Mercury Mines Inventory and Prioritization Report

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FINAL REPORT

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Summary

This report presents an inventory of mercury mines and an evaluation of their potential to discharge mercury-polluted stormwater, as required by the San Francisco Bay mercury Total Maximum Daily Load (TMDL). This report presents the findings from inspections of 16 mercury mine sites that drain to San Francisco Bay. This effort does not include mines that are already addressed by the Walker Creek and Guadalupe River watershed mercury TMDLs.

Staff of the San Francisco Bay Regional Water Quality Control Board (Water Board) inspected these sites in 2007 and 2008. The primary purpose of the inspections was to locate mining waste piles and assess their potential to erode into surface waters. The site inspections involved a cursory review of aerial photographs and a few historic documents, conducting site inspections, and collecting soil and waste samples for laboratory analysis. We relied primarily on visual assessments to locate the wastes and assess their erosion potential. Our efforts were limited in scope and do not constitute a full site characterization.

We conclude that three sites present a high threat to impair water quality because of visual evidence of eroding mining wastes; one of these sites is already being addressed. The remaining13 sites present a low threat to impair water quality because none to very small volumes of mining waste remain on site. These findings are summarized on Table 1 (see next page).

Table 1. Summary of Mercury Mines Inventory and Prioritization

Priority	County Mine	Threat to Water Quality[1]	Recommendation
	Marin County		
Low	Corda	Low – location of processing area and tailings unknown, probably small production	No action
N/A	Marin County Mercury Mines Addressed by Walker Creek Mercury TMDL: Chileno Valley, Cycle, Franciscan, and Gambonini		
	Napa County		
3 - High	Bella Oaks	High – large piles of tailings likely eroding into surface water	Initiate actions leading to remediation
Low	Borges Prospect	Low – appears to be an unproductive prospect	No action
1 - High	La Joya	High – largest volume tailings pile of any mine; actively eroding into creek	Continue remediation work with cooperative landowner & consultants
	San Mateo County		
Medium	Challenge	Low – little evidence that mine tailings remain on site.	No action
	Santa Clara County		
Medium	Hillsdale	Low – little evidence that mine tailings remain on site.	Track site development, work with other permitting agencies, and if needed, implement erosion controls for mercury mining waste.
Low	Silver Creek	Low – small volume of mine tailings on site, and mostly vegetated	No action
N/A	Santa Clara County Mercury Mines Addressed by Guadalupe Mercury TMDL: New Almaden (including: April, Cristobal, San Francisco, Enriquita, San Mateo, Senator, and Guadalupe), Santa Teresa, Bernal		
	Solano County		
Low	Hastings	Low – small volume of mine tailings on site, and mostly vegetated	No action
2 - High	St. John's	High – several tailings piles eroding into Rindler Creek	Initiate actions leading to erosion controls

Total: 16 mines, 3 high priority, 2 high priority mines not already being addressed

Notes:

Threat describes the potential for mercury mining wastes to erode into surface waters;
High threat is visual evidence (or high potential) of mining wastes eroding into surface waters;
Medium threat is mining wastes located near waters but no visual evidence of erosion;
Low threat is mining wastes located far from waters and no visual evidence of erosion.

1. Introduction and Purpose

Mercury is plentiful in the California Coast Range, and was mined for use as an amalgam in gold mining. Although California's peak mercury production occurred prior to 1900, mercury was mined intermittently for munitions and industrial uses through the mid-1970's. In accordance with common mining practices at the time, mining wastes were disposed in or near creeks so that these materials would be washed downstream and offsite by winter flows.

Mines in the San Francisco Bay Region range in size from non-productive prospects to the largest-producing mercury mine in North America (New Almaden). The conventional unit of mercury production is the flask, an iron container that holds 76 pounds of mercury. Approximately 6 of the 51 mines in California that produced more than 1,000 flasks of mercury and several smaller mercury mines are located in this region.

Discharges of mercury-laden mining waste pollute waters downstream. For example, elevated mercury concentrations are found in areas of the South Bay Salt Ponds Restoration Project that are closest to Alviso Slough, which drains New Almaden. Inorganic mercury from mines is converted to toxic methylmercury in the aquatic environment. Methylmercury bioaccumulates up the food web to fish. Because of elevated mercury levels in fish, the California Office of Environmental Health Hazard Assessment issued fish consumption advisories for San Francisco Bay and many local reservoirs.

These advisories are helpful to reduce the risk from fish consumption, but the Water Board's goal is to permanently reduce mercury so that fish are safe to eat. Local mercury mines that drain to San Francisco Bay are a direct source of mercury and subject to regulation by the Water Board. Therefore, this report presents an inventory of mercury mines and an evaluation of their potential to discharge mercury-polluted stormwater. Next, the Water Board will use its regulatory authority to compel erosion control to keep mercury safely on the land and out of the aquatic environment.

California law and the federal Clean Water Act give the Water Board responsibility and broad authority for regional water quality control and planning. The Water Board's master plan is the Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) [E]. The following excerpt from the Basin Plan describes the Water Board's plans and procedures to address discharges of mining waste into surface waters.

4.21 MINES AND MINERAL PRODUCERS

4.21.1 INACTIVE SITES

… Water quality and aquatic toxicity monitoring data suggests that the beneficial uses of a number of water supply reservoirs, creeks, and streams in the Region have been impacted as a result of past mining activities. Threatened beneficial uses of lakes, streams, bays and marshes due to mining activities so far identified in the Region include: fish migration, fish spawning, shellfish harvesting, wildlife habitat, preservation of rare and endangered species, cold and warm freshwater habitat, and water contact recreation. In response to these findings, the Water Board conducted surveys to locate abandoned and operating mines in the Region. The results of the surveys are compiled in the 1998 report titled, "San Francisco Bay Regional Water Quality Control Board Mines Report." [*reference B*]

In many cases, the adverse results of previous surface mining activities can be reduced, and in some cases eliminated, through appropriate erosion and sediment control practices. …

4.21.4 MINING PROGRAM DESCRIPTION

1. The Water Board intends to continue to work closely with Resource Conservation Districts and NRCS to identify all existing and abandoned mines and mineral production sites in the Region. Responsible parties will be identified. If needed, potential funding alternatives for cleanup activities will also be identified. Sites will be prioritized based on existing and potential impacts to water quality and size.

2. The Water Board will require an NPDES permit for the discharge of polluted stormwater from active and inactive mining operations, as defined in NPDES stormwater regulations. The Water Board will consider issuing individual permits or a general permit for such discharges, or will otherwise allow coverage under the State Water Board general permit for stormwater discharges associated with industrial activity as described in Section 4.14 Urban Runoff Management, Industrial Activity Control Program. Requirements of the notice of intent to be covered under the general permit(s) and the schedule for submittal will be established in the permit(s).

3. The responsible party or operator of each site discharging, or potentially discharging waste to land shall be required to submit a Report of Waste Discharge to the Water Board. Submittal of a Report of Discharge will be requested by the Water Board pursuant to the Water Code Section 13267. Requests will be made on a site-by-site basis and based on priority. A Report of Waste Discharge shall consist of a “Site Closure Plan” and an “Operation and Management Plan” for active sites, as described below:

- Each plan shall be designed to ensure short- and long-term protection of beneficial uses of receiving waters.

- The "Closure Plan" shall address site restoration and long-term maintenance and monitoring, which may include a financial guarantee to ensure that adequate funds are available for proper site closure.

- The "Operation and Management Plan" shall address stormwater runoff and erosion control measures and practices.

- Each plan will be evaluated in regard to potential impacts to beneficial uses of receiving waters. WDRs will be issued or conditionally waived at the discretion of the Water Board based on the threat to water quality and the effectiveness of identified and implemented control measures and the effectiveness of local agency oversight.

The Basin Plan in Chapter 7 contains additional requirements specific to mercury mines. These requirements are from the San Francisco Bay mercury total maximum daily load (TMDL), which was approved by U.S. EPA on February 12, 2008. The following are the Bay mercury TMDL requirements [F]:

> Local inactive mercury mines shall be addressed through continued implementation of the Mines and Mineral Producers Discharge Control Program (Mines Program) described in Chapter 4 [*of the Basin Plan*]. The key regulatory component of this established program is that property owners of inactive and active mine sites that discharge stormwater contaminated by contact with any overburden, raw material, intermediate products, finished products, byproducts, or waste products are required to comply with NPDES industrial stormwater regulations. Under the Mines Program, the Water Board has the authority to issue individual industrial permits or allow the discharger to obtain coverage under the industrial stormwater general permit issued by the State Water Resources Control Board. For those mines that are not currently meeting the conditions set forth in the Mines Program, responsible parties shall attain compliance within five years of the effective date of the San Francisco Bay mercury TMDL implementation plan [*February 2013*].

The first step toward ensuring compliance by February 2013 is to inventory mercury mines, from which priorities can be established. This report presents an inventory of mercury mines and their potential to discharge mercury-polluted stormwater.

2. Methods

We researched readily available records such as historic reports that analyzed the location, purity, and value of unexploited mercury ores (see references) to identify mercury mines in the San Francisco Bay region. We then conducted a field reconnaissance to locate each mine. Our efforts primarily relied on visual assessment to identify areas of disturbed soil and tailings piles and in identifying whether surface erosion, rilling, gullying, or mass wasting of tailing piles was occurring. We did not evaluate the turbidity of stormwater discharges, as the reconnaissance was conducted in the dry season.

Grab surface samples were collected of background soil, upstream sediment, mine tailings, and downstream sediment. Sample locations were selected in the field. Vegetation and the top approximately 1 cm were removed, and then a soil sample from approximately 1 to 4 cm depth was collected and placed in a labeled sample jar. The holes were backfilled and smoothed to the surrounding surface. To avoid cross-contamination, shovels and trowels were cleaned and gloves changed before and between each sample location.

It was not possible to collect upstream sediment samples at all mines because some mines were located at the tops of ridges. Similarly, it was not possible to collect downstream sediment samples at all mines because of access limitations. In any case, the sampling effort was designed as a screening level effort to confirm than tailings and downstream locations have elevated mercury concentrations compared to background and upstream, so just a few samples of each type were collected at each site. These results should not be interpreted as providing a either a full site characterization or a statistically robust data set.

We describe both the threat to water quality each mine presents and the priority for Water Board action. Sites that present a high threat to water quality are those with visual evidence (or high potential) of uncontrolled mining waste remaining on site that is subject to stormwater erosion and transport. These high threat sites are also high priority for Water Board action. Mining wastes were not visually evident at many sites, probably because they were located in steep drainages and have had many decades to be eroded and transported downstream and no longer remain on site. Nonetheless, several mines still have piles of eroding mining wastes evident on site. There were no sites that presented a medium threat to water quality. Hillsdale is the only medium priority mine because although it lacksvisual evidence of mining waste remaining on site, residences are being developed nearby. Low threat mines are located far from waters and there is no visual evidence of erosion. Low priority mines lack visual evidence of mining waste remaining on site.

The results of our inspections are summarized in Table 1 and presented in Section 3.

3. Findings and Recommendations

This section presents the results of the mercury mine site inspections. This section follows the organization of the summary table (Table 1) by county and provides more detail than Table 1. We describe the location, production history, and whether historic structures are still present. We describe and provide photographs of processing areas and tailings piles if present. We provide our conclusions about the threat to water quality, and summarize mercury data. We close with our recommendation for priority for Water Board regulatory action.

It is useful to compare mine site mercury data to the target established in the San Francisco Bay mercury TMDL. The Bay sediment target is 0.2 milligrams of mercury per kilogram of dry sediment (mg/kg dry wt., or 0.2 parts per million) [F]. This target was set to meet water quality goals, and is about twice the average natural background levels of mercury in the San Francisco Bay region. Background mercury soil concentrations at mine sites are often elevated relative to this regional target, as the mines are located in mercury enriched areas. However, considerably higher mercury concentrations in downstream samples and from eroding tailings piles than in background or upstream at an individual mine site indicates a likely water quality problem.

Marin County, Corda Mine

Other Names	N/A
Location	Petaluma (USGS 7.5 min topographic quadrangle) not indicated on USGS map
Coordinates	38 degrees 9.57 min North, 122 degrees 37.74 min West [C]
Production History	1968 to 1971 [C]
Site Drainage	Mine area drains in two directions, one to a gully the other through an artificial pond; all drainage eventually flows to San Antonio Creek
Land use	Active ranch
Inspection date	5/14/07
Mine Structures	No
Mine (Adits)	Present. Filled in w/ rubble.
Processing Areas and Tailings Piles	No processing area located. No map found that illustrates processing or mining areas. Several small (<5 cy) piles of tailings at adits, which are yellow-brown in color.
Surface water	Dry @ mine & in road immediately adjacent. Small amount of ponded water in gully below mine.

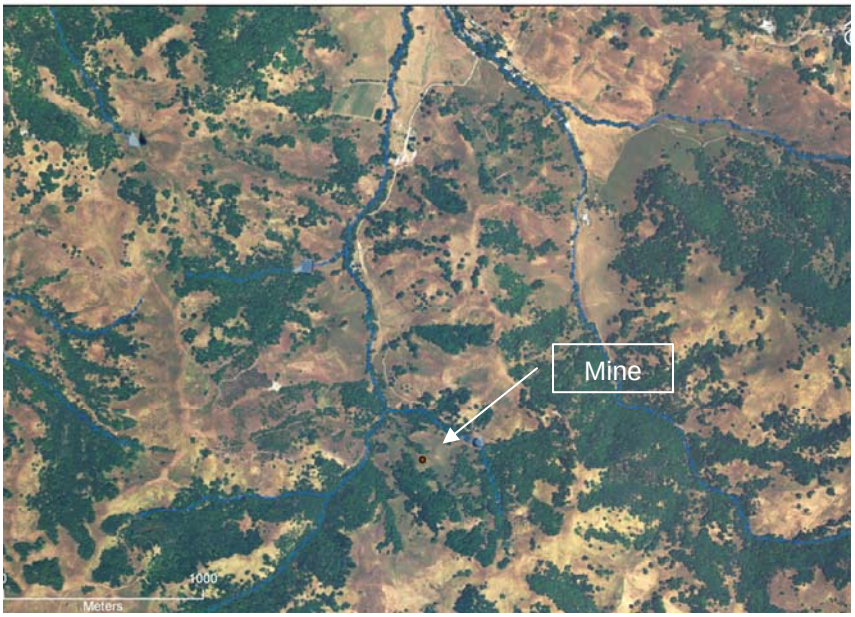
Threat to Water Quality	Low. Sampled sediments in gully – lesser drainage.

Mercury Sample Results

Sample Type	Sample ID	Mercury	Mercury	Comments
	Method	7471A	RL	RL = laboratory reporting limit
	Units	mg/kg	mg/kg	Elevated mercury concentrations in mine waste and down stream compared to background
Background	051407-S-CA-10	0.034	0.02	
Mine Waste	051407-S-CA-09	330	10	
Down Stream	051407 S-CA-08	63	4	

Findings and Recommendations	No action. We could not locate documentation on this mine. Based on the recent & short production, we assume it was a low-production mine. We only located very small tailings piles at mine site, and could not locate a processing area.
Priority	Low – small volume of tailings

Small tailings pile and rubble-covered adit at Corda Mine



Location of Corda Mine

Napa County, Bella Oaks Mine

Other Names	Bella Union and Oakville [A]
Location	Rutherford (USGS 7.5 min topographic quadrangle) Secs 20, 21, 28, T 7 N, R 5 W
Coordinates	Lat 38.4400, Long -122.4291
Production History	Approximately 1,800 flasks from 1872 to 1910 [C]
Site Drainage	Through a seasonal tributary to Napa River
Land use	The mine is located on gently sloping land at the base of the Coast Range on the west side of the Napa Valley. Rural residences line Bella Oaks Rd. in vicinity of the mine; to the east where Bella Oaks Rd. reaches the valley, land use changes to agriculture and associated residences.
Inspection date	5/11/07
Mine Structures	Present. (see photos)
Mine (Adits)	Did not explore for adits – due to large tailings pile and poison oak.
Processing Areas and Tailings Piles	Present. 3 large tailings piles, unvegetated, and eroding. Tailings in pile closest to mine structures have lots of white, otherwise piles are very red. Looks like tailings previously used to pave road, and tailings continue to erode onto road.
Surface water	Tailings piles are located some distance from nearest creek. Dry @ mine & in road ditch immediately below tailings. Dry creek @ bend in road.
Threat to Water Quality	High. Tailings continue to erode onto road. Mine drains in several directions but all flows reach the same unnamed tributary adjacent to Bella Oaks Rd. within a short distance downstream of the mine. Likely transport of tailings to creek.

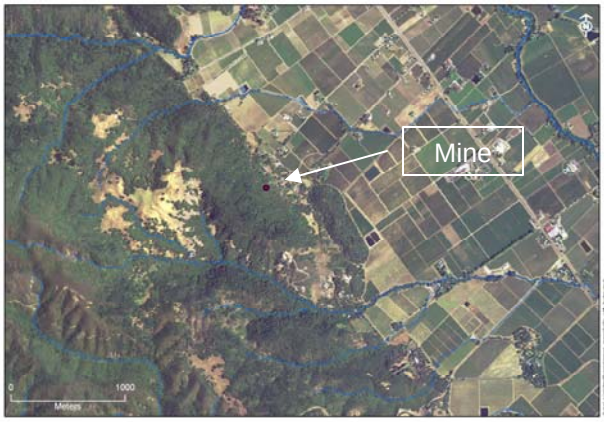
Mercury Sample Results

Sample Type	Sample ID	Mercury	Mercury	
	Method	7471A	RL	RL = laboratory reporting limit
	Units	mg/kg	mg/kg	
Mine Waste	051107-S-CA-05	14	2	Elevated mercury concentrations in mine waste and down stream compared to Bay target of 0.2 mg/kg
Mine Waste	051107-S-CA-06	330	8	
Down Stream	051107-S-CA-07	3.1	2	

Napa County, Bella Oaks Mine

Findings and Recommendations	Site appears unchanged since 1997 inspection [B]. Large, unvegetated piles of mining wastes and remnants of machinery and buildings. Recommend thorough site investigation, and at minimum, grading and contouring of waste piles and installation of erosion control measures. Site is an attractive nuisance; consequently, additional measures may be needed for the protection of human health from physical hazards and direct exposure to mercury.
Priority	High—Likely transport of tailings to creek.

Mining waste pile at Bella Oaks Mine



Location of Bella Oaks Mine

Napa County, Borges Prospect

Other Names	N/A
Location	Cordelia (USGS 7.5 min topographic quadrangle) Sec 29, T 4 N, R 3 W
Coordinates	Lat 38.1097, Long -122.1758
Production History	Listed as a prospect (no production information); Active 1969 [C]
Site Drainage	American Canyon Creek
Land use	Rural area with increasing residential developments
Inspection date	05/14/07
Mine Structures	None observed
Mine (Adits)	None observed
Processing Areas and Tailings Piles	None found
Surface water	Site dry at time of inspection (steep hillsides)
Threat to Water Quality	Low.
No samples collected for mercury analysis	
Findings and Recommendations	No action recommended as no evidence of mine or processing was found.
Priority	Low – No evidence of mine or processing wastes. We assume it to be an unproductive prospect

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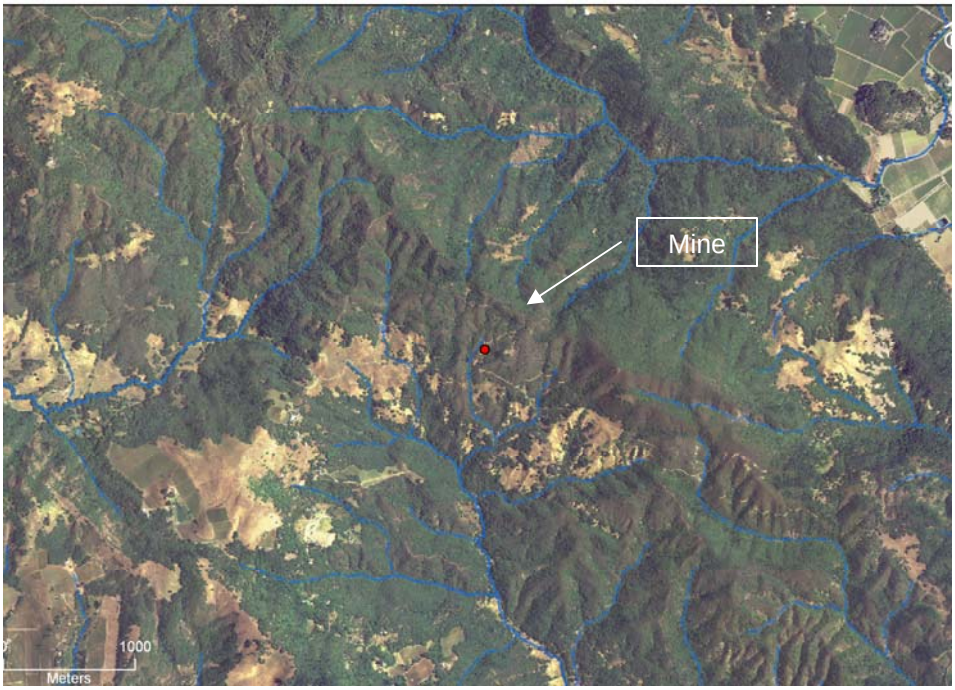
Napa County, La Joya Mine

Other Names	N/A
Location	Rutherford (USGS 7.5 min topographic quadrangle) Sec 24, T 7 N, R 6 W
Coordinates	Lat 38.4394, Long -122.4711
Production History	Approximately 2,000 flasks, intermittent production 1865-1939 [C]
Site Drainage	Processing area located in a tributary to Dry Creek, several miles upstream from Napa River
Land use	Rural
Inspection date	10/23/07
Mine Structures	None present
Mine (Adits)	Present. Main mine entrance obvious.
Processing Areas and Tailings Piles	The largest tailings pile of any mine in Region 2 (approx. 6,500 cy) is located below the mine entrance. It overhangs the tributary, is unvegetated and actively eroding into creek.
Surface water	Main mine opening discharges water. Creek had small flow. Creek incised to bedrock below tailings pile; tailings found downstream.
Threat to Water Quality	High. Continued mass wasting and erosion from tailings pile (which hangs over creek) directly into creek.

No samples collected for mercury analysis

Findings and Recommendations	The landowner is pursuing site remediation. The purpose of the 2007 inspection was to tour the site with the owner's consultants. Design complete and permits submitted to agencies.
Priority	High – Actively eroding mine waste into Dry Creek. Site contains the largest volume tailings pile of the 16 mines evaluated for this study.

Top of approx. 6,500 cy waste pile at La Joya Mine (looking west; photo courtesy URS Corp.)



Location of La Joya Mine

San Mateo County, Challenge Mine

Other Names	Farm Hill No. 2
Location	Woodside (USGS 7.5 min topographic quadrangle) (No section nos. on this map) T 5 S, R 4 W
Coordinates	Lat. 37.4458, Long. -122.2494
Production History	Challenge mine operated from 1955 to 1958 and produced about 2,500 flasks [C].
Site Drainage	The site drains through tributaries to Arroyo Ojo de Agua.
Land use	The site was remediated and redeveloped into residences and Stulsaft City Park (Redwood City).
Inspection date	6/11/07
Mine Structures	None (site remediated and redeveloped).
Mine (Adits)	None visible (site remediated and redeveloped).
Processing Areas and Tailings Piles	None visible (site remediated and redeveloped).
Surface water	Water was present in tributaries and Arroyo Ojo de Agua.
Threat to Water Quality	There are no obvious erosion problems at this site. One soil sample was collected from the former mining area on a hillside between soccer fields and residences, and contained 580 mg/kg mercury, equal to the cleanup level. Mercury in creek sediment samples ranged from 0.091 to 10 mg/kg mercury.

Mercury Sample Results (Soil)

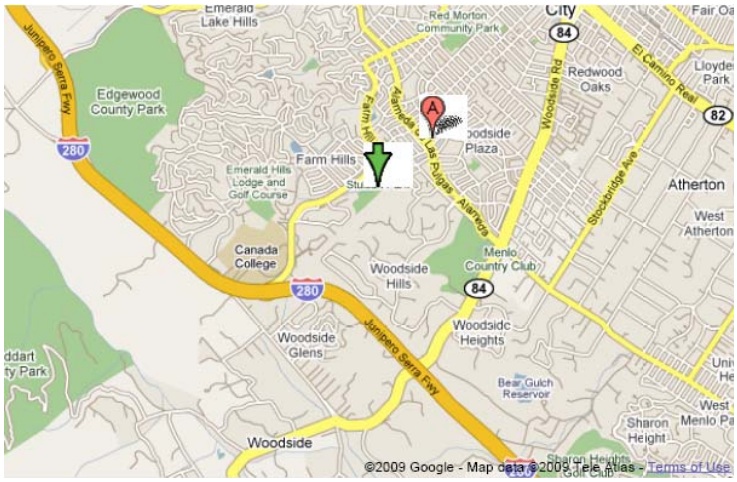
Sample Type	Sample ID	Mercury	Mercury	
	Method	7471A	RL	RL = laboratory reporting limit
	Units	mg/kg	mg/kg	
Upstream	SW1	4.3	2	Mercury in downstream samples is slightly elevated compared to upstream samples but much lower than the cleanup level; Mercury in the mine area sample is equal to the cleanup level
Upstream	SW3	2.5	2	
Upstream	SW5	0.24	0.02	
Upstream	SW5 Dup	0.091	0.02	
Mine Area	Background	580	16	
Down Stream	SW2	6.2	2	
Down Stream	SW4	10	2	
Down Stream	SW6	8.3	0.2	

Mercury Sample Results (Water)

Water and sediment samples were collected from tributaries and Arroyo Ojo de Agua. Mercury was detected in three water samples: in upstream tributary SW-1 sample at 0.75 µg/l, downstream tributary SW-2 sample at 0.56 µg/l, and downstream Arroyo Ojo de Agua SW-3 sample at 11 µg/l. Mercury was not detected in three water samples (upstream SW-5, downstream SW-4 & SW-6) plus a duplicate (reporting limit of 0.2 µg/l).

Findings and Recommendations	No action. The site was previously remediated under (San Mateo County Environmental Health Services oversight to a cleanup level of 580 mg/kg.
Priority	Low – site previously remediated.

Children's play area at Stulsaft Park (Challenge Mine also located in Stulsaft Park)



Location of Challenge Mine (green arrow)

Santa Clara County, Hillsdale Mine

Other Names	Chaboya
Location	San Jose East (USGS 7.5 min topographic quadrangle) (Section lines & numbers not on this map) T 7 S, R 1 E
Coordinates	Lat 37.2881, Long -121.8561
Production History	Small quantity producer
Site Drainage	Site is located at top and on sides of what is now called Communications Hill in San Jose, and drains to Coyote Creek
Land use	Quarry operations have ceased and site is being redeveloped with commercial and light industrial at lower elevations, and residences elsewhere.
Inspection date	N/A – met with owner and developers on March 4, 2008, and obtained site information. They submitted a comment letter on Guadalupe River watershed mercury TMDL in 2006, with additional information on mine.
Mine Structures	None
Mine (Adits)	The owner and developers have explored, sampled, and mapped the site.
Processing Areas and Tailings Piles	Little evidence of processing areas or tailings piles remains on site.
Surface water	Drainage from areas near Hillsdale mine is highly altered due to quarry operations and other site developments. There is a seep in the vicinity of the mine.
Threat to Water Quality	Low risk of current impacts to water quality as there is little evidence that mine tailings remain on site.
Mercury Sample Results	The owner and developers have sampled the site; they have not been required to provide complete results to the Water Board.
Findings and Recommendations	The current plan is to develop Communications Hill into a dense residential area, with light industrial at the base of the hill. During the planning and permitting phases for this development, the Hillsdale mercury mine will also be subject to other (city, county planning, county public health, and/or Water Board) regulatory requirements to protect humans from direct exposure to mercury.
Priority	Medium – track site development, and ensure that (1) other permitting agencies are aware of Hillsdale mine at the Communications Hill site, and (2) if mercury mining waste is eroding from Hillsdale mercury mine, the current property owner will need to implement best management practices for erosion control to keep mercury on the landscape and out of surface water.

Location of Hillsdale Mine (red dot)

Santa Clara County, Silver Creek Mine

Other Names	North Almaden
Location	Lick Observatory (USGS 7.5 min topographic quadrangle) (Section lines & numbers not on this map) T 7 N, R 2 E
Coordinates	Lat. 37.2672, Long. -121.7486
Production History	Few hundred flasks [C]
Site Drainage	Adits and tunnels are located on steep hills above perennial Silver Creek, and the processing area was on the creek banks.
Land use	Property contains a few residences and grazing leases; residential subdivisions are located to the north.
Inspection date	6/7/07
Mine Structures	Bricks and footings of some structures remain on and above creek banks.
Mine (Adits)	Observed many excavations and several adits on two ridges closest to creek. Reportedly, 1,200-ft tunnel with rail into adjacent hillside.
Processing Areas and Tailings Piles	Present. A pile (possibly overburden) is located near top of creek bank, but looks stable and mostly vegetated. Sample 060707-S-CA04 collected from an erosion area on this pile. Some calcines accumulated at oldest processing site, and some calcines observed in sediment in eroded creek bank below.
Surface water	Silver Creek had a low flow with fish visible in pools. The creek is incising, and it is heavily impacted by cows, culvert, and mine processing site. Some calcines, cinnabar and bricks in area where sediment sample collected.
Threat to Water Quality	Low risk of erosion of mercury-laden mining wastes to creek.

Mercury Sample Results

Sample Type	Sample ID	Mercury	Mercury	
	Method	7471A	RL	RL = laboratory reporting limit
	Units	mg/kg	mg/kg	
Background	060707-5-CA-01	0.38	0.023	Mercury concentrations in mine waste samples are elevated compared to background & downstream
	060707-5-KA-02	20	4.2	
	060707-5-CA-03	1.5	0.21	

Mine Waste	060707-5-CA-04	56	6.8
	060707-5-KA-05	140	6.5
	060707-5-KA-06	150	6.1
Down Stream	060707-5-KA-07	0.57	0.26
Findings and Recommendations	There is a surprisingly small amount of tailings on site given the number of adits, and most piles of tailings and/or overburden look stable and vegetated. Perhaps tailings have eroded downstream or been taken off site.		
Priority	Low – small volume of tailings remains on site.		

Foundation ruins on bank of Silver Creek

Mining wastes on hillside above Silver Creek

Location of Silver Creek Mine (red dot)

Solano County, Hastings Mine

Other Names	N/A
Location	Benicia Quadrangle (USGS 7.5 min topographic quadrangle) Section 11, T. 3 N, R. 3 W
Coordinates	Lat. 38.1136, Long. -122.1619
Production History	Production started in 1870's; a small amount of mercury was produced intermittently until 1930 when local ranchers obtained a court injunction [A, C].
Site Drainage	Mine and processing areas are located on hillside above Sulphur Springs, which drains into Lake Herman. OEHHA issued fish consumption advisories for Lake Herman.
Land use	Hastings Mine is located on property used for grazing, as are surrounding lands. A large quarry is located over the crest of the ridge.
Inspection date	4/1/08
Mine Structures	Remnants of several furnaces and a chimney remain on site.
Mine (Adits)	There are several adits visible at the site.
Processing Areas and Tailings Piles	Processing areas are visible, but there are no obvious waste piles, and the site is vegetated mostly with grasses.
Surface water	Sulphur Springs had a low flow. The creek is heavily impacted by cows.
Threat to Water Quality	Low risk of erosion of mercury-laden mining wastes to creek.

Mercury Sample Results

Sample Type	Sample ID	Mercury	Mercury	
	Method	7471A	RL	RL = laboratory reporting limit
	Units	mg/kg	mg/kg	
Background	040108-S-CA-01	3.9	0.22	Mercury concentrations in mine waste samples are greatly elevated above background
Mine Waste	040108-S-CA-02	460	20	
Mine Waste	040108-S-CA-03	390	21	
Down Stream	040108-S-KA-04	1.7	0.26	

Findings and Recommendations	No action. There is a small amount of tailings on site near processing ruins, but no obvious waste piles. The site generally looks stable and vegetated.
Priority	Low – small volume of tailings remains on site.

Ruins of brick furnaces and chimney at Hastings Mine

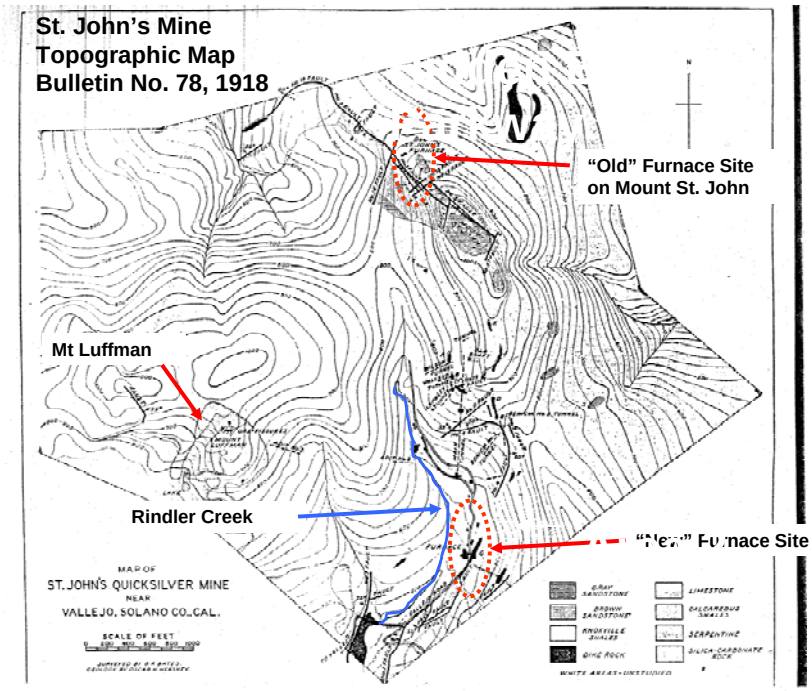
Location of Hastings Mine (google earth)

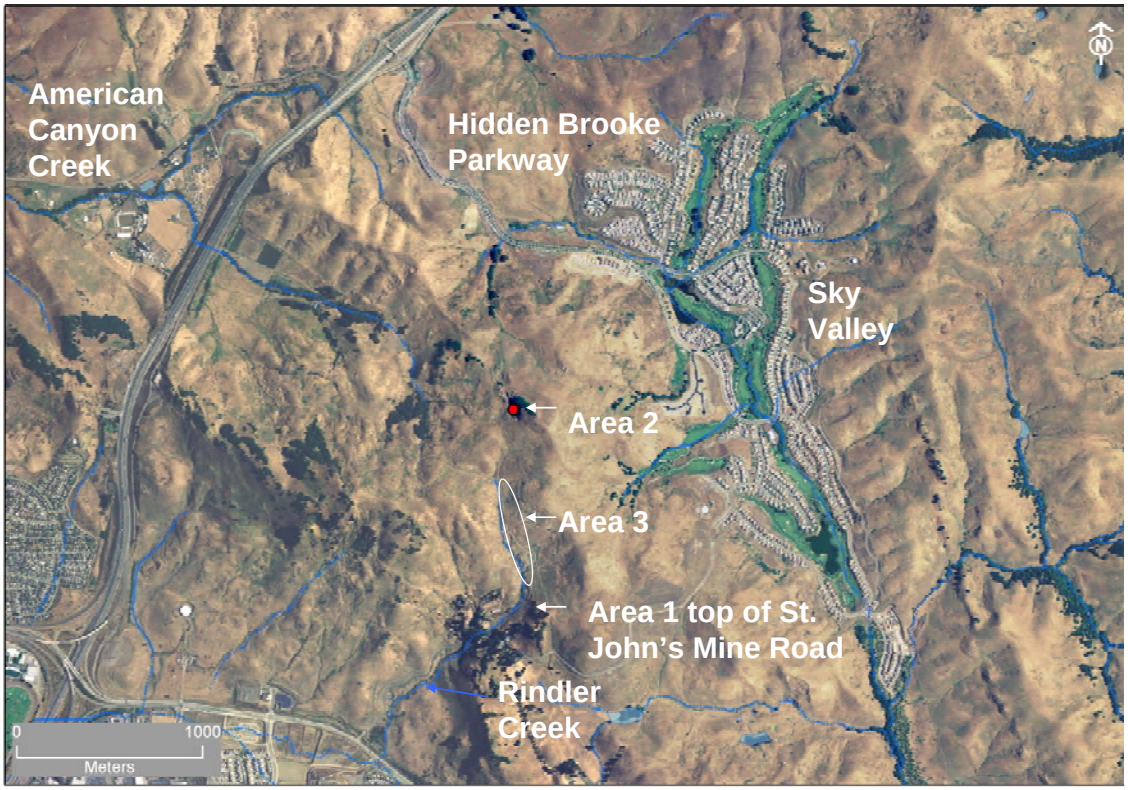
Solano County, St. John's Mine

Other Names	Vallejo
Location	Cordelia (USGS 7.5 min topographic quadrangle) Section 33, T. 4 N, R. 3 W
Coordinates	Lat. 38.1519, Long. -122.1916
Production History	St. John's mine was discovered in 1852, and produced over 17,000 flasks by 1965. Work was done in three areas (of the Sulphur Springs Mountains)—the north side of Mount St. John, Mount Luffman, and in a basinlike depression between the two mountains. [C]
Site Drainage	Multiple mine and processing areas drain: (1) toward Sky Valley to the NE (Sulphur Spring), (2) from Mount St. John to American Canyon Creek to the NW (visible from Hwy 680), and (3) mine sites along the steep hillside drain directly to Rindler Creek (and possibly to Lake Chabot) to the S.
Land use	St. John's Mine is located on property used for grazing, as are immediately surrounding lands. Residential developments include Sky Valley to the NE.
Inspection date	5/11/07 area (1), & 4/14/08 areas (2) and (3)
Mine Structures	Furnace structure remains in area (3) above Rindler Creek.
Mine (Adits)	Adits found in hillside in area (1) at top of St. John's Mine Road, and in area (3) above Rindler Creek.
Processing Areas and Tailings Piles	Area (3), the steep hillside above Rindler Creek, contains several tailings piles; these are unvegetated and not protected against erosion. Area (2), Mount St. John, looks about the same as in April 1998: large hillside scarring over 200 feet wide and tailings pile greater than 10,000 cy; evidence of minor seasonal erosion of tailings was apparent. Area (1) at the top of St. John's Mine Road, has no obvious processing areas or tailing piles.
Surface water	Area (3) is located on the steep hillside immediately above Rindler Creek, which was dry in May 2008. Areas (1) and (2) are located high on the hillside above waters.
Threat to Water Quality	Area (3) contains several tailings piles on the steep hillside; these are unvegetated and not protected against erosion into Rindler Creek. Area (2) looks same as in April 1998: large hillside scarring over 200 feet wide and tailings pile greater than 10,000 cy; evidence of minor seasonal erosion of tailings was apparent. Area (1) has a small amount of mine waste between boulders.

Mercury Sample Results

Sample Type	Sample ID	Mercury	Mercury	Comments
	Method	7471A	RL	RL = laboratory reporting limit
	Units	mg/kg	mg/kg	
Background	051107-S-BB-04	ND	0.2	Mercury in mine waste samples ranges from similar to background levels to greatly elevated above background; mercury in downstream samples ranges from background to elevated
Background	040108-S-CA-05	6.2	2.1	
Background	041408-S-CA-01	9.0	2.0	
Background	041408-S-CA-02	4.4	2.0	
Mine Waste	041408-S-CA-05	347	20	Area 3 above Rindler Creek
Mine Waste	041408-S-CA-06	500	20	Area 3
Mine Waste	041408-S-CA-03	7.6	2	Area 2 Mount St. John adjacent to hiking trail
Mine Waste	041408-S-CA-04	770	20	Area 2 Mount St. John below cell towers
Mine Waste	051107-S-BB-01	15	2.0	Area 1
Mine Waste	051107-S-BB-02	14	2.0	Area 1
Down Stream	051107-S-BB-03	0.86	0.2	Area 1
Down Stream	040108-S-CA-06	22	2.1	Area 3
Findings and Recommendations	Areas 3 (above Rindler Creek) and 2 (Mount St. John below cell towers) contain several tailings piles with high mercury concentrations on the steep hillside; these are unvegetated and not protected against erosion. These mine waste piles should be investigated and erosion controls implemented. Area 2 on Mount St. John is immediately adjacent to City of Vallejo hiking trail. 1998 sample contained 0.18 mg/kg mercury, and 2008 sample contained 7.6 mg/kg, comparable to background. Area 1 at the top of St. John's Mine Road, has no obvious processing areas or tailing piles.			
Priority	High – Area 3 above Rindler Creek, and Area 2 Mount St. John below cell towers, contain several tailings piles with high mercury concentrations.			





Location Map: St. John's Mine

Area (3): one of several unvegetated tailings pile on hillside above Rindler Creek

Area (3) above Rindler Creek: sampling furnace area tailings pile on hillside above Rindler Creek

Area (2) on Mount St. John

Area (1) at the top of St. John's Mine Road

Table 2. Laboratory Results

Mine	Sample Type	Sample ID	Lab Sample ID	Date Sample	Date Sampled	Mercury			Calcium		
						7471A	DL	RL	6010B	DL	RL
						mg/kg dry wt.			mg/kg dry wt.		
St. John's	Mine Waste	051107-S-BB-01	MQE0768-01	5/11/2007	5/11/07	15		2	2,000		12
	Mine Waste	051107-S-BB-02	MQE0768-02	5/11/2007	5/11/07	14		2	3,600		12
	Down Stream	051107-S-BB-03	MQE0768-03	5/11/2007	5/11/07	0.86		0.2	3,900		62
	Background	051107-S-BB-04	MQE0768-04	5/11/2007	5/11/07	ND		0.2	2,300		62
Bella Oaks	Mine Waste	051107-S-CA-05	MQE0768-05	5/11/2007	5/11/07	14		2	7,000		62
	Mine Waste	051107-S-CA-06	MQE0768-06	5/11/2007	5/11/07	330		8	7,100		62
	Down Stream	051107-S-CA-07	MQE0768-07	5/11/2007	5/11/07	3.1		2	4,300		62
Corda	Down Stream	051407 S-CA-08	MQE0768-08	5/14/2007	5/14/07	63		4	2,400		12
	Mine Waste	051407-S-CA-09	MQE0768-09	5/14/2007	5/14/07	330		10	2,300		12
	Background	051407-S-CA-10	MQE0768-10	5/14/2007	5/14/07	0.034		0.02	1,200		12
(Method)											
Silver Creek	Background	060707-5-CA-01	MQF0234-01	06/07/2007 0	6/7/07	0.38	0.00016	0.023	ND	0.013	2.9
	Background	060707-5-KA-02	MQF0234-02	06/07/2007 0	6/7/07	20	0.03	4.2	ND	0.012	2.6
	Background	060707-5-CA-03	MQF0234-03	06/07/2007 0	6/7/07	1.5	0.0015	0.21	ND	0.0024	0.52
	Mine Waste	060707-5-CA-04	MQF0234-04	06/07/2007 0	6/7/07	56	0.048	6.8	ND	0.0026	0.56
	Mine Waste	060707-5-KA-05	MQF0234-05	06/07/2007 0	6/7/07	140	0.046	6.5	ND	0.0025	0.22
	Mine Waste	060707-5-KA-06	MQF0234-06	06/07/2007 0	6/7/07	150	0.043	6.1	ND	0.0023	0.2
	Down Stream	060707-5-KA-07	MQF0234-07	06/07/2007 0	6/7/07	0.57	0.0018	0.26	ND	0.003	0.26
(Method)											
Challenge	Upstream	SW1	MQF0292-08		6/11/07	4.3		2	3,000		12
	Upstream	SW3	MQF0292-10		6/11/07	2.5		2	630		12
	Upstream	SW5	MQF0292-12		6/11/07	0.24		0.02	9,200		12
	Upstream	SW5 Dup	MQF0292-14		6/11/07	0.091		0.02	10,000		12
	Mined Area	Background	MQF0292-15		6/11/07	580		16	2,700		12
	Downstream	SW2	MQF0292-09		6/11/07	6.2		2	3,500		12
	Downstream	SW4	MQF0292-11		6/11/07	10		2	6,600		12
	Downstream	SW6	MQF0292-13		6/11/07	8.3		0.2	64,000		62
(Method)											
Santa Teresa	Background	031908-S-CA-01	MRC0574-01	3/19/08	3/19/08	0.26	0.00027	0.14	12,000	19	19
	Background	031908-S-CA-02	MRC0574-02	3/19/08	3/19/08	0.089	0.000042	0.021	3,200	15	15
	Mine Waste	031908-S-CA-03	MRC0574-03	3/19/08	3/19/08	110	0.022	11	6,900	15	15
	Mine Waste	031908-S-CA-04	MRC0574-04	3/19/08	3/19/08	4.0	0.0038	1.9	22,000	65	65
	Mine Waste	031908-S-CA-05	MRC0574-05	3/19/08	3/19/08	2.0	0.0038	1.9	12,000	13	13

Table 2. Laboratory Results

Mine	Sample Type	Sample ID	Lab Sample ID	Date Sample	Date Sampled	Mercury			Calcium		
						7471A	DL	RL	6010B	DL	RL
						mg/kg dry wt.			mg/kg dry wt.		
Hastings	Background	040108-S-CA-01	MRD0118-01	04/02/2008 1	4/2/08	3.9	0.0004	0.22	ND	0.95	1.4
	Mine Waste	040108-S-CA-02	MRD0118-02	04/02/2008 1	4/2/08	460	0.036	20	ND	0.86	1.3
	Mine Waste	040108-S-CA-03	MRD0118-03	04/02/2008 1	4/2/08	390	0.038	21	ND	0.89	1.3
	Down Stream	040108-S-KA-04	MRD0118-04	04/02/2008 1	4/2/08	1.7	0.00047	0.26	ND	0.22	0.33
St. John's	Background	040108-S-CA-05	MRD0118-05	04/02/2008 1	4/2/08	6.2	0.0037	2.1	ND	0.88	1.3
	Down Stream	040108-S-CA-06	MRD0118-06	04/02/2008 1	4/2/08	22	0.0038	2.1	ND	0.89	1.3
St. John's	Background	041408-S-CA-01	MRD0611-01	04/14/2008 1	4/14/08	9.0	0.0036	2	ND	0.84	1.2
	Background	041408-S-CA-02	MRD0611-02	04/14/2008 1	4/14/08	4.4	0.0037	2	ND	0.84	1.2
	Mine Waste	041408-S-CA-03	MRD0611-03	04/14/2008 1	4/14/08	7.6	0.0036	2	ND	0.84	1.2
	Mine Waste	041408-S-CA-04	MRD0611-04	04/14/2008 1	4/14/08	770	0.036	20	ND	0.84	1.2
	Mine Waste	041408-S-CA-05	MRD0611-05	04/14/2008 1	4/14/08	347	0.036	20	ND	0.84	1.2
	Mine Waste	041408-S-CA-06	MRD0611-06	04/14/2008 1	4/14/08	500	0.036	20	ND	0.84	1.2

Table 2. Laboratory Results

Mine	Sample Type	Sample ID	Magnesium			Total Organic Carbon			Moisture			Percent Solids	
			6010B	DL	RL	SM5310B	DL	RL	SM 2540E	DL	RL		DL
			mg/kg dry wt.			mg/kg wet wt			%			%	
St. John's	Mine Waste	051107-S-BB-01	21,000		7.5	40,000		5,000	4.7		0.1		
	Mine Waste	051107-S-BB-02	57,000		12	73,000		25,000	6.2		0.1		
	Down Stream	051107-S-BB-03	6,100		12	6,900		5,000	7.7		0.1		
	Background	051107-S-BB-04	7,800		12	8,900		5,000	7.3		0.1		
Bella Oaks	Mine Waste	051107-S-CA-05	110,000		12	ND		5,000	14		0.1		
	Mine Waste	051107-S-CA-06	67,000		12	20,000		5,000	8.8		0.1		
	Down Stream	051107-S-CA-07	8,500		12	9,400		5,000	15		0.1		
Corda	Down Stream	051407 S-CA-08	3,000		2.5	38,000		10,000	68		0.1		
	Mine Waste	051407-S-CA-09	280		2.5	ND		5,000	6.5		0.1		
	Background	051407-S-CA-10	3,500		2.5	ND		5,000	5.9		0.1		
(Method)						EPA 9060A MOD.						SM2540B	
Silver Creek	Background	060707-5-CA-01	24,000		29	21,000	2,200	5,000				87	1
	Background	060707-5-KA-02	25,000		26	38,000	7,300	17,000				95	1
	Background	060707-5-CA-03	160,000		52	25,000	2,200	5,000				96	1
	Mine Waste	060707-5-CA-04	31,000		28	39,000	7,300	17,000				89	1
	Mine Waste	060707-5-KA-05	36,000	9.5	14	20,000	2,200	5,000				92	1
	Mine Waste	060707-5-KA-06	39,000	8.9	13	13,000	2,200	5,000				98	1
	Down Stream	060707-5-KA-07	65,000	11	16	ND	2,200	5,000				77	1
(Method)												EPA 160.3 MOD	
Challenge	Upstream	SW1	12,000		2.5	11,000		7,000				71	
	Upstream	SW3	11,000		2.5	ND		6,000				83	
	Upstream	SW5	34,000		12	ND		6,500				77	
	Upstream	SW5 Dup	36,000		12	ND		5,900				85	
	Mined Area	Background	65,000		12	30,000		5,800				86	
	Downstream	SW2	37,000		12	42,000		8,900				56	
	Downstream	SW4	36,000		12	15,000		6,500				77	
	Downstream	SW6	21,000		12	52,000		9,800				51	
(Method)												SM2540G	
Santa Teresa	Background	031908-S-CA-01	11,000	3.8	3.8	94,000	7,100	16,000				66	1
	Background	031908-S-CA-02	5,900	3	3	28,000	2,200	5,000				84	1
	Mine Waste	031908-S-CA-03	9,100	3	3	29,000	2,200	4,900				82	1
	Mine Waste	031908-S-CA-04	25,000	13	13	5,600	2,200	4,900				97	1
	Mine Waste	031908-S-CA-05	25,000	13	13	ND	2,200	5,000				95	1

Table 2. Laboratory Results

Mine	Sample Type	Sample ID	Magnesium			Total Organic Carbon			Moisture			Percent Solids	
			6010B	DL	RL	SM5310B	DL	RL	SM 2540E	DL	RL		DL
			mg/kg dry wt.			mg/kg wet wt			%			%	
Hastings	Background	040108-S-CA-01	7,900	14	14	22,000	2,200	5,000				89	1
	Mine Waste	040108-S-CA-02	1,900	13	13	32,000	2,200	5,000				98	1
	Mine Waste	040108-S-CA-03	2,300	13	13	26,000	2,200	5,000				95	1
	Down Stream	040108-S-KA-04	3,500	3.3	3.3	ND	2,200	5,000				76	1
St. John's	Background	040108-S-CA-05	31,000	13	13	26,000	2,200	5,000				96	1
	Down Stream	040108-S-CA-06	8,600	13	13	8,900	2,200	5,000				95	1
St. John's	Background	041408-S-CA-01	515	12	12	18,000	2,200	5,000				97	1
	Background	041408-S-CA-02	673	12	12	26,000	2,200	5,000				98	1
	Mine Waste	041408-S-CA-03	242	12	12	ND	2,200	5,000				95	1
	Mine Waste	041408-S-CA-04	9,190	12	12	9,200	2,200	5,000				99	1
	Mine Waste	041408-S-CA-05	13,300	12	12	6,400	2,200	5,000				98	1
	Mine Waste	041408-S-CA-06	7,920	12	12	23,000	2,200	5,000				96	1

