209		0.2		105	69	126			
Surr: Toluene-d8	0.203		0.2		101	80	120			
Surr: 4-Bromofluorobenzene	0.193		0.2		97	80	120			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B**

File ID: **07013107.D** Batch ID: **MS15S6719B** Analysis Date: **01/31/2007 10:40**

Sample ID: **GLCS MS15S6719B** Units : **mg/Kg** Run ID: **MSD_15_070131A** Prep Date: **01/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	19	2	16		119	58	141			
Surr: 1,2-Dichloroethane-d4	0.391		0.4		98	69	126			
Surr: Toluene-d8	0.403		0.4		101	80	120			
Surr: 4-Bromofluorobenzene	0.405		0.4		101	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B**

File ID: **07013112.D** Batch ID: **MS15S6719B** Analysis Date: **01/31/2007 12:33**

Sample ID: **07012901-21AGS** Units : **mg/Kg** Run ID: **MSD_15_070131A** Prep Date: **01/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	17.2	2	16	0	107	46	142			
Surr: 1,2-Dichloroethane-d4	0.388		0.4		97	69	126			
Surr: Toluene-d8	0.409		0.4		102	80	120			
Surr: 4-Bromofluorobenzene	0.415		0.4		104	80	120			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B**

File ID: **07013113.D** Batch ID: **MS15S6719B** Analysis Date: **01/31/2007 12:55**

Sample ID: **07012901-21AGSD** Units : **mg/Kg** Run ID: **MSD_15_070131A** Prep Date: **01/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	18	2	16	0	112	46	142	17.16	4.6(20)	
Surr: 1,2-Dichloroethane-d4	0.39		0.4		98	69	126			
Surr: Toluene-d8	0.4		0.4		100	80	120			
Surr: 4-Bromofluorobenzene	0.399		0.4		99.7	80	120			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **07013109.D** Batch ID: **MS15S6719A** Analysis Date: **01/31/2007 11:25**

Sample ID: **MBLK MS15S6719A** Units : **µg/Kg** Run ID: **MSD_15_070131A** Prep Date: **01/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	40								
Vinyl chloride	ND	20								
Chloroethane	ND	20								
Bromomethane	ND	40								
Trichlorofluoromethane	ND	20								
1,1-Dichloroethene	ND	20								
Dichloromethane	ND	40								
trans-1,2-Dichloroethene	ND	20								
1,1-Dichloroethane	ND	20								
cis-1,2-Dichloroethene	ND	20								
Chloroform	ND	20								
1,2-Dichloroethane	ND	20								
1,1,1-Trichloroethane	ND	20								
Carbon tetrachloride	ND	20								
Benzene	ND	20								
1,2-Dichloropropane	ND	20								
Trichloroethene	ND	20								
Bromodichloromethane	ND	20								
cis-1,3-Dichloropropene	ND	20								
trans-1,3-Dichloropropene	ND	20								
1,1,2-Trichloroethane	ND	20								
Toluene	ND	20								
Dibromochloromethane	ND	20								
Tetrachloroethene	ND	20								
Chlorobenzene	ND	20								
Ethylbenzene	ND	20								
m,p-Xylene	ND	20								
Bromoform	ND	20								
o-Xylene	ND	20								
1,1,2,2-Tetrachloroethane	ND	20								
1,3-Dichlorobenzene	ND	20								
1,4-Dichlorobenzene	ND	20								
1,2-Dichlorobenzene	ND	20								
Surr: 1,2-Dichloroethane-d4	209		200		105	69	126			
Surr: Toluene-d8	203		200		101	80	120			
Surr: 4-Bromofluorobenzene	193		200		97	80	120			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **07013106.D** Batch ID: **MS15S6719A** Analysis Date: **01/31/2007 10:18**

Sample ID: **LCS MS15S6719A** Units : **µg/Kg** Run ID: **MSD_15_070131A** Prep Date: **01/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Benzene	484	10	400		121	70	140			
Toluene	464	10	400		116	70	130			
Ethylbenzene	466	10	400		116	70	130			
m,p-Xylene	502	10	400		125	70	133			
o-Xylene	521	10	400		130	70	135			
Surr: 1,2-Dichloroethane-d4	348		400		87	69	126			
Surr: Toluene-d8	397		400		99	80	120			
Surr: 4-Bromofluorobenzene	420		400		105	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **07013110.D** Batch ID: **MS15S6719A** Analysis Date: **01/31/2007 11:48**

Sample ID: **07012901-21AMS** Units : **µg/Kg** Run ID: **MSD_15_070131A** Prep Date: **01/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Benzene	467	10	400	0	117	57	140			
Toluene	448	10	400	0	112	60	130			
Ethylbenzene	447	10	400	0	112	63	134			
m,p-Xylene	481	10	400	0	120	64	136			
o-Xylene	498	10	400	0	124	62	138			
Surr: 1,2-Dichloroethane-d4	348		400		87	69	126			
Surr: Toluene-d8	399		400		99.9	80	120			
Surr: 4-Bromofluorobenzene	423		400		106	80	120			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **07013111.D** Batch ID: **MS15S6719A** Analysis Date: **01/31/2007 12:10**

Sample ID: **07012901-21AMSD** Units : **µg/Kg** Run ID: **MSD_15_070131A** Prep Date: **01/31/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Benzene	458	10	400	0	115	57	140	466.8	1.9(20)	
Toluene	445	10	400	0	111	60	130	448.3	0.8(20)	
Ethylbenzene	449	10	400	0	112	63	134	447.3	0.4(20)	
m,p-Xylene	485	10	400	0	121	64	136	481	0.8(20)	
o-Xylene	504	10	400	0	126	62	138	498	1.1(20)	
Surr: 1,2-Dichloroethane-d4	339		400		85	69	126			
Surr: Toluene-d8	395		400		99	80	120			
Surr: 4-Bromofluorobenzene	413		400		103	80	120			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B**

File ID: **07020105.D** Batch ID: **MS15W0201B** Analysis Date: **02/01/2007 09:07**

Sample ID: **MBLK MS15W0201B** Units : **mg/L** Run ID: **MSD_15_070201B** Prep Date: **02/01/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	0.5								
Surr: 1,2-Dichloroethane-d4	0.0104		0.01		104	75	128			
Surr: Toluene-d8	0.0101		0.01		101	80	120			
Surr: 4-Bromofluorobenzene	0.00976		0.01		98	80	120			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B**

File ID: **07020103.D** Batch ID: **MS15W0201B** Analysis Date: **02/01/2007 08:14**

Sample ID: **GLCS MS15W0201B** Units : **mg/L** Run ID: **MSD_15_070201B** Prep Date: **02/01/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	0.42	0.05	0.4		105	70	130			
Surr: 1,2-Dichloroethane-d4	0.0104		0.01		104	75	128			
Surr: Toluene-d8	0.0101		0.01		101	80	120			
Surr: 4-Bromofluorobenzene	0.0102		0.01		102	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B**

File ID: **07020108.D** Batch ID: **MS15W0201B** Analysis Date: **02/01/2007 10:15**

Sample ID: **07013101-01AGS** Units : **mg/L** Run ID: **MSD_15_070201B** Prep Date: **02/01/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.2	0.25	2	0	110	60	131			
Surr: 1,2-Dichloroethane-d4	0.0518		0.05		104	75	128			
Surr: Toluene-d8	0.0502		0.05		100	80	120			
Surr: 4-Bromofluorobenzene	0.0513		0.05		103	80	120			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B**

File ID: **07020109.D** Batch ID: **MS15W0201B** Analysis Date: **02/01/2007 10:37**

Sample ID: **07013101-01AGSD** Units : **mg/L** Run ID: **MSD_15_070201B** Prep Date: **02/01/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2.23	0.25	2	0	111	60	131	2.205	0.9(20)	
Surr: 1,2-Dichloroethane-d4	0.0518		0.05		104	75	128			
Surr: Toluene-d8	0.0494		0.05		99	80	120			
Surr: 4-Bromofluorobenzene	0.052		0.05		104	80	120			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **07020105.D** Batch ID: **MS15W0201A** Analysis Date: **02/01/2007 09:07**

Sample ID: **MBLK MS15W0201A** Units : **µg/L** Run ID: **MSD_15_070201B** Prep Date: **02/01/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloromethane	ND	2								
Vinyl chloride	ND	1								
Chloroethane	ND	1								
Bromomethane	ND	2								
Trichlorofluoromethane	ND	1								
1,1-Dichloroethene	ND	1								
Dichloromethane	ND	2								
trans-1,2-Dichloroethene	ND	1								
1,1-Dichloroethane	ND	1								
cis-1,2-Dichloroethene	ND	1								
Chloroform	ND	1								
1,2-Dichloroethane	ND	1								
1,1,1-Trichloroethane	ND	1								
Carbon tetrachloride	ND	1								
Benzene	ND	1								
1,2-Dichloropropane	ND	1								
Trichloroethene	ND	1								
Bromodichloromethane	ND	1								
cis-1,3-Dichloropropene	ND	1								
trans-1,3-Dichloropropene	ND	1								
1,1,2-Trichloroethane	ND	1								
Toluene	ND	1								
Dibromochloromethane	ND	1								
Tetrachloroethene	ND	1								
Chlorobenzene	ND	1								
Ethylbenzene	ND	1								
m,p-Xylene	ND	1								
Bromoform	ND	1								
o-Xylene	ND	1								
1,1,2,2-Tetrachloroethane	ND	1								
1,3-Dichlorobenzene	ND	1								
1,4-Dichlorobenzene	ND	1								
1,2-Dichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	10.4		10		104	75	128			
Surr: Toluene-d8	10.1		10		101	80	120			
Surr: 4-Bromofluorobenzene	9.76		10		98	80	120			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **07020102.D** Batch ID: **MS15W0201A** Analysis Date: **02/01/2007 07:51**

Sample ID: **LCS MS15W0201A** Units : **µg/L** Run ID: **MSD_15_070201B** Prep Date: **02/01/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	9.67	1	10		97	80	120			
Benzene	11.4	0.5	10		114	70	130			
Trichloroethene	9.51	1	10		95	70	130			
Toluene	10.8	0.5	10		108	80	120			
Chlorobenzene	10.1	1	10		101	70	130			
Ethylbenzene	11	0.5	10		110	80	120			
m,p-Xylene	11.6	0.5	10		116	70	130			
o-Xylene	12.1	0.5	10		121	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10		96	75	128			
Surr: Toluene-d8	9.84		10		98	80	120			
Surr: 4-Bromofluorobenzene	10.2		10		102	80	120			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 07-Feb-07

QC Summary Report

Work Order: 07012901

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **07020106.D** Batch ID: **MS15W0201A** Analysis Date: **02/01/2007 09:30**

Sample ID: **07013101-01AMS** Units : **µg/L** Run ID: **MSD_15_070201B** Prep Date: **02/01/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	49.3	2.5	50	0	99	66	132			
Benzene	55.7	1.3	50	0	111	70	130			
Trichloroethene	46.2	2.5	50	0	92	69	130			
Toluene	51.5	1.3	50	0	103	67	130			
Chlorobenzene	48.9	2.5	50	0	98	70	130			
Ethylbenzene	52.7	1.3	50	0	105	70	130			
m,p-Xylene	55.4	1.3	50	0	111	69	130			
o-Xylene	58.1	1.3	50	0	116	70	130			
Surr: 1,2-Dichloroethane-d4	47.8		50		96	75	128			
Surr: Toluene-d8	48.7		50		97	80	120			
Surr: 4-Bromofluorobenzene	51.3		50		103	80	120			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **07020107.D** Batch ID: **MS15W0201A** Analysis Date: **02/01/2007 09:52**

Sample ID: **07013101-01AMSD** Units : **µg/L** Run ID: **MSD_15_070201B** Prep Date: **02/01/2007**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
1,1-Dichloroethene	49.2	2.5	50	0	98	66	132	49.26	0.2(20)	
Benzene	56	1.3	50	0	112	70	130	55.67	0.5(20)	
Trichloroethene	46.3	2.5	50	0	93	69	130	46.22	0.1(20)	
Toluene	52.1	1.3	50	0	104	67	130	51.53	1.1(20)	
Chlorobenzene	49.2	2.5	50	0	98	70	130	48.88	0.6(20)	
Ethylbenzene	53.1	1.3	50	0	106	70	130	52.72	0.6(20)	
m,p-Xylene	55.5	1.3	50	0	111	69	130	55.35	0.2(20)	
o-Xylene	58.1	1.3	50	0	116	70	130	58.11	0.1(20)	
Surr: 1,2-Dichloroethane-d4	48.4		50		97	75	128			
Surr: Toluene-d8	48.6		50		97	80	120			
Surr: 4-Bromofluorobenzene	51		50		102	80	120			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

ZALCO LABORATORIES, INC.
Analytical & Consulting Services

4309 Armour Avenue
Bakersfield, California 93308

(661) 395-0539
FAX (661) 395-3069

Thursday, February 08, 2007

Reyna Vallejo
Alpha Analytical, Inc.
255 Glendale Ave.
Sparks, NV 89431

TEL: (775) 355-1044
FAX

RE:

Order No.: 0701322

Dear Reyna Vallejo:

Zalco Laboratories, Inc. received 7 sample(s) on 1/30/2007 for the analyses presented in the following report.

We appreciate your business and look forward to serving you in the future. Please feel free to call our office if you have any questions regarding these test results.

Sincerely,

Zalco Laboratories, Inc.
(661) 395-0539

This report is furnished for the exclusive use of our Customer and applies only to the samples tested. Zalco is not responsible for report alteration or detachment.

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-001A
Client Sample ID:	AEE07012901-28A	**Collection Date:**	1/26/2007 3:15:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-002A
Client Sample ID:	AEE07012901-29A	**Collection Date:**	1/26/2007 3:20:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-003A
Client Sample ID:	AEE07012901-30A	**Collection Date:**	1/26/2007 3:30:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-004A
Client Sample ID:	AEE07012901-31A	**Collection Date:**	1/26/2007 3:35:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-005A
Client Sample ID:	AEE07012901-32A	**Collection Date:**	1/26/2007 3:45:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-006A
Client Sample ID:	AEE07012901-33A	**Collection Date:**	1/26/2007 3:45:00 PM
Report Comment:		**Matrix:**	SOIL

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/Kg	15	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

ZALCO LABORATORIES, INC.
Analytical and Consulting Services
4309 Armour Avenue
Bakersfield, California 93308
(661) 395-0539
FAX (661) 395-3069

CLIENT:	Alpha Analytical, Inc.	**Report Date:**	2/8/2007
Lab Order:	0701322	**DateReceived:**	1/30/2007 10:15:00 AM
Project:		**Lab ID:**	0701322-007A
Client Sample ID:	AEE07012901-34A	**Collection Date:**	1/26/2007 12:00:00 PM
Report Comment:		**Matrix:**	WATER

Analyses	Method	Result	Units	DLR	Date Analyzed	Qual.
GLYCOLS						
Ethylene Glycol	SW8015	ND	mg/L	5.0	2/6/2007	

Qualifiers / Abbreviations:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
H - Hold Time Exceeded
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
DLR: Detection Limit for Reporting
NSS - Non-Sufficient Sample Amount

RESULTS FROM B-13 AND B-14 SHOWN IN TABLE 5

RESULTS FROM B-25 SHOWN IN TABLE 4

Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119
Sparks, Nevada 89431
Ph: (775) 355-0202
Fax: (775) 355-0817

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY

Fax

To:	Brett Whitford / Don Swigonski	**From:**	Ginger Peppard
Fax:	331-4153	**Pages:**	18
Phone:		**Date:**	1/30/07
Re:	Lab Results	**CC:**	

☐ **Urgent** ☑ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

Enclosed are the lab results, including the analysis for total metals on B-25-15.

Thanks!

Ginger Peppard
Customer Service Manager
WETLAB – Western Environmental Testing Laboratory
475 E. Greg Street, Suite 119
Sparks, NV 89431
(775) 355-0202
ginger@wetlaboratory.com

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street. #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

1/31/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford

OrderID: *0612194*

Dear: Brett Whitford

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 12/19/2006. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Customer Sample ID: B-25-15 **Collect Date/Time:** 12/19/2006 13:45

WETLAB Sample ID: 0612194-003 **Receive Date:** 12/19/2006 16:40

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	12/29/2006
Arsenic	SW846 6010 B	<2.5	mg/kg	2.5	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/11/2007
Barium	SW846 6010B	120	mg/kg	0.500	1/31/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/11/2007
Cadmium	SW846 6010B	0.47	mg/kg	0.0500	1/31/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/11/2007
Chromium	SW846 6010B	7.9	mg/kg	0.2500	1/31/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/11/2007
Lead	SW846 6010B	<50.000	mg/kg	50.000	1/31/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/11/2007
Selenium	SW846 6010B	<2.500	mg/kg	2.500	1/31/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/11/2007
Silver	SW846 6010B	<0.2500	mg/kg	0.2500	1/31/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/11/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/11/2007
Mercury	SW846 7471A	<0.10	mg/kg	0.10	1/31/2007

Customer Sample ID: B-GW-4-26 **Collect Date/Time:** 12/19/2006 15:00

WETLAB Sample ID: 0612194-004 **Receive Date:** 12/19/2006 16:40

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	12/29/2006
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/11/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/11/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/11/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/11/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/11/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/11/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/11/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/11/2007

Customer Sample ID: Field Blank **Collect Date/Time:** 12/19/2006 13:00

WETLAB Sample ID: 0612194-006 **Receive Date:** 12/19/2006 16:40

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SM 4500CNC	<0.010	mg/L	0.010	12/29/2006

QUALITY CONTROL REPORT

Sample ID: 612194
Reported: 01/11/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide WAD	4500CNI	mg/L	<0.010	0.104	0.100	101	0.088	0.085	4

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide WAD	4500CNI	mg/L	612-194-6	<0.010	0.088	0.100	88	12/29/06

Metals QC
Optima 4300DV

Batch:	T070111-1A	Matrix:	water

Sample ID:	612-194-1 10X	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0851	95	0.0850	0	0.090	0.0865	96	1/11/2007
As	6010B	<0.10	mg/L	<0.10	1.00	0.9532	95	0.9725	2	1.00	0.9718	97	1/11/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	0.9561	88	0.9569	0	1.00	0.9691	97	1/11/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9211	92	0.9301	1	1.00	0.9568	96	1/11/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9460	95	0.9478	0	1.00	0.9679	97	1/11/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9260	92	0.9374	1	1.00	0.9735	97	1/11/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9074	91	0.9272	2	1.00	0.9146	91	1/11/2007

Samples 612-194-(1-4) are associated with QC batch T070111-1A

Metals QC
CETAC M-6000A

Batch:	Hg070111-1A
Matrix:	TCLP

		Date Analyzed:	1/11/07
Sample ID:	612-194-1 100X	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	<0.10	2.00	2.13	107	2.36	10	2.00	2.11	106

Samples 612-194-(1-4) are associated with QC batch Hg070111-1A

Metals QC
CETAC M-6000A

Batch:	Hg070131-1A
Matrix:	soil

		Date Analyzed:	1/31/07
Sample ID:	612-194-3	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7471A	<0.10	mg/kg	<0.10	0.167	0.173	102	0.173	0	0.167	0.163	98

Sample 612-194-3 is associated with QC batch Hg070131-1A

Metals QC
CETAC M-6000A

Batch:	Hg070131-1A
Matrix:	soil

		Date Analyzed:	1/31/07
Sample ID:	612-194-3	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7471A	<0.10	mg/kg	<0.10	0.167	0.173	102	0.173	0	0.167	0.163	98

Sample 612-194-3 is associated with QC batch Hg070131-1A

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 612-194
Report Due Date: 1-4-06

Client AMEC
Address 780 Vista Blvd #100
City, State & Zip Sparks NV 89434
Contact Brett Whitford
Phone 331-2375
Fax 331-4153
P.O. Number
Collector's Name Don Swigonski
Project Name Gerlach Mine
Project Number 6417000720

Turnaround Time
Standard ✓ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Fax Results Y N To: Client Billing
Email Results Y N To: Client Billing
Compliance Monitoring Y N
Fax Results to State EPA Y N

Sample Type Codes
DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: DI water

	Sample Type	Sample Date	Sample Time	Containers	Analyses Requested: TCLP Kcora metals	Cyanide	ASA	Hold for instructions									Spl. No.
B-13-5	SO	12-19	10:25	1	X	X											1
B-14-5	SO		11:40	1	X	X											2
B-25-15	SO		13:45	1	X	X	X										3
B-GW-4-26	SO		15:00	1	X	X			X								4
B-GW-4-40	SO	12-19	15:30	1	X	X			X								5
Field Blank	DI	12-19	13:00	1	X	X	X										6

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature 5 °C	12-19	16:40	Don Swigonski	M. Shever
Custody Seals Intact? (Y) N (None)				
Number of Containers 6				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

GREEN Analytical Laboratories, Inc.

GAL ID No.: 701-013-01

January 23, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name: Gooseberry Mine
Project Number: 612-194
Date Received: 01/03/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/03/07. Samples #01 & #02 were cancelled per Ginger. Only sample #03 was analyzed.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

For: John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-013-01
Date Received: 01/03/07
Date Reported: 01/23/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: Gooseberry Mine
PROJECT NUMBER: 612-194

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CL
701-013-01	B-25-15	12/19/2006												

FOR: John Green, Laboratory Director

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-013-01
Date Received: 01/03/07
Date Reported: 01/23/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: Gooseberry Mine
PROJECT NUMBER: 612-194

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SC P
701-013-01		0.006	0.000	0.005	0.001	0.18	73.6	73.4	0.16	73.4					

For: John Green, Laboratory Director

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-013-01
Date Received: 01/03/07
Date Reported: 01/23/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: Gooseberry Mine
PROJECT NUMBER: 612-194

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
701-013-01										7.357		

D Zufelt
for: John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY

Specializing in Soil, Hazardous Waste and Water Analysis.

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-013
Report Due Date:

Client WETLAB
Address - Same as above
City, State & Zip
Contact Ginger
Phone
Fax
P.O. Number 612-194
Collector's Name
Project Name Gooseberry Mine
Project Number 6417000720

Turnaround Time
Standard X 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Fax Results Y (N) To: Client Billing
Email Results (Y) N To: Client Billing
Compliance Monitoring (Y) N
Fax Results to State EPA Y (N)

Sample Type Codes
DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ____

Sample Identification	Date	Time	Sample Type	Container	ABA w/ Sulfur Speciation	T-Sulf	CaCO3	SOBEK	Spl. No.
B-25-15	~~SO~~ 12/19/06	13:45	SO	1	X				01

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature ____ °C	1/2/07	1400	M. Shere	CBS → GAL
Custody Seals Intact? Y N None	1/3/07	1000	UPS	Dublin Zufelt
Number of Containers ____				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

INORGANIC RESULTS FOR B-21 AND B-23 SHOWN IN TABLE 6

RESULTS FOR B-26 SHOWN IN TABLE 4

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

1/26/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford

OrderID: *0701051*

Dear: Brett Whitford

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/8/2007. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Specializing in Soil, Hazardous Waste and Water Analysis.

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701051

General Comments

None

Specific Comments

None

Subcontracting Comments

The analysis for Acid Base Accounting was performed by Green Analytical Laboratories of Durango, CO. The report is attached.

Data Qualifier Legend

B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated; The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Brett Whitford
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry /6417000720*

Date Printed: 1/26/2007
OrderID: *0701051*

AMEC Earth and Environmental - 701051

Customer Sample ID: B-23-5
WETLAB Sample ID: 0701051-001
Collect Date/Time: 1/8/2007 09:15
Receive Date: 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-23-15
WETLAB Sample ID: 0701051-002
Collect Date/Time: 1/8/2007 09:40
Receive Date: 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.011	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-23-22 **Collect Date/Time:** 1/8/2007 10:10
WETLAB Sample ID: 0701051-003 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-21-5 **Collect Date/Time:** 1/8/2007 13:00
WETLAB Sample ID: 0701051-004 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-21-10 **Collect Date/Time:** 1/8/2007 13:15
WETLAB Sample ID: 0701051-005 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007

Customer Sample ID: B-21-10 **Collect Date/Time:** 1/8/2007 13:15
WETLAB Sample ID: 0701051-005 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-21-15 **Collect Date/Time:** 1/8/2007 13:30
WETLAB Sample ID: 0701051-006 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-26-5 **Collect Date/Time:** 1/8/2007 14:15
WETLAB Sample ID: 0701051-007 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.029	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: B-26-16 **Collect Date/Time:** 1/8/2007 15:00
WETLAB Sample ID: 0701051-008 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/26/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/26/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/26/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/26/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/26/2007
Mercury, TCLP	SW846 7470A	0.022	mg/L	0.010	1/26/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: Field Blank **Collect Date/Time:** 1/8/2007 12:00
WETLAB Sample ID: 0701051-009 **Receive Date:** 1/8/2007 16:39

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.01	mg/kg	0.01	1/17/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	1/19/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	1/19/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	1/19/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	1/19/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	1/19/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	1/19/2007
Acid Base Accounting	N/A	See Attached			

QUALITY CONTROL REPORT

Sample ID: 701051
Reported: 01/26/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide WAD	4500CNI	mg/L	<0.010	0.097	0.100	97	0.096	0.094	2

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide WAD	4500CNI	mg/L	701-051-1	<0.010	0.096	96	96	01/17/07

Metals QC
Optima 4300DV

Batch:	T070126-1A	Matrix:	water

Sample ID:	701-065-4	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0834	92	0.0875	5	0.090	0.0876	97	1/26/2007
As	6010B	<0.10	mg/L	<0.10	1.00	1.0300	104	1.0700	4	1.00	1.0000	100	1/26/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0700	98	1.0900	2	1.00	0.9860	99	1/26/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	1.0200	102	1.0400	2	1.00	0.9840	98	1/26/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	1.0100	101	1.0100	0	1.00	0.9750	98	1/26/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	1.0300	103	1.0500	2	1.00	0.9870	99	1/26/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	1.0200	102	1.0300	1	1.00	0.9380	94	1/26/2007

Samples 701-051-(1-8) are associated with QC batch T070126-1A

Metals QC
CETAC M-6000A

Batch:	Hg070126-1A
Matrix:	TCLP

		Date Analyzed:	1/26/07
Sample ID:	701-051-8	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	0.22	2.00	2.09	94	2.03	3	2.00	1.98	99

Samples 701-051-(1-8) are associated with QC batch Hg070126-1A

Metals QC
Optima 4300DV

Batch:	T070118-1A	Matrix:	water

Sample ID:	701-065-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0987	110	0.0868	13	0.090	0.0867	96	1/19/2007
As	6010B	<0.10	mg/L	<0.10	1.00	1.0181	102	0.9854	3	1.00	0.9919	99	1/19/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0326	103	0.9797	5	1.00	0.9940	99	1/19/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	1.0225	102	0.9761	5	1.00	0.9845	98	1/19/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	1.0360	104	0.9857	5	1.00	0.9951	100	1/19/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	1.0147	102	0.9754	4	1.00	0.9824	98	1/19/2007
Se	6010B	<0.040	mg/L	<0.040	1.0000	0.9580	96	0.9290	3	1.00	0.9315	93	1/19/2007

Sample 701-051-9 is associated with QC batch T070118-1A

Metals QC
CETAC M-6000A

Batch:	Hg070119-1A
Matrix:	TCLP

		Date Analyzed:	1/19/07
Sample ID:	701-065-1	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	2.16	104	2.27	5	2.00	2.05	103

Sample 701-051-9 is associated with QC batch Hg070119-1A

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY

Specializing in Soil, Hazardous Waste and Water Analysis.

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number
Report Due Date:

Client
Address
City, State & Zip
Contact
Phone | Collector's Name
Fax | Project Name
P.O. Number | Project Number

Turnaround Time
Standard_____ 5-Day_____ Other_____

Billing Address (if different than Client Address):
Company _____
Address _____
City, State & Zip _____
Contact _____
Phone _____
Fax _____
Email _____

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes
DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER:_____

			Sample Type	Containers	Analyses Requested												Spl. No.

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	Date	Time	Samples Relinquished By	Samples Received By
Temperature _____°C				
Custody Seals Intact? Y N None				
Number of Containers _____				

WET Lab's Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WET Labs for the Client's damages to the total compensation received, unless other arrangements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

Green Analytical Laboratories, Inc.

GAL ID No.: 701-050,01-08

January 23, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name: amec
Project Number: 701-051
Date Received: 01/11/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/11/07.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

FOR: John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-050,01-08
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC
PROJECT NUMBER: 701-051

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
701-050-01	B-23-5	1/8/2007												
701-050-02	B-23-15	1/8/2007												
701-050-03	B-23-22	1/8/2007												
701-050-04	B-21-5	1/8/2007												
701-050-05	B-21-10	1/8/2007												
701-050-06	B-21-15	1/8/2007												
701-050-07	B-26-5	1/8/2007												
701-050-08	B-26-16	1/8/2007												

For: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-050,01-08
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC
PROJECT NUMBER: 701-051

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
701-050-01		0.006				0.18	67.0	66.8							
701-050-02		0.002				0.07	43.5	43.4							
701-050-03		0.006				0.19	49.1	48.9							
701-050-04		0.054				1.69	309	307							
701-050-05		0.054				1.67	354	352							
701-050-06		0.036				1.14	181	180							
701-050-07		0.021				0.64	24.9	24.3							
701-050-08		0.003				0.08	85.9	85.8							

For: D Zufelt
John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-050,01-08
Date Received: 01/11/07
Date Reported: 01/23/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC
PROJECT NUMBER: 701-051

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
701-050-01										6.703		
701-050-02										4.351		
701-050-03										4.911		
701-050-04										30.89		
701-050-05										35.37		
701-050-06										18.14		
701-050-07										2.494		
701-050-08										8.589		

For: John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-050
Report Due Date:
Page ____ of ____

Client Wetlab
Address
City, State & Zip
Contact
Phone | Collector's Name
Fax | Project Name AMEC
P.O. Number 701-051 | Project Number
Email

Turnaround Time
Standard ✓ 5-Day Other

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water	SD = Solid
WW = Wastewater	SO = Soil
SW = Surface Water	HW = Hazardous Waste
MW = Monitoring Well	OTHER:

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	Analyses Requested: ABA	Spl. No.
B-23-5	1/8/07	9:15	SO	1		01
B-23-15		9:40	SO	1		02
B-23-22		10:10	SO	1		03
B-21-5		13:00	SO	1		04
B-21-10		13:15	SO	1		05
B-21-15		13:30	SO	1		06
B-26-5		14:15	SO	1		07
B-26-16		15:00	SO	1		08

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature ____ °C	1/10/07	1:33	[signature]	UPS - Green
Custody Seals Intact? Y N None	1/11/07		UPS	[signature]
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

RESULTS FOR TEST PIT TP-9
SHOWN IN TABLE 16

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

2/26/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski

OrderID: *0701203*

Dear: Don Swigonski

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/30/2007. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701203

General Comments

None

Specific Comments

None

Data Qualifier Legend

B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated; The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

SC -- Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry / 6417000720*

Date Printed: 2/26/2007
OrderID: *0701203*

AMEC Earth and Environmental - 701203

Customer Sample ID: TP-9-1
WETLAB Sample ID: 0701203-001

Collect Date/Time: 1/30/2007 10:45
Receive Date: 1/30/2007 12:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	7.9	%	0.1	2/12/2007
Moisture (post-MWMP)	EPA 160.1	17	%	0.1	2/12/2007
pH of Extraction Fluid	EPA 150.1	5.02	pH Units		2/12/2007
pH	EPA 150.1	8.16	pH Units		2/20/2007
Bicarbonate (HCO3)	SM 2320B	110	mg/L	1.0	2/20/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/20/2007
Total Alkalinity	SM 2320B	88	mg/L as CaCO3	1.0	2/20/2007
Chloride	EPA 300.0	1.4	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	0.28	mg/L	0.10	2/23/2007
Sulfate	EPA 300.0	110	mg/L	5.0	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	3.4	mg/L	0.25	2/23/2007
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	2/26/2007
Total Dissolved Solids (TDS)	SM 2540C	320	mg/L	10	2/16/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	2/22/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/20/2007
Barium	EPA 200.7	0.057	mg/L	0.010	2/20/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/20/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Boron	EPA 200.7	0.15	mg/L	0.10	2/20/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/20/2007
Calcium	EPA 200.7	51	mg/L	0.50	2/20/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/20/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Magnesium	EPA 200.7	13	mg/L	0.50	2/20/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Molybdenum	EPA 200.7	0.012	mg/L	0.010	2/20/2007

Customer Sample ID: TP-9-1 **Collect Date/Time:** 1/30/2007 10:45
WETLAB Sample ID: 0701203-001 **Receive Date:** 1/30/2007 12:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/20/2007
Potassium	EPA 200.7	7.0	mg/L	0.50	2/20/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Sodium	EPA 200.7	9.8	mg/L	0.50	2/20/2007
Strontium	EPA 200.7	0.58	mg/L	0.10	2/20/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Vanadium	EPA 200.7	0.038	mg/L	0.010	2/20/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/22/2007
Arsenic	EPA 200.8	0.015	mg/L	0.0050	2/22/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	2/22/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/22/2007
Mercury	EPA 245.1	0.00021	mg/L	0.00010	2/20/2007
Anions	Calculation	4.39	meq/L	0.01	
Cations	Calculation	4.22	meq/L	0.01	
Error	Calculation	2.0	%	1.0	

Customer Sample ID: TP-9-2 **Collect Date/Time:** 1/30/2007 10:55
WETLAB Sample ID: 0701203-002 **Receive Date:** 1/30/2007 12:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	16	%	0.1	2/12/2007
Moisture (pre-MWMP)	EPA 160.1	8.1	%	0.1	2/12/2007
pH of Extraction Fluid	EPA 150.1	5.02	pH Units		2/12/2007
pH	EPA 150.1	8.06	pH Units		2/15/2007
Bicarbonate (HCO3)	SM 2320B	95	mg/L	1.0	2/20/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/20/2007
Total Alkalinity	SM 2320B	78	mg/L as CaCO3	1.0	2/20/2007
Chloride	EPA 300.0	1.5	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	0.36	mg/L	0.10	2/23/2007
Sulfate	EPA 300.0	400	mg/L	25	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	2.4	mg/L	0.25	2/23/2007
Total Cyanide	SW846 9014	4.8	mg/kg	0.40	2/26/2007
Total Dissolved Solids (TDS)	SM 2540C	710	mg/L	10	2/16/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	2/22/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/20/2007

Customer Sample ID: TP-9-2 **Collect Date/Time:** 1/30/2007 10:55

WETLAB Sample ID: 0701203-002 **Receive Date:** 1/30/2007 12:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/20/2007
Barium	EPA 200.7	0.060	mg/L	0.010	2/20/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/20/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Boron	EPA 200.7	0.18	mg/L	0.10	2/20/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/20/2007
Calcium	EPA 200.7	120	mg/L	0.50	2/20/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/20/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Magnesium	EPA 200.7	29	mg/L	0.50	2/20/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Molybdenum	EPA 200.7	0.018	mg/L	0.010	2/20/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/20/2007
Potassium	EPA 200.7	8.6	mg/L	0.50	2/20/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/20/2007
Sodium	EPA 200.7	29	mg/L	0.50	2/20/2007
Strontium	EPA 200.7	1.3	mg/L	0.10	2/20/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/20/2007
Vanadium	EPA 200.7	0.044	mg/L	0.010	2/20/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/20/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/22/2007
Arsenic	EPA 200.8	0.013	mg/L	0.0050	2/22/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	2/22/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/22/2007
Mercury	EPA 245.1	0.00015	mg/L	0.00010	2/20/2007
Anions	Calculation	10.1	meq/L	0.01	
Cations	Calculation	9.86	meq/L	0.01	
Error	Calculation	1.3	%	1.0	

QUALITY CONTROL REPORT

Sample ID: 701203
Reported: 02/26/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide total	4500CNC	mg/L	<0.010	0.090	0.100	90	0.095	0.093	2

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide total	4500CNC	mg/L	701-203-1	<0.010	0.095	0.100	95	02/26/07

QUALITY CONTROL REPORT

Sample ID: 701203
Reported: 02/26/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Alkalinity	2320B	mg/L	NA	98	100	98	78	78	<1
pH	150.1	SU	NA	7.05	7.00	101	7.10	7.13	<1
pH	150.1	SU	NA	7.09	7.00	101	7.36	7.37	<1
TDS	2540C	mg/L	<10	156	150	104	3300	3500	6
Chloride	300.0	mg/L	<1.0	5.12	5.00	102	2.43	2.42	<1
NO3+NO2 Nitrogen	300.0	mg/L	<0.010	0.508	0.500	102	0.692	0.688	<1
Sulfate	300.0	mg/L	<1.0	9.85	10.0	98	26.6	26.6	<1
Fluoride	300.0	mg/L	<0.10	0.997	1.00	100	1.34	1.31	2
Cyanide WAD	4500CNI	mg/L	<0.010	0.100	0.100	100	0.066	0.070	6

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Chloride	300.0	mg/L	701-203-2	1.54	2.43	1.00	89	02/23/07
NO3+NO2 Nitrogen	300.0	mg/L	701-203-1	0.136	0.692	0.500	111	02/23/07
Sulfate	300.0	mg/L	701-203-1	22.6	26.6	4.00	100	02/22/07
Fluoride	300.0	mg/L	701-203-2	0.358	1.34	1.00	98	02/23/07
Cyanide WAD	4500CNI	mg/L	702-094-1	<0.010	0.066	0.100	NC	02/22/07

Metals QC
CETAC M-6000A

Batch:	Hg070220-1A
Matrix:	water

		Date Analyzed:	2/20/07
Sample ID:	702-120-1	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	<0.10	2.00	1.85	89	1.84	1	2.00	2.02	101

Samples 701-203-(1-2) are associated with QC batch Hg070220-1A

Metals QC
ELAN DRC-e

Batch:	W070220-1B	Matrix:	water

Sample ID:	702-131-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
As	200.8	<5.0	ug/L	<5.0	10.00	11.6658	105	11.7601	1	10.00	9.461	95	2/22/2007
Sb	200.8	<2.5	ug/L	<2.5	10.00	10.0708	100	10.0394	0	10.00	9.6958	97	2/22/2007
Se	200.8	<5.0	ug/L	<5.0	10.00	10.2764	100	10.3880	1	10.00	10.0317	100	2/22/2007
Tl	200.8	<1.0	ug/L	<1.0	10.00	8.6269	86	8.6962	1	10.00	8.8051	88	2/22/2007
Pb	200.8	<2.5	ug/L	<2.5	10.00	9.0838	90	9.0165	1	10.00	9.0387	90	2/22/2007

Samples 701-203-(1-2) are associated with QC batch W070220-1B

Metals QC
Optima 4300DV

Batch:	W070220-1B	Matrix:	water

Sample ID:	702-131-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank True Value	Lab Fortified Blank Result	Lab Fortified Blank % Rec	Date Analyzed
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0842	93	0.0864	3	0.090	0.0912	101	2/20/2007
Al	200.7	<0.045	mg/L	<0.045	1.00	0.9665	93	1.0115	5	1.00	0.9740	97	2/20/2007
B	200.7	<0.020	mg/L	<0.020	1.00	1.0027	100	1.0343	3	1.00	1.0220	102	2/20/2007
Ba	200.7	<0.010	mg/L	0.0260	1.00	0.9122	89	0.9439	3	1.00	1.0125	101	2/20/2007
Be	200.7	<0.0010	mg/L	<0.0010	1.00	0.9765	98	0.9946	2	1.00	1.0243	102	2/20/2007
Bi	200.7	<0.10	mg/L	<0.10	1.00	0.9658	98	0.9851	2	1.00	1.0200	102	2/20/2007
Ca	200.7	<0.50	mg/L	11.6219	10.00	21.1736	96	22.0033	4	10.00	10.1297	101	2/20/2007
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.9355	93	0.9630	3	1.00	1.0398	104	2/20/2007
Co	200.7	<0.010	mg/L	<0.010	1.00	0.9380	94	0.9606	2	1.00	1.0244	102	2/20/2007
Cr	200.7	<0.0050	mg/L	<0.0050	1.00	0.9146	91	0.9440	3	1.00	0.9970	100	2/20/2007
Cu	200.7	<0.050	mg/L	0.2501	1.00	1.1840	93	1.2166	3	1.00	0.9962	100	2/20/2007
Fe	200.7	<0.010	mg/L	0.0211	1.00	0.9060	88	0.9392	4	1.00	0.9482	95	2/20/2007
Ga	200.7	<0.10	mg/L	<0.10	1.00	1.0045	100	1.0219	2	1.00	1.0425	104	2/20/2007
K	200.7	<0.50	mg/L	2.5173	10.00	11.7605	92	12.0988	3	10.00	10.1395	101	2/20/2007
Li	200.7	<0.10	mg/L	<0.10	1.00	0.9210	92	0.9439	2	1.00	1.0034	100	2/20/2007
Mg	200.7	<0.50	mg/L	5.9080	10.00	14.7672	89	15.2157	3	10.00	10.0153	100	2/20/2007
Mn	200.7	<0.0050	mg/L	<0.0050	1.00	0.9599	96	0.9930	3	1.00	1.0267	103	2/20/2007
Mo	200.7	<0.010	mg/L	<0.010	1.00	0.9114	91	0.9315	2	1.00	1.0083	101	2/20/2007
Na	200.7	<0.50	mg/L	14.0348	10.00	23.3462	93	24.1987	4	10.00	10.3256	103	2/20/2007
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.9126	91	0.9313	2	1.00	1.0079	101	2/20/2007
P	200.7	<0.50	mg/L	<0.50	1.00	1.0966	97	1.1293	3	1.00	1.0502	105	2/20/2007
Pb	200.7	<0.010	mg/L	<0.010	1.00	0.9440	94	0.9598	2	1.00	1.0313	103	2/20/2007

Metals QC (Cont.)
Optima 4300DV

Batch:	W070220-1B	Matrix:	water

Sample ID:	702-131-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank True Value	Lab Fortified Blank Result	Lab Fortified Blank % Rec	Date Analyzed
Sc	200.7	<0.10	mg/L	<0.10	1.0000	0.8974	90	0.9343	4	1.00	1.0111	101	2/20/2007
Sn	200.7	<0.10	mg/L	<0.10	1.0000	0.9513	96	0.9753	2	1.00	1.0208	102	2/20/2007
Sr	200.7	<0.10	mg/L	0.1224	1.0000	1.0608	94	1.0939	3	1.00	1.0178	102	2/20/2007
Ti	200.7	<0.10	mg/L	<0.10	1.0000	0.9602	96	0.9968	4	1.00	1.0196	102	2/20/2007
V	200.7	<0.010	mg/L	0.0136	1.0000	0.9724	96	1.0055	3	1.00	1.0295	103	2/20/2007
Zn	200.7	<0.010	mg/L	<0.010	1.0000	0.9527	95	0.9763	2	1.00	1.0361	104	2/20/2007

Samples 701-203-(1-2) are associated with QC batch W070220-1B

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number
Report Due Date:
Page ____ of ____

Client
Address
City, State & Zip
Contact
Phone
Fax
P.O. Number
Collector's Name
Project Name
Project Number
Email

Turnaround Time
Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water	SD = Solid
WW = Wastewater	SO = Soil
SW = Surface Water	HW = Hazardous Waste
MW = Monitoring Well	OTHER: ____

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS											Spl. No.