Table 2. Laboratory Results

Mine	Sample Type	Sample ID		Silt	Clay	Silt+Clay	Arsenic		Barium		Cadmium		
			RL				6010B	DL	RL	6010B	DL	RL	6010B	DL
				%	%	%	mg/kg dry wt.			mg/kg dry wt.			mg/kg dry wt.	
St. John's	Mine Waste	051107-S-BB-01		23.8	20.5	44.3	210		15	130		5	ND	
	Mine Waste	051107-S-BB-02		29.0	14.0	43	170		25	200		5	ND	
	Down Stream	051107-S-BB-03		16.7	24.3	41	40		25	210		25	ND	
	Background	051107-S-BB-04		28.1	43.6	71.7	ND		25	250		25	ND	
Bella Oaks	Mine Waste	051107-S-CA-05		5.1	1.3	6.4	ND		25	74		25	ND	
	Mine Waste	051107-S-CA-06		16.5	3.0	19.5	ND		25	490		25	ND	
	Down Stream	051107-S-CA-07		15.1	20.4	35.5	ND		25	140		25	ND	
Corda	Down Stream	051407 S-CA-08		27.4	17.2	44.6	43		5	48		5	ND	
	Mine Waste	051407-S-CA-09		8.2	12.8	21	140		5	32		5	ND	
	Background	051407-S-CA-10		12.5	12.8	25.3	64		5	66		5	ND	
(Method)														
Silver Creek	Background	060707-5-CA-01	1	30.4	33.5	63.9	ND	0.1	29	230	0.0018	5.7	4700	1.7
	Background	060707-5-KA-02	1	27.7	5.4	33.1	ND	0.094	26	190	0.0016	5.2	19000	1.6
	Background	060707-5-CA-03	1	26.0	8.0	34	ND	0.019	5.2	26	0.0016	5.2	38000	16
	Mine Waste	060707-5-CA-04	1	26.5	31.1	57.6	ND	0.1	28	130	0.0018	5.6	10000	1.7
	Mine Waste	060707-5-KA-05	1	20.4	8.1	28.5	11	0.02	11	220	0.0017	5.4	8700	0.81
	Mine Waste	060707-5-KA-06	1	23.0	13.6	36.6	ND	0.018	10	120	0.0016	5.1	16000	0.76
	Down Stream	060707-5-KA-07	1	8.6	1.5	10.1	17	0.023	13	130	0.002	6.5	5100	0.97
(Method)														
Challenge	Upstream	SW1	0.1	17.5	3.1	20.6	ND		10	35		5	ND	
	Upstream	SW3	0.1	2.1	1.9	4	ND		10	9.5		5	ND	
	Upstream	SW5	0.1	9.2	1.4	10.6	ND		10	65		5	ND	
	Upstream	SW5 Dup	0.1	11.1	0.8	11.9	ND		50	70		5	ND	
	Mined Area	Background	0.1	13.9	15.4	29.3	ND		10	26		5	ND	
	Downstream	SW2	0.1	18.7	2.9	21.6	ND		10	42		5	ND	
	Downstream	SW4	0.1	6.1	2.2	8.3	ND		10	46		5	ND	
	Downstream	SW6	0.1	11.8	4.5	16.3	ND		10	72		5	ND	
(Method)														
Santa Teresa	Background	031908-S-CA-01	1	34.8	12.9	47.7	ND	6.7	30	180	0.15	3.8	ND	0.25
	Background	031908-S-CA-02	1	22.5	30.8	53.3	14	2.6	12	170	0.12	3	ND	0.2
	Mine Waste	031908-S-CA-03	1	24.1	7.7	31.8	ND	2.7	12	130	0.12	3	ND	0.21
	Mine Waste	031908-S-CA-04	1	NR	NR	NR	ND	11	52	81	0.52	13	ND	0.87
	Mine Waste	031908-S-CA-05	1	3.5	NR	3.5	15	2.3	10	53	0.11	2.6	0.3	0.18

Table 2. Laboratory Results

Mine	Sample Type	Sample ID		Silt	Clay	Silt+Clay	Arsenic			Barium			Cadmium	
			RL				6010B	DL	RL	6010B	DL	RL	6010B	DL
				%	%	%	mg/kg dry wt.			mg/kg dry wt.			mg/kg dry wt.	
Hastings	Background	040108-S-CA-01	1	38.5	30.6		ND	12	56	140	0.57	14	15000	70
	Mine Waste	040108-S-CA-02	1	5	2	7	52	11	51	220	0.52	13	5900	64
	Mine Waste	040108-S-CA-03	1	8.1	2	10.1	54	12	53	97	0.53	13	7300	66
	Down Stream	040108-S-KA-04	1	12.5	11.5	24	ND	2.9	13	140	0.13	3.3	3600	17
St. John's	Background	040108-S-CA-05	1	19.8	21.8	41.6	ND	12	52	86	0.53	13	89000	65
	Down Stream	040108-S-CA-06	1	13.5	12.4	25.9	ND	12	53	250	0.53	13	6400	66
St. John's	Background	041408-S-CA-01	1	25.3	16.7	42	ND	11	50	33	0.5	12	330	62
	Background	041408-S-CA-02	1	28.7	17	45.7	ND	11	50	50	0.5	12	694	62
	Mine Waste	041408-S-CA-03	1	12.9	10.2	23.1	116	11	50	44	0.5	12	67	62
	Mine Waste	041408-S-CA-04	1	17.5	17.9	35.4	111	11	50	96	0.5	12	6060	62
	Mine Waste	041408-S-CA-05	1	9.1	10	19.1	ND	11	50	194	0.5	12	13300	62
	Mine Waste	041408-S-CA-06	1	15.6	8.4	24	53	11	50	448	0.5	12	12500	62

Table 2. Laboratory Results

Mine	Sample Type	Sample ID	Chromium			Copper			Lead			Nickel		
			RL	6010B	DL	RL	6010B	DL	RL	6010B	DL	RL	6010B	DL	RL
				mg/kg dry wt.			mg/kg dry wt.			mg/kg dry wt.			mg/kg dry wt.		
St. John's	Mine Waste	051107-S-BB-01	0.2	810		5	ND		4	37		5	2700		5
	Mine Waste	051107-S-BB-02	0.2	1000		5	ND		4	46		5	3700		5
	Down Stream	051107-S-BB-03	1	57		25	55		20	ND		25	280		25
	Background	051107-S-BB-04	1	46		25	53		20	ND		25	70		25
Bella Oaks	Mine Waste	051107-S-CA-05	1	940		25	ND		20	ND		25	1600		25
	Mine Waste	051107-S-CA-06	1	1000		25	22		20	ND		25	1900		25
	Down Stream	051107-S-CA-07	1	80		25	22		20	ND		25	110		25
Corda	Down Stream	051407 S-CA-08	0.2	20		5	88		4	12		5	50		5
	Mine Waste	051407-S-CA-09	0.2	ND		5	49		4	42		5	ND		5
	Background	051407-S-CA-10	0.2	27		5	19		4	13		5	18		5
(Method)															
Silver Creek	Background	060707-5-CA-01	29	330	0.022	29	41	0.017	2.9	ND	0.12	29	790	0.21	14
	Background	060707-5-KA-02	26	350	0.02	26	23	0.015	2.6	33	0.11	26	1100	0.19	13
	Background	060707-5-CA-03	260	400	0.0041	5.2	7.1	0.003	0.52	ND	0.022	5.2	1600	0.038	2.6
	Mine Waste	060707-5-CA-04	28	290	0.0044	5.6	37	0.0033	0.56	52	0.024	5.6	810	0.041	2.8
	Mine Waste	060707-5-KA-05	14	200	0.0042	5.4	31	0.0031	4.3	10	0.023	5.4	650	0.04	5.4
	Mine Waste	060707-5-KA-06	13	310	0.004	5.1	24	0.003	4.1	28	0.021	5.1	680	0.037	5.1
	Down Stream	060707-5-KA-07	16	290	0.0051	6.5	24	0.0038	5.2	9.3	0.027	6.5	720	0.048	6.5
(Method)															
Challenge	Upstream	SW1	0.2	320		5	18		4	47		5	330		5
	Upstream	SW3	0.2	91		5	4.5		4	13		5	130		5
	Upstream	SW5	0.2	360		5	21		4	7.2		5	550		5
	Upstream	SW5 Dup	0.2	280		5	19		4	350		5	98		5
	Mined Area	Background	0.2	870		5	23		4	1,400		5	13		5
	Downstream	SW2	0.2	370		5	18		4	16		5	560		5
	Downstream	SW4	0.2	370		5	22		4	27		5	440		5
	Downstream	SW6	0.2	170		5	17		4	10		5	260		5
(Method)															
Santa Teresa	Background	031908-S-CA-01	0.4	140	0.32	7.5	34	0.37	0.38	39	2.6	3.8	270	1	1.9
	Background	031908-S-CA-02	0.3	29	0.26	6	26	0.29	0.3	13	2.1	3	37	0.8	1.5
	Mine Waste	031908-S-CA-03	0.3	52	0.26	6.1	20	0.3	0.3	36	2.1	3	110	0.81	1.5
	Mine Waste	031908-S-CA-04	1.3	500	1.1	26	26	1.3	1.3	ND	8.9	13	930	3.5	6.5
	Mine Waste	031908-S-CA-05	0.3	270	0.22	5.2	37	0.26	0.26	3.8	1.8	2.6	800	0.7	1.3

Table 2. Laboratory Results

Mine	Sample Type	Sample ID	Chromium			Copper			Lead			Nickel		
			RL	6010B	DL	RL	6010B	DL	RL	6010B	DL	RL	6010B	DL	RL
				mg/kg dry wt.			mg/kg dry wt.			mg/kg dry wt.			mg/kg dry wt.		
Hastings	Background	040108-S-CA-01	70	30	1.2	28	57	1.4	2.8	23	9.7	14	34	3.8	7
	Mine Waste	040108-S-CA-02	64	ND	1.1	26	90	1.3	2.6	39	8.8	13	52	3.4	6.4
	Mine Waste	040108-S-CA-03	66	ND	1.1	26	90	1.3	2.6	52	9.1	13	50	3.5	6.6
	Down Stream	040108-S-KA-04	17	22	0.28	6.6	25	0.33	0.66	8.9	2.3	3.3	25	0.89	1.7
St. John's	Background	040108-S-CA-05	65	66	1.1	26	38	1.3	2.6	ND	9	13	640	3.5	6.5
	Down Stream	040108-S-CA-06	66	59	1.1	26	48	1.3	2.6	ND	9.1	13	160	3.5	6.6
St. John's	Background	041408-S-CA-01	62	ND	1.1	25	35	1.2	1.2	34	8.6	12	28	3.4	6.2
	Background	041408-S-CA-02	62	27	1.1	25	40	1.2	1.2	50	8.6	12	32	3.4	6.2
	Mine Waste	041408-S-CA-03	62	31	1.1	25	75	1.2	1.2	21	8.6	12	52	3.4	6.2
	Mine Waste	041408-S-CA-04	62	ND	1.1	25	81	1.2	1.2	18	8.6	12	90	3.4	6.2
	Mine Waste	041408-S-CA-05	62	31	1.1	25	50	1.2	1.2	20	8.6	12	70	3.4	6.2
	Mine Waste	041408-S-CA-06	62	42	1.1	25	73	1.2	1.2	125	8.6	12	96	3.4	6.2

Table 2. Laboratory Results

Mine	Sample Type	Sample ID	Selenium			Silver			Zinc		
			6010B	DL	RL	6010B	DL	RL	6010B	DL	RL
			mg/kg dry wt.			mg/kg dry wt.			mg/kg dry wt.		
St. John's	Mine Waste	051107-S-BB-01	ND		10	ND		0.5	88		5
	Mine Waste	051107-S-BB-02	ND		10	ND		0.5	130		5
	Down Stream	051107-S-BB-03	ND		50	ND		2.5	95		25
	Background	051107-S-BB-04	ND		50	ND		2.5	90		25
Bella Oaks	Mine Waste	051107-S-CA-05	ND		50	ND		2.5	ND		25
	Mine Waste	051107-S-CA-06	ND		50	ND		2.5	38		25
	Down Stream	051107-S-CA-07	ND		50	ND		2.5	62		25
Corda	Down Stream	051407 S-CA-08	ND		10	ND		0.5	67		5
	Mine Waste	051407-S-CA-09	ND		10	5.7		0.5	11		5
	Background	051407-S-CA-10	ND		10	ND		0.5	30		5
(Method)											
Silver Creek	Background	060707-5-CA-01	ND	13	29	ND	0.013	8.6	81	0.019	2.9
	Background	060707-5-KA-02	ND	12	26	ND	0.011	7.9	62	0.018	2.6
	Background	060707-5-CA-03	ND	2.3	5.2	ND	0.023	16	24	0.0035	0.52
	Mine Waste	060707-5-CA-04	ND	2.5	5.6	ND	0.0025	1.7	90	0.0038	0.56
	Mine Waste	060707-5-KA-05	ND	0.026	11	ND	0.0024	0.54	59	0.0036	5.4
	Mine Waste	060707-5-KA-06	ND	0.024	10	ND	0.0022	0.51	65	0.0034	5.1
	Down Stream	060707-5-KA-07	ND	0.031	13	ND	0.0028	0.65	44	0.0043	6.5
(Method)											
Challenge	Upstream	SW1	ND		10	0.92		0.5	64		5
	Upstream	SW3	ND		10	ND		0.5	32		5
	Upstream	SW5	ND		10	ND		0.5	59		5
	Upstream	SW5 Dup	ND		10	0.5		0.5	52		5
	Mined Area	Background	ND		10	0.5		0.5	54		5
	Downstream	SW2	ND		10	ND		0.5	70		5
	Downstream	SW4	ND		10	ND		0.5	84		5
	Downstream	SW6	ND		10	ND		0.5	53		5
(Method)											
Santa Teresa	Background	031908-S-CA-01	ND	4.7	15	ND	0.67	0.75	75	1.1	7.5
	Background	031908-S-CA-02	ND	3.7	12	ND	0.53	0.6	52	0.89	6
	Mine Waste	031908-S-CA-03	ND	3.8	12	ND	0.54	0.61	67	0.9	6.1
	Mine Waste	031908-S-CA-04	ND	16	52	ND	2.3	2.6	ND	3.8	26
	Mine Waste	031908-S-CA-05	ND	16	52	ND	0.47	0.52	18	0.78	5.2

Table 2. Laboratory Results

Mine	Sample Type	Sample ID	Selenium			Silver			Zinc		
			6010B	DL	RL	6010B	DL	RL	6010B	DL	RL
			mg/kg dry wt.			mg/kg dry wt.			mg/kg dry wt.		
Hastings	Background	040108-S-CA-01	ND	17	56	ND	2.5	2.8	85	4.2	28
	Mine Waste	040108-S-CA-02	ND	16	51	ND	2.3	2.6	130	3.8	26
	Mine Waste	040108-S-CA-03	ND	16	53	ND	2.3	2.6	150	3.9	26
	Down Stream	040108-S-KA-04	ND	4.1	13	ND	0.59	0.66	49	0.98	6.6
St. John's	Background	040108-S-CA-05	ND	16	52	ND	2.3	2.6	67	3.9	26
	Down Stream	040108-S-CA-06	ND	16	53	ND	2.3	2.6	96	3.9	26
St. John's	Background	041408-S-CA-01	ND	16	50	ND	2.2	2.5	89	3.7	25
	Background	041408-S-CA-02	ND	16	50	ND	2.2	2.5	100	3.7	25
	Mine Waste	041408-S-CA-03	ND	16	50	ND	2.2	2.5	73	3.7	25
	Mine Waste	041408-S-CA-04	ND	16	50	ND	2.2	2.5	121	3.7	25
	Mine Waste	041408-S-CA-05	ND	16	50	ND	2.2	2.5	112	3.7	25
	Mine Waste	041408-S-CA-06	ND	16	50	ND	2.2	2.5	427	3.7	25

4. References

A. California State Mining Bureau 1918. Quicksilver Resources of California. Bulletin no. 78. May

B. San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) 1998. Mines Report. April.

C. U.S. Bureau of Mines 1965. Mercury Potential of the United States.

D. U.S. Geological Survey (USGS) Mineral Resources Data System (MRDS) URL: http://tin.er.usgs.gov/mrds/index.shtml

E. San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) 2007. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). January 18. http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml

F. San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) 2006. San Francisco Bay mercury TMDL, Approved Basin Plan amendment. August. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/sfbaymercurytmdl.shtml

Appendix A Analytical Laboratory Results

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6 June, 2007

Carrie Austin
RWQCB-Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Mercury Mines
Work Order: MQE0768

Enclosed are the results of analyses for samples received by the laboratory on 05/14/07 17:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Leticia Reyes
Project Manager

CA ELAP Certificate # 1210

The Chain(s) of Custody, 4 pages, are included and are an integral part of this report.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQE0768
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
051107-BB-01	MQE0768-01	Soil	05/11/07 00:00	05/14/07 17:45
051107-BB-02	MQE0768-02	Soil	05/11/07 00:00	05/14/07 17:45
051107-BB-03	MQE0768-03	Soil	05/11/07 00:00	05/14/07 17:45
051107-BB-04	MQE0768-04	Soil	05/11/07 00:00	05/14/07 17:45
051107-CA-05	MQE0768-05	Soil	05/11/07 00:00	05/14/07 17:45
051107-CA-06	MQE0768-06	Soil	05/11/07 00:00	05/14/07 17:45
051107-CA-07	MQE0768-07	Soil	05/11/07 00:00	05/14/07 17:45
051407-S-CA-08	MQE0768-08	Soil	05/14/07 00:00	05/14/07 17:45
051407-S-CA-09	MQE0768-09	Soil	05/14/07 00:00	05/14/07 17:45
051407-S-CA-10	MQE0768-10	Soil	05/14/07 00:00	05/14/07 17:45

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051107-BB-01 (MQE0768-01) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	**40000**	5000	mg/kg	1	7E24119	05/24/07 11:55	05/24/07	EPA 9060A MOD.	
051107-BB-02 (MQE0768-02) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	**73000**	25000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	
051107-BB-03 (MQE0768-03) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	**6900**	5000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	
051107-BB-04 (MQE0768-04) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	**8900**	5000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	
051107-CA-05 (MQE0768-05) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	ND	5000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	
051107-CA-06 (MQE0768-06) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	**20000**	5000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	
051107-CA-07 (MQE0768-07) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	**9400**	5000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	
051407-S-CA-08 (MQE0768-08) Soil	**Sampled: 05/14/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	**38000**	10000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	
051407-S-CA-09 (MQE0768-09) Soil	**Sampled: 05/14/07 00:00**	**Received: 05/14/07 17:45**							
Total Organic Carbon	ND	5000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051407-S-CA-10 (MQE0768-10) Soil Sampled: 05/14/07 00:00 Received: 05/14/07 17:45									
Total Organic Carbon	ND	5000	mg/kg	1	7E29131	05/29/07 10:29	05/29/07	EPA 9060A MOD.	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051107-BB-01 (MQE0768-01) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Silver	ND	0.50	mg/kg	1	7E25048	05/25/07	05/29/07	EPA 6010B	C
Arsenic	**210**	15	"	3	"	"	05/30/07	"	
Barium	**130**	5.0	"	1	"	"	05/29/07	"	
Calcium	**2000**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**810**	5.0	"	"	"	"	"	"	
Copper	ND	4.0	"	"	"	"	"	"	
Mercury	**15**	2.0	"	100	7E25014	05/25/07	05/25/07	EPA 7471A	
Magnesium	**21000**	7.5	"	3	7E25048	05/25/07	05/30/07	EPA 6010B	
Nickel	**2700**	5.0	"	1	"	"	05/29/07	"	
Lead	**37**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**88**	5.0	"	"	"	"	"	"	
051107-BB-02 (MQE0768-02) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Silver	ND	0.50	mg/kg	1	7E25048	05/25/07	05/29/07	EPA 6010B	C
Arsenic	**170**	25	"	5	"	"	05/30/07	"	
Barium	**200**	5.0	"	1	"	"	05/29/07	"	
Calcium	**3600**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**1000**	5.0	"	"	"	"	"	"	
Copper	ND	4.0	"	"	"	"	"	"	
Mercury	**14**	2.0	"	100	7E25014	05/25/07	05/25/07	EPA 7471A	
Magnesium	**57000**	12	"	5	7E25048	05/25/07	05/30/07	EPA 6010B	
Nickel	**3700**	5.0	"	1	"	"	05/29/07	"	
Lead	**46**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**130**	5.0	"	"	"	"	"	"	

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1515 Clay Street, Suite 1400	Project Number:	-	**Reported:**
Oakland CA, 94612	Project Manager:	Carrie Austin	06/06/07 16:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051107-BB-03 (MQE0768-03) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Silver	ND	2.5	mg/kg	5	7E25048	05/25/07	05/30/07	EPA 6010B	RL1
Arsenic	**40**	25	"	"	"	"	"	"	
Barium	**210**	25	"	"	"	"	"	"	
Calcium	**3900**	62	"	"	"	"	"	"	
Cadmium	ND	1.0	"	"	"	"	"	"	RL1
Chromium	**57**	25	"	"	"	"	"	"	
Copper	**55**	20	"	"	"	"	"	"	
Mercury	**0.86**	0.20	"	10	7E30030	05/30/07	05/31/07	EPA 7471A	
Magnesium	**6100**	12	"	5	7E25048	05/25/07	05/30/07	EPA 6010B	
Nickel	**280**	25	"	"	"	"	"	"	
Lead	ND	25	"	"	"	"	"	"	RL1
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**95**	25	"	"	"	"	"	"	
051107-BB-04 (MQE0768-04) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Silver	ND	2.5	mg/kg	5	7E25048	05/25/07	05/30/07	EPA 6010B	RL1
Arsenic	ND	25	"	"	"	"	"	"	
Barium	**250**	25	"	"	"	"	"	"	
Calcium	**2300**	62	"	"	"	"	"	"	
Cadmium	ND	1.0	"	"	"	"	"	"	RL1
Chromium	**46**	25	"	"	"	"	"	"	
Copper	**53**	20	"	"	"	"	"	"	
Mercury	ND	0.20	"	10	7E30030	05/30/07	05/31/07	EPA 7471A	
Magnesium	**7800**	12	"	5	7E25048	05/25/07	05/30/07	EPA 6010B	
Nickel	**70**	25	"	"	"	"	"	"	
Lead	ND	25	"	"	"	"	"	"	RL1
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**90**	25	"	"	"	"	"	"	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051107-CA-05 (MQE0768-05) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Silver	ND	2.5	mg/kg	5	7E25048	05/25/07	05/30/07	EPA 6010B	RL1
Arsenic	ND	25	"	"	"	"	05/30/07	"	RL1
Barium	**74**	25	"	"	"	"	"	"	
Calcium	**7000**	62	"	"	"	"	"	"	
Cadmium	ND	1.0	"	"	"	"	"	"	RL1
Chromium	**940**	25	"	"	"	"	"	"	
Copper	ND	20	"	"	"	"	"	"	RL1
Mercury	**14**	2.0	"	100	7E25014	05/25/07	05/25/07	EPA 7471A	
Magnesium	**110000**	12	"	5	7E25048	05/25/07	05/30/07	EPA 6010B	
Nickel	**1600**	25	"	"	"	"	"	"	
Lead	ND	25	"	"	"	"	"	"	RL1
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	ND	25	"	"	"	"	"	"	RL1
051107-CA-06 (MQE0768-06) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Silver	ND	2.5	mg/kg	5	7E25048	05/25/07	05/30/07	EPA 6010B	RL1
Arsenic	ND	25	"	"	"	"	05/30/07	"	RL1
Barium	**490**	25	"	"	"	"	"	"	
Calcium	**7100**	62	"	"	"	"	"	"	
Cadmium	ND	1.0	"	"	"	"	"	"	RL1
Chromium	**1000**	25	"	"	"	"	"	"	
Copper	**22**	20	"	"	"	"	"	"	
Mercury	**330**	8.0	"	400	7E30030	05/30/07	05/31/07	EPA 7471A	
Magnesium	**67000**	12	"	5	7E25048	05/25/07	05/30/07	EPA 6010B	
Nickel	**1900**	25	"	"	"	"	"	"	
Lead	ND	25	"	"	"	"	"	"	RL1
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**38**	25	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQE0768
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051107-CA-07 (MQE0768-07) Soil Sampled: 05/11/07 00:00 Received: 05/14/07 17:45									
Silver	ND	2.5	mg/kg	5	7E25048	05/25/07	05/30/07	EPA 6010B	RL1
Arsenic	ND	25	"	"	"	"	05/30/07	"	RL1
Barium	**140**	25	"	"	"	"	"	"	
Calcium	**4300**	62	"	"	"	"	"	"	
Cadmium	ND	1.0	"	"	"	"	"	"	RL1
Chromium	**80**	25	"	"	"	"	"	"	
Copper	**22**	20	"	"	"	"	"	"	
Mercury	**3.1**	2.0	"	100	7E25014	05/25/07	05/25/07	EPA 7471A	
Magnesium	**8500**	12	"	5	7E25048	05/25/07	05/30/07	EPA 6010B	
Nickel	**110**	25	"	"	"	"	"	"	
Lead	ND	25	"	"	"	"	"	"	RL1
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**62**	25	"	"	"	"	"	"	
051407-S-CA-08 (MQE0768-08) Soil Sampled: 05/14/07 00:00 Received: 05/14/07 17:45									
Silver	ND	0.50	mg/kg	1	7E25048	05/25/07	05/29/07	EPA 6010B	C
Arsenic	**43**	5.0	"	"	"	"	05/30/07	"	
Barium	**48**	5.0	"	"	"	"	05/29/07	"	
Calcium	**2400**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**20**	5.0	"	"	"	"	"	"	
Copper	**88**	4.0	"	"	"	"	"	"	
Mercury	**63**	4.0	"	200	7E30030	05/30/07	05/31/07	EPA 7471A	
Magnesium	**3000**	2.5	"	1	7E25048	05/25/07	05/29/07	EPA 6010B	B1
Nickel	**50**	5.0	"	"	"	"	"	"	
Lead	**12**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**67**	5.0	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQE0768
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051407-S-CA-09 (MQE0768-09) Soil Sampled: 05/14/07 00:00 Received: 05/14/07 17:45									
Silver	**5.7**	0.50	mg/kg	1	7E25048	05/25/07	05/30/07	EPA 6010B	
Arsenic	**140**	5.0	"	"	"	"	05/30/07	"	
Barium	**32**	5.0	"	"	"	"	05/29/07	"	
Calcium	**2300**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	ND	5.0	"	"	"	"	"	"	
Copper	**49**	4.0	"	"	"	"	"	"	
Mercury	**330**	10	"	500	7E30030	05/30/07	05/31/07	EPA 7471A	
Magnesium	**280**	2.5	"	1	7E25048	05/25/07	05/29/07	EPA 6010B	
Nickel	ND	5.0	"	"	"	"	"	"	
Lead	**42**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**11**	5.0	"	"	"	"	"	"	
051407-S-CA-10 (MQE0768-10) Soil Sampled: 05/14/07 00:00 Received: 05/14/07 17:45									
Silver	ND	0.50	mg/kg	1	7E25048	05/25/07	05/29/07	EPA 6010B	C
Arsenic	**64**	5.0	"	"	"	"	05/30/07	"	
Barium	**66**	5.0	"	"	"	"	05/29/07	"	
Calcium	**1200**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**27**	5.0	"	"	"	"	"	"	
Copper	**19**	4.0	"	"	"	"	"	"	
Mercury	**0.034**	0.020	"	"	7F01009	06/01/07	06/01/07	EPA 7471A	
Magnesium	**3500**	2.5	"	"	7E25048	05/25/07	05/29/07	EPA 6010B	B1
Nickel	**18**	5.0	"	"	"	"	"	"	
Lead	**13**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**30**	5.0	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQE0768
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Conventional Chemistry Parameters by APHA/EPA Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051107-BB-01 (MQE0768-01) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**4.7**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	
051107-BB-02 (MQE0768-02) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**6.2**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	
051107-BB-03 (MQE0768-03) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**7.7**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	
051107-BB-04 (MQE0768-04) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**7.3**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	
051107-CA-05 (MQE0768-05) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**14**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	
051107-CA-06 (MQE0768-06) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**8.8**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	
051107-CA-07 (MQE0768-07) Soil	**Sampled: 05/11/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**15**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	
051407-S-CA-08 (MQE0768-08) Soil	**Sampled: 05/14/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**68**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	
051407-S-CA-09 (MQE0768-09) Soil	**Sampled: 05/14/07 00:00**	**Received: 05/14/07 17:45**							
Moisture	**6.5**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQE0768
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Conventional Chemistry Parameters by APHA/EPA Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
051407-S-CA-10 (MQE0768-10) Soil Sampled: 05/14/07 00:00 Received: 05/14/07 17:45									
Moisture	**5.9**	0.10	%	1	7F01007	05/31/07	06/01/07	SM 2540E	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

TOTAL ORGANIC CARBON (EPA 9060A MOD.) - Quality Control

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7E24119 - General Prep / EPA 9060A MOD.										
Blank (7E24119-BLK1)				Prepared & Analyzed: 05/24/07						
Total Organic Carbon	ND	5000	mg/kg							
Laboratory Control Sample (7E24119-BS1)				Prepared & Analyzed: 05/24/07						
Total Organic Carbon	10800	5000	mg/kg	10000		108	90-110			
Matrix Spike (7E24119-MS1)	**Source: IQE2025-01**			Prepared & Analyzed: 05/24/07						
Total Organic Carbon	21500	5000	mg/kg	25000	ND	86	70-130			
Matrix Spike Dup (7E24119-MSD1)	**Source: IQE2025-01**			Prepared & Analyzed: 05/24/07						
Total Organic Carbon	19600	5000	mg/kg	25000	ND	78	70-130	9	30	
Batch 7E29131 - General Prep / EPA 9060A MOD.										
Blank (7E29131-BLK1)				Prepared & Analyzed: 05/29/07						
Total Organic Carbon	ND	5000	mg/kg							
Laboratory Control Sample (7E29131-BS1)				Prepared & Analyzed: 05/29/07						
Total Organic Carbon	9480	5000	mg/kg	10000		95	90-110			
Matrix Spike (7E29131-MS1)	**Source: MQE0768-10**			Prepared & Analyzed: 05/29/07						
Total Organic Carbon	24400	5000	mg/kg	25000	ND	98	70-130			
Matrix Spike Dup (7E29131-MSD1)	**Source: MQE0768-10**			Prepared & Analyzed: 05/29/07						
Total Organic Carbon	23900	5000	mg/kg	25000	ND	96	70-130	2	30	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7E25048 - EPA 3050B / EPA 6010B										
Blank (7E25048-BLK1)				Prepared: 05/25/07 Analyzed: 05/29/07						
Lead	ND	5.0	mg/kg							
Arsenic	ND	5.0	"							
Barium	ND	5.0	"							
Calcium	ND	12	"							
Cadmium	ND	0.20	"							
Silver	ND	0.50	"							C
Chromium	ND	5.0	"							
Copper	ND	4.0	"							
Magnesium	22.8	2.5	"							B1
Zinc	ND	5.0	"							
Nickel	ND	5.0	"							
Selenium	ND	10	"							
Laboratory Control Sample (7E25048-BS1)				Prepared: 05/25/07 Analyzed: 05/29/07						
Zinc	45.7	5.0	mg/kg	50.0		91	80-115			
Selenium	47.0	10	"	50.0		94	80-115			
Calcium	482	12	"	500		96	80-115			
Copper	46.6	4.0	"	50.0		93	85-115			
Barium	46.7	5.0	"	50.0		93	85-120			
Chromium	46.7	5.0	"	50.0		93	80-115			
Cadmium	44.8	0.20	"	50.0		90	80-115			
Nickel	46.4	5.0	"	50.0		93	80-115			
Arsenic	46.3	5.0	"	50.0		93	80-115			
Lead	45.6	5.0	"	50.0		91	80-115			
Silver	45.8	0.50	"	50.0		92	80-115			C
Magnesium	483	2.5	"	500		97	75-115			B1
Matrix Spike (7E25048-MS1)	**Source: MQE0723-02**			Prepared: 05/25/07 Analyzed: 05/29/07						
Nickel	92.9	5.0	mg/kg	50.0	80	26	80-115			M8
Zinc	89.2	5.0	"	50.0	51	76	80-115			M8
Lead	53.6	5.0	"	50.0	9.5	88	80-115			
Magnesium	6660	2.5	"	500	7800	0	75-115			M8, B1
Copper	70.8	4.0	"	50.0	24	94	85-115			
Chromium	83.4	5.0	"	50.0	48	71	80-115			M8
Cadmium	47.6	0.20	"	50.0	0.22	95	80-115			
Calcium	5050	12	"	500	3400	330	80-115			M7
Barium	162	5.0	"	50.0	150	24	85-120			M8

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7E25048 - EPA 3050B / EPA 6010B										
Matrix Spike (7E25048-MS1)	**Source: MQE0723-02**			Prepared: 05/25/07 Analyzed: 05/29/07						
Arsenic	54.4	5.0	mg/kg	50.0	10	89	80-115			
Selenium	48.1	10	"	50.0	ND	96	80-115			
Silver	46.8	0.50	"	50.0	ND	94	80-115			C
Matrix Spike Dup (7E25048-MSD1)	**Source: MQE0723-02**			Prepared: 05/25/07 Analyzed: 05/29/07						
Zinc	89.6	5.0	mg/kg	50.0	51	77	80-115	0.4	35	M8
Calcium	4250	12	"	500	3400	170	80-115	17	40	M7
Cadmium	43.3	0.20	"	50.0	0.22	86	80-115	9	20	
Chromium	83.9	5.0	"	50.0	48	72	80-115	0.6	30	M8
Copper	67.4	4.0	"	50.0	24	87	85-115	5	35	
Magnesium	7560	2.5	"	500	7800	0	75-115	13	35	M8, B1
Nickel	97.6	5.0	"	50.0	80	35	80-115	5	35	M8
Barium	187	5.0	"	50.0	150	74	85-120	14	30	M8
Selenium	44.7	10	"	50.0	ND	89	80-115	7	30	
Lead	51.6	5.0	"	50.0	9.5	84	80-115	4	35	
Arsenic	52.8	5.0	"	50.0	10	86	80-115	3	25	
Silver	42.8	0.50	"	50.0	ND	86	80-115	9	30	C
Batch 7E25014 - EPA 7471A / EPA 7471A										
Blank (7E25014-BLK1)				Prepared & Analyzed: 05/25/07						
Mercury	ND	0.020	mg/kg							
Laboratory Control Sample (7E25014-BS1)				Prepared & Analyzed: 05/25/07						
Mercury	0.639	0.020	mg/kg	0.667		96	80-125			
Matrix Spike (7E25014-MS1)	**Source: MQE0723-02**			Prepared & Analyzed: 05/25/07						
Mercury	0.720	0.020	mg/kg	0.667	0.056	100	80-125			

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/06/07 16:03

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7E25014 - EPA 7471A / EPA 7471A										
Matrix Spike Dup (7E25014-MSD1)	**Source: MQE0723-02**			Prepared & Analyzed: 05/25/07						
Mercury	0.726	0.020	mg/kg	0.667	0.056	100	80-125	0.8	20	
Batch 7E30030 - EPA 7471A / EPA 7471A										
Blank (7E30030-BLK1)				Prepared: 05/30/07 Analyzed: 05/31/07						
Mercury	ND	0.020	mg/kg							
Laboratory Control Sample (7E30030-BS1)				Prepared: 05/30/07 Analyzed: 05/31/07						
Mercury	0.692	0.020	mg/kg	0.667		104	80-125			
Matrix Spike (7E30030-MS1)	**Source: MQE0699-01**			Prepared: 05/30/07 Analyzed: 05/31/07						
Mercury	0.549	0.020	mg/kg	0.667	0.0025	82	80-125			
Matrix Spike Dup (7E30030-MSD1)	**Source: MQE0699-01**			Prepared: 05/30/07 Analyzed: 05/31/07						
Mercury	0.510	0.020	mg/kg	0.667	0.0025	76	80-125	7	20	M8
Batch 7F01009 - EPA 7471A / EPA 7471A										
Blank (7F01009-BLK1)				Prepared & Analyzed: 06/01/07						
Mercury	ND	0.020	mg/kg							
Laboratory Control Sample (7F01009-BS1)				Prepared & Analyzed: 06/01/07						
Mercury	0.656	0.020	mg/kg	0.667		98	80-125			
Matrix Spike (7F01009-MS1)	**Source: MQE0831-01**			Prepared & Analyzed: 06/01/07						
Mercury	0.788	0.020	mg/kg	0.667	0.093	104	80-125			

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Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F01009 - EPA 7471A / EPA 7471A										
Matrix Spike Dup (7F01009-MSD1)	**Source: MQE0831-01**			Prepared & Analyzed: 06/01/07						
Mercury	0.769	0.020	mg/kg	0.667	0.093	101	80-125	2	20	

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Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F01007 - General Preparation / SM 2540E										
Duplicate (7F01007-DUP1)	**Source: MQE0768-06**			Prepared: 05/31/07 Analyzed: 06/01/07						
Moisture	8.45	0.10	%		8.8			4	20	

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Notes and Definitions

RL1	Reporting limit raised due to sample matrix effects.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
C	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
B1	Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SACOC

TestAmerica
ANALYTICAL TESTING CORPORATION

CHAIN OF CUSTODY

☒ 885 Jarvis Drive • **Morgan Hill, CA 95037** • (408) 776-9600 • FAX (408) 782-6308
☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100

Company Name: SF Bay Water Board — Project: Mercury Mines
Mailing Address: 1515 Clay St. #1400 — Billing Address (if different):
City: Oakland — State: CA — Zip Code: 94612
Telephone: (510) 622-1015 — Fax #: (510) 622-2460 — P.O. #:
Report To: CARRIE AUSTIN — E-Mail Address: CAUSTIN@waterboards.ca.gov — QC Data: ☐ Level II (standard) ☐ Level III ☐ Level IV
Sampler: " " — Date/Time Results Required: — Test America Work Order # MQE0768

Turnaround Time: ☒ 10-15 Working Days (Standard TAT) ☐ 7 Working Days ☐ 5 Working Days ☐ 72 hours ☐ 48 hours ☐ 24 hours ☐ 2-8 hours

MANDATORY: ☐ SDWA (Drinking Water) ☐ CWA (Waste Water) ☒ RCRA (Hazardous Waste) ☒ Other (soil)

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Test America's Sample #		Mercury 7470	Metals 6010	Grainsize D422M/psd	TOC 415.1					Comments/Temp. (if required)
1. 051107-S-BB-01	05/11/07	Mine Waste	1	1L WM Clear Glass	01		X	X	X	X					
2. " -02		Mine Waste			02		X	X	X	X					
3. " -03		soil			03		X	X	X	X					
4. " -04		soil			04		X	X	X	X					
5. 051107 S-CA-05		Mine Waste			05		X	X	X	X					
6. " -06					06		X	X	X	X					
7. " -07		soil			07		X	X	X	X					
8. 051407-S-CA-08	05/14/07	(sed) ~~Soil~~			08		X	X	X	X					
9. " -09		Mine Waste			09		X	X	X	X					Temp 17.0C
10. " -10		soil			10		X	X	X	X					

Relinquished by/Co.		Received by/Co.	Date/Time/Temp	
[signature]	5/14/07 16:50	[signature] / TA	5-14-07	1555
[signature] / TA		[signature]	5-14-07	1615
[signature]		[signature]	5-14-07	1745

Samples Received in Good Condition? ☒ Yes ☐ No Samples on Ice? ☒ Yes ☐ No Method of Shipment: CLIENT Page 1 of 1

In relinquishing samples to Test America, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days.

White: Test America **Yellow:** Test America **Pink:** Client

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: SF Bay Water Board
REC. BY (PRINT): A.M.
WORKORDER: MQE0768

DATE REC'D AT LAB: 5/14/07
TIME REC'D AT LAB: 1745
DATE LOGGED IN: 5/22/07

For Regulatory Purposes?
DRINKING WATER YES (NO)
WASTE WATER YES (NO)

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / (Absent) Intact / Broken*								
2. Chain-of-Custody (Present) / Absent*								
3. Traffic Reports or Packing List: Present / (Absent)								
4. Airbill: Airbill / Sticker Present / (Absent)								
5. Airbill #:								
6. Sample Labels: (Present) / Absent								
7. Sample IDs: (Listed) / Not Listed on Chain-of-Custody								
8. Sample Condition: (Intact) / Broken* / Leaking*								
9. **Does information on chain-of-custody, traffic reports and sample labels agree?** (Yes) / No*								
10. Sample received within hold time? (Yes) / No*								
11. Adequate sample volume received? (Yes) / No*								
12. Proper preservatives used? (Yes) / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / (No)								
14. Read Temp: 4.0°C Corrected Temp: 4.0°C Is corrected temp 4 +/-2°C? (Yes) / No**								

(Acceptance range for samples requiring thermal pres.)

**Exception (if any): METALS / DFF ON ICE or Problem COC

5/14/07 A.M. See COC

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

TestAmerica
ANALYTICAL TESTING CORPORATION

CHAIN OF CUSTODY

☒ 885 Jarvis Drive • **Morgan Hill, CA 95037** • (408) 776-9600 • FAX (408) 782-6308
☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100

Company Name: SF Bay Water Board
Project: Mercury Mines
Mailing Address: 1515 Clay St. #1400
Billing Address (if different):
City: Oakland State: CA Zip Code: 94612
Telephone: (510) 622-1015 Fax #: (510) 622-2460 P.O. #:
Report To: CARRIE AUSTIN E-Mail Address: CAUSTIN@waterboards.ca.gov QC Data: ☐ Level II (standard) ☐ Level III ☐ Level IV
Sampler: " " Date/Time Results Required: Test America Work Order # MQE0768

Turnaround Time:
☒ 10-15 Working Days (Standard TAT)
☐ 7 Working Days
☐ 5 Working Days
☐ 72 hours
☐ 48 hours
☐ 24 hours
☐ 2-8 hours

MANDATORY:
☐ SDWA (Drinking Water)
☐ CWA (Waste Water)
☒ RCRA (Hazardous Waste)
☒ Other (soil)

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Test America's Sample #	Mercury 7470	Metals 6010	Grain size D422 M/PSP	TOC 415.1	Comments/Temp. (if required)
1. Ø511Ø7-S-BB-Ø1	05/11/07	Mine Waste	1	1L w/Clear Glass	01	X	X	X	X	
2. " -02		Mine Waste			02	X	X	X	X	
3. " -03		soil			03	X	X	X	X	
4. " -04		soil			04	X	X	X	X	
5. Ø511Ø7-S-CA-05		Mine Waste			05	X	X	X	X	
6. " -06		↓			06	X	X	X	X	
7. " -07		soil			07	X	X	X	X	
8. Ø514Ø7-S-CA-08	05/14/07	(sed) ~~Soil~~			08	X	X	X	X	
9. " -09		Mine Waste			09	X	X	X	X	Temp 17.0c
10. " -10		soil			10	X	X	X	X	

Relinquished by/Co.: Date/Time/Temp: 5/14/07 15:50 Received by/Co.: TA Date/Time/Temp: 5-14-07 1555
Relinquished by/Co.: Received by/Co.: Date/Time/Temp: 5-14-07 1615
Relinquished by/Co.: Received by/Co.: Date/Time/Temp: 5-14-07 1745

Samples Received in Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment: CLIENT Page 1 of 1

By relinquishing samples to Test America, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Invoices is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days.

White: Test America **Yellow:** Test America **Pink:** Client

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: SF Bay Water Board
REC. BY (PRINT): A.M.
WORKORDER: MQE0768

DATE REC'D AT LAB: 5/14/07
TIME REC'D AT LAB: 1745
DATE LOGGED IN: 5/22/07

For Regulatory Purposes?
DRINKING WATER YES (NO)
WASTE WATER YES (NO)

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / (Absent) Intact / Broken*								
2. Chain-of-Custody	(Present) / Absent*								
3. Traffic Reports or Packing List:	Present / (Absent)								
4. Airbill:	Airbill / Sticker Present / (Absent)								
5. Airbill #:									
6. Sample Labels:	(Present) / Absent								
7. Sample IDs:	(Listed) / Not Listed on Chain-of-Custody								
8. Sample Condition:	(Intact) / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree?	(Yes) / No*								
10. Sample received within hold time?	(Yes) / No*								
11. Adequate sample volume received?	(Yes) / No*								
12. Proper preservatives used?	(Yes) / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes)	Yes / (No)								
14. Read Temp: 4.0c; Corrected Temp: 4.0°C; Is corrected temp 4 +/-2°C?	(Yes) / No**								

(Acceptance range for samples requiring thermal pres.)

**Exception (if any): METALS / DFF ON ICE or Problem COC

5/14/07 A.M. See COC

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

STL Burlington
South Burlington, VT

Sample Data Summary Package

SDG: MQE0768

Case Narrative

SEVERN TRENT STL

STL Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403

Tel: 802 660 1990 Fax: 802 660 1919
www.stl-inc.com

June 6, 2007

Ms. Leticia Reyes
Test America, Inc.
Morgan Hill Division
885 Jarvis Drive
Morgan Hill, CA 95037

Re: Laboratory Project No. 27000
Case: RWQCB; SDG: MQE0768

Dear Ms. Reyes:

Enclosed are the analytical results for the samples that were received by STL Burlington on May 24th, 2007. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 05/24/07 ETR No: 120197		
711825	MQE0768-01	05/11/07	SOIL
711826	MQE0768-02	05/11/07	SOIL
711827	MQE0768-03	05/11/07	SOIL
711828	MQE0768-04	05/11/07	SOIL
711829	MQE0768-05	05/11/07	SOIL
711830	MQE0768-06	05/11/07	SOIL
711831	MQE0768-07	05/11/07	SOIL
711832	MQE0768-08	05/14/07	SOIL
711833	MQE0768-09	05/14/07	SOIL
711834	MQE0768-10	05/14/07	SOIL

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal. Samples MQE0768-01 and MQE0768-02 were received broken. Replacement volume and additional sample volume for the samples were received on May 30th, 2007.

Particle Size Analysis by ASTM D422
There were no exceptions to the method quality control criteria during the analyses of these samples.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine Dusablon
Project Manager

Enclosure

Chain of Custody

SUBCONTRACT ORDER

TestAmerica - Morgan Hill, CA

MQE0768

SENDING LABORATORY:	RECEIVING LABORATORY:
TestAmerica - Morgan Hill, CA	STL - Burlington, VT
885 Jarvis Drive	208 South Park Drive, Suite 1
Morgan Hill, CA 95037	Colchester, VT 05446
Phone: 408-776-9600	Phone :(802) 655-1203
Fax: 408-782-6308	Fax: (802) 655-1248
Project Manager: Leticia Reyes	Project Location:
Client: RWQCB-Regional Water Quality Control Board	Receipt Temperature:_____°C Ice: Y / N

Contract Agreement: 04-006-120-0; Registration Number: 3940010561563. Send Hard Copy and copy of Invoice: include Copy of COC with invoice: Send one monthly invoices, with attached, itemized sub-invoices as needed, per contract

Analysis	Due	Expires	Interlab	Surch	Comments
Sample ID: MQE0768-01	**Soil**		Sampled: 05/11/07 00:00		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					
Sample ID: MQE0768-02	**Soil**		Sampled: 05/11/07 00:00		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					
Sample ID: MQE0768-03	**Soil**		Sampled: 05/11/07 00:00		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					
Sample ID: MQE0768-04	**Soil**		Sampled: 05/11/07 00:00		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					
Sample ID: MQE0768-05	**Soil**		Sampled: 05/11/07 00:00		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					
Sample ID: MQE0768-06	**Soil**		Sampled: 05/11/07 00:00		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					

Released By	Date/Time	Received By	Date/Time
Julie Ng.	5/23 1500	Thomas Jackson	5-24-07 / 0915

Page 1 of 2

SUBCONTRACT ORDER

TestAmerica - Morgan Hill, CA

MQE0768

Analysis	Due	Expires	Interlab	Surch	Comments
Sample ID: MQE0768-07	**Soil**		Sampled: 05/11/07 00:00		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					
Sample ID: MQE0768-08	**Soil**		Sampled: 05/14/07 00:00		
Grain Size analysis	05/30/07 15:00	05/28/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					
Sample ID: MQE0768-09	**Soil**		Sampled: 05/14/07 00:00		
Grain Size analysis	05/30/07 15:00	05/28/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					
Sample ID: MQE0768-10	**Soil**		Sampled: 05/14/07 00:00		
Grain Size analysis	05/30/07 15:00	05/28/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)					

SUBCONTRACT ORDER

TestAmerica - Morgan Hill, CA

MQE0768

ADDITIONAL SAMPLES

SENDING LABORATORY:

TestAmerica - Morgan Hill, CA
885 Jarvis Drive
Morgan Hill, CA 95037
Phone: 408-776-9600
Fax: 408-782-6308
Project Manager: Leticia Reyes
Client: RWQCB-Regional Water Quality Control Board

RECEIVING LABORATORY: REPLACEMENT SAMPLES

STL - Burlington, VT
208 South Park Drive, Suite 1
Colchester, VT 05446
Phone :(802) 655-1203
Fax: (802) 655-1248
Project Location:
Receipt Temperature: _____ °C Ice: Y / N

Contract Agreement: 04-006-120-0; Registration Number: 3940010561563. Send Hard Copy and copy of Invoice: include Copy of COC with invoice: Send one monthly invoices, with attached, itemized sub-invoices as needed, per contract

Analysis	Due	Expires	Interlab	Surch	Comments
Sample ID: MQE0768-01	**Soil**		Sampled: **05/11/07 00:00**		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)	4 oz. jar (E)			
Sample ID: MQE0768-02	**Soil**		Sampled: **05/11/07 00:00**		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)	4 oz. jar (E)			
Sample ID: MQE0768-03	**Soil**		Sampled: **05/11/07 00:00**		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)				
Sample ID: MQE0768-04	**Soil**		Sampled: **05/11/07 00:00**		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)				
Sample ID: MQE0768-05	**Soil**		Sampled: **05/11/07 00:00**		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)				
Sample ID: MQE0768-06	**Soil**		Sampled: **05/11/07 00:00**		
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)				

Julie Ng. 5/29 1500
Released By Date/Time

Thomas Jackson 5-30-07 / 0920
Received By Date/Time

Released By Date/Time

Received By Date/Time

SUBCONTRACT ORDER

TestAmerica - Morgan Hill, CA

MQE0768

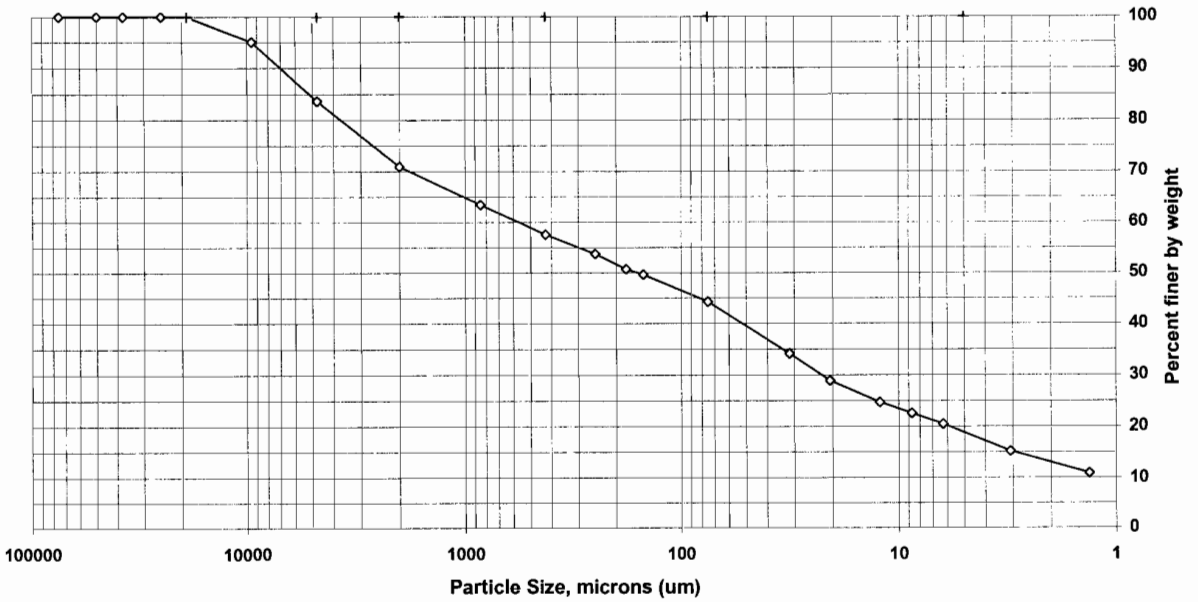
Analysis	Due	Expires	Interlab	Surch	Comments
Sample ID: MQE0768-07	**Soil**	Sampled: **05/11/07 00:00**			
Grain Size analysis	05/30/07 15:00	05/25/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)				
Sample ID: MQE0768-08	**Soil**	Sampled: **05/14/07 00:00**			
Grain Size analysis	05/30/07 15:00	05/28/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)				
Sample ID: MQE0768-09	**Soil**	Sampled: **05/14/07 00:00**			
Grain Size analysis	05/30/07 15:00	05/28/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)				
Sample ID: MQE0768-10	**Soil**	Sampled: **05/14/07 00:00**			
Grain Size analysis	05/30/07 15:00	05/28/07 00:00	$55.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied:					
4 oz. jar (C)	4 oz. jar (D)				

Sample Data Summary Package - Geotechnical

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-01	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711825			**End Date:**	6/6/2007

Percent Solids:	94.4%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	95.1	4.9
#4	4750	83.6	11.4
#10	2000	71.0	12.7
#20	850	63.5	7.5
#40	425	57.6	5.9
#60	250	53.7	3.8
#80	180	50.7	3.0
#100	150	49.6	1.1
#200	75	44.3	5.3
Hydrometer	31.6	34.1	10.2
|	20.6	28.9	5.3
|	12.1	24.7	4.2
|	8.7	22.6	2.1
|	6.3	20.5	2.1
|	3.1	15.2	5.3
V	1.3	10.9	4.4

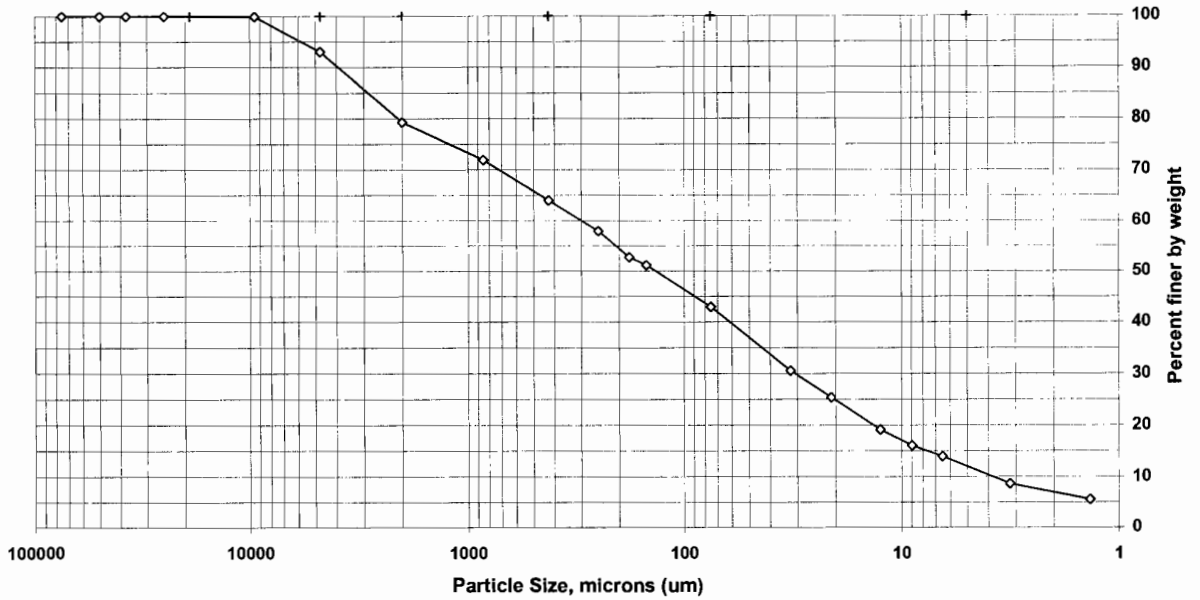
Soil Classification	Percent of Total Sample
Gravel	16.4
Sand	39.3
Coarse Sand	12.7
Medium Sand	13.4
Fine Sand	13.3
Silt	23.8
Clay	20.5

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-02	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711826			**End Date:**	6/6/2007

Percent Solids:	94.8%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.9	0.1
#4	4750	93.0	6.9
#10	2000	79.2	13.8
#20	850	71.9	7.3
#40	425	64.0	7.9
#60	250	57.9	6.1
#80	180	52.8	5.1
#100	150	51.2	1.6
#200	75	43.0	8.2
Hydrometer	32.2	30.5	12.5
|	20.9	25.3	5.2
|	12.5	19.1	6.2
|	9.0	16.0	3.1
|	6.5	14.0	2.1
|	3.2	8.6	5.3
V	1.4	5.5	3.1

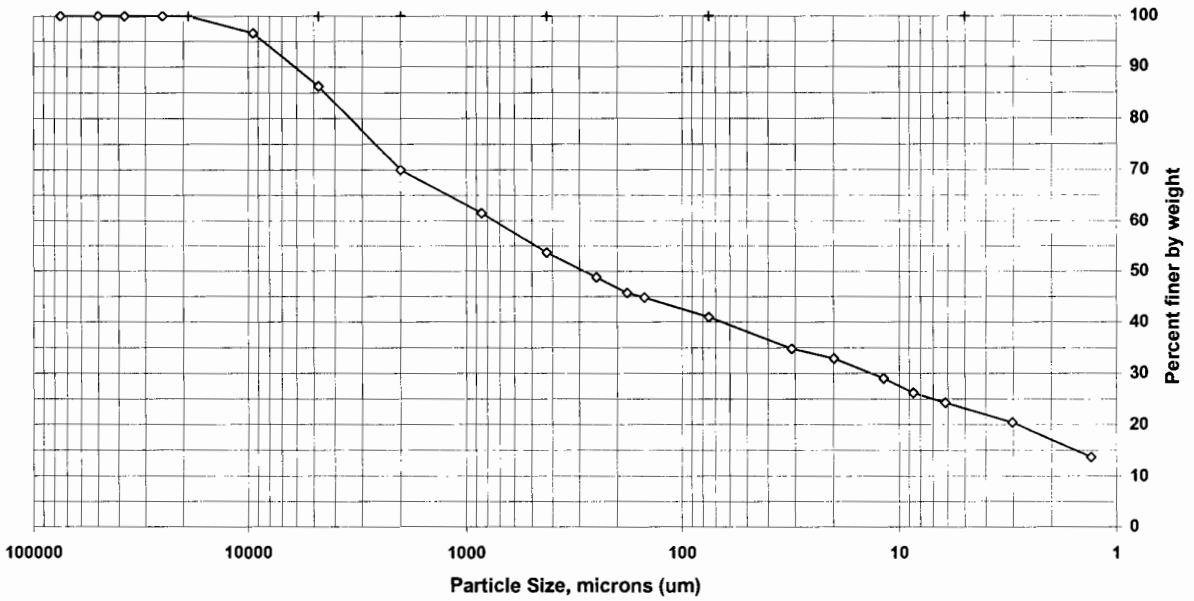
Soil Classification	Percent of Total Sample
Gravel	7.0
Sand	50.1
Coarse Sand	13.8
Medium Sand	15.2
Fine Sand	21.0
Silt	29.0
Clay	14.0

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-03	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711827			**End Date:**	6/6/2007

Percent Solids:	91.4%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	subrounded
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	96.7	3.3
#4	4750	86.2	10.4
#10	2000	70.0	16.2
#20	850	61.6	8.5
#40	425	53.7	7.9
#60	250	48.8	4.9
#80	180	45.8	3.1
#100	150	44.8	0.9
#200	75	41.0	3.8
Hydrometer	31.1	34.8	6.2
|	19.9	32.9	1.9
|	11.8	29.0	3.8
|	8.6	26.2	2.9
|	6.2	24.3	1.9
|	3.0	20.4	3.8
V	1.3	13.7	6.7

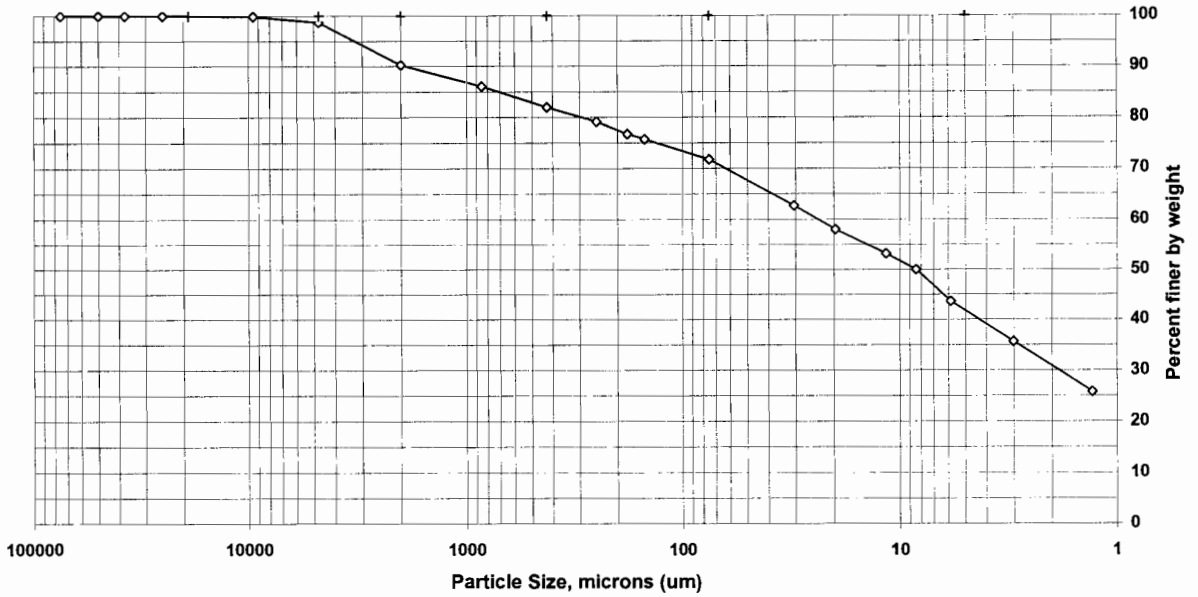
Soil Classification	Percent of Total Sample
Gravel	13.8
Sand	45.2
Coarse Sand	16.2
Medium Sand	16.3
Fine Sand	12.7
Silt	16.7
Clay	24.3

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-04	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711828			**End Date:**	6/6/2007

Percent Solids:	92.6%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	rounded
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.9	0.1
#4	4750	98.7	1.2
#10	2000	90.3	8.5
#20	850	86.1	4.2
#40	425	82.0	4.1
#60	250	79.1	2.9
#80	180	76.7	2.4
#100	150	75.7	1.0
#200	75	71.7	4.0
Hydrometer	30.5	62.8	9.0
|	19.6	58.0	4.8
|	11.6	53.2	4.8
|	8.4	50.0	3.2
|	5.8	43.6	6.4
|	3.0	35.6	8.0
V	1.3	25.8	9.8

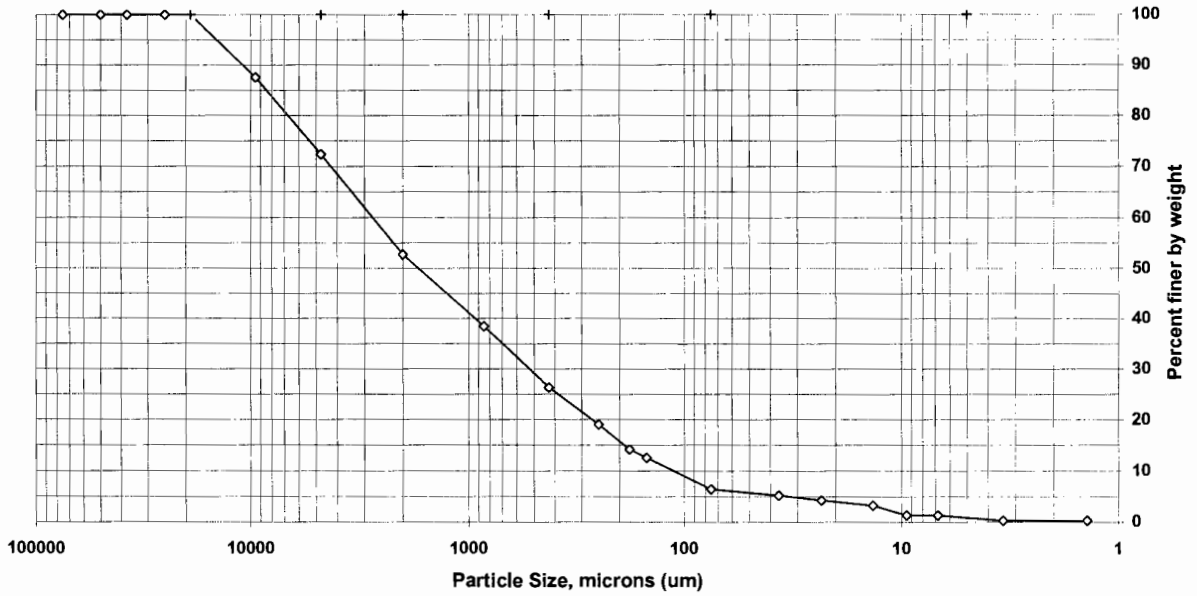
Soil Classification	Percent of Total Sample
Gravel	1.3
Sand	27.0
Coarse Sand	8.5
Medium Sand	8.3
Fine Sand	10.3
Silt	28.1
Clay	43.6

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-05	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711829			**End Date:**	6/6/2007

Percent Solids:	86.7%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	subangular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	87.6	12.4
#4	4750	72.3	15.2
#10	2000	52.7	19.6
#20	850	38.5	14.3
#40	425	26.3	12.2
#60	250	19.0	7.3
#80	180	14.2	4.9
#100	150	12.6	1.6
#200	75	6.4	6.1
Hydrometer	36.6	5.2	1.2
|	23.2	4.2	1.0
|	13.5	3.3	1.0
|	9.5	1.3	2.0
|	6.8	1.3	0.0
|	3.4	0.3	1.0
V	1.4	0.3	0.0

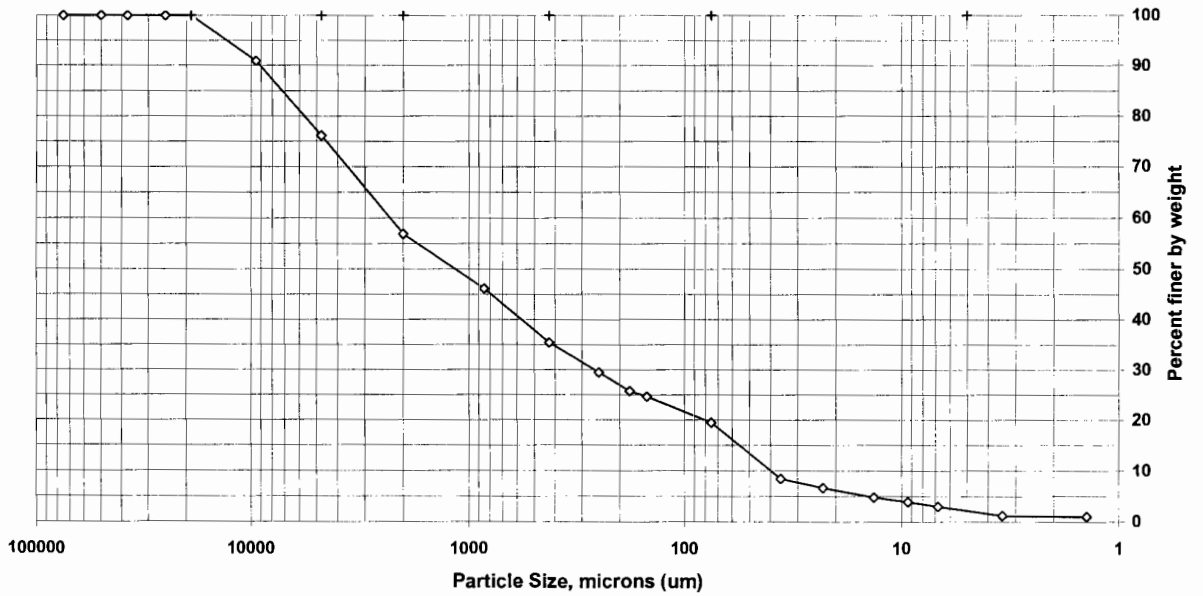
Soil Classification	Percent of Total Sample
Gravel	27.7
Sand	65.9
Coarse Sand	19.6
Medium Sand	26.4
Fine Sand	19.9
Silt	5.1
Clay	1.3

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-06	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711830			**End Date:**	6/6/2007

Percent Solids:	75.8%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	subangular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	90.9	9.1
#4	4750	76.1	14.8
#10	2000	56.8	19.3
#20	850	46.1	10.7
#40	425	35.4	10.7
#60	250	29.4	6.0
#80	180	25.7	3.7
#100	150	24.6	1.1
#200	75	19.4	5.2
Hydrometer	35.9	8.4	11.1
|	22.9	6.6	1.8
|	13.4	4.8	1.8
|	9.3	3.9	0.9
|	6.8	3.0	0.9
|	3.4	1.2	1.8
V	1.4	1.0	0.1

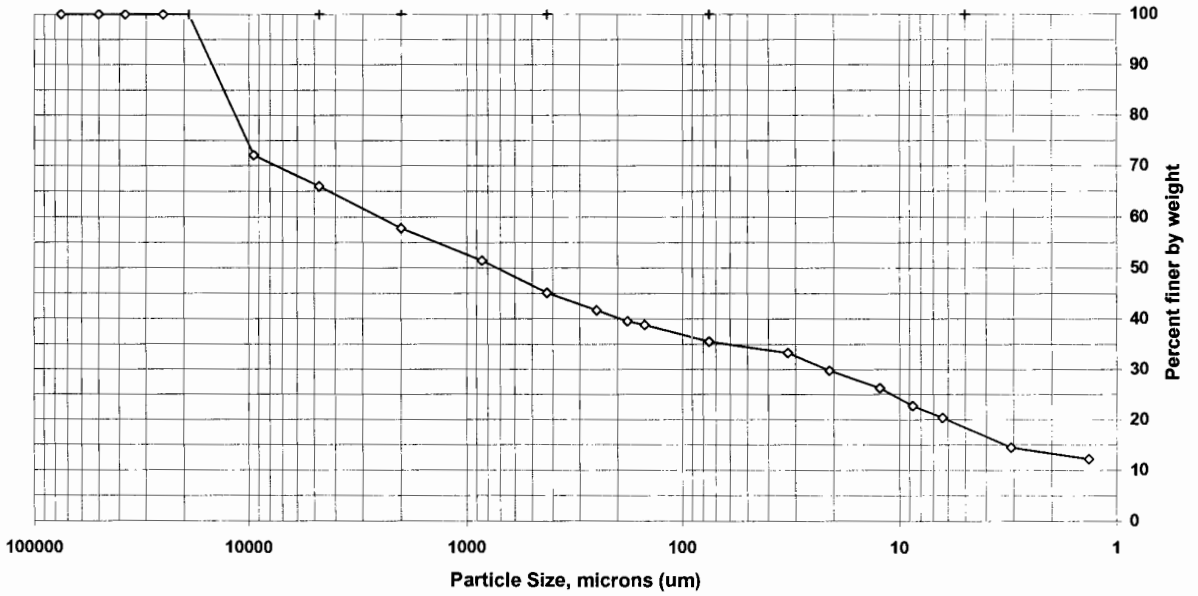
Soil Classification	Percent of Total Sample
Gravel	23.9
Sand	56.7
Coarse Sand	19.3
Medium Sand	21.4
Fine Sand	16.0
Silt	16.5
Clay	3.0

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-07	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711831			**End Date:**	6/6/2007

Percent Solids:	83.1%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	subangular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	72.1	27.9
#4	4750	66.0	6.1
#10	2000	57.8	8.2
#20	850	51.4	6.4
#40	425	45.1	6.3
#60	250	41.7	3.4
#80	180	39.5	2.2
#100	150	38.8	0.7
#200	75	35.5	3.3
Hydrometer	32.6	33.3	2.2
|	20.9	29.8	3.5
|	12.3	26.2	3.5
|	8.7	22.7	3.5
|	6.4	20.4	2.3
|	3.1	14.5	5.9
V	1.3	12.2	2.3

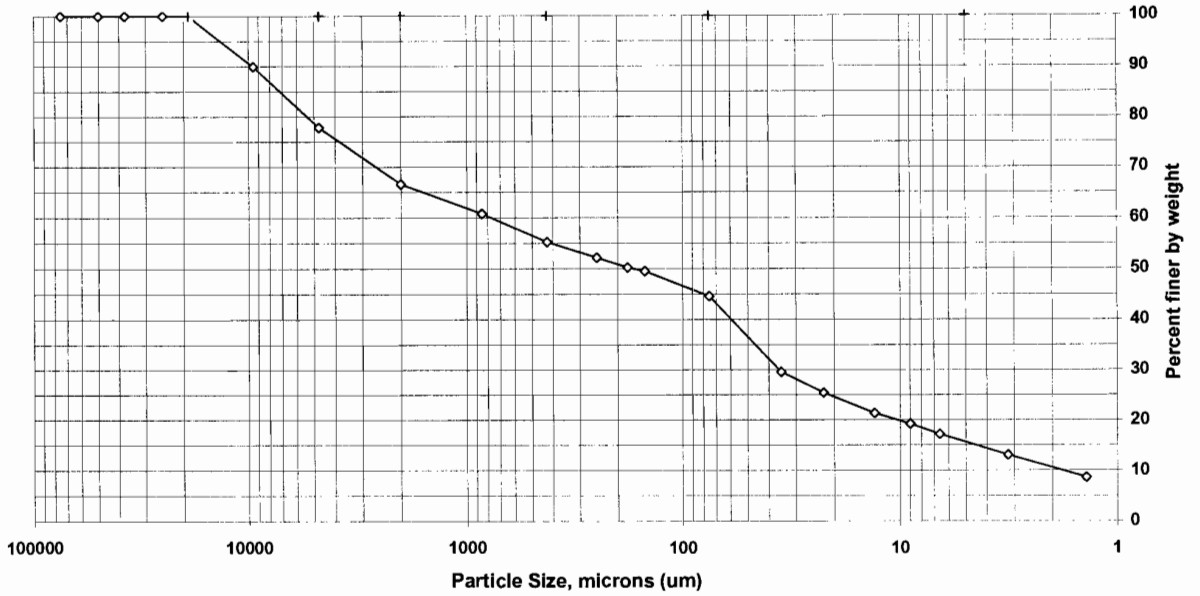
Soil Classification	Percent of Total Sample
Gravel	34.0
Sand	30.5
Coarse Sand	8.2
Medium Sand	12.7
Fine Sand	9.6
Silt	15.1
Clay	20.4

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-08	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711832			**End Date:**	6/6/2007

Percent Solids:	45.2%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	90.0	10.0
#4	4750	77.8	12.1
#10	2000	66.6	11.3
#20	850	60.8	5.8
#40	425	55.2	5.5
#60	250	52.2	3.1
#80	180	50.2	1.9
#100	150	49.5	0.7
#200	75	44.6	4.9
Hydrometer	35.1	29.6	15.1
|	22.4	25.4	4.1
|	13.1	21.3	4.1
|	9.0	19.2	2.1
|	6.6	17.2	2.1
|	3.2	13.1	4.1
V	1.4	8.6	4.5

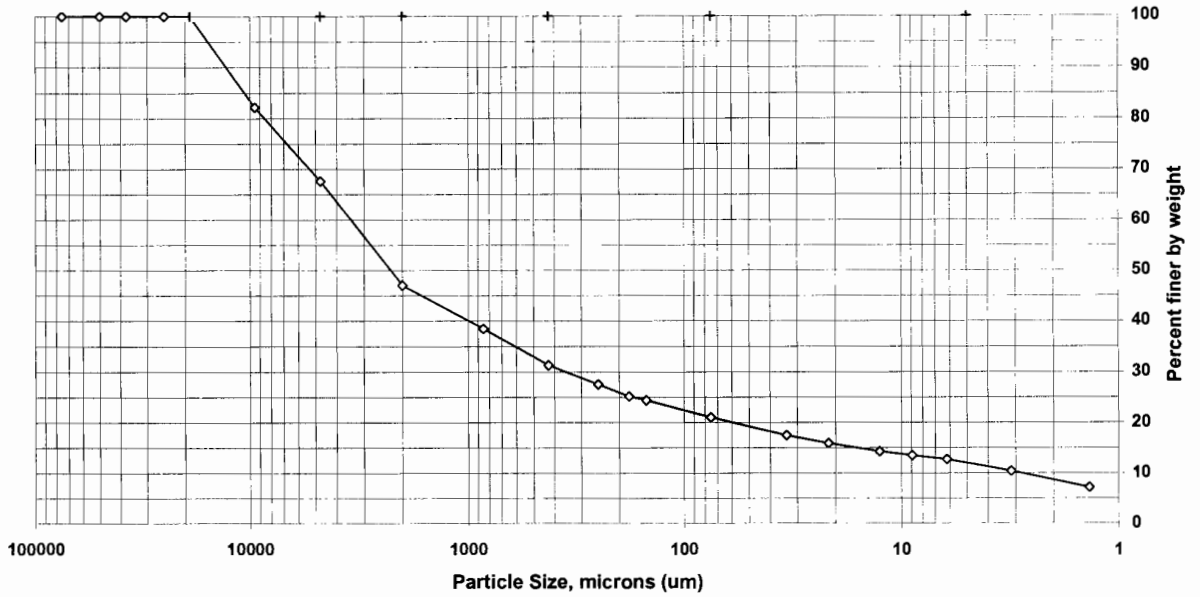
Soil Classification	Percent of Total Sample
Gravel	22.2
Sand	33.2
Coarse Sand	11.3
Medium Sand	11.3
Fine Sand	10.6
Silt	27.4
Clay	17.2

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-09	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711833			**End Date:**	6/6/2007

Percent Solids:	94.6%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	82.2	17.8
#4	4750	67.7	14.5
#10	2000	47.1	20.6
#20	850	38.4	8.6
#40	425	31.3	7.1
#60	250	27.5	3.8
#80	180	25.2	2.4
#100	150	24.4	0.8
#200	75	21.0	3.4
Hydrometer	33.7	17.5	3.6
|	21.5	15.9	1.6
|	12.5	14.3	1.6
|	8.9	13.6	0.8
|	6.2	12.8	0.8
|	3.1	10.4	2.3
V	1.4	7.2	3.3

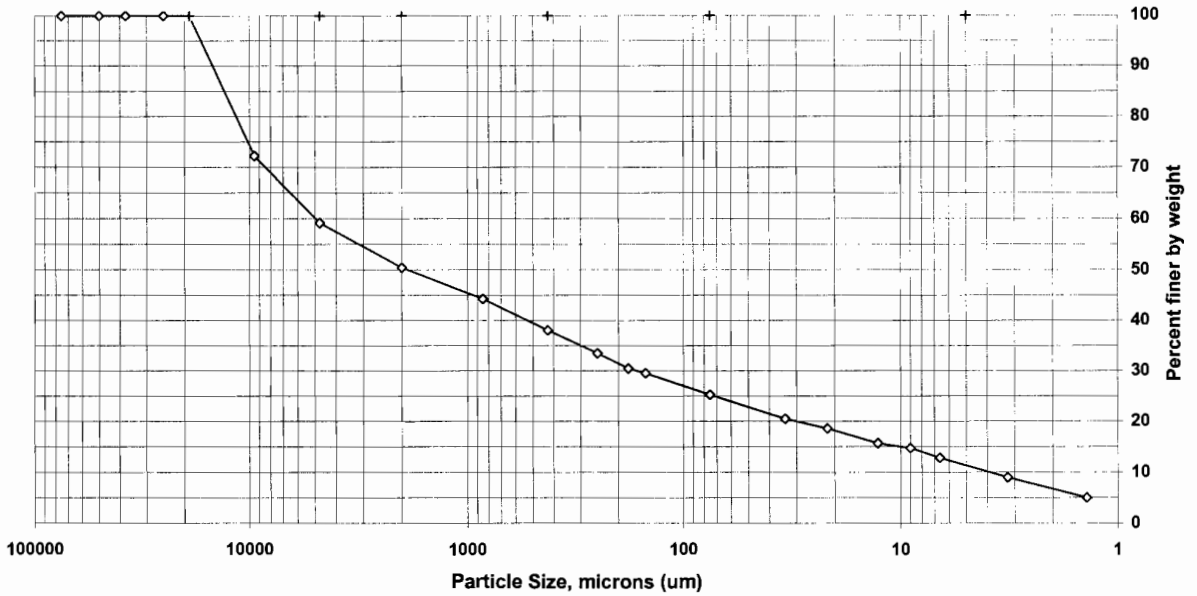
Soil Classification	Percent of Total Sample
Gravel	32.3
Sand	46.7
Coarse Sand	20.6
Medium Sand	15.8
Fine Sand	10.3
Silt	8.2
Clay	12.8

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQE0768	**Date Received:**	5/24/2007
Sample ID:	MQE0768-10	**ETR(s):**	120197	**Start Date:**	5/31/2007
Lab ID:	711834			**End Date:**	6/6/2007

Percent Solids:	93.4%	**Non-soil material:**	n/a
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	72.3	27.7
#4	4750	59.1	13.2
#10	2000	50.4	8.7
#20	850	44.3	6.1
#40	425	38.0	6.3
#60	250	33.5	4.5
#80	180	30.4	3.0
#100	150	29.5	1.0
#200	75	25.3	4.2
Hydrometer	33.8	20.5	4.8
|	21.6	18.6	1.9
|	12.7	15.7	2.9
|	9.0	14.7	1.0
|	6.6	12.8	1.9
|	3.2	9.0	3.8
V	1.4	5.0	4.0

Soil Classification	Percent of Total Sample
Gravel	40.9
Sand	33.8
Coarse Sand	8.7
Medium Sand	12.4
Fine Sand	12.8
Silt	12.5
Clay	12.8

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Sample Handling

RECEIVED
5-24-07
JThomas Jackson

From: Origin ID: RBKA (408)776-9600
Tim Costello
Test America
885 Jarvis Drive

Morgan Hill, CA 95037

CLS822387/21/23

Ship Date: 23MAY07
ActWgt: 19 LB
System#: 9141070/INET7011
Account#: S *********

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (802)655-1203 **BILL SENDER**

Sample Receiving
STL-Burlington
208 South Park Drive, Suite 1

Colchester, VT 05446

PRIORITY OVERNIGHT

THU
Deliver By:
24MAY07

TRK# 7986 8158 5240

FORM 0201

BTV

AA

05446 -VT-US

XH BTVA

Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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RECEIVED
5-30-07
JRomar Jackson

From: Origin ID: RBKA (408)776-9600
Tim Costello
Test America
885 Jarvis Drive

Morgan Hill, CA 95037

FedEx Express

CL:8822387/21/23

Ship Date: 29MAY07
ActWgt: 23 LB
System#: 9141070/INET2600
Account#: S *********

Delivery Address Bar Code

SHIP TO: (802)655-1203 **BILL SENDER**

Sample Receiving
STL-Burlington
208 South Park Drive Suite 1

Colchester, VT 05446

Ref #
Invoice #
PO #
Dept #

PRIORITY OVERNIGHT

WED
Deliver By:
30MAY07

TRK# 7907 4947 4993

FORM 0201

BTV AA

05446 -VT-US

XH BTVA

Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
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Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

STL BURLINGTON
SAMPLE RECEIPT & LOG IN CHECKLIST

Client: TACAMH	Date Received: 5-24-07	Log In Date: 5-31-07	
ETR: 120197	Time Received: 0915	By: J.J.	
SDG: MQE0768	Received By: J.J.	Signature: J Roman Jackson	
Project: 27000	# Coolers Received: 1	PM Signature: Krista Sisselman	
Samples Delivered By: X Shipping Service ☐ Courier ☐ Hand ☐ Other (specify)		Date: 6/14/07	
List Air bill Number(s) or Attach a photocopy of the Air Bill:			

COOLER SCREEN	YES	NO	NA	COMMENTS
There is *no* evidence to indicate tampering	X			
Custody seals are present and intact	X			
Custody seal numbers are present		X		
If yes, list custody seal numbers:				

Thermal Preservation Type: X Wet Ice ☐ Blue Ice ☐ None ☐ Other (specify)

IR Gun ID: 62 Correction Factor (CF) = 0 °C

Cooler 1:	2.0 °C	Cooler 6	°C	Cooler 11	°C	Cooler 16	°C
Cooler 2:	°C	Cooler 7	°C	Cooler 12	°C	Cooler 17	°C
Cooler 3:	°C	Cooler 8	°C	Cooler 13	°C	Cooler 18	°C
Cooler 4:	°C	Cooler 9	°C	Cooler 14	°C	Cooler 19	°C
Cooler 5	°C	Cooler 10	°C	Cooler 15	°C	Cooler 20	°C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun

EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.

Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	NA	COMMENTS
Sample containers were received intact	X	X		See Below
Legible sample labels are affixed to each container	X			

CHAIN OF CUSTODY (COC)	YES	NO	NA	COMMENTS
COC is present and includes the following information for each container:				
• Sample ID / Sample Description	X			
• Date of Sample Collection	X			
• Time of Sample Collection	X			
• Identification of the Sampler		X		
• Preservation Type			X	
• Requested Tests Method(s)	X			
• Necessary Signatures	X			
Internal Chain of Custody (ICOC) Required		X		
If yes to above, ICOC Record initiated for every Worksheet			X	

SAMPLE INTEGRITY / USABILITY	YES	NO	NA	COMMENTS
The sample container matches the COC	X			
Appropriate sample containers were received for the tests requested	X			
Samples were received within holding time	X			
Sufficient amount of sample is provided for requested analyses	X			
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)			X	
Appropriate preservatives were used for the tests requested			X	
pH of inorganic samples checked and is within method specification			X	
If no, attach Inorganic Sample pH Adjustment Form			X	

ANOMALY / NCR SUMMARY

Samples MQE0768-01, MQE0768-02 were received broken and unusable.

Additional sample volume and replacement volume was received on 5-30-07. Refer to appropriate COC.

STL BURLINGTON
SAMPLE RECEIPT & LOG IN CHECKLIST

Client: TACAMH	Date Received: 5-30-07	Log In Date: 5-31-07	
ETR: 120197	Time Received: 0920	By: J. J.	
SDG: MQE0768	Received By: J. J	Signature: J Renee Jackson	
Project: 27000	# Coolers Received: 1	PM Signature: Kristin Dysart	
Samples Delivered By: X Shipping Service ☐ Courier ☐ Hand ☐ Other (specify)		Date: 6/4/07	
List Air bill Number(s) or Attach a photocopy of the Air Bill:			

COOLER SCREEN	YES	NO	NA	COMMENTS
There is *no* evidence to indicate tampering	X			
Custody seals are present and intact	X			
Custody seal numbers are present		X		
If yes, list custody seal numbers:				

Thermal Preservation Type: X Wet Ice ☐ Blue Ice ☐ None ☐ Other (specify)

IR Gun ID: 62 Correction Factor (CF) = Ø °C

Cooler 1:	1.4 °C	Cooler 6	°C	Cooler 11	°C	Cooler 16	°C
Cooler 2:	°C	Cooler 7	°C	Cooler 12	°C	Cooler 17	°C
Cooler 3:	°C	Cooler 8	°C	Cooler 13	°C	Cooler 18	°C
Cooler 4:	°C	Cooler 9	°C	Cooler 14	°C	Cooler 19	°C
Cooler 5	°C	Cooler 10	°C	Cooler 15	°C	Cooler 20	°C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun

EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.

Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	NA	COMMENTS
Sample containers were received intact	X			See Below
Legible sample labels are affixed to each container	X			

CHAIN OF CUSTODY (COC)	YES	NO	NA	COMMENTS
COC is present and includes the following information for each container:				
▪ Sample ID / Sample Description	X			
▪ Date of Sample Collection	X			
▪ Time of Sample Collection	X			
▪ Identification of the Sampler		X		
▪ Preservation Type			X	
▪ Requested Tests Method(s)	X			
▪ Necessary Signatures	X			
Internal Chain of Custody (ICOC) Required		X		
If yes to above, ICOC Record initiated for every Worksheet			X	

SAMPLE INTEGRITY / USABILITY	YES	NO	NA	COMMENTS
The sample container matches the COC	X			
Appropriate sample containers were received for the tests requested	X			
Samples were received within holding time	X			
Sufficient amount of sample is provided for requested analyses	X			
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)			X	
Appropriate preservatives were used for the tests requested			X	
pH of inorganic samples checked and is within method specification			X	
If no, attach Inorganic Sample pH Adjustment Form			X	

ANOMALY / NCR SUMMARY

This is the Replacement and Additional sample volume.

Last Page of this Document

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25 June, 2007

Carrie Austin
RWQCB-Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Mercury Mines
Work Order: MQF0234

Enclosed are the results of analyses for samples received by the laboratory on 06/07/07 16:10. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Leticia Reyes
Project Manager

CA ELAP Certificate # 1210

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
060707-5-CA-01	MQF0234-01	Soil	06/07/07 00:00	06/07/07 16:10
060707-5-KA-02	MQF0234-02	Soil	06/07/07 00:00	06/07/07 16:10
060707-5-CA-03	MQF0234-03	Soil	06/07/07 00:00	06/07/07 16:10
060707-5-CA-04	MQF0234-04	Soil	06/07/07 00:00	06/07/07 16:10
060707-5-KA-05	MQF0234-05	Soil	06/07/07 00:00	06/07/07 16:10
060707-5-KA-06	MQF0234-06	Soil	06/07/07 00:00	06/07/07 16:10
060707-5-KA-07	MQF0234-07	Soil	06/07/07 00:00	06/07/07 16:10

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
060707-5-CA-01 (MQF0234-01) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Organic Carbon	**21000**	5000	mg/kg	1	7F18122	06/18/07 12:18	06/18/07	EPA 9060A MOD.	
060707-5-KA-02 (MQF0234-02) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Organic Carbon	**38000**	17000	mg/kg	1	7F18122	06/18/07 12:18	06/18/07	EPA 9060A MOD.	
060707-5-CA-03 (MQF0234-03) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Organic Carbon	**25000**	5000	mg/kg	1	7F18122	06/18/07 12:18	06/18/07	EPA 9060A MOD.	
060707-5-CA-04 (MQF0234-04) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Organic Carbon	**39000**	17000	mg/kg	1	7F18122	06/18/07 12:18	06/18/07	EPA 9060A MOD.	
060707-5-KA-05 (MQF0234-05) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Organic Carbon	**20000**	5000	mg/kg	1	7F18122	06/18/07 12:18	06/18/07	EPA 9060A MOD.	
060707-5-KA-06 (MQF0234-06) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Organic Carbon	**13000**	5000	mg/kg	1	7F18122	06/18/07 12:18	06/18/07	EPA 9060A MOD.	
060707-5-KA-07 (MQF0234-07) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Organic Carbon	ND	5000	mg/kg	1	7F18122	06/18/07 12:18	06/18/07	EPA 9060A MOD.	

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RWQCB-Regional Water Quality Control Board	Project:	Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number:	-	**Reported:**
Oakland CA, 94612	Project Manager:	Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
060707-5-CA-01 (MQF0234-01) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Silver	ND	8.6	mg/kg dry	5	7F14037	06/14/07	06/18/07	EPA 6010B	
Arsenic	ND	29	"	"	"	"	"	"	
Barium	**230**	5.7	"	1	"	"	06/15/07	"	
Calcium	**4700**	29	"	"	"	"	"	"	
Cadmium	ND	2.9	"	5	"	"	06/18/07	"	
Chromium	**330**	29	"	"	"	"	"	"	
Copper	**41**	2.9	"	"	"	"	"	"	B
Mercury	**0.38**	0.023	"	1	7F14028	06/14/07	06/14/07	EPA 7471A	
Magnesium	**24000**	29	"	5	7F14037	06/14/07	06/18/07	EPA 6010B	B1
Nickel	**790**	14	"	"	"	"	"	"	
Lead	ND	29	"	"	"	"	"	"	
Selenium	ND	29	"	"	"	"	"	"	
Zinc	**81**	2.9	"	"	"	"	"	"	
060707-5-KA-02 (MQF0234-02) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Silver	ND	7.9	mg/kg dry	5	7F14037	06/14/07	06/18/07	EPA 6010B	
Arsenic	ND	26	"	"	"	"	"	"	
Barium	**190**	5.2	"	1	"	"	06/15/07	"	
Calcium	**19000**	26	"	"	"	"	"	"	
Cadmium	ND	2.6	"	5	"	"	06/18/07	"	
Chromium	**350**	26	"	"	"	"	"	"	
Copper	**23**	2.6	"	"	"	"	"	"	B
Mercury	**20**	4.2	"	200	7F13013	06/13/07	06/13/07	EPA 7471A	
Magnesium	**25000**	26	"	5	7F14037	06/14/07	06/18/07	EPA 6010B	B1
Nickel	**1100**	13	"	"	"	"	"	"	
Lead	**33**	26	"	"	"	"	"	"	
Selenium	ND	26	"	"	"	"	"	"	
Zinc	**62**	2.6	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
060707-5-CA-03 (MQF0234-03) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Silver	ND	16	mg/kg dry	10	7F14037	06/14/07	06/18/07	EPA 6010B	
Arsenic	ND	5.2	"	1	"	"	06/15/07	"	
Barium	**26**	5.2	"	"	"	"	"	"	
Calcium	**38000**	260	"	10	"	"	06/18/07	"	
Cadmium	ND	0.52	"	1	"	"	06/15/07	"	
Chromium	**400**	5.2	"	"	"	"	"	"	
Copper	**7.1**	0.52	"	"	"	"	"	"	B
Mercury	**1.5**	0.21	"	10	7F13013	06/13/07	06/13/07	EPA 7471A	
Magnesium	**160000**	52	"	"	7F14037	06/14/07	06/18/07	EPA 6010B	B1
Nickel	**1600**	2.6	"	1	"	"	06/15/07	"	
Lead	ND	5.2	"	"	"	"	"	"	
Selenium	ND	5.2	"	"	"	"	"	"	
Zinc	**24**	0.52	"	"	"	"	"	"	
060707-5-CA-04 (MQF0234-04) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Silver	ND	1.7	mg/kg dry	1	7F14037	06/14/07	06/15/07	EPA 6010B	C
Arsenic	ND	28	"	5	"	"	06/18/07	"	
Barium	**130**	5.6	"	1	"	"	06/15/07	"	
Calcium	**10000**	28	"	"	"	"	"	"	
Cadmium	ND	0.56	"	"	"	"	"	"	
Chromium	**290**	5.6	"	"	"	"	"	"	
Copper	**37**	0.56	"	"	"	"	"	"	B
Mercury	**56**	6.8	"	300	7F13013	06/13/07	06/13/07	EPA 7471A	
Magnesium	**31000**	28	"	5	7F14037	06/14/07	06/18/07	EPA 6010B	B1
Nickel	**810**	2.8	"	1	"	"	06/15/07	"	
Lead	**52**	5.6	"	"	"	"	"	"	
Selenium	ND	5.6	"	"	"	"	"	"	
Zinc	**90**	0.56	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
060707-5-KA-05 (MQF0234-05) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Silver	ND	0.54	mg/kg dry	1	7F15037	06/15/07	06/18/07	EPA 6010B	C
Arsenic	**11**	11	"	"	"	"	"	"	
Barium	**220**	5.4	"	"	"	"	"	"	
Calcium	**8700**	14	"	"	"	"	"	"	
Cadmium	ND	0.22	"	"	"	"	"	"	
Chromium	**200**	5.4	"	"	"	"	"	"	
Copper	**31**	4.3	"	"	"	"	"	"	
Mercury	**140**	6.5	"	300	7F13013	06/13/07	06/13/07	EPA 7471A	
Magnesium	**36000**	14	"	5	7F15037	06/15/07	06/20/07	EPA 6010B	
Nickel	**650**	5.4	"	1	"	"	06/18/07	"	
Lead	**10**	5.4	"	"	"	"	"	"	
Selenium	ND	11	"	"	"	"	"	"	
Zinc	**59**	5.4	"	"	"	"	"	"	
060707-5-KA-06 (MQF0234-06) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Silver	ND	0.51	mg/kg dry	1	7F15037	06/15/07	06/18/07	EPA 6010B	C
Arsenic	ND	10	"	"	"	"	"	"	
Barium	**120**	5.1	"	"	"	"	"	"	
Calcium	**16000**	13	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**310**	5.1	"	"	"	"	"	"	
Copper	**24**	4.1	"	"	"	"	"	"	
Mercury	**150**	6.1	"	300	7F13013	06/13/07	06/13/07	EPA 7471A	
Magnesium	**39000**	13	"	5	7F15037	06/15/07	06/20/07	EPA 6010B	
Nickel	**680**	5.1	"	1	"	"	06/18/07	"	
Lead	**28**	5.1	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**65**	5.1	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
060707-5-KA-07 (MQF0234-07) Soil Sampled: 06/07/07 00:00 Received: 06/07/07 16:10									
Silver	ND	0.65	mg/kg dry	1	7F15037	06/15/07	06/18/07	EPA 6010B	
Arsenic	**17**	13	"	"	"	"	"	"	
Barium	**130**	6.5	"	"	"	"	"	"	
Calcium	**5100**	16	"	"	"	"	"	"	
Cadmium	ND	0.26	"	"	"	"	"	"	
Chromium	**290**	6.5	"	"	"	"	"	"	
Copper	**24**	5.2	"	"	"	"	"	"	
Mercury	**0.57**	0.26	"	10	7F13013	06/13/07	06/13/07	EPA 7471A	
Magnesium	**65000**	16	"	5	7F15037	06/15/07	06/20/07	EPA 6010B	
Nickel	**720**	6.5	"	1	"	"	06/18/07	"	
Lead	**9.3**	6.5	"	"	"	"	"	"	
Selenium	ND	13	"	"	"	"	"	"	
Zinc	**44**	6.5	"	"	"	"	"	"	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Conventional Chemistry Parameters by APHA/EPA Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
060707-5-CA-01 (MQF0234-01) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Solids	**87**	1.0	%	1	7F12018	06/08/07	06/12/07	SM2540B	
060707-5-KA-02 (MQF0234-02) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Solids	**95**	1.0	%	1	7F12018	06/08/07	06/12/07	SM2540B	
060707-5-CA-03 (MQF0234-03) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Solids	**96**	1.0	%	1	7F12018	06/08/07	06/12/07	SM2540B	
060707-5-CA-04 (MQF0234-04) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Solids	**89**	1.0	%	1	7F12018	06/08/07	06/12/07	SM2540B	
060707-5-KA-05 (MQF0234-05) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Solids	**92**	1.0	%	1	7F12018	06/08/07	06/12/07	SM2540B	
060707-5-KA-06 (MQF0234-06) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Solids	**98**	1.0	%	1	7F12018	06/08/07	06/12/07	SM2540B	
060707-5-KA-07 (MQF0234-07) Soil	**Sampled: 06/07/07 00:00**	**Received: 06/07/07 16:10**							
Total Solids	**77**	1.0	%	1	7F12018	06/08/07	06/12/07	SM2540B	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

TOTAL ORGANIC CARBON (EPA 9060A MOD.) - Quality Control

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F18122 - General Prep / EPA 9060A MOD.										
Blank (7F18122-BLK1)				Prepared & Analyzed: 06/18/07						
Total Organic Carbon	ND	5000	mg/kg							
Laboratory Control Sample (7F18122-BS1)				Prepared & Analyzed: 06/18/07						
Total Organic Carbon	10400	5000	mg/kg	10000		104	90-110			
Matrix Spike (7F18122-MS1)	**Source: MQF0234-06**			Prepared & Analyzed: 06/18/07						
Total Organic Carbon	35200	5000	mg/kg	25000	13000	89	70-130			
Matrix Spike Dup (7F18122-MSD1)	**Source: MQF0234-06**			Prepared & Analyzed: 06/18/07						
Total Organic Carbon	37800	5000	mg/kg	25000	13000	99	70-130	7	30	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F14037 - EPA 3050B / EPA 6010B										
Blank (7F14037-BLK1)				Prepared: 06/14/07 Analyzed: 06/09/07						
Magnesium	21.7	5.0	mg/kg wet							B1
Copper	1.50	0.50	"							B
Blank (7F14037-BLK1)				Prepared: 06/14/07 Analyzed: 06/15/07						
Selenium	ND	5.0	"							
Lead	ND	5.0	"							
Zinc	ND	0.50	"							
Silver	ND	1.5	"							
Arsenic	ND	5.0	"							
Barium	ND	5.0	"							
Nickel	ND	2.5	"							
Cadmium	ND	0.50	"							
Chromium	ND	5.0	"							
Calcium	ND	25	"							
Laboratory Control Sample (7F14037-BS1)				Prepared: 06/14/07 Analyzed: 06/15/07						
Selenium	45.2	5.0	mg/kg wet	50.0		90	80-115			
Nickel	47.4	2.5	"	50.0		95	80-115			
Lead	45.0	5.0	"	50.0		90	80-115			
Zinc	47.2	0.50	"	50.0		94	80-115			
Copper	49.7	0.50	"	50.0		99	85-115			B
Magnesium	525	5.0	"	500		105	75-115			B1
Silver	46.2	1.5	"	50.0		92	80-115			
Arsenic	46.8	5.0	"	50.0		94	80-115			
Barium	49.4	5.0	"	50.0		99	85-120			
Calcium	486	25	"	500		97	80-115			
Chromium	47.6	5.0	"	50.0		95	80-115			
Cadmium	46.2	0.50	"	50.0		92	80-115			