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature ____ °C				
Custody Seals Intact? Y N None				
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

RESULTS FOR CYANIDE TANK 1
SHOWN IN TABLE 14

RESULTS FOR TANK 6 AND SOUTH CYANIDE
TANK IN MILL BUILDING SHOWN IN
TABLE 13

RESULTS FOR TEST PITS ATP AND LP
SHOWN IN TABLE 13

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

3/14/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski

OrderID: *0702123*

Dear: Don Swigonski

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 2/15/2007. Additional comments are located on page 2 of this report.

This is a final Report

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Report Comments

AMEC Earth and Environmental - 702123

General Comments

This is a final report.

Specific Comments

Due to sample matrix it was necessary to analyze for various analytes at a dilution on numerous samples. The reporting limits have been adjusted accordingly.

Due to a laboratory oversight, the analysis for WAD Cyanide was performed past the EPA recommended holding time on sample 0702123-010. We apologize for any inconvenience this may cause.

The cation/anion balance for sample 0702123-009 was outside WETLAB acceptance criteria; however, reanalysis confirmed the original results.

Data Qualifier Legend

B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated; The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

SC -- Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry G417000720*

Date Printed: 3/14/2007
OrderID: *0702123*

AMEC Earth and Environmental - 702123

Customer Sample ID: Tank 6
WETLAB Sample ID: 0702123-001

Collect Date/Time: 2/14/2007 12:10
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	28	%	0.1	2/25/2007
Moisture (pre-MWMP)	EPA 160.1	16	%	0.1	2/25/2007
pH of Extraction Fluid	EPA 150.1	4.90	pH Units		2/20/2007
pH	EPA 150.1	10.02	pH Units		2/26/2007
Bicarbonate (HCO3)	SM 2320B	2600	mg/L	1.0	3/1/2007
Carbonate (CO3)	SM 2320B	2700	mg/L	1.0	3/1/2007
Total Alkalinity	SM 2320B	6600	mg/L as CaCO3	1.0	3/1/2007
Chloride	EPA 300.0	2800	mg/L	1000	3/9/2007
Fluoride	EPA 300.0	0.42	mg/L	0.10	3/7/2007
Sulfate	EPA 300.0	6700	mg/L	1000	3/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	30	mg/L	10	3/10/2007
Total Dissolved Solids (TDS)	SM 2540C	27000	mg/L	10	2/28/2007
WAD Cyanide	SM 4500CNI	16	mg/L	0.010	3/8/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	3/2/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Beryllium	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Bismuth	EPA 200.7	<1.0	mg/L	1.0	3/2/2007
Boron	EPA 200.7	1.2	mg/L	1.0	3/2/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Calcium	EPA 200.7	<5.0	mg/L	5.0	3/2/2007
Chromium	EPA 200.7	0.57	mg/L	0.050	3/2/2007
Cobalt	EPA 200.7	0.16	mg/L	0.10	3/2/2007
Copper	EPA 200.7	36	mg/L	5.0	3/9/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	3/2/2007
Iron	EPA 200.7	2.4	mg/L	0.10	3/2/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	3/2/2007
Magnesium	EPA 200.7	<5.0	mg/L	5.0	3/2/2007
Manganese	EPA 200.7	<0.050	mg/L	0.050	3/2/2007
Molybdenum	EPA 200.7	21	mg/L	0.10	3/2/2007
Nickel	EPA 200.7	<0.10	mg/L	0.10	3/2/2007

Customer Sample ID: Tank 6 **Collect Date/Time:** 2/14/2007 12:10
WETLAB Sample ID: 0702123-001 **Receive Date:** 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Phosphorus	EPA 200.7	17	mg/L	5.0	3/2/2007
Potassium	EPA 200.7	650	mg/L	5.0	3/2/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	3/2/2007
Silver	EPA 200.7	14	mg/L	5.0	3/12/2007
Sodium	EPA 200.7	8400	mg/L	50	3/9/2007
Strontium	EPA 200.7	<1.0	mg/L	1.0	3/2/2007
Thallium	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	3/2/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	3/2/2007
Vanadium	EPA 200.7	0.16	mg/L	0.10	3/2/2007
Zinc	EPA 200.7	0.35	mg/L	0.10	3/9/2007
Antimony	EPA 200.8	4.2	mg/L	0.025	3/9/2007
Arsenic	EPA 200.8	8.5	mg/L	0.050	3/9/2007
Selenium	EPA 200.8	20	mg/L	0.050	3/9/2007
Thallium	EPA 200.8	<0.010	mg/L	0.010	3/14/2007
Mercury	EPA 245.1	0.084	mg/L	0.010	3/8/2007
Anions	Calculation	353	meq/L	0.01	
Cations	Calculation	383	meq/L	0.01	
Error	Calculation	4.1	%	1.0	
Arsenic	SW846 6010B	280	mg/kg	150	2/28/2007
Barium	SW846 6010B	52	mg/kg	50	3/2/2007
Cadmium	SW846 6010B	7.8	mg/kg	5.0	3/2/2007
Chromium	SW846 6010B	26	mg/kg	25	2/28/2007
Lead	SW846 6010B	66	mg/kg	50	2/28/2007
Selenium	SW846 6010B	<150	mg/kg	150	2/28/2007
Silver	SW846 6010B	110	mg/kg	25	2/28/2007
Mercury	SW846 7471A	2.5	mg/kg	2.0	3/2/2007

Customer Sample ID: R5 Box **Collect Date/Time:** 2/14/2007 15:00
WETLAB Sample ID: 0702123-002 **Receive Date:** 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	24	%	0.1	2/22/2007
Moisture (post-MWMP)	EPA 160.1	16	%	0.1	2/22/2007
pH of Extraction Fluid	EPA 150.1	4.90	pH Units		2/20/2007
pH	EPA 150.1	8.26	pH Units		2/27/2007
Bicarbonate (HCO3)	SM 2320B	180	mg/L	1.0	3/1/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	3/1/2007
Total Alkalinity	SM 2320B	150	mg/L as CaCO3	1.0	3/1/2007

Customer Sample ID: R5 Box
WETLAB Sample ID: 0702123-002

Collect Date/Time: 2/14/2007 15:00
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Chloride	EPA 300.0	52	mg/L	50	3/10/2007
Fluoride	EPA 300.0	0.10	mg/L	0.10	3/7/2007
Sulfate	EPA 300.0	1100	mg/L	100	3/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	11	mg/L	1.0	3/10/2007
Total Dissolved Solids (TDS)	SM 2540C	2400	mg/L	10	2/28/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	3/8/2007
Aluminum	EPA 200.7	0.11	mg/L	0.045	3/9/2007
Barium	EPA 200.7	0.096	mg/L	0.010	3/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	3/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Boron	EPA 200.7	1.8	mg/L	0.10	3/9/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	3/9/2007
Calcium	EPA 200.7	400	mg/L	0.50	3/9/2007
Chromium	EPA 200.7	0.065	mg/L	0.0050	3/9/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Copper	EPA 200.7	0.24	mg/L	0.050	3/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Iron	EPA 200.7	0.037	mg/L	0.010	3/9/2007
Lithium	EPA 200.7	0.12	mg/L	0.10	3/9/2007
Magnesium	EPA 200.7	34	mg/L	0.50	3/9/2007
Manganese	EPA 200.7	0.16	mg/L	0.0050	3/9/2007
Molybdenum	EPA 200.7	0.11	mg/L	0.010	3/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Potassium	EPA 200.7	61	mg/L	0.50	3/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Sodium	EPA 200.7	150	mg/L	0.50	3/9/2007
Strontium	EPA 200.7	2.8	mg/L	0.10	3/9/2007
Thallium	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Zinc	EPA 200.7	0.021	mg/L	0.010	3/9/2007
Antimony	EPA 200.8	0.035	mg/L	0.0025	3/9/2007
Arsenic	EPA 200.8	<0.050	mg/L	0.050	3/9/2007
Selenium	EPA 200.8	0.24	mg/L	0.0050	3/9/2007
Thallium	EPA 200.8	<0.010	mg/L	0.010	3/14/2007
Mercury	EPA 245.1	0.0020	mg/L	0.0010	3/8/2007
Anions	Calculation	28.1	meq/L	0.01	
Cations	Calculation	30.9	meq/L	0.01	

Customer Sample ID: R5 Box **Collect Date/Time:** 2/14/2007 15:00
WETLAB Sample ID: 0702123-002 **Receive Date:** 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Error	Calculation	4.7	%	1.0	

Customer Sample ID: CN Tank 3 **Collect Date/Time:** 2/14/2007 14:45
WETLAB Sample ID: 0702123-003 **Receive Date:** 2/15/2007 09:55

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	760	mg/kg	80	2/26/2007
WAD Cyanide	SW846 9014	79	mg/kg	10	2/26/2007

Customer Sample ID: JP Surface **Collect Date/Time:** 2/14/2007 15:15
WETLAB Sample ID: 0702123-004 **Receive Date:** 2/15/2007 09:55

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	750	mg/kg	40	3/6/2007

Customer Sample ID: South CN Vat **Collect Date/Time:** 2/14/2007 15:25
WETLAB Sample ID: 0702123-005 **Receive Date:** 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	36	%	0.1	2/20/2007
Moisture (pre-MWMP)	EPA 160.1	32	%	0.1	2/20/2007
pH of Extraction Fluid	EPA 150.1	4.90	pH Units		2/20/2007
pH	EPA 150.1	9.66	pH Units		2/27/2007
Bicarbonate (HCO3)	SM 2320B	530	mg/L	1.0	3/1/2007
Carbonate (CO3)	SM 2320B	170	mg/L	1.0	3/1/2007
Total Alkalinity	SM 2320B	720	mg/L as CaCO3	1.0	3/1/2007
Chloride	EPA 300.0	210	mg/L	100	3/9/2007
Fluoride	EPA 300.0	0.20	mg/L	0.10	3/7/2007
Sulfate	EPA 300.0	650	mg/L	100	3/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	15	mg/L	1.0	3/10/2007
Total Dissolved Solids (TDS)	SM 2540C	2700	mg/L	10	2/28/2007
WAD Cyanide	SM 4500CNI	1.2	mg/L	0.010	3/8/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	3/9/2007
Barium	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	3/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	3/9/2007

Customer Sample ID: South CN Vat
WETLAB Sample ID: 0702123-005

Collect Date/Time: 2/14/2007 15:25
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Boron	EPA 200.7	0.79	mg/L	0.10	3/9/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	3/9/2007
Calcium	EPA 200.7	2.4	mg/L	0.50	3/9/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Magnesium	EPA 200.7	0.65	mg/L	0.50	3/9/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Molybdenum	EPA 200.7	1.0	mg/L	0.010	3/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Phosphorus	EPA 200.7	1.6	mg/L	0.50	3/9/2007
Potassium	EPA 200.7	66	mg/L	0.50	3/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Silver	EPA 200.7	0.89	mg/L	0.50	3/12/2007
Strontium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Thallium	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Vanadium	EPA 200.7	0.070	mg/L	0.010	3/9/2007
Zinc	EPA 200.7	0.64	mg/L	0.010	3/9/2007
Antimony	EPA 200.8	0.079	mg/L	0.0025	3/9/2007
Arsenic	EPA 200.8	0.18	mg/L	0.0050	3/9/2007
Selenium	EPA 200.8	0.53	mg/L	0.0050	3/9/2007
Thallium	EPA 200.8	<0.010	mg/L	0.010	3/14/2007
Mercury	EPA 245.1	0.0065	mg/L	0.0010	3/8/2007
Anions	Calculation	34.9	meq/L	0.01	
Cations	Calculation	36.2	meq/L	0.01	
Error	Calculation	1.9	%	1.0	
Arsenic	SW846 6010B	<150	mg/kg	150	
Barium	SW846 6010B	<50	mg/kg	50	3/2/2007
Cadmium	SW846 6010B	<5.0	mg/kg	5.0	3/2/2007
Chromium	SW846 6010B	<25	mg/kg	25	
Lead	SW846 6010B	<50	mg/kg	50	
Selenium	SW846 6010B	<150	mg/kg	150	
Silver	SW846 6010B	58	mg/kg	25	
Mercury	SW846 7471A	0.61	mg/kg	0.50	3/2/2007

Customer Sample ID: South CN Vat
WETLAB Sample ID: 0702123-005
Collect Date/Time: 2/14/2007 15:25
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed

Customer Sample ID: ATP-1
WETLAB Sample ID: 0702123-006
Collect Date/Time: 2/14/2007 15:30
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	7.3	%	0.1	2/20/2007
Moisture (post-MWMP)	EPA 160.1	18	%	0.1	2/20/2007
pH of Extraction Fluid	EPA 150.1	4.90	pH Units		2/20/2007
pH	EPA 150.1	8.09	pH Units		2/27/2007
Bicarbonate (HCO3)	SM 2320B	56	mg/L	1.0	3/1/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	3/1/2007
Total Alkalinity	SM 2320B	46	mg/L as CaCO3	1.0	3/1/2007
Chloride	EPA 300.0	18	mg/L	1.0	3/12/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	3/7/2007
Sulfate	EPA 300.0	1200	mg/L	100	3/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	2.6	mg/L	1.0	3/10/2007
Total Dissolved Solids (TDS)	SM 2540C	1800	mg/L	10	2/28/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	3/8/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	3/9/2007
Barium	EPA 200.7	0.018	mg/L	0.010	3/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	3/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Boron	EPA 200.7	0.25	mg/L	0.10	3/9/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	3/9/2007
Calcium	EPA 200.7	250	mg/L	0.50	3/9/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Magnesium	EPA 200.7	59	mg/L	0.50	3/9/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Molybdenum	EPA 200.7	0.43	mg/L	0.010	3/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Potassium	EPA 200.7	190	mg/L	0.50	3/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Silver	EPA 200.7	0.018	mg/L	0.0050	3/9/2007

Customer Sample ID: ATP-1 **Collect Date/Time:** 2/14/2007 15:30
WETLAB Sample ID: 0702123-006 **Receive Date:** 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Sodium	EPA 200.7	75	mg/L	0.50	3/9/2007
Strontium	EPA 200.7	2.5	mg/L	0.10	3/9/2007
Thallium	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Antimony	EPA 200.8	0.0026	mg/L	0.0025	3/9/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	3/9/2007
Selenium	EPA 200.8	<0.050	mg/L	0.050	3/9/2007
Thallium	EPA 200.8	<0.010	mg/L	0.010	3/14/2007
Mercury	EPA 245.1	0.0022	mg/L	0.0010	3/8/2007
Anions	Calculation	26.6	meq/L	0.01	
Cations	Calculation	25.5	meq/L	0.01	
Error	Calculation	2.2	%	1.0	
Acid Base Accounting	N/A	See Atttached			

Customer Sample ID: ATP-2 **Collect Date/Time:** 2/14/2007 15:35
WETLAB Sample ID: 0702123-007 **Receive Date:** 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	18	%	0.1	2/25/2007
Moisture (pre-MWMP)	EPA 160.1	11	%	0.1	2/25/2007
pH of Extraction Fluid	EPA 150.1	4.90	pH Units		2/20/2007
pH	EPA 150.1	7.93	pH Units		2/26/2007
Bicarbonate (HCO3)	SM 2320B	41	mg/L	1.0	3/1/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	3/1/2007
Total Alkalinity	SM 2320B	34	mg/L as CaCO3	1.0	3/1/2007
Chloride	EPA 300.0	19	mg/L	10	3/10/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	3/7/2007
Sulfate	EPA 300.0	630	mg/L	50	3/9/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	2.2	mg/L	0.50	3/10/2007
Total Dissolved Solids (TDS)	SM 2540C	1000	mg/L	10	2/28/2007
WAD Cyanide	SM 4500CNI	0.013	mg/L	0.010	3/8/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	3/9/2007
Barium	EPA 200.7	0.017	mg/L	0.010	3/9/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	3/9/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Boron	EPA 200.7	0.16	mg/L	0.10	3/9/2007

Customer Sample ID: ATP-2 **Collect Date/Time:** 2/14/2007 15:35
WETLAB Sample ID: 0702123-007 **Receive Date:** 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	3/9/2007
Calcium	EPA 200.7	150	mg/L	0.50	3/9/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Iron	EPA 200.7	0.14	mg/L	0.010	3/9/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Magnesium	EPA 200.7	36	mg/L	0.50	3/9/2007
Manganese	EPA 200.7	0.060	mg/L	0.0050	3/9/2007
Molybdenum	EPA 200.7	0.35	mg/L	0.010	3/9/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Potassium	EPA 200.7	100	mg/L	0.50	3/9/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Sodium	EPA 200.7	80	mg/L	0.50	3/9/2007
Strontium	EPA 200.7	1.4	mg/L	0.10	3/9/2007
Thallium	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	3/9/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	3/9/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	3/9/2007
Thallium	EPA 200.8	<0.010	mg/L	0.010	3/14/2007
Mercury	EPA 245.1	0.0022	mg/L	0.0010	3/8/2007
Anions	Calculation	14.5	meq/L	0.01	
Cations	Calculation	16.5	meq/L	0.01	
Error	Calculation	6.5	%	1.0	
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: LP-1 **Collect Date/Time:** 2/14/2007 15:45
WETLAB Sample ID: 0702123-008 **Receive Date:** 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	15	%	0.1	2/20/2007
Moisture (post-MWMP)	EPA 160.1	18	%	0.1	2/20/2007

Customer Sample ID: LP-1
WETLAB Sample ID: 0702123-008

Collect Date/Time: 2/14/2007 15:45
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
pH of Extraction Fluid	EPA 150.1	4.90	pH Units		2/20/2007
pH	EPA 150.1	10.37	pH Units		2/26/2007
Bicarbonate (HCO3)	SM 2320B	2100	mg/L	1.0	3/1/2007
Carbonate (CO3)	SM 2320B	3700	mg/L	1.0	3/1/2007
Total Alkalinity	SM 2320B	7900	mg/L as CaCO3	1.0	3/1/2007
Chloride	EPA 300.0	64	mg/L	50	3/10/2007
Fluoride	EPA 300.0	0.95	mg/L	0.10	3/7/2007
Sulfate	EPA 300.0	3300	mg/L	1.0	3/10/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	38	mg/L	10	3/10/2007
Total Dissolved Solids (TDS)	SM 2540C	22000	mg/L	10	2/28/2007
WAD Cyanide	SM 4500CNI	1.6	mg/L	0.010	3/8/2007
Aluminum	EPA 200.7	0.55	mg/L	0.45	3/9/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Beryllium	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Bismuth	EPA 200.7	<1.0	mg/L	1.0	3/9/2007
Boron	EPA 200.7	<1.0	mg/L	1.0	3/9/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	3/9/2007
Calcium	EPA 200.7	<5.0	mg/L	5.0	3/9/2007
Chromium	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Cobalt	EPA 200.7	0.36	mg/L	0.10	3/9/2007
Copper	EPA 200.7	30	mg/L	0.50	3/9/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	3/9/2007
Iron	EPA 200.7	170	mg/L	0.10	3/9/2007
Lead	EPA 200.7	0.46	mg/L	0.10	3/9/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	3/9/2007
Magnesium	EPA 200.7	<5.0	mg/L	5.0	3/9/2007
Manganese	EPA 200.7	0.13	mg/L	0.050	3/9/2007
Molybdenum	EPA 200.7	3.9	mg/L	0.10	3/9/2007
Nickel	EPA 200.7	0.30	mg/L	0.10	3/9/2007
Phosphorus	EPA 200.7	5.3	mg/L	5.0	3/9/2007
Potassium	EPA 200.7	28	mg/L	5.0	3/9/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	3/9/2007
Silver	EPA 200.7	250	mg/L	25	3/12/2007
Sodium	EPA 200.7	5300	mg/L	0.50	3/9/2007
Strontium	EPA 200.7	<1.0	mg/L	1.0	3/9/2007
Thallium	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	3/9/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	3/9/2007
Vanadium	EPA 200.7	<0.10	mg/L	0.10	3/9/2007
Zinc	EPA 200.7	0.18	mg/L	0.10	3/9/2007
Antimony	EPA 200.8	1.4	mg/L	0.025	3/9/2007

Customer Sample ID: LP-1
WETLAB Sample ID: 0702123-008
Collect Date/Time: 2/14/2007 15:45
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Arsenic	EPA 200.8	13	mg/L	0.050	3/9/2007
Selenium	EPA 200.8	16	mg/L	0.050	3/9/2007
Thallium	EPA 200.8	<0.010	mg/L	0.010	3/14/2007
Mercury	EPA 245.1	0.097	mg/L	0.010	3/8/2007
Anions	Calculation	231	meq/L	0.01	
Cations	Calculation	241	meq/L	0.01	
Error	Calculation	2.2	%	1.0	
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: LP-2
WETLAB Sample ID: 0702123-009
Collect Date/Time: 2/14/2007 16:00
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	31	%	0.1	2/20/2007
Moisture (pre-MWMP)	EPA 160.1	25	%	0.1	2/20/2007
pH of Extraction Fluid	EPA 150.1	4.90	pH Units		2/20/2007
pH	EPA 150.1	9.36	pH Units		2/27/2007
Bicarbonate (HCO3)	SM 2320B	1000	mg/L	1.0	3/1/2007
Carbonate (CO3)	SM 2320B	140	mg/L	1.0	3/1/2007
Total Alkalinity	SM 2320B	1100	mg/L as CaCO3	1.0	3/1/2007
Chloride	EPA 300.0	120	mg/L	100	3/10/2007
Fluoride	EPA 300.0	1.2	mg/L	0.10	3/7/2007
Sulfate	EPA 300.0	13000	mg/L	2000	3/10/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	18	mg/L	10	3/10/2007
Total Dissolved Solids (TDS)	SM 2540C	28000	mg/L	10	2/28/2007
WAD Cyanide	SM 4500CNI	0.47	mg/L	0.010	3/8/2007
Aluminum	EPA 200.7	<0.22	mg/L	0.22	3/9/2007
Barium	EPA 200.7	<0.050	mg/L	0.050	3/12/2007
Beryllium	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Bismuth	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Boron	EPA 200.7	0.76	mg/L	0.50	3/9/2007
Cadmium	EPA 200.7	<0.0050	mg/L	0.0050	3/9/2007
Calcium	EPA 200.7	62	mg/L	2.5	3/9/2007
Chromium	EPA 200.7	<0.025	mg/L	0.025	3/9/2007
Cobalt	EPA 200.7	3.0	mg/L	0.050	3/9/2007
Copper	EPA 200.7	<0.25	mg/L	0.25	3/9/2007
Gallium	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Iron	EPA 200.7	12	mg/L	0.050	3/9/2007
Lead	EPA 200.7	<0.050	mg/L	0.050	3/9/2007

Customer Sample ID: LP-2
WETLAB Sample ID: 0702123-009

Collect Date/Time: 2/14/2007 16:00
Receive Date: 2/15/2007 09:55

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Lithium	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Magnesium	EPA 200.7	3.7	mg/L	2.5	3/9/2007
Manganese	EPA 200.7	<0.025	mg/L	0.025	3/9/2007
Molybdenum	EPA 200.7	0.69	mg/L	0.050	3/9/2007
Nickel	EPA 200.7	0.11	mg/L	0.050	3/9/2007
Phosphorus	EPA 200.7	2.9	mg/L	2.5	3/9/2007
Potassium	EPA 200.7	100	mg/L	2.5	3/9/2007
Scandium	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Silver	EPA 200.7	97	mg/L	5.0	3/12/2007
Sodium	EPA 200.7	9900	mg/L	50	3/9/2007
Strontium	EPA 200.7	0.61	mg/L	0.50	3/9/2007
Thallium	EPA 200.7	<0.25	mg/L	0.25	3/9/2007
Tin	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Titanium	EPA 200.7	<0.50	mg/L	0.50	3/9/2007
Vanadium	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Zinc	EPA 200.7	<0.050	mg/L	0.050	3/9/2007
Antimony	EPA 200.8	0.064	mg/L	0.0025	3/9/2007
Arsenic	EPA 200.8	0.20	mg/L	0.0050	3/9/2007
Selenium	EPA 200.8	1.9	mg/L	0.0050	3/9/2007
Thallium	EPA 200.8	<0.010	mg/L	0.010	3/14/2007
Mercury	EPA 245.1	0.039	mg/L	0.010	3/8/2007
Anions	Calculation	296	meq/L	0.01	
Cations	Calculation	437	meq/L	0.01	
Error	Calculation	19.2	%	1.0	
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: Field Blank
WETLAB Sample ID: 0702123-010

Collect Date/Time: 2/14/2007 12:00
Receive Date: 2/15/2007 09:55

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
pH	EPA 150.1	5.59	pH Units		2/15/2007
Bicarbonate (HCO3)	SM 2320B	<1.0	mg/L	1.0	3/1/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	3/1/2007
Total Alkalinity	SM 2320B	<1.0	mg/L as CaCO3	1.0	3/1/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/15/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/15/2007
Sulfate	EPA 300.0	<1.0	mg/L	1.0	2/15/2007
Nitrate Nitrogen	EPA 300.0	<1.0	mg/L	1.0	2/15/2007
Nitrite Nitrogen	EPA 300.0	<0.010	mg/L	0.010	2/15/2007

Customer Sample ID: Field Blank
WETLAB Sample ID: 0702123-010

Collect Date/Time: 2/14/2007 12:00
Receive Date: 2/15/2007 09:55

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SM 4500CNC	<0.010	mg/L	0.010	2/23/2007
Total Dissolved Solids (TDS)	SM 2540C	<10	mg/L	10	2/21/2007
WAD Cyanide	SM 4500CNI	<0.010 HT	mg/L	0.010	3/6/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	3/2/2007
Barium	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	3/2/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	3/2/2007
Calcium	EPA 200.7	<0.50	mg/L	0.50	3/2/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	3/2/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	3/8/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Magnesium	EPA 200.7	<0.50	mg/L	0.50	3/2/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	3/2/2007
Molybdenum	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	3/2/2007
Potassium	EPA 200.7	<0.50	mg/L	0.50	3/2/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	3/2/2007
Sodium	EPA 200.7	<0.50	mg/L	0.50	3/8/2007
Strontium	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Thallium	EPA 200.7	<0.050	mg/L	0.050	3/1/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	3/2/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	3/2/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	3/8/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	3/14/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	3/14/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	3/14/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	3/14/2007
Mercury	EPA 245.1	0.00015	mg/L	0.00010	3/1/2007
Anions	Calculation	<0.01	meq/L	0.01	
Cations	Calculation	<0.01	meq/L	0.01	
Error	Calculation	NA	%	1.0	

Customer Sample ID: Field Blank
WETLAB Sample ID: 0702123-010

Collect Date/Time: 2/14/2007 12:00
Receive Date: 2/15/2007 09:55

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed

QUALITY CONTROL REPORT

Sample ID: 702123
Reported: 03/12/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Alkalinity	2320B	mg/L	NA	96	100	96	34	34	<1
pH	150.1	SU	NA	7.05	7.00	101	7.10	7.13	<1
pH	150.1	SU	NA	7.03	7.00	100	10.16	10.16	<1
pH	150.1	SU	NA	7.13	7.00	102	9.36	9.33	<1
TDS	2540C	mg/L	<10	149	150	99	345	359	4
TDS	2540C	mg/L	<10	143	150	95	2660	2440	9
Chloride	300.0	mg/L	<1.0	5.14	5.00	103	1.08	1.10	2
Chloride	300.0	mg/L	<1.0	4.96	5.00	99	3.66	3.66	<1
Chloride	300.0	mg/L	<1.0	5.00	5.00	100	1.53	1.38	10
Chloride	300.0	mg/L	<1.0	4.94	5.00	99	2.64	2.65	<1
Nitrate as N	300.0	mg/L	<1.0	2.03	2.00	101	1.09	1.10	<1
Nitrite as N	300.0	mg/L	<0.010	0.522	0.500	104	0.528	0.545	3
NO3+NO2 as N	300.0	mg/L	<0.010	0.489	0.500	98	0.521	0.525	<1
Sulfate	300.0	mg/L	<1.0	9.85	10.0	99	3.87	3.84	<1
Sulfate	300.0	mg/L	<1.0	9.28	10.0	93	36.7	37.4	2
Sulfate	300.0	mg/L	<1.0	9.28	10.0	93	53.2	52.4	2
Fluoride	300.0	mg/L	<0.10	0.986	1.00	99	1.03	1.00	2
Fluoride	4500FC	mg/L	<0.10	0.961	1.00	96	1.11	1.15	3
Cyanide WAD	4500CNI	mg/L	<0.010	0.102	0.100	102	0.082	0.086	5
Cyanide WAD	4500CNI	mg/L	<0.010	0.084	0.100	84	0.091	0.105	15
Cyanide Total	4500CNC	mg/L	<0.010	0.096	0.100	96	0.070	0.070	<1
Cyanide Total	4500CNC	mg/L	<0.010	0.090	0.100	90	0.095	0.093	2
Cyanide Total	4500CNC	mg/L	<0.010	0.102	0.100	102	0.082	0.086	5

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Chloride	300.0	mg/L	702123-010	<1.0	1.08	1	108	02/15/07
Chloride	300.0	mg/L	702123-001	2.76	3.66	1.00	90	03/09/07
Chloride	300.0	mg/L	702123-008	<1.0	1.53	1.00	NC	03/10/07
Chloride	300.0	mg/L	702123-006	1.76	2.64	1.00	88	03/12/07
Nitrate as N	300.0	mg/L	702123-010	<1.0	1.09	1.00	109	02/15/07
Nitrite as N	300.0	mg/L	702123-010	<0.010	0.528	0.500	106	02/15/07
NO3+NO2 as N	300.0	mg/L	702123-001	0.030	0.521	0.500	98	03/10/07
Sulfate	300.0	mg/L	702123-010	<1.0	3.87	4.00	97	02/15/07
Sulfate	300.0	mg/L	702123-008	32.6	36.7	4.00	103	03/10/07
Sulfate	300.0	mg/L	702123-006	49.8	53.2	4.00	84	03/10/07
Fluoride	300.0	mg/L	702123-010	<0.10	1.03	1.00	103	02/15/07
Fluoride	4500FC	mg/L	702094-011	0.224	1.11	1.00	89	03/07/07
Cyanide WAD	4500CNI	mg/L	702123-010	<0.010	0.082	0.100	82	03/06/07
Cyanide WAD	4500CNI	mg/L	703031-001	<0.010	0.091	0.100	91	03/08/07
Cyanide Total	4500CNC	mg/L	702127-006	<0.010	0.070	0.100	NC	02/23/07
Cyanide Total	4500CNC	mg/L	701203-001	<0.010	0.095	0.100	95	02/27/07
Cyanide Total	4500CNC	mg/L	702123-010	<0.010	0.082	0.100	82	03/06/07

Metals QC
ELAN DRC-e

Batch:	W070301-1A	Matrix:	water

Sample ID:	702-212-1 100x	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
As	200.8	<5.0	ug/L	<5.0	10.00	11.7117	110	11.7373	0	10.00	10.063	101	3/2/2007
Sb	200.8	<2.5	ug/L	<2.5	10.00	11.8432	116	11.8544	0	10.00	9.5562	96	3/2/2007
Se	200.8	<5.0	ug/L	7.47022	10.00	18.4399	110	18.7618	2	10.00	10.2392	102	3/2/2007
Tl	200.8	<1.0	ug/L	<1.0	10.00	10.9081	108	11.5504	6	10.00	9.1010	91	3/2/2007
Pb	200.8	<2.5	ug/L	<2.5	10.00	11.9466	117	11.3770	5	10.00	9.2789	93	3/2/2007

Samples 702-123-(1,2,5-10) are associated with QC batch W070301-1A

Metals QC
Optima 4300DV

Batch:	S070228-1B	Matrix:	soil

Sample ID:	702-176-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.0050	mg/kg	6.885	4.500	12.239	119	12.054	2	4.500	4.688	104	2/28/2007
As	6010B	<0.030	mg/kg	34.742	50.00	90.318	111	85.524	5	50.00	50.433	101	2/28/2007
Ba	6010B	<0.010	mg/kg	459.288	50.00	522.285	126	525.596	1	50.00	46.759	94	2/28/2007
Cd	6010B	<0.0010	mg/kg	0.768	50.00	43.698	86	43.174	1	50.00	48.358	97	2/28/2007
Cr	6010B	<0.0050	mg/kg	10.858	50.00	57.987	94	57.614	1	50.00	49.804	100	2/28/2007
Pb	6010B	<0.010	mg/kg	24.234	50.00	70.612	93	69.431	2	50.00	49.055	98	2/28/2007
Se	6010B	<0.020	mg/kg	3.223	50.00	47.665	89	46.284	3	50.00	46.409	93	2/28/2007

Samples 702-123-(1&5) are associated with QC batch S070228-1B

Metals QC
CETAC M-6000A

Batch:	Hg070307-1A
Matrix:	water

		Date Analyzed:	3/1/07
Sample ID:	702-127-7 10X	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	0.22	2.00	2.05	92	2.06	0	2.00	1.98	99

Samples 702-123-(1,2,5-9) are associated with QC batch Hg070307-1A

Metals QC
CETAC M-6000A

Batch:	Hg070301-2B
Matrix:	water

		Date Analyzed:	3/1/07
Sample ID:	702-123-10	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	0.15	2.00	2.51	118	2.60	4	2.00	2.14	107

Sample 702-123-10 is associated with QC batch Hg070301-2B

Metals QC
Optima 4300DV

Batch:	W070301-1A	Matrix:	water

Sample ID:	702-212-1 100X	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0818	92	0.0856	5	0.090	0.0882	98	3/1/2007
Al	200.7	<0.045	mg/L	0.0751	1.00	0.9693	89	0.9487	2	1.00	0.8458	85	3/1/2007
As	200.7	<0.030	mg/L	<0.030	1.00	0.8979	91	0.9364	4	1.00	0.8940	89	3/1/2007
B	200.7	<0.020	mg/L	0.0338	1.00	0.9190	89	0.9506	3	1.00	0.8911	89	3/1/2007
Ba	200.7	<0.010	mg/L	0.0105	1.00	0.8463	84	0.8791	4	1.00	0.8486	85	3/1/2007
Be	200.7	<0.0010	mg/L	<0.0010	1.00	0.9369	94	0.9872	5	1.00	0.9192	92	3/1/2007
Bi	200.7	<0.10	mg/L	<0.10	1.00	0.9092	92	0.9493	4	1.00	0.8905	89	3/1/2007
Ca	200.7	<0.50	mg/L	4.6536	10.00	13.7371	91	14.1868	3	10.00	9.1520	92	3/1/2007
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.8918	89	0.9359	5	1.00	0.8934	89	3/1/2007
Co	200.7	<0.010	mg/L	<0.010	1.00	0.9096	91	0.9458	4	1.00	0.8979	90	3/1/2007
Cr	200.7	<0.0050	mg/L	0.0077	1.00	0.8846	88	0.9196	4	1.00	0.8992	90	3/1/2007
Cu	200.7	<0.050	mg/L	0.6420	1.00	1.3500	71	1.2842	5	1.00	0.8847	88	3/1/2007
Fe	200.7	<0.010	mg/L	33.0181	1.00	34.2842	127	37.8429	10	1.00	0.8926	89	3/1/2007
Ga	200.7	<0.10	mg/L	<0.10	1.00	0.9594	96	1.0242	7	1.00	0.9606	96	3/1/2007
K	200.7	<0.50	mg/L	3.0043	10.00	11.8807	89	12.3808	4	10.00	8.9007	89	3/1/2007
Li	200.7	<0.10	mg/L	<0.10	1.00	0.9243	91	0.9548	3	1.00	0.8885	89	3/1/2007
Mg	200.7	<0.50	mg/L	9.4093	10.00	17.9649	86	18.5523	3	10.00	9.0154	90	3/1/2007
Mn	200.7	<0.0050	mg/L	0.1478	1.00	1.1213	97	1.0824	4	1.00	0.9282	93	3/1/2007
Mo	200.7	<0.010	mg/L	0.0569	1.00	0.8800	82	0.8875	1	1.00	0.8507	85	3/1/2007
Na	200.7	<0.50	mg/L	23.7582	10.00	30.2764	65	31.1345	3	10.00	9.5991	96	3/1/2007
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.8855	88	0.9207	4	1.00	0.8767	88	3/1/2007
P	200.7	<0.50	mg/L	<0.50	1.00	1.1962	89	1.0660	12	1.00	0.8727	87	3/1/2007
Pb	200.7	<0.010	mg/L	0.0235	1.00	0.9163	89	0.9404	3	1.00	0.8763	88	3/1/2007

Metals QC (Cont.)
Optima 4300DV

Batch:	W070301-1A	Matrix:	water

Sample ID:	702-212-1 100X	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Sc	200.7	<0.10	mg/L	<0.10	1.0000	0.8496	85	0.8915	5	1.00	0.8557	86	3/1/2007
Sn	200.7	<0.10	mg/L	<0.10	1.0000	0.9212	92	0.9735	6	1.00	0.9147	91	3/1/2007
Sr	200.7	<0.10	mg/L	<0.10	1.0000	0.9586	92	0.9897	3	1.00	0.9110	91	3/1/2007
Ti	200.7	<0.10	mg/L	<0.10	1.0000	0.9354	93	0.9839	5	1.00	0.9364	94	3/1/2007
V	200.7	<0.010	mg/L	0.0153	1.0000	0.9365	92	0.9812	5	1.00	0.9181	92	3/1/2007
Zn	200.7	<0.010	mg/L	0.4137	1.0000	1.2521	84	1.2362	1	1.00	0.9050	91	3/1/2007

Samples 702-123-(1,2,5-10) are associated with QC batch W070301-1A

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 702-123
Report Due Date: 3/1/07
Page 1 of 1

Client Amec
Address
City, State & Zip
Contact DAN SWIGONSKI
Phone
Collector's Name D. Swigonski
Fax
Project Name Groundwater
P.O. Number
Project Number 6417000720
Email DON.SWIGONSKI@amec.com

Turnaround Time
Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ____

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	Profile II	ASTM CN	ASTM CN	Total Reg Metals							Spl. No.
Tank 6	2-14 2007	12:10	SD	1	X			X							1
RS Box		15:00	SD	1	X										2
CN TANK 3		14:45		1			X	X							3
JP Surface		15:10		1			X								4
South CN VAT		15:25		1	X			X							5
ATP-1		15:30		1	X	X									6
ATP-2		15:35		1	X	X									7
LP-1		15:45		1	X	X									8
LP-2		16:00		1	X	X									9
Field Blank		12:00	W	3	X	X	X		X						10

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature 10 °C	2/15	9:55	Dan Swigonski	B Stec
Custody Seals Intact? Y N (None)				
Number of Containers 12				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

331-2375
-4153

301.2E

Green Analytical Laboratories, Inc.

GAL ID No.: 702-082,01-04

March 2, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name:	Amec
Project Number:	702-123
Date Received:	02/20/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 02/20/07.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

For: John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 702-082,01-04
Date Received: 02/20/07
Date Reported: 03/02/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: Amec
PROJECT NUMBER: 702-123

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
702-082-01	ATP-1	2/14/2007												
702-082-02	ATP-2	2/14/2007												
702-082-03	LP-1	2/14/2007												
702-082-04	LP-2	2/14/2007												

For: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 702-082,01-04
Date Received: 02/20/07
Date Reported: 03/02/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: Amec
PROJECT NUMBER: 702-123

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
702-082-01		0.065				2.04	352	350							
702-082-02		0.082				2.57	371	368							
702-082-03		8.465				264	336	71.4							
702-082-04		9.102				284	333	48.5							

For John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 702-082,01-04
Date Received: 02/20/07
Date Reported: 03/02/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: Amec
PROJECT NUMBER: 702-123

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
702-082-01										35.17		
702-082-02										37.09		
702-082-03										33.58		
702-082-04										33.29		

D Zufelt
FOR: John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 702-082
Report Due Date:
Page 1 of 1

Client Wetlab
Address
City, State & Zip
Contact Ginger
Phone
Collector's Name
Fax
Project Name Amec
P.O. Number
Project Number 702-123
Email

Turnaround Time
Standard X 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company ____
Address ____
City, State & Zip ____
Contact ____
Phone ____
Fax ____
Email ____

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ____

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	Analyses Requested: ABA	Spl. No.
ATP-1	2/14	15:30	SO	1	X	01
ATP-2	↓	15:35	SO	1	X	02
LP-1	↓	15:45	SO	1	X	03
LP-2	↓	16:00	SO	1	X	04
~~Field Blank~~	↓	~~12:00~~			~~X~~	

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature ____ °C	2/15	14:00	[signature]	UPS → Green
Custody Seals Intact? Y N None				
Number of Containers ____	2/20	14:30	UPS	[signature]

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number
Report Due Date:
Page ____ of ____

Client
Address
City, State & Zip
Contact
Phone
Collector's Name
Fax
Project Name
P.O. Number
Project Number

Turnaround Time
Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water	SD = Solid
WW = Wastewater	SO = Soil
SW = Surface Water	HW = Hazardous Waste
MW = Monitoring Well	OTHER: ____

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS											Spl. No.

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature ____ °C				
Custody Seals Intact? Y N None				
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

RESULTS FOR TEST PITS TP-JP-5 THROUGH TP-JP-8 SHOWN IN TABLE 10

RESULTS FOR WR-2 SHOWN IN TABLE 17

INORGANIC RESULTS FOR TEST PITS TP-RS-1 THROUGH TP-RS-3 SHOWN IN TABLE 12

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

3/30/2007

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski

OrderID: *0701198*

Dear: Don Swigonski

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 1/26/2007. Additional comments are located on page 2 of this report.

This is an ammended report that includes the corrected results for Total Cyanide on samples 0701198-009, 0701198-011, 0701198-012, and 0701193-014 as well as the date analyzed for Total Cyanide on sample 0701198-014. We apologize for any inconvenience this may have caused.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager

Western Environmental Testing Laboratory
Report Comments

AMEC Earth and Environmental - 701198

General Comments

None

Specific Comments

The matrix spike/matrix spike duplicate (MS/MSD) values for the analysis of WAD Cyanide on sample 0701198-005 and Sodium on sample 0701198-015 were outside laboratory acceptance criteria; however, the relative percent difference (RPD) value was acceptable, indicating probable matrix interference. The reported results should be considered estimates.

Due to sample matrix it was necessary to analyze for various analytes a dilution on numerous submitted samples. The reporting limits have been adjusted accordingly.

Due to a laboratory oversight the analysis for Nitrate and Nitrite Nitrogen were performed past the EPA recommended holding time on sample 0701198-016 (Field Blank). We apologize for any inconvenience this may have caused.

Subcontracting Comments

The analysis for Acid Base Accounting was performed by Green Analytical Laboratories of Durango, CO. Their report is attached.

Data Qualifier Legend

B -- Blank contamination; Analyte detected above the method reporting limit in an associated blank

HT -- Sample held beyond the accepted holding time

J -- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

M -- Reported value is estimated; The sample matrix interfered with the analysis

N -- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.

NC -- Not calculated due to matrix interference

Q -- Reported value is estimated; The value failed to meet QC criteria for either precision or accuracy

SA -- Reported value was caclulated using the method of Standard Additions.

SC -- Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth and Environmental
780 Vista Blvd. Suite 100
Sparks, NV 89434
Attn: Don Swigonski
Phone: (775) 331-2375 **Fax:** (775) 331-4153
PO\Project: *Gooseberry / 641700720*

Date Printed: 3/30/2007
OrderID: *0701198*

Customer Sample ID: TP-JP-5-1
WETLAB Sample ID: 0701198-001

Collect Date/Time: 1/26/2007 10:05
Receive Date: 1/26/2007 17:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	10	%	0.1	2/7/2007
Moisture (pre-MWMP)	EPA 160.1	7.2	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	7.66	pH Units		2/9/2007
Bicarbonate (HCO3)	SM 2320B	39	mg/L	1.0	2/12/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	32	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	2.5	mg/L	2.0	2/23/2007
Fluoride	EPA 300.0	0.32	mg/L	0.20	2/23/2007
Sulfate	EPA 300.0	1100	mg/L	25	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	64	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	1900	mg/L	10	2/12/2007
WAD Cyanide	SM 4500CNI	0.042	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/15/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/15/2007
Bismuth	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Boron	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Calcium	EPA 200.7	310	mg/L	5.0	2/15/2007
Chromium	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Cobalt	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Iron	EPA 200.7	0.11	mg/L	0.10	2/15/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Magnesium	EPA 200.7	66	mg/L	5.0	2/15/2007
Manganese	EPA 200.7	0.14	mg/L	0.050	2/15/2007
Molybdenum	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Nickel	EPA 200.7	<0.10	mg/L	0.10	2/15/2007

Customer Sample ID: TP-JP-5-1 **Collect Date/Time:** 1/26/2007 10:05
WETLAB Sample ID: 0701198-001 **Receive Date:** 1/26/2007 17:00

MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Phosphorus	EPA 200.7	<5.0	mg/L	5.0	2/15/2007
Potassium	EPA 200.7	5.8	mg/L	5.0	2/15/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Silver	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Strontium	EPA 200.7	1.7	mg/L	1.0	2/15/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Vanadium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Antimony	EPA 200.8	0.0029	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	<0.050	mg/L	0.050	2/21/2007
Selenium	EPA 200.8	0.12	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/15/2007
Anions	Calculation	28.2	meq/L	0.010	
Cations	Calculation	25.8	meq/L	0.010	
Error	Calculation	4.4	%	1.0	

Customer Sample ID: TP-JP-5-5 **Collect Date/Time:** 1/26/2007 10:05
WETLAB Sample ID: 0701198-002 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	22	%	0.1	2/7/2007
Moisture (pre-MWMP)	EPA 160.1	6.4	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	8.16	pH Units		2/15/2007
Bicarbonate (HCO3)	SM 2320B	73	mg/L	1.0	2/14/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/14/2007
Total Alkalinity	SM 2320B	60	mg/L as CaCO3	1.0	2/14/2007
Chloride	EPA 300.0	13	mg/L	5.0	2/23/2007
Fluoride	EPA 300.0	<0.50	mg/L	0.50	2/23/2007
Sulfate	EPA 300.0	1300	mg/L	50	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	160	mg/L	2.0	2/23/2007
Total Dissolved Solids (TDS)	SM 2540C	3400	mg/L	10	2/12/2007
WAD Cyanide	SM 4500CNI	0.91	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/15/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Beryllium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Bismuth	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Boron	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007

Customer Sample ID: TP-JP-5-5
WETLAB Sample ID: 0701198-002
Collect Date/Time: 1/26/2007 10:05
Receive Date: 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Calcium	EPA 200.7	61	mg/L	5.0	2/15/2007
Chromium	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Cobalt	EPA 200.7	0.93	mg/L	0.10	2/15/2007
Copper	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Iron	EPA 200.7	1.6	mg/L	0.10	2/15/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Magnesium	EPA 200.7	11	mg/L	5.0	2/15/2007
Manganese	EPA 200.7	0.11	mg/L	0.050	2/15/2007
Molybdenum	EPA 200.7	1.7	mg/L	0.10	2/15/2007
Nickel	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Phosphorus	EPA 200.7	<5.0	mg/L	5.0	2/15/2007
Potassium	EPA 200.7	9.2	mg/L	5.0	2/15/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Silver	EPA 200.7	0.14	mg/L	0.050	2/15/2007
Sodium	EPA 200.7	990	mg/L	5.0	2/15/2007
Strontium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Vanadium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Antimony	EPA 200.8	0.020	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	<0.050	mg/L	0.050	2/21/2007
Selenium	EPA 200.8	2.3	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	0.0065	mg/L	0.0010	2/20/2007
Anions	Calculation	40.1	meq/L	0.010	
Cations	Calculation	47.3	meq/L	0.010	
Error	Calculation	8.3	%	1.0	

Customer Sample ID: TP-JP-6-1
WETLAB Sample ID: 0701198-003
Collect Date/Time: 1/26/2007 10:10
Receive Date: 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	15	%	0.1	2/7/2007
Moisture (pre-MWMP)	EPA 160.1	3.0	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	7.77	pH Units		2/9/2007
Bicarbonate (HCO3)	SM 2320B	48	mg/L	1.0	2/12/2007

Customer Sample ID: TP-JP-6-1 **Collect Date/Time:** 1/26/2007 10:10

WETLAB Sample ID: 0701198-003 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	38	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/23/2007
Sulfate	EPA 300.0	2200	mg/L	50	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	23	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	3100	mg/L	10	2/12/2007
WAD Cyanide	SM 4500CNI	0.052	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/15/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Beryllium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Bismuth	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Boron	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Calcium	EPA 200.7	520	mg/L	5.0	2/15/2007
Chromium	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Cobalt	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Copper	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Iron	EPA 200.7	0.15	mg/L	0.10	2/15/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Magnesium	EPA 200.7	88	mg/L	5.0	2/15/2007
Manganese	EPA 200.7	0.14	mg/L	0.050	2/15/2007
Molybdenum	EPA 200.7	0.20	mg/L	0.10	2/15/2007
Nickel	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Phosphorus	EPA 200.7	<5.0	mg/L	5.0	2/15/2007
Potassium	EPA 200.7	8.1	mg/L	5.0	2/15/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Silver	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Sodium	EPA 200.7	310	mg/L	5.0	2/15/2007
Strontium	EPA 200.7	3.4	mg/L	1.0	2/15/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Vanadium	EPA 200.7	0.11	mg/L	0.10	2/15/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Antimony	EPA 200.8	0.014	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	<0.050	mg/L	0.050	2/21/2007
Selenium	EPA 200.8	0.12	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	0.00035	mg/L	0.00010	2/15/2007

Customer Sample ID: TP-JP-6-1 **Collect Date/Time:** 1/26/2007 10:10
WETLAB Sample ID: 0701198-003 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Anions	Calculation	48.2	meq/L	0.010	
Cations	Calculation	46.9	meq/L	0.010	
Error	Calculation	1.4	%	1.0	

Customer Sample ID: TP-JP-6-5 **Collect Date/Time:** 1/26/2007 10:17
WETLAB Sample ID: 0701198-004 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	14	%	0.1	2/7/2007
Moisture (pre-MWMP)	EPA 160.1	7.1	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	7.77	pH Units		2/9/2007
Bicarbonate (HCO3)	SM 2320B	56	mg/L	1.0	2/12/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	46	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	6.8	mg/L	5.0	2/23/2007
Fluoride	EPA 300.0	0.75	mg/L	0.50	2/23/2007
Sulfate	EPA 300.0	870	mg/L	50	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	39	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	1500	mg/L	10	2/12/2007
WAD Cyanide	SM 4500CNI	0.027	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/15/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Beryllium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Bismuth	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Boron	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Calcium	EPA 200.7	240	mg/L	5.0	2/15/2007
Chromium	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Cobalt	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Copper	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Iron	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Magnesium	EPA 200.7	59	mg/L	5.0	2/15/2007
Manganese	EPA 200.7	0.24	mg/L	0.050	2/15/2007
Molybdenum	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Nickel	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Phosphorus	EPA 200.7	<5.0	mg/L	5.0	2/15/2007

Customer Sample ID: TP-JP-6-5 **Collect Date/Time:** 1/26/2007 10:17
WETLAB Sample ID: 0701198-004 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Potassium	EPA 200.7	7.1	mg/L	5.0	2/15/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Silver	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Sodium	EPA 200.7	91	mg/L	5.0	2/15/2007
Strontium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Vanadium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/21/2007
Selenium	EPA 200.8	0.14	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/15/2007
Anions	Calculation	22.0	meq/L	0.010	
Cations	Calculation	21.0	meq/L	0.010	
Error	Calculation	2.5	%	1.0	

Customer Sample ID: TP-JP-7-1 **Collect Date/Time:** 1/26/2007 10:22
WETLAB Sample ID: 0701198-005 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	7.4	%	0.1	2/7/2007
Moisture (post-MWMP)	EPA 160.1	16	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	8.00	pH Units		2/9/2007
Bicarbonate (HCO3)	SM 2320B	37	mg/L	1.0	2/12/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	30	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	<0.20	mg/L	0.20	2/23/2007
Sulfate	EPA 300.0	840	mg/L	50	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	140	mg/L	5.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	2000	mg/L	10	2/12/2007
WAD Cyanide	SM 4500CNI	0.019 M	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/15/2007
Barium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Beryllium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Bismuth	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Boron	EPA 200.7	<1.0	mg/L	1.0	2/15/2007

Customer Sample ID: TP-JP-7-1
WETLAB Sample ID: 0701198-005
Collect Date/Time: 1/26/2007 10:22
Receive Date: 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Calcium	EPA 200.7	72	mg/L	5.0	2/15/2007
Chromium	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Cobalt	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Copper	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Iron	EPA 200.7	0.19	mg/L	0.10	2/22/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Magnesium	EPA 200.7	12	mg/L	5.0	2/15/2007
Manganese	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Molybdenum	EPA 200.7	0.14	mg/L	0.10	2/15/2007
Nickel	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Phosphorus	EPA 200.7	<5.0	mg/L	5.0	2/15/2007
Potassium	EPA 200.7	6.2	mg/L	5.0	2/15/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Silver	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Sodium	EPA 200.7	470	mg/L	5.0	2/15/2007
Strontium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Vanadium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Antimony	EPA 200.8	0.0037	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	<0.050	mg/L	0.050	2/21/2007
Selenium	EPA 200.8	0.53	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/15/2007
Anions	Calculation	28.1	meq/L	0.010	
Cations	Calculation	25.2	meq/L	0.010	
Error	Calculation	5.5	%	1.0	

Customer Sample ID: TP-JP-7-5
WETLAB Sample ID: 0701198-006
Collect Date/Time: 1/26/2007 10:28
Receive Date: 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	15	%	0.1	2/7/2007
Moisture (pre-MWMP)	EPA 160.1	9.3	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	8.63	pH Units		2/9/2007

Customer Sample ID: TP-JP-7-5 **Collect Date/Time:** 1/26/2007 10:28
WETLAB Sample ID: 0701198-006 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Bicarbonate (HCO3)	SM 2320B	51	mg/L	1.0	2/12/2007
Carbonate (CO3)	SM 2320B	2.4	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	46	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/23/2007
Sulfate	EPA 300.0	230	mg/L	10	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	40	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	560	mg/L	10	2/12/2007
WAD Cyanide	SM 4500CNI	0.039	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	0.077	mg/L	0.045	2/15/2007
Barium	EPA 200.7	0.023	mg/L	0.010	2/15/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/15/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/15/2007
Calcium	EPA 200.7	12	mg/L	0.50	2/15/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/15/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Iron	EPA 200.7	0.32	mg/L	0.010	2/15/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Magnesium	EPA 200.7	1.6	mg/L	0.50	2/15/2007
Manganese	EPA 200.7	0.0064	mg/L	0.0050	2/15/2007
Molybdenum	EPA 200.7	0.082	mg/L	0.010	2/15/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Potassium	EPA 200.7	1.6	mg/L	0.50	2/15/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Silver	EPA 200.7	0.010	mg/L	0.0050	2/15/2007
Sodium	EPA 200.7	150	mg/L	0.50	2/15/2007
Strontium	EPA 200.7	0.11	mg/L	0.10	2/15/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Antimony	EPA 200.8	0.0039	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	0.019	mg/L	0.0050	2/21/2007
Selenium	EPA 200.8	0.16	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007

Customer Sample ID: TP-JP-7-5 **Collect Date/Time:** 1/26/2007 10:28
WETLAB Sample ID: 0701198-006 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Mercury	EPA 245.1	0.00014	mg/L	0.00010	2/15/2007
Anions	Calculation	8.56	meq/L	0.010	
Cations	Calculation	7.31	meq/L	0.010	
Error	Calculation	7.9	%	1.0	

Customer Sample ID: TP-JP-8-1 **Collect Date/Time:** 1/26/2007 10:35
WETLAB Sample ID: 0701198-007 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	17	%	0.1	2/7/2007
Moisture (pre-MWMP)	EPA 160.1	8.8	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	8.92	pH Units		2/9/2007
Bicarbonate (HCO3)	SM 2320B	66	mg/L	1.0	2/12/2007
Carbonate (CO3)	SM 2320B	7.2	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	66	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	1.6	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/23/2007
Sulfate	EPA 300.0	290	mg/L	10	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	34	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	710	mg/L	10	2/12/2007
WAD Cyanide	SM 4500CNI	0.58	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	0.45	mg/L	0.045	2/15/2007
Barium	EPA 200.7	0.038	mg/L	0.010	2/21/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/15/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/15/2007
Calcium	EPA 200.7	12	mg/L	0.50	2/15/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/15/2007
Cobalt	EPA 200.7	0.067	mg/L	0.010	2/15/2007
Copper	EPA 200.7	0.081	mg/L	0.050	2/15/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Iron	EPA 200.7	1.5	mg/L	0.010	2/15/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Magnesium	EPA 200.7	3.1	mg/L	0.50	2/15/2007
Manganese	EPA 200.7	0.044	mg/L	0.0050	2/15/2007
Molybdenum	EPA 200.7	0.20	mg/L	0.010	2/15/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/15/2007

Customer Sample ID: TP-JP-8-1 **Collect Date/Time:** 1/26/2007 10:35
WETLAB Sample ID: 0701198-007 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Potassium	EPA 200.7	1.4	mg/L	0.50	2/15/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Silver	EPA 200.7	0.12	mg/L	0.050	2/22/2007
Sodium	EPA 200.7	180	mg/L	0.50	2/15/2007
Strontium	EPA 200.7	0.11	mg/L	0.10	2/21/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Vanadium	EPA 200.7	0.017	mg/L	0.010	2/15/2007
Zinc	EPA 200.7	0.027	mg/L	0.010	2/15/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	0.11	mg/L	0.0050	2/21/2007
Selenium	EPA 200.8	0.91	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	0.0013	mg/L	0.00010	2/15/2007
Anions	Calculation	9.83	meq/L	0.010	
Cations	Calculation	8.80	meq/L	0.010	
Error	Calculation	5.5	%	1.0	

Customer Sample ID: TP-JP-8-5 **Collect Date/Time:** 1/26/2007 10:40
WETLAB Sample ID: 0701198-008 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	8.1	%	0.1	2/7/2007
Moisture (post-MWMP)	EPA 160.1	14	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	8.11	pH Units		2/9/2007
Bicarbonate (HCO3)	SM 2320B	83	mg/L	1.0	2/12/2007
Carbonate (CO3)	SM 2320B	2.4	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	72	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	6.7	mg/L	5.0	2/23/2007
Fluoride	EPA 300.0	<0.50	mg/L	0.50	2/23/2007
Sulfate	EPA 300.0	1800	mg/L	50	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	100	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	3000	mg/L	10	2/12/2007
WAD Cyanide	SM 4500CNI	0.75	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/15/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/21/2007
Beryllium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Bismuth	EPA 200.7	<1.0	mg/L	1.0	2/15/2007

Customer Sample ID: TP-JP-8-5 **Collect Date/Time:** 1/26/2007 10:40
WETLAB Sample ID: 0701198-008 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Boron	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Calcium	EPA 200.7	130	mg/L	5.0	2/15/2007
Chromium	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Cobalt	EPA 200.7	0.36	mg/L	0.10	2/15/2007
Copper	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Iron	EPA 200.7	2.6	mg/L	0.10	2/15/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Magnesium	EPA 200.7	24	mg/L	5.0	2/15/2007
Manganese	EPA 200.7	0.10	mg/L	0.050	2/15/2007
Molybdenum	EPA 200.7	0.49	mg/L	0.10	2/15/2007
Nickel	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Phosphorus	EPA 200.7	<5.0	mg/L	5.0	2/15/2007
Potassium	EPA 200.7	6.4	mg/L	5.0	2/15/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Silver	EPA 200.7	0.090	mg/L	0.050	2/15/2007
Sodium	EPA 200.7	670	mg/L	5.0	2/15/2007
Strontium	EPA 200.7	<1.0	mg/L	1.0	2/21/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Vanadium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Antimony	EPA 200.8	0.0087	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	0.081	mg/L	0.0050	2/21/2007
Selenium	EPA 200.8	1.2	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	0.0019	mg/L	0.00010	2/15/2007
Anions	Calculation	46.3	meq/L	0.010	
Cations	Calculation	37.9	meq/L	0.010	
Error	Calculation	9.9	%	1.0	

Customer Sample ID: TP-RS-1-1 **Collect Date/Time:** 1/26/2007 10:45
WETLAB Sample ID: 0701198-009 **Receive Date:** 1/26/2007 17:00

, TCLP-8

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	0.52	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007

Customer Sample ID: TP-RS-1-1 **Collect Date/Time:** 1/26/2007 10:45
WETLAB Sample ID: 0701198-009 **Receive Date:** 1/26/2007 17:00

, TCLP-8

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	0.028	mg/L	0.010	2/8/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: TP-RS-1-5 **Collect Date/Time:** 1/26/2007 10:50
WETLAB Sample ID: 0701198-010 **Receive Date:** 1/26/2007 17:00

, TCLP-8

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: TP-RS-2-1 **Collect Date/Time:** 1/26/2007 11:15
WETLAB Sample ID: 0701198-011 **Receive Date:** 1/26/2007 17:00

, TCLP-8

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	1.4	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	0.010	mg/L	0.010	2/8/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: TP-RS-2-5 **Collect Date/Time:** 1/26/2007 11:10
WETLAB Sample ID: 0701198-012 **Receive Date:** 1/26/2007 17:00

, TCLP-8

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	0.65	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: TP-RS-3-1 **Collect Date/Time:** 1/26/2007 11:15
WETLAB Sample ID: 0701198-013 **Receive Date:** 1/26/2007 17:00

, TCLP-8

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	<0.20	mg/kg	0.20	1/31/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: TP-RS-3-5 **Collect Date/Time:** 1/26/2007 11:20
WETLAB Sample ID: 0701198-014 **Receive Date:** 1/26/2007 17:00

, TCLP-8

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Total Cyanide	SW846 9014	1.1	mg/kg	0.20	2/9/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Selenium, TCLP	SW846 6010B	<0.40	mg/L	0.40	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	<0.010	mg/L	0.010	2/8/2007

Customer Sample ID: TP-RS-3-5 **Collect Date/Time:** 1/26/2007 11:20
WETLAB Sample ID: 0701198-014 **Receive Date:** 1/26/2007 17:00

, TCLP-8

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Acid Base Accounting	N/A	See Attached			

Customer Sample ID: WR-2 **Collect Date/Time:** 1/26/2007 14:15
WETLAB Sample ID: 0701198-015 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (post-MWMP)	EPA 160.1	14	%	0.1	2/7/2007
Moisture (pre-MWMP)	EPA 160.1	4.3	%	0.1	2/7/2007
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	4.32	pH Units		2/5/2007
Bicarbonate (HCO3)	SM 2320B	59	mg/L	1.0	2/12/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	48	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/23/2007
Fluoride	EPA 300.0	0.48	mg/L	0.10	2/23/2007
Sulfate	EPA 300.0	400	mg/L	10	2/22/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	2.0	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	630	mg/L	10	2/12/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/15/2007
Barium	EPA 200.7	0.023	mg/L	0.010	2/21/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/15/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Boron	EPA 200.7	0.34	mg/L	0.10	2/15/2007
Cadmium	EPA 200.7	<0.0010	mg/L	0.0010	2/21/2007
Calcium	EPA 200.7	120	mg/L	0.50	2/15/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/15/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Iron	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Magnesium	EPA 200.7	16	mg/L	0.50	2/15/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	2/15/2007
Molybdenum	EPA 200.7	0.034	mg/L	0.010	2/15/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Potassium	EPA 200.7	2.0	mg/L	0.50	2/15/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/15/2007

Customer Sample ID: WR-2 **Collect Date/Time:** 1/26/2007 14:15
WETLAB Sample ID: 0701198-015 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Sodium	EPA 200.7	30 M	mg/L	0.50	2/15/2007
Strontium	EPA 200.7	1.2	mg/L	0.10	2/21/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Vanadium	EPA 200.7	0.018	mg/L	0.010	2/15/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Antimony	EPA 200.8	0.12	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	0.10	mg/L	0.0050	2/21/2007
Selenium	EPA 200.8	0.12	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/15/2007
Anions	Calculation	9.46	meq/L	0.010	
Cations	Calculation	8.66	meq/L	0.010	
Error	Calculation	4.4	%	1.0	

Customer Sample ID: Field Blank **Collect Date/Time:** 1/26/2007 12:00
WETLAB Sample ID: 0701198-016 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II, PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
pH	EPA 150.1	8.05	pH Units		2/9/2007
Bicarbonate (HCO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/7/2007
Total Alkalinity	SM 2320B	<1.0	mg/L as CaCO3	1.0	2/7/2007
Chloride	EPA 300.0	<1.0	mg/L	1.0	2/3/2007
Fluoride	EPA 300.0	<0.10	mg/L	0.10	2/3/2007
Sulfate	EPA 300.0	<1.0	mg/L	1.0	2/3/2007
Nitrate Nitrogen	EPA 300.0	<1.0 HT	mg/L	1.0	2/3/2007
Nitrite Nitrogen	EPA 300.0	<0.010 HT	mg/L	0.010	2/3/2007
Total Dissolved Solids (TDS)	SM 2540C	<10	mg/L	10	2/5/2007
WAD Cyanide	SM 4500CNI	<0.010	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	<0.045	mg/L	0.045	2/15/2007
Barium	EPA 200.7	<0.010	mg/L	0.010	2/21/2007
Beryllium	EPA 200.7	<0.0010	mg/L	0.0010	2/15/2007
Bismuth	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Boron	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Calcium	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Chromium	EPA 200.7	<0.0050	mg/L	0.0050	2/15/2007
Cobalt	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Copper	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Gallium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007

Customer Sample ID: Field Blank **Collect Date/Time:** 1/26/2007 12:00
WETLAB Sample ID: 0701198-016 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II, PROFILE II, PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Iron	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Lead	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Lithium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Magnesium	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Manganese	EPA 200.7	<0.0050	mg/L	0.0050	2/15/2007
Molybdenum	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Nickel	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Phosphorus	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Potassium	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Scandium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Silver	EPA 200.7	<0.0050	mg/L	0.0050	2/15/2007
Sodium	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Strontium	EPA 200.7	<0.10	mg/L	0.10	2/21/2007
Tin	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Titanium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Vanadium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Zinc	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Antimony	EPA 200.8	<0.0025	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	<0.0050	mg/L	0.0050	2/21/2007
Selenium	EPA 200.8	<0.0050	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	<0.00010	mg/L	0.00010	2/15/2007
Anions	Calculation	<0.010	meq/L	0.010	
Cations	Calculation	<0.010	meq/L	0.010	
Error	Calculation	NA	%	1.0	
Selenium,TCLP	SW846 6010B	<0.40	mg/l	0.40	2/8/2007
Arsenic, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Barium, TCLP	SW846 6010B	<2.00	mg/L	2.00	2/8/2007
Cadmium, TCLP	SW846 6010B	<0.10	mg/L	0.10	2/8/2007
Chromium, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Lead, TCLP	SW846 6010B	<1.00	mg/L	1.00	2/8/2007
Silver, TCLP	SW846 6010B	<0.50	mg/L	0.50	2/8/2007
Mercury, TCLP	SW846 7470A	0.010	mg/L	0.010	2/8/2007

Customer Sample ID: TP-JP-6-10 **Collect Date/Time:** 1/26/2007 10:17
WETLAB Sample ID: 0701198-017 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Moisture (pre-MWMP)	EPA 160.1	5.2	%	0.1	2/7/2007
Moisture (post-MWMP)	EPA 160.1	17	%	0.1	2/7/2007

Customer Sample ID: TP-JP-6-10
WETLAB Sample ID: 0701198-017

Collect Date/Time: 1/26/2007 10:17
Receive Date: 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
pH of Extraction Fluid	EPA 150.1	5.50	pH Units		2/7/2007
pH	EPA 150.1	7.97	pH Units		2/9/2007
Bicarbonate (HCO3)	SM 2320B	61	mg/L	1.0	2/12/2007
Carbonate (CO3)	SM 2320B	<1.0	mg/L	1.0	2/12/2007
Total Alkalinity	SM 2320B	50	mg/L as CaCO3	1.0	2/12/2007
Chloride	EPA 300.0	11	mg/L	5.0	2/23/2007
Fluoride	EPA 300.0	<0.50	mg/L	0.50	2/23/2007
Sulfate	EPA 300.0	2600	mg/L	100	2/24/2007
Nitrate + Nitrite Nitrogen	EPA 300.0	96	mg/L	1.0	2/10/2007
Total Dissolved Solids (TDS)	SM 2540C	4800	mg/L	10	2/14/2007
WAD Cyanide	SM 4500CNI	0.74	mg/L	0.010	2/14/2007
Aluminum	EPA 200.7	<0.45	mg/L	0.45	2/15/2007
Barium	EPA 200.7	<0.10	mg/L	0.10	2/21/2007
Beryllium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Bismuth	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Boron	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Cadmium	EPA 200.7	<0.010	mg/L	0.010	2/15/2007
Calcium	EPA 200.7	290	mg/L	5.0	2/15/2007
Chromium	EPA 200.7	<0.050	mg/L	0.050	2/15/2007
Cobalt	EPA 200.7	0.49	mg/L	0.10	2/15/2007
Copper	EPA 200.7	<0.50	mg/L	0.50	2/15/2007
Gallium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Iron	EPA 200.7	0.37	mg/L	0.10	2/15/2007
Lead	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Lithium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Magnesium	EPA 200.7	45	mg/L	5.0	2/15/2007
Manganese	EPA 200.7	0.13	mg/L	0.050	2/15/2007
Molybdenum	EPA 200.7	1.2	mg/L	0.10	2/15/2007
Nickel	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Phosphorus	EPA 200.7	<5.0	mg/L	5.0	2/15/2007
Potassium	EPA 200.7	17	mg/L	5.0	2/15/2007
Scandium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Silver	EPA 200.7	0.065	mg/L	0.050	2/15/2007
Sodium	EPA 200.7	820	mg/L	5.0	2/15/2007
Strontium	EPA 200.7	1.4	mg/L	1.0	2/21/2007
Tin	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Titanium	EPA 200.7	<1.0	mg/L	1.0	2/15/2007
Vanadium	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Zinc	EPA 200.7	<0.10	mg/L	0.10	2/15/2007
Antimony	EPA 200.8	0.049	mg/L	0.0025	2/21/2007
Arsenic	EPA 200.8	0.010	mg/L	0.0050	2/21/2007

Customer Sample ID: TP-JP-6-10 **Collect Date/Time:** 1/26/2007 10:17

WETLAB Sample ID: 0701198-017 **Receive Date:** 1/26/2007 17:00

, MWMP PROFILE II

Parameter	Method	Results	Units	Reporting Limit	Date Analyzed
Selenium	EPA 200.8	1.5	mg/L	0.0050	2/21/2007
Thallium	EPA 200.8	<0.0010	mg/L	0.0010	2/21/2007
Mercury	EPA 245.1	0.016	mg/L	0.0010	2/20/2007
Anions	Calculation	62.3	meq/L	0.010	
Cations	Calculation	54.3	meq/L	0.010	
Error	Calculation	6.9	%	1.0	

QUALITY CONTROL REPORT

Sample ID: 701198
Reported: 03/30/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Alkalinity	2320B	mg/L	NA	100	100	100	216	216	<1
Alkalinity	2320B	mg/L	NA	98	100	98	80	82	2
pH	150.1	SU	NA	7.01	7.00	100	7.53	7.53	<1
TDS	2540C	mg/L	<10	149	150	100	4170	4360	4
TDS	2540C	mg/L	<10	155	150	103	4850	4770	2
Chloride	300.0	mg/L	<1.0	5.12	5.00	102	2.66	2.66	<1
Chloride	300.0	mg/L	<1.0	5.12	5.00	102	2.43	2.42	<1
NO3+NO2 Nitrogen	300.0	mg/L	<0.010	0.511	0.500	102	0.879	0.860	2
Sulfate	300.0	mg/L	<1.0	9.85	1.00	98	46.1	46.1	<1
Sulfate	300.0	mg/L	<1.0	9.87	1.00	99	29.0	28.9	<1
Fluoride	300.0	mg/L	<0.10	0.997	1.00	100	0.875	0.865	1
Fluoride	300.0	mg/L	<0.10	0.997	1.00	100	1.34	1.31	2
Cyanide WAD	4500CNI	mg/L	<0.010	0.0972	0.100	97	0.091	0.088	4
Cyanide WAD	4500CNI	mg/L	<0.010	0.100	0.100	100	0.066	0.070	6

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Chloride	300.0	mg/L	701-198-7	1.59	2.66	1.00	107	02/23/07
Chloride	300.0	mg/L	701-203-2	1.54	2.43	2.42	89	02/23/07
NO3+NO2 Nitrogen	300.0	mg/L	701-198-5	0.284	0.879	0.500	119	02/10/07
Sulfate	300.0	mg/L	701-198-1	42.6	46.1	4.00	88	02/21/07
Sulfate	300.0	mg/L	701-198-17	26.4	29.0	4.00	SC	02/24/07
Fluoride	300.0	mg/L	701-198-7	<0.10	0.875	1.00	88	02/23/07
Fluoride	300.0	mg/L	701-203-2	0.358	1.34	1.00	98	02/23/07
Cyanide WAD	4500CNI	mg/L	701-198-1	0.019	0.091	0.100	NC	02/14/07
Cyanide WAD	4500CNI	mg/L	702-094-1	<0.010	0.066	0.100	NC	02/22/07

NC = Not calculated due to matrix interference.
SC = Spike recovery not calculated. Sample concentration >4X the spike amount; Therefore the spike could not be adequately recovered.

QUALITY CONTROL REPORT

Sample ID: 701198
Reported: 03/30/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide Total	4500CNC	mg/L	<0.010	0.092	0.100	92	0.109	0.109	<1

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide Total	4500CNC	mg/L	701193-022	0.018	0.109	0.100	91	01/31/07

Metals QC
Optima 4300DV

Batch:	W070213-1A	Matrix:	water

Sample ID:	701-198-15	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0835	93	0.0853	2	0.090	0.0536	60	2/15/2007
Al	200.7	<0.045	mg/L	<0.045	1.00	0.8893	89	0.8892	0	1.00	0.9025	90	2/15/2007
B	200.7	<0.020	mg/L	0.3410	1.00	1.2643	92	1.3014	3	1.00	0.9415	94	2/15/2007
Ba	200.7	<0.010	mg/L	0.0214	1.00	0.8489	83	0.8581	1	1.00	0.9145	91	2/15/2007
Be	200.7	<0.0010	mg/L	<0.0010	1.00	0.9658	97	0.9812	2	1.00	0.9828	98	2/15/2007
Bi	200.7	<0.10	mg/L	<0.10	1.00	0.9638	96	0.9854	2	1.00	0.9629	96	2/15/2007
Ca	200.7	<0.50	mg/L	120.00	10.00	121.0247	SC	122.1070	1	10.00	9.6058	96	2/15/2007
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.8892	89	0.9027	2	1.00	0.9567	96	2/15/2007
Co	200.7	<0.010	mg/L	<0.010	1.00	0.9093	91	0.9296	2	1.00	0.9587	96	2/15/2007
Cr	200.7	<0.0050	mg/L	<0.0050	1.00	0.8840	88	0.8998	2	1.00	0.9401	94	2/15/2007
Cu	200.7	<0.050	mg/L	<0.050	1.00	0.9444	94	0.9606	2	1.00	0.9203	92	2/15/2007
Fe	200.7	<0.010	mg/L	<0.010	1.00	0.8679	87	0.8730	1	1.00	0.8908	89	2/15/2007
Ga	200.7	<0.10	mg/L	<0.10	1.00	1.0028	100	1.0169	1	1.00	0.9804	98	2/15/2007
K	200.7	<0.50	mg/L	2.0400	10.00	11.0413	90	11.2293	2	10.00	9.3819	94	2/15/2007
Li	200.7	<0.10	mg/L	<0.10	1.00	0.9599	96	0.9762	2	1.00	0.9264	93	2/15/2007
Mg	200.7	<0.50	mg/L	15.700	10.00	23.3747	77	23.3766	0	10.00	9.5539	96	2/15/2007
Mn	200.7	<0.0050	mg/L	0.0000	1.00	0.9563	96	0.9690	1	1.00	0.9783	98	2/15/2007
Mo	200.7	<0.010	mg/L	0.0336	1.00	0.9058	87	0.9309	3	1.00	0.9222	92	2/15/2007
Na	200.7	<0.50	mg/L	30.00	10.00	36.4403	NC	37.4641	3	10.00	9.3790	94	2/15/2007
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.8824	88	0.9060	3	1.00	0.9412	94	2/15/2007
P	200.7	<0.50	mg/L	<0.50	1.00	1.0075	101	1.0268	2	1.00	0.9688	97	2/15/2007
Pb	200.7	<0.010	mg/L	<0.010	1.00	0.9126	91	0.9338	2	1.00	0.9629	96	2/15/2007

Metals QC (Cont.)
Optima 4300DV

Batch:	W070213-1A	Matrix:	water

Sample ID:	701-198-15	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Sc	200.7	<0.10	mg/L	<0.10	1.0000	0.8566	86	0.8568	0	1.00	0.9197	92	2/15/2007
Sn	200.7	<0.10	mg/L	<0.10	1.0000	0.9448	94	0.9733	3	1.00	0.9735	97	2/15/2007
Sr	200.7	<0.10	mg/L	1.0400	1.0000	1.8158	78	1.8624	3	1.00	0.8999	90	2/15/2007
Ti	200.7	<0.10	mg/L	<0.10	1.0000	0.9415	94	0.9548	1	1.00	0.9625	96	2/15/2007
V	200.7	<0.010	mg/L	0.0183	1.0000	0.9720	95	0.9906	2	1.00	0.9764	98	2/15/2007
Zn	200.7	<0.010	mg/L	<0.010	1.0000	0.9134	91	0.9355	2	1.00	0.9751	98	2/15/2007

Samples 701-198(1-8,15,16) are associated with QC batch W070213-1A

NC = Not calculated due to matrix interference.