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F14037 - EPA 3050B / EPA 6010B										
Matrix Spike (7F14037-MS1)	**Source: MQF0228-01**			Prepared: 06/14/07 Analyzed: 06/15/07						
Magnesium	6240	5.0	mg/kg wet	500	5430	163	75-115			M7, B1
Selenium	43.2	5.0	"	50.0	ND	86	80-115			
Zinc	82.7	0.50	"	50.0	35.8	94	80-115			
Copper	70.2	0.50	"	50.0	22.0	97	85-115			B
Chromium	88.8	5.0	"	50.0	42.6	92	80-115			
Lead	49.4	5.0	"	50.0	5.36	88	80-115			
Calcium	2620	25	"	500	2130	97	80-115			
Silver	44.4	1.5	"	50.0	ND	89	80-115			
Arsenic	46.9	5.0	"	50.0	4.82	84	80-115			
Barium	202	5.0	"	50.0	149	107	85-120			
Nickel	76.6	2.5	"	50.0	30.2	93	80-115			
Cadmium	45.2	0.50	"	50.0	0.0550	90	80-115			
Matrix Spike Dup (7F14037-MSD1)	**Source: MQF0228-01**			Prepared: 06/14/07 Analyzed: 06/15/07						
Copper	70.2	0.50	mg/kg wet	50.0	22.0	97	85-115	0	35	B
Magnesium	6060	5.0	"	500	5430	126	75-115	3	35	M7, B1
Selenium	43.6	5.0	"	50.0	ND	87	80-115	1	30	
Zinc	82.8	0.50	"	50.0	35.8	94	80-115	0.1	35	
Chromium	90.3	5.0	"	50.0	42.6	95	80-115	2	30	
Lead	49.2	5.0	"	50.0	5.36	88	80-115	0.3	35	
Silver	44.1	1.5	"	50.0	ND	88	80-115	0.6	30	
Arsenic	47.3	5.0	"	50.0	4.82	85	80-115	0.8	25	
Barium	215	5.0	"	50.0	149	133	85-120	6	30	M7
Cadmium	45.3	0.50	"	50.0	0.0550	90	80-115	0.2	20	
Calcium	2670	25	"	500	2130	109	80-115	2	40	
Nickel	77.1	2.5	"	50.0	30.2	94	80-115	0.6	35	

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885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F15037 - EPA 3050B / EPA 6010B										
Blank (7F15037-BLK1)				Prepared: 06/15/07 Analyzed: 06/18/07						
Chromium	ND	5.0	mg/kg wet							
Arsenic	ND	10	"							
Nickel	ND	5.0	"							
Cadmium	ND	0.20	"							
Selenium	ND	10	"							
Zinc	ND	5.0	"							
Lead	5.19	5.0	"							B
Copper	ND	4.0	"							
Barium	ND	5.0	"							
Calcium	39.9	12	"							B1
Silver	ND	0.50	"							
Magnesium	40.8	2.5	"							B1
Laboratory Control Sample (7F15037-BS1)				Prepared: 06/15/07 Analyzed: 06/18/07						
Arsenic	48.7	10	mg/kg wet	50.0		97	80-115			
Chromium	50.2	5.0	"	50.0		100	80-115			
Cadmium	48.1	0.20	"	50.0		96	80-115			
Nickel	50.0	5.0	"	50.0		100	80-115			
Selenium	49.4	10	"	50.0		99	80-115			
Zinc	49.1	5.0	"	50.0		98	80-115			
Lead	52.5	5.0	"	50.0		105	80-115			B
Barium	48.3	5.0	"	50.0		97	85-120			
Copper	50.4	4.0	"	50.0		101	85-115			
Silver	48.1	0.50	"	50.0		96	80-115			
Magnesium	527	2.5	"	500		105	75-115			B1
Calcium	538	12	"	500		108	80-115			B1
Matrix Spike (7F15037-MS1)	**Source: MQF0173-01**			Prepared: 06/15/07 Analyzed: 06/18/07						
Silver	47.5	0.50	mg/kg wet	50.0	0.455	94	80-115			
Cadmium	47.1	0.20	"	50.0	0.0900	94	80-115			
Magnesium	1090	2.5	"	500	533	111	75-115			B1
Arsenic	55.4	10	"	50.0	5.04	101	80-115			
Lead	64.0	5.0	"	50.0	12.5	103	80-115			B
Nickel	48.5	5.0	"	50.0	0.810	95	80-115			
Selenium	60.7	10	"	50.0	10.7	100	80-115			
Zinc	119	5.0	"	50.0	55.2	127	80-115			M7
Chromium	63.4	5.0	"	50.0	13.9	99	80-115			

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F15037 - EPA 3050B / EPA 6010B										
Matrix Spike (7F15037-MS1)	**Source: MQF0173-01**			Prepared: 06/15/07 Analyzed: 06/18/07						
Barium	52.0	5.0	mg/kg wet	50.0	3.87	96	85-120			
Calcium	1580	12	"	500	952	125	80-115			B1
Copper	1400	4.0	"	50.0	1730	0	85-115			
Matrix Spike Dup (7F15037-MSD1)	**Source: MQF0173-01**			Prepared: 06/15/07 Analyzed: 06/18/07						
Silver	46.5	0.50	mg/kg wet	50.0	0.455	92	80-115	2	30	
Cadmium	46.3	0.20	"	50.0	0.0900	92	80-115	2	20	
Lead	60.6	5.0	"	50.0	12.5	96	80-115	5	35	B
Magnesium	1080	2.5	"	500	533	109	75-115	0.8	35	B1
Nickel	47.5	5.0	"	50.0	0.810	93	80-115	2	35	
Selenium	56.4	10	"	50.0	10.7	91	80-115	7	30	
Zinc	123	5.0	"	50.0	55.2	135	80-115	3	35	M7
Arsenic	51.8	10	"	50.0	5.04	94	80-115	7	25	
Calcium	1650	12	"	500	952	140	80-115	5	40	B1
Chromium	62.1	5.0	"	50.0	13.9	96	80-115	2	30	
Barium	51.9	5.0	"	50.0	3.87	96	85-120	0.3	30	
Copper	1560	4.0	"	50.0	1730	0	85-115	11	35	
Batch 7F13013 - EPA 7471A / EPA 7471A										
Blank (7F13013-BLK1)				Prepared & Analyzed: 06/13/07						
Mercury	ND	0.020	mg/kg wet							
Blank (7F13013-BLK2)				Prepared & Analyzed: 06/13/07						
Mercury	ND	0.020	mg/kg wet							
Laboratory Control Sample (7F13013-BS1)				Prepared & Analyzed: 06/13/07						
Mercury	0.679	0.020	mg/kg wet	0.667		102	80-125			

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F13013 - EPA 7471A / EPA 7471A										
Laboratory Control Sample (7F13013-BS2)				Prepared & Analyzed: 06/13/07						
Mercury	0.664	0.020	mg/kg wet	0.667		100	80-125			
Matrix Spike (7F13013-MS1)	**Source: MQF0223-08**			Prepared & Analyzed: 06/13/07						
Mercury	1.03	0.10	mg/kg wet	0.667	0.381	98	80-125			
Matrix Spike Dup (7F13013-MSD1)	**Source: MQF0223-08**			Prepared & Analyzed: 06/13/07						
Mercury	1.04	0.10	mg/kg wet	0.667	0.381	99	80-125	0.5	20	
Batch 7F14028 - EPA 7471A / EPA 7471A										
Blank (7F14028-BLK1)				Prepared & Analyzed: 06/14/07						
Mercury	ND	0.020	mg/kg wet							
Blank (7F14028-BLK2)				Prepared & Analyzed: 06/14/07						
Mercury	ND	0.020	mg/kg wet							
Laboratory Control Sample (7F14028-BS1)				Prepared & Analyzed: 06/14/07						
Mercury	0.660	0.020	mg/kg wet	0.667		99	80-125			
Laboratory Control Sample (7F14028-BS2)				Prepared & Analyzed: 06/14/07						
Mercury	0.627	0.020	mg/kg wet	0.667		94	80-125			
Matrix Spike (7F14028-MS1)	**Source: MQF0234-01**			Prepared & Analyzed: 06/14/07						
Mercury	1.02	0.046	mg/kg dry	0.766	0.382	84	80-125			
Matrix Spike Dup (7F14028-MSD1)	**Source: MQF0234-01**			Prepared & Analyzed: 06/14/07						
Mercury	1.15	0.046	mg/kg dry	0.766	0.382	100	80-125	11	20	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F12018 - General Preparation / SM2540B										
Blank (7F12018-BLK1)				Prepared: 06/08/07 Analyzed: 06/12/07						
Total Solids	ND	1.0	%							
Duplicate (7F12018-DUP1)	**Source: MQF0289-02**			Prepared: 06/08/07 Analyzed: 06/12/07						
Total Solids	46.6	1.0	%		47.1			1	20	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MQF0234
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	06/25/07 12:23

Notes and Definitions

M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
C	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
B1	Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
B	Analyte was detected in the associated Method Blank.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

TestAmerica
ANALYTICAL TESTING CORPORATION

CHAIN OF CUSTODY

☒ 885 Jarvis Drive • **Morgan Hill, CA 95037** • (408) 776-9600 • FAX (408) 782-6308
☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100

Company Name: SF Bay Water Board		Project: Mercury Mines	
Mailing Address: 1515 clay St #1400		Billing Address (if different):	
City: Oakland	State: CA	Zip Code: 94612	
Telephone: (510) 622-1015	Fax #:	P.O. #:	
Report To: Carrie Austin	E-Mail Address: CAUSTIN@WATER BOARDS.CA.GOV	QC Data: ☐ Level II (standard) ☐ Level III ☐ Level IV	
Sampler: " "	Date/Time Results Required:	Test America Work Order #: MQF0234	

Turnaround Time:
- ☒ 10-15 Working Days (Standard TAT)
- ☐ 7 Working Days
- ☐ 5 Working Days
- ☐ 72 hours
- ☐ 48 hours
- ☐ 24 hours
- ☐ 2-8 hours

MANDATORY:
- ☐ SDWA (Drinking Water)
- ☐ CWA (Waste Water)
- ☒ RCRA (Hazardous Waste)
- ☒ Other Soil

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Test America's Sample #	Mercury 7470 *	Cadmium 6010 *	Metals 6010 *	TOC SM5310B	Grain size D422					Comments/Temp. (if required)
1. 060707-S-CA-01		S	1	Glass	01	x	x	x	x	x					* 7470 & 6010 Dry wt Metals As Ba Cd Cr(tot) Cu Pb Ni Se Ag Zn Grain size use sieve & hydrometer need <63µm
2. 060707-S-KA-02					02										
3. 060707-S-CA-03					03										
4. 060707-S-CA-04					04										
5. 060707-S-KA-05					05										
6. 060707-S-KA-06					06										
7. 060707-S-KA-07		x	x	x	07	x	x	x	x	x					
8.															
9.															
10.															

Relinquished by/Co.:	Received by/Co.: JULIE NG.	Date/Time/Temp: 6/7 1610
Relinquished by/Co.:	Received by/Co.:	Date/Time/Temp:
Relinquished by/Co.:	Received by/Co.:	Date/Time/Temp:

Received in Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment: CLIENT Page 1 of 1

By submitting samples to Test America, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days.

White: Test America **Yellow:** Test America **Pink:** Client

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: SF BAY WATER BOARD
REC. BY (PRINT) JULIE NG.
WORKORDER: MQF0234

DATE REC'D AT LAB: 6/7/07
TIME REC'D AT LAB: 1610
DATE LOGGED IN: 6/8/07

For Regulatory Purposes?
DRINKING WATER YES / (NO)
WASTE WATER YES / (NO)

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / Absent								
	Intact / Broken*								
2. Chain-of-Custody	Present / Absent*								
3. Traffic Reports or Packing List:	Present / Absent								* 1 (L-WM) JAR EACH
4. Airbill:	Airbill / Sticker								
	Present / Absent								
5. Airbill #:									
6. Sample Labels:	Present / Absent								
7. Sample IDs:	Listed / Not Listed								
	on Chain-of-Custody								
8. Sample Condition:	Intact / Broken* /								
	Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree?	**Yes / No***								
10. Sample received within hold time?	Yes / No*								
11. Adequate sample volume received?	Yes / No*								
12. Proper preservatives used?	Yes / No*								
13. Trip Blank / Temp Blank Received?									
(circle which, if yes)	Yes / No*								
14. Read Temp:	8 °C								
Corrected Temp:	↓								
Is corrected temp 4 +/-2°C?	Yes / No**								

(Acceptance range for samples requiring thermal pres.)

Exception (if any): METALS / DFF ON ICE
Problem COC

JULIE NG. 6/7/07 SEE COC

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

PROBLEM CHAIN-OF-CUSTODY MQF0234

DATE/TIME 6/8/07
CLIENT S.F. Water Board
CLIENT SERVICES REP Tim

DATE RECEIVED 6/7/07
TURN AROUND TIME Std.
ANALYST Andy

PROBLEM

(D Sub Grain Size to?

RESOLUTION

Client Instruction* STL Burlington

Telephone Number of Client: See Work Share

Client Contact for Instruction:

Date and Time of Instruction:

Date & Time Form Given to Sample Control:

CLIENT SERVICES REP. SIGNATURE: Tim

DATE/TIME: 6/11/07 12:00

*If client does not return call within 24 hours, please route this form to the Laboratory Director.

White Copy - Client Services

Pink Copy - Sample Control

STL Burlington
South Burlington, VT

Sample Data Summary Package

SDG: MQF0234

Case Narrative

June 21, 2007

Ms. Leticia Reyes
Test America, Inc.
Morgan Hill Division
885 Jarvis Drive
Morgan Hill, CA 95037

STL Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403

Tel: 802 660 1990 Fax: 802 660 1919
www.stl-inc.com

Re: Laboratory Project No. 27000
Case: SANFRAN; SDG: MQF0234

Dear Ms. Reyes:

Enclosed are the analytical results for the samples that were received by STL Burlington on June 12th, 2007. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 06/12/07 ETR No: 120435		
713744	MQF0234-01	06/07/07	SOIL
713745	MQF0234-02	06/07/07	SOIL
713746	MQF0234-03	06/07/07	SOIL
713747	MQF0234-04	06/07/07	SOIL
713748	MQF0234-05	06/07/07	SOIL
713749	MQF0234-06	06/07/07	SOIL
713750	MQF0234-07	06/07/07	SOIL

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Particle Size Analysis by ASTM D422
There were no exceptions to the method quality control criteria during the analyses of these samples.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine Dusablon
Project Manager

Enclosure

Chain of Custody

SUBCONTRACT ORDER

TestAmerica - Morgan Hill, CA

MQF0234

SENDING LABORATORY:

TestAmerica - Morgan Hill, CA
885 Jarvis Drive
Morgan Hill, CA 95037
Phone: 408-776-9600
Fax: 408-782-6308
Project Manager: Leticia Reyes
Client: San Francisco Water Board [1]

RECEIVING LABORATORY:

STL - Burlington, VT
208 South Park Drive, Suite 1
Colchester, VT 05446
Phone :(802) 655-1203
Fax: (802) 655-1248
Project Location:
Receipt Temperature: ____ °C Ice: Y / N

Analysis	Due	Expires	Interlab	Surch	Comments
Sample ID: MQF0234-01	**Soil**		Sampled: **06/07/07 00:00**		
Grain Size analysis	06/21/07 15:00	06/21/07 00:00	$55.00	0%	STL (Burlington)/Sieve & Hydrometer (<63um)
Containers Supplied: 4 oz. jar (C)					
Sample ID: MQF0234-02	**Soil**		Sampled: **06/07/07 00:00**		
Grain Size analysis	06/21/07 15:00	06/21/07 00:00	$55.00	0%	STL (Burlington)/Sieve & Hydrometer (<63um)
Containers Supplied: 4 oz. jar (C)					
Sample ID: MQF0234-03	**Soil**		Sampled: **06/07/07 00:00**		
Grain Size analysis	06/21/07 15:00	06/21/07 00:00	$55.00	0%	STL (Burlington)/Sieve & Hydrometer (<63um)
Containers Supplied: 4 oz. jar (C)					
Sample ID: MQF0234-04	**Soil**		Sampled: **06/07/07 00:00**		
Grain Size analysis	06/21/07 15:00	06/21/07 00:00	$55.00	0%	STL (burlington)/Sieve & Hydrometer (<63um)
Containers Supplied: 4 oz. jar (C)					
Sample ID: MQF0234-05	**Soil**		Sampled: **06/07/07 00:00**		
Grain Size analysis	06/21/07 15:00	06/21/07 00:00	$55.00	0%	STL (Burlington)/Sieve & Hydrometer (<63um)
Containers Supplied: 4 oz. jar (C)					
Sample ID: MQF0234-06	**Soil**		Sampled: **06/07/07 00:00**		
Grain Size analysis	06/21/07 15:00	06/21/07 00:00	$55.00	0%	STL (Burlington)/Sieve & Hydrometer (<63um)
Containers Supplied: 4 oz. jar (C)					

Released By	Date/Time	Received By	Date/Time
JULIE	6/11 1500	J Dennis Jackson	6-12-07 / 0930

Page 1 of 2

SUBCONTRACT ORDER

TestAmerica - Morgan Hill, CA

MQF0234

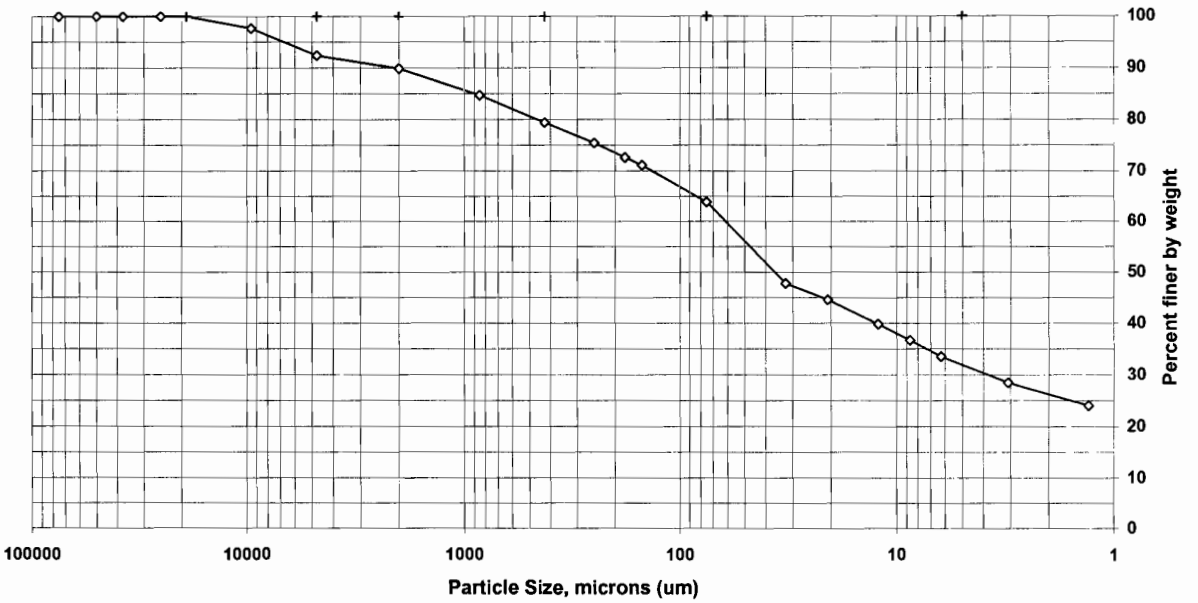
Analysis	Due	Expires	Interlab	Surch	Comments
Sample ID: MQF0234-07	**Soil**	Sampled: **06/07/07 00:00**			
Grain Size analysis	06/21/07 15:00	06/21/07 00:00	$55.00	0%	STL (Burlington)/Sieve & Hydrometer (<63um)
Containers Supplied: 4 oz. jar (C)					

Sample Data Summary Package - Geotechnical

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0234	**Date Received:**	6/12/2007
Sample ID:	MQF0234-01	**ETR(s):**	120435	**Start Date:**	6/13/2007
Lab ID:	713744			**End Date:**	6/21/2007

Percent Solids:	91.4%	**Non-soil material:**	twigs,grass
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	97.7	2.3
#4	4750	92.4	5.3
#10	2000	89.8	2.5
#20	850	84.7	5.1
#40	425	79.4	5.3
#60	250	75.4	3.9
#80	180	72.6	2.8
#100	150	71.1	1.5
#200	75	63.9	7.3
Hydrometer	32.4	47.8	16.1
|	20.7	44.6	3.2
|	12.2	39.8	4.7
|	8.7	36.7	3.2
|	6.3	33.5	3.2
|	3.1	28.5	5.0
V	1.3	24.0	4.5

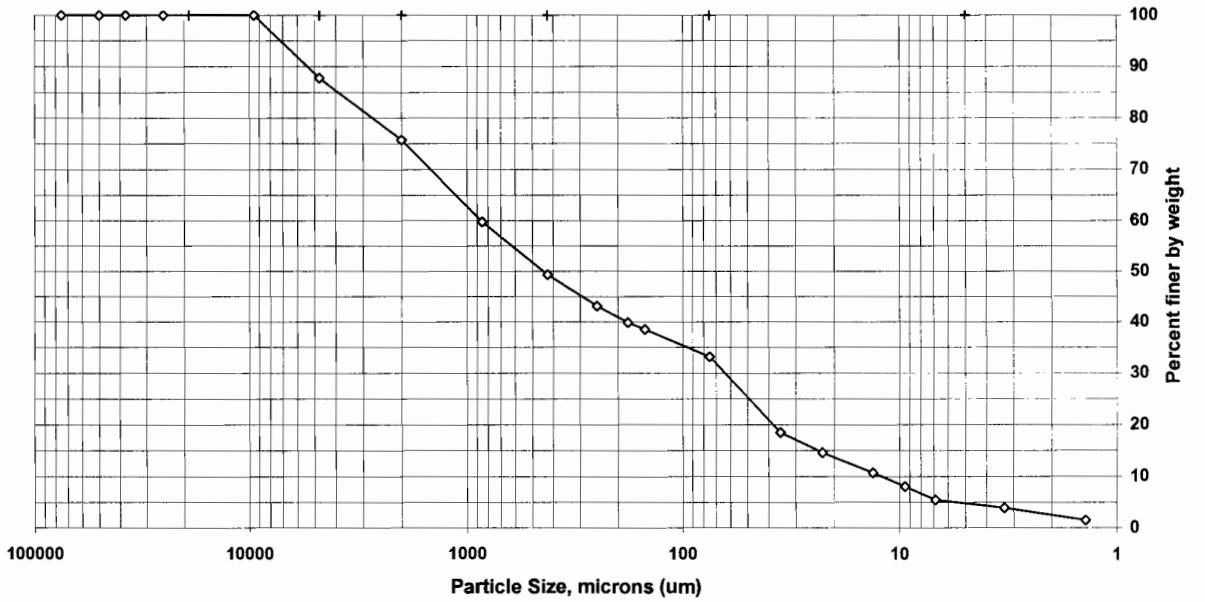
Soil Classification	Percent of Total Sample
Gravel	7.6
Sand	28.5
Coarse Sand	2.5
Medium Sand	10.5
Fine Sand	15.5
Silt	30.4
Clay	33.5

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0234	**Date Received:**	6/12/2007
Sample ID:	MQF0234-02	**ETR(s):**	120435	**Start Date:**	6/13/2007
Lab ID:	713745			**End Date:**	6/21/2007

Percent Solids:	96.6%	**Non-soil material:**	twigs
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	9.5 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	87.7	12.3
#10	2000	75.7	12.0
#20	850	59.8	15.9
#40	425	49.3	10.5
#60	250	43.1	6.2
#80	180	39.9	3.2
#100	150	38.5	1.4
#200	75	33.2	5.3
Hydrometer	35.3	18.5	14.7
|	22.6	14.6	3.9
|	13.3	10.7	3.9
|	9.5	8.1	2.6
|	6.9	5.4	2.6
|	3.3	3.9	1.5
V	1.4	1.5	2.4

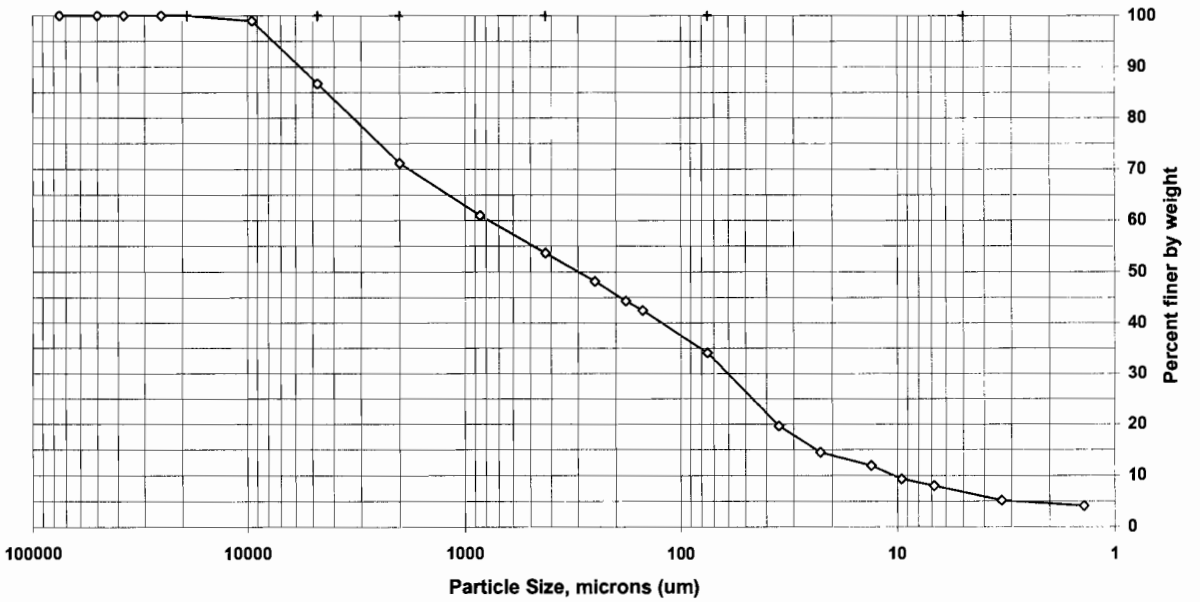
Soil Classification	Percent of Total Sample
Gravel	12.3
Sand	54.6
Coarse Sand	12.0
Medium Sand	26.4
Fine Sand	16.1
Silt	27.7
Clay	5.4

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0234	**Date Received:**	6/12/2007
Sample ID:	MQF0234-03	**ETR(s):**	120435	**Start Date:**	6/13/2007
Lab ID:	713746			**End Date:**	6/21/2007

Percent Solids:	95.6%	**Non-soil material:**	grass
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.0	1.0
#4	4750	86.7	12.2
#10	2000	71.2	15.5
#20	850	61.0	10.2
#40	425	53.7	7.3
#60	250	48.2	5.5
#80	180	44.3	3.8
#100	150	42.5	1.9
#200	75	34.0	8.4
Hydrometer	35.1	19.7	14.4
|	22.6	14.5	5.2
|	13.2	11.9	2.6
|	9.6	9.3	2.6
|	6.8	8.0	1.3
|	3.3	5.2	2.8
V	1.4	4.1	1.1

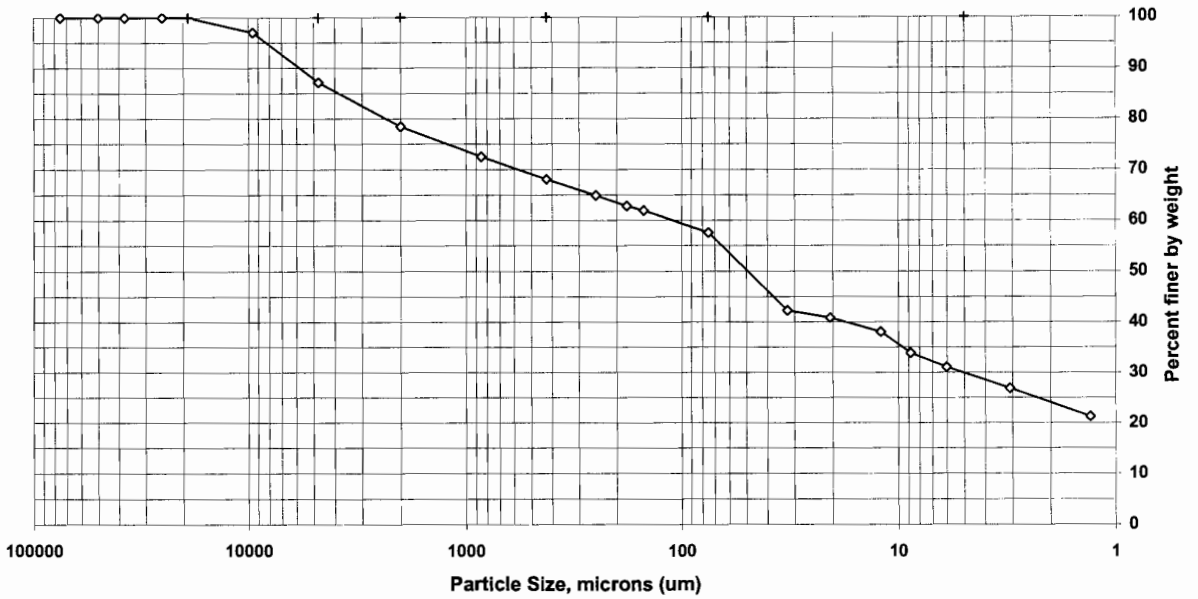
Soil Classification	Percent of Total Sample
Gravel	13.3
Sand	52.7
Coarse Sand	15.5
Medium Sand	17.5
Fine Sand	19.6
Silt	26.0
Clay	8.0

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0234	**Date Received:**	6/12/2007
Sample ID:	MQF0234-04	**ETR(s):**	120435	**Start Date:**	6/13/2007
Lab ID:	713747			**End Date:**	6/21/2007

Percent Solids:	90.0%	**Non-soil material:**	roots
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	97.1	2.9
#4	4750	87.1	9.9
#10	2000	78.4	8.7
#20	850	72.5	5.9
#40	425	68.0	4.5
#60	250	64.9	3.2
#80	180	62.8	2.0
#100	150	61.9	0.9
#200	75	57.6	4.3
Hydrometer	32.4	42.3	15.3
|	20.6	40.9	1.4
|	12.0	38.1	2.8
|	8.8	33.9	4.2
|	6.0	31.1	2.8
|	3.1	26.8	4.2
V	1.3	21.2	5.6

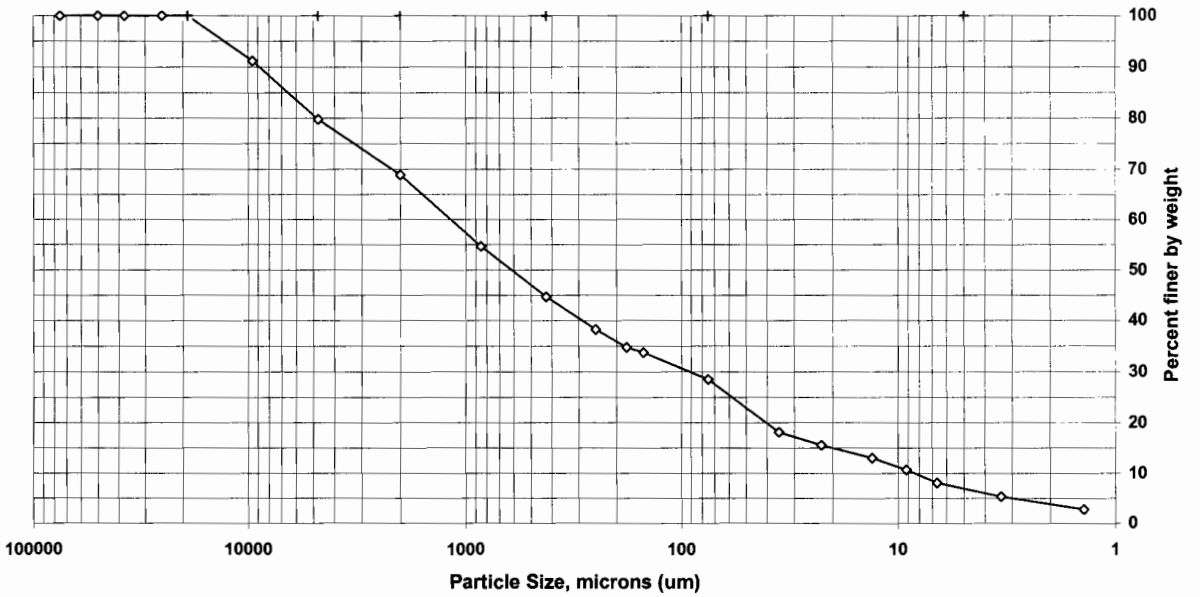
Soil Classification	Percent of Total Sample
Gravel	12.9
Sand	29.5
Coarse Sand	8.7
Medium Sand	10.4
Fine Sand	10.4
Silt	26.5
Clay	31.1

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0234	**Date Received:**	6/12/2007
Sample ID:	MQF0234-05	**ETR(s):**	120435	**Start Date:**	6/13/2007
Lab ID:	713748			**End Date:**	6/21/2007

Percent Solids:	90.7%	**Non-soil material:**	grass
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	91.1	8.9
#4	4750	79.7	11.4
#10	2000	68.9	10.9
#20	850	54.6	14.2
#40	425	44.7	9.9
#60	250	38.3	6.4
#80	180	34.8	3.5
#100	150	33.7	1.1
#200	75	28.5	5.2
Hydrometer	35.3	18.1	10.4
|	22.5	15.6	2.6
|	13.1	13.0	2.6
|	9.2	10.7	2.3
|	6.6	8.1	2.6
|	3.4	5.3	2.8
V	1.4	2.8	2.6

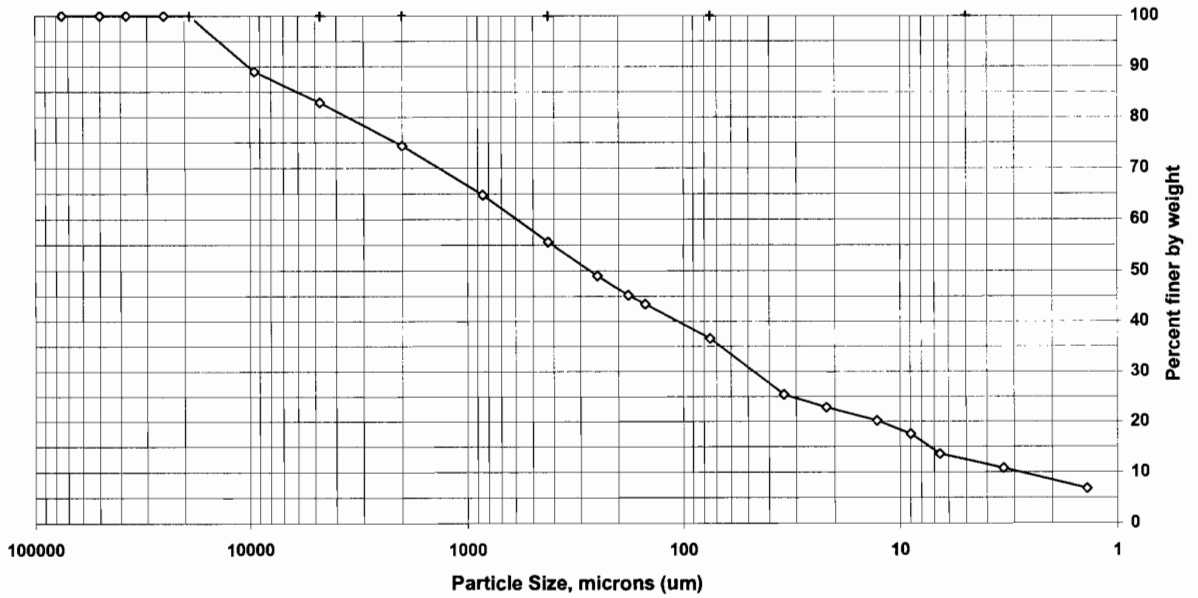
Soil Classification	Percent of Total Sample
Gravel	20.3
Sand	51.2
Coarse Sand	10.9
Medium Sand	24.2
Fine Sand	16.2
Silt	20.4
Clay	8.1

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0234	**Date Received:**	6/12/2007
Sample ID:	MQF0234-06	**ETR(s):**	120435	**Start Date:**	6/13/2007
Lab ID:	713749			**End Date:**	6/21/2007

Percent Solids:	94.8%	**Non-soil material:**	grass
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	88.9	11.1
#4	4750	82.9	6.1
#10	2000	74.4	8.5
#20	850	64.7	9.6
#40	425	55.6	9.1
#60	250	49.0	6.6
#80	180	45.2	3.8
#100	150	43.4	1.7
#200	75	36.6	6.8
Hydrometer	34.2	25.4	11.2
|	21.8	22.8	2.6
|	12.7	20.2	2.6
|	8.9	17.5	2.6
|	6.6	13.6	3.9
|	3.4	10.7	2.8
V	1.4	6.8	3.9

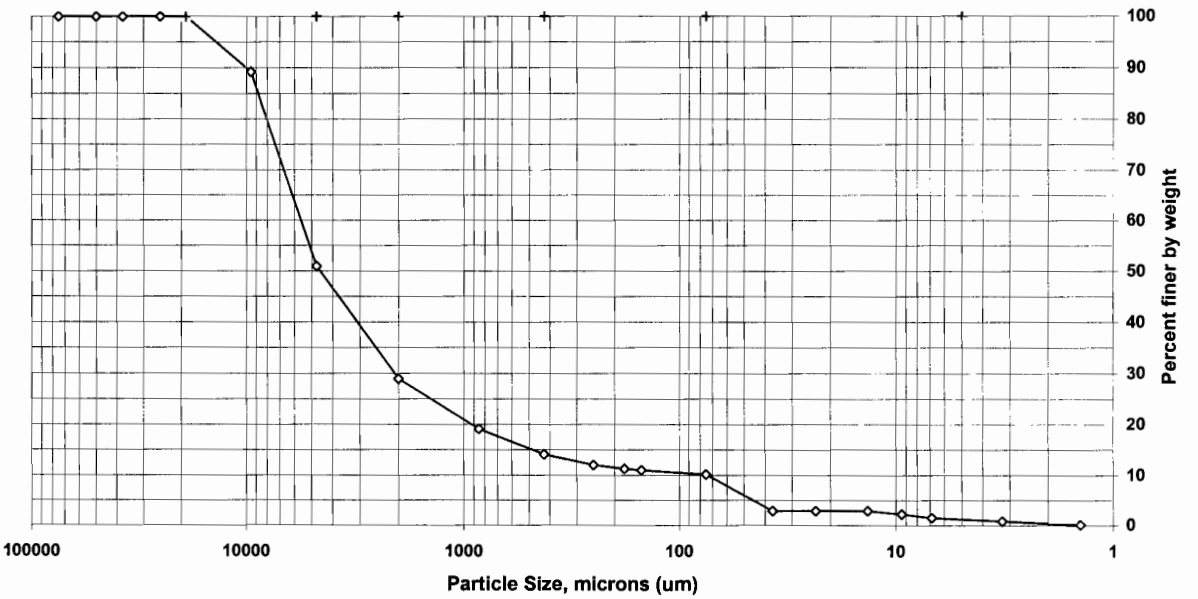
Soil Classification	Percent of Total Sample
Gravel	17.1
Sand	46.3
Coarse Sand	8.5
Medium Sand	18.7
Fine Sand	19.0
Silt	23.0
Clay	13.6

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0234	**Date Received:**	6/12/2007
Sample ID:	MQF0234-07	**ETR(s):**	120435	**Start Date:**	6/13/2007
Lab ID:	713750			**End Date:**	6/21/2007

Percent Solids:	87.7%	**Non-soil material:**	na
Specific Gravity:	2.650	**Shape (> #10):**	subangular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	89.2	10.8
#4	4750	50.9	38.2
#10	2000	28.9	22.0
#20	850	19.1	9.8
#40	425	14.1	4.9
#60	250	12.0	2.1
#80	180	11.3	0.8
#100	150	11.0	0.3
#200	75	10.1	0.9
Hydrometer	37.0	2.9	7.2
I	23.4	2.9	0.0
I	13.5	2.9	0.0
I	9.4	2.2	0.7
I	6.9	1.5	0.7
I	3.3	0.8	0.7
V	1.4	0.1	0.7

Soil Classification	Percent of Total Sample
Gravel	49.1
Sand	40.8
Coarse Sand	22.0
Medium Sand	14.8
Fine Sand	4.0
Silt	8.6
Clay	1.5

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Sample Handling

RECEIVED
6-12-07
J Thomas Jackson

From: Origin ID: RBKA (408)776-9600
Tim Costello
Test America
885 Jarvis Drive

Morgan Hill, CA 95037

FedEx Express

CLS822387/21/23

Ship Date: 11JUN07
ActWgt: 19 LB
System#: 9141070/INET2600
Account#: S *********

Delivery Address Bar Code

SHIP TO: (802)655-1203 **BILL SENDER**

Sample Receiving
STL-Burlington
208 South Park Drive Suite 1

Colchester, VT 05446

Ref #
Invoice #
PO #
Dept #

PRIORITY OVERNIGHT **TUE**

Deliver By:
12JUN07

TRK# 7991 5629 3404 FORM 0201

BTV AA

05446 -VT-US

XH BTVA

Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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STL BURLINGTON
SAMPLE RECEIPT & LOG IN CHECKLIST

Client: TACAMH	Date Received: 6-12-07	Log In Date: 6-13-07	
ETR: 120435	Time Received: 0930	By: J.J.	
SDG: MQF0234	Received By: J.J.	Signature: JRomayne Jackson	
Project: 27000	# Coolers Received: 1	PM Signature: Kristin Busalla	
Samples Delivered By: X Shipping Service ☐ Courier ☐ Hand ☐ Other (specify)		Date: 6/13/07	
List Air bill Number(s) or Attach a photocopy of the Air Bill:			

COOLER SCREEN	YES	NO	NA	COMMENTS
There is *no* evidence to indicate tampering	X			
Custody seals are present and intact	X			
Custody seal numbers are present		X		
If yes, list custody seal numbers:				

Thermal Preservation Type: X Wet Ice ☐ Blue Ice ☐ None ☐ Other (specify)

IR Gun ID: 62 Correction Factor (CF) = 0 °C

Cooler 1:	2.4 °C	Cooler 6	°C	Cooler 11	°C	Cooler 16	°C
Cooler 2:	°C	Cooler 7	°C	Cooler 12	°C	Cooler 17	°C
Cooler 3:	°C	Cooler 8	°C	Cooler 13	°C	Cooler 18	°C
Cooler 4:	°C	Cooler 9	°C	Cooler 14	°C	Cooler 19	°C
Cooler 5	°C	Cooler 10	°C	Cooler 15	°C	Cooler 20	°C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun

EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.

Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	NA	COMMENTS
Sample containers were received intact	X			
Legible sample labels are affixed to each container	X			

CHAIN OF CUSTODY (COC)	YES	NO	NA	COMMENTS
COC is present and includes the following information for each container:				
• Sample ID / Sample Description	X			
• Date of Sample Collection	X			
• Time of Sample Collection	X			
• Identification of the Sampler		X		
• Preservation Type			X	
• Requested Tests Method(s)	X			
• Necessary Signatures	X			
Internal Chain of Custody (ICOC) Required		X		
If yes to above, ICOC Record initiated for every Worksheet			X	

SAMPLE INTEGRITY / USABILITY	YES	NO	NA	COMMENTS
The sample container matches the COC	X			
Appropriate sample containers were received for the tests requested	X			
Samples were received within holding time	X			
Sufficient amount of sample is provided for requested analyses	X			
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)			X	
Appropriate preservatives were used for the tests requested			X	
pH of inorganic samples checked and is within method specification			X	
If no, attach Inorganic Sample pH Adjustment Form			X	

ANOMALY / NCR SUMMARY

Last Page of this Document

TestAmerica
ANALYTICAL TESTING CORPORATION

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

10 July, 2007

Lindsay Whalin
RWQCB-Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Challenge Mine Hg
Work Order: MQF0292

Enclosed are the results of analyses for samples received by the laboratory on 06/11/07 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen

Theresa Allen For Leticia Reyes
Project Manager

CA ELAP Certificate # 1210

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Challenge SW-1	MQF0292-01	Water	06/11/07 00:00	06/11/07 17:30
Challenge SW-2	MQF0292-02	Water	06/11/07 00:00	06/11/07 17:30
Challenge SW-3	MQF0292-03	Water	06/11/07 00:00	06/11/07 17:30
Challenge SW-4	MQF0292-04	Water	06/11/07 00:00	06/11/07 17:30
Challenge SW-5	MQF0292-05	Water	06/11/07 00:00	06/11/07 17:30
Challenge SW-6	MQF0292-06	Water	06/11/07 00:00	06/11/07 17:30
Challenge SW-5 DUP	MQF0292-07	Water	06/11/07 00:00	06/11/07 17:30
Challenge SW-1	MQF0292-08	Soil	06/11/07 00:00	06/11/07 17:30
Challenge SW-2	MQF0292-09	Soil	06/11/07 00:00	06/11/07 17:30
Challenge SW-3	MQF0292-10	Soil	06/11/07 00:00	06/11/07 17:30
Challenge SW-4	MQF0292-11	Soil	06/11/07 00:00	06/11/07 17:30
Challenge SW-5	MQF0292-12	Soil	06/11/07 00:00	06/11/07 17:30
Challenge SW-6	MQF0292-13	Soil	06/11/07 00:00	06/11/07 17:30
Challenge SW-5 DUP	MQF0292-14	Soil	06/11/07 00:00	06/11/07 17:30
Challenge Background	MQF0292-15	Soil	06/11/07 00:00	06/11/07 17:30