SC = Spike recovery not calculated. Sample concentration >4X the spike amount; Therefore the spike could not be adequately recovered.

Metals QC
ELAN DRC-e

Batch:	W070213-1A	Matrix:	water

Sample ID:	701-198-15	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
As	200.8	<5.0	ug/L	10.2217	10.00	18.9080	87	18.9878	0	10.00	9.893	99	2/21/2007
Sb	200.8	<2.5	ug/L	11.6033	10.00	21.0364	94	20.8203	1	10.00	10.2441	102	2/21/2007
Se	200.8	<5.0	ug/L	11.9866	10.00	19.9401	80	20.1236	1	10.00	9.1854	92	2/21/2007
Tl	200.8	<1.0	ug/L	<1.0	10.00	9.0598	90	9.1337	1	10.00	9.1795	92	2/21/2007
Pb	200.8	<2.5	ug/L	<2.5	10.00	9.5167	92	9.3760	1	10.00	9.4413	94	2/21/2007

Samples 701-198-(1-8,15,16) are associated with QC batch W070213-1A

Metals QC
Optima 4300DV

Batch:	W070213-1B	Matrix:	water

Sample ID:	702-016-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0838	93	0.0841	0	0.090	0.0536	60	2/15/2007
Al	200.7	<0.045	mg/L	<0.045	1.00	0.8677	86	0.8664	0	1.00	0.9025	90	2/15/2007
B	200.7	<0.020	mg/L	0.1259	1.00	1.0901	96	1.0969	1	1.00	0.9415	94	2/15/2007
Ba	200.7	<0.010	mg/L	0.0735	1.00	0.8978	82	0.8969	0	1.00	0.9145	91	2/15/2007
Be	200.7	<0.0010	mg/L	<0.0010	1.00	1.0086	101	0.9957	1	1.00	0.9828	98	2/15/2007
Bi	200.7	<0.10	mg/L	<0.10	1.00	0.9695	99	0.9733	0	1.00	0.9629	96	2/15/2007
Ca	200.7	<0.50	mg/L	28.2369	10.00	38.0530	98	36.5257	4	10.00	9.6058	96	2/15/2007
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.9017	90	0.9053	0	1.00	0.9567	96	2/15/2007
Co	200.7	<0.010	mg/L	<0.010	1.00	0.9118	91	0.9133	0	1.00	0.9587	96	2/15/2007
Cr	200.7	<0.0050	mg/L	<0.0050	1.00	0.9078	91	0.9106	0	1.00	0.9401	94	2/15/2007
Cu	200.7	<0.050	mg/L	<0.050	1.00	0.9233	92	0.9266	0	1.00	0.9203	92	2/15/2007
Fe	200.7	<0.010	mg/L	0.0645	1.00	0.9325	87	0.9324	0	1.00	0.8908	89	2/15/2007
Ga	200.7	<0.10	mg/L	<0.10	1.00	0.9762	97	0.9754	0	1.00	0.9804	98	2/15/2007
K	200.7	<0.50	mg/L	4.1861	10.00	13.4068	92	13.3533	0	10.00	9.3819	94	2/15/2007
Li	200.7	<0.10	mg/L	<0.10	1.00	0.9108	89	0.9171	1	1.00	0.9264	93	2/15/2007
Mg	200.7	<0.50	mg/L	7.6912	10.00	16.8364	91	16.7055	1	10.00	9.5539	96	2/15/2007
Mn	200.7	<0.0050	mg/L	0.1812	1.00	1.1571	98	1.1564	0	1.00	0.9783	98	2/15/2007
Mo	200.7	<0.010	mg/L	<0.010	1.00	0.8758	87	0.8764	0	1.00	0.9222	92	2/15/2007
Na	200.7	<0.50	mg/L	24.3370	10.00	33.4912	92	32.5343	3	10.00	9.3790	94	2/15/2007
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.8840	88	0.8868	0	1.00	0.9412	94	2/15/2007
P	200.7	<0.50	mg/L	<0.50	1.00	1.0146	95	1.0145	0	1.00	0.9688	97	2/15/2007
Pb	200.7	<0.010	mg/L	<0.010	1.00	0.9249	92	0.9274	0	1.00	0.9629	96	2/15/2007

Metals QC (Cont.)
Optima 4300DV

Batch:	W070213-1B	Matrix:	water

Sample ID:	702-016-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Sc	200.7	<0.10	mg/L	<0.10	1.0000	0.8534	85	0.8554	0	1.00	0.9197	92	2/15/2007
Sn	200.7	<0.10	mg/L	<0.10	1.0000	0.9782	99	0.9792	0	1.00	0.9735	97	2/15/2007
Sr	200.7	<0.10	mg/L	0.2368	1.0000	1.1091	87	1.0915	2	1.00	0.8999	90	2/15/2007
Ti	200.7	<0.10	mg/L	<0.10	1.0000	0.9621	96	0.9678	1	1.00	0.9625	96	2/15/2007
V	200.7	<0.010	mg/L	0.0105	1.0000	0.9842	97	0.9878	0	1.00	0.9764	98	2/15/2007
Zn	200.7	<0.010	mg/L	0.0217	1.0000	0.9606	94	0.9631	0	1.00	0.9751	98	2/15/2007

Sample 701-198-17 is associated with QC batch W070213-1B

Metals QC
ELAN DRC-e

Batch:	W070213-1B	Matrix:	water

Sample ID:	702-016-2	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
As	200.8	<5.0	ug/L	10.6380	10.00	20.5748	99	21.1996	3	10.00	9.893	99	2/21/2007
Sb	200.8	<2.5	ug/L	<2.5	10.00	10.3810	103	10.3724	0	10.00	10.2441	102	2/21/2007
Se	200.8	<5.0	ug/L	<5.0	10.00	9.7056	95	9.9035	2	10.00	9.1854	92	2/21/2007
Tl	200.8	<1.0	ug/L	<1.0	10.00	8.9003	89	9.0008	1	10.00	9.1795	92	2/21/2007
Pb	200.8	<2.5	ug/L	<2.5	10.00	9.6308	91	9.7829	2	10.00	9.4413	94	2/21/2007

Sample 701-198-17 is associated with QC batch W070213-1B

Metals QC
CETAC M-6000A

Batch:	Hg070208-1B
Matrix:	TCLP

		Date Analyzed:	2/8/07
Sample ID:	701-198-16	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7471A	<0.10	ug/L	0.10	2.00	2.49	120	2.88	15	2.00	2.24	112

Samples 701-198-(13,14,16) are associated with QC batch Hg070208-1B

Metals QC
Optima 4300DV

Batch:	T070208-1A	Matrix:	water

Sample ID:	701-198-10	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0886	99	0.0888	0	0.090	0.0883	98	2/8/2007
As	6010B	<0.10	mg/L	<0.10	1.00	0.9817	98	0.9866	0	1.00	0.9689	97	2/8/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	0.9309	91	0.9223	1	1.00	0.9568	96	2/8/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9073	91	0.9058	0	1.00	0.9386	94	2/8/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9268	92	0.9206	1	1.00	0.9425	94	2/8/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9236	92	0.9196	0	1.00	0.9465	95	2/8/2007
Se	6010B	<0.040	mg/L	<0.040	1.00	0.9092	90	0.9098	0	1.00	0.8931	89	2/8/2007

Samples 701-198-(9-10) are associated with QC batch T070208-1A

QUALITY CONTROL REPORT

Sample ID: 701198
Reported: 02/25/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Cyanide Total	4500CNC	mg/L	<0.010	0.092	0.100	92	0.109	0.109	<1

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide Total	4500CNC	mg/L	701193-022	0.018	0.109	0.100	91	01/31/07

Metals QC
Optima 4300DV

Batch:	T070208-1B	Matrix:	water

Sample ID:	702-040-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank True Value	Lab Fortified Blank Result	Lab Fortified Blank % Rec	Date Analyzed
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0882	98	0.0885	0	0.090	0.0883	98	2/8/2007
As	6010B	<0.10	mg/L	<0.10	1.00	0.9803	98	0.9834	0	1.00	0.9689	97	2/8/2007
Ba	6010B	<0.20	mg/L	<0.20	1.00	0.9690	96	0.9631	1	1.00	0.9568	96	2/8/2007
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9512	95	0.9507	0	1.00	0.9386	94	2/8/2007
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9500	95	0.9509	0	1.00	0.9425	94	2/8/2007
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9581	96	0.9584	0	1.00	0.9465	95	2/8/2007
Se	6010B	<0.040	mg/L	<0.040	1.00	0.9093	91	0.9161	1	1.00	0.8931	89	2/8/2007

Samples 701-198-(11-14,16) are associated with QC batch T070208-1B

Metals QC
CETAC M-6000A

Batch:	Hg070208-1A
Matrix:	TCLP

		Date Analyzed:	2/8/07
Sample ID:	701-193-22	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	%-Rec
Hg	7470A	<0.10	ug/L	<0.10	2.00	2.60	130	2.98	14	2.00	2.24	112

Samples 701-198-(9-12) are associated with QC batch Hg070208-1A

SAMPLE RECEIVING CHECKLIST

WETLAB Sample ID: 701-198

Y	N	
X		**Was the information on the Chain of Custody (COC) complete?**
		If no, what was missing:
		Client Information
		Analyses requested — cannot perform ABA on water (field blank) client okd not running.
		Sample Information circle one: Sample ID Date Col. Time Col. samplers name sample matrix
		Was the client notified of any problems?
		Who did you speak with_____ When_____
	X	**Did the sample containers match the COC?**
		if no, what was incorrect:
		Number of containers — see back
		Sample Volume
		Preservation
		If there was in-house preservation was it logged in the book?
		Temperature
		Was the client notified of any problems?
		Who did you speak with_____ When_____
		Is this standard turn-around-time or RUSH? (circle one)
		if RUSH, was it approved?
		Were the appropriate people in the lab verbally notified?
X		**Are there special reporting requirements**
X		Does the client need QC?
	X	Does the client need 'low level' reporting limits for nutrients?
	X	Does the client need special reporting limits for metals?
	X	**Are there 'short hold' tests?**
		Were samples received 'in hold'
		If yes, is there sufficient time to meet holding times?
		Were the appropriate people in the lab verbally notified?
		Was the client notified of any problems?
		Who did you speak with_____ When_____
		Are the samples for NV or CA (circle one)
X		**Is there subcontracting?**
X		Has the COC been copied and put in the box?
X		Has a sub-chain been written up?
	X	Is there any special paperwork (I.e. special reporting requirements) that needs to go with the chain?
X		**Is there special pricing for this project?**

Samples logged in by: GP

Login reviewed by: ADS

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-198
Report Due Date: 2-8-07
Page 1 of 2

Client Amec
Address
City, State & Zip
Contact Don Swigonski
Phone
Collector's Name Swigonski
Fax
Project Name Gunsalborn
P.O. Number
Project Number 6 417 00 07 20
Email

Turnaround Time
Standard 5-Day Other

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water	SD = Solid
WW = Wastewater	SO = Soil
SW = Surface Water	HW = Hazardous Waste
MW = Monitoring Well	OTHER:

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO. OF CONTAINERS	Mercury	Pb-Sb-As	Metals								Spl. No.
TP-JP-5-1	1-26	10:05	SO	1	X	X									1
TP-JP-5-5	1-26	10:08	SO	1	X	X									2
TP-JP-6-1	1-26	10:10	SO	1	X	X									3
TP-JP-6-5	1-26	10:17	SO	1	X	X									4
TP-JP-7-1	1-26	10:22	SO	1	X	X									5
TP-JP-7-5	1-26	10:28	SO	1	X	X									6
TP-JP-8-1	1-26	10:35	SO	1	X	X									7
TP-JP-8-5	1-26	10:40	SO	1	X	X									8
TP-RS-1-1	1-26	10:45	SO	1			X	X	X						9
TP-RS-1-5	1-26	10:50	SO	1			X	X	X						10
TP-RS-2-1	1-26	11:05	SO	1			X	X	X						11
TP-RS-2-5	1-26	11:10	SO	1			X	X	X						12

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature 10 °C	1-26-07	17:00	[signature]	[signature]
Custody Seals Intact? Y N None				
Number of Containers 8				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 701-198
Report Due Date: 2-9-07
Page 2 of 2

Client Ambe
Address
City, State & Zip
Contact Don Swigonski
Phone
Fax
P.O. Number
Email

Collector's Name Swigonski
Project Name Gundersen
Project Number

Turnaround Time
Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company
Address
City, State & Zip
Contact
Phone
Fax
Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water	SD = Solid
WW = Wastewater	SO = Soil
SW = Surface Water	HW = Hazardous Waste
MW = Monitoring Well	OTHER:

SAMPLE ID/LOCATION	DATE	TIME	SAMPLE TYPE	NO OF CONTAINERS	EPA	TPH Carbon Ranges	Cd	MWMP	Paint Filter							Spl. No.
TP-RS-3-1	1-26	11:15			X	X	X									13
TP-RS-3-5	1-26	11:21			X	X	X									14
WR-2	1-26	14:15						X	X							15
Field Blank	1-26	12:00			X	X	X		X							16
TP-TP-6-10	1/26	10:17	SO	1				X	X							17

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature 10 °C	1-26	17:00	Don Swigonski	[illegible]
Custody Seals Intact? Y N None				
Number of Containers 8				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compesation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

Green Analytical Laboratories, Inc.

GAL ID No.: 701-113,01-06

February 5, 2007

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name: AMEC - Gooseberry
Project Number: 701-198
Date Received: 01/30/07

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 01/30/07.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

For: John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-113,01-06
Date Received: 01/30/07
Date Reported: 02/05/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC - Gooseberry
PROJECT NUMBER: 701-198

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
113-01	T-P-RS-1-1	01/26/07												
701-113-02	T-P-RS-1-5	01/26/07												
701-113-03	T-P-RS-2-1	01/26/07												
701-113-04	T-P-RS-2-5	01/26/07												
701-113-05	T-P-RS-3-1	01/26/07												
701-113-06	T-P-RS-3-5	01/26/07												

D Zufelt
For: John Green, Laboratory Director

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

GAL I.D.: 701-113,01-06
Date Received: 01/30/07
Date Reported: 02/05/07
Sample Matrix: Soil

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

PROJECT NAME: AMEC - Gooseberry
PROJECT NUMBER: 701-198

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
701-113-01		1.030				32.2	104	71.5							
701-113-02		0.846				26.4	179	152							
701-113-03		0.431				13.5	138	125							
701-113-04		0.249				7.78	114	106							
701-113-05		0.937				29.3	144	115							
701-113-06		0.520				16.2	138	122							

For: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 701-113,01-06
Date Received: 01/30/07
Date Reported: 02/05/07
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC - Gooseberry
PROJECT NUMBER: 701-198

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
113-01										10.37		
701-113-02										17.85		
701-113-03										13.82		
701-113-04										11.37		
701-113-05										14.40		
701-113-06										13.82		

D Zufelt
For John Green, Laboratory Director

RESULTS FOR WR-1 SHOWN IN TABLE 17

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

November 16, 2006

Lab Sample ID: 610-127

AMEC Earth & Environmental
780 Vista Blvd, Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Dear Mr. Whitford,

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The sample was received by WETLAB-Western Environmental Testing Laboratory in good condition on 10/11/06.

The analysis for AGP/ANP was performed by Green Analytical Laboratories, Inc. of Durango, Colorado. Their report is attached.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager
EPA Lab ID NV004

Enclosure

Western Environmental Testing Laboratory
Analytical Report

ANEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/11/06
Lab Sample ID: 610-127
Reported: 11/16/06

Project Name/Number: Gooseberry / 6417000.720
Client Sample ID/Location: WR1-10-11
Date/Time Collected: 10/11/06 @ 1530
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
MWWP				
% Moisture (pre-MWMP)	160.1	1.2	%	10/26/06
% Moisture (post- MWMP)	160.1	14	%	10/30/06
pH of Extraction fluid	150.1	4.44	SU	10/26/06
MWMP Profile I Wet Chemistry				
Alkalinity, Total	2320B	78	mg/L as CaCO3	11/07/06
Bicarbonate	2320B	95	mg/L	11/07/06
Carbonate	2320B	<1.0	mg/L	11/07/06
Chloride	300.0	1.5	mg/L	11/03/06
WAD Cyanide	4500 CN I	0.020	mg/L	11/01/06
Fluoride	300.0	0.19	mg/L	11/03/06
Nitrate Nitrogen	300.0	1.5	mg/L	11/03/06
Nitrite Nitrogen	300.0	0.19	mg/L	11/03/06
pH	150.1	8.14	SU	10/27/06
Sulfate	300.0	18	mg/L	11/03/06
Total Dissolved Solids	2540C	150	mg/L	10/30/06
MWMP Profile I Metals				
Aluminum	200.7	<0.045	mg/L	11/02/06
Antimony	200.8	0.010	mg/L	11/14/06
Arsenic	200.8	0.024	mg/L	11/14/06
Barium	200.7	0.019	mg/L	11/02/06
Beryllium	200.7	<0.0010	mg/L	11/02/06
Boron	200.7	<0.10	mg/L	11/02/06
Cadmium	200.7	<0.0010	mg/L	11/02/06
Calcium	200.7	29	mg/L	11/02/06
Chromium	200.7	<0.0050	mg/L	11/02/06

Andy Smith, Lab Manager
WETLAB

475 East Greg Street Suite # 119 Sparks, NV 89431 775-355-0202

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID:	NV004
Received:	10/11/06
Lab Sample ID:	610-127
Reported:	11/16/06

Project Name/Number:	Gooseberry / 6417000.720
Client Sample ID/Location:	WR1-10-11
Date/Time Collected:	10/11/06 @ 1530
Sampled By:	Client

Parameter	Method	Results	Units	Analyzed
MWMP Profile I Metals-continued				
Copper	200.7	<0.050	mg/L	11/02/06
Iron	200.7	0.12	mg/L	11/02/06
Lead	200.7	<0.010	mg/L	11/02/06
Magnesium	200.7	2.0	mg/L	11/02/06
Manganese	200.7	0.0060	mg/L	11/02/06
Mercury	245.1	0.00021	mg/L	11/01/06
Nickel	200.7	<0.010	mg/L	11/02/06
Potassium	200.7	5.1	mg/L	11/02/06
Selenium	200.8	0.0095	mg/L	11/14/06
Silver	200.7	<0.0050	mg/L	11/02/06
Sodium	200.7	8.2	mg/L	11/02/06
Thallium	200.8	<0.0010	mg/L	11/14/06
Zinc	200.7	<0.010	mg/L	11/02/06

MWMP Profile I Ion Balance

Cation - Anion Balance

Cation, meq/L 2.11
Anions, meq/L 2.09
% Error <1.0

Andy Smith, Lab Manager
WETLAB

475 East Greg Street Suite # 119 Sparks, NV 89431 775-355-0202

Western Environmental Testing Laboratory
QUALITY CONTROL REPORT

Lab Sample ID 610-127
Reported: 11/16/06

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
pH	150.1	SU	N/A	7.08	7.00	101	8.14	8.17	<1
Alkalinity	2320B	mg/L as $CaCO_3$	N/A	100	100	100	6.0	6.0	<1
TDS	2540C	mg/L	<1.0	148	150	99	549	550	<1
Chloride	300.0	mg/L	<1.0	4.85	5.00	97	2.37	2.29	3
Nitrate as N	300.0	mg/L	<0.010	1.98	2.00	99	1.13	1.07	5
Nitrite as N	300.0	mg/L	<0.010	0.452	0.500	90	0.456	0.426	7
Sulfate	300.0	mg/L	<1.0	9.45	10.0	94	10.7	10.6	2
Fluoride	300.0	mg/L	<0.10	0.992	1.00	99	1.84	1.82	1
WAD Cyanide	4500CNI	mg/L	<0.010	0.100	0.100	100	0.181	0.177	22

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE ANALYZED
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Chloride	300.0	mg/L	610-095-9	2.202	2.372	1.00	NC	11/02/06
Nitrate as N	300.0	mg/L	610-095-9	0.297	1.126	1.00	83	11/02/06
Nitrite as N	300.0	mg/L	610-095-9	<0.010	0.456	0.500	91	11/02/06
Sulfate	300.0	mg/L	610-095-9	5.72	10.7	4.00	126	11/02/06
Fluoride	300.0	mg/L	610-095-9	0.872	1.842	1.00	97	11/02/06
WAD Cyanide	4500CNI	mg/L	610-280-1	0.078	0.181	0.100	103	11/01/06

NC = Not calculated due to matrix interference.

Metals QC
Optima 4300DV

Batch:	W061030-2A	Matrix:	water

Sample ID:	610-210-5	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0867	96	0.0876	1	0.090	0.0902	100	11/2/2006
Al	200.7	<0.045	mg/L	<0.045	1.00	0.9849	95	1.0033	2	1.00	0.9715	97	11/2/2006
B	200.7	<0.020	mg/L	0.0213	1.00	0.9938	97	1.0132	2	1.00	0.9721	97	11/2/2006
Ba	200.7	<0.010	mg/L	0.0362	1.00	0.9402	90	0.9479	1	1.00	0.9607	96	11/2/2006
Be	200.7	<0.0010	mg/L	<0.0010	1.00	0.9890	99	0.9859	0	1.00	0.9870	99	11/2/2006
Ca	200.7	<0.50	mg/L	18.7872	10.00	28.5498	98	29.5696	4	10.00	9.8771	99	11/2/2006
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.9226	92	0.9350	1	1.00	0.9730	97	11/2/2006
Cr	200.7	<0.0050	mg/L	<0.0050	1.00	0.9359	94	0.9444	1	1.00	0.9798	98	11/2/2006
Cu	200.7	<0.050	mg/L	<0.050	1.00	0.9458	94	0.9586	1	1.00	0.9422	94	11/2/2006
Fe	200.7	<0.010	mg/L	<0.010	1.00	0.9774	97	0.9621	2	1.00	0.9702	97	11/2/2006
K	200.7	<0.50	mg/L	52.1288	10.00	61.6491	95	64.4029	4	10.00	9.7557	98	11/2/2006
Mg	200.7	<0.50	mg/L	10.1952	10.00	19.3727	92	19.5502	1	10.00	9.6394	96	11/2/2006
Mn	200.7	<0.0050	mg/L	0.2172	1.00	1.1892	97	1.2103	2	1.00	0.9890	99	11/2/2006
Na	200.7	<0.50	mg/L	7.3180	10.00	16.8022	95	17.2214	2	10.00	9.8599	99	11/2/2006
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.9428	94	0.9406	0	1.00	0.9628	96	11/2/2006
Pb	200.7	<0.010	mg/L	<0.010	1.00	0.9531	95	0.9496	0	1.00	0.9790	98	11/2/2006
Zn	200.7	<0.010	mg/L	0.0214	1.0000	0.9707	95	0.9857	2	1.00	0.9778	98	11/2/2006

Sample 610-127-1 MWMP is associated with QC batch W061030-2A

Metals QC
ELAN DRC-e

Batch:	W061030-2A	Matrix:	water

Sample ID:	610-210-5	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
As	200.8	<5.0	ug/L	<5.0	10.00	11.1212	109	10.7669	3	10.00	10.408	104	11/20/2006
Sb	200.8	<2.5	ug/L	<2.5	10.00	11.1668	112	10.8751	3	10.00	10.5849	106	11/20/2006
Se	200.8	<5.0	ug/L	<5.0	10.00	11.1023	112	11.1466	0	10.00	10.4523	105	11/20/2006
Tl	200.8	<1.0	ug/L	<1.0	10.00	10.1270	101	9.9065	2	10.00	9.3957	94	11/20/2006
Pb	200.8	<2.5	ug/L	<2.5	10.00	10.1991	102	10.0127	2	10.00	9.6369	96	11/20/2006

Sample 610-127-1 MWMP is associated with QC batch W061030-2A

Metals QC
CETAC M-6000A

Batch:	Hg061031-1B
Matrix:	water

		Date Analyzed:	10/31/06
Sample ID:	610-180-1	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	mg/L	<0.10	2.00	2.02	100	2.06	2	2.00	1.72	86

Samples 610-127-1 is associated with QC batch Hg061031-1B

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number [illegible]
Report Due Date: [illegible]
Page ____ of ____

Client [illegible]
Address [illegible]
City, State & Zip [illegible]
Contact [illegible]
Phone
Collector's Name [illegible]
Fax
Project Name [illegible]
P.O. Number
Project Number [illegible]
Email

Turnaround Time
Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company ____
Address ____
City, State & Zip ____
Contact ____
Phone ____
Fax ____
Email ____

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water	SD = Solid
WW = Wastewater	SO = Soil
SW = Surface Water	HW = Hazardous Waste
MW = Monitoring Well	OTHER: ____

SAMPLE ID/LOCATION	DATE	TIME	Sample Type	Containers	[illegible]	[illegible]									Spl. No.
[illegible]	[illegible]	[illegible]			[illegible]	[illegible]									

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature [illegible] °C	[illegible]	[illegible]	[illegible]	[illegible]
Custody Seals Intact? Y N None				
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

Green Analytical Laboratories, Inc.

GAL ID No.: 610-106-01

October 26, 2006

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

Project Name: AMEC Gooseberry
Project Number: 6417000720
Date Received: 10/19/06

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as EPA-600/2-78-054, ASA Monograph #9 and USDA Handbook 60.

Samples were received by Green Analytical Laboratories, Inc. in good condition on 10/19/06.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Debbie Zufelt

For: John Green
Laboratory Director

Enclosure

75 Suttle Street, Durango, Colorado 81303
Telephone (970) 247-4220 Fax (970) 247-4227

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 610-106-01
Date Received: 10/19/06
Date Reported: 10/26/06
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC Gooseberry
PROJECT NUMBER: 6417000720

GAL #	LOCATION	SAMPLE DATE	SAMPLE DEPTH	PH UNITS	EC MMHO/CM	% SAT	CALCIUM MEQ/L	MAGNESIUM MEQ/L	SODIUM MEQ/L	SAR	% SAND	% SILT	% CLAY	CLASS
610-106-01	WR1-10-11	10/11/2006		7.98										

D Zufelt
FOR: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 610-106-01
Date Received: 10/19/06
Date Reported: 10/26/06
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC Gooseberry
PROJECT NUMBER: 6417000720

GAL #	CARBON	TOT S %	SULFATE S%	PYR S %	ORG S%	ACID POT TN/1000TN	NEUT POT TN/1000TN	A-B POT TN/1000TN	PYR A POT TN/1000TN	PYRS A-B TN/1000TN	BORON PPM	TOT SE PPM	AB-DTPA PPM	SE	SOL SE PPM
610-106-01		0.698				21.8	108	86.6							

For: John Green, Laboratory Director

WET Lab
475 E. Greg Street, Suite 119
Sparks, NV 89431
Attention: Ginger Peppard

GAL I.D.: 610-106-01
Date Received: 10/19/06
Date Reported: 10/26/06
Sample Matrix: Soil

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

PROJECT NAME: AMEC Gooseberry
PROJECT NUMBER: 6417000720

GAL #	AVAIL NA MEQ/100GM	EXTRACT NA MEQ/100GM	CEC MEQ/100GM	ESP	CO3	SAMPLER	NO3	EFFVRS	LIME EST	%CACO3	SAMPLE TYPE	ELEVATION
610-106-01										10.84		

D Zufelt
FOR: John Green, Laboratory Director

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY

Specializing in Soil, Hazardous Waste and Water Analysis.

475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number
Report Due Date:
Page _____ of _____

Client
Address
City, State & Zip
Contact
Phone | Collector's Name
Fax | Project Name
P.O. Number | Project Number
Email

Turnaround Time
Standard _____ 5-Day _____ Other _____

Billing Address (if different than Client Address):
Company _____
Address _____
City, State & Zip _____
Contact _____
Phone _____
Fax _____
Email _____

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: _____

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	Sample Type	Containers	Analyses Requested										Spl. No.

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature _____ °C				
Custody Seals Intact? Y N None				
Number of Containers _____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

RESULTS FOR T-1 THRUGH T-6
(TRANSFORMERS)
SHOWN IN TABLE 15

RESULTS FOR DR-1 THROUGH DR-5
(DRUMS)
SHOWN IN TABLE 18

RESULTS FOR SETNK, TANK 4, TNK 5 AND TANK 6
(MILL BUILDING)
SHOWN IN TABLE 14

CYANIDE MIXING TANK 2 AND CYANIDE MIXING TANK 3
SHOWN IN TABLE 14

WETLAB
WESTERN ENVIRONMENTAL
TESTING LABORATORY

475 E. Greg Street #119 | Sparks, Nevada 89431 | tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

March 30, 2007

Lab Sample ID: 610-097B

AMEC Earth & Environmental
780 Vista Blvd, Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Dear Mr. Whitford,

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, 18th & 19th editions, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 10/10/06. Upon review of the samples received, there was no sample received for the MWMP and Profile II analyses for sample SCyanide Vat, therefore those analyses were cancelled per client's request.

This is an amended report that includes the corrected reporting limit for Selenium (MWMP) on sample SETNK 10-9.

Due to a laboratory oversight, sample CN Tank 1 could not be located after sample log-in. The analysis for WAD Cyanide was cancelled per client's request.

Due to sample matrix it was necessary to analyze for all metals analytes at a dilution on samples SETNK 10-9 (MWMP), TNK-4-10-9 (MWMP), and TNK 5-10-9 (MWMP). The reporting limits have been adjusted accordingly.

The Meteoric Water Mobility Procedure extraction was performed twice in order to facilitate the analysis of Mercury and Total Dissolved Solids within the appropriate holding time. The extraction data for both extractions has been provided in the report. Please see the attached case narrative concerning this issue.

The analyses for PCB's, TCLP 11, and TPH-extractable were performed by Associated Laboratories of Orange, California. Their report is attached.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Andy Smith
Laboratory Manager
EPA Lab ID NV004

Enclosure

Case Narrative

The following is a discussion pertaining to the mine waste samples received on 10/10/06 as WETLAB sample IDs 610-097(2-4). At the request of the client these samples were analyzed for NDEP Profile II constituents following a Meteoric Water Mobility Procedure (MWMP) extraction.

The samples of concern were originally extracted according to the MWMP method on 11/08/06 and submitted for the analysis of all constituents included in the NDEP Profile II list. Due to higher than expected results for numerous analytes, reanalysis was required with sample dilution included. The reanalysis for two constituents (Mercury and Total Dissolved Solids) was performed past the EPA recommended holding time for these parameters. Due to this issue the laboratory performed a second MWMP extraction for the sole purpose of reanalysis of Mercury and Total Dissolved Solids. This additional extraction was performed on 12/29/06. The reanalysis data as well as the MWMP extraction data for both extractions is provided in the report.

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 02
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: SETNK 10-9
Date/Time Collected: 10/09/06 @ 1400
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
MWWP (11/08/06)				
% Moisture (pre-MWMP)	160.1	1.8	%	11/08/06
% Moisture (post- MWMP)	160.1	42.4	%	11/10/06
pH of Extraction fluid	150.1	4.61	SU	11/08/06
MWMP Profile II Wet Chemistry				
Alkalinity, Total	2320B	3300	mg/L as $CaCO_3$	11/14/06
Bicarbonate	2320B	2200	mg/L	11/14/06
Carbonate	2320B	910	mg/L	11/14/06
Hydroxide	2320B	<1.0	mg/L	11/14/06
Chloride	300.0	400	mg/L	11/20/06
Fluoride	4500FC	0.91	mg/L	11/21/06
Nitrate + Nitrite Nitrogen	300.0	8.1	mg/L	11/22/06
pH	150.1	9.64	SU	11/09/06
Sulfate	300.0	3000	mg/L	11/14/06
WAD Cyanide	4500CNI	38	mg/L	11/15/06
MWMP Profile II Metals				
Aluminum	200.7	<4.5	mg/L	11/22/07
Antimony	200.7	<2.0	mg/L	11/22/07
Arsenic	200.7	<3.0	mg/L	11/22/07
Barium	200.7	<1.0	mg/L	11/22/07
Beryllium	200.7	<0.10	mg/L	11/22/07
Bismuth	200.7	<10	mg/L	11/22/07
Boron	200.7	<10	mg/L	11/22/07
Cadmium	200.7	<0.10	mg/L	11/22/07
Calcium	200.7	<50	mg/L	11/22/07
Chromium	200.7	<0.50	mg/L	11/22/07

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
Client Sample/ID Location: SETNK 10-9

Lab Sample ID: 610-097B 02
Reported: 03/30/07

Parameter	Method	Results	Units	Analyzed
MWMP Profile II Metals Cont'd				
Cobalt	200.7	<1.0	mg/L	11/22/07
Copper	200.7	<5.0	mg/L	11/22/07
Gallium	200.7	<10	mg/L	11/22/07
Iron	200.7	120	mg/L	11/22/07
Lead	200.7	<1.0	mg/L	11/22/07
Lithium	200.7	<10	mg/L	11/22/07
Magnesium	200.7	<50	mg/L	11/22/07
Manganese	200.7	<0.50	mg/L	11/22/07
Molybdenum	200.7	2.1	mg/L	11/22/07
Nickel	200.7	<1.0	mg/L	11/22/07
Phosphorus	200.7	<50	mg/L	11/22/07
Potassium	200.7	110	mg/L	11/22/07
Scandium	200.7	<10	mg/L	11/22/07
Selenium	200.7	<5.0	mg/L	11/22/07
Silver	200.7	35	mg/L	12/01/06
Sodium	200.7	3000	mg/L	11/22/07
Strontium	200.7	<10	mg/L	11/22/07
Thallium	200.7	<6.0	mg/L	11/22/07
Tin	200.7	<10	mg/L	11/22/07
Titanium	200.7	<10	mg/L	11/22/07
Vanadium	200.7	<1.0	mg/L	11/22/07
Zinc	200.7	<1.0	mg/L	11/22/07

MWMP Profile II Ion Balance

Cation - Anion Balance

Cation, meq/L 140
Anions, meq/L 141
% Error <1.0

Andy Smith, Lab Manager

WET LAB
475 East Greg Street Suite # 119 Sparks, NV 89431 775-355-0202

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 02
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: SETNK 10-9
Date/Time Collected: 10/09/06 @ 1400
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
MWWP (12/29/06)				
% Moisture (pre-MWMP)	160.1	1.4	%	12/29/06
% Moisture (post- MWMP)	160.1	41.8	%	12/30/06
pH of Extraction fluid	150.1	4.60	SU	12/29/06
MWMP Wet Chemistry				
Total Dissolved Solids	2540C	17000	mg/L	12/31/06
MWMP Metals				
Mercury	245.1	0.13	mg/L	12/31/06

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 02
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: SETNK 10-9
Date/Time Collected: 10/09/06 @ 1400
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
RCRA Metals				
Arsenic	6010B	310	mg/kg	11/28/06
Barium	6010B	32	mg/kg	11/28/06
Cadmium	6010B	11	mg/kg	11/28/06
Chromium	6010B	42	mg/kg	11/28/06
Lead	6010B	270	mg/kg	11/28/06
Mercury	7471A	2.4	mg/kg	11/03/06
Selenium	6010B	53	mg/kg	11/28/06
Silver	6010B	130	mg/kg	11/29/06

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 03
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: TNK 4-10-9
Date/Time Collected: 10/09/06 @ 1415
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
MWWP (11/08/06)				
% Moisture (pre-MWMP)	160.1	5.7	%	11/08/06
% Moisture (post- MWMP)	160.1	37.6	%	11/10/06
pH of Extraction fluid	150.1	4.61	SU	11/08/06
MWMP Profile II Wet Chemistry				
Alkalinity, Total	2320B	16000	mg/L as $CaCO_3$	11/14/06
Bicarbonate	2320B	<10	mg/L	11/14/06
Carbonate	2320B	8900	mg/L	11/14/06
Hydroxide	2320B	290	mg/L	11/14/06
Chloride	300.0	3100	mg/L	11/14/06
Fluoride	4500FC	1.6	mg/L	11/21/06
Nitrate + Nitrite Nitrogen	300.0	39	mg/L	11/22/06
pH	150.1	10.00	SU	11/09/06
Sulfate	300.0	46000	mg/L	11/04/06
WAD Cyanide	4500CNI	28	mg/L	11/15/06
MWMP Profile II Metals				
Aluminum	200.7	<45	mg/L	12/01/06
Antimony	200.7	12	mg/L	11/22/06
Arsenic	200.7	<30	mg/L	12/01/06
Barium	200.7	<1.0	mg/L	11/22/07
Beryllium	200.7	<0.10	mg/L	11/22/07
Bismuth	200.7	<10	mg/L	11/22/06
Boron	200.7	<10	mg/L	11/22/07
Cadmium	200.7	<0.10	mg/L	11/22/07
Calcium	200.7	<50	mg/L	11/22/07
Chromium	200.7	<0.50	mg/L	11/22/07

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
Client Sample/ID Location: TNK 4-10-9

Lab Sample ID: 610-097B 03
Reported: 03/30/07

Parameter	Method	Results	Units	Analyzed
MWMP Profile II Metals Cont'd				
Cobalt	200.7	4.7	mg/L	11/22/07
Copper	200.7	77	mg/L	11/22/07
Gallium	200.7	<10	mg/L	11/22/07
Iron	200.7	35	mg/L	11/22/07
Lead	200.7	<1.0	mg/L	11/22/07
Lithium	200.7	<10	mg/L	11/22/07
Magnesium	200.7	<50	mg/L	11/22/07
Manganese	200.7	<0.50	mg/L	11/22/07
Molybdenum	200.7	27	mg/L	11/22/07
Nickel	200.7	<1.0	mg/L	11/22/07
Phosphorus	200.7	<50	mg/L	11/22/07
Potassium	200.7	930	mg/L	11/22/07
Scandium	200.7	<10	mg/L	11/22/07
Selenium	200.7	30	mg/L	11/22/07
Silver	200.7	29	mg/L	12/01/06
Sodium	200.7	28000	mg/L	11/22/07
Strontium	200.7	<10	mg/L	11/22/07
Thallium	200.7	<6.0	mg/L	11/22/07
Tin	200.7	<10	mg/L	11/22/07
Titanium	200.7	<10	mg/L	11/22/07
Vanadium	200.7	<1.0	mg/L	11/22/07
Zinc	200.7	<1.0	mg/L	11/22/07

MWMP Profile II Ion Balance

Cation - Anion Balance

Cation, meq/L 1250
Anions, meq/L 1360
% Error 4.4

Andy Smith, Lab Manager

WET LAB
475 East Greg Street Suite # 119 Sparks, NV 89431 775-355-0202

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 03
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: TNK 4-10-9
Date/Time Collected: 10/09/06 @ 1415
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
MWWP (12/29/06)				
% Moisture (pre-MWMP)	160.1	4.3	%	12/29/06
% Moisture (post- MWMP)	160.1	33.3	%	12/30/06
pH of Extraction fluid	150.1	4.60	SU	12/29/06
MWMP Wet Chemistry				
Total Dissolved Solids	2540C	35000	mg/L	12/31/06
MWMP Metals				
Mercury	245.1	0.037	mg/L	12/31/06

Andy Smith, Lab Manager

WET LAB
475 East Greg Street Suite # 119 Sparks, NV 89431 775-355-0202

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 03
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: TNK 4-10-9
Date/Time Collected: 10/09/06 @ 1415
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
RCRA Metals				
Arsenic	6010B	210	mg/kg	11/28/06
Barium	6010B	32	mg/kg	11/28/06
Cadmium	6010B	24	mg/kg	11/28/06
Chromium	6010B	36	mg/kg	11/28/06
Lead	6010B	400	mg/kg	11/28/06
Mercury	7471A	2.5	mg/kg	11/03/06
Selenium	6010B	190	mg/kg	11/28/06
Silver	6010B	120	mg/kg	11/29/06

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 04
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: TNK 5-10-9
Date/Time Collected: 10/09/06 @ 1425
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
MWWP (11/08/06)				
% Moisture (pre-MWMP)	160.1	6.6	%	11/08/06
% Moisture (post- MWMP)	160.1	45.7	%	11/10/06
pH of Extraction fluid	150.1	4.61	SU	11/08/06
MWMP Profile II Wet Chemistry				
Alkalinity, Total	2320B	46000	mg/L as $CaCO_3$	11/14/06
Bicarbonate	2320B	23000	mg/L	11/14/06
Carbonate	2320B	16000	mg/L	11/14/06
Hydroxide	2320B	<1.0	mg/L	11/14/06
Chloride	300.0	11000	mg/L	11/14/06
Fluoride	4500FC	2.3	mg/L	11/21/06
Nitrate + Nitrite Nitrogen	300.0	55	mg/L	11/22/06
pH	150.1	9.52	SU	11/10/06
Sulfate	300.0	70000	mg/L	11/30/06
WAD Cyanide	4500CNI	6.6	mg/L	11/15/06
MWMP Profile II Metals				
Aluminum	200.7	<45	mg/L	12/01/06
Antimony	200.7	6.9	mg/L	11/22/06
Arsenic	200.7	20	mg/L	11/22/06
Barium	200.7	<1.0	mg/L	11/22/07
Beryllium	200.7	<0.10	mg/L	11/22/06
Bismuth	200.7	<10	mg/L	11/22/06
Boron	200.7	<10	mg/L	11/22/06
Cadmium	200.7	<0.10	mg/L	11/22/06
Calcium	200.7	<50	mg/L	11/22/06
Chromium	200.7	<0.50	mg/L	11/22/06

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
Client Sample/ID Location: TNK 5-10-9

Lab Sample ID: 610-097B 04
Reported: 03/30/07

Parameter	Method	Results	Units	Analyzed
MWMP Profile II Metals Cont'd				
Cobalt	200.7	2.7	mg/L	12/05/06
Copper	200.7	140	mg/L	11/22/07
Gallium	200.7	<10	mg/L	11/22/07
Iron	200.7	25	mg/L	11/22/07
Lead	200.7	<1.0	mg/L	11/22/07
Lithium	200.7	<10	mg/L	11/22/07
Magnesium	200.7	<50	mg/L	11/22/07
Manganese	200.7	<0.50	mg/L	11/22/07
Molybdenum	200.7	30	mg/L	11/22/07
Nickel	200.7	1.2	mg/L	11/22/07
Phosphorus	200.7	69	mg/L	11/22/07
Potassium	200.7	1700	mg/L	11/22/07
Scandium	200.7	<10	mg/L	11/22/07
Selenium	200.7	49	mg/L	11/22/07
Silver	200.7	39	mg/L	12/01/06
Sodium	200.7	48000	mg/L	11/22/06
Strontium	200.7	<10	mg/L	11/22/06
Thallium	200.7	<6.0	mg/L	11/22/06
Tin	200.7	<10	mg/L	11/22/06
Titanium	200.7	<10	mg/L	11/22/06
Vanadium	200.7	<1.0	mg/L	11/22/06
Zinc	200.7	1.2	mg/L	11/22/06

MWMP Profile II Ion Balance

Cation - Anion Balance

Cation, meq/L 2140
Anions, meq/L 2680
% Error 11

Andy Smith, Lab Manager

WET LAB
475 East Greg Street Suite # 119 Sparks, NV 89431 775-355-0202

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 04
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: TNK 5-10-9
Date/Time Collected: 10/09/06 @ 1425
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
MWWP (12/29/06)				
% Moisture (pre-MWMP)	160.1	5.0	%	12/29/06
% Moisture (post- MWMP)	160.1	35.0	%	12/30/06
pH of Extraction fluid	150.1	4.60	SU	12/29/06
MWMP Wet Chemistry				
Total Dissolved Solids	2540C	130000	mg/L	12/31/06
MWMP Metals				
Mercury	245.1	0.14	mg/L	12/31/06

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 04
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: TNK 5-10-9
Date/Time Collected: 10/09/06 @ 1425
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
RCRA Metals				
Arsenic	6010B	310	mg/kg	11/28/06
Barium	6010B	44	mg/kg	11/28/06
Cadmium	6010B	3.2	mg/kg	11/28/06
Chromium	6010B	36	mg/kg	11/28/06
Lead	6010B	76	mg/kg	11/28/06
Mercury	7471A	2.1	mg/kg	11/03/06
Selenium	6010B	160	mg/kg	11/28/06
Silver	6010B	94	mg/kg	11/29/06

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 05, 07/08
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: See Below
Date/Time Collected: 10/09/06 @ 1445, 1525, 1530
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
SCyanide Vat				
WAD Cyanide	4500CNI	1300	mg/L	10/23/06
Arsenic	6010B	<1.5	mg/kg	11/28/06
Barium	6010B	13	mg/kg	11/28/06
Cadmium	6010B	0.16	mg/kg	11/28/06
Chromium	6010B	3.4	mg/kg	11/28/06
Lead	6010B	5.9	mg/kg	11/28/06
Mercury	7471A	0.78	mg/kg	11/03/06
Selenium	6010B	<1.5	mg/kg	11/28/06
Silver	6010B	6.1	mg/kg	11/29/06
CN TNK 2				
WAD Cyanide	4500CNI	15	mg/L	10/23/06
CN TNK 3				
WAD Cyanide	4500CNI	12	mg/L	10/23/06

Andy Smith, Lab Manager

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 15/17
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: See Below
Date/Time Collected: 10/10/06
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
Dr1-10-10				
pH	9045B	8.93	SU	10/26/06
TCLP Arsenic	1311/6010B	<1.0	mg/L	10/27/06
TCLP Barium	1311/6010B	<2.0	mg/L	10/27/06
TCLP Cadmium	1311/6010B	<0.10	mg/L	10/27/06
TCLP Chromium	1311/6010B	<0.50	mg/L	10/27/06
TCLP Lead	1311/6010B	<1.0	mg/L	10/27/06
TCLP Selenium	1311/6010B	<0.40	mg/L	10/27/06
TCLP Silver	1311/6010B	<0.50	mg/L	10/27/06
Dr2-10-10				
pH	9045B	8.80	SU	10/26/06
TCLP Arsenic	1311/6010B	<1.0	mg/L	10/27/06
TCLP Barium	1311/6010B	<2.0	mg/L	10/27/06
TCLP Cadmium	1311/6010B	<0.10	mg/L	10/27/06
TCLP Chromium	1311/6010B	<0.50	mg/L	10/27/06
TCLP Lead	1311/6010B	<1.0	mg/L	10/27/06
TCLP Selenium	1311/6010B	<0.40	mg/L	10/27/06
TCLP Silver	1311/6010B	<0.50	mg/L	10/27/06
Dr3-10-10				
pH	9045B	8.43	SU	10/26/06
TCLP Arsenic	1311/6010B	<1.0	mg/L	10/27/06
TCLP Barium	1311/6010B	<2.0	mg/L	10/27/06
TCLP Cadmium	1311/6010B	<0.10	mg/L	10/27/06
TCLP Chromium	1311/6010B	<0.50	mg/L	10/27/06
TCLP Lead	1311/6010B	<1.0	mg/L	10/27/06
TCLP Selenium	1311/6010B	<0.40	mg/L	10/27/06
TCLP Silver	1311/6010B	<0.50	mg/L	10/27/06

Andy Smith, Lab Manager

WET LAB
475 East Greg Street Suite # 119 Sparks, NV 89431 775-355-0202

Western Environmental Testing Laboratory
Analytical Report

AMEC Earth & Environmental
780 Vista Blvd., Suite 100
Sparks, NV 89434
Attn: Brett Whitford

Phone: 775-331-2375 Fax: 775-331-4153

EPA Lab ID: NV004
Received: 10/10/06
Lab Sample ID: 610-097B 18/19
Reported: 03/30/07

Project Name/ Number: Gooseberry / 6417000720
Sample ID: See Below
Date/Time Collected: 10/10/06
Sampled By: Client

Parameter	Method	Results	Units	Analyzed
Dr4-10-10				
pH	9045B	10.83	SU	10/26/06
WAD Cyanide	4500CNI	<0.20	mg/kg	10/23/06
TCLP Arsenic	1311/6010B	<1.0	mg/L	10/27/06
TCLP Barium	1311/6010B	<2.0	mg/L	10/27/06
TCLP Cadmium	1311/6010B	<0.10	mg/L	10/27/06
TCLP Chromium	1311/6010B	<0.50	mg/L	10/27/06
TCLP Lead	1311/6010B	<1.0	mg/L	10/27/06
TCLP Selenium	1311/6010B	<0.40	mg/L	10/27/06
TCLP Silver	1311/6010B	<0.50	mg/L	10/27/06
Dr5-10-10				
pH	9045B	8.21	SU	10/26/06
WAD Cyanide	4500CNI	<0.20	mg/L	10/23/06
TCLP Arsenic	1311/6010B	<1.0	mg/L	10/27/06
TCLP Barium	1311/6010B	<2.0	mg/L	10/27/06
TCLP Cadmium	1311/6010B	<0.10	mg/L	10/27/06
TCLP Chromium	1311/6010B	<0.50	mg/L	10/27/06
TCLP Lead	1311/6010B	16	mg/L	10/27/06
TCLP Selenium	1311/6010B	0.83	mg/L	10/27/06
TCLP Silver	1311/6010B	<0.50	mg/L	10/27/06

Andy Smith, Lab Manager

WET LAB
475 East Greg Street Suite # 119 Sparks, NV 89431 775-355-0202

QUALITY CONTROL REPORT

Sample ID: 610-097 (MWMP)
Reported: 03/30/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
Alkalinity	2320B	mg/L as $CaCO_3$	NA	96	100	96	3340	3232	3
pH	150.1	SU	NA	7.06	7.00	101	7.37	7.41	<1
TDS	2540C	mg/L	<10	144	150	96	183000	191000	3
TDS	2540C	mg/L	<10	140	150	93	128000	130000	2
Chloride	300.0	mg/L	<1.0	5.03	5.00	101	1.36	1.36	<1
Nitrate Nitrogen	300.0	mg/L	<1.0	0.48	0.50	95	0.507	0.505	<1
Nitrite Nitrogen	$4500NO_2B$	mg/L	<0.010	0.494	0.500	99	0.250	0.271	8
Sulfate	300.0	mg/L	<5.0	9.97	10.0	100	6.71	6.73	<1
Fluoride	4500FC	mg/L	<0.10	1.01	1.00	101	0.617	0.631	2
Cyanide WAD	4500CNI	mg/L	<0.010	0.095	0.100	95	0.102	0.103	<1

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Chloride	300.0	mg/L	610-097-2	0.541	1.36	1.00	82	11/14/06
Nitrate Nitrogen	300.0	mg/L	610-097-2	0.035	0.507	0.500	94	11/21/06
Nitrite Nitrogen	$4500NO_2B$	mg/L	611-178-1	<0.010	0.250	0.250	100	11/22/06
Sulfate	300.0	mg/L	610-097-2	3.03	6.71	4.00	92	11/14/06
Fluoride	4500FC	mg/L	610-097-2	0.182	0.617	0.500	87	11/21/06
Cyanide WAD	4500CNI	mg/L	611-090-6	<0.010	0.102	0.100	102	11/15/06

QUALITY CONTROL REPORT

Sample ID: 610-097 (soil)
Reported: 03/30/07

PARAMETER	METHOD	UNITS	METHOD BLANK RESULTS	LABORATORY FORTIFIED BLANK			DUPLICATE		
				RESULT	ACTUAL	% RECOVERY	SAMPLE RESULT	DUPLICATE RESULT	% RPD
pH	150.1	SU	NA	7.03	7.00	100	7.96	8.04	1
Cyanide WAD	4500CNI	mg/L	<0.010	0.086	0.100	86	0.083	0.090	8

PARAMETER	METHOD	UNITS	MATRIX SPIKE RESULTS					DATE
			SPIKED SAMPLE	SAMPLE RESULT	SPIKE RESULT	SPIKE VALUE	% RECOVERY	
Cyanide WAD	4500CNI	mg/L	610-151-1	<0.010	0.083	0.100	83	10/23/06

Metals QC
Optima 4300DV

Batch:	T061027-1A	Matrix:	TCLP

Sample ID:	610-226-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank True Value	Lab Fortified Blank Result	Lab Fortified Blank % Rec	Date Analyzed
Ag	6010B	<0.050	mg/L	<0.050	0.090	0.0850	94	0.0828	3	0.090	0.0867	96	10/27/2006
As	6010B	<0.10	mg/L	<0.10	1.00	0.9185	91	0.9272	1	1.00	0.9368	94	10/27/2006
Ba	6010B	<0.20	mg/L	<0.20	1.00	1.0438	100	1.0232	2	1.00	1.0116	101	10/27/2006
Cd	6010B	<0.010	mg/L	<0.010	1.00	0.9256	92	0.9088	2	1.00	0.9397	94	10/27/2006
Cr	6010B	<0.050	mg/L	<0.050	1.00	0.9494	85	0.9261	2	1.00	0.9628	96	10/27/2006
Pb	6010B	<0.10	mg/L	<0.10	1.00	0.9900	96	0.9766	1	1.00	0.9681	97	10/27/2006
Se	6010B	<0.040	mg/L	<0.040	1.00	0.8189	83	0.8250	1	1.00	0.8444	84	10/27/2006

Samples 610-097-(15-19) are associated with QC batch T061027-1A

Metals QC
CETAC M-6000A

Batch:	Hg061231-1
Matrix:	MWMP

		Date Analyzed:	12/31/06
Sample ID:	610-097-4 1000X	**Analyst:**	ADS

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	245.1	<0.10	ug/L	0.207	2.00	1.90	85	2.00	5	2.00	1.98	99

Samples 610-097(2-4) MWMP are associated with QC batch Hg061231-1

Metals QC
Optima 4300DV

Batch:	W061120-2A	Matrix:	water

Sample ID:	611-104-1 TOTAL	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	200.7	<0.0050	mg/L	<0.0050	0.090	0.0803	89	0.0800	0	0.090	0.0833	93	11/22/2006
Al	200.7	<0.045	mg/L	0.6986	1.00	2.0732	NC	2.0677	0	1.00	0.9114	91	11/22/2006
B	200.7	<0.020	mg/L	0.0414	1.00	0.9814	94	0.9804	0	1.00	0.9326	93	11/22/2006
Ba	200.7	<0.010	mg/L	0.0233	1.00	0.9288	91	0.9245	0	1.00	0.9119	91	11/22/2006
Be	200.7	<0.0010	mg/L	<0.0010	1.00	1.0126	101	1.0172	0	1.00	0.9959	100	11/22/2006
Bi	200.7	<0.10	mg/L	<0.10	1.00	0.9949	99	0.9951	0	1.00	0.9698	97	11/22/2006
Ca	200.7	<0.50	mg/L	10.4090	10.00	19.8550	94	19.8626	0	10.00	10.0663	101	11/22/2006
Cd	200.7	<0.0010	mg/L	<0.0010	1.00	0.9532	95	0.9452	1	1.00	0.9537	95	11/22/2006
Co	200.7	<0.010	mg/L	<0.010	1.00	0.9871	99	0.9904	0	1.00	0.9817	98	11/22/2006
Cr	200.7	<0.0050	mg/L	<0.0050	1.00	0.9429	94	0.9371	1	1.00	0.9650	96	11/22/2006
Cu	200.7	<0.050	mg/L	<0.050	1.00	1.0112	100	1.0138	0	1.00	0.9393	94	11/22/2006
Fe	200.7	<0.010	mg/L	0.8297	1.00	1.8531	102	1.8576	0	1.00	0.9669	97	11/22/2006
Ga	200.7	<0.10	mg/L	<0.10	1.00	1.0057	100	1.0071	0	1.00	1.0285	103	11/22/2006
K	200.7	<0.50	mg/L	6.0163	10.00	15.3903	94	15.4612	0	10.00	9.5442	95	11/22/2006
Li	200.7	<0.10	mg/L	<0.10	1.00	0.9326	93	0.9348	0	1.00	0.9282	93	11/22/2006
Mg	200.7	<0.50	mg/L	1.2753	10.00	11.0207	97	10.9599	1	10.00	9.6944	97	11/22/2006
Mn	200.7	<0.0050	mg/L	0.1979	1.00	1.1447	95	1.1433	0	1.00	0.9761	98	11/22/2006
Mo	200.7	<0.010	mg/L	<0.010	1.00	0.9567	96	0.9514	1	1.00	0.9640	96	11/22/2006
Na	200.7	<0.50	mg/L	67.4193	10.00	73.0345	SC	73.7547	1	10.00	9.3775	94	11/22/2006
Ni	200.7	<0.010	mg/L	<0.010	1.00	0.9624	96	0.9567	1	1.00	0.9708	97	11/22/2006
P	200.7	<0.50	mg/L	0.5454	1.00	1.4851	94	1.4742	1	1.00	0.9686	97	11/22/2006
Pb	200.7	<0.010	mg/L	<0.010	1.00	0.9738	97	0.9708	0	1.00	0.9602	96	11/22/2006

Metals QC (Cont.)
Optima 4300DV

Batch:	W061120-2A	Matrix:	water

Sample ID:	611-104-1 TOTAL	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Sc	200.7	<0.10	mg/L	<0.10	1.0000	0.9357	94	0.9379	0	1.00	0.9309	93	11/22/2006
Sn	200.7	<0.10	mg/L	<0.10	1.0000	0.9943	100	0.9890	1	1.00	1.0160	102	11/22/2006
Sr	200.7	<0.10	mg/L	<0.10	1.0000	0.9885	95	0.9962	1	1.00	0.9504	95	11/22/2006
Ti	200.7	<0.10	mg/L	<0.10	1.0000	1.0796	106	1.0761	0	1.00	1.0635	106	11/22/2006
V	200.7	<0.010	mg/L	<0.010	1.0000	0.9871	99	0.9868	0	1.00	0.9846	98	11/22/2006
Zn	200.7	<0.010	mg/L	0.0910	1.0000	1.0763	99	1.0720	0	1.00	0.9844	98	11/22/2006

NC = Not calculated due to matrix interference.

SC = Spike recovery not calculated. Sample concentration >4X the spike amount; therefore the spike could not be adequately recovered.

Samples 610-097-(2-4) MWMP are associated with QC batch W061120-2A

Metals QC
Optima 4300DV

Batch:	S061121-1B	Matrix:	soil

Sample ID:	611-157-1	Analyst:	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank			Date Analyzed
										True Value	Result	% Rec	
Ag	6010B	<0.0050	mg/kg	13.8040	4.500	23.5304	NC	21.1147	11	4.500	4.4422	99	11/22/2006
As	6010B	<0.030	mg/kg	<0.030	50.00	34.0382	68	38.2559	12	50.00	46.9277	94	11/22/2006
Ba	6010B	<0.010	mg/kg	61.2550	50.00	116.9651	111	128.1515	9	50.00	49.4419	99	11/22/2006
Cd	6010B	<0.0010	mg/kg	<0.0010	50.00	41.6207	84	42.2981	2	50.00	49.1462	98	11/22/2006
Cr	6010B	<0.0050	mg/kg	12.9495	50.00	56.8825	88	57.5292	1	50.00	50.0326	100	11/22/2006
Pb	6010B	<0.010	mg/kg	53.6750	50.00	99.7458	92	93.8041	6	50.00	49.8940	100	11/22/2006
Se	6010B	<0.020	mg/kg	4.2372	250.00	199.6660	78	206.8478	4	250.00	215.0464	86	11/22/2006

NC = Not calcualted due to matrix interference.

Samples 610-097-(2-5) are associated with QC batch S061121-1B

Metals QC
CETAC M-6000A

Batch:	Hg061102-1A
Matrix:	soil

		Date Analyzed:	11/3/06
Sample ID:	610-097-5	**Analyst:**	NR

Analyte	Method	Method Blank	Units	Sample Result	Spike Value	Spike Result	% Rec	Spike Dup	% RPD	Lab Fortified Blank		
										True Value	Result	% Rec
Hg	7471A	<0.10	mg/kg	0.775	0.167	0.533	SC	0.550	3	0.167	0.165	99

SC = Spike recovery not calculated. Sample concentration >4X the spike amount; therefore the spike could not be adequately recovered.

Samples 610-097-(2-5) are associated with QC batch Hg061102-1A

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 610-097
Report Due Date: 10-31-06
Page 1 of 2

Client: AMEC
Address: 780 Vista Blvd
City, State & Zip: SPARKS NV 89434
Contact: Brett Whitted
Phone: 331-2375
Collector's Name: Brett
Fax:
Project Name: Gooseberry
P.O. Number:
Project Number: 6417000720
Email:

Turnaround Time
Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company ____
Address ____
City, State & Zip ____
Contact ____
Phone ____
Fax ____
Email ____

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: mine waste

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	Sample Type	Containers	MWMP throBSeH	RCRA 8 metals	PCB's	WAD Cyanide							Spl. No.
TS-10-10	10-10	10:45			✓		✓								1
SETNK 10-9	10-9	1400			✓	✓									2
TNK 4-10-9	10-9	1425			✓	✓									3
TNK 5-10-9	10-9	1425			✓	✓									4
~~TNK~~ S Cyanide Vat	10-9	1445			✓	✓		✓							5
CN Tank 1	10-9	1515						✓							6
CN Tnk 2	10-9	1525						✓							7
CN Tnk 3	10-9	1530						✓							8
T1-10-9	10-9	1600					✓								9
T2-10-9	10-9	1600					✓								10
T3-10-10	10-10	10:30					✓								11
T4-10-10	10-10	10:40					✓								12

Instructions/Comments/Special Requirements: * Bulk to be provided on 10-11 - for MWMP
TNK5-10-9 May offgas - from bulk sample

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature 18 °C	10-10-06	1445	[signature]	[signature]
Custody Seals Intact? Y N None				
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.
475 E. Greg Street #119 | Sparks, Nevada 89431
tel (775) 355-0202 | fax (775) 355-0817 | www.WETLaboratory.com

Lab Number 610-097
Report Due Date: 10-31-06
Page 2 of 2

Client: AMEC
Address: 780 Vista Blvd.
City, State & Zip: SPARKS, NV 89434
Contact: Brett Whitford
Phone: 331 2375
Fax: 334-4153
P.O. Number:
Collector's Name: WRW
Project Name: Gooseberry
Project Number: 6417000720

Turnaround Time: Standard ____ 5-Day ____ Other ____

Billing Address (if different than Client Address):
Company ____
Address ____
City, State & Zip ____
Contact ____
Phone ____
Fax ____
Email ____

Email

Additional Information

Fax Results	Y	N	To: Client	Billing
Email Results	Y	N	To: Client	Billing
Compliance Monitoring	Y	N		
Fax Results to State EPA	Y	N		

Sample Type Codes

DW = Drinking Water
WW = Wastewater
SW = Surface Water
MW = Monitoring Well
SD = Solid
SO = Soil
HW = Hazardous Waste
OTHER: ____

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	Sample Type	Containers	PCB's	TCLP 7-11	TPH EXT	pH	and Cyanide						Spl. No.
T6-10-10	10-10	10:45			✓										13
TID-10-10	10-10	10:55			✓										14
Dr1-10-10	10-10					✓	✓	✓							15
Dr2-10-10	10-10					✓	✓	✓	✓						16
Dr3-10-10	10-10					✓	✓	✓	✓						17
Dr4-10-10	10-10					✓	✓	✓	✓						18
Dr5-10-10	10-10					✓	✓	✓	✓						19

Instructions/Comments/Special Requirements:

SAMPLE RECEIPT	DATE	TIME	Samples Relinquished By	Samples Received By
Temperature 18 °C	10-10	1445	[signature]	[signature]
Custody Seals Intact? Y N (None)				
Number of Containers ____				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

301.2E

SAMPLE RECEIVING CHECKLIST

WETLAB Sample ID: 610-097

Y	N	
✓		**Was the information on the Chain of Custody (COC) complete?**
		If no, what was missing:
		Client Information
		Analyses requested
		Sample Information circle one: Sample ID Date Col. Time Col. samplers name sample matrix
		Was the client notified of any problems?
		Who did you speak with_____ When_____
	✓	**Did the sample containers match the COC?**
		if no, what was incorrect: 10/11/06-GP no sample for #5 for MWMP received
		Number of containers
		Sample Volume
		Preservation
		If there was in-house preservation was it logged in the book?
		Temperature
		Was the client notified of any problems?
		Who did you speak with_____ When_____
		Is this standard turn-around-time or RUSH? (circle one) 3 wk
		if RUSH, was it approved?
		Were the appropriate people in the lab verbally notified?
✓		**Are there special reporting requirements**
✓		Does the client need QC?
	✓	Does the client need 'low level' reporting limits for nutrients?
	✓	Does the client need special reporting limits for metals?
	✓	**Are there 'short hold' tests?**
		Were samples received 'in hold'
		If yes, is there sufficient time to meet holding times?
		Were the appropriate people in the lab verbally notified?
		Was the client notified of any problems?
		Who did you speak with_____ When_____
		Are the samples for NV or CA (circle one)
✓		**Is there subcontracting?**
✓		Has the COC been copied and put in the box?
		Has a sub-chain been written up?
		Is there any special paperwork (I.e. special reporting requirements) that needs to go with the chain?
✓		**Is there special pricing for this project?**

10/23 -GP
Called Brett and asked him to collect additional sample for #6 (CN Tank) b/c sample is MIA.

1/2/07 ADS
left msg w/ Brett about how/why we did 2 MWMP extracts (2nd for Hg/TDS)

Samples logged in by: MS

Login reviewed by: GP

10-10-06

Waiting on info from Brett re: Data packages

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900

FAX 714/538-1209

CLIENT Western Environmental Testing Lab. (10124)
ATTN: Ginger Peppard
475 E. Greg St
Suite 119
Sparks, NV 89431

LAB REQUEST 178070

REPORTED 10/30/2006

RECEIVED 10/13/2006

PROJECT #610-097 Gooseberry
#6417000720

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
748417	T5-10-10
748418	T1-10-9
748419	T2-10-9
748420	T3-10-10
748421	T4-10-10
748422	T6-10-10
748423	T1D-10-10
748424	Dr1-10-10
748425	Dr2-10-10
748426	Dr3-10-10
748427	Dr4-10-10

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

ALAB : 00001

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92868 - 714/771-6900 *FAX 714/538-1209*

CLIENT Western Environmental Testing Lab. (10124)
ATTN: Ginger Peppard
475 E. Greg St
Suite 119
Sparks, NV 89431

LAB REQUEST 178070
REPORTED 10/30/2006
RECEIVED 10/13/2006

PROJECT #610-097 Gooseberry
#6417000720

SUBMITTER Client

COMMENTS

This laboratory request covers the following listed samples which were analyzed for the parameters indicated on the attached Analytical Result Report. All analyses were conducted using the appropriate methods as indicated on the report. This cover letter is an integral part of the final report.

Order No.	Client Sample Identification
748428	Dr5-10-10
748429	Laboratory Method Blank

Thank you for the opportunity to be of service to your company. Please feel free to call if there are any questions regarding this report or if we can be of further service.

ASSOCIATED LABORATORIES by,

Edward S. Behare, Ph.D.
Vice President

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

The reports of the Associated Laboratories are confidential property of our clients and may not be reproduced or used for publication in part or in full without our written permission. This is for the mutual protection of the public, our clients, and ourselves.

TESTING & CONSULTING
Chemical
Microbiological
Environmental

ALAB : 00002

Order #: 748417
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled: 10:45
Sampled By:

Client: W ern Environmental Testing Lab.
Client Sample ID: T5-10-10

Analyte	Result	DF	DLR	Units	Date/Analyst	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1016	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1221	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1232	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1242	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1248	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1254	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1260	ND	1	1.0	mg/Kg	10/23/06	CAL
Surrogates				**Units**	**Control Limits**	
DCB(Sur)	78.2			%	50 - 135	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748418
Matrix: SOLID
Date Sampled: 10/09/2006
Time Sampled: 16:00
Sampled By:

Client: W .ern Environmental Testing Lab.
Client Sample ID: T1-10-9

Analyte	Result	DF	DLR	Units	Date/Analyst	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1016	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1221	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1232	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1242	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1248	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1254	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1260	ND	1	1.0	mg/Kg	10/23/06	CAL
Surrogates				**Units**	**Control Limits**	
DCB(Sur)	84.0			%	50 - 135	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748419
Matrix: SOLID
Date Sampled: 10/09/2006
Time Sampled: 16:00
Sampled By:

Client: W .ern Environmental Testing Lab.
Client Sample ID: T2-10-9

Analyte	Result	DF	DLR	Units	Date/Analyst	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1016	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1221	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1232	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1242	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1248	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1254	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1260	ND	1	1.0	mg/Kg	10/23/06	CAL
Surrogates				**Units**	**Control Limits**	
DCB(Sur)	81.0			%	50 - 135	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748420
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled: 10:30
Sampled By:

Client: W ern Environmental Testing Lab.
Client Sample ID: T3-10-10

Analyte	Result	DF	DLR	Units	Date/Analyst	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1016	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1221	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1232	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1242	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1248	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1254	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1260	ND	1	1.0	mg/Kg	10/23/06	CAL
Surrogates				**Units**	**Control Limits**	
DCB(Sur)	85.3			%	50 - 135	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748421 **Client:** W ern Environmental Testing Lab.
Matrix: SOLID **Client Sample ID:** T4-10-10
Date Sampled: 10/10/2006
Time Sampled: 10:40
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1016	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1221	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1232	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1242	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1248	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1254	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1260	ND	1	1.0	mg/Kg	10/23/06	CAL
Surrogates				**Units**	**Control Limits**	
DCB(Sur)	83.8			%	50 - 135	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748422
Client: W ern Environmental Testing Lab.
Matrix: SOLID
Client Sample ID: T6-10-10
Date Sampled: 10/10/2006
Time Sampled: 10:45
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1016	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1221	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1232	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1242	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1248	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1254	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1260	ND	1	1.0	mg/Kg	10/23/06	CAL
Surrogates				**Units**	**Control Limits**	
DCB(Sur)	82.9			%	50 - 135	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748423
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled: 10:55
Sampled By:

Client: W ern Environmental Testing Lab.
Client Sample ID: T1D-10-10

Analyte	Result	DF	DLR	Units	Date/Analyst	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1016	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1221	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1232	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1242	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1248	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1254	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1260	ND	1	1.0	mg/Kg	10/23/06	CAL
Surrogates				**Units**	**Control Limits**	
DCB(Sur)	83.5			%	50 - 135	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748424
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled:
Sampled By:

Client: V. .ern Environmental Testing Lab.
Client Sample ID: Dr1-10-10

Analyte	Result	DF	DLR	Units	Date/Analyst	
1311/8260 TCLP Compounds Only						
1,1 Dichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,2 Dichloroethane TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,4-Dichlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Benzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Carbon Tetrachloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chloroform TCLP	ND	1	0.005	mg/L	10/18/06	RP
Methylethylketone TCLP	ND	1	0.10	mg/L	10/18/06	RP
Tetrachloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Trichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Vinyl Chloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	96			%	70 - 135	
Surr2 - 1,2-Dichloroethane-d4	108			%	70 - 135	
Surr3 - Toluene-d8	95			%	70 - 135	
Surr4 - p-Bromofluorobenzene	93			%	70 - 135	
8015B Carbon Chain I						
C06 - C10	ND	1	3	mg/Kg	10/18/06	AF
C10 - C22	ND	1	3	mg/Kg	10/18/06	AF
C22 - C36	12	1	5	mg/Kg	10/18/06	AF
Surrogates				**Units**	**Control Limits**	
Sur-o-Terphenyl	101			%	55 - 200	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748425 **Client:** W ern Environmental Testing Lab.
Matrix: SOLID **Client Sample ID:** Dr2-10-10
Date Sampled: 10/10/2006
Time Sampled:
Sampled By:

Analyte	Result	DF	DLR	Units	Date/Analyst	
1311/8260 TCLP Compounds Only						
1,1 Dichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,2 Dichloroethane TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,4-Dichlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Benzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Carbon Tetrachloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chloroform TCLP	ND	1	0.005	mg/L	10/18/06	RP
Methylethylketone TCLP	ND	1	0.10	mg/L	10/18/06	RP
Tetrachloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Trichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Vinyl Chloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	107			%	70 - 135	
Surr2 - 1,2-Dichloroethane-d4	111			%	70 - 135	
Surr3 - Toluene-d8	96			%	70 - 135	
Surr4 - p-Bromofluorobenzene	96			%	70 - 135	
8015B Carbon Chain I						
C06 - C10	ND	1	3	mg/Kg	10/18/06	AF
C10 - C22	ND	1	3	mg/Kg	10/18/06	AF
C22 - C36	ND	1	5	mg/Kg	10/18/06	AF
Surrogates				**Units**	**Control Limits**	
Sur-o-Terphenyl	121			%	55 - 200	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748426
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled:
Sampled By:

Client: W. .ern Environmental Testing Lab.
Client Sample ID: Dr3-10-10

Analyte	Result	DF	DLR	Units	Date/Analyst	
1311/8260 TCLP Compounds Only						
1,1 Dichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,2 Dichloroethane TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,4-Dichlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Benzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Carbon Tetrachloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chloroform TCLP	ND	1	0.005	mg/L	10/18/06	RP
Methylethylketone TCLP	ND	1	0.005	mg/L	10/18/06	RP
Tetrachloroethylene TCLP	ND	1	0.10	mg/L	10/18/06	RP
Trichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Vinyl Chloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	106			%	70 - 135	
Surr2 - 1,2-Dichloroethane-d4	108			%	70 - 135	
Surr3 - Toluene-d8	97			%	70 - 135	
Surr4 - p-Bromofluorobenzene	92			%	70 - 135	
8015B Carbon Chain I						
C06 - C10	ND	1	3	mg/Kg	10/18/06	AF
C10 - C22	ND	1	3	mg/Kg	10/18/06	AF
C22 - C36	ND	1	5	mg/Kg	10/18/06	AF
Surrogates				**Units**	**Control Limits**	
Sur-o-Terphenyl	139			%	55 - 200	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748427
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled:
Sampled By:

Client: W ern Environmental Testing Lab.
Client Sample ID: Dr4-10-10

Analyte	Result	DF	DLR	Units	Date/Analyst	
1311/8260 TCLP Compounds Only						
1,1 Dichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,2 Dichloroethane TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,4-Dichlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Benzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Carbon Tetrachloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chloroform TCLP	ND	1	0.005	mg/L	10/18/06	RP
Methylethylketone TCLP	ND	1	0.005	mg/L	10/18/06	RP
Tetrachloroethylene TCLP	ND	1	0.10	mg/L	10/18/06	RP
Trichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Vinyl Chloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	105			%	70 - 135	
Surr2 - 1,2-Dichloroethane-d4	105			%	70 - 135	
Surr3 - Toluene-d8	96			%	70 - 135	
Surr4 - p-Bromofluorobenzene	92			%	70 - 135	
8015B Carbon Chain I						
C06 - C10	ND	1	3	mg/Kg	10/18/06	AF
C10 - C22	ND	1	3	mg/Kg	10/18/06	AF
C22 - C36	7.0	1	5	mg/Kg	10/18/06	AF
Surrogates				**Units**	**Control Limits**	
Sur-o-Terphenyl	117			%	55 - 200	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748428
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled:
Sampled By:

Client: W ern Environmental Testing Lab.
Client Sample ID: Dr5-10-10

Analyte	Result	DF	DLR	Units	Date/Analyst	
1311/8260 TCLP Compounds Only						
1,1 Dichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,2 Dichloroethane TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,4-Dichlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Benzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Carbon Tetrachloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chloroform TCLP	ND	1	0.005	mg/L	10/18/06	RP
Methylethylketone TCLP	ND	1	0.10	mg/L	10/18/06	RP
Tetrachloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Trichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Vinyl Chloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	108			%	70 - 135	
Surr2 - 1,2-Dichloroethane-d4	109			%	70 - 135	
Surr3 - Toluene-d8	98			%	70 - 135	
Surr4 - p-Bromofluorobenzene	93			%	70 - 135	
8015B Carbon Chain I						
C06 - C10	ND	1	3	mg/Kg	10/18/06	AF
C10 - C22	4.3	1	3	mg/Kg	10/18/06	AF
C22 - C36	16	1	5	mg/Kg	10/18/06	AF
Surrogates				**Units**	**Control Limits**	
Sur-o-Terphenyl	154			%	55 - 200	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748429
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled:
Sampled By:

Client: Western Environmental Testing Lab.
Client Sample ID: Laboratory Method Blank

Analyte	Result	DF	DLR	Units	Date/Analyst	
1311/8260 TCLP Compounds Only						
1,1 Dichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,2 Dichloroethane TCLP	ND	1	0.005	mg/L	10/18/06	RP
1,4-Dichlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Benzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Carbon Tetrachloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chlorobenzene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Chloroform TCLP	ND	1	0.005	mg/L	10/18/06	RP
Methylethylketone TCLP	ND	1	0.10	mg/L	10/18/06	RP
Tetrachloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Trichloroethylene TCLP	ND	1	0.005	mg/L	10/18/06	RP
Vinyl Chloride TCLP	ND	1	0.005	mg/L	10/18/06	RP
Surrogates				**Units**	**Control Limits**	
Surr1 - Dibromofluoromethane	99			%	70 - 135	
Surr2 - 1,2-Dichloroethane-d4	104			%	70 - 135	
Surr3 - Toluene-d8	97			%	70 - 135	
Surr4 - p-Bromofluorobenzene	94			%	70 - 135	
8015B Carbon Chain I						
C06 - C10	ND	1	3	mg/Kg	10/18/06	AF
C10 - C22	ND	1	3	mg/Kg	10/18/06	AF
C22 - C36	ND	1	5	mg/Kg	10/18/06	AF
Surrogates				**Units**	**Control Limits**	
Sur-o-Terphenyl	113			%	55 - 200	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1016	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1221	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1232	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1242	ND	1	1.0	mg/Kg	10/23/06	CAL

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

Order #: 748429
Matrix: SOLID
Date Sampled: 10/10/2006
Time Sampled:
Sampled By:

Client: Western Environmental Testing Lab.
Client Sample ID: Laboratory Method Blank

Analyte	Result	DF	DLR	Units	Date/Analyst	
8082 - Polychlorinated Biphenyls (PCBs) by GC						
PCB-1248	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1254	ND	1	1.0	mg/Kg	10/23/06	CAL
PCB-1260	ND	1	1.0	mg/Kg	10/23/06	CAL
Surrogates				**Units**	**Control Limits**	
DCB(Sur)	83.0			%	50 - 135	

DLR = Detection limit for reporting purposes, ND = Not Detected below indicated detection limit, DF = Dilution Factor

SSOCIATED LABORATORIES
LCS REPORT FORM

QC Sample: LCS/LCSD

Matrix: SOLID

Extraction Method : 3545

Prep. Date: October 17, 2006

Analysis Date October 18, 2006

ID#'s in Batch: LR 178197, 178070, 178115

LAB CONTROLLED SPIKE / LAB CONTROLLED DUPLICATE RESULT

Reporting Units = mg/Kg

Test	Method	Method Blank	Spike Added	LCS Spike	LCSD Spk. Dup	%Rec LCS	%Rec LCSD	RPD
DIESEL	8015D	ND	25	24	24	96	96	0

ND = Not Detected
LCS Result = Lab Control Sample Result
%REC-LCS & LCSD = Percent Recovery of LCS Spike & LCS Spike Duplicate
RPD = Relative Percent Difference of LCS Spike and LCS Spike Duplicate

%REC LIMITS	*= 70 - 130*
RPD LIMITS	*= 30*

SURROGATE RECOVERY

Sample No.	O-Terphenyl
QC Limit	55-200
Method Blank	113
LCS	124
LCSD	125

A' OCIATED LABORATORIES

QA / QC EPA Methods 8260, 624, & 524.2 GCMS # 3

Sample ID: MS/MSD Water Samples 178070-424
Date Prep: October 18, 2006
Date Analyzed: October 18, 2006 8:28 PM
Sample Matrix: Water
Units: µg/L

Applies to LR: 178070, 178145, 178159, 178215, 178207

Compound	Sample Conc.	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC RPD	Limits %REC
1,1-Dichloroethene	0.00	50.0	40.60	43.90	81	88	8	22	59-172
MTBE	0.00	50.0	49.50	49.50	99	99	0	24	62-137
Benzene	0.00	50.0	40.30	42.60	81	85	6	24	62-137
Trichloroethene	0.00	50.0	42.00	46.10	84	92	9	21	66-142
Toluene	0.00	50.0	40.50	44.80	81	90	10	21	59-139
Chlorobenzene	0.00	50.0	43.80	46.90	88	94	7	21	60-133

Sample ID: LCS

Compound	Spike Added	Spike Res	Spike %Rec	Limits %REC
1,1-Dichloroethene	50.0	49.20	98	59-172
MTBE	50.0	49.50	99	62-137
Benzene	50.0	47.30	95	62-137
Trichloroethene	50.0	50.60	101	66-142
Toluene	50.0	49.70	99	59-139
Chlorobenzene	50.0	54.60	109	60-133

*=Outside QC limits due to high concentration in sample
If Sample Result > 4 times Spike Added, then "NC"

Surrogate Recovery

Compound	MB		MS	MSD		LCS	Limits % Rec
Dibromofluoromethane	99		93	104		94	70-135
1,2-Dichloroethane-d4	104		106	101		102	70-135
Toluene-d8	97		95	96		104	70-135
p-Bromofluorobenzene	94		96	94		95	70-135

ASSOCIATED LABORATORIES

NARRATIVE

Date: October 31, 2006

Narrative for Lab Request LR: 178070

Client Project Identification:
Client Name: Western Environmental Testing Lab.
Project: #610-097 Cooseberry
#6417000720

This narrative includes all samples as shown on the attached Lab Request final report.