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

INORGANICS

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-1 (MQF0292-08) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Percent Solids	**71**	0.10	%	1	7F19130	06/19/07	06/19/07 20:15	EPA 160.3 MOD	
Challenge SW-2 (MQF0292-09) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Percent Solids	**56**	0.10	%	1	7F19130	06/19/07	06/19/07 20:15	EPA 160.3 MOD	
Challenge SW-3 (MQF0292-10) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Percent Solids	**83**	0.10	%	1	7F19130	06/19/07	06/19/07 20:15	EPA 160.3 MOD	
Challenge SW-4 (MQF0292-11) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Percent Solids	**77**	0.10	%	1	7F19130	06/19/07	06/19/07 20:15	EPA 160.3 MOD	
Challenge SW-5 (MQF0292-12) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Percent Solids	**77**	0.10	%	1	7F19130	06/19/07	06/19/07 20:15	EPA 160.3 MOD	
Challenge SW-6 (MQF0292-13) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Percent Solids	**51**	0.10	%	1	7F19130	06/19/07	06/19/07 20:15	EPA 160.3 MOD	
Challenge SW-5 DUP (MQF0292-14) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Percent Solids	**85**	0.10	%	1	7F19130	06/19/07	06/19/07 20:15	EPA 160.3 MOD	
Challenge Background (MQF0292-15) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Percent Solids	**86**	0.10	%	1	7F19130	06/19/07	06/19/07 20:15	EPA 160.3 MOD	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-1 (MQF0292-08) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Total Organic Carbon	**11000**	7000	mg/kg dry	1	7F19123	06/19/07 09:45	06/19/07	EPA 9060A MOD.	
Challenge SW-2 (MQF0292-09) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Total Organic Carbon	**42000**	8900	mg/kg dry	1	7F19123	06/19/07 09:45	06/19/07	EPA 9060A MOD.	
Challenge SW-3 (MQF0292-10) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Total Organic Carbon	ND	6000	mg/kg dry	1	7F19123	06/19/07 09:45	06/19/07	EPA 9060A MOD.	
Challenge SW-4 (MQF0292-11) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Total Organic Carbon	**15000**	6500	mg/kg dry	1	7F19123	06/19/07 09:45	06/19/07	EPA 9060A MOD.	
Challenge SW-5 (MQF0292-12) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Total Organic Carbon	ND	6500	mg/kg dry	1	7F19123	06/19/07 09:45	06/19/07	EPA 9060A MOD.	
Challenge SW-6 (MQF0292-13) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Total Organic Carbon	**52000**	9800	mg/kg dry	1	7F19123	06/19/07 09:45	06/19/07	EPA 9060A MOD.	
Challenge SW-5 DUP (MQF0292-14) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Total Organic Carbon	ND	5900	mg/kg dry	1	7F19123	06/19/07 09:45	06/19/07	EPA 9060A MOD.	
Challenge Background (MQF0292-15) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Total Organic Carbon	**30000**	5800	mg/kg dry	1	7F19123	06/19/07 09:45	06/19/07	EPA 9060A MOD.	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-1 (MQF0292-01) Water	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.020	mg/l	1	7F14041	06/14/07	06/19/07	EPA 6010B	C
Arsenic	ND	0.20	"	"	"	"	06/18/07	"	
Barium	ND	0.10	"	"	"	"	"	"	
Calcium	**8.5**	0.50	"	"	"	"	"	"	
Cadmium	ND	0.010	"	"	"	"	06/19/07	"	
Chromium	**0.093**	0.020	"	"	"	"	06/18/07	"	
Copper	ND	0.020	"	"	"	"	"	"	
Mercury	**0.75**	0.20	ug/l	"	7F21014	06/25/07	06/25/07	EPA 7470A	
Magnesium	**110**	0.10	mg/l	"	7F14041	06/14/07	06/18/07	EPA 6010B	
Nickel	ND	0.050	"	"	"	"	"	"	
Lead	ND	0.10	"	"	"	"	"	"	
Selenium	ND	0.20	"	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	"	
Challenge SW-2 (MQF0292-02) Water	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.020	mg/l	1	7F14041	06/14/07	06/19/07	EPA 6010B	C
Arsenic	ND	0.20	"	"	"	"	06/18/07	"	
Barium	ND	0.10	"	"	"	"	"	"	
Calcium	**12**	0.50	"	"	"	"	"	"	
Cadmium	ND	0.010	"	"	"	"	06/19/07	"	
Chromium	**0.063**	0.020	"	"	"	"	06/18/07	"	
Copper	ND	0.020	"	"	"	"	"	"	
Mercury	**0.56**	0.20	ug/l	"	7F21014	06/25/07	06/25/07	EPA 7470A	
Magnesium	**110**	0.10	mg/l	"	7F14041	06/14/07	06/18/07	EPA 6010B	
Nickel	ND	0.050	"	"	"	"	"	"	
Lead	ND	0.10	"	"	"	"	"	"	
Selenium	ND	0.20	"	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-3 (MQF0292-03) Water	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.020	mg/l	1	7F14041	06/14/07	06/19/07	EPA 6010B	C
Arsenic	ND	0.20	"	"	"	"	06/18/07	"	
Barium	ND	0.10	"	"	"	"	"	"	
Calcium	**10**	0.50	"	"	"	"	"	"	
Cadmium	ND	0.010	"	"	"	"	06/19/07	"	
Chromium	**0.11**	0.020	"	"	"	"	06/18/07	"	
Copper	**0.026**	0.020	"	"	"	"	"	"	
Mercury	**11**	0.20	ug/l	"	7F21014	06/25/07	06/25/07	EPA 7470A	
Magnesium	**8.9**	0.10	mg/l	"	7F14041	06/14/07	06/18/07	EPA 6010B	
Nickel	**0.27**	0.050	"	"	"	"	"	"	
Lead	ND	0.10	"	"	"	"	"	"	
Selenium	ND	0.20	"	"	"	"	"	"	
Zinc	**0.20**	0.050	"	"	"	"	"	"	
Challenge SW-4 (MQF0292-04) Water	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.020	mg/l	1	7F14041	06/14/07	06/19/07	EPA 6010B	C
Arsenic	ND	0.20	"	"	"	"	06/18/07	"	
Barium	ND	0.10	"	"	"	"	"	"	
Calcium	**22**	0.50	"	"	"	"	"	"	
Cadmium	ND	0.010	"	"	"	"	06/19/07	"	
Chromium	ND	0.020	"	"	"	"	06/18/07	"	
Copper	ND	0.020	"	"	"	"	"	"	
Mercury	ND	0.20	ug/l	"	7F21014	06/25/07	06/25/07	EPA 7470A	
Magnesium	**99**	0.10	mg/l	"	7F14041	06/14/07	06/18/07	EPA 6010B	
Nickel	ND	0.050	"	"	"	"	"	"	
Lead	ND	0.10	"	"	"	"	"	"	
Selenium	ND	0.20	"	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-5 (MQF0292-05) Water	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.020	mg/l	1	7F14041	06/14/07	06/19/07	EPA 6010B	C
Arsenic	ND	0.20	"	"	"	"	06/18/07	"	
Barium	**0.11**	0.10	"	"	"	"	"	"	
Calcium	**46**	0.50	"	"	"	"	"	"	
Cadmium	ND	0.010	"	"	"	"	06/19/07	"	
Chromium	ND	0.020	"	"	"	"	06/18/07	"	
Copper	ND	0.020	"	"	"	"	"	"	
Mercury	ND	0.20	ug/l	"	7F21014	06/25/07	06/25/07	EPA 7470A	
Magnesium	**110**	0.10	mg/l	"	7F14041	06/14/07	06/18/07	EPA 6010B	
Nickel	ND	0.050	"	"	"	"	"	"	
Lead	ND	0.10	"	"	"	"	"	"	
Selenium	ND	0.20	"	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	"	
Challenge SW-6 (MQF0292-06) Water	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.020	mg/l	1	7F14041	06/14/07	06/19/07	EPA 6010B	C
Arsenic	ND	0.20	"	"	"	"	06/18/07	"	
Barium	ND	0.10	"	"	"	"	"	"	
Calcium	**32**	0.50	"	"	"	"	"	"	
Cadmium	ND	0.010	"	"	"	"	06/19/07	"	
Chromium	**0.024**	0.020	"	"	"	"	06/18/07	"	
Copper	ND	0.020	"	"	"	"	"	"	
Mercury	ND	0.20	ug/l	"	7F21014	06/25/07	06/25/07	EPA 7470A	
Magnesium	**120**	0.10	mg/l	"	7F14041	06/14/07	06/18/07	EPA 6010B	
Nickel	ND	0.050	"	"	"	"	"	"	
Lead	ND	0.10	"	"	"	"	"	"	
Selenium	ND	0.20	"	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-5 DUP (MQF0292-07) Water Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Silver	**0.056**	0.020	mg/l	1	7F14041	06/14/07	06/19/07	EPA 6010B	
Arsenic	ND	0.20	"	"	"	"	06/18/07	"	
Barium	**0.11**	0.10	"	"	"	"	"	"	
Calcium	**47**	0.50	"	"	"	"	"	"	
Cadmium	ND	0.010	"	"	"	"	06/19/07	"	
Chromium	ND	0.020	"	"	"	"	06/18/07	"	
Copper	ND	0.020	"	"	"	"	"	"	
Mercury	ND	0.20	ug/l	"	7F21014	06/25/07	06/25/07	EPA 7470A	
Magnesium	**110**	0.10	mg/l	"	7F14041	06/14/07	06/18/07	EPA 6010B	
Nickel	ND	0.050	"	"	"	"	"	"	
Lead	ND	0.10	"	"	"	"	"	"	
Selenium	ND	0.20	"	"	"	"	"	"	
Zinc	ND	0.050	"	"	"	"	"	"	
Challenge SW-1 (MQF0292-08) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Silver	**0.92**	0.50	mg/kg	1	7F19035	06/19/07	06/21/07	EPA 6010B	
Arsenic	ND	10	"	"	"	"	06/20/07	"	
Barium	**35**	5.0	"	"	"	"	"	"	
Calcium	**3000**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**320**	5.0	"	"	"	"	"	"	
Copper	**18**	4.0	"	"	"	"	"	"	
Mercury	**4.3**	2.0	"	100	7F26006	06/26/07	06/26/07	EPA 7471A	
Magnesium	**12000**	2.5	"	1	7F19035	06/19/07	06/20/07	EPA 6010B	
Nickel	**330**	5.0	"	"	"	"	"	"	
Lead	**47**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**64**	5.0	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-2 (MQF0292-09) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.50	mg/kg	1	7F19035	06/19/07	06/20/07	EPA 6010B	C
Arsenic	ND	10	"	"	"	"	"	"	
Barium	**42**	5.0	"	"	"	"	"	"	
Calcium	**3500**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**370**	5.0	"	"	"	"	"	"	
Copper	**18**	4.0	"	"	"	"	"	"	
Mercury	**6.2**	2.0	"	100	7F26006	06/26/07	06/26/07	EPA 7471A	
Magnesium	**37000**	12	"	5	7F19035	06/19/07	06/21/07	EPA 6010B	
Nickel	**560**	5.0	"	1	"	"	06/20/07	"	
Lead	**16**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**70**	5.0	"	"	"	"	"	"	
Challenge SW-3 (MQF0292-10) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.50	mg/kg	1	7F19035	06/19/07	06/20/07	EPA 6010B	C
Arsenic	ND	10	"	"	"	"	"	"	
Barium	**9.5**	5.0	"	"	"	"	"	"	
Calcium	**630**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**91**	5.0	"	"	"	"	"	"	
Copper	**4.5**	4.0	"	"	"	"	"	"	
Mercury	**2.5**	2.0	"	100	7F26006	06/26/07	06/26/07	EPA 7471A	
Magnesium	**11000**	2.5	"	1	7F19035	06/19/07	06/20/07	EPA 6010B	
Nickel	**130**	5.0	"	"	"	"	"	"	
Lead	**13**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**32**	5.0	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-4 (MQF0292-11) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.50	mg/kg	1	7F19035	06/19/07	06/20/07	EPA 6010B	C
Arsenic	ND	10	"	"	"	"	"	"	
Barium	**46**	5.0	"	"	"	"	"	"	
Calcium	**6600**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**370**	5.0	"	"	"	"	"	"	
Copper	**22**	4.0	"	"	"	"	"	"	
Mercury	**10**	2.0	"	100	7F26006	06/26/07	06/26/07	EPA 7471A	
Magnesium	**36000**	12	"	5	7F19035	06/19/07	06/21/07	EPA 6010B	
Nickel	**440**	5.0	"	1	"	"	06/20/07	"	
Lead	**27**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**84**	5.0	"	"	"	"	"	"	
Challenge SW-5 (MQF0292-12) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	ND	0.50	mg/kg	1	7F19035	06/19/07	06/20/07	EPA 6010B	C
Arsenic	ND	10	"	"	"	"	"	"	
Barium	**65**	5.0	"	"	"	"	"	"	
Calcium	**9200**	12	"	"	"	"	"	"	
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**360**	5.0	"	"	"	"	"	"	
Copper	**21**	4.0	"	"	"	"	"	"	
Mercury	**0.24**	0.020	"	"	7F26006	06/26/07	06/26/07	EPA 7471A	
Magnesium	**34000**	12	"	5	7F19035	06/19/07	06/21/07	EPA 6010B	
Nickel	**550**	5.0	"	1	"	"	06/20/07	"	
Lead	**7.2**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**59**	5.0	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-6 (MQF0292-13) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Silver	ND	0.50	mg/kg	1	7F20007	06/20/07	06/22/07	EPA 6010B	
Arsenic	ND	10	"	"	"	"	"	"	
Barium	**72**	5.0	"	"	"	"	"	"	
Calcium	**64000**	62	"	5	"	"	06/25/07	"	B1
Cadmium	ND	0.20	"	1	"	"	06/22/07	"	
Chromium	**170**	5.0	"	"	"	"	"	"	
Copper	**17**	4.0	"	"	"	"	"	"	
Mercury	**8.3**	0.20	"	10	7F27013	06/27/07	06/27/07	EPA 7471A	
Magnesium	**21000**	12	"	5	7F20007	06/20/07	06/25/07	EPA 6010B	B1
Nickel	**260**	5.0	"	1	"	"	06/22/07	"	
Lead	**10**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**53**	5.0	"	"	"	"	"	"	
Challenge SW-5 DUP (MQF0292-14) Soil Sampled: 06/11/07 00:00 Received: 06/11/07 17:30									
Silver	**0.50**	0.50	mg/kg	1	7F20025	06/20/07	06/21/07	EPA 6010B	
Arsenic	ND	50	"	5	"	"	06/22/07	"	
Barium	**70**	5.0	"	1	"	"	06/21/07	"	
Calcium	**10000**	12	"	"	"	"	"	"	B1
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**280**	5.0	"	"	"	"	"	"	
Copper	**19**	4.0	"	"	"	"	"	"	
Mercury	**0.091**	0.020	"	"	7F26006	06/26/07	06/26/07	EPA 7471A	
Magnesium	**36000**	12	"	5	7F20025	06/20/07	06/22/07	EPA 6010B	B1
Nickel	**350**	5.0	"	1	"	"	06/21/07	"	
Lead	**98**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**52**	5.0	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge Background (MQF0292-15) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Silver	**0.50**	0.50	mg/kg	1	7F20025	06/20/07	06/21/07	EPA 6010B	
Arsenic	ND	10	"	"	"	"	"	"	
Barium	**26**	5.0	"	"	"	"	"	"	
Calcium	**2700**	12	"	"	"	"	"	"	B1
Cadmium	ND	0.20	"	"	"	"	"	"	
Chromium	**870**	5.0	"	"	"	"	"	"	
Copper	**23**	4.0	"	"	"	"	"	"	
Mercury	**580**	16	"	800	7F26006	06/26/07	06/26/07	EPA 7471A	
Magnesium	**65000**	12	"	5	7F20025	06/20/07	06/25/07	EPA 6010B	B1
Nickel	**1400**	5.0	"	1	"	"	06/21/07	"	
Lead	**13**	5.0	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**54**	5.0	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Conventional Chemistry Parameters by APHA/EPA Methods

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Challenge SW-1 (MQF0292-08) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Total Solids	**71**	1.0	%	1	7F13014	06/12/07	06/13/07	SM2540B	
Challenge SW-2 (MQF0292-09) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Total Solids	**53**	1.0	%	1	7F13014	06/12/07	06/13/07	SM2540B	
Challenge SW-3 (MQF0292-10) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Total Solids	**82**	1.0	%	1	7F13014	06/12/07	06/13/07	SM2540B	
Challenge SW-4 (MQF0292-11) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Total Solids	**75**	1.0	%	1	7F13014	06/12/07	06/13/07	SM2540B	
Challenge SW-5 (MQF0292-12) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Total Solids	**76**	1.0	%	1	7F13014	06/12/07	06/13/07	SM2540B	
Challenge SW-6 (MQF0292-13) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Total Solids	**57**	1.0	%	1	7F13014	06/12/07	06/13/07	SM2540B	
Challenge SW-5 DUP (MQF0292-14) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Total Solids	**81**	1.0	%	1	7F13014	06/12/07	06/13/07	SM2540B	
Challenge Background (MQF0292-15) Soil	**Sampled: 06/11/07 00:00**	**Received: 06/11/07 17:30**							
Total Solids	**81**	1.0	%	1	7F13014	06/12/07	06/13/07	SM2540B	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

INORGANICS - Quality Control

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F19130 - General Prep / EPA 160.3 MOD										
Blank (7F19130-BLK1)				Prepared & Analyzed: 06/19/07						
Percent Solids	ND	0.10	%							
Duplicate (7F19130-DUP1)	**Source: IQF1212-01**			Prepared & Analyzed: 06/19/07						
Percent Solids	20.0	0.10	%		20			0	20	
Duplicate (7F19130-DUP2)	**Source: IQF1212-02**			Prepared & Analyzed: 06/19/07						
Percent Solids	21.8	0.10	%		23			5	20	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

TOTAL ORGANIC CARBON (EPA 9060A MOD.) - Quality Control

TestAmerica - Irvine, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F19123 - General Prep / EPA 9060A MOD.										
Blank (7F19123-BLK1)				Prepared & Analyzed: 06/19/07						
Total Organic Carbon	ND	5000	mg/kg wet							
Laboratory Control Sample (7F19123-BS1)				Prepared & Analyzed: 06/19/07						
Total Organic Carbon	9970	5000	mg/kg wet	10000		100	90-110			
Matrix Spike (7F19123-MS1)	**Source: MQF0292-14**			Prepared & Analyzed: 06/19/07						
Total Organic Carbon	27000	5900	mg/kg dry	29400	3900	79	70-130			
Matrix Spike Dup (7F19123-MSD1)	**Source: MQF0292-14**			Prepared & Analyzed: 06/19/07						
Total Organic Carbon	29000	5900	mg/kg dry	29400	3900	85	70-130	7	30	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F14041 - EPA 200.7/3005A / EPA 6010B										
Blank (7F14041-BLK1)				Prepared: 06/14/07 Analyzed: 06/15/07						
Cadmium	ND	0.010	mg/l							
Chromium	ND	0.020	"							
Copper	ND	0.020	"							
Magnesium	ND	0.10	"							
Calcium	ND	0.50	"							
Nickel	ND	0.050	"							
Silver	ND	0.020	"							
Arsenic	ND	0.20	"							
Barium	ND	0.10	"							
Selenium	ND	0.20	"							
Zinc	ND	0.050	"							
Lead	ND	0.10	"							
Laboratory Control Sample (7F14041-BS1)				Prepared: 06/14/07 Analyzed: 06/15/07						
Magnesium	10.5	0.10	mg/l	10.0		105	85-115			
Chromium	1.03	0.020	"	1.00		103	85-115			
Copper	0.999	0.020	"	1.00		100	85-115			
Nickel	1.04	0.050	"	1.00		104	85-115			
Barium	0.998	0.10	"	1.00		100	85-115			
Silver	0.999	0.020	"	1.00		100	80-115			
Cadmium	1.04	0.010	"	1.00		104	80-115			
Calcium	10.4	0.50	"	10.0		104	80-120			
Arsenic	1.03	0.20	"	1.00		103	75-115			
Zinc	1.02	0.050	"	1.00		102	80-115			
Lead	1.03	0.10	"	1.00		103	80-115			
Selenium	0.983	0.20	"	1.00		98	70-115			
Matrix Spike (7F14041-MS1)	**Source: MQE0871-02**			Prepared: 06/14/07 Analyzed: 06/15/07						
Chromium	1.03	0.020	mg/l	1.00	ND	103	85-115			
Copper	0.996	0.020	"	1.00	ND	100	85-115			
Magnesium	10.4	0.10	"	10.0	ND	104	85-115			
Nickel	1.02	0.050	"	1.00	ND	102	85-115			
Silver	0.997	0.020	"	1.00	ND	100	80-115			
Arsenic	1.02	0.20	"	1.00	ND	102	75-115			
Cadmium	1.02	0.010	"	1.00	ND	102	80-115			
Barium	0.996	0.10	"	1.00	ND	100	85-115			
Calcium	10.4	0.50	"	10.0	ND	104	80-120			

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F14041 - EPA 200.7/3005A / EPA 6010B										
Matrix Spike (7F14041-MS1)	**Source: MQE0871-02**			Prepared: 06/14/07 Analyzed: 06/15/07						
Lead	1.02	0.10	mg/l	1.00	ND	102	80-115			
Zinc	1.01	0.050	"	1.00	0.00210	101	80-115			
Selenium	0.965	0.20	"	1.00	ND	96	70-115			
Matrix Spike Dup (7F14041-MSD1)	**Source: MQE0871-02**			Prepared: 06/14/07 Analyzed: 06/15/07						
Chromium	1.02	0.020	mg/l	1.00	ND	102	85-115	1	25	
Cadmium	1.01	0.010	"	1.00	ND	101	80-115	1	25	
Nickel	1.02	0.050	"	1.00	ND	102	85-115	0.1	25	
Magnesium	10.4	0.10	"	10.0	ND	104	85-115	0.9	20	
Silver	0.987	0.020	"	1.00	ND	99	80-115	1	25	
Arsenic	1.02	0.20	"	1.00	ND	102	75-115	0	25	
Barium	0.988	0.10	"	1.00	ND	99	85-115	0.7	25	
Calcium	10.3	0.50	"	10.0	ND	103	80-120	1	25	
Copper	0.987	0.020	"	1.00	ND	99	85-115	0.9	25	
Zinc	1.00	0.050	"	1.00	0.00210	100	80-115	1	25	
Lead	1.01	0.10	"	1.00	ND	101	80-115	1	25	
Selenium	0.973	0.20	"	1.00	ND	97	70-115	0.8	25	
Batch 7F19035 - EPA 3050B / EPA 6010B										
Blank (7F19035-BLK1)				Prepared: 06/19/07 Analyzed: 06/20/07						
Zinc	ND	5.0	mg/kg							
Calcium	34.2	12	"							B1
Cadmium	ND	0.20	"							
Barium	ND	5.0	"							
Copper	ND	4.0	"							
Chromium	ND	5.0	"							
Magnesium	28.3	2.5	"							B1
Lead	ND	5.0	"							
Nickel	ND	5.0	"							
Selenium	ND	10	"							
Arsenic	ND	10	"							
Silver	ND	0.50	"							

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F19035 - EPA 3050B / EPA 6010B										
Laboratory Control Sample (7F19035-BS1)				Prepared: 06/19/07 Analyzed: 06/20/07						
Zinc	46.9	5.0	mg/kg	50.0		94	80-115			
Magnesium	516	2.5	"	500		103	75-115			B1
Cadmium	46.4	0.20	"	50.0		93	80-115			
Barium	47.4	5.0	"	50.0		95	85-120			
Calcium	524	12	"	500		105	80-115			B1
Copper	49.2	4.0	"	50.0		98	85-115			
Chromium	48.5	5.0	"	50.0		97	80-115			
Selenium	47.4	10	"	50.0		95	80-115			
Arsenic	44.5	10	"	50.0		89	80-115			
Nickel	47.5	5.0	"	50.0		95	80-115			
Silver	46.4	0.50	"	50.0		93	80-115			
Lead	46.7	5.0	"	50.0		93	80-115			
Matrix Spike (7F19035-MS1)	**Source: MQF0420-01**			Prepared: 06/19/07 Analyzed: 06/20/07						
Chromium	73.2	5.0	mg/kg	50.0	20.0	106	80-115			
Calcium	3480	12	"	500	2430	208	80-115			B1
Zinc	76.5	5.0	"	50.0	29.4	94	80-115			
Cadmium	42.0	0.20	"	50.0	ND	84	80-115			
Silver	42.3	0.50	"	50.0	0.165	84	80-115			
Barium	179	5.0	"	50.0	131	96	85-120			
Copper	62.7	4.0	"	50.0	16.4	93	85-115			
Lead	50.8	5.0	"	50.0	6.44	89	80-115			
Arsenic	40.2	10	"	50.0	ND	80	80-115			
Nickel	66.0	5.0	"	50.0	18.3	95	80-115			
Selenium	42.8	10	"	50.0	6.26	73	80-115			M8
Magnesium	4630	2.5	"	500	3350	256	75-115			B1, M7
Matrix Spike Dup (7F19035-MSD1)	**Source: MQF0420-01**			Prepared: 06/19/07 Analyzed: 06/20/07						
Calcium	4660	12	mg/kg	500	2430	446	80-115	29	40	B1, M7
Zinc	78.6	5.0	"	50.0	29.4	98	80-115	3	35	
Cadmium	42.8	0.20	"	50.0	ND	86	80-115	2	20	
Copper	65.8	4.0	"	50.0	16.4	99	85-115	5	35	
Selenium	48.4	10	"	50.0	6.26	84	80-115	12	30	
Chromium	75.4	5.0	"	50.0	20.0	111	80-115	3	30	
Nickel	68.9	5.0	"	50.0	18.3	101	80-115	4	35	
Silver	42.9	0.50	"	50.0	0.165	85	80-115	1	30	
Arsenic	42.7	10	"	50.0	ND	85	80-115	6	25	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F19035 - EPA 3050B / EPA 6010B										
Matrix Spike Dup (7F19035-MSD1)	**Source: MQF0420-01**			Prepared: 06/19/07 Analyzed: 06/20/07						
Lead	55.9	5.0	mg/kg	50.0	6.44	99	80-115	10	35	
Barium	203	5.0	"	50.0	131	145	85-120	13	30	M7
Magnesium	5110	2.5	"	500	3350	353	75-115	10	35	B1, M7
Batch 7F20007 - EPA 3050B / EPA 6010B										
Blank (7F20007-BLK1)				Prepared: 06/20/07 Analyzed: 06/22/07						
Silver	ND	0.50	mg/kg							
Barium	ND	5.0	"							
Zinc	ND	5.0	"							
Cadmium	ND	0.20	"							
Calcium	19.6	12	"							B1
Lead	ND	5.0	"							
Nickel	ND	5.0	"							
Magnesium	27.5	2.5	"							B1
Selenium	ND	10	"							
Chromium	ND	5.0	"							
Copper	ND	4.0	"							
Blank (7F20007-BLK1)				Prepared: 06/20/07 Analyzed: 06/25/07						
Arsenic	ND	10	"							
Laboratory Control Sample (7F20007-BS1)				Prepared: 06/20/07 Analyzed: 06/22/07						
Chromium	50.9	5.0	mg/kg	50.0		102	80-115			
Silver	46.5	0.50	"	50.0		93	80-115			
Cadmium	48.7	0.20	"	50.0		97	80-115			
Barium	47.8	5.0	"	50.0		96	85-120			
Calcium	538	12	"	500		108	80-115			B1
Zinc	49.8	5.0	"	50.0		100	80-115			
Magnesium	531	2.5	"	500		106	75-115			B1
Lead	50.2	5.0	"	50.0		100	80-115			
Selenium	47.8	10	"	50.0		96	80-115			
Nickel	50.2	5.0	"	50.0		100	80-115			
Copper	48.7	4.0	"	50.0		97	85-115			

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F20007 - EPA 3050B / EPA 6010B										
Laboratory Control Sample (7F20007-BS1)				Prepared: 06/20/07 Analyzed: 06/25/07						
Arsenic	48.3	10	mg/kg	50.0		97	80-115			
Matrix Spike (7F20007-MS1)	**Source: MQF0292-13**			Prepared: 06/20/07 Analyzed: 06/22/07						
Cadmium	44.7	0.20	mg/kg	50.0	0.160	89	80-115			
Copper	64.2	4.0	"	50.0	16.9	95	85-115			
Chromium	314	5.0	"	50.0	173	282	80-115			M7
Silver	43.1	0.50	"	50.0	0.0550	86	80-115			
Calcium	7150	12	"	500	63500	0	80-115			M8, B1
Zinc	113	5.0	"	50.0	53.2	120	80-115			M7
Barium	105	5.0	"	50.0	71.8	66	85-120			M8
Selenium	46.8	10	"	50.0	0.330	93	80-115			
Nickel	387	5.0	"	50.0	260	255	80-115			M7
Lead	57.8	5.0	"	50.0	10.5	95	80-115			
Matrix Spike (7F20007-MS1)	**Source: MQF0292-13**			Prepared: 06/20/07 Analyzed: 06/25/07						
Arsenic	38.7	50	"	50.0	ND	77	80-115			M8
Magnesium	24400	12	"	500	21300	620	75-115			B1, M7
Matrix Spike Dup (7F20007-MSD1)	**Source: MQF0292-13**			Prepared: 06/20/07 Analyzed: 06/22/07						
Silver	41.9	0.50	mg/kg	50.0	0.0550	84	80-115	3	30	
Barium	98.6	5.0	"	50.0	71.8	54	85-120	6	30	M8
Zinc	106	5.0	"	50.0	53.2	104	80-115	7	35	
Calcium	5800	12	"	500	63500	0	80-115	21	40	M8, B1
Cadmium	43.6	0.20	"	50.0	0.160	87	80-115	3	20	
Selenium	46.9	10	"	50.0	0.330	93	80-115	0.2	30	
Chromium	242	5.0	"	50.0	173	138	80-115	26	30	M7
Nickel	327	5.0	"	50.0	260	134	80-115	17	35	M7
Lead	55.0	5.0	"	50.0	10.5	89	80-115	5	35	
Copper	61.1	4.0	"	50.0	16.9	88	85-115	5	35	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F20007 - EPA 3050B / EPA 6010B										
Matrix Spike Dup (7F20007-MSD1)	**Source: MQF0292-13**			Prepared: 06/20/07 Analyzed: 06/25/07						
Arsenic	49.6	50	mg/kg	50.0	ND	99	80-115	25	25	
Magnesium	20200	12	"	500	21300	0	75-115	19	35	B1, M8
Batch 7F20025 - EPA 3050B / EPA 6010B										
Blank (7F20025-BLK1)				Prepared: 06/20/07 Analyzed: 06/21/07						
Nickel	ND	5.0	mg/kg							
Barium	ND	5.0	"							
Selenium	ND	10	"							
Magnesium	14.1	2.5	"							B1
Cadmium	ND	0.20	"							
Chromium	ND	5.0	"							
Copper	ND	4.0	"							
Zinc	ND	5.0	"							
Calcium	27.3	12	"							B1
Silver	ND	0.50	"							
Lead	ND	5.0	"							
Blank (7F20025-BLK1)				Prepared: 06/20/07 Analyzed: 06/22/07						
Arsenic	ND	10	"							
Laboratory Control Sample (7F20025-BS1)				Prepared: 06/20/07 Analyzed: 06/21/07						
Barium	44.6	5.0	mg/kg	50.0		89	85-120			
Chromium	42.8	5.0	"	50.0		86	80-115			
Calcium	458	12	"	500		92	80-115			B1
Nickel	42.2	5.0	"	50.0		84	80-115			
Copper	44.6	4.0	"	50.0		89	85-115			
Lead	42.1	5.0	"	50.0		84	80-115			
Selenium	41.7	10	"	50.0		83	80-115			
Cadmium	41.0	0.20	"	50.0		82	80-115			
Zinc	40.9	5.0	"	50.0		82	80-115			
Silver	42.2	0.50	"	50.0		84	80-115			
Magnesium	470	2.5	"	500		94	75-115			B1

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F20025 - EPA 3050B / EPA 6010B										
Laboratory Control Sample (7F20025-BS1)				Prepared: 06/20/07 Analyzed: 06/22/07						
Arsenic	43.4	10	mg/kg	50.0		87	80-115			
Matrix Spike (7F20025-MS1)	**Source: MQF0292-14**			Prepared: 06/20/07 Analyzed: 06/21/07						
Nickel	431	5.0	mg/kg	50.0	352	158	80-115			M7
Barium	106	5.0	"	50.0	69.8	72	85-120			M8
Selenium	37.0	10	"	50.0	7.62	59	80-115			M8
Zinc	134	5.0	"	50.0	52.2	164	80-115			M7
Chromium	620	5.0	"	50.0	281	676	80-115			M7
Copper	52.7	4.0	"	50.0	18.7	68	85-115			M8
Cadmium	30.4	0.20	"	50.0	0.110	61	80-115			M8
Lead	36.6	5.0	"	50.0	97.6	0	80-115			M8
Silver	31.7	0.50	"	50.0	0.500	62	80-115			M8
Calcium	11600	12	"	500	10300	256	80-115			M7, B1
Matrix Spike (7F20025-MS1)	**Source: MQF0292-14**			Prepared: 06/20/07 Analyzed: 06/22/07						
Arsenic	35.8	50	"	50.0	4.18	63	80-115			M8
Magnesium	35300	12	"	500	35900	0	75-115			B1, M8
Matrix Spike Dup (7F20025-MSD1)	**Source: MQF0292-14**			Prepared: 06/20/07 Analyzed: 06/21/07						
Barium	145	5.0	mg/kg	50.0	69.8	150	85-120	31	30	M7, R2
Magnesium	23400	2.5	"	500	35900	0	75-115	40	35	M8, B1, R2
Zinc	114	5.0	"	50.0	52.2	123	80-115	16	35	M7
Chromium	261	5.0	"	50.0	281	0	80-115	81	30	M8, R2
Copper	76.3	4.0	"	50.0	18.7	115	85-115	37	35	R2
Selenium	52.1	10	"	50.0	7.62	89	80-115	34	30	R2
Calcium	13400	12	"	500	10300	620	80-115	15	40	M7, B1
Silver	46.8	0.50	"	50.0	0.500	93	80-115	38	30	R2
Lead	93.8	5.0	"	50.0	97.6	0	80-115	88	35	M8, R2
Nickel	294	5.0	"	50.0	352	0	80-115	38	35	R2, M8
Cadmium	44.8	0.20	"	50.0	0.110	89	80-115	38	20	R, R2

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F20025 - EPA 3050B / EPA 6010B										
Matrix Spike Dup (7F20025-MSD1)	**Source: MQF0292-14**			Prepared: 06/20/07 Analyzed: 06/22/07						
Arsenic	49.7	50	mg/kg	50.0	4.18	91	80-115	32	25	R2
Batch 7F21014 - EPA 7470A/1311 TCLP / EPA 7470A										
Blank (7F21014-BLK1)				Prepared & Analyzed: 06/25/07						
Mercury	ND	0.20	ug/l							
Laboratory Control Sample (7F21014-BS1)				Prepared & Analyzed: 06/25/07						
Mercury	8.20	0.20	ug/l	8.00		102	70-130			
Matrix Spike (7F21014-MS1)	**Source: MQF0296-01**			Prepared & Analyzed: 06/25/07						
Mercury	8.26	0.20	ug/l	8.00	ND	103	70-130			
Matrix Spike Dup (7F21014-MSD1)	**Source: MQF0296-01**			Prepared & Analyzed: 06/25/07						
Mercury	8.01	0.20	ug/l	8.00	ND	100	70-130	3	25	
Batch 7F26006 - EPA 7471A / EPA 7471A										
Blank (7F26006-BLK1)				Prepared & Analyzed: 06/26/07						
Mercury	ND	0.020	mg/kg							
Blank (7F26006-BLK2)				Prepared & Analyzed: 06/26/07						
Mercury	ND	0.020	mg/kg							
Laboratory Control Sample (7F26006-BS1)				Prepared & Analyzed: 06/26/07						
Mercury	0.637	0.020	mg/kg	0.667		96	80-125			

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F26006 - EPA 7471A / EPA 7471A										
Laboratory Control Sample (7F26006-BS2)				Prepared & Analyzed: 06/26/07						
Mercury	0.599	0.020	mg/kg	0.667		90	80-125			
Matrix Spike (7F26006-MS1)	**Source: MQF0430-01**			Prepared & Analyzed: 06/26/07						
Mercury	0.690	0.020	mg/kg	0.667	0.0825	91	80-125			
Matrix Spike Dup (7F26006-MSD1)	**Source: MQF0430-01**			Prepared & Analyzed: 06/26/07						
Mercury	0.681	0.020	mg/kg	0.667	0.0825	90	80-125	1	20	
Batch 7F27013 - EPA 7471A / EPA 7471A										
Blank (7F27013-BLK1)				Prepared & Analyzed: 06/27/07						
Mercury	ND	0.020	mg/kg							
Blank (7F27013-BLK2)				Prepared & Analyzed: 06/27/07						
Mercury	ND	0.020	mg/kg							
Laboratory Control Sample (7F27013-BS1)				Prepared & Analyzed: 06/27/07						
Mercury	0.664	0.020	mg/kg	0.667		100	80-125			
Laboratory Control Sample (7F27013-BS2)				Prepared & Analyzed: 06/27/07						
Mercury	0.626	0.020	mg/kg	0.667		94	80-125			
Matrix Spike (7F27013-MS1)	**Source: MQF0740-01**			Prepared & Analyzed: 06/27/07						
Mercury	2.51	0.20	mg/kg	0.667	1.52	148	80-125			M7
Matrix Spike Dup (7F27013-MSD1)	**Source: MQF0740-01**			Prepared & Analyzed: 06/27/07						
Mercury	2.21	0.20	mg/kg	0.667	1.52	104	80-125	13	20	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

TestAmerica - Morgan Hill, CA

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7F13014 - General Preparation / SM2540B										
Blank (7F13014-BLK1)				Prepared: 06/12/07 Analyzed: 06/13/07						
Total Solids	ND	1.0	%							
Duplicate (7F13014-DUP1)	**Source: MQF0292-15**			Prepared: 06/12/07 Analyzed: 06/13/07						
Total Solids	79.4	1.0	%		80.7			2	20	

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RWQCB-Regional Water Quality Control Board	Project: Challenge Mine Hg	MQF0292
1515 Clay Street, Suite 1400	Project Number: 0607	**Reported:**
Oakland CA, 94612	Project Manager: Lindsay Whalin	07/10/07 09:12

Notes and Definitions

R2	The RPD exceeded the acceptance limit.
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
C	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
B1	Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

SEQUOIA ANALYTICAL
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☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Company Name: SF Waterboard	Project Name: Challenge Mine Hg 0607
Mailing Address: 1515 Clay st. Ste 1400	Billing Address (if different):
City: Oakland State: CA Zip Code: 94612	
Telephone: 510-622-2363 FAX #: 510-622-2458	P.O. #:
Report To: Lindsay Whalin Sampler: Lindsay Whalin	QC Data: LEVEL D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Working Days ☐ 3 Working Days ☐ 2 - 8 Hours ☐ 7 Working Days ☐ 2 Working Days ☐ 5 Working Days ☐ 24 Hours

☐ Drinking Water Creek water ☐ Waste Water ☒ Other

MQF0292

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample # (container #)	Analyses Requested: Hg (total) 7470A	Ni 7521	Metals 6010B	Comments
01 1 Challenge SW-1	6/11/07	Creek water	1	1L Amber Bit, HNO3	006608	✓	✓	✓	HNO3 Preservative
02 2. Challenge SW-2			1		006612	✓	✓	✓	
03 3. Challenge SW-3			1		006609	✓	✓	✓	
04 4 Challenge SW-4			1		006614	✓	✓	✓	
05 5 Challenge SW-5			1		006616	✓	✓	✓	
06 6. Challenge SW-6			1		006618	✓	✓	✓	
07 7 Challenge SW5 Dup			1		006610	✓	✓	✓	
8.									
9.									
10.									

Relinquished By: Connie Ramos	Date: 6/11/07	Time: 3:05	Received By: (TAMH)	Date: 6/11/07	Time: 15:05
Relinquished By:	Date: 6/11/07	Time: 1730	Received By: Andy Medeiros	Date: 6/11/07	Time: 1730
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Were Samples Received in Good Condition? ☒ Yes ☐ No Samples on Ice? ☒ Yes ☐ No Method of Shipment TAC

Pink - Client
Yellow - Sequoia
White - Sequoia

SACOC

TestAmerica

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☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100

Company Name: SF Waterboard
Project: Challenge Mine 0607
Mailing Address: 1515 Clay St. Ste 1400
Billing Address (if different):
City: Oakland State: CA Zip Code: 94612
Telephone: 510-622-2363 Fax #: 510-622-2458 P.O. #:
Report To: Lindsay Whalin E-Mail Address: lwhalin@waterboards ca.gov
QC Data: ☐ Level II (standard) ☐ Level III ☒ Level IV
Sampler: Lindsay Whalin Date/Time Results Required: 10 days
Test America Work Order #

Turnaround Time: ☒ 10-15 Working Days (Standard TAT) ☐ 7 Working Days ☐ 5 Working Days ☐ 72 hours ☐ 48 hours ☐ 24 hours ☐ 2-8 hours

MANDATORY: ☐ SDWA (Drinking Water) ☐ CWA (Waste Water) ☐ RCRA (Hazardous Waste) ☒ Other Creek Sediments

MQF0292

ANALYSES REQUESTED (Please provide method)

	Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Test America's Sample #	Hg Total 7471A *	Ca + Mg 6010 *	Metals 6010 *	TOC SM 5310B	Grainsize D422	Comments/Temp. (if required)
08	1. Challenge SW-1	6/11/07	Sediments	1	1L glass Jar	003154	✓	✓	✓	✓	✓	Keep cold.
09	2. Challenge SW-2			1		003157	✓					
10	3. Challenge SW-3			1		003152	✓					
11	4. Challenge SW-4			1		003159	✓					
12	5. Challenge SW-5			1		003082	✓					
13	6. Challenge SW-6			1		003156	✓					
14	Challenge SW5 Dup			1		003196	✓					
15	8. Challenge Background			1		003084	✓					
	9.											Grain size use sieves
	10.											hydrometer need <63um

* 747#As? 6010 Dry weight

Relinquished by/Co.	Received by/Co.	Date/Time/Temp
Connie Ramos	[signature]	6/11/07 1505
[signature]	Andy Medeiros	6-11-07 1730

Were Samples Received in Good Condition? ☒ Yes ☐ No Samples on Ice? ☒ Yes ☐ No Method of Shipment: TAC Page 2 of 2

Note: By relinquishing samples to Test America, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days.

White: Test America **Yellow:** Test America **Pink:** Client

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: SF Waterboard
REC. BY (PRINT) A.M.
WORKORDER: MQF0292

DATE REC'D AT LAB: 6/11/07
TIME REC'D AT LAB: 1730
DATE LOGGED IN: 6/12/07

For Regulatory Purposes?
DRINKING WATER YES / (NO)
WASTE WATER YES / (NO)

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / (Absent) Intact / Broken*								
2. Chain-of-Custody	(Present) / Absent*								
3. Traffic Reports or Packing List:	Present / (Absent)								
4. Airbill:	Airbill / Sticker Present / (Absent)								
5. Airbill #:									
6. Sample Labels:	(Present) / Absent								
7. Sample IDs:	(Listed) / Not Listed on Chain-of-Custody								
8. Sample Condition:	(Intact) / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree?	**(Yes) / No***								
10. Sample received within hold time?	(Yes) / No*								
11. Adequate sample volume received?	(Yes) / No*								
12. Proper preservatives used?	(Yes) / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes)	Yes / (No)								
14. Read Temp: 3.2°C Corrected Temp: (6) Is corrected temp 4 +/-2°C?	(Yes) / No**								

(Acceptance range for samples requiring thermal pres.)

**Exception (if any): METALS / DFF ON ICE or Problem COC

See COC 6/11/07 A.M.

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

STL Burlington
South Burlington, VT

Sample Data Summary Package

SDG: MQF0292

Case Narrative

June 22, 2007

SEVERN TRENT STL

Ms. Leticia Reyes
Test America, Inc.
Morgan Hill Division
885 Jarvis Drive
Morgan Hill, CA 95037

STL Burlington
30 Community Drive, Suite 11
South Burlington, VT 05403

Tel: 802 660 1990 Fax: 802 660 1919
www.stl-inc.com

Re: Laboratory Project No. 27000
Case: RWQCB; SDG: MQF0292

Dear Ms. Reyes:

Enclosed are the analytical results for the samples that were received by STL Burlington on June 13th, 2007. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 06/13/07 ETR No: 120453		
713929	MQF0292-08	06/11/07	SOIL
713930	MQF0292-09	06/11/07	SOIL
713931	MQF0292-10	06/11/07	SOIL
713932	MQF0292-11	06/11/07	SOIL
713933	MQF0292-12	06/11/07	SOIL
713934	MQF0292-13	06/11/07	SOIL
713935	MQF0292-14	06/11/07	SOIL
713936	MQF0292-15	06/11/07	SOIL

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Particle Size Analysis by ASTM D422
There were no exceptions to the method quality control criteria during the analyses of these samples.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine Dusablon
Project Manager

Enclosure

Chain of Custody

SUBCONTRACT ORDER

TestAmerica - Morgan Hill, CA

MQF0292

SENDING LABORATORY:	RECEIVING LABORATORY:
TestAmerica - Morgan Hill, CA	STL - Burlington, VT
885 Jarvis Drive	208 South Park Drive, Suite 1
Morgan Hill, CA 95037	Colchester, VT 05446
Phone: 408-776-9600	Phone :(802) 655-1203
Fax: 408-782-6308	Fax: (802) 655-1248
Project Manager: Leticia Reyes	Project Location:

Contract Agreement: 04-006-120-0; Registration Number: 3940010561563. Send Hard Copy and copy of Invoice: include Copy of COC with invoice: Send one monthly invoices, with attached, itemized sub-invoices as needed, per contract

Analysis	Due	Expires	Comments
Sample ID: MQF0292-08	**Soil**	Sampled: **06/11/07 00:00**	
Grain Size analysis	06/26/07 15:00	06/25/07 00:00	STL-Burlington: Dry Weight, D422M/PSEP
Containers Supplied:			
4 oz. jar (B)			
Sample ID: MQF0292-09	**Soil**	Sampled: **06/11/07 00:00**	
Grain Size analysis	06/26/07 15:00	06/25/07 00:00	STL-Burlington: Dry Weight, D422M/PSEP
Containers Supplied:			
4 oz. jar (B)			
Sample ID: MQF0292-10	**Soil**	Sampled: **06/11/07 00:00**	
Grain Size analysis	06/26/07 15:00	06/25/07 00:00	STL-Burlington: Dry Weight, D422M/PSEP
Containers Supplied:			
4 oz. jar (B)			
Sample ID: MQF0292-11	**Soil**	Sampled: **06/11/07 00:00**	
Grain Size analysis	06/26/07 15:00	06/25/07 00:00	STL-Burlington: Dry Weight, D422M/PSEP
Containers Supplied:			
4 oz. jar (B)			
Sample ID: MQF0292-12	**Soil**	Sampled: **06/11/07 00:00**	
Grain Size analysis	06/26/07 15:00	06/25/07 00:00	STL-Burlington: Dry Weight, D422M/PSEP
Containers Supplied:			
4 oz. jar (B)			
Sample ID: MQF0292-13	**Soil**	Sampled: **06/11/07 00:00**	
Grain Size analysis	06/26/07 15:00	06/25/07 00:00	STL-Burlington: Dry Weight, D422M/PSEP
Containers Supplied:			
4 oz. jar (B)			

Released By	Date	Received By	Date
JULIE NG.	6/12 1500	Thomas Jackson	6-13-07 0930
Released By	Date	Received By	Date

SUBCONTRACT ORDER

TestAmerica - Morgan Hill, CA

MQF0292

Analysis	Due	Expires	Comments
Sample ID: MQF0292-14	**Soil**	Sampled: 06/11/07 00:00	
Grain Size analysis	06/26/07 15:00	06/25/07 00:00	STL-Burlington: Dry Weight, D422M/PSEP
Containers Supplied:			
4 oz. jar (B)			
Sample ID: MQF0292-15	**Soil**	Sampled: 06/11/07 00:00	
Grain Size analysis	06/26/07 15:00	06/25/07 00:00	STL-Burlington: Dry Weight, D422M/PSEP
Containers Supplied:			
4 oz. jar (B)			

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☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 FAX (650) 232-9612

Company Name: SF Water board	Project Name: Challenge Mine Hg 0607
Mailing Address: 1515 Clay st. Ste 1400	Billing Address (if different):
City: Oakland State: CA Zip Code: 94612	
Telephone: 510-622-2363 FAX #: 510-622-2458	P.O. #:
Report To: Lindsay Whalin Sampler: Lindsay Whalin	QC Data: ~~LEVEL D~~ (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time:
☒ 10 Working Days ☐ 3 Working Days ☐ 2 - 8 Hours
☐ 7 Working Days ☐ 2 Working Days
☐ 5 Working Days ☐ 24 Hours

☐ Drinking Water Creek water
☐ Waste Water
☒ Other

0292

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested: Hg (EPA 1630A)	Ni 3521	Metals 6010B	Comments
1 Challenge SW-1	6/11/07	Creek Water	1	1L Amber Bt, HNO3	006608	✓	✓	✓	HNO3 Preservative
2 Challenge SW-2			1		006612	✓	✓	✓	
3 Challenge SW-3			1		006609	✓	✓	✓	
4 Challenge SW-4			1		006614	✓	✓	✓	
5 Challenge SW-5			1		006616	✓	✓	✓	
6 Challenge SW-6			1		006618	✓	✓	✓	
7 Challenge SW-5 Dup			1		006610	✓	✓	✓	
8.									
9.									
10.									

Relinquished By:	Connie Ramos	Date: 6/11/07	Time: 3:05	Received By: (TAM#)	Date: 6/11/07	Time: 15:05
Relinquished By:		Date: 6/11/07	Time: 1730	Received By: Andy Redelsin	Date: 6/11/07	Time: 1730
Relinquished By:		Date:	Time:	Received By:	Date:	Time:

Were Samples Received in Good Condition? ☒ Yes ☐ No

Pink - Client
Yellow - Sequoia
White - Sequoia

5

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☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100

Company Name: SF Waterboard | Project: Challenge Mine 0607
Mailing Address: 1515 Clay St. Ste 1400 | Billing Address (if different):
City: Oakland | State: CA | Zip Code: 94612
Telephone: 510-622-2365 | Fax #: 510-622-2458 | P.O. #:
Report To: Lindsay Whalin | E-Mail Address: lwhalin@waterboards.ca.gov | QC Data: ☐ Level II (standard) ☐ Level III ☑ Level IV
Sampler: Lindsay Whalin | Date/Time Results Required: 10 days | Test America Work Order #

Turnaround Time: ☑ 10-15 Working Days (Standard TAT) ☐ 7 Working Days ☐ 5 Working Days ☐ 72 hours ☐ 48 hours ☐ 24 hours ☐ 2-8 hours

MANDATORY: ☐ SDWA (Drinking Water) ☐ CWA (Waste Water) ☐ RCRA (Hazardous Waste) ☑ Other Creek Sediments

1F0292

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Test America's Sample #	Hg Total 7471A *	Cd + Mg 6010 *	Metals 6010 *	TOC SM 5310 B	Grain Size D6122	Comments/Temp. (if required)
1. Challenge SW-1	6/11/07	Sediment	1	1L glass Jar	003154	✓	✓	✓	✓	✓	Keep cold.
2. Challenge SW-2			1		003157	✓					
3. Challenge SW-3			1		003152	✓					
4. Challenge SW-4			1		003159	✓					
5. Challenge SW-5			1		003062	✓					
6. Challenge SW-6			1		003156	✓					
Challenge SW5 Dup			1		003196	✓					
8. Challenge Background			1		003084	✓					
9.											Grain size use sieves hydrometer need <63mm
10.											

* 7471A 6010 Dry weight

Relinquished by/Co.: Connie Rans	Received by/Co.:	Date/Time/Temp: 6/11/07	1505
Relinquished by/Co.:	Received by/Co.: Cindy Medlock	Date/Time/Temp: 6-11-07	1730
Relinquished by/Co.:	Received by/Co.:	Date/Time/Temp:	

Were Samples Received in Good Condition? ☒ Yes ☐ No Samples on Ice? ☒ Yes ☐ No Method of Shipment: TAC Page 2 of 2

Note: By relinquishing samples to Test America, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days.