Analyses Requested:

- EPA 1311/8260B – TCLP Volatile Organic Compounds
- EPA 8082 – PCBs by GC
- EPA 8015 – Carbon Chain

Data Validation:

Holding Times
All EPA designated holding times were met.

Calibration
Initial calibration criteria were met for all analytes. Initial and Continuing Calibration Check samples were run at the required frequency. All results were within required limits.

Quality Control Samples
All QC results were within control limits.

Other Anomalies or Comments
The reporting limit (DLR) is adjusted if dilution of the sample is necessary.

ALAB : 00019

APPENDIX E

DATA QUALITY REVIEW AND VALIDATION REPORT

APPENDIX E

DATA QUALITY REVIEW AND VALIDATION REPORT
For Soil and Solid Samples Collected
From October 9, 2006 to February 14, 2007

Gooseberry Mine Closure Assessment
Storey County, Nevada

Prepared by:

AMEC Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224

6-417-000720/ Phase 3

April 2007

Table of Contents

Page

ACRONYMS ii

1.0 INTRODUCTION 1

2.0 DATA VALIDATION AND REVIEW METHODOLOGY 2

3.0 EXPLANATION OF DATA QUALITY INDICATORS 3

4.0 SPECIFIC DATA VALIDATION FINDINGS 5
- 4.1 Chain of Custody and Sample Receipt Condition Documentation 5
- 4.2 Organic Analyses 6
  - 4.2.1 Total Petroleum Hydrocarbons 6
  - 4.2.2 Volatile Organic Compounds 7
  - 4.2.3 Benzene, Toluene, Ethylbenzene, and Xylene 7
  - 4.2.4 Ethylene Glycol 8
- 4.3 Inorganic Analyses 8
  - 4.3.1 Total Metals 8
  - 4.3.2 TCLP Metals 9
  - 4.3.3 Total Cyanide 10
  - 4.3.4 WAD Cyanide 11
  - 4.3.5 Profile II Anions 12
  - 4.3.6 Profile II Metals 12

5.0 FIELD DUPLICATE RESULTS 14

6.0 SUMMARY AND CONCLUSIONS 15

REFERENCES 16

LIMITATIONS 17

List of Tables

Table 1 Field Samples Collected from the Gooseberry Mine Site with Corresponding Laboratory IDs

Table 2 Methods Included in Profiles I and II Analyses

Table 3 Definitions of Data Qualifiers Added as a Result of Data Validation Findings

Table 4 Data Qualifiers Added as a Result of Data Validation Findings

Table 5 Field Duplicate Detections

ACRONYMS

°C	degrees centigrade
ABA	acid base accounting
Alpha	Alpha Analytical, Inc.
AMEC	AMEC Earth & Environmental
BS	blank spike
BTEX	benzene, toluene, ethylbenzene, and xylene
CAR	certified analytical report
CLP	EPA Contract Laboratory Program
COC	chain of custody
CRI	contract required quantitation limit check standard
DCB	decachlorobiphenyl
DRO	diesel range organics
EPA	United States Environmental Protection Agency
GAL	Green Analytical Laboratories
ICAL	initial calibration
ICS	interference check sample
ID	identification
IDL	instrument detection limit
IS	internal standard
LCS	laboratory control sample
MDL	method detection limit
MRL	method reporting limit
MS	matrix spike
MSD	matrix spike duplicate
MWMP	meteoric water mobility profile
NDEP	Nevada Department of Environmental Protection
ORO	oil range organics

PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
QC	quality control
RCRA	Resource Conservation and Recovery Act
RF	response factor
RPD	relative percent difference
SAP	sampling and analysis plan
SDG	sample delivery group
TCLP	toxicity characteristic leaching procedure
TPH-E	total extractable petroleum hydrocarbons
TPH-P	total purgeable petroleum hydrocarbons
WAD	weak acid dissociable
WET Lab	Western Environmental Testing Laboratory
Zalco	Zalco Laboratories, Inc.

1.0 INTRODUCTION

A total of 132 soil and mine waste samples were collected between October 9, 2006 and February 14, 2007 from the Gooseberry Mine site in Storey County, Nevada. AMEC submitted the 132 primary samples and 10 field blanks to Western Environmental Testing Laboratory (WET Lab) in Sparks, Nevada and Alpha Analytical, Inc. (Alpha) in Sparks, Nevada.

WET Lab analyzed samples by the following inorganic methods:

- Total Resource Recovery and Conservation Act (RCRA) metals by United States Environmental Protection Agency (EPA) Methods 6010B, 6020 and 7471A:
- Toxicity characteristic leaching procedure (TCLP) RCRA metals by EPA Methods 1311, 6010B, 6020 and 7470A;
- Total cyanide by EPA Method 9014;
- Weak acid dissociable (WAD) cyanide by Standard Method 4500CNI;
- Meteoric water mobility procedure (MWMP) by Nevada Department of Environmental Protection (NDEP) Method MWMP;
- MWMP Profiles I and II anions and metals analysis of MWMP extracts for RCRA-exempt mine wastes as described in the Revised Sampling and Analysis Plan (SAP) for Gooseberry Mine (AMEC, 2006);
- pH by EPA Method 150.1

WET Lab submitted selected samples to Green Analytical Laboratories (GAL) in Durango, Colorado for acid/base accounting (ABA).

WET Lab submitted selected samples to Associated Laboratories in Orange, California for analysis of polychlorinated biphenyls (PCBs) by EPA Method 8082, TCLP volatile organic compounds (VOCs) by EPA Methods 1311 and 8260B, and total extractable petroleum hydrocarbons (TPH-E) by EPA Method 8015B.

Alpha analyzed samples by the following organic methods:

- TPH-E and total purgeable petroleum hydrocarbons (TPH-P) by EPA Method 8015B;
- VOCs by EPA Method 8260B;
- Benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method 8260B; and
- Volatile organic compounds (VOCs) by EPA Method 8260B.

Alpha submitted seven samples to Zalco Laboratories, Inc. (Zalco) in Bakersfield California for ethylene glycol analysis by EPA Method 8015.

A list of samples by field sample identification (ID), laboratory sample ID, and analyses performed is presented in Table 1. A list of analyses included in MWMP Profiles I and II may be found in Table 2.

2.0 DATA VALIDATION AND REVIEW METHODOLOGY

The results for the samples listed in Table 1 underwent 90% data quality review and 10% full data validation to evaluate data usability. This data quality review and full data validation have been performed in general accordance with:

- EPA, 2005. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Data Review, EPA540/R-04/009.
- EPA, 2004. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA540/R-04/004.
- EPA, 2004. SW-846 Test Methods for Evaluating Solid Wastes, Update IIIB.
- EPA, 1992. Guidance for Data Usability in Risk Assessment (Part A), EPA/540/R-92/003.
- American Public Health Association (APHA), 1998. Standard Methods for the Examination of Water and Wastewater. 20th Edition.
- AMEC, 2006. Revised Sampling and Analysis Plan for Gooseberry Mine, Storey County, Nevada.

The EPA guidelines listed above were written specifically for the Contract Laboratory Program (CLP), and have been modified for the purposes of this data validation where they differ from EPA Method SW-846 method-specific quality control requirements.

The laboratory's certified analytical report (CAR) and supporting documentation were reviewed to assess the following:

- Chain of custody (COC) compliance;
- Holding time compliance;
- Calibration compliance;
- Presence or absence of laboratory contamination as demonstrated by method blanks;
- Accuracy and bias as demonstrated by recovery of surrogate spikes, laboratory control samples (LCS), and matrix spike (MS) samples;

- Analytical precision as relative percent difference (RPD) of analyte concentration between laboratory duplicates or MS and matrix spike duplicates (MSD);
- Proper qualitative identification and quantitation of target analytes (evaluated for full validation); and
- Insofar as possible, the degree of conformance to method requirements and good laboratory practices.

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all quality control (QC) audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

3.0 EXPLANATION OF DATA QUALITY INDICATORS

Summary explanations of the specific data quality indicators reviewed during this data quality review and data validation are presented below.

Table 3.1: Explanation of Data Quality Indicators

Data Quality Indicator	Description
Laboratory Control Sample Recoveries	LCSs, also known as blank spikes (BS), are aliquots of analyte-free water or Ottawa sand that are spiked with the analytes of interest for an analytical method, or a representative subset of those analytes. The spiked water or sand is then processed through the same extraction, concentration, cleanup, and analytical procedures as the samples they accompany. LCS recovery is an indication of a laboratory's ability to successfully perform an analytical method in an interference-free matrix. The SAP-specified LCS recovery limits for samples from this project are 70% to 140% for organic analytes and 80% to 120% for inorganic analytes. The SAP-specified RPD between duplicate LCSs is less than or equal to 20%.
Matrix Spike Recoveries	MSs and MSDs are prepared by adding known amounts of the analytes of interest for an analytical method, or a representative subset of those analytes, to an aliquot of sample. The spiked sample is then processed through the same extraction, concentration, cleanup, and analytical procedures as the unspiked samples in an analytical batch. MS recovery and precision are an indication of a laboratory's ability to successfully recover an analyte in the matrix of a specific sample or closely related sample matrices. It is important not to apply MS results for any specific sample to other samples without understanding how the sample matrices are related. The SAP specified MS recovery limits for samples from this project are 60% to 140% for organic analytes and 75% to 125% for inorganic analytes. The SAP-specified RPD between duplicate MSs is less than or equal to 30%.

Data Quality Indicator	Description
Surrogate Spike Recoveries	Surrogate spikes are used to evaluate accuracy, method performance, and extraction efficiency in each individual sample. Surrogate compounds are compounds not normally found in environmental samples, but which are similar to target analytes in chemical composition and behavior in the analytical process. The SAP-specified surrogate spike recovery limits for samples from this project are 70% to 130% for laboratory blanks and 60% to 140% for field samples.
Blank Concentrations	Blank samples are aliquots of analyte free water or Ottawa sand that are used as negative controls to verify that the sample collection, storage, preparation, and analysis system does not produce false positive results. Laboratory blanks are processed by the laboratory using exactly the same procedures as the field samples. Target analytes should not be found in laboratory blanks. When target analytes are detected in blanks, analyte concentrations in associated samples greater than the MRL but less than 5 times the concentration detected in the blank, or 10 times the concentration detected in the blank for common laboratory contaminants, will be U qualified by AMEC. Analyte concentrations between the instrument detection limit (IDL) or method detection limit (MDL) and MRL, and less than 5 times (or again, 10 times for common lab contaminants) the concentration detected in the blank will be U qualified at the MRL concentration.
Internal Standard Recoveries	Internal Standards (IS) are compounds that are added to a sample extract after all preparatory steps are completed and before instrumental analysis. These compounds serve as standards for qualitative analysis using relative retention time and quantitative analysis using relative response factors (RFs). Methods that use IS calibration include requirements for changes in response to the IS relative to the initial calibration (ICAL). For EPA Method 8260B, IS response must fall between 50% and 200% of the response in the ICAL. Because the area of the IS is used in the denominator of the equation for calculation of results using internal standardization, a response below 50% may indicate a possible positive bias, and a response above 200% may indicate a possible negative bias. For EPA Method 6020, IS response must fall between 30% and 120% of the intensity of the first standard used during calibration.
Inductively Coupled Plasma Interference Check Sample	The Interference check sample (ICS) verifies the analytical instrument's ability to overcome interferences typical of those found in samples. ICS recoveries must be within the method-specified 80 to 120% acceptance limits.
Reporting Limit Check Standard	The reporting limit check standard verifies the instrumental calibration near the laboratory's reporting limit. Lead reporting contract required quantitation limit check standard (CRI) acceptance limits are 50% to 150% and 70% to 130% for all other metals.

Data Quality Indicator	Description
Laboratory Duplicates	Laboratory duplicate analysis verifies acceptable method precision by the laboratory at the time of preparation and analysis. The SAP-specified RPD between duplicate samples is less than or equal to 30% for analyte concentrations greater than or equal to five times the MRL, and the absolute concentration difference less than or equal to the MRL for analyte concentrations less than five times the MRL.
Calibration	Instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. Calibration is verified at the beginning of the analytical run and on an ongoing basis.

4.0 SPECIFIC DATA VALIDATION FINDINGS

Results from the 132 project samples may be considered usable with the limitations and exceptions described in Sections 4.1 through 5.0. Definitions of data qualifiers added during validation may be found in Table 3. Summaries of specific qualifiers added to each affected sample as a result of the data validation findings are presented in Table 4. A summary of field duplicate detections are presented in Table 5.

4.1 Chain of Custody and Sample Receipt Condition Documentation

There were no anomalies associated with sample receipt condition or COC documentation, except as described below. All samples were received at the laboratory in good condition.

The cooler temperatures for most samples exceeded the EPA-recommended 4 degrees centigrade (°C) ± 2°C temperature range because the samples were delivered directly to the lab from the field and did not have time to equilibrate with the ice in the coolers. Data usability is not adversely affected.

SCyanide Vat: According to the WET Lab sample delivery group (SDG) 610-097 case narrative, MWMP and Profile II samples were not submitted by AMEC for this sample, although the analyses were requested on the COC. The MWMP and Profile II analyses for this sample were cancelled by AMEC. A sample was collected at this location on February 14, 2007 and submitted to WET Lab for MWMP and Profile II analyses.

CN Tank 1: According to the WET Lab SDG 610-097 case narrative, this sample was misplaced after receipt by the laboratory. WAD cyanide analysis was cancelled for this sample by AMEC's request.

4.2 Organic Analyses

The organic analyses associated with the samples covered in this report consisted of PCBs, TPH-E, TPH-P, VOCs, BTEX, and ethylene glycol. Sample specific narrative descriptions of data validation findings and data quality limitations may be found in Sections 4.2.1 through 4.2.4.

For organic analyses, continuing calibration (CCAL) performance is evaluated in terms of %D, which corresponds to percent deviation (average response factor [RF] models) or percent drift (regression fit models) from the average ICAL response. To facilitate understanding of CCAL effects on data quality to the end user, %D has been expressed as percent recovery in this narrative. CCAL recoveries should fall within 85 to 115% acceptance limits.

4.2.1 Total Petroleum Hydrocarbons

According to Randy Gardner at Alpha, the laboratory G qualified all detected oil range organics (ORO) results as estimated values because the instrument was calibrated using only 30-weight oil and not the entire range of oil weights. AMEC agrees that these results are quantitative estimates and J qualified the affected results on the data tables. (J-BC)

According to the CAR, the laboratory L qualified diesel range organics (DRO) results that "may include contributions from heavier-end hydrocarbons (e.g., motor oil) that elute in the DRO range", AMEC agrees that these results are quantitative estimates and J qualified the affected results on the data tables. (J-MI)

Dr5-10-10: Recovery of surrogate compound o-terphenyl was high at 154% for this sample. AMEC J qualified the detected DRO and ORO results from this sample because of possible high bias in the analytical results. (J-HS)

TP-AST-2-1 and TP-AST-5-1: The surrogate compound nonane was not recovered from these samples. The samples were analyzed at tenfold dilution, which may have diluted the surrogate compounds to concentrations less than the method detection limit. Data usability is not adversely affected.

B-23-5 and B-21-15: Recoveries of surrogate compound nonane were low at 59.2% and 55.4%, respectively, in these samples. AMEC UJ qualified the nondetected ORO, gasoline range organics (GRO), and DRO results from these samples because of possible low bias in the analytical results. (UJ-LS)

B-23-5, B-23-15, B-23-22, B-21-5, B-21-10, and B-21-15: Recoveries of surrogate compound nonane were low at 46% in the LCS and at 52% in the MS and high at

154% in the method blank associated with the analysis of these samples. The surrogate recoveries were outside of acceptance limits but DRO recovery was acceptable in the LCS, MS, and DRO was not recovered in the associated method blank. Data usability is not adversely affected.

GRO recovery was high at 145.8% in the CCAL associated with these samples. Although the recovery was high, GRO was not detected in the associated samples. Data usability is not adversely affected.

4.2.2 Volatile Organic Compounds

B-23-5, B-23-15, B-23-22, B-21-5, B-21-10, and B-21-15: Chloromethane and bromomethane recoveries were low at 63.3% and 24.3%, respectively in a CCAL associated with these samples. AMEC UJ qualified the nondetected chloromethane and bromomethane results from these samples because of possible bias in the analytical results. (**UJ**-LC)

B-22-5 and B-22-15: Bromomethane and cis-1,2-dichloroethene recoveries were outside of acceptance limits at 72.3% and 116.4%, respectively, in a CCAL associated with these samples. Specific limitations include the following:

- AMEC UJ qualified the bromomethane results from these samples because of possible low bias in the analytical results. (**UJ**-LC)
- cis-1,2-Dichloroethene recovery was high in the CCAL, and this analyte was not detected in the associated samples. Data usability is not adversely affected.

TP-RS-1-1, TP-RS-1-5, TP-RS-2-1, TP-RS-2-5, TP-RS-3-1, and TP-RS-3-5: Bromomethane recovery was low at 70.4% in a CCAL associated with these samples. AMEC UJ qualified the nondetected bromomethane results from these samples because of possible low bias in the analytical results. (**UJ**-LC)

Field Blank (1/26/2007): Chloromethane (83.4%), chloroethane (81%), bromomethane (71%), and o-xylene (121%) recoveries were outside of acceptance limits for the CCAL associated with this sample. These analytes were not recovered from the samples associated with this field blank. Data usability is not adversely affected.

4.2.3 Benzene, Toluene, Ethylbenzene, and Xylene

TP-BP-1-5: M,p-xylene and o-xylene recoveries were high at 143% and 146%, respectively, in the MS performed on this sample. Although recoveries were high, these analytes were not detected in this sample. Data usability is not adversely affected.

4.2.4 Ethylene Glycol

In an e-mail dated February 16, 2007, Erica Schaefer of AMEC requested that Alpha procure data validation packages for the ethylene glycol analysis of sample TP-G-1-5 from the subcontracting laboratory (Zalco). Zalco provided the validation package on April 13, 2007.

TP-G-1-1, TP-G-1-5, TP-G-2-1, TP-G-2-5, TP-G-2-10, TP-G-3-1 and Field Blank (1/26/07): The RSD of 22.4% for the ethylene glycol ICAL associated with these samples exceeded the method recommended 20%. In addition, Zalco forced the linear calibration through the origin, although EPA Method 8000B Section 7.5.2 specifically states the "[t]he analyst should not force the line through the origin." AMEC UJ qualified the nondetected ethylene glycol results from these samples because o problems with the ICAL. (UJ-BC)

Zalco also did not provide raw data for the CCV analyzed in association with this SDG. AMEC could not assess continuing calibration for these samples.

4.3 Inorganic Analyses

The inorganic analyses associated with the samples covered in this report consisted of total and TCLP metals, total and WAD cyanide, Profiles I and II anions and metals, and ABA. Sample specific narrative descriptions of data validation findings and data quality limitations may be found and in Sections 4.3.1 through 4.3.6.

4.3.1 Total Metals

SCyanide Vat: Mercury recoveries were not reported for the MS/MSD performed on this sample. The concentration detected in the sample was greater than four times the spike concentration. Data usability is not adversely affected.

SETNK 10-9, TNK 4-10-9, SCyanide Vat, and TNK 5-10-9: Mercury was detected at a concentration of 0.00013 mg/L in the method blank and at concentrations of 0.00012 mg/L and 0.00014 mg/L in calibration blanks associated with this sample. The mercury results for these samples were detected at concentrations greater than five times the concentration detected in the blank. Data usability is not adversely affected.

SETNK 10-9, TNK 4-10-9, and TNK 5-10-9: Several metal analytes were detected at concentrations between the MDL and MRL in the method blank and calibration blanks associated with these samples. The metals results for these samples were either nondetected or detected at concentrations greater than five times the concentration detected in the blank. Data usability is not adversely affected.

4.3.2 TCLP Metals

B-22-5, B-22-15, and B-22-19: Mercury was detected at a concentration of 0.013 mg/L in the field blank associated with these samples. AMEC U qualified the detected mercury results from these samples because the detected concentrations were less than five times the concentration detected in the blank. (**U**-FB)

B-22-5, B-22-15, B-22-19, and Field Blank (1/3/2007): Mercury was detected at a concentration of 0.00010 mg/L in the method blank and at 0.00009 mg/L in two calibration blanks associated with these samples. AMEC U qualified the detected mercury results from these samples because the detected concentrations were less than five times the concentration detected in the blank, when corrected for dilution. (**U**-MB,CB)

Several additional metal analytes were detected at concentrations between the MDL and MRL in the method blank, calibration blanks, and TCLP blank associated with these samples. The metals detected in the blanks were not detected in the associated samples, and data usability is not adversely affected.

TP-RS-1-1 and TP-RS-2-1: Mercury was detected at a concentration of 0.010 mg/L in the field blank associated with these samples. AMEC U qualified the detected mercury results from these samples because the detected concentrations were less than five times the concentration detected in the blank. (**U**-FB)

TP-RS-1-1, TP-RS-1-5, TP-RS-2-1, TP-RS-2-5, TP-RS-3-1, and TP-RS-3-5: Several metal analytes were detected at concentrations between the MDL and MRL in the calibration blanks, method blank, and TCLP blank associated with these samples. The metals results for these samples were all nondetected, and data usability is not adversely affected by the blank contamination.

B-16-5: Several metal analytes were detected at concentrations between the MDL and MRL in the calibration blanks and TCLP blank associated with this sample. The metals detected in the blanks were not detected in the associated samples, and data usability is not adversely affected.

B-16-15, B-16-23, B-17-5, B-17-15, B-17-20, and B-17-22: Mercury was detected at a concentration of 0.00007 mg/L in two calibration blanks associated with these samples. AMEC U qualified the detected mercury results for samples B-16-23 and B-17-20 because the mercury concentrations detected in the samples were less than five times the concentration detected in the blanks, when corrected for dilution. (**U**-CB)

Barium was detected at 0.0913 mg/L in the TCLP blank associated with these samples. AMEC U qualified the detected barium results from samples B-16-15 and B-

17-15 because the detected results were less than five times the concentration detected in the associated TCLP blank, when corrected for dilution. (**U**-CB)

Several additional metal analytes were detected at concentrations between the MDL and MRL in the calibration blanks and TCLP blank associated with this sample. The metals detected in the blanks were not detected in the associated samples or were detected at concentrations greater than five times the concentrations detected in the blanks. Data usability is not adversely affected.

B-20-5: Mercury recovery was high at 130% in the MS performed on this sample. Although the recovery was high, mercury was not detected in this sample. Data usability is not adversely affected.

B-26-16: Mercury recoveries were acceptable at 105% in the MS performed on this sample and at 77% in the MSD. The laboratory re-analyzed the MSD with a recovery of 102% and reported this value. Although, in AMEC's professional opinion it is not good laboratory practice to re-analyze samples, the recoveries for both analyses were within the SAP-specified acceptance limits of 75% to 125%. Data usability is not adversely affected.

B-23-5, B-23-15, B-26-5, and B-26-16: Mercury was detected at concentrations of 0.00008 mg/L in the method blank and at 0.00009 mg/L and 0.00026 mg/L in two calibration blanks associated with these samples. AMEC U qualified the detected mercury results from these samples because the detected concentrations were less than five times the concentration detected in the blank, when corrected for dilution. (**U**-MB,CB)

B-23-5, B-23-15, B-23-22, B-21-5, B-21-10, B-21-15, B-26-5, B-26-16, and Field Blank (1/8/2007): Several metals were detected at concentrations between the MDL and MRL in the method blank, calibration blanks, and TCLP blank associated with these samples. The metals detected in the blanks were not detected in the samples, and data usability is not adversely affected.

TP-6-1, TP-6-3.5, TP-10-1, TP-10-5, TP-11-1, TP-11-3.5, TP-7-1, TP-7-.5, and TP-7-5: Chromium was detected in a method blank and calibration blank associated with these samples at concentrations of 0.0012 mg/L and 0.0007 mg/L, respectively. Chromium was not detected in these samples, and data usability is not adversely affected.

4.3.3 Total Cyanide

B-16-5, B-16-23, B-17-5, B-17-15, B-17-20, and B-17-22: Cyanide was detected at a concentration of 0.030 mg/L in the field blank associated with these samples.

Samples B-16-5, B-17-5, and B-17-15 were subsequently analyzed for WAD cyanide. WAD cyanide was not detected above the reporting limit in these samples, supporting the possibility that the detected total cyanide concentrations from samples B-16-5, B-17-5, and B-17-15 were a result of contamination.

Specific limitations include the following: AMEC U qualified the detected total cyanide results from samples B-16-5, B-16-23, B-17-5, B-17-15, and B-17-20 because the detected cyanide concentrations were less than ten times the concentration detected in the blank, when corrected for dilution. (**U**-FB)

B-16-5 and B-16-15: Cyanide was detected at concentrations of 0.0038 mg/L and 0.0068 mg/L in two calibration blanks associated with these samples. Cyanide was either not detected or detected at a concentration greater than five times the concentrations detected in the blanks. Data usability is not adversely affected.

B-23-5, B-23-15, B-23-22, B-21-5, B-21-10, B-21-15, B-26-5, B-26-16, and Field Blank (1/8/2007): Cyanide was detected at concentrations of 0.0034 mg/L and 0.0046 mg/l in two calibration blanks associated with these samples. The concentrations detected in the blanks were less than the MRL of 0.010 mg/L, and cyanide was either not detected or detected at a concentration greater than five times the concentrations detected in the blanks for the associated samples. Data usability is not adversely affected.

TP-RS-1-1, TP-RS-2-1, TP-RS-2-5, TP-RS-3-5, TP-11-1, and TP-20-5: Cyanide was reported as nondetected at a reporting limit of 0.2 mg/kg for these samples. Upon investigation of the raw analytical data, AMEC discovered that the cyanide results for SDGs 701193 and 701198 had not been corrected for dilution. The cyanide results for these samples should have been reported as being detected at concentrations above the MRL. AMEC informed WET Lab of this oversight on March 29, 2007. As a result, WET Lab issued corrected reports on March 30, 2007.

4.3.4 WAD Cyanide

TP-JP-5-1: WAD cyanide recovery was low at 72% in the MS performed on this sample. AMEC J qualified the detected WAD cyanide result from this sample because of possible low bias in the analytical result. (**J**-LM)

TP-JP-3-1: WAD cyanide recovery was low at 71% in the MS performed on this sample. AMEC J qualified the detected WAD cyanide result from this sample because of possible low bias in the analytical result. (**J**-LM)

TP-9-1: WAD cyanide recovery was low at 66% in the MS performed on this sample. AMEC UJ qualified the nondetected WAD cyanide result from this sample because of possible low bias in the analytical result. (**UJ**-LM)

TP-JP-2-1, TP-JP-2-5, and TP-JP-3-5: WAD cyanide was detected in two blanks associated with these samples at concentrations of 0.0044 mg/L and 0.0071 mg/L. AMEC U qualified the WAD cyanide results from these samples because the detected concentrations were less than five times the concentration detected in the blanks. (**U**-CB)

4.3.5 Profile II Anions

LP-1: Chloride recovery was high at 153% in the MS performed on this sample. AMEC J qualified the detected chloride result from this sample because of possible high bias in the analytical result. (**J**-HM)

WR-1: Chloride recovery was low at 17% in the MS performed on this sample. AMEC J qualified the detected chloride result from this sample because of possible low bias in the analytical result. (**J**-LM)

Sulfate recovery was high at 126% in the MS performed on this sample. AMEC J qualified the detected sulfate result from this sample because of possible high bias in the analytical result. (**J**-HM)

4.3.6 Profile II Metals

SETNK 10-9, TNK 4-10-9, and TNK 5-10-9: Several metal analytes were detected at concentrations between the MDL and MRL in the method blank and calibration blanks associated with these samples. Metals detected in the blanks either were not detected in the associated samples or were detected at concentrations greater than five times the concentrations detected in the blanks, when corrected for dilution. Data usability is not adversely affected.

SETNK 10-9: Selenium was reported as nondetected at a reporting limit of 3.0 mg/L for this sample. According to the raw analytical data, selenium was detected at a concentration of 4.64 mg/L. AMEC contacted WET Lab on March 29, 2007, and it was determined that the reporting limit should have been 5.0 mg/L and the selenium result nondetected. WET Lab issued a corrected report on March 30, 2007.

TP-JP-5-1, TP-JP-5-5, TP-JP-6-1, TP-JP-6-5, TP-JP-7-1, TP-JP-7-5, TP-JP-8-1, TP-JP-8-5, WR-2, and TP-JP-6-10: Silver recovery was low at 60% in the LCS associated with these samples. AMEC J qualified the detected silver results and UJ

qualified the nondetected silver results from these samples because of possible low bias in the analytical results. (**J/UJ**-LL)

Several metal analytes were detected at concentrations between the MDL and MRL in the method blank and calibration blanks associated with these samples. Specific limitations are described below:

- Antimony was detected at a concentration of 0.00032 mg/L in the initial calibration blank associated with these samples. AMEC U qualified the antimony results from samples TP-JP-5-1, TP-JP-6-1, TP-JP-7-1, and TP-JP-8-5 because the detected concentrations were less than five times the concentration detected in the blank, when corrected for dilution. (**U**-CB)
- Mercury was detected at a concentration of 0.00004 mg/L in the method blank associated with these samples. AMEC U qualified the mercury result from sample TP-JP-7-5 because the detected concentration was less than five times the concentration detected in the blank. (**U**-MB)

WR-2: Sodium recovery was low at 64% in the MS performed on this sample. AMEC J qualified the sodium result from this sample because of possible low bias in the analytical result. (**J**-LM)

TP-JP-1-5: Selenium recovery was high at 129% in the MS performed on this sample. AMEC J qualified the detected selenium result from this sample because of possible high bias in the analytical result. (**J**-HM)

South CN Vat, R5 Box, ATP-1, and ATP-2: Mercury was detected at a concentration of 0.00015 mg/L in a field blank associated with these samples. AMEC U qualified the detected mercury results from these samples because the concentrations detected in the samples were less than five times the concentration detected in the blank, when corrected for dilution. (**U**-FB)

TP-8-1, B-25-1.5, TP-JP-1-1, TP-JP-1-5, TP-JP-2-1, TP-JP-2-5, TP-JP-3-1, TP-JP-3-5, TP-JP-4-1, TP-JP-4-5, and Field Blank (1/25/2007): Mercury was detected at negative concentrations of -0.00008 mg/L in the method blank and at -0.00010 mg/L and -0.00008 mg/L in the calibration blanks associated with these samples. The absolute value of the detected concentration was equal to, or slightly less than, the MRL of 0.00010 mg/L. AMEC UJ qualified the nondetected mercury results from these samples because of possible instrument bias. (**UJ**-CB)

Chromium was detected at a concentration of 0.00161 mg/L in a calibration blank associated with these samples. Chromium was not detected at concentrations greater than the MRL in any of the associated samples. Data usability is not adversely affected.

Several additional metals were detected at concentrations between the MDL and MRL in the method blank and calibration blanks associated with these samples. The metals detected in the blanks were not detected in the samples, and data usability is not adversely affected.

TP-9-1 and TP-9-2: Mercury was detected at a concentration 0.00005 mg/L in the method blank associated with these samples. AMEC U qualified the detected mercury results from these samples because the detected concentrations were less than five times the concentration detected in the blank. (**U**-MB)

Iron was detected at a concentration of 0.021 mg/L in a calibration blank associated with these samples. Iron was not detected in these samples, and data usability is not adversely affected.

Several additional metal analytes were detected at concentrations between the MDL and MRL in the method blank and calibration blanks associated with these samples. The metals detected in the blanks were not detected in the samples or detected at concentrations greater than five times the concentration detected in the blank. Data usability is not adversely affected.

5.0 FIELD DUPLICATE RESULTS

Samples B-21-10, TP-BP-3-10, TP-7-5, TP-JP-6-10, and TP-G-2-10 were collected as field duplicates and submitted to WET lab and/or Alpha. Detected results and %RPDs for the field duplicates are summarized in Table 5. Precision values met the SAP-specified acceptance limits of 30% RPD for aqueous samples and 40% RPD for soil samples with concentrations more than five times their MRL, and the absolute concentration difference between field duplicate samples with concentrations less than five times the MRL was less than or equal to the MRL, except as described below and in Table 5.

TP-JP-6-5 and TP-JP-6-10: RPDs between the analysis of primary sample TP-JP-6-5 and field duplicate TP-JP-6-10 exceeded the SAP-specified acceptance limit for sulfate (100%), nitrate and nitrite as nitrogen (84%), total dissolved solids (105%), WAD cyanide (186%), manganese (59%), potassium (82%), sodium (160%), and selenium (166%). AMEC J qualified the detected results of these analytes in the primary and field duplicate samples because of imprecision between field duplicate analyses. (**J**-FD)

TP-G-2-5 and TP-G-2-10: RPDs between the analysis of primary sample TP-G-2-5 and field duplicate sample TP-G-2-10 exceeded the SAP specified acceptance limit for DRO (83%) and ORO (104%). AMEC J qualified the detected results of these analytes in the primary and field duplicate samples because of imprecision between field duplicate analyses. (**J**-FD)

6.0 SUMMARY AND CONCLUSIONS

AMEC's review of this dataset shows the data are generally usable and of good quality. The types of qualifications applied to the dataset included non-detected data (U), and estimated data (J or UJ).

Non-detected Qualified Data. Forty-five metals and cyanide results from this project were qualified as nondetected because of method blank, field blank, TCLP blank, or calibration blank contamination.

Estimated Data. A total of 119 results were qualified as estimated data because of surrogate, MS, or LCS recoveries exceeding acceptance criteria; initial or continuing calibration exceeding acceptance criteria; high RPDs between field duplicate analyses; or matrix interference.

Data Completeness Assessment. A total of 3,290 data records were evaluated during the data validation and review of the sample results. Of the total data records, 119 records (3.6%) were qualified as estimated concentrations. Estimated concentrations may be associated with either the nondetected concentration limits (UJ) or the concentration of detected target analytes (J). Forty-five data records (1.4%) were qualified as nondetected as a result of a detection of a target analyte in the associated method blank.

The 95% project data quality objective for valid measurements was met for this project.

REFERENCES

EPA, 2005. *EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Data Review*, EPA540/R-04/009.

EPA, 2004. *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA540/R-04/004.

EPA, 2004. SW-846 *Test Methods for Evaluating Solid Wastes, Update IIIB.*

EPA, 1992. *Guidance for Data Usability in Risk Assessment (Part A)*, EPA/540/R-92/003.

AMEC, 2006. *Revised Sampling and Analysis Plan for Gooseberry Mine, Storey County, Nevada.*

APHA, 1998. *Standard Methods for the Examination of Water and Wastewater.* 20th Edition (ed. L.S. Clesceri, et al.). APHA

LIMITATIONS

This report was prepared by AMEC Earth & Environmental, Inc. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Data Validation Report is intended to be used by the Nevada Division of Environmental Protection only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

APPENDIX F
SHAFT CLOSURE PLAN

GOOSEBERRY MINE
BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA

amec

SEP 2 6 2007

HARTMAN
STRUCTURAL ENGINEERING

September 24, 2007
Job #5807

Brett Whitford
AMEC
780 Vista Blvd., Ste. 100
Sparks, NV 89434-6656

RE: Gooseberry Mine
Shaft Closures

Dear Brett,

We have completed our review of the "Initial Geotechnical Assessment Final Report Gooseberry Mine, Storey County, Nevada" prepared by AMEC Earth and Environmental, Inc. dated May 2006 and offer the following details as a suggested means to cap the Main Shaft and Decline Shaft at the project site.

It is our understanding the former mining site is being considered for possible commercial development and the attached details will be used to develop budgetary costs in connection with capping the two existing Mine Shafts. Our details are based on the assumption that an additional Field Investigation will be conducted prior to final design or construction of any concrete plug or cap. Subsurface Geotechnical conditions near the shaft openings must be verified and would be used to determine the actual keyed dimensions required for the concrete plug and cap.

All work near and around the shaft openings must be performed by properly trained and qualified individuals. Workers and equipment must be secured to appropriate anchorages until the concrete cap has been placed and attained adequate strength.

Since the future development for this site is unknown at this time, actual design loads could vary from those used to develop the attached details. A qualified Engineer should determine the final design requirements prior to constructing the concrete plug and cap. The following parameters were used to prepare the enclosed details dated September 24, 2007.

1. Concrete — f'c = 3,000 psi @ 28 days
2. Reinforcing — f_y = 60 ksi
3. Concrete Density — 130 pcf
4. Single Point Load at Center of each Shaft opening:
   a. Dead Load — 78 kips
   b. Snow Load — 20 kips
   c. High Rack Load — 24 kips

Although it is preferable to avoid constructing any structures directly over a capped shaft opening, it is our opinion the above criteria will provide reasonable budgetary costs to cap the shafts with concrete plugs that have the ability to support a potential future column or footing for a warehouse or distribution center similar to those currently being developed within the Tahoe-Reno Industrial Park.

Please give me a call should you have any questions.

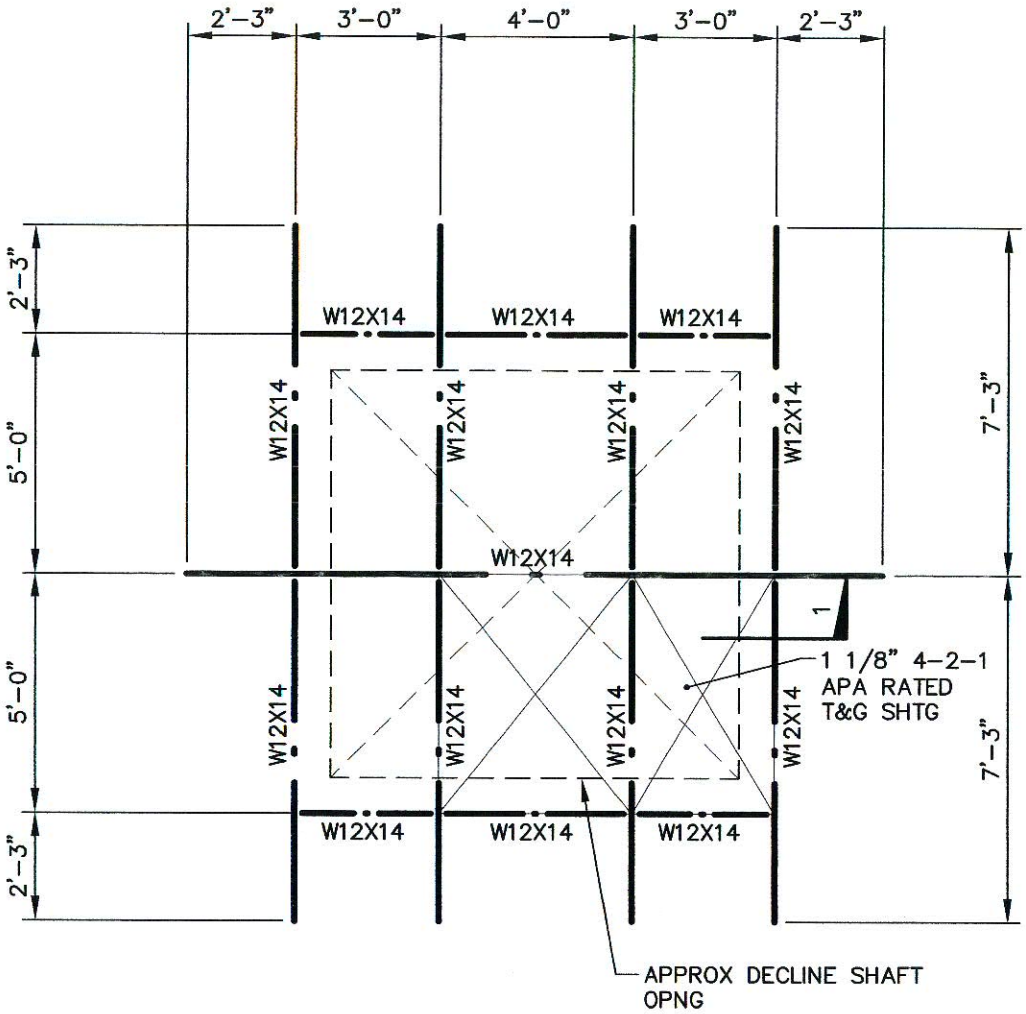
Sincerely,
Hartman Structural Engineering, LLC

Brian S. Hartman, P.E.

bsh/mm
Enc. (4)

1005 Terminal Way
Suite 165
Reno, Nevada
89502-2196

Telephone:
(775) 786-4717
Facsimile:
(775) 786-4733
www.hartman-se.com
mail@hartman-se.com



PLAN @ 8'-6"X8'-6" DECLINE SHAFT

SCALE: 1/4"=1'-0"

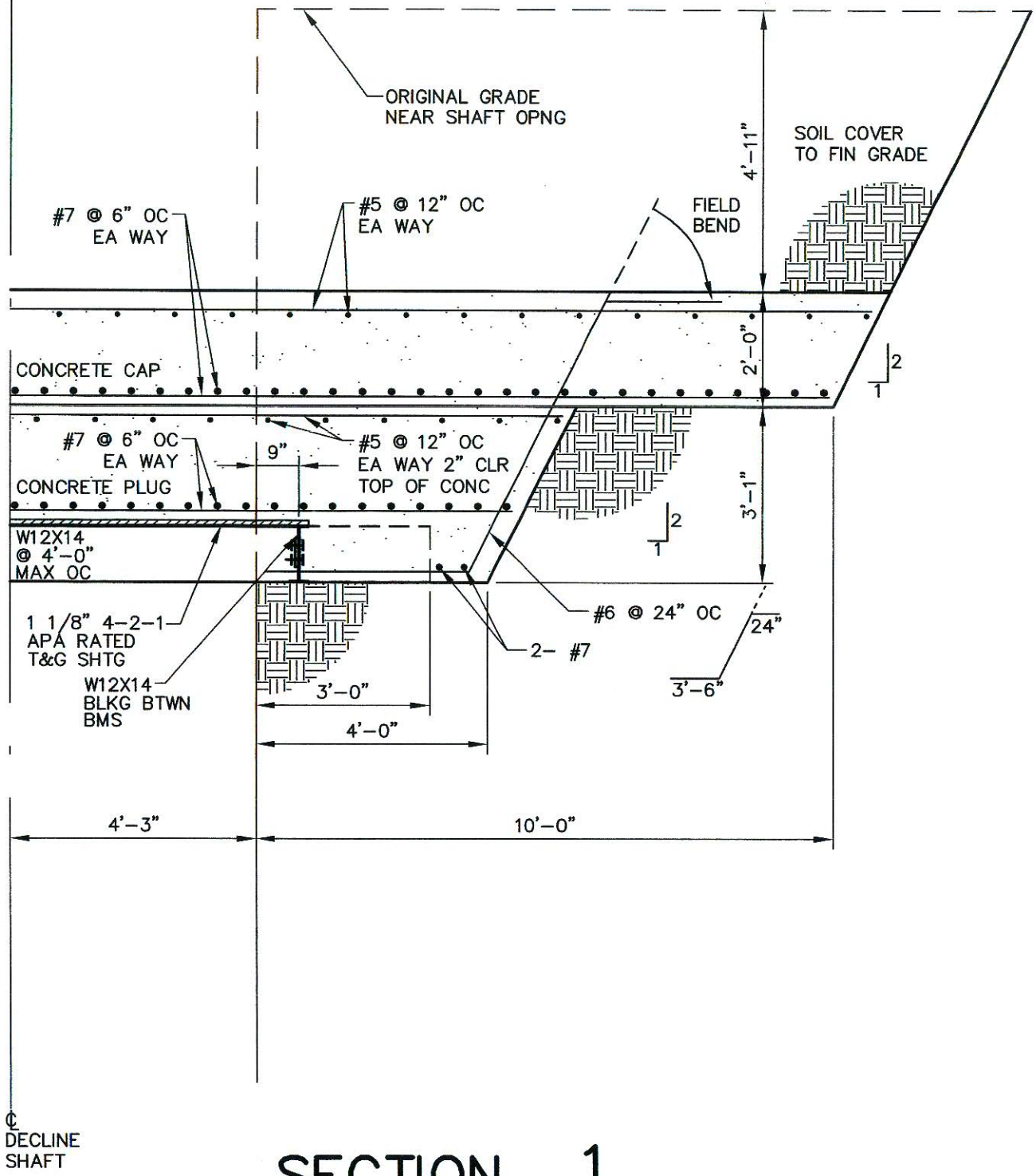
PROPOSED DECLINE SHAFT
CLOSURE
FOR
GOOSEBERRY MINE
STOREY COUNTY NEVADA

HARTMAN
STRUCTURAL ENGINEERING
1005 Terminal Way
Suite #165
Reno, Nevada
89502-2196
Telephone: (775) 786-4717
Facsimile: (775) 786-4733
E-mail: mail@Hartman-SE.com

JOB # 5807

DATE: 25 SEP 2007

SHEET 1 OF 4



SECTION 1

SCALE: 3/8"=1'-0"

PROPOSED DECLINE SHAFT
CLOSURE
FOR
GOOSEBERRY MINE

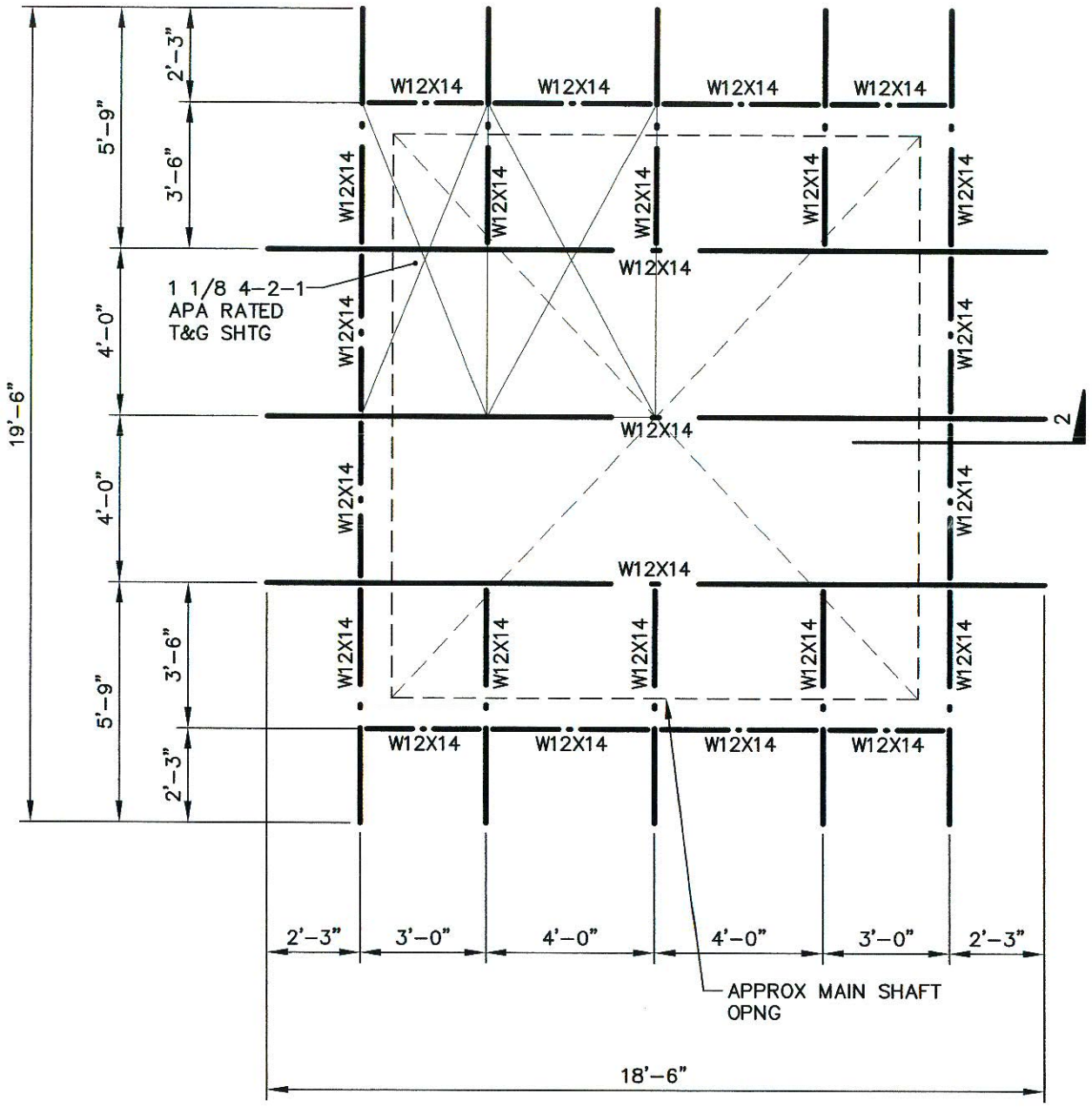
STOREY COUNTY NEVADA

HARTMAN
STRUCTURAL ENGINEERING
1005 Terminal Way
Suite #165
Reno, Nevada
89502-2196
Telephone: (775) 786-4717
Facsimile: (775) 786-4733
E-mail: mail@Hartman-SE.com

JOB # 5807

DATE: 25 SEP 2007

SHEET 2 OF 4



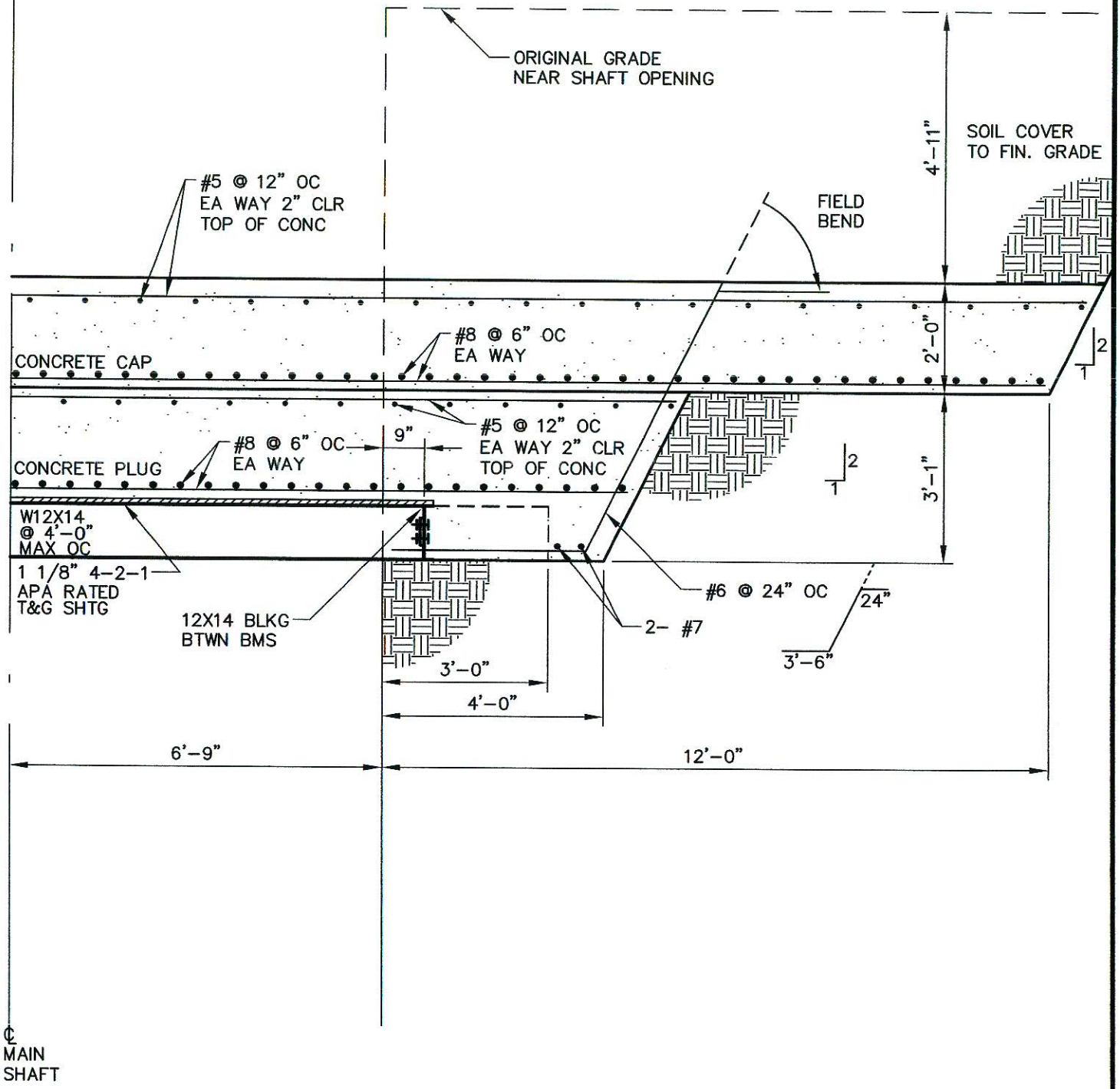
PLAN @ 12'-6"X13'-6" MAIN SHAFT

SCALE: 1/4"=1'-0"

PROPOSED MAIN SHAFT CLOSURE
FOR
GOOSEBERRY MINE
STOREY COUNTY NEVADA

HARTMAN
STRUCTURAL ENGINEERING
1005 Terminal Way
Suite #165
Reno, Nevada
89502-2196
Telephone: (775) 786-4717
Facsimile: (775) 786-4733
E-mail: mail@Hartman-SE.com

JOB # 5807
DATE: 25 SEP 2007
SHEET 3 OF 4



SECTION 2

SCALE: 3/8"=1'-0"

PROPOSED MAIN SHAFT CLOSURE
FOR
GOOSEBERRY MINE
STOREY COUNTY NEVADA

HARTMAN
STRUCTURAL ENGINEERING
1005 Terminal Way
Suite #165
Reno, Nevada
89502-2196
Telephone: (775) 786-4717
Facsimile: (775) 786-4733
E-mail: mail@Hartman-SE.com

JOB # 5807

DATE: 25 SEP 2007

SHEET 4 OF 4

APPENDIX G
DRAFT TECHNICAL SPECIFICATIONS

GOOSEBERRY MINE
BROWNFIELDS PROJECT
STOREY COUNTY, NEVADA

amec

DRAFT TECHNICAL SPECIFICATIONS
ISSUED FOR AGENCY REVIEW
HEAP LEACH PAD & TAILINGS CLOSURE
GOOSEBERRY MINE, STOREY COUNTY, NEVADA

Submitted to:

Nevada Division of Environmental Protection
901 South Stewart Street
Suite 4001
Carson City, Nevada 89701

Submitted by:

AMEC Earth & Environmental, Inc.
780 Vista Boulevard, Suite 100
Sparks, Nevada 89434

November 2007
AMEC Job No. 6-417-000720

amec

TABLE OF CONTENTS

PART I: EARTHWORK SECTION **PAGE**

1. GENERAL REQUIREMENTS 1
   - 1.1 Definitions 1
   - 1.2 Scope of Work 1
   - 1.3 Dust Control 1
   - 1.4 Control of Natural Waters 2
   - 1.5 Sequence of Work 2
     - 1.5.1 Task I Construction 2
     - 1.5.2 Task II Construction (Not in Earthwork Scope) 3
2. SURVEYS 4
3. FOUNDATION PREPARATION 4
   - 3.1 Clearing and Grubbing 4
   - 3.2 Stockpiling Growth Media 4
   - 3.3 Overexcavation of Existing Surface Soils 5
   - 3.4 Surface Preparation and Compaction 5
4. EARTHWORK CONSTRUCTION 5
   - 4.1 General 5
     - 4.1.1 Common Excavation 5
     - 4.1.2 Rock Excavation 6
   - 4.2 Fills 6
     - 4.2.1 General 6
     - 4.2.2 Material Quality 6
       - 4.2.2.1 Rock Fill 6
       - 4.2.2.2 Random Fill 7
       - 4.2.2.3 Common Fill 7
       - 4.2.2.4 Drain Rock 7
       - 4.2.2.5 Evaporation Pond Stone Fill 8
     - 4.2.3 Placement and Compaction 8
       - 4.2.3.1 Rock Fill Placement 8
       - 4.2.3.2 Random and Common Fill Placement 9
       - 4.2.3.3 Stone Fill Placement 9
5. Underdrain piping system 10
   - 5.1 Materials 10
     - 5.1.1 PVC Piping 10
     - 5.1.2 HDPE Underdrain Pipe 10
     - 5.1.3 Geotextile10
   - 5.2 Submittals 11
     - 5.2.1 Certificates 11
     - 5.2.2 Samples 11
   - 5.3 Delivery, Handling and Storage of Materials 11
     - 5.3.1 General 11
   - 5.4 Pipe Placement 12

PROFESSIONAL ENGINEER STATE OF NEVADA
ADEL MABROUK
Exp: 12-31-09
CIVIL
No. 18518
11-29-2007

5.5 Installation of Geotextile 13
6. Chain Link Fencing 13
6.1 Materials 13
6.1.1 Fabric. 13
6.1.2 Barbed Wire 13
6.1.3 Posts, Rails, and Braces 13
6.2 Gates 13
6.2.1 Miscellaneous Fittings and Hardware 14
6.3 Submittals 14
6.3.1 Certificates 14
6.4 Delivery, Handling and Storage of Materials 14
6.4.1 General 14
6.5 Fence Installation 15
7. FINISHED SURFACE PREPARATION OF AREAS TO RECEIVE LINING 15
8. WEATHER LIMITATIONS 16
9. QUALITY ASSURANCE 17
9.1 General 17
9.2 Construction Observations 17
9.3 Material Selection and Use 17
9.4 Earthwork Material Testing 18
9.4.1 General 18
9.4.2 Test Procedures 18
9.4.2.1 Quality Assurance Reports 19

PART II: GEOMEMBRANE LINING MATERIALS, INSTALLATION AND TESTING Page

1. GENERAL REQUIREMENTS 1
1.1 Definitions 1
1.2 Site Cleanup 1
1.3 Liner Deliveries 2
1.4 Scope of Work 2
1.5 Standards and Test Methods 2
1.6 Submittals 4
1.6.1 Qualifications 5
1.6.2 Samples 6
1.6.3 Shop Drawings 6
1.6.4 Certificates 6
1.6.5 Schedules 6
1.7 Delivery, Storage & Handling of Materials 6
1.7.1 Delivery 6
1.7.2 Storage and Handling 7
1.8 Verification of Areas to Receive Geomembrane Liners 7
1.9 Liner Testing 7
1.10 Warranty 7
2. INSTALLATION SPECIFICATIONS 7

2.1 Inspection of Sheet Liner at Job Site 7
2.2 Finished Grade 8
2.3 Liner Placement 8
2.4 Field Welding 9
3. QUALITY CONTROL 10
3.1 Raw Material 10
3.2 Roll Goods 10
3.2.1 General 10
3.2.2 60-Mil Smooth HDPE Geomembrane 11
3.3 Conformance Testing 12
3.3.1 Testing Requirements 12
3.3.2 Sampling Procedures 12
3.3.3 Test Results 12
3.3.4 Procedures for Conformance Test Failure 13
3.4 Field Seam Testing 13
3.4.1 General 13
3.4.2 Procedure in the Case of Destructive Test Failure 15
4. CONSTRUCTION QUALITY ASSURANCE 16
4.1 Construction Observations 16
4.2 Quality Assurance Reports 16

HEAP LEACH FACILITY CLOSURE
GOOSEBERRY MINE
STOREY COUNTY, NEVADA

DRAWING INDEX

DRAWING NO.	REV.	DATE	TITLE
1. CV01	1.0	11/07	COVER SHEET
2. Site	1.0	11/07	SITE PLAN
3. GRD1	1.0	11/07	PRELIMINARY GRADING & UNDER DRAINS
4. GRD2	1.0	11/07	HEAP LEACH PAD & EVAPORATION POND GRADING
5. GRD3	1.0	11/07	ASAMERA TAILING POND GRADING & DRAINAGE DITCH
6. GRD4	1.0	11/07	REWORKED TAILING POND GRADING
7. PRO1	1.0	11/07	DRAINAGE DITCH PROFILE & SECTIONS
8. DT01	1.0	11/07	DETAIL SHEET
9. DT02	1.0	11/07	DETAIL SHEET
10. DT03	1.0	11/07	DETAIL SHEET

TECHNICAL SPECIFICATIONS
HEAP LEACH PAD CLOSURE
GOOSEBERRY MINE SITE
STOREY COUNTY, NEVADA

PART I: EARTHWORK

1. GENERAL REQUIREMENTS

1.1 Definitions

The following definitions apply to these Technical Specifications:

- "Owner" is defined as State of Nevada, Division of Environmental Protection (State). The Owner's properly authorized representative will act on behalf of the Owner.

- "Engineer" is defined as a representative appointed and authorized by the Owner. The Engineer shall be a registered Professional Engineer in the State of Nevada. The Owner must identify the Engineer in writing to the Contractor.

- "Inspector" is defined as the party or parties representing the Owner under the supervision of the Engineer. The Inspectors will perform Construction Quality Assurance (CQA) observations and testing for the project. A supervisory Inspector with a minimum of 5 years experience in earthworks and geomembrane liner testing shall review all work performed by Inspectors on the job site. Resumes of all Inspectors shall be submitted to the Owner for approval.

- "Earthwork Contractor" is defined as the party or parties identified as such by the Owner and are responsible for the Scope of Work as identified in Part I of these Technical Specifications.

- "Lining Contractor" is defined as the party or parties identified as such by the Owner and are responsible for the Scope of Work as identified in Part II of these Technical Specifications. The Liner Contractor may be a subcontractor to the Earthwork Contractor.

- "Contract Manager" is defined as a representative appointed and authorized by the Owner to act as a liaison between the Owner, the Earthwork Contractor, the Lining Contractor, and the Engineer.

1.2 Scope of Work

These Technical Specifications and the Construction Drawings constitute the Earthwork package for closure of the Heap Leach Pad (HLP) and conversion of an existing holding pond to an evaporation pond at the Gooseberry Mine site, Storey County, Nevada. The Earthwork package covers the following items of Work:

- Survey for line and grade of the specific project elements.
- Excavation of test pits as needed to locate the existing liner under the HLP.
- Installation of an underdrain around the HLP with geotextile wrap and stone fill
- Finished surface preparation for areas to receive geomembrane lining.
- Excavation of material from the East and West mill tailings ponds and placement on the excavated material on the HLP
- Intermediate grading, final grading and covering the HLP
- Grading and surface preparation the West mill tailing pond to receive geomembrane lining.
- Excavation of material in the "Jello Pile" and placement in the disposal cell.
- Cover and final grading of the disposal cell.
- Lowering the dam and placing cover on the tailings at the Asamera tailing pond.
- Site grading and construction of the drainage ditch at the Asamera Tailing pond.
- Removal of loose tailings and rock, and placement in the pond at the Reworked tailing pond
- Grading and earth cover of he reworked tailing pond.
- Site grading to provide drainage.
- Installation of fencing.
- Finished surface preparation for areas to receive geomembrane lining.

Part II of these Technical Specifications covers the geomembrane lining materials, installation and testing and is not part of the Earthwork Contractor's Scope of Work.

1.3 Dust Control

The Earthwork Contractor, for the duration of the contract, shall maintain all excavations, embankments, haul roads, access roads, plant sites, waste disposal areas, stockpile areas, and all other work areas free from dust as determined by the Owner. Industry accepted methods of dust control suitable for the area involved, such as sprinkling, will be permitted. Alternative methods for dust control shall be approved by the Owner. No separate payment will be made for dust control.

1.4 Control of Natural Waters

The Earthwork Contractor, for the duration of the contract, shall be responsible for temporary diversion of natural waters to protect the work areas from damage. The Contractor shall also be responsible for routing any runoff from the HLP to containment areas during the construction period. No separate payment will be made for control of natural waters.

1.5 Sequence of Work

The sequence of work shall be in accordance with the following requirements.

1.5.1 Task I Construction

- Clearing and grubbing to a nominal depth of 12 inches areas to be covered with fill (as required by site conditions) and undisturbed areas that will be used as borrow pit locations. All materials shall be placed in growth medium stockpile areas designated by the Owner.

- Excavation down to the existing liners in the East and West mill tailing ponds. Place the excavated material on the heap leach pad to the limits shown on the drawings. Remove and dispose of the liners in the ponds

- Preliminary grading of the top of the HLP to smooth out the ridge and fill and compact the existing trenches. This work shall be Coordinated with the placement of the material from the mill tailing ponds.

- Earthwork and grading of the East mill tailing pond as required and shown on the Drawings to create the Disposal Cell. Placement of the material from the "Jello Pile" in the Disposal Cell after approval of the liner installation and tailing layer. Earthwork and grading as shown to close the Disposal after installation of the geomembrane cap.

- Finished surface preparation of all areas to receive geomembrane lining. Placement of the select fill and tailings as protection for the geotextile lining in the Evaporation pond and disposal cell. Placement of the stone fill in the evaporation pond.

- Installation of slotted underdrain piping, drain rock and geotextile fabric at the base of the HLP. Installation of the drain line and fittings from the HLP to the Evaporation pond

- Folding in of the existing liner system in the Pregnant Solution Pond and subsequent backfilling of the pond to reestablish drainage across the area.

- Earthwork grading to the lines and grades shown on the Construction Drawings for the HLP. Note: Contactor shall use caution if operating heavy equipment over the drain line from the HLP to the Evaporation Basin. Additional fill may be placed in a temporary berm over this pipe for protection if needed.

- Earthwork grading to the lines and grades shown on the construction drawings for the Asamera Tailing pond and excavation of the drainage ditch around the pond.

- Excavation the tailings and loose rock on the northeast corner of the reworked tailing Pond down to native ground, or as directed by the engineer. Placement of the material in the pond, and grading and covering the pond to the grades and limits shown.

- Re-grading all borrows pits as needed to provide positive drainage, so that ponding of surface or rain water will not occur.

The Earthwork Contractor shall work in close coordination with the Lining Contractor so as to provide a prepared surface for liner installation that conforms to the requirements set forth in these Technical Specifications. Lining installation will need to progress in an orderly fashion to allow project completion within the required schedule. The Earthwork Contractor shall excavate and backfill all high-density polyethylene (HDPE) anchor trenches as shown on the Construction Drawings. No separate payment will be made for anchor trench excavation and backfill.

1.5.2 Task II Construction (Not in Earthwork Scope)

- Installation and testing of the 60-mil smooth geomembrane liner for the Evaporation Basin.

- Installation of the pipe boot for the drain line.

2. SURVEYS

The Owner will perform basic construction surveying to establish horizontal and vertical control. Construction surveys to assure completion to the specified lines and grades will be the responsibility of the Earthwork Contractor. Pre-construction and final cross-section surveys to determine earthwork quantities will be the responsibility of the Owner. Mapping accuracy may require adjustments to the plan elevations due to actual field conditions. Any proposed changes shall be submitted in writing and are subject to review and approval by the Engineer.

Except as noted otherwise, grading tolerances shall be plus or minus 0.1 feet for horizontal and sloped surfaces from the elevations shown on the Construction Drawings.

The Earthwork Contractor shall supply electronic (AutoCAD v. 2004 or compatible) as-built drawings of the completed finished grade surfaces. The as-built drawings shall consist of topographic maps of the finished grade surfaces and shall provide sufficient detail to allow for verification of the various project elements including, but not limited to, elevation, grades and location. No areas within the scope of the project shall be covered with geomembrane liner without written approval of the Engineer and the Owner.

Any areas found to be deficient shall be rectified by the Earthwork Contractor at no additional cost to the Owner. Additional electronic as-built drawings shall be provided to the Owner and the Engineer for review and approval prior to final acceptance.

3. FOUNDATION PREPARATION

3.1 Clearing and Grubbing

All vegetation, debris and other deleterious material shall be removed from areas of cut and fill and areas to receive geomembrane lining. Materials to be removed include surface boulders, organic matter including trees, stumps and roots, or other objectionable materials as determined by the Engineer. A nominal twelve (12) inch depth of stripping will be required to meet the aforementioned requirements.

3.2 Stockpiling Growth Media

All growth media removed during the clearing and grubbing operations shall be stockpiled in areas designated by the Owner. The growth media stockpiles shall be graded smooth such that positive surface drainage is maintained. The slopes shall be graded smooth to 2.5:1 (H:V).

3.3 Overexcavation of Existing Surface Soils

After initial clearing and grubbing, overexcavation of any softer soils to the contact of relatively firm soils or rock shall be performed only at the direction of the Engineer. If required, overexcavation shall be performed by the Contractor. Confirmation of adequate subexcavation and exposure of firm soils or rock shall be made by the Inspector subject to approval by the Engineer.

3.4 Surface Preparation and Compaction

The upper eight (8) inches of native soils beneath cut surfaces and areas to receive fill shall be scarified, moisture conditioned and compacted to a minimum of 95 percent of maximum dry density as determined in accordance with ASTM D1557. Moisture content during compaction shall be maintained within the limits of 2 percent below to 3 percent above optimum moisture content as determined by ASTM D1557. Scarification and compaction can be deleted in areas in which intact bedrock is exposed at the surface.

4. EARTHWORK CONSTRUCTION

4.1 General

THE HLP will be capped with a minimum of two feet of random fill or common fill, except that the area above the underdrain trench shall be filled with compacted tailings as shown on the Construction Drawings.

Excavation in soil and rock shall be performed to the lines and grades presented on the Construction Drawings. The Earthwork Contractor can anticipate that materials within the specified depth of excavation will require the use of conventional earthmoving equipment and heavy ripping. Soil materials can be excavated with dozers and scrapers. Light to heavy ripping may be required for excavation in some of the more cemented (caliche) zones. Considerable amounts of cobbles and boulders should be anticipated by the Contractor. Based on the results of field exploration, bedrock is expected to be encountered within the depth of excavation, particularly within the borrow areas.

4.1.1 Common Excavation

Common excavation shall be classified as soil materials that do not meet the specifications for rock excavation as defined in Section 4.2.2.

All earth materials, boulders or detached pieces of solid rock less than one cubic yard in volume shall be classified as common excavation. No additional allowance above the unit prices bid for common excavation shall be permitted for excavation of wet or frozen materials.

All excavated materials may be used as fill provided it meets the requirements for the class of material in which its use is intended as specified herein.

4.1.2 Rock Excavation

Rock excavation shall be classified as material which cannot be effectively loosened or broken down in a single pass by ripping with a late model tractor-mounted hydraulic ripper, equipped with one digging point of standard manufacturer's design that is adequately sized for use with and propelled by a crawler-type tractor, rated at a minimum 520-net flywheel horsepower and operating in low gear. All boulders or detached pieces of solid rock in excess of one cubic yard in volume shall be classified as rock excavation. These materials may be used for fill if they meet the requirements for the class of materials in which its use is intended as specified herein.

4.2 Fills

Fill materials shall be placed to the lines and grades as shown on the Construction Drawings. Material type, quality, placement and compaction procedures and requirements are specified in the following sections.

4.2.1 General

All fill materials shall be free of excessive vegetation, debris, organic matter, frozen materials and other deleterious materials.

4.2.2 Material Quality

4.2.2.1 Rock Fill

Any material having more than 30 percent plus ¾-inch rock shall be classified as rock fill. Rock fill may be obtained from excavation in borrow areas designated by the Owner and approved by the Engineer.

Rock fill can be placed in the base of the deeper fills and shall not be used in the upper two (2) feet.

All excavation from the areas previously defined shall be suitable for rock fill provided they contain no particles larger than 24 inches nominal diameter (least dimension). Leach material or acid generating waste materials are not acceptable for use as rock fill.

4.2.2.2 Random Fill

Random fill may be obtained from excavation of the borrow areas designated by the Owner and approved by the Engineer.

Random fill can be placed in the base of the deeper fills and shall not be used in the upper one (1) foot.

All excavation from the areas previously defined shall be considered suitable for use as random fill provided it contains no particles larger than 8-inches nominal diameter (least dimension) and has a plasticity index of no more than 15 as determined in accordance with ASTM D4318.

4.2.2.3 Common Fill

Common fill may be obtained from borrow areas designated by the Owner and approved by the Engineer. Common fill may extend to finished grade.

Materials shall be considered suitable for use as common fill provided they contain no particles larger than four (4) inches nominal diameter (least dimension). The material shall have no more than 45 percent (by weight) passing the No. 200 sieve and have a plasticity index of no more than 15 as determined in accordance with ASTM D4318.

4.2.2.4 Drain Rock

Drain rock shall be used to backfill the perforated underdrain piping as shown on the Construction Drawings. The Earthwork Contractor shall be responsible for supply and placement of Drain Rock. Drain rock shall meet the following grading requirements as determined by ASTM C117.

Drain Rock

Sieve Size (Square Openings)	Percent Passing (By Dry Weight)
1½-inch	100
¾-inch	50 – 100
½-inch	0 - 20
No. 4	0 - 5
No. 200	0 - 3

Drain rock material shall be nonplastic when tested in accordance with ASTM D4318. The percent of wear when subjected to the Los Angeles abrasion test (ASTM C131, 500 revolutions) shall be no greater than 40. The percent loss when subjected to the sodium sulfate soundness test (ASTM C88) shall be no greater than 12. Alternative materials may be approved subject to review by the Engineer.

The requirements for geotextile encapsulating the drain rock are presented in Section 5.1.2.

4.2.2.5 Evaporation Pond Stone Fill

The Evaporation Pond shall be filled to the elevation shown on the Construction Drawings with a stone backfill. The material shall consist of stones with a minimum dimension of 2-inches up to a maximum dimension of 5-inches.

Stone fill material shall be nonplastic when tested in accordance with ASTM D4318. The percent of wear when subjected to the Los Angeles abrasion test (ASTM C131, 500 revolutions) shall be no greater than 40. The percent loss when subjected to the sodium sulfate soundness test (ASTM C88) shall be no greater than 12. Alternative materials may be approved subject to review by the Engineer.

4.2.3 Placement and Compaction

Fill materials shall be placed to the lines and grades shown on the Construction Drawings.

4.2.3.1 Rock Fill Placement

Rock fill for mass grading operations shall be placed in lifts not to exceed twelve (12) inches in compacted thickness unless authorized by the Engineer. The type of compaction equipment,

and number of passes, shall be approved by the Engineer in writing based on an acceptable field fill compaction performance test.

Construction and monitoring of the field test shall be performed per U.S. Army Corps of Engineers' guidelines for test fill construction. The test fill may be located so that it is incorporated within the limits of the compacted fill areas. Borrow moisture content on minus ¾-inch material shall be within two percent of optimum moisture prior to placement.

The data to be collected during construction of the test fill and submitted to the Engineer for approval shall include:

- Amount of settlement after every two passes of a 10-ton minimum (static drum weight) vibratory, smooth-drum roller compactor, to a maximum of 10 passes.
- Gradation and moisture content of in-place material.
- In-place fill density at completion of the test by bulk density or nuclear gauge methods.

A curve showing settlement versus number of passes shall be produced from the data. This curve will be used to evaluate the required minimum number of passes for acceptable compaction. Final evaluation by the Engineer will be based on a review of the test data.

4.2.3.2 Random and Common Fill Placement

Random and common fill shall be placed in lifts not to exceed 12-inches in loose thickness, unless otherwise authorized by the Engineer. Where the Earthwork Contractor demonstrates that the equipment being used effectively compacts lifts thicker than 12-inches, thicker lifts may be authorized by the Engineer.

Compaction of random and common fill shall be between 85 percent and 90 percent of ASTM D1557 maximum dry density. The moisture content during compaction shall be maintained within the limits of 2 percent below to 3 percent above optimum moisture content as determined in accordance with ASTM D1557. Fill materials that are compacted in excess of 90 percent relative compaction shall be scarified to yield materials within the specified range.

4.2.3.3 Stone Fill Placement

The stone fill for the Evaporation Pond shall be placed on a protective layer of geotextile to protect the geomembrane pond liner from damage.

Placement methods and haulage equipment proposed by the Contractor shall be selected to prevent damage to the pond lining system. Depending on the construction equipment proposed by the Contractor for placement operations, consideration shall be given to hand placement of the initial layer of materials. Proposed equipment and placement methods to prevent damage to the liner system shall be outlined in the Contractor's proposal to the Owner.

At no time shall equipment be operated directly on the surface of the liner. The working surface during the placement of the drainage materials shall be maintained at a level that will not induce stresses sufficient to puncture or damage the underlying liner system. If haulage and/or placement vehicle traffic is proposed to travel onto the working surface, a minimum thickness of material shall be established based upon a successful test pad with liner, geotextile and the equipment proposed for use. Proposed methods and equipment used for haulage as well as material placement shall be reviewed and approved by the Engineer prior to commencing operations.

As the ambient air temperature increases, wrinkles in the liner will develop due to the thermal expansion and contraction properties of the HDPE liner. Stone fill materials shall be placed during the cooler times of the day when the liner lays relatively flat. To minimize the effect of wrinkles, stone fill materials shall be placed in an uphill direction and/or parallel to the contours.

5. UNDERDRAIN PIPING SYSTEM

5.1 Materials

5.1.1 PVC Piping

PVC piping shall be 6 inch, ASTM D3034, SDR 35, with integral bell gasket joints: Rubber gaskets shall be factory installed and conform to ASTM F477.

PVC Fittings. ASTM D3034, SDR 35 with integral bell gasketed joints. Gaskets shall conform to ASTM F477.

5.1.2 HDPE Underdrain Pipe

HDPE slotted underdrain piping shall be ASTM F-405 Heavy Duty. Pipe may be supplied in coils or sections. Provide manufactures standard fittings to transition to PVC pipe

5.1.3 Geotextile

Geotextile shall consist of a nonwoven, needle punched, polypropylene fabric having a minimum weight of 10-ounces per square yard in conformance with ASTM D5261. Geotextile

shall consist of GSE Lining Technology NW10, Contech C-120NW, Amoco ProPex 4510, or an equivalent product approved by the Engineer.

5.2 Submittals

5.2.1 Certificates

The Contractor shall submit one (1) original and two (2) copies of certificates provided by the manufacturer and indicating that all materials, pipe and fittings comply with the applicable portions of this specification.