White: Test America **Yellow:** Test America **Pink:** Client

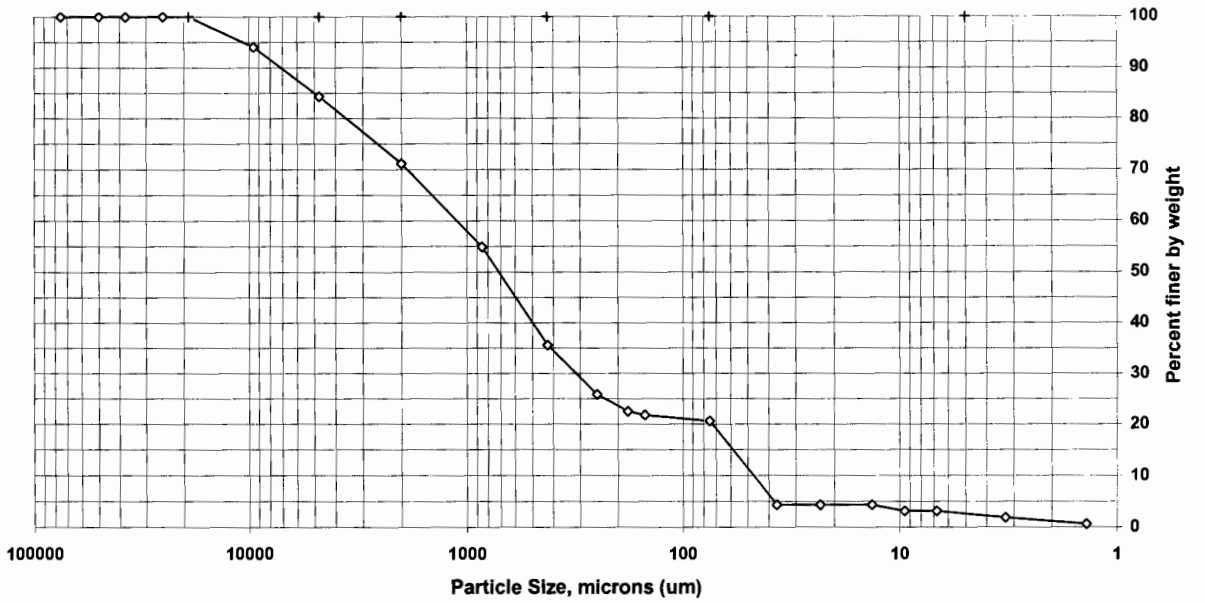
6

Sample Data Summary Package - Geotechnical

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0292	**Date Received:**	6/14/2007
Sample ID:	MQF0292-08	**ETR(s):**	120453	**Start Date:**	6/14/2007
Lab ID:	713929			**End Date:**	6/22/2007

Percent Solids:	67.8%	**Non-soil material:**	plant, shell
Specific Gravity:	2.650	**Shape (> #10):**	subangular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	94.0	6.0
#4	4750	84.3	9.7
#10	2000	71.2	13.2
#20	850	54.9	16.3
#40	425	35.6	19.2
#60	250	25.8	9.8
#80	180	22.5	3.3
#100	150	21.8	0.8
#200	75	20.6	1.2
Hydrometer	36.7	4.3	16.3
|	23.2	4.3	0.0
|	13.4	4.3	0.0
|	9.5	3.1	1.2
|	6.8	3.1	0.0
|	3.3	1.9	1.2
V	1.4	0.6	1.2

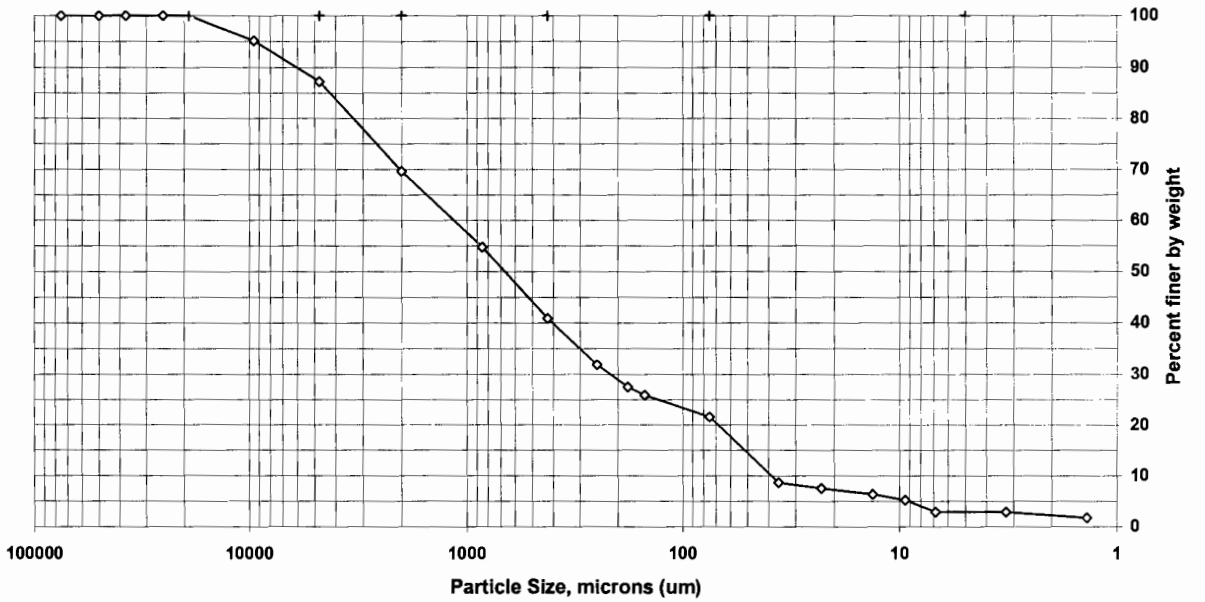
Soil Classification	Percent of Total Sample
Gravel	15.7
Sand	63.7
Coarse Sand	13.2
Medium Sand	35.5
Fine Sand	15.0
Silt	17.5
Clay	3.1

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0292	**Date Received:**	6/14/2007
Sample ID:	MQF0292-09	**ETR(s):**	120453	**Start Date:**	6/14/2007
Lab ID:	713930			**End Date:**	6/22/2007

Percent Solids:	54.4%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	subangular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	95.1	4.9
#4	4750	87.3	7.9
#10	2000	69.6	17.6
#20	850	54.8	14.8
#40	425	40.9	13.9
#60	250	31.9	9.0
#80	180	27.5	4.4
#100	150	25.9	1.6
#200	75	21.6	4.3
Hydrometer	36.0	8.7	12.9
|	22.9	7.5	1.2
|	13.3	6.4	1.2
|	9.4	5.2	1.2
|	6.8	2.9	2.3
|	3.3	2.9	0.0
V	1.4	1.7	1.2

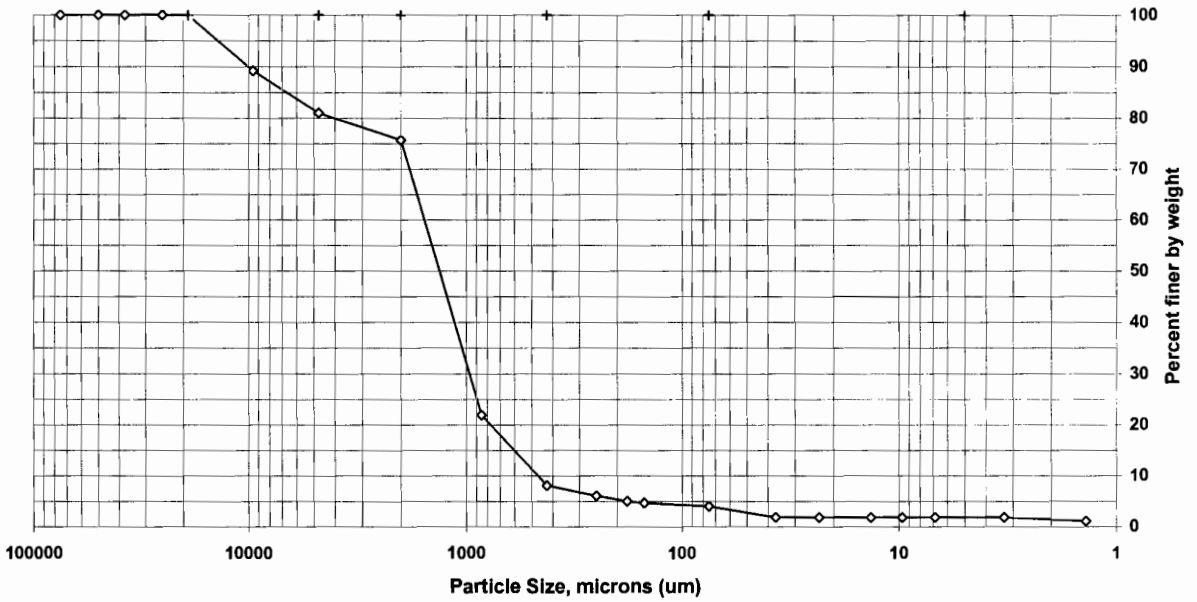
Soil Classification	Percent of Total Sample
Gravel	12.7
Sand	65.7
Coarse Sand	17.6
Medium Sand	28.7
Fine Sand	19.3
Silt	18.7
Clay	2.9

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0292	**Date Received:**	6/14/2007
Sample ID:	MQF0292-10	**ETR(s):**	120453	**Start Date:**	6/14/2007
Lab ID:	713931			**End Date:**	6/22/2007

Percent Solids:	84.3%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	25 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	99.9	0.1
3/8 inch	9500	89.2	10.8
#4	4750	81.0	8.2
#10	2000	75.7	5.3
#20	850	21.9	53.8
#40	425	8.1	13.8
#60	250	6.0	2.1
#80	180	5.0	1.0
#100	150	4.7	0.3
#200	75	4.0	0.7
Hydrometer	36.8	1.9	2.1
|	23.3	1.9	0.0
|	13.4	1.9	0.0
|	9.7	1.9	0.0
|	6.8	1.9	0.0
|	3.3	1.9	0.0
V	1.4	1.1	0.7

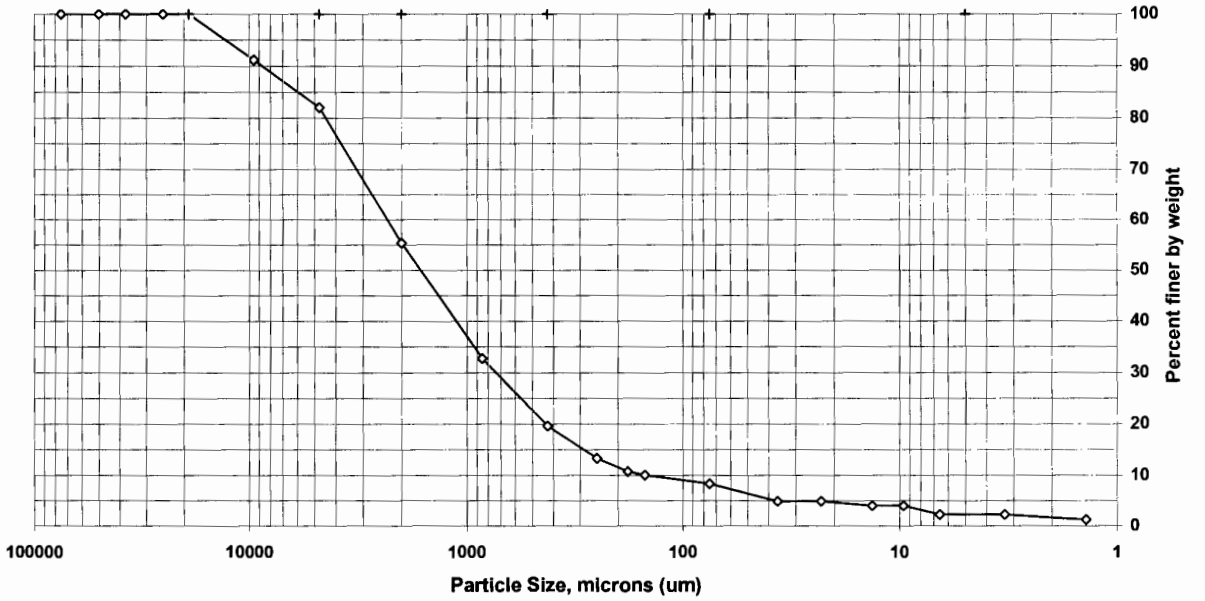
Soil Classification	Percent of Total Sample
Gravel	19.0
Sand	77.0
Coarse Sand	5.3
Medium Sand	67.6
Fine Sand	4.1
Silt	2.1
Clay	1.9

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0292	**Date Received:**	6/14/2007
Sample ID:	MQF0292-11	**ETR(s):**	120453	**Start Date:**	6/14/2007
Lab ID:	713932			**End Date:**	6/22/2007

Percent Solids:	79.9%	**Non-soil material:**	n/a
Specific Gravity:	2.650	**Shape (> #10):**	subangular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	91.2	8.8
#4	4750	82.0	9.1
#10	2000	55.4	26.7
#20	850	32.7	22.6
#40	425	19.6	13.1
#60	250	13.3	6.3
#80	180	10.8	2.5
#100	150	10.0	0.8
#200	75	8.3	1.7
Hydrometer	36.3	4.9	3.5
|	23.0	4.9	0.0
|	13.3	4.0	0.9
|	9.6	4.0	0.0
|	6.6	2.2	1.8
|	3.3	2.2	0.0
V	1.4	1.2	1.0

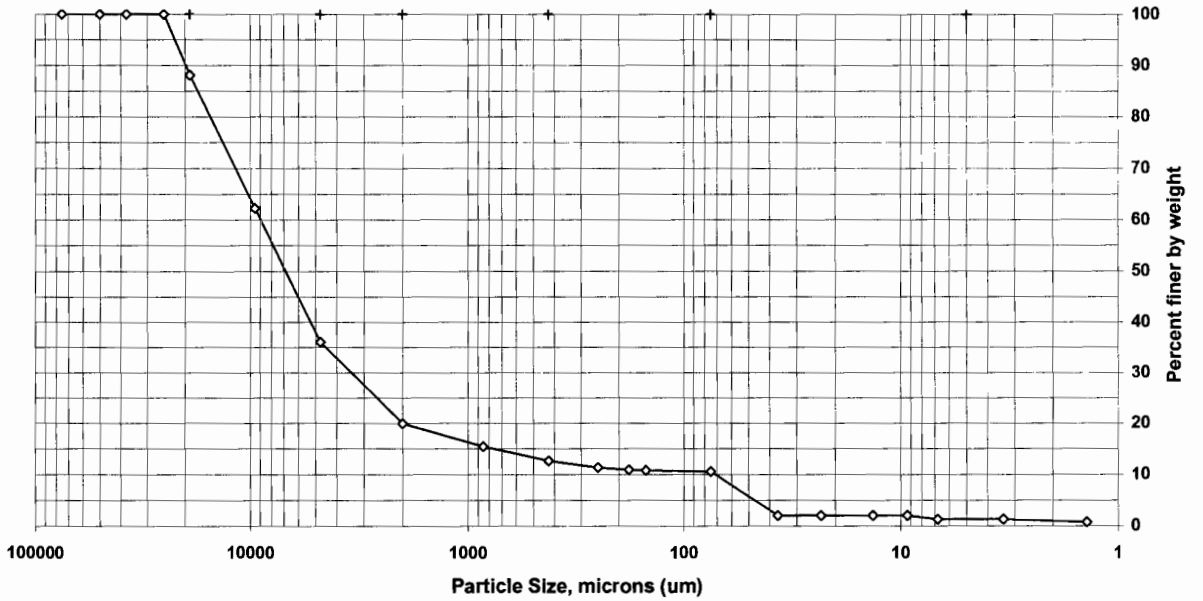
Soil Classification	Percent of Total Sample
Gravel	18.0
Sand	73.7
Coarse Sand	26.7
Medium Sand	35.8
Fine Sand	11.3
Silt	6.1
Clay	2.2

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0292	**Date Received:**	6/14/2007
Sample ID:	MQF0292-12	**ETR(s):**	120453	**Start Date:**	6/14/2007
Lab ID:	713933			**End Date:**	6/22/2007

Percent Solids:	82.3%	**Non-soil material:**	n/a
Specific Gravity:	2.650	**Shape (> #10):**	subrounded
Maximum Particle Size:	25 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	88.1	11.9
3/8 inch	9500	62.3	25.8
#4	4750	36.1	26.2
#10	2000	19.9	16.2
#20	850	15.5	4.5
#40	425	12.7	2.8
#60	250	11.3	1.3
#80	180	10.9	0.4
#100	150	10.8	0.1
#200	75	10.6	0.3
Hydrometer	36.7	2.0	8.5
|	23.2	2.0	0.0
|	13.4	2.0	0.0
|	9.3	2.0	0.0
|	6.8	1.4	0.7
|	3.4	1.4	0.0
V	1.4	0.8	0.6

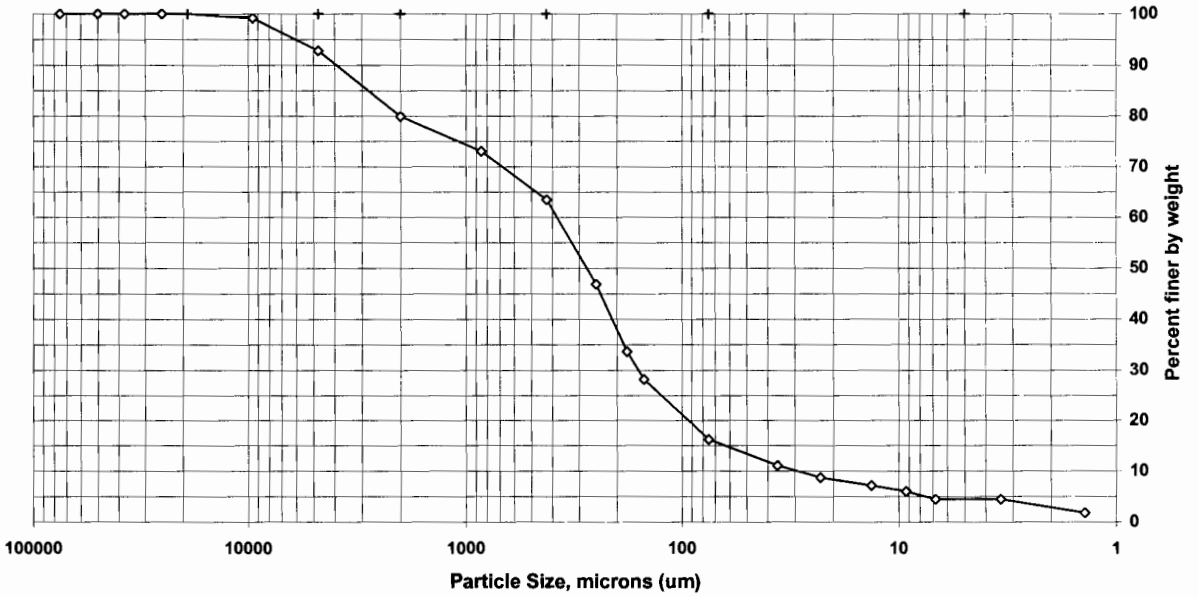
Soil Classification	Percent of Total Sample
Gravel	63.9
Sand	25.5
Coarse Sand	16.2
Medium Sand	7.2
Fine Sand	2.1
Silt	9.2
Clay	1.4

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0292	**Date Received:**	6/14/2007
Sample ID:	MQF0292-13	**ETR(s):**	120453	**Start Date:**	6/14/2007
Lab ID:	713934			**End Date:**	6/22/2007

Percent Solids:	57.9%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	subrounded
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	99.2	0.8
#4	4750	92.9	6.3
#10	2000	79.9	12.9
#20	850	73.0	6.9
#40	425	63.5	9.5
#60	250	46.8	16.7
#80	180	33.7	13.1
#100	150	28.2	5.5
#200	75	16.2	12.0
Hydrometer	36.1	11.1	5.1
|	22.9	8.7	2.4
|	13.4	7.1	1.6
|	9.3	6.0	1.1
|	6.8	4.5	1.6
|	3.4	4.5	0.0
V	1.4	1.8	2.7

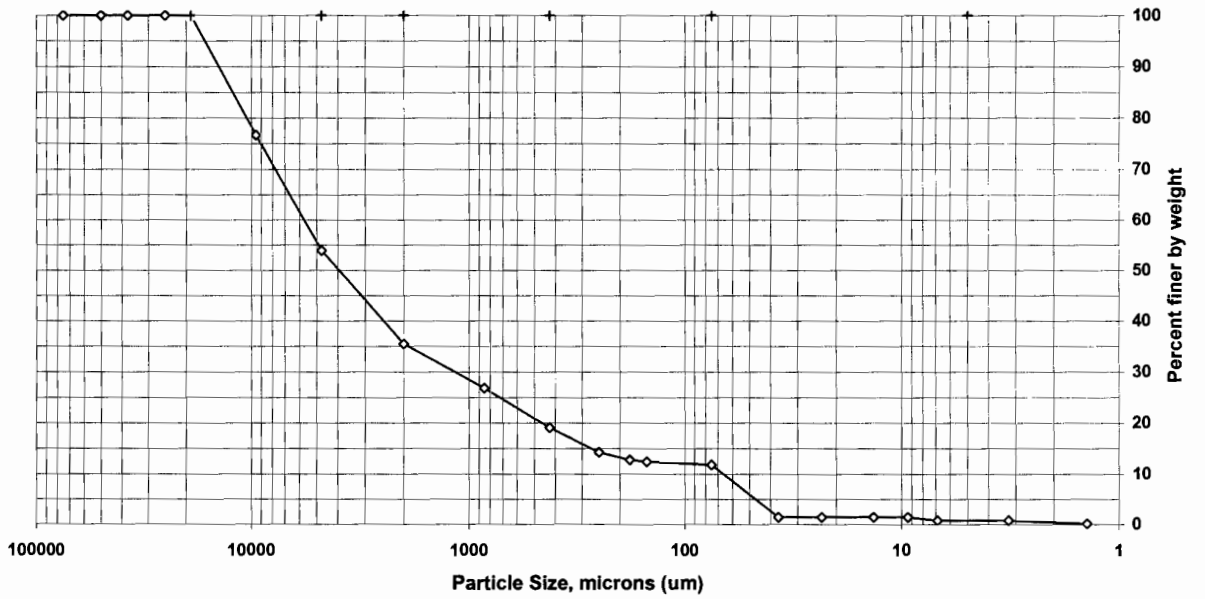
Soil Classification	Percent of Total Sample
Gravel	7.1
Sand	76.6
Coarse Sand	12.9
Medium Sand	16.4
Fine Sand	47.3
Silt	11.8
Clay	4.5

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0292	**Date Received:**	6/14/2007
Sample ID:	MQF0292-14	**ETR(s):**	120453	**Start Date:**	6/14/2007
Lab ID:	713935			**End Date:**	6/22/2007

Percent Solids:	84.4%	**Non-soil material:**	n/a
Specific Gravity:	2.650	**Shape (> #10):**	subrounded
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	76.7	23.3
#4	4750	53.9	22.8
#10	2000	35.5	18.4
#20	850	26.8	8.7
#40	425	19.1	7.7
#60	250	14.3	4.8
#80	180	12.8	1.5
#100	150	12.4	0.4
#200	75	11.8	0.6
Hydrometer	36.8	1.4	10.4
|	23.3	1.4	0.0
|	13.4	1.4	0.0
|	9.4	1.4	0.0
|	6.9	0.8	0.7
|	3.2	0.8	0.0
V	1.4	0.2	0.6

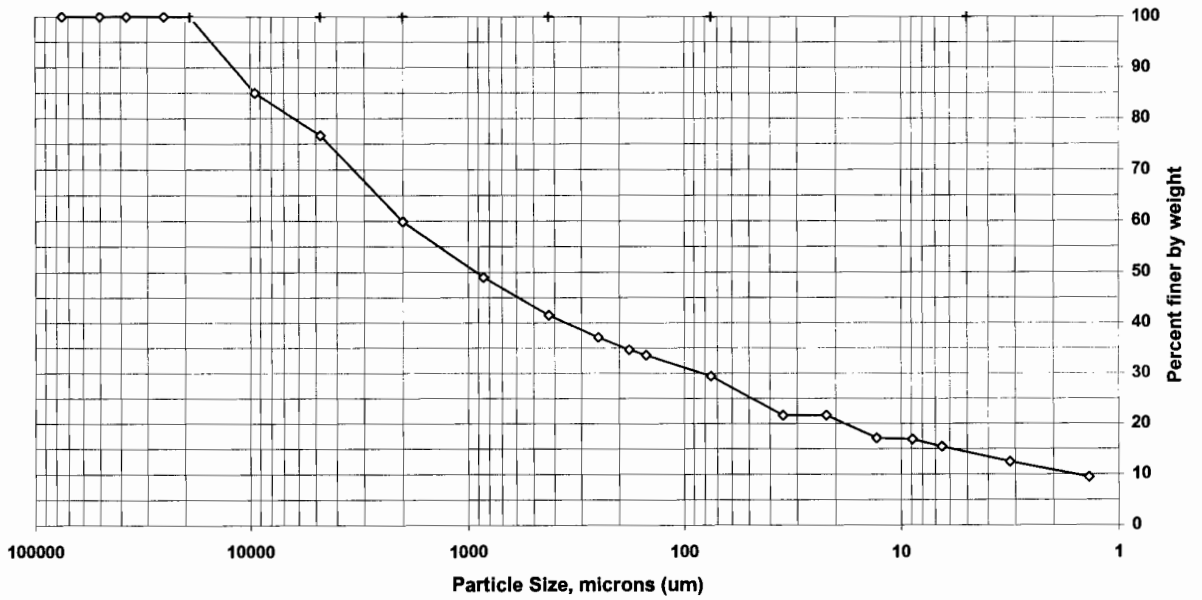
Soil Classification	Percent of Total Sample
Gravel	46.1
Sand	42.1
Coarse Sand	18.4
Medium Sand	16.4
Fine Sand	7.3
Silt	11.1
Clay	0.8

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MQF0292	**Date Received:**	6/14/2007
Sample ID:	MQF0292-15	**ETR(s):**	120453	**Start Date:**	6/14/2007
Lab ID:	713936			**End Date:**	6/22/2007

Percent Solids:	87.3%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	subangular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	85.0	15.0
#4	4750	76.6	8.3
#10	2000	59.9	16.7
#20	850	49.0	10.9
#40	425	41.5	7.5
#60	250	37.1	4.4
#80	180	34.6	2.5
#100	150	33.6	1.0
#200	75	29.4	4.2
Hydrometer	34.8	21.6	7.7
|	22.0	21.6	0.0
|	12.9	17.1	4.5
|	8.9	16.9	0.2
|	6.5	15.4	1.5
|	3.2	12.4	3.0
V	1.4	9.4	3.0

Soil Classification	Percent of Total Sample
Gravel	23.4
Sand	47.3
Coarse Sand	16.7
Medium Sand	18.4
Fine Sand	12.1
Silt	13.9
Clay	15.4

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Sample Handling

RECEIVED
6-13-07
Thomas Jackson

From: Origin ID: RBKA (408)776-9600
Tim Costello
Test America
885 Jarvis Drive

Morgan Hill, CA 95037

FedEx Express

E

CLS022307/21/23

Ship Date: 12JUN07
ActWgt: 24 LB
System#: 9141070/INET2600
Account#: S *********

Delivery Address Bar Code

SHIP TO: (802)655-1203 **BILL RECIPIENT**

Sample Receiving
STL-Burlington
208 South Park Drive Suite 1

Colchester, VT 05446

Ref #
Invoice #
PO #
Dept #

PRIORITY OVERNIGHT

WED
Deliver By:
13JUN07

TRK# 7986 9549 3573 FORM 0201

BTV AA

05446 -VT-US

XH BTVA

Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

STL BURLINGTON
SAMPLE RECEIPT & LOG IN CHECKLIST

Client: TACAMH	Date Received: 6-13-07	Log In Date: 6-14-07	
ETR: 120453	Time Received: 0930	By: J.J.	
SDG: MQF0292	Received By: J.J.	Signature: Thomas Jackson	
Project: 27000	# Coolers Received: 1	PM Signature: Kristi Russell	
Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Hand ☐ Other (specify)		Date: 6/18/07	
List Air bill Number(s) or Attach a photocopy of the Air Bill:			

COOLER SCREEN	YES	NO	NA	COMMENTS
There is *no* evidence to indicate tampering	X			
Custody seals are present and intact	X			
Custody seal numbers are present		X		
If yes, list custody seal numbers:				

Thermal Preservation Type: ☒ Wet Ice ☐ Blue Ice ☐ None ☐ Other (specify)

IR Gun ID: 62 Correction Factor (CF) = 0 °C

Cooler 1:	1.6 °C	Cooler 6	°C	Cooler 11	°C	Cooler 16	°C
Cooler 2:	°C	Cooler 7	°C	Cooler 12	°C	Cooler 17	°C
Cooler 3:	°C	Cooler 8	°C	Cooler 13	°C	Cooler 18	°C
Cooler 4:	°C	Cooler 9	°C	Cooler 14	°C	Cooler 19	°C
Cooler 5	°C	Cooler 10	°C	Cooler 15	°C	Cooler 20	°C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun

EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.

Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	NA	COMMENTS
Sample containers were received intact	X			
Legible sample labels are affixed to each container	X			

CHAIN OF CUSTODY (COC)	YES	NO	NA	COMMENTS
COC is present and includes the following information for each container:				
• Sample ID / Sample Description	X			
• Date of Sample Collection	X			
• Time of Sample Collection	X			
• Identification of the Sampler		X		
• Preservation Type			X	
• Requested Tests Method(s)	X			
• Necessary Signatures	X			
Internal Chain of Custody (ICOC) Required		X		
If yes to above, ICOC Record initiated for every Worksheet			X	

SAMPLE INTEGRITY / USABILITY	YES	NO	NA	COMMENTS
The sample container matches the COC	X			
Appropriate sample containers were received for the tests requested	X			
Samples were received within holding time	X			
Sufficient amount of sample is provided for requested analyses	X			
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)			X	
Appropriate preservatives were used for the tests requested			X	
pH of inorganic samples checked and is within method specification			X	
If no, attach Inorganic Sample pH Adjustment Form			X	

ANOMALY / NCR SUMMARY

Last Page of this Document

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

11 April, 2008

Carrie Austin
RWQCB-Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Mercury Mines
Work Order: MRC0574

Enclosed are the results of analyses for samples received by the laboratory on 03/21/08 15:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Leticia Reyes
Project Manager

CA ELAP Certificate # 2682

The Chain(s) of Custody, 5 pages, are included and are an integral part of this report.

For Volatile Analysis a trip blank is required to be provided. If trip blank results are not included in the report, then either the trip blank was not submitted or requested to be analyzed.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

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Partial Report

RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRC0574
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
031908-S-CA-01	MRC0574-01	Soil	03/19/08 11:45	03/21/08 15:40
031908-S-CA-02	MRC0574-02	Soil	03/19/08 12:03	03/21/08 15:40
031908-S-CA-03	MRC0574-03	Soil	03/19/08 12:15	03/21/08 15:40
031908-S-CA-04	MRC0574-04	Soil	03/19/08 12:28	03/21/08 15:40
031908-S-CA-05	MRC0574-05	Soil	03/19/08 12:35	03/21/08 15:40

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

TestAmerica Irvine

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
031908-S-CA-01 (MRC0574-01) Soil	**Sampled: 03/19/08 11:45**	**Received: 03/21/08 15:40**							
Total Organic Carbon	**94000**	16000	mg/kg	1	8D03135	04/03/08 12:41	04/03/08	EPA 9060A MOD.	
031908-S-CA-02 (MRC0574-02) Soil	**Sampled: 03/19/08 12:03**	**Received: 03/21/08 15:40**							
Total Organic Carbon	**28000**	5000	mg/kg	1	8D03135	04/03/08 12:41	04/03/08	EPA 9060A MOD.	
031908-S-CA-03 (MRC0574-03) Soil	**Sampled: 03/19/08 12:15**	**Received: 03/21/08 15:40**							
Total Organic Carbon	**29000**	4900	mg/kg	1	8D03135	04/03/08 12:41	04/03/08	EPA 9060A MOD.	
031908-S-CA-04 (MRC0574-04) Soil	**Sampled: 03/19/08 12:28**	**Received: 03/21/08 15:40**							
Total Organic Carbon	**5600**	4900	mg/kg	1	8D03135	04/03/08 12:41	04/03/08	EPA 9060A MOD.	
031908-S-CA-05 (MRC0574-05) Soil	**Sampled: 03/19/08 12:35**	**Received: 03/21/08 15:40**							
Total Organic Carbon	ND	5000	mg/kg	1	8D03135	04/03/08 12:41	04/03/08	EPA 9060A MOD.	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
031908-S-CA-01 (MRC0574-01) Soil Sampled: 03/19/08 11:45 Received: 03/21/08 15:40									
Silver	ND	0.50	mg/kg	1	8C26026	03/26/08	03/27/08	EPA 6010B	
Arsenic	ND	20	"	2	"	"	04/02/08	"	RL1
Barium	**120**	2.5	"	1	"	"	03/27/08	"	
Calcium	**7600**	12	"	"	"	"	"	"	
Cadmium	ND	0.25	"	"	"	"	"	"	
Chromium	**90**	5.0	"	"	"	"	"	"	
Copper	**23**	0.25	"	"	"	"	"	"	
Mercury	**0.18**	0.090	"	5	8D01010	04/01/08	04/01/08	EPA 7471A	
Magnesium	**7600**	2.5	"	1	8C26026	03/26/08	03/27/08	EPA 6010B	B1
Nickel	**180**	1.2	"	"	"	"	"	"	
Lead	**26**	2.5	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**50**	5.0	"	"	"	"	"	"	
031908-S-CA-02 (MRC0574-02) Soil Sampled: 03/19/08 12:03 Received: 03/21/08 15:40									
Silver	ND	0.50	mg/kg	1	8C26026	03/26/08	03/27/08	EPA 6010B	
Arsenic	**12**	10	"	"	"	"	03/28/08	"	
Barium	**140**	2.5	"	"	"	"	03/27/08	"	
Calcium	**2700**	12	"	"	"	"	"	"	
Cadmium	ND	0.25	"	"	"	"	"	"	
Chromium	**24**	5.0	"	"	"	"	"	"	
Copper	**22**	0.25	"	"	"	"	"	"	
Mercury	**0.075**	0.018	"	"	8D01010	04/01/08	04/01/08	EPA 7471A	
Magnesium	**5000**	2.5	"	"	8C26026	03/26/08	03/27/08	EPA 6010B	B1
Nickel	**31**	1.2	"	"	"	"	"	"	
Lead	**11**	2.5	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	03/28/08	"	
Zinc	**43**	5.0	"	"	"	"	03/27/08	"	

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
031908-S-CA-03 (MRC0574-03) Soil Sampled: 03/19/08 12:15 Received: 03/21/08 15:40									
Silver	ND	0.50	mg/kg	1	8C26026	03/26/08	03/27/08	EPA 6010B	
Arsenic	ND	10	"	"	"	"	"	"	
Barium	**110**	2.5	"	"	"	"	"	"	
Calcium	**5700**	12	"	"	"	"	"	"	
Cadmium	ND	0.25	"	"	"	"	"	"	
Chromium	**43**	5.0	"	"	"	"	"	"	
Copper	**17**	0.25	"	"	"	"	"	"	
Mercury	**87**	9.0	"	500	8D01010	04/01/08	04/01/08	EPA 7471A	
Magnesium	**7500**	2.5	"	1	8C26026	03/26/08	03/27/08	EPA 6010B	B1
Nickel	**88**	1.2	"	"	"	"	"	"	
Lead	**30**	2.5	"	"	"	"	"	"	
Selenium	ND	10	"	"	"	"	"	"	
Zinc	**55**	5.0	"	"	"	"	"	"	
031908-S-CA-04 (MRC0574-04) Soil Sampled: 03/19/08 12:28 Received: 03/21/08 15:40									
Silver	ND	2.5	mg/kg	5	8C26026	03/26/08	04/07/08	EPA 6010B	RL1
Arsenic	ND	50	"	"	"	"	03/28/08	"	RL1
Barium	**79**	12	"	"	"	"	"	"	
Calcium	**21000**	62	"	"	"	"	"	"	
Cadmium	ND	1.2	"	"	"	"	"	"	RL1
Chromium	**480**	25	"	"	"	"	"	"	
Copper	**25**	1.2	"	"	"	"	"	"	
Mercury	**3.9**	1.8	"	100	8D01010	04/01/08	04/01/08	EPA 7471A	
Magnesium	**24000**	12	"	5	8C26026	03/26/08	03/28/08	EPA 6010B	B1
Nickel	**900**	6.2	"	"	"	"	"	"	
Lead	ND	12	"	"	"	"	"	"	RL1
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	ND	25	"	"	"	"	"	"	RL1

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
031908-S-CA-05 (MRC0574-05) Soil Sampled: 03/19/08 12:35 Received: 03/21/08 15:40									
Silver	ND	0.50	mg/kg	1	8C26026	03/26/08	03/27/08	EPA 6010B	
Arsenic	**14**	10	"	"	"	"	"	"	
Barium	**50**	2.5	"	"	"	"	"	"	
Calcium	**11000**	12	"	"	"	"	"	"	
Cadmium	**0.28**	0.25	"	"	"	"	"	"	
Chromium	**250**	5.0	"	"	"	"	"	"	
Copper	**35**	0.25	"	"	"	"	"	"	
Mercury	**1.9**	1.8	"	100	8D01010	04/01/08	04/01/08	EPA 7471A	
Magnesium	**23000**	12	"	5	8C26026	03/26/08	03/28/08	EPA 6010B	B1
Nickel	**760**	1.2	"	1	"	"	03/27/08	"	
Lead	**3.6**	2.5	"	"	"	"	"	"	
Selenium	ND	50	"	5	"	"	03/28/08	"	RL1
Zinc	**17**	5.0	"	1	"	"	03/27/08	"	

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Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Conventional Chemistry Parameters by APHA/EPA Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
031908-S-CA-01 (MRC0574-01) Soil	**Sampled: 03/19/08 11:45**	**Received: 03/21/08 15:40**							
Percent Solids	**66**	1.0	%	1	8C28033	03/27/08	03/28/08	SM2540G	
031908-S-CA-02 (MRC0574-02) Soil	**Sampled: 03/19/08 12:03**	**Received: 03/21/08 15:40**							
Percent Solids	**84**	1.0	%	1	8C28033	03/27/08	03/28/08	SM2540G	
031908-S-CA-03 (MRC0574-03) Soil	**Sampled: 03/19/08 12:15**	**Received: 03/21/08 15:40**							
Percent Solids	**82**	1.0	%	1	8C28033	03/27/08	03/28/08	SM2540G	
031908-S-CA-04 (MRC0574-04) Soil	**Sampled: 03/19/08 12:28**	**Received: 03/21/08 15:40**							
Percent Solids	**97**	1.0	%	1	8C28033	03/27/08	03/28/08	SM2540G	
031908-S-CA-05 (MRC0574-05) Soil	**Sampled: 03/19/08 12:35**	**Received: 03/21/08 15:40**							
Percent Solids	**95**	1.0	%	1	8C28033	03/27/08	03/28/08	SM2540G	

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Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

TOTAL ORGANIC CARBON (EPA 9060A MOD.) - Quality Control

TestAmerica Irvine

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D03135 - General Prep / EPA 9060A MOD.										
Blank (8D03135-BLK1)				Prepared & Analyzed: 04/03/08						
Total Organic Carbon	ND	5000	mg/kg							
Laboratory Control Sample (8D03135-BS1)				Prepared & Analyzed: 04/03/08						
Total Organic Carbon	10800	5000	mg/kg	10000		108	90-110			
Matrix Spike (8D03135-MS1)	**Source: MRC0574-02**			Prepared & Analyzed: 04/03/08						
Total Organic Carbon	48300	4900	mg/kg	24700	27600	84	70-130			
Matrix Spike Dup (8D03135-MSD1)	**Source: MRC0574-02**			Prepared & Analyzed: 04/03/08						
Total Organic Carbon	44900	4900	mg/kg	24600	27600	70	70-130	7	30	

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Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8C26026 - EPA 3050B / EPA 6010B										
Blank (8C26026-BLK1)				Prepared: 03/26/08 Analyzed: 03/27/08						
Arsenic	ND	10	mg/kg							
Barium	ND	2.5	"							
Magnesium	4.40	2.5	"							B1
Copper	ND	0.25	"							
Chromium	ND	5.0	"							
Silver	ND	0.50	"							
Lead	ND	2.5	"							
Selenium	ND	10	"							
Zinc	ND	5.0	"							
Calcium	ND	12	"							
Nickel	ND	1.2	"							
Cadmium	ND	0.25	"							
Laboratory Control Sample (8C26026-BS1)				Prepared: 03/26/08 Analyzed: 03/27/08						
Barium	45.7	2.5	mg/kg	50.0		91	80-120			
Arsenic	44.6	10	"	50.0		89	80-120			
Cadmium	46.4	0.25	"	50.0		93	80-120			
Silver	45.2	0.50	"	50.0		90	80-120			
Copper	45.9	0.25	"	50.0		92	80-120			
Chromium	46.0	5.0	"	50.0		92	80-120			
Lead	45.3	2.5	"	50.0		91	80-120			
Nickel	45.9	1.2	"	50.0		92	80-120			
Calcium	477	12	"	500		95	80-120			
Selenium	44.4	10	"	50.0		89	80-120			
Zinc	46.1	5.0	"	50.0		92	80-120			
Magnesium	446	2.5	"	500		89	80-120			B1
Matrix Spike (8C26026-MS1)	**Source: MRC0576-01**			Prepared: 03/26/08 Analyzed: 03/28/08						
Silver	40.0	10	mg/kg	50.0	ND	80	80-120			
Arsenic	39.2	50	"	50.0	ND	78	80-120			M8, RL1
Barium	170	12	"	50.0	121	98	80-120			
Calcium	15700	62	"	500	14000	339	80-120			M7
Copper	101	1.2	"	50.0	55.1	91	80-120			
Chromium	135	25	"	50.0	95.4	79	80-120			M8
Cadmium	44.4	1.2	"	50.0	ND	89	80-120			
Lead	40.5	12	"	50.0	ND	81	80-120			
Nickel	109	6.2	"	50.0	54.4	109	80-120			

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Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8C26026 - EPA 3050B / EPA 6010B										
Matrix Spike (8C26026-MS1)	**Source: MRC0576-01**			Prepared: 03/26/08 Analyzed: 03/28/08						
Zinc	96.0	25	mg/kg	50.0	50.8	90	80-120			
Magnesium	10700	12	"	500	10200	94	80-120			B1
Selenium	33.3	50	"	50.0	ND	67	80-120			M8, RL1
Matrix Spike Dup (8C26026-MSD1)	**Source: MRC0576-01**			Prepared: 03/26/08 Analyzed: 03/28/08						
Silver	41.5	5.0	mg/kg	50.0	ND	83	80-120	4	20	
Copper	94.1	1.2	"	50.0	55.1	78	80-120	7	20	M8
Barium	151	12	"	50.0	121	61	80-120	11	20	M8
Arsenic	47.9	100	"	50.0	ND	96	80-120	20	20	RL1
Chromium	111	25	"	50.0	95.4	31	80-120	19	20	M8
Cadmium	43.9	1.2	"	50.0	ND	88	80-120	1	20	
Nickel	96.7	6.2	"	50.0	54.4	84	80-120	12	20	
Lead	49.3	12	"	50.0	ND	99	80-120	20	20	
Selenium	55.5	50	"	50.0	ND	111	80-120	50	20	R2
Zinc	89.5	25	"	50.0	50.8	77	80-120	7	20	M8
Magnesium	9500	12	"	500	10200	0	80-120	12	20	M8, B1
Calcium	10300	62	"	500	14000	0	80-120	41	20	M8, R2
Batch 8D01010 - EPA 7471A / EPA 7471A										
Blank (8D01010-BLK1)				Prepared & Analyzed: 04/01/08						
Mercury	ND	0.018	mg/kg							
Laboratory Control Sample (8D01010-BS1)				Prepared & Analyzed: 04/01/08						
Mercury	0.588	0.018	mg/kg	0.667		88	80-120			
Matrix Spike (8D01010-MS1)	**Source: MRC0574-03**			Prepared & Analyzed: 04/01/08						
Mercury	88.3	9.0	mg/kg	0.667	87.5	125	80-120			M7

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Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D01010 - EPA 7471A / EPA 7471A										
Matrix Spike Dup (8D01010-MSD1)	**Source: MRC0574-03**			Prepared & Analyzed: 04/01/08						
Mercury	88.3	9.0	mg/kg	0.667	87.5	125	80-120	0	25	M7

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Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8C28033 - General Preparation / SM2540G										
Blank (8C28033-BLK1)				Prepared: 03/27/08 Analyzed: 03/28/08						
Percent Solids	ND	1.0	%							
Duplicate (8C28033-DUP1)	**Source: MRC0574-03**			Prepared: 03/27/08 Analyzed: 03/28/08						
Percent Solids	83.5	1.0	%		82.4			1	20	

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Oakland CA, 94612	Project Manager: Carrie Austin	04/11/08 09:56

Notes and Definitions

RL1	Reporting limit raised due to sample matrix effects.
R2	The RPD exceeded the acceptance limit.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
B1	Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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ANALYTICAL TESTING CORPORATION

CHAIN OF CUSTODY

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☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100

Company Name: SF Bay WATER BOARD		Project: Mercury Mines	
Mailing Address: 1515 Clay St. #1400		Billing Address (if different):	
City: Oakland	State: CA	Zip Code: 94612	
Telephone: (510) 622-1015	Fax #:	P.O. #:	
Report To: CAUSTIN	E-Mail Address: CAUSTIN@waterboards.ca.gov	QC Data: ☐ Level II (standard) ☐ Level III ☐ Level IV	
Sampler: C AUSTIN	Date/Time Results Required: STD	Test America Work Order #: MRC0574	

Turnaround Time:
☒ 10-15 Working Days (Standard TAT)
☐ 7 Working Days
☐ 5 Working Days
☐ 72 hours
☐ 48 hours
☐ 24 hours
☐ 2-8 hours

MANDATORY:
☐ SDWA (Drinking Water)
☐ CWA (Waste Water)
☒ RCRA (Hazardous Waste)
☒ Other

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Test America's Sample #	Mercury 7471A* 7470A*	Cr#Ni* 6010	Metals 6010*	TOC SM5310B	Grain size D422					Comments/Temp. (if required)
1. Ø31908-S-CA-Ø1		S	1	Glass	01	X	X	X	X	X					*7470 & 6010
2. Ø31908-S-CA-Ø2		〃	〃	〃	02	〃	〃	〃	〃	〃					Dry wt
3. Ø31908-S-CA-Ø3		〃	〃	〃	03	〃	〃	〃	〃	〃					Metals As Ba Cd Cr (tot) Cu Pb Ni Se Ag Zn
4. Ø31908-S-CA-Ø4		S	1	Glass	04	X	X	X	X	X					
5.															
6.															GRAIN Size
7.															use sieve & hydrometer
8.															need <63 µm
9.															
10.															

Relinquished by/Co.:	Received by/Co.: (TAMH)	Date/Time/Temp: 3/21/08 1015
Relinquished by/Co.:	Received by/Co.: D. Velasquez	Date/Time/Temp: 3-21-08 1540
Relinquished by/Co.:	Received by/Co.:	Date/Time/Temp:

Were Samples Received in Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment: TAC Page 1 of 1

Note: By relinquishing samples to Test America, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days.

White: Test America **Yellow:** Test America **Pink:** Client

PROBLEM CHAIN-OF-CUSTODY

MRC0574

DATE/TIME 3/21/08 1540 DATE RECEIVED 3/21/08

CLIENT SF Bay Water TURN AROUND TIME 10 day

CLIENT SERVICES REP Leticia Reyes ANALYST DV.

PROBLEM

1) received one extra sample
2) no sampling time

RESOLUTION

Client Instruction* See email

Telephone Number of Client: per email

Client Contact for Instruction: Carrie Cousins

Date and Time of Instruction: 03/24/08

Date & Time Form Given to Sample Control: 03/24/08

CLIENT SERVICES REP. SIGNATURE:

DATE/TIME: 03/24/08

*If client does not return call within 24 hours, please route this form to the Laboratory Director.

White Copy - Client Services

Pink Copy - Sample Control

MRC0574

Leticia Reyes

From: Ellen Fostersmith [EFostersmith@valleywater.org]
Sent: Thursday, March 20, 2008 3:01 PM
To: Leticia Reyes
Cc: Simon Gutierrez; Vanessa De La Piedra
Subject: Church Street Groundwater Sampling

Hi Leticia,

We need 45 VOA (40 ml) bottles with HCL for TPHG EPA method 8015, BTEX and 1,2-DCA EPA method 8260B (full scan) for April 23, 2008. Also a cooler or two for the bottles. Please drop off the bottles and coolers at 5750 Almaden Expressway by Monday, April 21.

We also need an edf of the analytical report for GEOTRACKER. Here is some essential information needed for the edf.

Global ID = T0608500005
Company Code , do you mean Log Code = SCVW
Site code = Case # = 1077

If you need any more information from me, please let me know

Thanks,

Ellen Fostersmith
Groundwater Management Unit
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118
(408) 265-2607 ext. 2746
mailto:EFostersmith@valleywater.org

MRC0574

Leticia Reyes

From: Carrie Austin [CAustin@waterboards.ca.gov]
Sent: Monday, March 24, 2008 3:32 PM
To: Leticia Reyes
Subject: response on COC & yes, 5 samples

Attachments: Header

Header (7 KB)

(this e-mail bounced back, so I'm re-sending)

>>> "Carrie Austin" <CAustin@waterboards.ca.gov> 3/24/2008 11:16 AM >>>
oops!
yes, we do want all 5 analyzed for all the same things we collected them at the following times
1 11:45
2 12:03
3 12:15
4 12:28
5 12:35

Carrie M. Austin, P.E.

Project Manager - Hg TMDL in Guadalupe
SFB Water Board
1515 Clay St., # 1400
Oakland, CA 94612
caustin@waterboards.ca.gov
(510) 622-1015
fax 622-2460

>>> <MP6500@testamericainc.com> 3/24/2008 8:01 AM >>>
This E-mail was sent from "RG768" (Aficio MP 6500).