Before incorporating any piping and geotextile materials into the project, a certification of materials shall be submitted by the manufacturer or supplier. The certificate shall include:

- Name of manufacturer.
- Name of fabricator.
- Chemical composition and coating, if any.
- Product description and life expectancy, if applicable.
- Statement of specification compliance including the name of this project.
- Signature of authorized official attesting to the information presented.
- Manufacturer's recommendations for field installation and repairs.

All materials shall be subject to the approval of the Engineer prior to incorporating any of the materials into the work.

5.2.2 Samples

Submit for approval samples of the material proposed for use, where appropriate.

5.3 Delivery, Handling and Storage of Materials

5.3.1 General

All pipe and materials furnished by the Earthwork Contractor shall be delivered, distributed and stored at the project site by the Earthwork Contractor. The Earthwork Contractor shall be responsible for all materials at all times. The Earthwork Contractor shall replace or repair, in a manner approved by the Engineer and at the Earthwork Contractor's own expense, all such material found to be defective in manufacture or damaged in handling after delivery by the manufacturer. This shall include the furnishing of all materials and labor required for the replacement of installed material discovered damaged or defective prior to the final acceptance of the work, or during the guarantee period.

5.4 Pipe Placement

The slotted underdrain pipe shall be installed along the edge of the existing liner as shown on the Drawings. The solid pipe and cleanouts shall be installed as shown on the Construction Drawings.

Pipe fittings shall be installed at the required locations. Prior to installation, each section of pipe and each fitting shall be inspected for defects and/or damage.

The Earthwork Contractor shall use equipment and methods approved by the Engineer for safe, convenient and satisfactory execution of the work. All pipe; fittings and other appurtenances shall be carefully lowered into the trench piece by piece. Under no circumstances shall such materials be dropped into trenches or lined channels. Extreme care shall be taken to prevent foreign material from entering the pipe while it is being installed. During periods when pipe laying is not in progress, the open ends of the pipe shall be closed by a watertight plug or other means approved by the Engineer.

The cutting of pipe for inserting fittings or closure pieces shall be done in a neat and workmanship-like manner without damage to the pipe or coating and so as to leave a smooth end at right angles to the axis of the pipe.

Whenever it is necessary to deflect pipe from a straight line, either in the vertical or horizontal plane, to avoid obstructions or where long radius curves are permitted, the amount of deflection allowed shall not exceed that required for satisfactory joining and shall be approved by the Engineer.

Wherever significant site variations not shown on the Construction Drawings are encountered during construction, and where such obstructions interfere with the work to an extent that an alteration in the lines or grades of the pipe is required, the Engineer shall have the authority to order such deviation or to arrange for removal, relocation or reconstruction of the obstructions. If the deviation results in a change in the amount of work done by the Earthwork Contractor, an increase in the work shall be compensated for on the basis of payment as detailed in the

proposal, or on a change-order basis. A reduction of work shall result in a similar credit to the Owner.

5.5 Installation of Geotextile

Geotextile shall be dry and clean immediately prior to installation. The geotextile shall be installed such that foot traffic is minimized and no vehicle traffic crosses the liner. All joints shall be overlapped a minimum of twelve (12) inches. All holes or tears that occur during installation shall be immediately marked and repaired, at the Contractor's expense. Repair methods shall be approved by the Engineer.

Geotextiles are sensitive to ultraviolet radiation and must have very limited exposure to direct sunlight. Any geotextile stored at the site shall be covered with ultraviolet stabilized tarps for protection. The geotextile shall not be exposed to direct sunlight for more than five days.

6. FENCING

6.1 Materials

Unless otherwise noted all fence materials shall conform the requirements of the Nevada Department of Transportation "Standard Specifications for Road and Bridge Construction", Current Edition. Fencing shall be NDOT "Standard Fencing" as specified in Section 616.03.02 of the NDOT Standard Specifications with three strands barbed wire, and one strand smooth wire.

6.1.1 Barbed Wire

Barbed wire shall be 2-strand 12-1/2 gauge zinc-coated wire with 4-point barbs and shall conform to the requirements of ASTM A 121

6.1.2 Posts

Steel posts shall be C-Section, or T-Section conforming to AASHTO M281. Wood Posts shall conform to the requirements of Section 724.03.01 of the NDOT Standard Specifications.

6.2 Drive Gates

Gate frames shall conform to the requirements of Section 734.03.07 of the NDOT Standard Specifications.

6.3 Submittals

6.3.1 Certificates

The Contractor shall submit one (1) original and two (2) copies of certificates provided by the manufacturer and indicating that all materials, comply with the applicable portions of this specification.

Before incorporating any fencing into the project, a certification of materials shall be submitted by the manufacturer or supplier. The certificate shall include:

- Name of manufacturer.
- Name of fabricator.
- Chemical composition and coating, if any.
- Product description and life expectancy, if applicable.
- Statement of specification compliance including the name of this project.
- Signature of authorized official attesting to the information presented.
- Manufacturer's recommendations for field installation and repairs.

All materials shall be subject to the approval of the Engineer prior to incorporating any of the materials into the work.

6.4 Delivery, Handling and Storage of Materials

6.4.1 General

All fencing material furnished by the Earthwork Contractor shall be delivered, distributed and stored at the project site by the Earthwork Contractor. The Earthwork Contractor shall be responsible for all materials at all times. The Earthwork Contractor shall replace or repair, in a manner approved by the Engineer and at the Earthwork Contractor's own expense, all such material found to be defective in manufacture or damaged in handling after delivery by the manufacturer. This shall include the furnishing of all materials and labor required for the

replacement of installed material discovered damaged or defective prior to the final acceptance of the work, or during the guarantee period.

6.5 Fence Installation

Steel posts shall be driven at the required dimension and depth and at the spacing shown on the Drawings.

Wood posts shall be set in concrete. The concrete shall be thoroughly compacted around the posts by tamping or vibrating and shall have a smooth finish slightly higher than the ground and sloped to drain away from the posts. All posts shall be set plumb and to the required grade and alignment. No materials shall be installed on the posts, nor shall the posts be disturbed in any manner within seven days after the individual post footing is completed.

Should rock be encountered at a depth less than the planned footing depth, a hole 2-inches (50 mm) larger than the greatest dimension of the posts shall be drilled to a depth of 12-inches (300 mm). After the posts are set, the remainder of the drilled hole shall be filled with grout, composed of one part Portland cement and two parts mortar sand. Any remaining space above the rock shall be filled with concrete in the manner described above.

In lieu of drilling, the rock may be excavated to the required footing depth. No extra compensation shall be made for rock excavation.

Stress panels shall be installed as shown on the Drawings. Corner panels shall be installed at all changes in direction greater than 45 degrees.

At locations of small natural swales or drainage ditches and where it is not practical to have the fence conform to the general contour of the ground surface, longer posts may be used and multiple strands of barbed wire stretched thereon to span the opening below the fence. The vertical clearance between strands of barbed wire shall be 6-inches (150 mm) or less.

7. FINISHED SURFACE PREPARATION OF AREAS TO RECEIVE LINING

All surfaces to receive geomembrane lining shall meet the following specifications.

All finished grade areas to receive geomembrane lining shall be free of angular gravel, objectionable gravel over ¼-inch in diameter and hard objects. In areas with excessive coarse particles exposed on the existing lining surface, removal by appropriate methods will be required. Areas to receive geomembrane liner shall be cleaned to the satisfaction of the Inspector prior to geomembrane deployment. Any objectionable particles beneath the existing liner system shall be cut out and removed prior to deployment of the new liner system.

Prior to installation of the liner, the Lining Contractor shall, in the presence of the Earthwork Contractor, the Inspector and the Owner, inspect and verify the conditions of the specified area as adequate for placement of the liner. Following the verification of the surface, the Lining Contractor shall sign an acceptance form and assumes full responsibility for the verified area should conditions be altered by occurrences outside the control of the Earthwork Contractor.

8. WEATHER LIMITATIONS

Unless approved in the field by the Engineer, controlled fill shall not be constructed when the atmospheric temperature is at 35 degrees F and falling. When the temperature falls below 35 degrees F, it shall be the responsibility of the Earthwork Contractor to protect all areas of completed surfaces against any detrimental effects by methods approved by the Engineer. Any areas that are damaged by freezing shall be removed or reconditioned, reshaped and recompacted by the Earthwork Contractor in conformance with the requirements of this specification.

9. QUALITY ASSURANCE

9.1 General

The Inspector, under the supervision of the Engineer, shall represent the Owner and shall be responsible during construction for the following:

- Construction observations for quality assurance
- Materials testing for compliance with the specifications
- Soils testing
- Reports

The Earthwork Contractor shall be responsible for all surveying and verification of lines and grades during construction. The Owner shall provide final cross-section surveys and will determine earthwork quantities. The Owner shall verify quantities and grades for final acceptance of site grading.

9.2 Construction Observations

The Engineer shall be the interpreter of the site construction specifications, and shall direct observations and tests as considered necessary to assess and accept the quality of work. An Inspector under the direction of the Engineer shall make continuous observations and tests of construction operations.

9.3 Material Selection and Use

The Engineer shall advise the Earthwork Contractor as to the suitability of proposed borrow material for its specified use in the project construction. It shall be the responsibility of the representative of the Engineer to confirm that all materials meet the specified requirements. Processing may be required to meet the gradation requirements specified herein. Final acceptance of construction materials shall be after placement and compaction. In the event testing indicates the specifications are not being achieved, the Contractor shall at his expense, either remove and replace or rework the material within the area represented by the failing test until passing tests are achieved.

9.4 Earthwork Material Testing

9.4.1 General

The Inspector, under the supervision of the Engineer, shall perform testing to classify each specified construction material type. Tests performed shall consist of grain-size distribution analyses and Atterberg limits testing to classify each material type for its specified use in construction. Additionally, moisture content, moisture-density relationships and in-place density and moisture tests shall be performed to verify that the construction conforms to the Construction Drawings and Technical Specifications. Table I-1 depicts a CQA Sampling and Testing Guide. Observations and tests performed by the Inspector shall not relieve the Earthwork Contractor of responsibility for providing adequate quality control measures nor of responsibility for damage to or loss of material before acceptance. The Earthwork Contractor shall, at his expense, furnish any labor and equipment necessary to assist the Inspector in obtaining samples for testing. The Earthwork Contractor shall allow sufficient time for the Inspector to carry out the required testing and observations at no additional cost to the Owner.

Table I-1
Earthwork CQA Sampling and Testing Guide

Material	Tests	Frequency
Subgrade & Finished Grade - Cut - Random and Common fill	1. Laboratory Compaction Curve 2. Density (in-place)	1. One Per Soil Type 2. Minimum of One Density Test per 1,000 Square Yards
Granular Fill & Drain Rock	1. Gradation, Los Angeles Abrasion, Soundness, Atterberg Limits	1. Once Per Source or Visually Approved

9.4.2 Test Procedures

All tests performed shall be in accordance with the current edition of the ASTM Testing Standards as indicated below.

- ASTM C88-99a Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
- ASTM C117-03 Standard Test Method for Materials Finer than 75μm (No. 200) Sieve in Mineral Aggregates by Washing
- ASTM C131-03 Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

- ASTM C136-01 Standard Test for Sieve Analysis of Fine and Coarse Aggregates
- ASTM D422-63 (2002) Standard Test Method for Particle-Size of Soils
- ASTM D1557-02e1 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
- ASTM D2216-98 Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D2922-01 Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
- ASTM D4318-00 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils

9.4.2.1 Quality Assurance Reports

The Engineer shall submit reports of observations and tests to the Owner. The reports shall be submitted to the Owner in a timely fashion. As soon as possible, after identification, items of non-conformance will be brought to the attention of the Owner.

A copy of all test results will be maintained at the construction site, and shall include the following:

- Date issued.
- Project title and number.
- Date of testing and/or sampling.
- Designation or use of material tested.
- Type of test and specification.
- Location of test.
- Observations regarding compliance or noncompliance with the Construction Drawings and Technical Specifications.

Upon completion of construction, the Engineer shall submit a final Construction Quality Assurance Report stating that the project was completed in substantial conformance with the approved Construction Drawings and Technical Specifications and presenting test summaries, record drawings and other supporting data necessary to document the completed construction.

TECHNICAL SPECIFICATIONS
HEAP LEACH PAD CLOSURE
GOOSEBERRY MINE SITE
STOREY COUNTY, NEVADA

PART II: GEOMEMBRANE LINING MATERIALS, INSTALLATION AND TESTING

1. GENERAL REQUIREMENTS

1.1 Definitions

The following definitions apply to these Technical Specifications:

- "Owner" is defined as The State of Nevada, Division of Environmental Protection (State). The Owner's properly authorized representative will act on behalf of the Owner.

- "Engineer" is defined as a representative appointed and authorized by the Owner. The Engineer shall be a registered Professional Engineer in the State of Nevada. The Owner must identify the Engineer in writing to the Contractor.

- "Inspector" is defined as the party or parties representing the Owner under the supervision of the Engineer. The Inspectors shall perform Construction Quality Assurance (CQA) observations and testing for the project. A supervisory inspector with a minimum of 5 years experience in earthworks and geomembrane liner testing shall review all work performed by inspectors on the job site. Resumes of all inspectors shall be submitted to the Owner for approval.

- "Earthwork Contractor" is defined as the party or parties identified as such by the Owner and is responsible for Tasks I & III as defined in these Technical Specifications.

- "Lining Contractor" is defined as the party or parties identified as such by the Owner and is responsible for Task II as defined in these Technical Specifications. The Liner Contractor may be a subcontractor to the Earthwork Contractor.

- "Contract Manager" is defined as a representative appointed and authorized by the Owner to act as a liaison between the Owner, the Earthwork Contractor, the Lining Contractor, and the Engineer.

1.2 Site Cleanup

The Lining Contractor shall, at all times, keep the work area in a neat, clean and safe condition. All scrap material, debris, trash, sandbags and the like shall be removed from the pond area as well as the surrounding project area. Sand bags shall be UV resistant. These materials shall be cleaned up on a regular basis and shall be disposed of in an area provided by the Owner at the Lining Contractor's expense. The Lining Contractor shall leave the work area in a neat,

clean, and safe condition. In the event of the Lining Contractor's failure to comply with the foregoing, the same may be accomplished by the Owner at the Lining Contractor's expense.

1.3 Liner Deliveries

Liner deliveries shall be coordinated with the Contractor's field crew. The Owner is not responsible for liner delivery, unloading or storage. The Owner will not accept liner deliveries that arrive at the project site when the liner crew is not present.

1.4 Scope of Work

These Technical Specifications cover the requirements for manufacture, installation and testing of the geomembrane lining system construction for the Heap Leach Pad Closure, Gooseberry Mine, Storey Pine County, Nevada as indicated by the Construction Drawings and summarized as follows.

- Installation and testing of the 60-mil smooth geomembrane liner for the evaporation pond.
- Installation of the pipe boot for the drain inlet.
- As-built drawings documenting the layout and numbering of panels, roll numbers and destructive test sample locations for each element of the project shall be required. As-built drawings shall be submitted to the Engineer within two weeks of the completion of liner deployment. As-built drawings shall be prepared and submitted in AutoCAD v. 2004 or compatible format.

The work requirements outlined above and as shown on the Construction Drawings include furnishing materials, labor, quality control testing, construction machinery and services for construction of the facility as outlined in the Construction Drawings and these Technical Specifications.

The Lining Contractor's construction layout drawings shall be submitted for approval and shall specify all components and details required to meet these Technical Specifications. The responsibility of the Owner and the Lining Contractor shall be clearly indicated.

1.5 Standards and Test Methods

All tests performed shall be in accordance with the current edition of the ASTM Testing Standards or other Standards as indicated below.

- ASTM D638 Standard Test Method for Tensile Properties of Plastics
- ASTM D792 Standard Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement
- ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting
- ASTM D1004 Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting
- ASTM D1204 Standard Method for Linear Dimensional Changes of Nonrigid Thermoplastic Sheeting or Film at Elevated Temperatures
- ASTM D1238 Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer
- ASTM D1505 Standard Test Method for Density of Plastics by the Density-Gradient Technique
- ASTM D1603 Standard Test Method for Carbon Black In Olefin Plastics
- ASTM D3895 Standard Test Method for Oxidative Induction Time of Polyolefins by Differential Scanning Calorimetry
- ASTM D4218 Standard Test Method for Determination of Carbon Black Content in Polyethylene Compounds by the Muffle-Furnace Technique
- ASTM D4354 Standard Practice for Sampling of Geosynthetics for Testing
- ASTM D4437 Standard Practice for Determining the Integrity of Field Seams Used in Joining Flexible Polymeric Sheet Geomembranes
- ASTM D4439 Standard Terminology for Geosynthetics
- ASTM D4759 Standard Practice for Determining the Specification Conformance of Geosynthetics
- ASTM D4833 Standard Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products
- ASTM D5084 Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter
- ASTM D5199 Standard Test Method for Measuring the Nominal Thickness of Geomembranes

- ASTM D5321 Standard Test Method for Determining the Coefficient of Soil and Geosynthetic or Geosynthetic and Geosynthetic Friction by the Direct Shear Method
- ASTM D5323 Standard Practice for Determination of 2% Secant Modulus for Polyethylene Geomembranes
- ASTM D5397 Standard Test Method for Evaluation of Stress Crack Resistance of Polyolefin Geomembranes Using Notched Constant Tensile Load Test
- ASTM D5596 Standard Test Method for Microscopic Evaluation of the Dispersion of Carbon Black in Polyolefin Geomembranes
- ASTM D5617 Standard Test Method for Multi-Axial Tension Test for Geosynthetics
- ASTM D5721 Standard Practice for Air-Oven Aging of Polyolefin Geomembranes
- ASTM D5885 Standard Test Method for Oxidative Induction Time of Polyolefin Geosynthetics by High Pressure Differential Scanning Calorimetry
- ASTM D6392 Standard Test Method for Determining the Integrity of Nonreinforced Geomembrane Seams Produced Using Thermo-Fusion Methods
- ASTM D6693 Standard Test Method for Determining Tensile Properties of Nonreinforced Polyethylene and Nonreinforced Flexible Polypropylene Geomembranes
- GRI GM11 Standard Specification for Accelerated Weathering of Geomembranes using a Fluorescent UVA-Condensation Exposure Device
- GRI-GM13 Standard Specification for Test Properties, Testing Frequency and Recommended Warranty for High Density Polyethylene (HDPE) Smooth and Textured Geomembranes
- GRI-GM14 Standard Specification for Selecting Variable Intervals for Taking Geomembrane Destructive Seam Samples Using the Method of Attributes

1.6 Submittals

The Lining Contractor shall submit the following to the Engineer and Owner prior to mobilization onto the project site.

1.6.1 Qualifications

Prior to the start of work, the FML Manufacturer and the Installation Contractor each shall submit, for approval by the Engineer and the Owner, documented evidence of their ability and capacity to perform this work. The evidence must address manufacturing capabilities and available personnel. Lining materials shall be obtained from an approved North American manufacturer.

The Contractor shall submit the name and qualifications of the project superintendent that will be on the project whenever lining materials are being handled and installed plus the names and qualifications of senior installation personnel on the project.

The Lining Manufacturer and the Contractor each shall submit a complete description of their quality control program, as applicable, for manufacturing, handling, installing, testing, repairing and providing a completed lining in accordance with requirements of these Technical Specifications. The description shall include, but not be limited to, polymer resin supplier, product identification, acceptance testing, fabrication and production testing, installation testing, documentation of changes, alterations and repairs, retests and acceptance.

The Lining Manufacturer and the Contractor each shall have successfully manufactured and/or installed a minimum of ten (10) million square feet of similar lining material in liquid/solid waste containment structures.

The lining placement superintendent shall have successfully supervised the installation of a minimum of five (5) million square feet of HDPE lining material in liquid/solid waste containment structures.

The Lining Manufacturer shall provide on-site technical supervision and assistance at all times during installation of the lining system. The Lining Manufacturer and the Contractor, as applicable to each, shall submit for approval by the Engineer and the Owner written certification that the lining system was installed in accordance with the Lining Manufacturer's recommendations, the approved Construction Drawings and Technical Specifications, and approved submittals.
The Contractor shall make arrangements with the Lining Manufacturer to allow the Engineer and Owner to visit the manufacturing plant during manufacture of the lining materials for this project, in order to observe manufacturing methods and quality control of manufactured materials. The Contractor is not responsible for expenses incurred by the Engineer and Owner for their visits to the manufacturing plant.

The Engineer and the Owner will conduct a pre-construction meeting with the Lining Contractor and the Earthwork Contractor prior to installation of the lining system. Topics for review and discussion shall include, as a minimum, Construction Drawings and Technical Specifications, approved submittals, training and qualifications procedures for Contractor personnel, and daily production.

1.6.2 Samples

Submit for approval samples of the liner material proposed for use.

1.6.3 Shop Drawings

Submit for approval, as soon as practicable after award of the contract, three (3) sets of full and complete shop and installation drawings showing a minimum of:

- Layout of liner system.
- Details of jointing, liner system and liner anchorages.

1.6.4 Certificates

Certificates of compliance with the requirements of standards and testing methods specified herein shall be submitted for each roll of material prior to delivery. The certificates of compliance shall clearly indicate the roll or rolls of material that they represent. The liner material manufacturer must satisfy by affidavit to the Lining Contractor, the Engineer and the Owner that the material he offers to furnish will meet, in every respect, the requirements set forth in these Technical Specifications. The Lining Contractor shall transmit to the Engineer and the Owner the affidavit given him by the manufacturer or supplier prior to approval for the furnishing and installing of any such material.

1.6.5 Schedules

The Lining Contractor shall submit a schedule detailing the liner fabrication and installation. The Lining Contractor shall work in coordination with the Earthwork Contractor so that the placement of lining will follow, in orderly sequence, the progression of the project.

1.7 Delivery, Storage & Handling of Materials

1.7.1 Delivery

Materials shall be delivered to the site after the Engineer has approved the required submittals.

1.7.2 Storage and Handling

Storage and handling of the materials shall conform to the Manufacturer's recommendations and shall be done in such a manner so as to prevent damage to any part of the work. The Lining Contractor shall be responsible for unloading, storage and handling of materials. Any unloading and handling performed by the Owner will be back-charged to the Lining Contractor.

1.8 Verification of Areas to Receive Geomembrane Liners

Prior to installation of the liner, the Lining Contractor shall, in the presence of the Earthwork Contractor, the Inspector and the Owner, inspect and verify the conditions of the specified area as adequate for placement of the liner. Finished surface preparation specifications are outlined in Part I, Sections 3 and 7. Following the verification of the surface, the Lining Contractor shall sign an acceptance form and assumes full responsibility for the verified area should conditions be altered by occurrences outside the control of the Earthwork Contractor.

1.9 Liner Testing

Trained quality control personnel of the Lining Contractor shall perform destructive and nondestructive testing. Quality Control procedures are specified in Section 3.

1.10 Warranty

The Lining Contractor shall submit a proposed warranty with the bid proposal. Terms and conditions of the warranty are to be agreed upon between the Owner and the Lining Contractor.

2. INSTALLATION SPECIFICATIONS

2.1 Inspection of Sheet Liner at Job Site

The Lining Contractor shall be responsible for inspection of the sheet rolls at the job site. Should rolls show damage from transit, they will be so identified by the Lining Contractor and set aside.

During unrolling of the lining material, the Lining Contractor will carry out visual inspection of the sheet surface. Any faulty areas shall be marked and repaired by the Lining Contractor in a manner that is acceptable to the Engineer.

2.2 Finished Grade

The finished grade surfaces in contact with the geomembrane liner shall be smooth and free of angular gravel, objectionable gravel over ¾-inch in size, or hard objects within 4-inches of the surface. The surface shall have no sudden, sharp or abrupt changes or breaks in grade.

2.3 Liner Placement

The geomembrane shall be laid out and installed by trained technicians in accordance with the Construction Drawings; the layout and details as presented in the approved shop drawings; and in accordance with the Manufacturer's requirements. The lining layout shall be designed to minimize the number and length of field joints, consistent with proper methods of liner installation. The liner shall be oriented to minimize stress on the field seams. Liner panels shall be laid out such that the seam is oriented longitudinally with the grade and not along the contours (the field seam shall be oriented up and down the slope or grade).

The liner shall be installed such that foot traffic is minimized and no vehicle traffic crosses the liner. Heavy generators and All Terrain Vehicles (ATVs) will not be allowed to travel on the liner surface. The liner shall have no cuts, nicks, abrasions, holes, tears or insufficient HDPE joints which could leak or develop into leaks after installation is complete. Any holes, tears or suspect material or joints that occur during installation shall be immediately marked and repaired. The Inspector shall approve repair methods. The Lining Contractor shall have sufficient quality control to detect holes, tears or insufficient joints during installation. Field seams shall have sufficient overlap for proper seaming. Typical overlap shall be a minimum of 4 inches. All field seams shall be 100 percent inspected by the Lining Contractor.

Under no circumstances shall the lining be subjected to materials, sandbags, equipment or other items being dragged across its surface, nor shall workers and others slide down slopes atop the lining. All scuffed surfaces resulting from abuse of any kind caused by the Contractor in performance of the work shall be repaired at no additional cost to the Owner.

Deployed liner shall be secured from damage due to high winds by using sandbags. A sufficient quantity of sandbags shall be placed along unseamed roll and liner edges at intervals no greater than 5 to 6 feet. Sandbags should remain in place on all sheets and edges until the liner is covered. No open seams or holes shall be allowed in the deployed liner at the end of the day.

Liner shall be placed with sufficient slack to prevent excessive lifting of the liner from the subgrade upon contraction. Compensating seams may be required to prevent excessive lifting (trampolines).

2.4 Field Welding

Resin used for extrusion welding to make field seams between HDPE sheets and for repairs shall be HDPE produced from HDPE resin that is fully compatible with the HDPE sheet resin. Physical properties of the resin shall be the same as HDPE lining sheets.

The weld area shall be free of all dirt, dust, moisture or other foreign material. The contact surface of the sheets shall be wiped with clean rags to remove any contamination.

Production field welding shall be performed by a double-wedge fusion welding process or an equivalent method approved by the Engineer. Small areas, such as butt joints and repairs, shall be completed by an extrusion fusion welding process. A sample weld shall be made prior to the start-up of each shift, every time personnel are changed, at work stoppages of 30 minutes or more, or at the request of the Inspector. Sample welds shall be made under ambient conditions, from each welding machine, prior to commencement of production welding. Test welds shall be a minimum of 5 feet in length for extruded seams and 10 feet long for hot wedge seams. Test weld samples shall be tested in shear and peel. Sample approval by the Inspector and the Lining Contractor must be made before production welding may begin. For extrusion welded seams, the edge of the FML shall be beveled and cleaned of oxidation on surfaces to receive extrudate by disk grinding or equivalent not more than one hour before seaming.

All 'T' joints shall be capped. Cap-patches shall extend a minimum of 6 inches beyond the intersection of the joint and shall be extrusion welded and vacuum tested. No open seams or holes or Leister patches shall be allowed in the deployed liner at the end of the day.

All field test welds and production welds shall have bonded seam (shear) strength equal to a minimum of 95 percent of the tensile strength of the HDPE parent material when tested in accordance with ASTM D6392 and shall have a film tearing bond failure. Peel tests shall have a minimum strength of 62 and 72 percent (extrusion welds and fusion welds, respectively) of the tensile strength of the HDPE parent material when tested in accordance with ASTM D6392 and shall exhibit a film tearing bond failure. The values for seam testing criteria for HDPE are presented in Section 3.4.1. A film tearing bond (FTB) failure is defined as a failure of one of the sheets by tearing, instead of separating from the other sheet at the weld interface area. A separation greater than 10 percent of the width of the weld cross-section shall constitute a non-FTB failure.

Both weld interfaces on double-wedge welds shall be tested. Four (4) out of the five (5) test coupons tested in shear and peel must meet or exceed the values presented in Section 3.4.1 and the fifth sample shall meet or exceed 80% of the given values to constitute a passing test. Both weld interfaces on double-wedge welds shall be tested.

The minimum tensile strength of the parent material is defined to be equal to the value specified in Section 3.2.

3. QUALITY CONTROL

3.1 Raw Material

Raw material shall be first quality, virgin polyethylene resin and shall be tested in the laboratory prior to acceptance during production, and shall meet or exceed the minimum requirements as stated herein. Raw materials shall also meet or exceed the manufacturer's published typical or average lot specifications, if they exceed the requirements stated herein.

The manufacturer shall perform conformance testing to demonstrate that the raw material meets the minimum requirements. Prior to delivery of material to the project site, the manufacturer shall submit the following information for each batch of raw resin utilized in the manufacture of roll goods.

- Resin suppliers name.
- Resin identification.
- Production date.
- Quality control certificates issued by the resin supplier.
- Manufacturer's compliance test results.

3.2 Roll Goods

3.2.1 General

Roll goods shall meet or exceed the minimum requirements for HDPE as stated herein. Finished roll goods shall also meet or exceed the manufacturer's published specifications and these specifications.

Prior to delivery, the manufacturer shall submit a Quality Control Certificate for each roll of material. These certificates shall clearly indicate the roll or rolls that the results represent. Roll goods shipped to the project site that do not meet or exceed the manufacturer's published specifications and the specifications stated herein shall be rejected. The Quality Control Certificate shall include the following information:

- Roll number and identification.
- Results of quality control tests.

3.2.2 60-Mil Smooth HDPE Geomembrane

Tests to be performed and minimum specifications shall include, but not be limited to, the following:

Smooth HDPE Specification		
Property	**Test Method**	**60-mil**
Thickness (min. ave.) Lowest individual of 10 values	ASTM D5199 & GRI-GM 13	Nominal Minus 10%
Density (min.)	ASTM D1505/D792	0.94 g/cc
Tensile Properties (1) (min. ave.)	ASTM D6693 Type IV (both directions)	
Yield strength		126 lb/in.
Break strength		228 lb/in.
Yield elongation	1.3" gauge	12%
Break elongation	2.0" gauge	700%
Tear Resistance (min. ave.)	D1004	42 lb
Puncture Resistance (min. ave.)	D4833	108 lb
Stress Crack Resistance (2)	D5397 (App.)	300 hr.
Carbon Black Content (range)	D1603(3)	2.0 – 3.0%
Carbon Black Dispersion	D5596 & GRI-GM13	Note (4)
Oxidative Induction Time (OIT) (min. ave.) (5)		
(a) Standard OIT or	D3895	100 min.
(b) High Pressure OIT	D5885	400 min.
Oven Aging at 85° C (min. ave.) % retained after 90 days (5) (6)	D5721	
(a) Standard OIT or	D3895	55%
(b) High Pressure OIT	D5885	80%
UV Resistance (min. ave.) (7)	GRI-GM11	
(a) Standard OIT or	D3895	N.R. (8)
(b) High Pressure OIT-% retained after 1600 hrs. (9)	D5885	50%

(1) Machine direction (MD) and cross machine direction (XMD) average values should be on the basis of 5 test specimens each direction.
Yield elongation is calculated using a gage length of 1.3 inches
Break elongation is calculated using a gage length of 2.0 inches
(2) The yield stress used to calculate the applied load for the SP-NCLT test should be the manufacturer's mean value via MQC testing.
(3) Other methods such as D4218 (muffle furnace) or microwave methods are acceptable if an appropriate correlation to D1603 (tube furnace) can be established.
(4) Carbon black dispersion (only near spherical agglomerates) for 10 different views:
9 in Categories 1 or 2 and 1 in Category 3.
(5) The manufacturer has the option to select either one of the OIT methods listed to evaluate the antioxidant content in the geomembrane.
(6) It is also recommended to evaluate samples at 30 and 60 days to compare with the 90 day response.
(7) The condition of the test should be 20 hr. UV cycle at 75° C followed by 4 hr. condensation at 60° C.
(8) Not recommended since the high temperature of the Std-OIT test produces an unrealistic result for some of the antioxidants in the UV exposed samples.
(9) UV resistance is based on percent retained value regardless of the original HP-OIT value.

3.3 Conformance Testing

Conformance testing shall be conducted by a third party laboratory to statistically measure conformance of the HDPE roll goods shipped to the project.

3.3.1 Testing Requirements

The following are the minimum tests that shall be performed as part of the conformance testing program.

Property	Test Method
Density	ASTM D1505
Melt Flow Index	ASTM D1238
Thickness	ASTM D5199 & GRI-GM13
Carbon Black Content	ASTM D1603
Tensile Properties Stress at yield Stress at break Elongation at yield Elongation at break	ASTM D6693 Type IV (both directions)

3.3.2 Sampling Procedures

Samples shall be taken at a rate of one per lot or one per 100,000 square feet of roll goods shipped to the project, whichever results in the greater number of tests. Rolls shall be selected at random for testing.

Samples shall be removed from the roll at a random location, but shall not include any area within the first 3 lineal feet of the end and/or edge of the roll. The sample shall be a minimum of 1.5 feet by 3 feet in size and shall be marked with an arrow to indicate the machine direction and the Lining Manufacturers roll and lot identification number.

3.3.3 Test Results

The Engineer shall review the test results for project compliance and shall provide a written report to the Owner.

3.3.4 Procedures for Conformance Test Failure

Should any test results indicate non-conformance with the Technical Specifications, the nonconforming roll number shall be identified and additional conformance testing shall be performed on rolls with adjacent numbers. All non-conforming rolls shall be identified and set aside. The cost for additional conformance testing due to test results that indicate non-conformance shall be borne by the Lining Contractor.

3.4 Field Seam Testing

3.4.1 General

The Lining Contractor and the Inspector shall carefully inspect each seam after the welding operations have been completed. Suspected discrepant areas shall be identified with a contrasting marker. A CQA sampling and testing guide is presented in Table II-1.

Destructive shear and peel tests shall be performed on samples of field seams every 500 lineal feet of seam for each welder used during that day. The actual location of seam tests will be randomly determined in the field by the Inspector.

Table II-1
Liner CQA Sampling and Testing Guide

Material	Tests	Frequency
60-mil HDPE geomembrane liner	1. Destructive shear and peel tests (minimum).	1. Every 500 lineal feet of seam for each welding machine (randomly located).
	2. Air pressurization testing, vacuum testing, or equivalent method. (Performed by Lining Contractor and observed by the Inspector.)	2. Entire length of field welded seams.

All field test welds and production welds shall have bonded seam (shear) strength equal to a minimum of 95 percent of the tensile strength of the HDPE parent material when tested in accordance with ASTM D6392 and shall have a film tearing bond failure. Peel tests shall have a minimum strength of 62 and 72 percent (extrusion welds and fusion welds, respectively) of the tensile strength of the HDPE parent material when tested in accordance with ASTM D6392 and shall exhibit a film tearing bond failure. The values for seam testing criteria for HDPE are presented in Section 3.4.1. A film tearing bond (FTB) failure is defined as a failure of one of the sheets by tearing, instead of separating from the other sheet at the weld interface area. A separation greater than ten (10) percent of the width of the weld cross-section shall constitute a non-FTB failure. Both weld interfaces on double-wedge welds shall be tested. Four (4) out of

the five (5) test coupons tested in shear and peel must meet or exceed the values presented in the table and the fifth sample shall meet or exceed 80% of the given values to constitute a passing test. Both weld interfaces on double-wedge welds shall be tested.

Geomembrane Seam Strength Criteria

Destructive Seam Samples (2)	ASTM D4437/D6392	60-mil (ppi width)
HDPE – Smooth and Textured		
Fusion Weld – Shear	95 percent of the parent strength at yield & FTB (1)	120
Fusion Weld – Peel	72 percent of the parent strength at yield & FTB (1)	91
Extrusion Weld Shear	95 percent of the parent strength at yield & FTB (1)	120
Extrusion Weld – Peel	62 percent of the parent strength at yield & FTB (1)	78

Notes: 1) FTB: A film tearing bond is defined as a failure through the parent material while achieving a separation of less than 10 percent.
2) Four out of the five test coupons tested in shear and peel must meet or exceed the values presented in the table and the fifth sample shall meet or exceed 80% of the given values to constitute a passing test. Both weld interfaces on double-wedge welds shall be tested.

The minimum tensile strength of the parent material is defined to be equal to the value specified in Section 3.2. Copies of the results of these tests shall be submitted to the Lining Contractor, the Engineer and the Owner. Approval of test results must be obtained prior to final acceptance.

The Lining Contractor's Quality Control inspector shall mark, log and identify each type and location of repair to be made at all discrepant areas. No open seams or holes or Leister patches shall be allowed at the end of the day.

The Engineer and the Owner shall have the right to reject any field made seam for cause at no cost to the Owner. Cause shall be defined to include poor workmanship, defective welds and insufficient overlap of panels. Any field made seam rejected for cause shall be repaired or replaced to the satisfaction of the Engineer at no additional cost to the Owner.

The entire length of each field-welded seam shall, under the observation of the Inspector, be tested by air pressurization of the unwelded test channel to a minimum pressure of 30 psi for a minimum duration of 5 minutes. A pressure drop greater than 2 psi is indicative of a failing test. Patches and extrusion welds shall be tested by vacuum methods with a minimum vacuum pressure equal to 8 inches of mercury (4 psi), or by an equivalent method approved by the Engineer.

3.4.2 Procedure in the Case of Destructive Test Failure

In the case that a destructive seam test fails in either shear or peel, the entire length of seam represented by this test is in question. As a minimum, the procedure for destructive test failures shall be as follows:

A. The Lining Contractor shall provide the Engineer with two additional destructive test samples spaced a minimum of 150 feet on either side of the failed test.

B. The Engineer and the Owner reserve the right to take additional samples as warranted to adequately assess the quality of the work.

C. From each destructive test sample, ten test coupons will be cut. Five of these samples will be tested for seam shear strength and five will be tested for peel strength. Both weld interfaces on double wedge welds shall be tested. A passing test for destructive samples is defined in Section 3.4.1..

D. If passing tests are achieved from the tracking samples obtained in Item A, the 300 feet of seam represented by the passing tests is in question. Additional samples at closer intervals can be taken or the 300 feet of seam shall be capped.

E. If a failing test occurs at the new destructive test location, an additional test will be taken at a minimum of 50 feet from the failed test. This procedure is repeated until the failed section is fully defined or the edge of the seam that was originally represented by the original test is reached.

F. If passing tests are achieved at the minimum 150-foot distance from the failed destructive test, additional destructive tests may be taken at a closer spacing from the failed test at the discretion of the Lining Contractor. If the tests at the closer interval fail, additional destructive tests at a wider interval shall be taken until the length of failed seam is fully defined.

G. Once the length of defective seam is identified, the Lining Contractor shall either cut out the defective seam and wedge weld a new piece of liner in the seam area; or install a cap-patch strip over the affected seam area. Cap-patches shall be a minimum of 3 feet in width and shall be centered over the defective seam. Extrusion welding the exposed flap of liner on wedge welded seams or additional extrusion welding of extrusion-welded seams shall not be allowed.

H. An additional destructive test sample shall be taken within the repaired area and tested in accordance with Item C. Nondestructive testing by appropriate methods shall also be performed within the repaired area.

l. In the case that the retest of the repaired area fails, the procedure described above shall be repeated until passing tests are achieved.

4. CONSTRUCTION QUALITY ASSURANCE

4.1 Construction Observations

The Engineer shall be the interpreter of the site construction specifications, and shall make observations and tests as considered necessary to assess and accept the quality of the work. Inspectors shall make continuous observations and tests of construction operations under the direction of the Engineer.

The Owner shall be responsible for verification of lines and grades prior to acceptance of the completed work. The Lining Contractor shall be responsible for any surveying required during liner placement. The Lining Contractor shall also be responsible for the preparation of as-built drawings.

4.2 Quality Assurance Reports

The Engineer shall submit reports of observations and tests made by the Inspectors to the Owner. The reports shall be submitted to the Owner in a timely fashion.

A copy of all test results will be maintained at the construction site, and shall include the following:

- Date issued.
- Project title and number.
- Date of testing and/or sampling.
- Designation of material tested.
- Type of test and specification.
- Location of test.
- Observations regarding compliance or noncompliance with the Construction Drawings and Technical Specifications.

Upon completion of construction, the Engineer shall submit a Final Quality Assurance Report stating that the project was completed in substantial conformance with the approved Construction Drawings and Technical Specifications and presenting test summaries, record drawings and other supporting data necessary to document the completed construction.