Scan Date: 03.24.2008 10:01:52 (-0500)
Queries to: MP6500@testamericainc.com

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If you have received this communication in error, please notify the

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: SF Bay Waterboard
REC. BY (PRINT) D.V. O
WORKORDER: MRC0574

DATE REC'D AT LAB: 3/21/08
TIME REC'D AT LAB: 1540
DATE LOGGED IN: 3/25/08

For Regulatory Purposes?
___ DRINKING WATER
___ WASTE WATER
✓ OTHER haz

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / (Absent)	01	031908-S-CA-01	80z jar	—	—	Soil	3/19/08	1145
Intact / Broken*	02	02						1203
2. Chain-of-Custody (Present) / Absent*	03	03						1215
3. Traffic Reports or	04	04						1228
Packing List: Present / (Absent)	05	05						1235
4. Airbill: Airbill / Sticker								
Present / (Absent)								
5. Airbill #:								
6. Sample Labels: (Present) / Absent								
7. Sample IDs: (Listed) / Not Listed								
on Chain-of-Custody								
8. Sample Condition: (Intact) / Broken* /								
Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree? (Yes) / No*								
10. Sample received within hold time? (Yes) / No*			3/21	Yes				
11. Adequate sample volume received? (Yes) / No*								
12. Proper preservatives used? (Yes) / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / (No*)								
14. Read Temp: 3.4°								
Correction Factor: -1.0°								
Corrected Temp: 2.4°								
Is corrected temp. 0-6°C? (Yes) / No**								
**Exception (if any): Metals / Perchlorate								
DFF on Ice or Problem COC								

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

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21 April, 2008

Carrie Austin
RWQCB-Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Mercury Mines
Work Order: MRD0118

Enclosed are the results of analyses for samples received by the laboratory on 04/02/08 17:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Leticia Reyes
Project Manager

CA ELAP Certificate # 2682

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

For Volatile Analysis a trip blank is required to be provided. If trip blank results are not included in the report, then either the trip blank was not submitted or requested to be analyzed.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
040108-S-CA-01	MRD0118-01	Soil	04/02/08 10:52	04/02/08 17:30
040108-S-CA-02	MRD0118-02	Soil	04/02/08 11:20	04/02/08 17:30
040108-S-CA-03	MRD0118-03	Soil	04/02/08 11:28	04/02/08 17:30
040108-S-KA-04	MRD0118-04	Soil	04/02/08 11:49	04/02/08 17:30
040108-S-CA-05	MRD0118-05	Soil	04/02/08 14:15	04/02/08 17:30
040108-S-CA-06	MRD0118-06	Soil	04/02/08 14:28	04/02/08 17:30

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

TestAmerica Irvine

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
040108-S-CA-01 (MRD0118-01) Soil	**Sampled: 04/02/08 10:52**	**Received: 04/02/08 17:30**							
Total Organic Carbon	**22000**	5000	mg/kg	1	8D09087	04/09/08 09:30	04/09/08	EPA 9060A MOD.	
040108-S-CA-02 (MRD0118-02) Soil	**Sampled: 04/02/08 11:20**	**Received: 04/02/08 17:30**							
Total Organic Carbon	**32000**	5000	mg/kg	1	8D09087	04/09/08 09:30	04/09/08	EPA 9060A MOD.	
040108-S-CA-03 (MRD0118-03) Soil	**Sampled: 04/02/08 11:28**	**Received: 04/02/08 17:30**							
Total Organic Carbon	**26000**	5000	mg/kg	1	8D09087	04/09/08 09:30	04/09/08	EPA 9060A MOD.	
040108-S-KA-04 (MRD0118-04) Soil	**Sampled: 04/02/08 11:49**	**Received: 04/02/08 17:30**							
Total Organic Carbon	ND	5000	mg/kg	1	8D09087	04/09/08 09:30	04/09/08	EPA 9060A MOD.	
040108-S-CA-05 (MRD0118-05) Soil	**Sampled: 04/02/08 14:15**	**Received: 04/02/08 17:30**							
Total Organic Carbon	**26000**	5000	mg/kg	1	8D09087	04/09/08 09:30	04/09/08	EPA 9060A MOD.	
040108-S-CA-06 (MRD0118-06) Soil	**Sampled: 04/02/08 14:28**	**Received: 04/02/08 17:30**							
Total Organic Carbon	**8900**	5000	mg/kg	1	8D09087	04/09/08 09:30	04/09/08	EPA 9060A MOD.	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
040108-S-CA-01 (MRD0118-01) Soil Sampled: 04/02/08 10:52 Received: 04/02/08 17:30									
Silver	ND	2.8	mg/kg dry	5	8D08029	04/08/08	04/10/08	EPA 6010B	RL1
Arsenic	ND	56	"	"	"	"	"	"	C, RL1
Barium	**140**	14	"	"	"	"	"	"	
Calcium	**15000**	70	"	"	"	"	"	"	
Cadmium	ND	1.4	"	"	"	"	"	"	RL1
Chromium	**30**	28	"	"	"	"	"	"	
Copper	**57**	2.8	"	"	"	"	"	"	
Mercury	**3.9**	0.22	"	10	8D18023	04/18/08	04/18/08	EPA 7471A	
Magnesium	**7900**	14	"	5	8D08029	04/08/08	04/10/08	EPA 6010B	
Nickel	**34**	7.0	"	"	"	"	"	"	
Lead	**23**	14	"	"	"	"	"	"	
Selenium	ND	56	"	"	"	"	"	"	RL1
Zinc	**85**	28	"	"	"	"	"	"	
040108-S-CA-02 (MRD0118-02) Soil Sampled: 04/02/08 11:20 Received: 04/02/08 17:30									
Silver	ND	2.6	mg/kg dry	5	8D08029	04/08/08	04/10/08	EPA 6010B	RL1
Arsenic	**52**	51	"	"	"	"	04/14/08	"	
Barium	**220**	13	"	"	"	"	04/10/08	"	
Calcium	**5900**	64	"	"	"	"	"	"	
Cadmium	ND	1.3	"	"	"	"	"	"	RL1
Chromium	ND	26	"	"	"	"	"	"	RL1
Copper	**90**	2.6	"	"	"	"	"	"	
Mercury	**460**	20	"	1000	8D17010	04/17/08	04/17/08	EPA 7471A	
Magnesium	**1900**	13	"	5	8D08029	04/08/08	04/10/08	EPA 6010B	
Nickel	**52**	6.4	"	"	"	"	"	"	
Lead	**39**	13	"	"	"	"	"	"	
Selenium	ND	51	"	"	"	"	"	"	RL1
Zinc	**130**	26	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
040108-S-CA-03 (MRD0118-03) Soil Sampled: 04/02/08 11:28 Received: 04/02/08 17:30									
Silver	ND	2.6	mg/kg dry	5	8D08029	04/08/08	04/10/08	EPA 6010B	RL1
Arsenic	**54**	53	"	"	"	"	04/11/08	"	
Barium	**97**	13	"	"	"	"	04/10/08	"	
Calcium	**7300**	66	"	"	"	"	"	"	
Cadmium	ND	1.3	"	"	"	"	"	"	RL1
Chromium	ND	26	"	"	"	"	"	"	RL1
Copper	**90**	2.6	"	"	"	"	"	"	
Mercury	**390**	21	"	1000	8D17010	04/17/08	04/17/08	EPA 7471A	
Magnesium	**2300**	13	"	5	8D08029	04/08/08	04/10/08	EPA 6010B	
Nickel	**50**	6.6	"	"	"	"	"	"	
Lead	**52**	13	"	"	"	"	"	"	
Selenium	ND	53	"	"	"	"	"	"	RL1
Zinc	**150**	26	"	"	"	"	"	"	
040108-S-KA-04 (MRD0118-04) Soil Sampled: 04/02/08 11:49 Received: 04/02/08 17:30									
Silver	ND	0.66	mg/kg dry	1	8D08029	04/08/08	04/09/08	EPA 6010B	
Arsenic	ND	13	"	"	"	"	"	"	C
Barium	**140**	3.3	"	"	"	"	"	"	
Calcium	**3600**	17	"	"	"	"	"	"	
Cadmium	ND	0.33	"	"	"	"	"	"	
Chromium	**22**	6.6	"	"	"	"	"	"	
Copper	**25**	0.66	"	"	"	"	"	"	
Mercury	**1.7**	0.26	"	10	8D17010	04/17/08	04/17/08	EPA 7471A	
Magnesium	**3500**	3.3	"	1	8D08029	04/08/08	04/09/08	EPA 6010B	
Nickel	**25**	1.7	"	"	"	"	"	"	
Lead	**8.9**	3.3	"	"	"	"	"	"	
Selenium	ND	13	"	"	"	"	"	"	
Zinc	**49**	6.6	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
040108-S-CA-05 (MRD0118-05) Soil Sampled: 04/02/08 14:15 Received: 04/02/08 17:30									
Silver	ND	2.6	mg/kg dry	5	8D08029	04/08/08	04/10/08	EPA 6010B	RL1
Arsenic	ND	52	"	"	"	"	04/14/08	"	RL1
Barium	**86**	13	"	"	"	"	04/10/08	"	
Calcium	**89000**	65	"	"	"	"	"	"	
Cadmium	ND	1.3	"	"	"	"	"	"	RL1
Chromium	**66**	26	"	"	"	"	"	"	
Copper	**38**	2.6	"	"	"	"	"	"	
Mercury	**6.2**	2.1	"	100	8D17010	04/17/08	04/17/08	EPA 7471A	
Magnesium	**31000**	13	"	5	8D08029	04/08/08	04/10/08	EPA 6010B	
Nickel	**640**	6.5	"	"	"	"	"	"	
Lead	ND	13	"	"	"	"	"	"	RL1
Selenium	ND	52	"	"	"	"	"	"	
Zinc	**67**	26	"	"	"	"	"	"	
040108-S-CA-06 (MRD0118-06) Soil Sampled: 04/02/08 14:28 Received: 04/02/08 17:30									
Silver	ND	2.6	mg/kg dry	5	8D08029	04/08/08	04/10/08	EPA 6010B	RL1
Arsenic	ND	53	"	"	"	"	"	"	C, RL1
Barium	**250**	13	"	"	"	"	"	"	
Calcium	**6400**	66	"	"	"	"	"	"	
Cadmium	ND	1.3	"	"	"	"	"	"	RL1
Chromium	**59**	26	"	"	"	"	"	"	
Copper	**48**	2.6	"	"	"	"	"	"	
Mercury	**22**	2.1	"	100	8D17010	04/17/08	04/17/08	EPA 7471A	
Magnesium	**8600**	13	"	5	8D08029	04/08/08	04/10/08	EPA 6010B	
Nickel	**160**	6.6	"	"	"	"	"	"	
Lead	ND	13	"	"	"	"	"	"	RL1
Selenium	ND	53	"	"	"	"	"	"	RL1
Zinc	**96**	26	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Conventional Chemistry Parameters by APHA/EPA Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
040108-S-CA-01 (MRD0118-01) Soil	**Sampled: 04/02/08 10:52**	**Received: 04/02/08 17:30**							
Percent Solids	**89**	1.0	%	1	8D09013	04/08/08	04/09/08	SM2540G	
040108-S-CA-02 (MRD0118-02) Soil	**Sampled: 04/02/08 11:20**	**Received: 04/02/08 17:30**							
Percent Solids	**98**	1.0	%	1	8D09013	04/08/08	04/09/08	SM2540G	
040108-S-CA-03 (MRD0118-03) Soil	**Sampled: 04/02/08 11:28**	**Received: 04/02/08 17:30**							
Percent Solids	**95**	1.0	%	1	8D09013	04/08/08	04/09/08	SM2540G	
040108-S-KA-04 (MRD0118-04) Soil	**Sampled: 04/02/08 11:49**	**Received: 04/02/08 17:30**							
Percent Solids	**76**	1.0	%	1	8D09013	04/08/08	04/09/08	SM2540G	
040108-S-CA-05 (MRD0118-05) Soil	**Sampled: 04/02/08 14:15**	**Received: 04/02/08 17:30**							
Percent Solids	**96**	1.0	%	1	8D09013	04/08/08	04/09/08	SM2540G	
040108-S-CA-06 (MRD0118-06) Soil	**Sampled: 04/02/08 14:28**	**Received: 04/02/08 17:30**							
Percent Solids	**95**	1.0	%	1	8D09013	04/08/08	04/09/08	SM2540G	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

TOTAL ORGANIC CARBON (EPA 9060A MOD.) - Quality Control

TestAmerica Irvine

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D09087 - General Prep / EPA 9060A MOD.										
Blank (8D09087-BLK1)				Prepared & Analyzed: 04/09/08						
Total Organic Carbon	ND	5000	mg/kg							
Laboratory Control Sample (8D09087-BS1)				Prepared & Analyzed: 04/09/08						
Total Organic Carbon	9220	5000	mg/kg	9980		92	90-110			
Matrix Spike (8D09087-MS1)	**Source: IRD0672-08**			Prepared & Analyzed: 04/09/08						
Total Organic Carbon	16400	5000	mg/kg	25000	ND	65	70-130			M2
Matrix Spike Dup (8D09087-MSD1)	**Source: IRD0672-08**			Prepared & Analyzed: 04/09/08						
Total Organic Carbon	19600	5000	mg/kg	25000	ND	79	70-130	18	30	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D08029 - EPA 3050B / EPA 6010B										
Blank (8D08029-BLK1)				Prepared: 04/08/08 Analyzed: 04/09/08						
Chromium	ND	5.0	mg/kg wet							
Calcium	ND	12	"							
Magnesium	ND	2.5	"							
Copper	ND	0.50	"							
Arsenic	ND	10	"							
Silver	ND	0.50	"							
Barium	ND	2.5	"							
Zinc	ND	5.0	"							
Cadmium	ND	0.25	"							
Lead	ND	2.5	"							
Selenium	ND	10	"							
Nickel	ND	1.2	"							
Laboratory Control Sample (8D08029-BS1)				Prepared: 04/08/08 Analyzed: 04/09/08						
Calcium	496	12	mg/kg wet	500		99	80-120			
Chromium	44.9	5.0	"	50.0		90	80-120			
Copper	45.0	0.50	"	50.0		90	80-120			
Barium	44.9	2.5	"	50.0		90	80-120			
Magnesium	429	2.5	"	500		86	80-120			
Cadmium	44.4	0.25	"	50.0		89	80-120			
Silver	43.6	0.50	"	50.0		87	80-120			
Arsenic	44.1	10	"	50.0		88	80-120			
Nickel	44.8	1.2	"	50.0		90	80-120			
Selenium	43.0	10	"	50.0		86	80-120			
Zinc	46.5	5.0	"	50.0		93	80-120			
Lead	44.0	2.5	"	50.0		88	80-120			
Matrix Spike (8D08029-MS1)	**Source: MRD0290-01**			Prepared: 04/08/08 Analyzed: 04/10/08						
Copper	71.3	2.5	mg/kg wet	50.0	27.0	89	80-120			
Calcium	68000	62	"	500	62600	1080	80-120			M7
Chromium	104	25	"	50.0	50.1	107	80-120			
Cadmium	46.8	1.2	"	50.0	ND	94	80-120			
Magnesium	11100	12	"	500	9810	248	80-120			M7
Arsenic	46.0	50	"	50.0	ND	92	80-120			C
Barium	236	12	"	50.0	168	137	80-120			M7
Silver	46.7	2.5	"	50.0	ND	93	80-120			
Selenium	62.7	50	"	50.0	ND	125	80-120			M7

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D08029 - EPA 3050B / EPA 6010B										
Matrix Spike (8D08029-MS1)	**Source: MRD0290-01**			Prepared: 04/08/08 Analyzed: 04/10/08						
Lead	47.5	12	mg/kg wet	50.0	ND	95	80-120			
Zinc	98.0	25	"	50.0	48.3	99	80-120			
Nickel	107	6.2	"	50.0	60.4	94	80-120			
Matrix Spike Dup (8D08029-MSD1)	**Source: MRD0290-01**			Prepared: 04/08/08 Analyzed: 04/10/08						
Calcium	58900	62	mg/kg wet	500	62600	0	80-120	14	20	M8
Chromium	95.2	25	"	50.0	50.1	90	80-120	9	20	
Copper	62.2	2.5	"	50.0	27.0	71	80-120	14	20	M8
Cadmium	41.6	1.2	"	50.0	ND	83	80-120	12	20	
Barium	209	12	"	50.0	168	83	80-120	12	20	
Silver	41.4	2.5	"	50.0	ND	83	80-120	12	20	
Arsenic	50.6	50	"	50.0	ND	101	80-120	9	20	C
Lead	40.6	12	"	50.0	ND	81	80-120	16	20	
Magnesium	9340	12	"	500	9810	0	80-120	17	20	M8
Zinc	90.4	25	"	50.0	48.3	84	80-120	8	20	
Nickel	92.2	6.2	"	50.0	60.4	64	80-120	15	20	M8
Matrix Spike Dup (8D08029-MSD1)	**Source: MRD0290-01**			Prepared: 04/08/08 Analyzed: 04/14/08						
Selenium	44.8	50	"	50.0	ND	90	80-120	33	20	R2
Batch 8D17010 - EPA 7471A / EPA 7471A										
Blank (8D17010-BLK1)				Prepared & Analyzed: 04/17/08						
Mercury	ND	0.020	mg/kg wet							
Blank (8D17010-BLK2)				Prepared & Analyzed: 04/17/08						
Mercury	ND	0.020	mg/kg wet							

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D17010 - EPA 7471A / EPA 7471A										
Laboratory Control Sample (8D17010-BS1)				Prepared & Analyzed: 04/17/08						
Mercury	0.642	0.020	mg/kg wet	0.667		96	80-120			
Laboratory Control Sample (8D17010-BS2)				Prepared & Analyzed: 04/17/08						
Mercury	0.582	0.020	mg/kg wet	0.667		87	80-120			
Matrix Spike (8D17010-MS1)	**Source: MRD0078-04**			Prepared & Analyzed: 04/17/08						
Mercury	41.4	2.0	mg/kg wet	0.667	15.0	3960	80-120			M7
Matrix Spike Dup (8D17010-MSD1)	**Source: MRD0078-04**			Prepared & Analyzed: 04/17/08						
Mercury	28.8	2.0	mg/kg wet	0.667	15.0	2060	80-120	36	25	M7, R
Batch 8D18023 - EPA 7471A / EPA 7471A										
Blank (8D18023-BLK1)				Prepared & Analyzed: 04/18/08						
Mercury	ND	0.020	mg/kg wet							
Blank (8D18023-BLK2)				Prepared & Analyzed: 04/18/08						
Mercury	ND	0.020	mg/kg wet							
Laboratory Control Sample (8D18023-BS1)				Prepared & Analyzed: 04/18/08						
Mercury	0.652	0.020	mg/kg wet	0.667		98	80-120			
Laboratory Control Sample (8D18023-BS2)				Prepared & Analyzed: 04/18/08						
Mercury	0.623	0.020	mg/kg wet	0.667		93	80-120			
Matrix Spike (8D18023-MS1)	**Source: MRD0289-02**			Prepared & Analyzed: 04/18/08						
Mercury	0.731	0.020	mg/kg wet	0.667	0.0683	99	80-120			

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D18023 - EPA 7471A / EPA 7471A										
Matrix Spike Dup (8D18023-MSD1)	**Source: MRD0289-02**			Prepared & Analyzed: 04/18/08						
Mercury	0.710	0.020	mg/kg wet	0.667	0.0683	96	80-120	3	25	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D09013 - General Preparation / SM2540G										
Blank (8D09013-BLK1)				Prepared: 04/08/08 Analyzed: 04/09/08						
Percent Solids	ND	1.0	%							
Duplicate (8D09013-DUP1)	**Source: MRD0326-01**			Prepared: 04/08/08 Analyzed: 04/09/08						
Percent Solids	61.9	1.0	%		63.5			3	20	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0118
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	04/21/08 17:07

Notes and Definitions

RL1	Reporting limit raised due to sample matrix effects.
R2	The RPD exceeded the acceptance limit.
R	The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
M2	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
C	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

TestAmerica
ANALYTICAL TESTING CORPORATION

CHAIN OF CUSTODY

☒ 885 Jarvis Drive • **Morgan Hill, CA 95037** • (408) 776-9600 • FAX (408) 782-6308
☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100

Company Name: SF Bay Water Board		Project: Mercury Mines	
Mailing Address: 1515 Clay St #1400		Billing Address (if different):	
City: Oakland	State: CA	Zip Code: 94612	
Telephone: (510) 622-1015	Fax #:	P.O. #:	
Report To: C. AUSTIN	E-Mail Address: CAUSTIN@WATERBOARDS.CA.GOV	QC Data: ☒ Level II (standard) ☐ Level III ☐ Level IV	
Sampler: C. AUSTIN	Date/Time Results Required: STD	Test America Work Order #: MRDO118	

Turnaround Time:
☒ 10-15 Working Days (Standard TAT)
☐ 7 Working Days
☐ 5 Working Days
☐ 72 hours
☐ 48 hours
☐ 24 hours
☐ 2-8 hours

MANDATORY:
☐ SDWA (Drinking Water)
☐ CWA (Waste Water)
☒ RCRA (Hazardous Waste)
☒ Other

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Test America's Sample #	Mercury 7471A *	Ca & Mg * 6010	Metals * 6010	TOC SM5310B	Grain Size D422				Comments/Temp. (if required)
1. ϕ4ϕ1ϕ8-S-CA-ϕ1	10:52	S	1	8oz glass	-01	X	X	X	X	X				* 7471A & 6010 Dry wt. Metals As Ba Cd Cr(tot) Cu Pb Ni Se Ag Zn GRAIN SIZE use sieve & hydrometer need 2.63 µm
2. ϕ4ϕ1ϕ8-S-CA-ϕ2	11:20				-02									
3. ϕ4ϕ1ϕ8-S-CA-ϕ3	11:28				-03									
4. ϕ4ϕ1ϕ8-S-KA-ϕ4	11:49				-04									
5. ϕ4ϕ1ϕ8-S-CA-ϕ5	14:15				-05									
6. ϕ4ϕ1ϕ8-S-CA-ϕ6	14:28	S	1	8oz glass	-06	X	X	X	X	X				
7.														
8.														
9.														
10.														

Relinquished by/Co.:	Received by/Co.: (TAMH)	Date/Time/Temp: 4/2/08	1500
Relinquished by/Co.:	Received by/Co.: D. Velasquez	Date/Time/Temp: 4-2-08	1730
Relinquished by/Co.:	Received by/Co.:	Date/Time/Temp:	

Were Samples Received in Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment: TAC Page 1 of 1

By relinquishing samples to Test America, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days.

White: Test America **Yellow:** Test America **Pink:** Client

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: SF Bay Water Board
REC. BY (PRINT): D.N.
WORKORDER: MRD0113

DATE REC'D AT LAB: 4/2/08
TIME REC'D AT LAB: 1730
DATE LOGGED IN: 4/3/08

For Regulatory Purposes?
___ DRINKING WATER
___ WASTE WATER
✓ OTHER

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / (Absent) Intact / Broken*								
2. Chain-of-Custody (Present) / Absent*								
3. Traffic Reports or Packing List: Present / (Absent)								
4. Airbill: Airbill / Sticker (Present) / Absent								
5. Airbill #:								
6. Sample Labels: (Present) / Absent								
7. Sample IDs: (Listed) / Not Listed on Chain-of-Custody								
8. Sample Condition: (Intact) / Broken* / Leaking*								
9. **Does information on chain-of-custody, traffic reports and sample labels agree?** (Yes) / No*								
10. Sample received within hold time? (Yes) / No*								
11. Adequate sample volume received? (Yes) / No*								
12. Proper preservatives used? (Yes) / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / (No)								
14. Read Temp: 3.5° Correction Factor: -1.0° Corrected Temp: 2.5° Is corrected temp. 0-6°C? (Yes) / No**								
**Exception (if any): Metals / Perchlorate DFF on Ice or Problem COC								

4/2/08 D.J.

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

TestAmerica
South Burlington, VT

Extended Data Package

SDG: MRD0118

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Case Narrative

TestAmerica

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April 21, 2008

Ms. Leticia Reyes
TestAmerica, Inc.
Morgan Hill Division
885 Jarvis Drive
Morgan Hill, CA 95037

Re: Laboratory Project No. 28000
Case: RWQCB; SDG: MRD0118

Dear Ms. Reyes:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on April 9th, 2008. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 04/09/08 ETR No: 124898		
748089	MRD0118-01	04/02/08	SOIL
748090	MRD0118-02	04/02/08	SOIL
748091	MRD0118-03	04/02/08	SOIL
748092	MRD0118-04	04/02/08	SOIL
748093	MRD0118-05	04/02/08	SOIL
748094	MRD0118-06	04/02/08	SOIL

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Particle Size Analysis by ASTM D422
There were no exceptions to the method quality control criteria during the analyses of these samples.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

30 Community Drive Suite #11 South Burlington, VT 05403 **tel** 802.660.1990 **fax** 802.660.1919 **www.testamericainc.com**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine A. Dusablon
Project Manager

Enclosure

Chain of Custody

SUBCONTRACT ORDER

TestAmerica Morgan Hill

MRD0118

SENDING LABORATORY:	RECEIVING LABORATORY:
TestAmerica Morgan Hill	TestAmerica Burlington
885 Jarvis Drive	30 Community Drive, Suite 11
Morgan Hill, CA 95037	South Burlington, VT 05403
Phone: 408-776-9600	Phone :(802) 660-1990
Fax: 408-782-6308	Fax: (802) 660-1919
Project Manager: Leticia Reyes	Project Location:
Client: San Francisco Water Board	Receipt Temperature: ____ °C Ice: Y / N

Report in Dry Weight

Analysis	Units	Due	Expires	Interlab Price	Surch	Comments
Sample ID: MRD0118-01	**Soil**		Sampled: **04/02/08 10:52**			
Grain Size Analysis (SUB)	N/A	04/17/08	04/16/08 10:52	$55.00	0%	TA-Burlington; Sieve & Hydrometer (<63um)
Containers Supplied: 2 oz. jar (B)						
Sample ID: MRD0118-02	**Soil**		Sampled: **04/02/08 11:20**			
Grain Size Analysis (SUB)	N/A	04/17/08	04/16/08 11:20	$55.00	0%	TA-Burlington; Sieve & Hydrometer (<63um)
Containers Supplied: 2 oz. jar (B)						
Sample ID: MRD0118-03	**Soil**		Sampled: **04/02/08 11:28**			
Grain Size Analysis (SUB)	N/A	04/17/08	04/16/08 11:28	$55.00	0%	TA-Burlington; Sieve & Hydrometer (<63um)
Containers Supplied: 2 oz. jar (B)						
Sample ID: MRD0118-04	**Soil**		Sampled: **04/02/08 11:49**			
Grain Size Analysis (SUB)	N/A	04/17/08	04/16/08 11:49	$55.00	0%	TA-Burlington; Sieve & Hydrometer (<63um)
Containers Supplied: 2 oz. jar (B)						
Sample ID: MRD0118-05	**Soil**		Sampled: **04/02/08 14:15**			
Grain Size Analysis (SUB)	N/A	04/17/08	04/16/08 14:15	$55.00	0%	TA-Burlington; Sieve & Hydrometer (<63um)
Containers Supplied: 2 oz. jar (B)						
Sample ID: MRD0118-06	**Soil**		Sampled: **04/02/08 14:28**			
Grain Size Analysis (SUB)	N/A	04/17/08	04/16/08 14:28	$55.00	0%	TA-Burlington; Sieve & Hydrometer (<63um)
Containers Supplied: 2 oz. jar (B)						

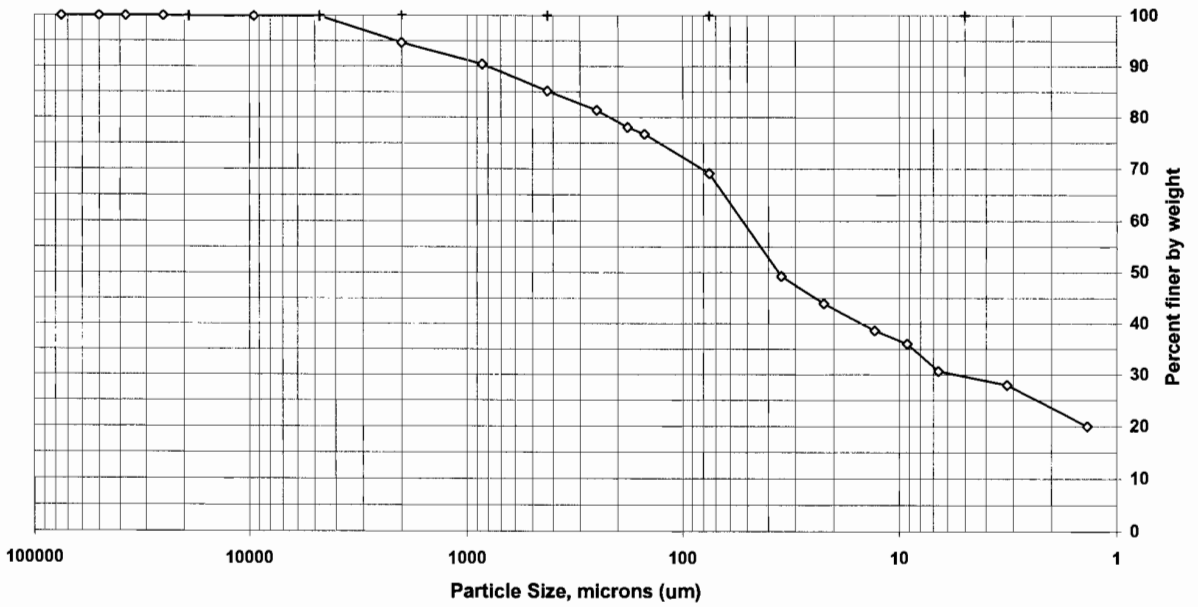
Julie N.	4/7/08 1700	[signature] 4/9/08 0930	
Released By	Date/Time	Received By	Date/Time

Particle Size Results

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0118	**Date Received:**	4/9/2008
Sample ID:	MRD0118-01	**ETR(s):**	124898	**Start Date:**	4/9/2008
Lab ID:	748089			**End Date:**	4/14/2008

Percent Solids:	87.7%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	25 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	99.9	0.1
3/8 inch	9500	99.9	0.0
#4	4750	99.9	0.0
#10	2000	94.7	5.2
#20	850	90.4	4.3
#40	425	85.2	5.2
#60	250	81.4	3.8
#80	180	78.1	3.3
#100	150	76.7	1.4
#200	75	69.1	7.6
Hydrometer	34.8	49.3	19.8
|	22.2	44.0	5.3
|	13.0	38.6	5.3
|	9.2	36.0	2.7
|	6.6	30.6	5.3
|	3.2	28.0	2.7
V	1.4	20.0	8.0

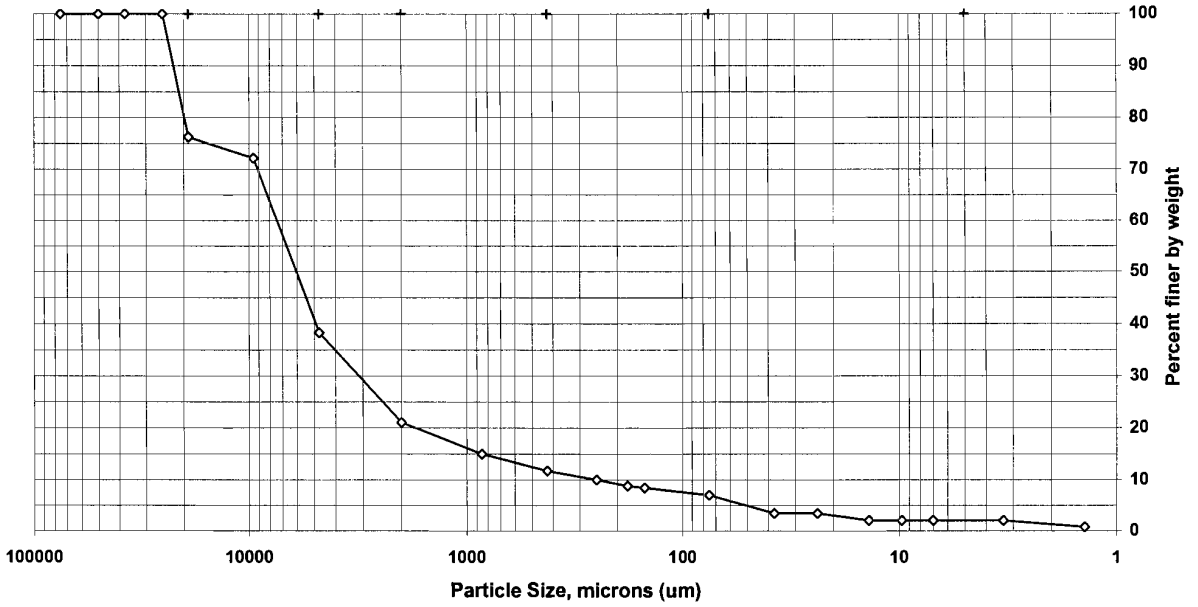
Soil Classification	Percent of Total Sample
Gravel	0.1
Sand	30.8
Coarse Sand	5.2
Medium Sand	9.5
Fine Sand	16.1
Silt	38.5
Clay	30.6

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0118	**Date Received:**	4/9/2008
Sample ID:	MRD0118-02	**ETR(s):**	124898	**Start Date:**	4/9/2008
Lab ID:	748090			**End Date:**	4/14/2008

Percent Solids:	99.1%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	25 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	76.2	23.8
3/8 inch	9500	72.1	4.1
#4	4750	38.3	33.8
#10	2000	21.1	17.3
#20	850	15.0	6.1
#40	425	11.8	3.2
#60	250	10.0	1.8
#80	180	8.8	1.2
#100	150	8.5	0.3
#200	75	7.0	1.5
Hydrometer	37.5	3.4	3.6
|	23.7	3.4	0.0
|	13.8	2.0	1.4
|	9.7	2.0	0.0
|	7.0	2.0	0.0
|	3.3	2.0	0.0
V	1.4	0.8	1.2

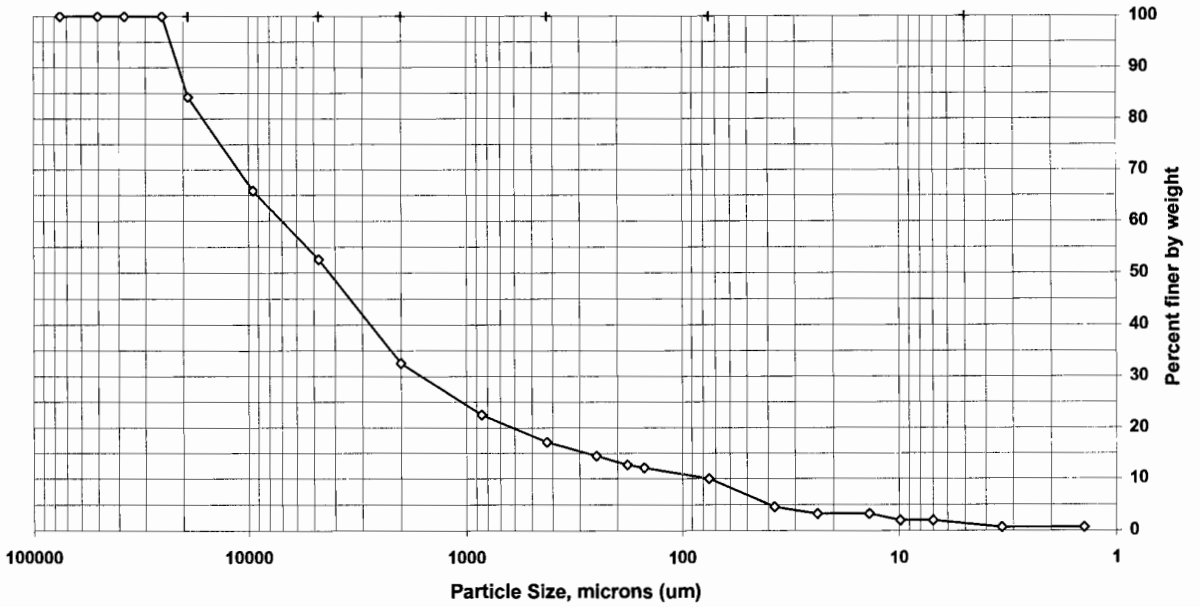
Soil Classification	Percent of Total Sample
Gravel	61.7
Sand	31.3
Coarse Sand	17.3
Medium Sand	9.3
Fine Sand	4.8
Silt	5.0
Clay	2.0

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0118	**Date Received:**	4/9/2008
Sample ID:	MRD0118-03	**ETR(s):**	124898	**Start Date:**	4/9/2008
Lab ID:	748091			**End Date:**	4/14/2008

Percent Solids:	99.1%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	25 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	84.2	15.8
3/8 inch	9500	65.9	18.3
#4	4750	52.6	13.3
#10	2000	32.5	20.0
#20	850	22.5	10.0
#40	425	17.2	5.3
#60	250	14.5	2.7
#80	180	12.7	1.8
#100	150	12.1	0.6
#200	75	10.0	2.1
Hydrometer	37.4	4.6	5.5
|	23.7	3.3	1.3
|	13.7	3.3	0.0
|	9.9	2.0	1.3
|	7.0	2.0	0.0
|	3.4	0.7	1.3
V	1.4	0.7	0.0

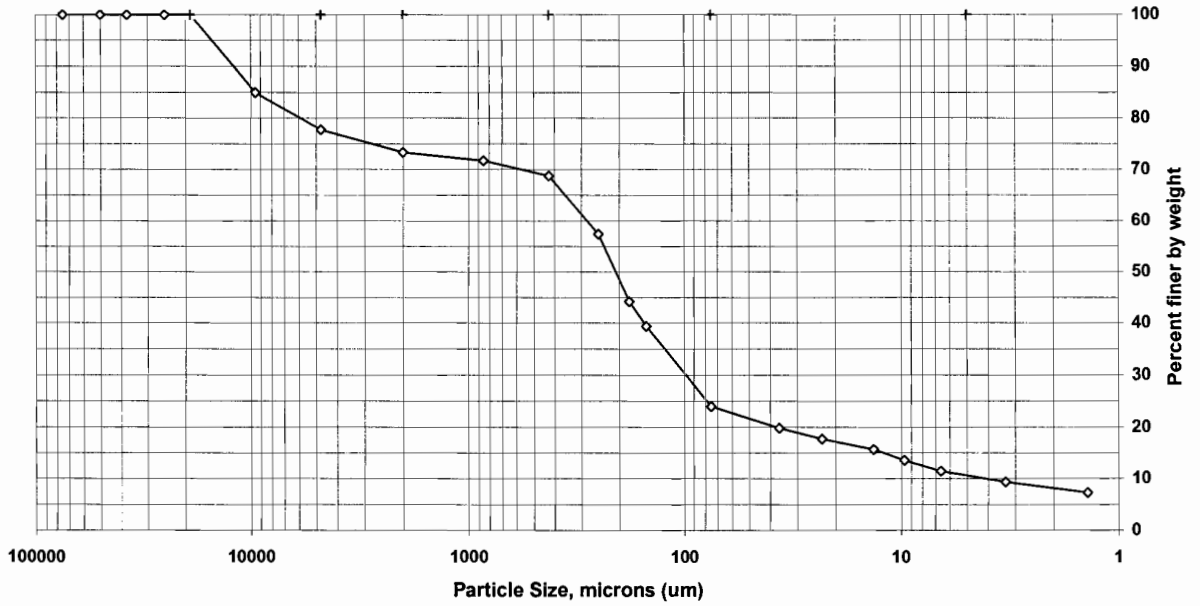
Soil Classification	Percent of Total Sample
Gravel	47.4
Sand	42.5
Coarse Sand	20.0
Medium Sand	15.4
Fine Sand	7.1
Silt	8.1
Clay	2.0

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0118	**Date Received:**	4/9/2008
Sample ID:	MRD0118-04	**ETR(s):**	124898	**Start Date:**	4/9/2008
Lab ID:	748092			**End Date:**	4/14/2008

Percent Solids:	76.7%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	rounded
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	85.0	15.0
#4	4750	77.7	7.3
#10	2000	73.3	4.4
#20	850	71.7	1.6
#40	425	68.7	3.0
#60	250	57.4	11.3
#80	180	44.2	13.2
#100	150	39.4	4.8
#200	75	24.0	15.3
Hydrometer	36.4	19.8	4.2
|	23.1	17.7	2.1
|	13.4	15.6	2.1
|	9.7	13.6	2.1
|	6.6	11.5	2.1
|	3.3	9.4	2.1
V	1.4	7.3	2.1

Soil Classification	Percent of Total Sample
Gravel	22.3
Sand	53.7
Coarse Sand	4.4
Medium Sand	4.5
Fine Sand	44.7
Silt	12.5
Clay	11.5

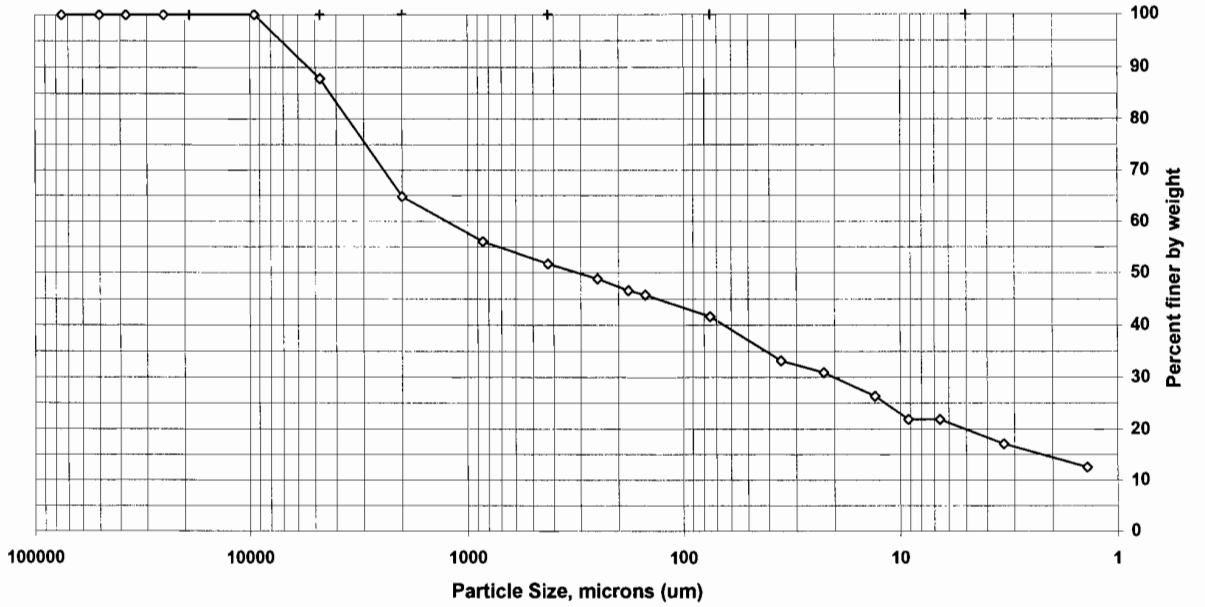
Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

FSL024:07.29.05:0

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0118	**Date Received:**	4/9/2008
Sample ID:	MRD0118-05	**ETR(s):**	124898	**Start Date:**	4/9/2008
Lab ID:	748093			**End Date:**	4/14/2008

Percent Solids:	97.0%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	9.5 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	100.0	0.0
#4	4750	87.8	12.2
#10	2000	64.8	23.1
#20	850	56.0	8.7
#40	425	51.7	4.3
#60	250	48.8	2.9
#80	180	46.6	2.2
#100	150	45.8	0.9
#200	75	41.6	4.1
Hydrometer	35.3	33.2	8.4
|	22.4	30.9	2.3
|	13.1	26.4	4.6
|	9.2	21.8	4.6
|	6.6	21.8	0.0
|	3.3	17.1	4.7
V	1.4	12.5	4.6

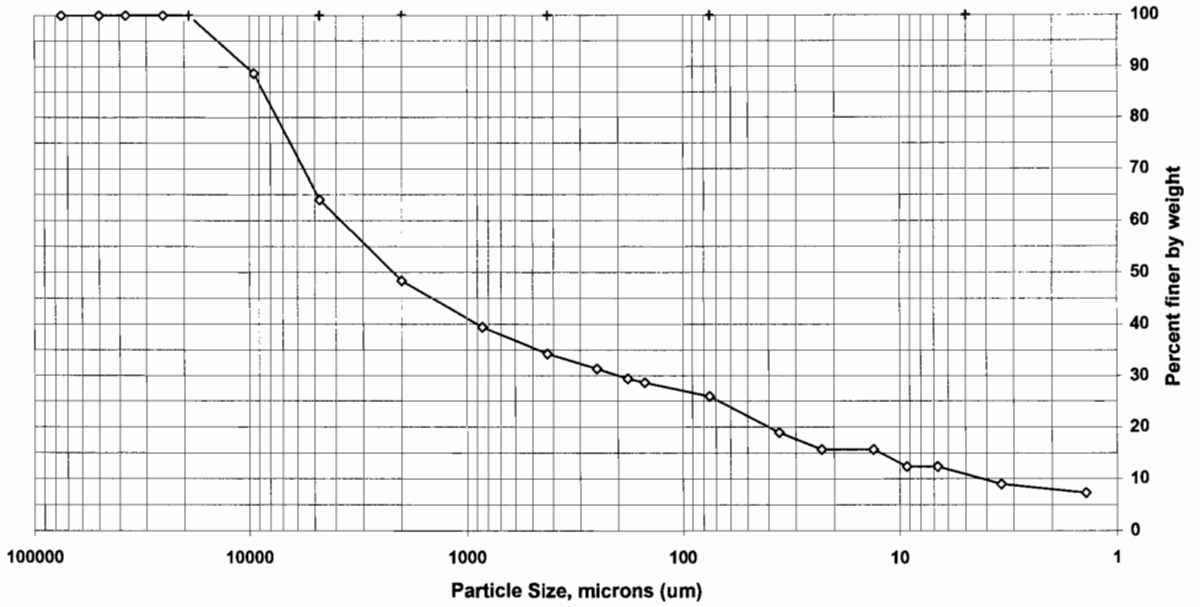
Soil Classification	Percent of Total Sample
Gravel	12.2
Sand	46.2
Coarse Sand	23.1
Medium Sand	13.0
Fine Sand	10.1
Silt	19.8
Clay	21.8

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0118	**Date Received:**	4/9/2008
Sample ID:	MRD0118-06	**ETR(s):**	124898	**Start Date:**	4/9/2008
Lab ID:	748094			**End Date:**	4/14/2008

Percent Solids:	93.3%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	88.7	11.3
#4	4750	64.0	24.6
#10	2000	48.4	15.6
#20	850	39.4	9.0
#40	425	34.2	5.1
#60	250	31.3	2.9
#80	180	29.4	1.9
#100	150	28.6	0.8
#200	75	25.9	2.7
Hydrometer	35.8	18.9	7.0
|	22.9	15.6	3.3
|	13.2	15.6	0.0
|	9.3	12.4	3.3
|	6.7	12.4	0.0
|	3.4	9.0	3.4
V	1.4	7.3	1.6

Soil Classification	Percent of Total Sample
Gravel	36.0
Sand	38.1
Coarse Sand	15.6
Medium Sand	14.1
Fine Sand	8.3
Silt	13.5
Clay	12.4

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size Analysis of Soils
By ASTM D422
Hydrometer Data

Set Number: **MRD0118**

Client Code: TACAMH
SDG: MRD0118
ETR(s): 124898

Date Received: 9-Apr-08
Start Date: 9-Apr-08
End Date: 14-Apr-08

Date and Analyst

	Percent Solids	Weighed	Mixed	Hydrometer	Large sieves	Small sieves
	MAP 04/09/08 DJP 04/10/08	MAP 04/09/08	MAP 04/10/08	TEH 04/11/08 TEH 04/12/08	MAP 04/10/08 DPS 04/14/08	TEH 04/12/08 DPS 04/14/08

Test number	1	2	3	4	5	6	7	8	9	10	11	12
Lab number	**748089**	**748090**	**748091**	**748092**	**748093**	**748094**						
Time, min. (2)	2	2	2	2	2	2	2	2	2	2	2	2
Reading	1.0125	1.0045	1.0050	1.0080	1.0105	1.0090						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (5)	5	5	5	5	5	5	5	5	5	5	5	5
Reading	1.0115	1.0045	1.0045	1.0075	1.0100	1.0080						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (15)	15	15	15	15	15	15	15	15	15	15	15	15
Reading	1.0105	1.0040	1.0045	1.0070	1.0090	1.0080						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (30)	30	30	29	29	31	31	31	32	30	30	30	31
Reading	1.0100	1.0040	1.0040	1.0065	1.0080	1.0070						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (60)	59	58	58	63	60	59	59	60	63	57	63	57
Reading	1.0090	1.0040	1.0040	1.0060	1.0080	1.0070						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (250)	256	256	250	250	240	234	265	259	253	247	241	235
Reading	1.0085	1.0040	1.0035	1.0055	1.0070	1.0060						
Temperature, C	20.0	20.0	20.0	20.0	20.0	20.0						
Time, min. (1440)	1440	1440	1434	1434	1424	1418	1412	1406	1400	1394	1388	1382
Reading	1.0070	1.0035	1.0035	1.0050	1.0060	1.0055						
Temperature, C	20.0	20.5	20.0	20.0	20.0	20.0						

Hydrometer used: 313119 **Model #:** ASTM 151H **Manufacturer:** ELE **Hydrometer start time:** 9:07

Calibrations:	L temp, C	L read	H Temp, C	H read
	17.0	1.0035	23.0	1.0030

Cal. Date: 09/09/07 **Hydrometer data entered:** DPS 04/13/08

11

Particle Size Analysis of Soils
By ASTM D422
Hydrometer Data

Set Number: **MRD0118**

Client Code: TACAMH
SDG: MRD0118
ETR(s): 124898

Date Received: 09-Apr-08
Start Date: 09-Apr-08
End Date:

Date and Analyst

Percent Solids	Weighed	Mixed	Hydrometer	Large sieves	Small sieves
MP 4.9.08 DJP 4-10.08	MP 4.9.08	MP 4.10.08	TEH 4/11/08 TEH 4/12/08	MP 4.10.08 DPS 04/14/08	TEH 4/12/08 DPS 04/14/08

Test number	1	2	3	4	5	6	7	8	9	10	11	12
Lab number	748089	748090	748091	748092	748093	748094						
Time, min. (2)	2	2	2	2	2	2	2	2	2	2	2	2
Reading	1.0125	1.0045	1.0050	1.0080	1.0105	1.0090						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (5)	5	5	5	5	5	5	5	5	5	5	5	5
Reading	1.0115	1.0045	1.0045	1.0075	1.0100	1.0080						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (15)	15	15	15	15	15	15	15	15	15	15	15	15
Reading	1.0105	1.0040	1.0045	1.0070	1.0090	1.0080						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (30)	30	30	29	29	31	31	31	32	30	30	30	31
Reading	1.0100	1.0040	1.0040	1.0065	1.0080	1.0070						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (60)	59	58	58	63	60	59	59	60	63	57	63	57
Reading	1.0090	1.0040	1.0040	1.0060	1.0080	1.0070						
Temperature, C	20.0	20.0	20.0	20.0	20.5	20.5						
Time, min. (250)	256	256	250	250	240	234	265	259	253	247	241	235
Reading	1.0085	1.0040	1.0035	1.0055	1.0070	1.0060						
Temperature, C	20.0	20.0	20.0	20.0	20.0	20.0						
Time, min. (1440)	1440	1440	1434	1434	1424	1418	1412	1406	1400	1394	1388	1382
Reading	1.0070	1.0035	1.0035	1.0050	1.0060	1.0055						
Temperature, C	20.0	20.5	20.0	20.0	20.0	20.0						

Hydrometer used: 313119 **Model #:** ASTM 151H **Manufacturer:** **Hydrometer start time:** 0907

Calibrations:

L temp, C	L read	H Temp, C	H read
17.0		23.0	

Cal. Date: **Hydrometer data entered:** DPS 04/13/08

12

Particle Size Analysis of Soils By ASTM D422

Sieve Data

Client Code: TACAMH | ETR(s): 124898 | SDG: MRD0118 | Date Rec: 9-Apr-08 | Start Date: 9-Apr-08 | End Date: 14-Apr-08

SET: MRD0118

Dry prep = D421
Wet prep = D2217

Standard Values

Sieve	Opening, um
3 inch	75000
2 inch	50000
1.5 inch	37500
1 inch	25000
3/4 inch	19000
3/8 inch	9500
#4	4750
#10	2000
#20	850
#40	425
#60	250
#80	180
#100	150
#200	75

Test	1	2	3	4	5	6	7	8	9	10	11	12
Laboratory No	748089	748090	748091	748092	748093	748094						
Sample ID	MRD0118-01	MRD0118-02	MRD0118-03	MRD0118-04	MRD0118-05	MRD0118-06						
Sample Prep	D2217	D2217	D2217	D2217	D2217	D2217						
Pan, g												
Pan/sample, g	34.35	59.69	62.24	50.20	36.39	52.72						
Pan/dry sample, g												
Hygroscopic Moisture correction factor (HMCF) for dry prep / Percent Solids for dry and wet prep												
Pan, g	1.01	0.98	1.00	0.99	0.99	0.96						
Pan/sample, g	12.34	13.92	14.78	11.08	12.86	16.44						
Pan/dry sample, g	10.95	13.80	14.66	8.73	12.50	15.41						
HMCF	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%						
Description of >#10 particles												
Non-soil material	plant	plant	plant	plant	plant	plant						
Shape	angular	angular	angular	rounded	angular	angular						
Hardness	hard	hard	hard	hard	hard	hard						
Sample % Solids	87.7%	99.1%	99.1%	76.7%	97.0%	93.3%						
Dry sample wt, g	30.14	59.14	61.70	38.51	35.29	49.21						

Sieve (tares)

Size	Mass, g		Size	Mass, g	Mass, g	Mass, g	Mass, g	Mass, g	Mass, g	Mass, g	Mass, g	Mass, g	Mass, g	Mass, g	Mass, g
3 inch			3 inch												
2 inch			2 inch												
1.5 inch			1.5 inch												
1 inch			1 inch												
3/4 inch	457.94		3/4 inch	457.97	472.00	467.67									
3/8 inch	447.65		3/8 inch	447.65	450.06	458.97	453.42		453.22						
#4	484.92		#4	484.92	504.92	493.12	487.73	489.21	497.05						
#10	462.85		#10	464.42	473.06	475.22	464.56	470.99	470.55						
#20	382.91	A	#20	384.20	386.51	389.11	383.52	385.99	387.34						
#40	354.84	A	#40	356.41	356.73	358.13	355.98	356.36	357.37						
#60	338.21	A	#60	339.36	339.25	339.88	342.58	339.23	339.65						
#80	325.79	A	#80	326.79	326.51	326.88	330.87	326.58	326.74						
#100	333.99	A	#100	334.40	334.19	334.34	335.85	334.29	334.36						
#200	323.37	A	#200	325.66	324.24	324.65	329.28	324.83	324.71						

Sieve + Sample Weights

Maximum Particle size

	25 mm	25 mm	25 mm	19 mm	9.5 mm	19 mm						

Default SG 2.65

Specific gravity	2.650	2.650	2.650	2.650	2.650	2.650						

Sample Mass Parameters

Sample Mass >#10, g	1.60	46.68	41.62	10.29	12.43	25.40	0.00	0.00	0.00	0.00	0.00	0.00
Sample mass <#10, g	28.54	12.46	20.08	28.22	22.86	23.81	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Handling

Pedro Hufano
Test America
885 Jarvis Drive

Morgan Hill, CA 95037

CLS 128787/21/24

ActWgt: 38 LB
System#: 9141070/INET8010
Account#: S *********

Delivery Address Bar Code

SHIP TO: (802) 660-1990 **BILL RECIPIENT**

Sample Receiving
TestAmerican Burlington
30 COMMUNITY DR STE 11

SOUTH BURLINGTON, VT 054036834

Ref #
Invoice #
PO #
Dept #

TUE - 08APR **AA**

TRK# 0201 7918 8031 7430

PRIORITY OVERNIGHT

XH BTVA

05403
VT-US
BTV

4/9/08
0930

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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TestAmerica Burlington

SAMPLE RECEIPT & LOG IN CHECKLIST

Client: TACAMH	Date Received: 4.8.08	Log In Date: 4/9/08
ETR: 124898	Time Received: 0930	By: OHS
SDG: MRD018	Received By: OHK	Signature:
Project: 24000.	# Coolers Received: 1	PM Signature: Kristin Deal
Samples Delivered By: ☒ Shipping Service ☐ Courier ☐ Hand ☐ Other (specify)		Date: 4/15/08

List Air bill Number(s) or Attach a photocopy of the Air Bill:

COOLER SCREEN	YES	NO	NA	COMMENTS
There is *no* evidence to indicate tampering	X			
Custody seals are present and intact	X			
Custody seal numbers are present		X		
If yes, list custody seal numbers:				

Thermal Preservation Type: ☒ Wet Ice ☐ Blue Ice ☐ None ☐ Other (specify)

IR Gun ID: 62 Correction Factor (CF) = Ø °C

Cooler 1: 3.6 °C	Cooler 6 °C	Cooler 11 °C	Cooler 16 °C
Cooler 2: °C	Cooler 7 °C	Cooler 12 °C	Cooler 17 °C
Cooler 3: °C	Cooler 8 °C	Cooler 13 °C	Cooler 18 °C
Cooler 4: °C	Cooler 9 °C	Cooler 14 °C	Cooler 19 °C
Cooler 5 °C	Cooler 10 °C	Cooler 15 °C	Cooler 20 °C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun

EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.

Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	NA	COMMENTS
Sample containers were received intact	X			
Legible sample labels are affixed to each container	X			

CHAIN OF CUSTODY (COC)	YES	NO	NA	COMMENTS
COC is present and includes the following information for each container:				
• Sample ID / Sample Description	X			
• Date of Sample Collection	X			
• Time of Sample Collection	X			
• Identification of the Sampler		X		
• Preservation Type			X	
• Requested Tests Method(s)	X			
• Necessary Signatures		X		no sampler signature
Internal Chain of Custody (ICOC) Required		X		
If yes to above, ICOC Record initiated for every Worksheet			X	

SAMPLE INTEGRITY / USABILITY	YES	NO	NA	COMMENTS
The sample container matches the COC	X			
Appropriate sample containers were received for the tests requested	X			
Samples were received within holding time	X			
Sufficient amount of sample is provided for requested analyses	X			
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)			X	
Appropriate preservatives were used for the tests requested			X	
pH of inorganic samples checked and is within method specification			X	
If no, attach Inorganic Sample pH Adjustment Form			X	

ANOMALY / NCR SUMMARY

FSR002:12.19.07:3

Last Page of this Document

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

1 May, 2008

Carrie Austin
RWQCB-Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: Mercury Mines
Work Order: MRD0611

Enclosed are the results of analyses for samples received by the laboratory on 04/15/08 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Leticia Reyes
Project Manager

CA ELAP Certificate # 2682

The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

For Volatile Analysis a trip blank is required to be provided. If trip blank results are not included in the report, then either the trip blank was not submitted or requested to be analyzed.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
041408-S-CA-01	MRD0611-01	Soil	04/14/08 11:55	04/15/08 17:00
041408-S-CA-02	MRD0611-02	Soil	04/14/08 12:05	04/15/08 17:00
041408-S-CA-03	MRD0611-03	Soil	04/14/08 12:15	04/15/08 17:00
041408-S-CA-04	MRD0611-04	Soil	04/14/08 12:40	04/15/08 17:00
041408-S-CA-05	MRD0611-05	Soil	04/14/08 12:55	04/15/08 17:00
041408-S-CA-06	MRD0611-06	Soil	04/14/08 13:20	04/15/08 17:00

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

TOTAL ORGANIC CARBON (EPA 9060A MOD.)

TestAmerica Irvine

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
041408-S-CA-01 (MRD0611-01) Soil	**Sampled: 04/14/08 11:55**	**Received: 04/15/08 17:00**							
Total Organic Carbon	**18000**	5000	mg/kg	1	8D24085	04/24/08 10:00	04/25/08	EPA 9060A MOD.	
041408-S-CA-02 (MRD0611-02) Soil	**Sampled: 04/14/08 12:05**	**Received: 04/15/08 17:00**							
Total Organic Carbon	**26000**	5000	mg/kg	1	8D24085	04/24/08 10:00	04/25/08	EPA 9060A MOD.	
041408-S-CA-03 (MRD0611-03) Soil	**Sampled: 04/14/08 12:15**	**Received: 04/15/08 17:00**							
Total Organic Carbon	ND	5000	mg/kg	1	8D24085	04/24/08 10:00	04/25/08	EPA 9060A MOD.	
041408-S-CA-04 (MRD0611-04) Soil	**Sampled: 04/14/08 12:40**	**Received: 04/15/08 17:00**							
Total Organic Carbon	**9200**	5000	mg/kg	1	8D24085	04/24/08 10:00	04/25/08	EPA 9060A MOD.	
041408-S-CA-05 (MRD0611-05) Soil	**Sampled: 04/14/08 12:55**	**Received: 04/15/08 17:00**							
Total Organic Carbon	**6400**	5000	mg/kg	1	8D24085	04/24/08 10:00	04/25/08	EPA 9060A MOD.	
041408-S-CA-06 (MRD0611-06) Soil	**Sampled: 04/14/08 13:20**	**Received: 04/15/08 17:00**							
Total Organic Carbon	**23000**	5000	mg/kg	1	8D24085	04/24/08 10:00	04/25/08	EPA 9060A MOD.	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
041408-S-CA-01 (MRD0611-01) Soil Sampled: 04/14/08 11:55 Received: 04/15/08 17:00									
Silver	ND	2.5	mg/kg	5	8D23023	04/23/08	04/25/08	EPA 6010B	
Arsenic	ND	50	"	"	"	"	"	"	C, RL1
Barium	**32**	12	"	"	"	"	"	"	
Calcium	**320**	62	"	"	"	"	"	"	
Cadmium	ND	1.2	"	"	"	"	"	"	RL1
Chromium	ND	25	"	"	"	"	"	"	C, RL1
Copper	**34**	1.2	"	"	"	"	04/28/08	"	
Mercury	**8.7**	2.0	"	100	8D25017	04/25/08	04/25/08	EPA 7471A	
Magnesium	**500**	12	"	5	8D23023	04/23/08	04/25/08	EPA 6010B	
Nickel	**27**	6.2	"	"	"	"	"	"	
Lead	**33**	12	"	"	"	"	04/28/08	"	
Selenium	ND	50	"	"	"	"	04/25/08	"	RL1
Zinc	**86**	25	"	"	"	"	"	"	
041408-S-CA-02 (MRD0611-02) Soil Sampled: 04/14/08 12:05 Received: 04/15/08 17:00									
Silver	ND	2.5	mg/kg	5	8D23023	04/23/08	04/25/08	EPA 6010B	RL1
Arsenic	ND	50	"	"	"	"	04/28/08	"	RL1
Barium	**49**	12	"	"	"	"	04/25/08	"	
Calcium	**680**	62	"	"	"	"	"	"	
Cadmium	ND	1.2	"	"	"	"	"	"	RL1
Chromium	**26**	25	"	"	"	"	04/28/08	"	
Copper	**39**	1.2	"	"	"	"	"	"	
Mercury	**4.3**	2.0	"	100	8D25017	04/25/08	04/25/08	EPA 7471A	
Magnesium	**660**	12	"	5	8D23023	04/23/08	04/25/08	EPA 6010B	
Nickel	**31**	6.2	"	"	"	"	"	"	
Lead	**49**	12	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**98**	25	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
041408-S-CA-03 (MRD0611-03) Soil Sampled: 04/14/08 12:15 Received: 04/15/08 17:00									
Silver	ND	2.5	mg/kg	5	8D23023	04/23/08	04/25/08	EPA 6010B	RL1
Arsenic	**110**	50	"	"	"	"	04/28/08	"	
Barium	**42**	12	"	"	"	"	04/25/08	"	
Calcium	**64**	62	"	"	"	"	"	"	
Cadmium	ND	1.2	"	"	"	"	"	"	RL1
Chromium	**29**	25	"	"	"	"	04/28/08	"	
Copper	**71**	1.2	"	"	"	"	"	"	
Mercury	**7.2**	2.0	"	100	8D25017	04/25/08	04/25/08	EPA 7471A	
Magnesium	**230**	12	"	5	8D23023	04/23/08	04/25/08	EPA 6010B	
Nickel	**49**	6.2	"	"	"	"	"	"	
Lead	**20**	12	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**69**	25	"	"	"	"	"	"	
041408-S-CA-04 (MRD0611-04) Soil Sampled: 04/14/08 12:40 Received: 04/15/08 17:00									
Silver	ND	2.5	mg/kg	5	8D23023	04/23/08	04/25/08	EPA 6010B	RL1
Arsenic	**110**	50	"	"	"	"	04/28/08	"	
Barium	**95**	12	"	"	"	"	04/25/08	"	
Calcium	**6000**	62	"	"	"	"	"	"	
Cadmium	ND	1.2	"	"	"	"	"	"	RL1
Chromium	ND	25	"	"	"	"	"	"	C, RL1
Copper	**80**	1.2	"	"	"	"	04/28/08	"	
Mercury	**760**	20	"	1000	8D25017	04/25/08	04/25/08	EPA 7471A	
Magnesium	**9100**	12	"	5	8D23023	04/23/08	04/25/08	EPA 6010B	
Nickel	**89**	6.2	"	"	"	"	"	"	
Lead	**18**	12	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**120**	25	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Total Metals by EPA 6000/7000 Series Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
041408-S-CA-05 (MRD0611-05) Soil Sampled: 04/14/08 12:55 Received: 04/15/08 17:00									
Silver	ND	2.5	mg/kg	5	8D23023	04/23/08	04/25/08	EPA 6010B	RL1
Arsenic	ND	50	"	"	"	"	"	"	C, RL1
Barium	**190**	12	"	"	"	"	"	"	
Calcium	**13000**	62	"	"	"	"	"	"	
Cadmium	ND	1.2	"	"	"	"	"	"	RL1
Chromium	**30**	25	"	"	"	"	04/28/08	"	
Copper	**49**	1.2	"	"	"	"	"	"	
Mercury	**340**	20	"	1000	8D25017	04/25/08	04/25/08	EPA 7471A	
Magnesium	**13000**	12	"	5	8D23023	04/23/08	04/25/08	EPA 6010B	
Nickel	**69**	6.2	"	"	"	"	"	"	
Lead	**20**	12	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**110**	25	"	"	"	"	"	"	
041408-S-CA-06 (MRD0611-06) Soil Sampled: 04/14/08 13:20 Received: 04/15/08 17:00									
Silver	ND	2.5	mg/kg	5	8D23023	04/23/08	04/25/08	EPA 6010B	RL1
Arsenic	**51**	50	"	"	"	"	04/28/08	"	
Barium	**430**	12	"	"	"	"	04/25/08	"	
Calcium	**12000**	62	"	"	"	"	"	"	
Cadmium	ND	1.2	"	"	"	"	"	"	RL1
Chromium	**40**	25	"	"	"	"	04/28/08	"	
Copper	**70**	1.2	"	"	"	"	"	"	
Mercury	**480**	20	"	1000	8D29006	04/29/08	04/29/08	EPA 7471A	
Magnesium	**7600**	12	"	5	8D23023	04/23/08	04/25/08	EPA 6010B	
Nickel	**92**	6.2	"	"	"	"	"	"	
Lead	**120**	12	"	"	"	"	"	"	
Selenium	ND	50	"	"	"	"	"	"	RL1
Zinc	**410**	25	"	"	"	"	"	"	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Conventional Chemistry Parameters by APHA/EPA Methods

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
041408-S-CA-01 (MRD0611-01) Soil	**Sampled: 04/14/08 11:55**	**Received: 04/15/08 17:00**							
Percent Solids	**97**	1.0	%	1	8D17015	04/16/08	04/17/08	SM2540G	
041408-S-CA-02 (MRD0611-02) Soil	**Sampled: 04/14/08 12:05**	**Received: 04/15/08 17:00**							
Percent Solids	**98**	1.0	%	1	8D17015	04/16/08	04/17/08	SM2540G	
041408-S-CA-03 (MRD0611-03) Soil	**Sampled: 04/14/08 12:15**	**Received: 04/15/08 17:00**							
Percent Solids	**95**	1.0	%	1	8D17015	04/16/08	04/17/08	SM2540G	
041408-S-CA-04 (MRD0611-04) Soil	**Sampled: 04/14/08 12:40**	**Received: 04/15/08 17:00**							
Percent Solids	**99**	1.0	%	1	8D17015	04/16/08	04/17/08	SM2540G	
041408-S-CA-05 (MRD0611-05) Soil	**Sampled: 04/14/08 12:55**	**Received: 04/15/08 17:00**							
Percent Solids	**98**	1.0	%	1	8D17015	04/16/08	04/17/08	SM2540G	
041408-S-CA-06 (MRD0611-06) Soil	**Sampled: 04/14/08 13:20**	**Received: 04/15/08 17:00**							
Percent Solids	**96**	1.0	%	1	8D17015	04/16/08	04/17/08	SM2540G	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

TOTAL ORGANIC CARBON (EPA 9060A MOD.) - Quality Control

TestAmerica Irvine

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D24085 - General Prep / EPA 9060A MOD.										
Blank (8D24085-BLK1)				Prepared: 04/24/08 Analyzed: 04/25/08						
Total Organic Carbon	ND	5000	mg/kg							
Laboratory Control Sample (8D24085-BS1)				Prepared: 04/24/08 Analyzed: 04/25/08						
Total Organic Carbon	9430	5000	mg/kg	9980		94	90-110			
Matrix Spike (8D24085-MS1)	**Source: MRD0611-01**			Prepared: 04/24/08 Analyzed: 04/25/08						
Total Organic Carbon	41100	5000	mg/kg	24900	17600	94	70-130			
Matrix Spike Dup (8D24085-MSD1)	**Source: MRD0611-01**			Prepared: 04/24/08 Analyzed: 04/25/08						
Total Organic Carbon	36300	5000	mg/kg	24800	17600	75	70-130	12	30	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D23023 - EPA 3050B / EPA 6010B										
Blank (8D23023-BLK1)				Prepared & Analyzed: 04/23/08						
Copper	ND	1.0	mg/kg							
Calcium	ND	12	"							
Chromium	ND	5.0	"							
Barium	ND	2.5	"							
Cadmium	ND	0.25	"							
Magnesium	ND	5.0	"							
Arsenic	ND	10	"							
Silver	ND	0.50	"							
Selenium	ND	10	"							
Lead	ND	2.5	"							
Zinc	ND	5.0	"							
Nickel	ND	1.2	"							
Laboratory Control Sample (8D23023-BS1)				Prepared & Analyzed: 04/23/08						
Calcium	466	12	mg/kg	500		93	80-120			
Chromium	45.2	5.0	"	50.0		90	80-120			
Copper	43.6	1.0	"	50.0		87	80-120			
Barium	44.6	2.5	"	50.0		89	80-120			
Magnesium	453	5.0	"	500		91	80-120			
Arsenic	44.5	10	"	50.0		89	80-120			
Silver	43.5	0.50	"	50.0		87	80-120			
Cadmium	44.3	0.25	"	50.0		89	80-120			
Lead	42.7	2.5	"	50.0		85	80-120			
Selenium	43.8	10	"	50.0		88	80-120			
Zinc	45.2	5.0	"	50.0		90	80-120			
Nickel	44.0	1.2	"	50.0		88	80-120			
Matrix Spike (8D23023-MS1)	**Source: MRD0716-09**			Prepared & Analyzed: 04/23/08						
Calcium	4920	62	mg/kg	500	4330	118	80-120			
Copper	57.0	5.0	"	50.0	16.4	81	80-120			
Arsenic	56.0	50	"	50.0	11.4	89	80-120			
Silver	40.6	2.5	"	50.0	ND	81	80-120			
Cadmium	41.2	1.2	"	50.0	ND	82	80-120			
Barium	176	12	"	50.0	138	75	80-120			M8
Selenium	40.0	50	"	50.0	ND	80	80-120			RL1
Lead	46.7	12	"	50.0	ND	93	80-120			
Magnesium	5980	25	"	500	4460	303	80-120			M7

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D23023 - EPA 3050B / EPA 6010B										
Matrix Spike (8D23023-MS1)	**Source: MRD0716-09**			Prepared & Analyzed: 04/23/08						
Nickel	106	6.2	mg/kg	50.0	47.7	116	80-120			
Zinc	91.9	25	"	50.0	48.6	87	80-120			
Matrix Spike (8D23023-MS1)	**Source: MRD0716-09**			Prepared: 04/23/08 Analyzed: 04/24/08						
Chromium	86.3	5.0	"	50.0	39.1	94	80-120			
Matrix Spike Dup (8D23023-MSD1)	**Source: MRD0716-09**			Prepared & Analyzed: 04/23/08						
Calcium	5490	62	mg/kg	500	4330	233	80-120	11	20	M7
Barium	191	12	"	50.0	138	105	80-120	8	20	
Arsenic	63.3	50	"	50.0	11.4	104	80-120	12	20	
Silver	41.0	2.5	"	50.0	ND	82	80-120	1	20	
Cadmium	41.9	1.2	"	50.0	ND	84	80-120	2	20	
Selenium	41.4	50	"	50.0	ND	83	80-120	4	20	RL1
Copper	57.5	5.0	"	50.0	16.4	82	80-120	0.9	20	
Zinc	99.9	25	"	50.0	48.6	103	80-120	8	20	
Magnesium	5470	25	"	500	4460	202	80-120	9	20	M7
Lead	47.0	12	"	50.0	ND	94	80-120	0.7	20	
Nickel	94.4	6.2	"	50.0	47.7	93	80-120	11	20	
Matrix Spike Dup (8D23023-MSD1)	**Source: MRD0716-09**			Prepared: 04/23/08 Analyzed: 04/24/08						
Chromium	88.8	5.0	"	50.0	39.1	99	80-120	3	20	
Batch 8D25017 - EPA 7471A / EPA 7471A										
Blank (8D25017-BLK1)				Prepared & Analyzed: 04/25/08						
Mercury	ND	0.020	mg/kg							

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1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D25017 - EPA 7471A / EPA 7471A										
Blank (8D25017-BLK2)				Prepared & Analyzed: 04/25/08						
Mercury	ND	0.020	mg/kg							
Laboratory Control Sample (8D25017-BS1)				Prepared & Analyzed: 04/25/08						
Mercury	0.662	0.020	mg/kg	0.667		99	80-120			
Laboratory Control Sample (8D25017-BS2)				Prepared & Analyzed: 04/25/08						
Mercury	0.592	0.020	mg/kg	0.667		89	80-120			
Matrix Spike (8D25017-MS1)	**Source: MRD0716-08**			Prepared & Analyzed: 04/25/08						
Mercury	0.655	0.020	mg/kg	0.667	0.0342	93	80-120			
Matrix Spike Dup (8D25017-MSD1)	**Source: MRD0716-08**			Prepared & Analyzed: 04/25/08						
Mercury	0.666	0.020	mg/kg	0.667	0.0342	95	80-120	2	25	
Batch 8D29006 - EPA 7471A / EPA 7471A										
Blank (8D29006-BLK1)				Prepared & Analyzed: 04/29/08						
Mercury	ND	0.020	mg/kg							
Blank (8D29006-BLK2)				Prepared & Analyzed: 04/29/08						
Mercury	ND	0.020	mg/kg							
Laboratory Control Sample (8D29006-BS1)				Prepared & Analyzed: 04/29/08						
Mercury	0.640	0.020	mg/kg	0.667		96	80-120			
Laboratory Control Sample (8D29006-BS2)				Prepared & Analyzed: 04/29/08						
Mercury	0.616	0.020	mg/kg	0.667		92	80-120			

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Total Metals by EPA 6000/7000 Series Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D29006 - EPA 7471A / EPA 7471A										
Matrix Spike (8D29006-MS1)	**Source: MRD0611-06**			Prepared & Analyzed: 04/29/08						
Mercury	535	20	mg/kg	0.667	478	8500	80-120			M7
Matrix Spike Dup (8D29006-MSD1)	**Source: MRD0611-06**			Prepared & Analyzed: 04/29/08						
Mercury	482	20	mg/kg	0.667	478	500	80-120	10	25	M7

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
www.testamericainc.com

RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8D17015 - General Preparation / SM2540G										
Blank (8D17015-BLK1)				Prepared: 04/16/08 Analyzed: 04/17/08						
Percent Solids	ND	1.0	%							
Duplicate (8D17015-DUP1)	**Source: MRD0611-06**			Prepared: 04/16/08 Analyzed: 04/17/08						
Percent Solids	95.6	1.0	%		95.8			0.2	20	

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RWQCB-Regional Water Quality Control Board	Project: Mercury Mines	MRD0611
1515 Clay Street, Suite 1400	Project Number: -	**Reported:**
Oakland CA, 94612	Project Manager: Carrie Austin	05/01/08 13:03

Notes and Definitions

RL1	Reporting limit raised due to sample matrix effects.
M8	The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
M7	The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
C	Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

TestAmerica
ANALYTICAL TESTING CORPORATION

CHAIN OF CUSTODY

☒ 885 Jarvis Drive • **Morgan Hill, CA 95037** • (408) 776-9600 • FAX (408) 782-6308
☐ 819 Striker Ave., Suite 8 • **Sacramento, CA 95834** • (916) 921-9600 • FAX (916) 921-0100

Company Name: SF Bay Water Board		Project: Mercury Mines	
Mailing Address: 1515 Clay St #1400		Billing Address (if different):	
City: Oakland	State: CA	Zip Code: 94612	
Telephone: (510) 622-1015	Fax #:	P.O. #:	
Report To: C Austin	E-Mail Address: @waterboards.ca.gov	QC Data: ☒ Level II (standard) ☐ Level III ☐ Level IV	
Sampler: C Austin	Date/Time Results Required:	Test America Work Order # MRD0611	

Turnaround Time:
☒ 10-15 Working Days (Standard TAT)
☐ 7 Working Days
☐ 5 Working Days
☐ 72 hours
☐ 48 hours
☐ 24 hours
☐ 2-8 hours

MANDATORY:
☐ SDWA (Drinking Water)
☐ CWA (Waste Water)
☒ RCRA (Hazardous Waste)
☒ Other

ANALYSES REQUESTED (Please provide method)

Client Sample I.D.	Date / Time Sampled	Matrix Desc.	# of Cont.	Container Type	Test America's Sample #	Mercury* 7471A	Cd/Mg* 6010	Metals* 6010	TOC SM5310B	Grain Size D422					Comments/Temp. (if required)
1. 041408-S-CA-01	04/14/08 1155	S	1	B203 6/ass	01	X	X	X	X	X					*7471A & 6010
2. 041408-S-CA-02	1205				02										Dry Wt.
3. 041408-S-CA-03	1215				03										Metals 6010 As Ba
4. 041408-S-CA-04	1240				04										Cd Cr Cu Pb
5. 041408-S-CA-05	1255				05										Ni Se Ag Zn
6. 041408-S-CA-06	1320				06										Grain size
7.															use sieve & hydrometer
8.															need <63 µm
9.															
10.															

Relinquished by/Co.:	Received by/Co.:	Date/Time/Temp: 4-15-8	1300
Relinquished by/Co.:	Received by/Co.: TAMH	Date/Time/Temp: 4-15-8	1700
Relinquished by/Co.:	Received by/Co.:	Date/Time/Temp:	

Samples Received in Good Condition? ☑ Yes ☐ No Samples on Ice? ☑ Yes ☐ No Method of Shipment: TA COURIER Page 1 of

By relinquishing samples to Test America, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. for services is due within 30 days from the date of the invoice. Sample(s) will be disposed of after 30 days.

White: Test America **Yellow:** Test America **Pink:** Client

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: SF BAY WB / RWQCB
REC. BY (PRINT): PH
WORKORDER: MRD0611

DATE REC'D AT LAB: 4/15/08
TIME REC'D AT LAB: 1700
DATE LOGGED IN: 4/16/08

For Regulatory Purposes?
___ DRINKING WATER
___ WASTE WATER
✓ OTHER

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	CLIENT ID	CONTAINER DESCRIPTION	PRESER VATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / (Absent) Intact / Broken*								
2. Chain-of-Custody	(Present) / Absent*								
3. Traffic Reports or Packing List:	Present / (Absent)								
4. Airbill:	Airbill / Sticker Present / (Absent)								
5. Airbill #: —									
6. Sample Labels:	(Present) / Absent								
7. Sample IDs:	(Listed) / Not Listed on Chain-of-Custody								
8. Sample Condition:	(Intact) / Broken* / Leaking*								
9. Does information on chain-of-custody, traffic reports and sample labels agree?	**(Yes) / No***								
10. Sample received within hold time?	(Yes) / No*								
11. Adequate sample volume received?	(Yes) / No*								
12. Proper preservatives used?	(Yes) / No*								
13. Trip Blank / Temp Blank Received? (circle which, if yes)	Yes / (No*)								
14. Read Temp:	3.6°C								
Correction Factor:	-1.0								
Corrected Temp:	2.6°C								
Is corrected temp. 0-6°C?	(Yes) / No**								
**Exception (if any): Metals / Perchlorate DFF on Ice or Problem COC									

(Handwritten diagonally across the table: See COC / 1L Clear Jar [initials] 4/15/08)

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

TestAmerica
South Burlington, VT

Sample Data Summary Package

SDG: MRD0611

TestAmerica

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Case Narrative

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

April 28, 2008

Ms. Leticia Reyes
TestAmerica, Inc.
Morgan Hill Division
885 Jarvis Drive
Morgan Hill, CA 95037

Re: Laboratory Project No. 28000
Case: RWQCB; SDG: MRD0611

Dear Ms. Reyes:

Enclosed are the analytical results for the samples that were received by TestAmerica Burlington on April 18th, 2008. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 04/18/08 ETR No: 125065		
749261	MRD0611-01	04/14/08	SOIL
749262	MRD0611-02	04/14/08	SOIL
749263	MRD0611-03	04/14/08	SOIL
749264	MRD0611-04	04/14/08	SOIL
749265	MRD0611-05	04/14/08	SOIL
749266	MRD0611-06	04/14/08	SOIL

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Particle Size Analysis by ASTM D422
There were no exceptions to the method quality control criteria during the analyses of these samples.

Any reference within this report to Severn Trent Laboratories, Inc. or STL, should be understood to refer to TestAmerica Laboratories, Inc. (formerly known as Severn Trent Laboratories, Inc.) The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

30 Community Drive Suite 11 South Burlington, VT 05403 **tel** 802.660.1990 **fax** 802.660.1919 **www.testamericainc.com**

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

If there are any questions regarding this submittal, please contact me at 802 660-1990.

Sincerely,

Kristine Dusablon

Kristine A. Dusablon
Project Manager

Enclosure

Chain of Custody

SUBCONTRACT ORDER

TestAmerica Morgan Hill

MRD0611

SENDING LABORATORY:	RECEIVING LABORATORY:
TestAmerica Morgan Hill	TestAmerica Burlington
885 Jarvis Drive	30 Community Drive, Suite 11
Morgan Hill, CA 95037	South Burlington, VT 05403
Phone: 408-776-9600	Phone :(802) 660-1990
Fax: 408-782-6308	Fax: (802) 660-1919
Project Manager: Leticia Reyes	Project Location:
Client: RWQCB-Regional Water Quality Control Board	Receipt Temperature: _____ °C Ice: Y / N

Contract Agreement: 04-006-120-0; Registration Number: 3940010561563. Send Hard Copy and copy of Invoice: include Copy of COC with invoice: Send one monthly invoices, with attached, itemized sub-invoices as needed, per contract

Analysis	Units	Due	Expires	Interlab Price	Surch	Comments
Sample ID: MRD0611-01	**Soil**		Sampled: **04/14/08 11:55**			
Grain Size Analysis (SUB)	N/A	04/29/08	04/28/08 11:55	$175.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied: 8 oz. jar (B)						
Sample ID: MRD0611-02	**Soil**		Sampled: **04/14/08 12:05**			
Grain Size Analysis (SUB)	N/A	04/29/08	04/28/08 12:05	$175.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied: 8 oz. jar (B)						
Sample ID: MRD0611-03	**Soil**		Sampled: **04/14/08 12:15**			
Grain Size Analysis (SUB)	N/A	04/29/08	04/28/08 12:15	$175.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied: 8 oz. jar (B)						
Sample ID: MRD0611-04	**Soil**		Sampled: **04/14/08 12:40**			
Grain Size Analysis (SUB)	N/A	04/29/08	04/28/08 12:40	$175.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied: 8 oz. jar (B)						
Sample ID: MRD0611-05	**Soil**		Sampled: **04/14/08 12:55**			
Grain Size Analysis (SUB)	N/A	04/29/08	04/28/08 12:55	$175.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied: 8 oz. jar (B)						
Sample ID: MRD0611-06	**Soil**		Sampled: **04/14/08 13:20**			
Grain Size Analysis (SUB)	N/A	04/29/08	04/28/08 13:20	$175.00	0%	STL-Burlington: D422M/PSEP
Containers Supplied: 8 oz. jar (B)						

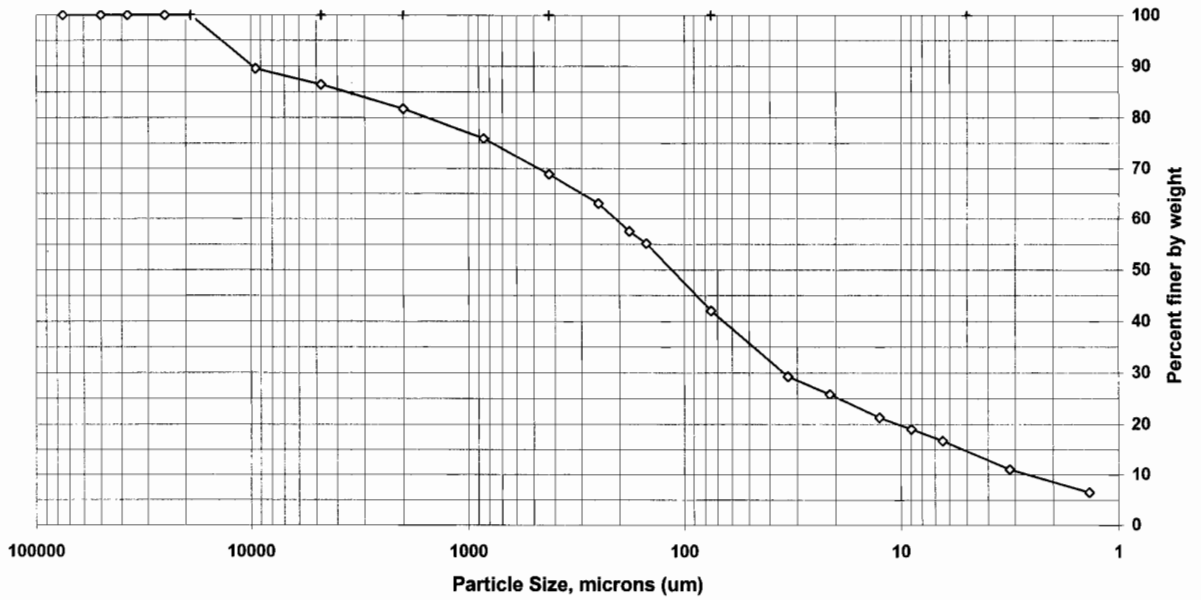
Released By	Date/Time	Received By	Date/Time
DLuna FASNET	4/16/08 1530	Scott Z	4/18/08 0925

Sample Data Summary – Geotechnical

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0611	**Date Received:**	4/18/2008
Sample ID:	MRD0611-01	**ETR(s):**	125065	**Start Date:**	4/18/2008
Lab ID:	749261			**End Date:**	4/25/2008

Percent Solids:	98.0%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	89.5	10.5
#4	4750	86.4	3.0
#10	2000	81.7	4.7
#20	850	75.9	5.8
#40	425	68.8	7.1
#60	250	63.0	5.8
#80	180	57.5	5.5
#100	150	55.2	2.4
#200	75	42.0	13.1
Hydrometer	33.1	29.3	12.7
|	21.3	25.9	3.4
|	12.5	21.3	4.6
|	9.0	19.0	2.3
|	6.5	16.7	2.3
|	3.2	11.0	5.7
V	1.4	6.5	4.6

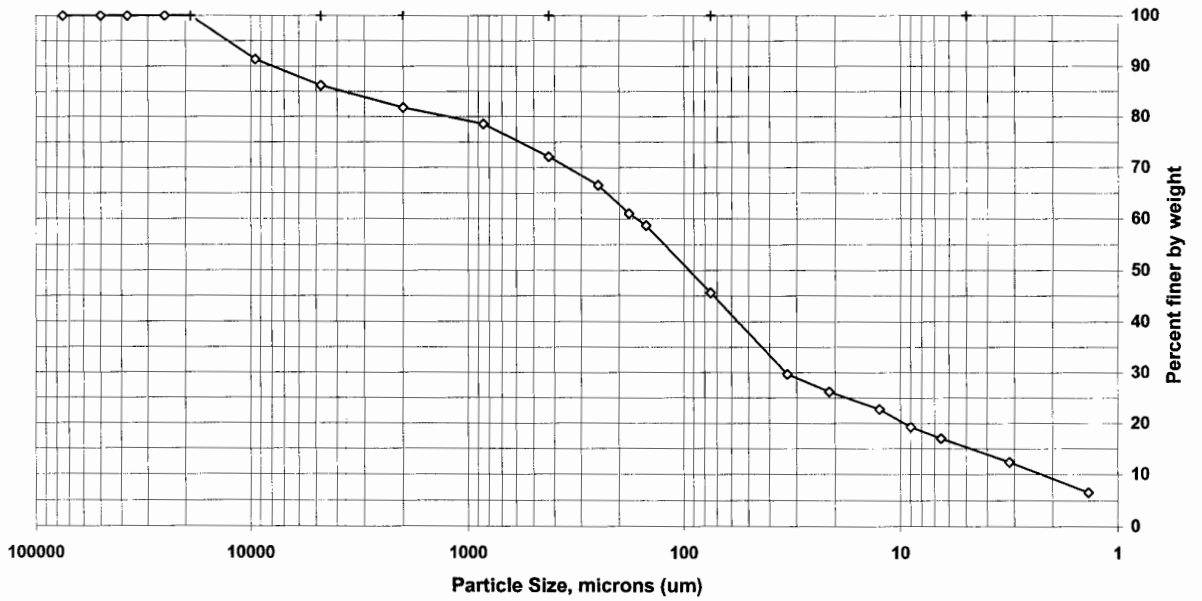
Soil Classification	Percent of Total Sample
Gravel	13.6
Sand	44.4
Coarse Sand	4.7
Medium Sand	12.9
Fine Sand	26.8
Silt	25.3
Clay	16.7

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0611	**Date Received:**	4/18/2008
Sample ID:	MRD0611-02	**ETR(s):**	125065	**Start Date:**	4/18/2008
Lab ID:	749262			**End Date:**	4/25/2008

Percent Solids:	97.8%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	91.3	8.7
#4	4750	86.2	5.2
#10	2000	81.8	4.4
#20	850	78.5	3.3
#40	425	72.1	6.5
#60	250	66.5	5.6
#80	180	61.1	5.4
#100	150	58.7	2.4
#200	75	45.6	13.1
Hydrometer	33.1	29.7	15.9
|	21.3	26.2	3.5
|	12.5	22.8	3.5
|	9.0	19.3	3.5
|	6.5	17.0	2.3
|	3.2	12.3	4.6
V	1.4	6.6	5.8

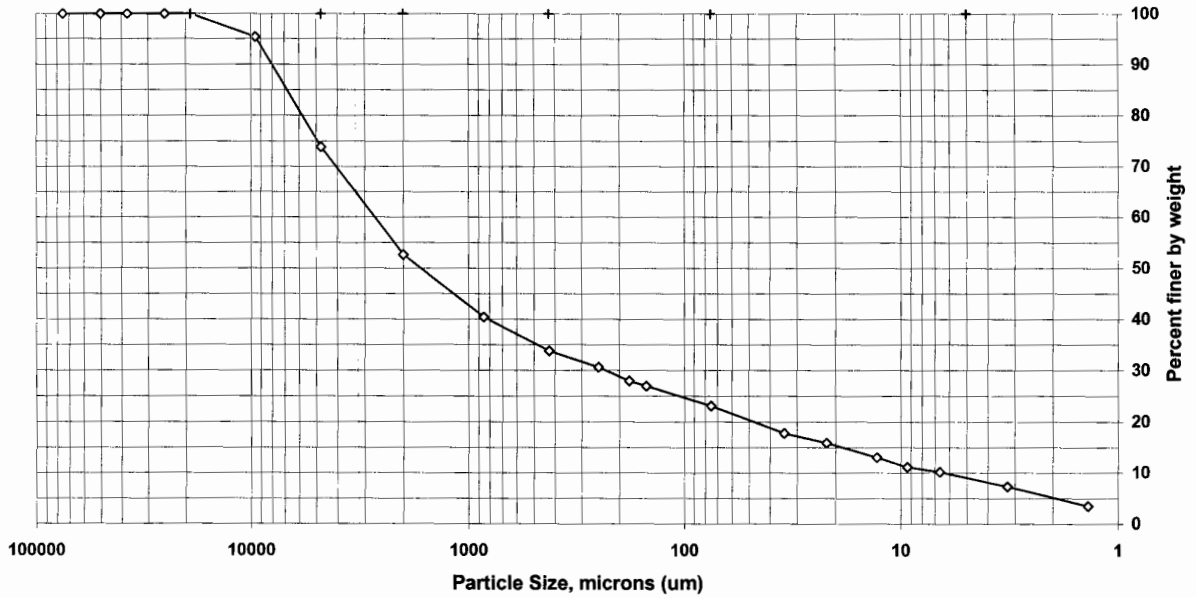
Soil Classification	Percent of Total Sample
Gravel	13.8
Sand	40.5
Coarse Sand	4.4
Medium Sand	9.7
Fine Sand	26.5
Silt	28.7
Clay	17.0

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0611	**Date Received:**	4/18/2008
Sample ID:	MRD0611-03	**ETR(s):**	125065	**Start Date:**	4/18/2008
Lab ID:	749263			**End Date:**	4/25/2008

Percent Solids:	95.9%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	95.4	4.6
#4	4750	73.8	21.5
#10	2000	52.6	21.2
#20	850	40.4	12.3
#40	425	33.8	6.6
#60	250	30.6	3.1
#80	180	28.0	2.7
#100	150	27.0	1.0
#200	75	23.1	3.9
Hydrometer	34.4	17.8	5.3
|	22.0	15.9	1.9
|	12.9	13.1	2.9
|	9.3	11.1	1.9
|	6.6	10.2	1.0
|	3.2	7.3	2.9
V	1.4	3.5	3.8

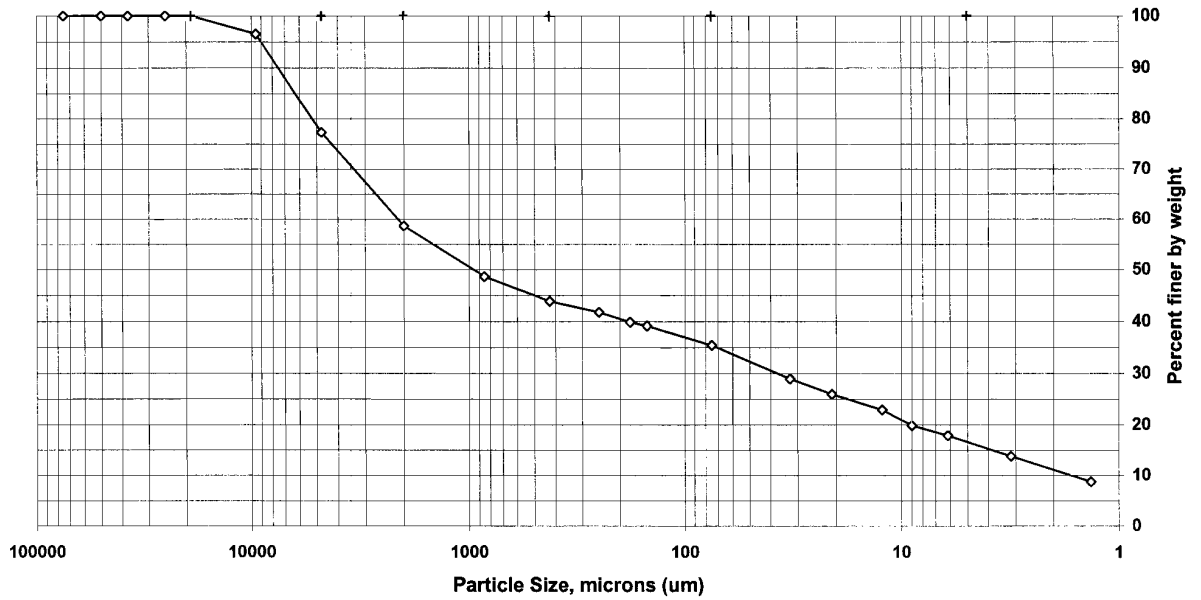
Soil Classification	Percent of Total Sample
Gravel	26.2
Sand	50.7
Coarse Sand	21.2
Medium Sand	18.9
Fine Sand	10.7
Silt	12.9
Clay	10.2

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0611	**Date Received:**	4/18/2008
Sample ID:	MRD0611-04	**ETR(s):**	125065	**Start Date:**	4/18/2008
Lab ID:	749264			**End Date:**	4/25/2008

Percent Solids:	98.7%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	96.5	3.5
#4	4750	77.3	19.2
#10	2000	58.6	18.7
#20	850	48.7	9.9
#40	425	43.9	4.8
#60	250	41.8	2.1
#80	180	39.9	1.9
#100	150	39.1	0.7
#200	75	35.4	3.7
Hydrometer	32.6	29.0	6.4
|	20.9	26.0	3.0
|	12.3	22.9	3.0
|	9.0	19.9	3.0
|	6.2	17.9	2.0
|	3.2	13.8	4.0
V	1.3	8.8	5.1

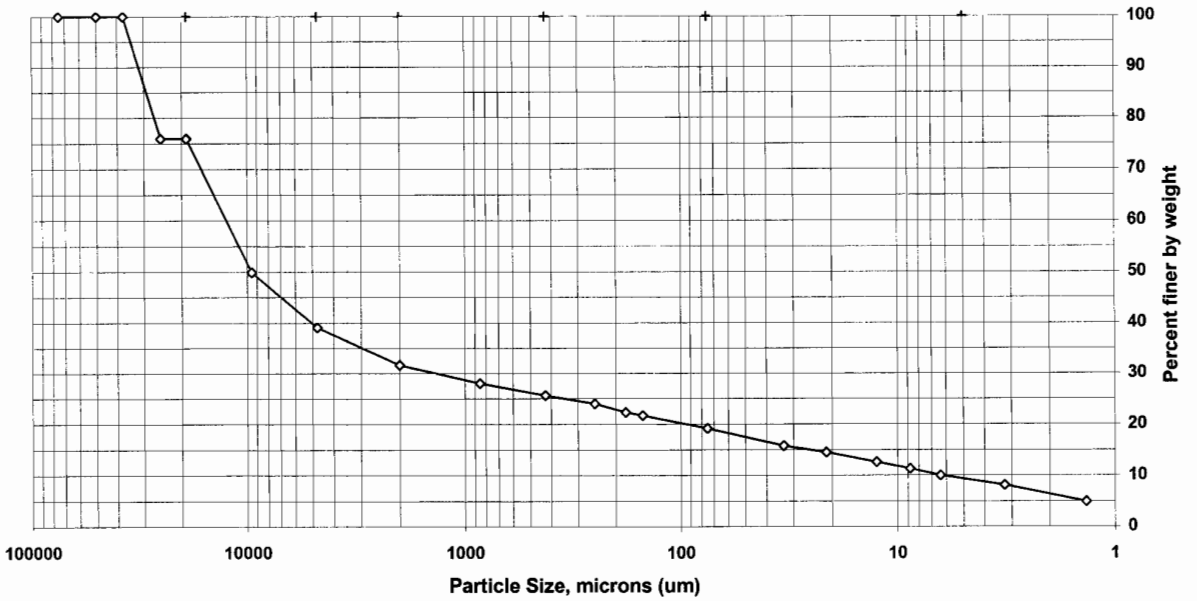
Soil Classification	Percent of Total Sample
Gravel	22.7
Sand	41.9
Coarse Sand	18.7
Medium Sand	14.8
Fine Sand	8.5
Silt	17.5
Clay	17.9

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0611	**Date Received:**	4/18/2008
Sample ID:	MRD0611-05	**ETR(s):**	125065	**Start Date:**	4/18/2008
Lab ID:	749265			**End Date:**	4/25/2008

Percent Solids:	97.9%	**Non-soil material:**	na
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	37.5 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	75.9	24.1
3/4 inch	19000	75.9	0.0
3/8 inch	9500	49.9	26.0
#4	4750	39.1	10.8
#10	2000	31.6	7.4
#20	850	28.1	3.5
#40	425	25.6	2.4
#60	250	24.0	1.6
#80	180	22.3	1.7
#100	150	21.7	0.6
#200	75	19.1	2.6
Hydrometer	33.3	15.8	3.3
|	21.3	14.5	1.3
|	12.5	12.6	1.9
|	8.8	11.3	1.3
|	6.4	10.0	1.3
|	3.2	8.1	1.9
V	1.4	4.9	3.2

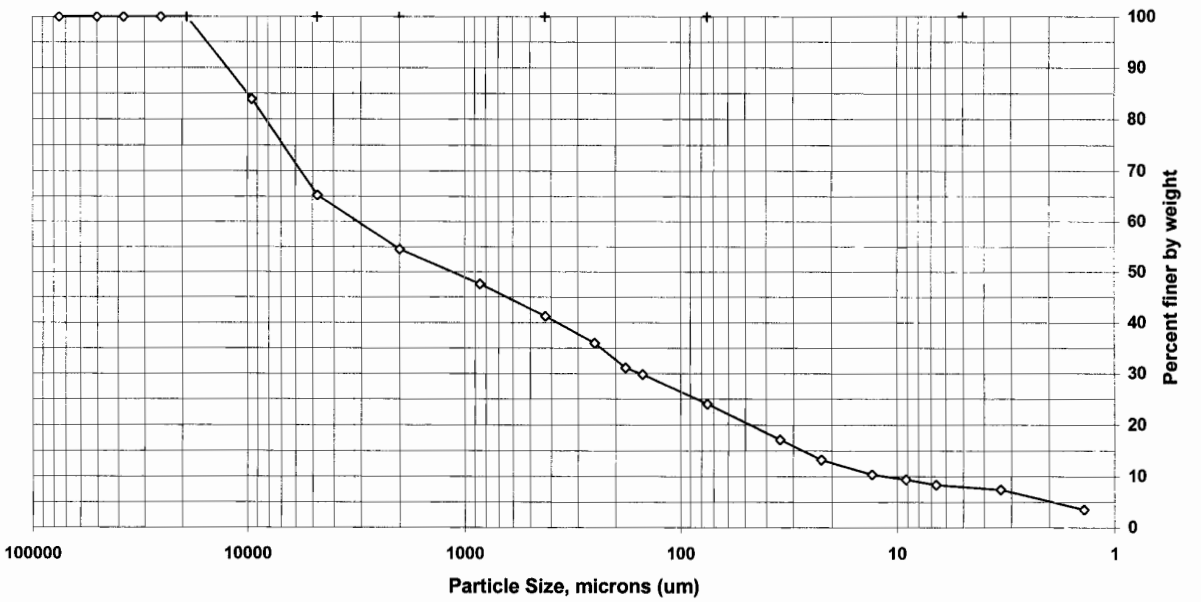
Soil Classification	Percent of Total Sample
Gravel	60.9
Sand	19.9
Coarse Sand	7.4
Medium Sand	6.0
Fine Sand	6.5
Silt	9.1
Clay	10.0

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Particle Size of Soils by ASTM D422

Client Code:	TACAMH	**SDG:**	MRD0611	**Date Received:**	4/18/2008
Sample ID:	MRD0611-06	**ETR(s):**	125065	**Start Date:**	4/18/2008
Lab ID:	749266			**End Date:**	4/25/2008

Percent Solids:	96.0%	**Non-soil material:**	plant
Specific Gravity:	2.650	**Shape (> #10):**	angular
Maximum Particle Size:	19 mm	**Hardness (> #10):**	hard



Sieve size	Particle size, um	Percent finer	Incremental percent
3 inch	75000	100.0	0.0
2 inch	50000	100.0	0.0
1.5 inch	37500	100.0	0.0
1 inch	25000	100.0	0.0
3/4 inch	19000	100.0	0.0
3/8 inch	9500	83.9	16.1
#4	4750	65.3	18.7
#10	2000	54.5	10.8
#20	850	47.6	6.9
#40	425	41.2	6.4
#60	250	35.9	5.3
#80	180	31.1	4.8
#100	150	29.8	1.3
#200	75	24.1	5.8
Hydrometer	34.5	17.2	6.9
|	22.3	13.3	3.9
|	13.1	10.4	2.9
|	9.1	9.4	1.0
|	6.6	8.4	1.0
|	3.4	7.5	1.0
V	1.4	3.6	3.9

Soil Classification	Percent of Total Sample
Gravel	34.7
Sand	41.2
Coarse Sand	10.8
Medium Sand	13.3
Fine Sand	17.2
Silt	15.6
Clay	8.4

Preparation Method: **D2217**
Dispersion Device: Mechanical mixer with a metal paddle.
Dispersion Period: 1 minute

Sample Handling

Pedro Hufano
Test America
885 Jarvis Drive

Morgan Hill, CA 95037

CLS 128767/21/24

ActWgt: 31 LB
System#: 9141070/INET8010
Account#: S *********

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: 802-660-1990 **BILL SENDER**

Test America Burlington
Test America Burlington
30 COMMUNITY DR STE 11

SOUTH BURLINGTON, VT 054036834

TRK# 0201 7909 8643 7094

THU - 17APR **AA**
PRIORITY OVERNIGHT

XH BTVA

05403
VT-US
BTV

After printing this label:
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic valueof the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss.Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

Scott 2 4/18/08 0925

TestAmerica Burlington
SAMPLE RECEIPT & LOG IN CHECKLIST

Client:	TACAMH	Date Received:	4/18/08	Log In Date:	4/18/08
ETR:	125065	Time Received:	0925	By:	SML
SDG:	MRD0611	Received By:	SML	Signature:	Scott Z
Project:	28000	# Coolers Received:	1	PM Signature:	Kristen Dysinger 4/21/08
Samples Delivered By:	X Shipping Service ☐ Courier ☐ Hand ☐ Other (specify)			Date:	
List Air bill Number(s) or Attach a photocopy of the Air Bill:					

COOLER SCREEN	YES	NO	NA	COMMENTS
There is *no* evidence to indicate tampering	X			
Custody seals are present and intact	X			
Custody seal numbers are present		X		
If yes, list custody seal numbers:	1Z 019 262 03 6515 4062, 1Z 019 262 03 6695 3456			

Thermal Preservation Type: X Wet Ice ☐ Blue Ice ☐ None ☐ Other (specify)

IR Gun ID: 96 Correction Factor (CF) = 0 °C

Cooler 1:	5.6 °C	Cooler 6	°C	Cooler 11	°C	Cooler 16	°C
Cooler 2:	°C	Cooler 7	°C	Cooler 12	°C	Cooler 17	°C
Cooler 3:	°C	Cooler 8	°C	Cooler 13	°C	Cooler 18	°C
Cooler 4:	°C	Cooler 9	°C	Cooler 14	°C	Cooler 19	°C
Cooler 5	°C	Cooler 10	°C	Cooler 15	°C	Cooler 20	°C

Unless otherwise documented, the recorded temperature readings are adjusted readings to account for the CF of the IR Gun

EPA Criteria: 0-6°C, except for air and geo samples which should be at ambient temperature and tissue samples, which may be frozen.

Some clients require thermal preservation criteria of 2-4°C or other such criteria. The PM must notify SM when alternate criteria is specified.

SAMPLE CONDITION	YES	NO	NA	COMMENTS
Sample containers were received intact	✓			
Legible sample labels are affixed to each container	✓			

CHAIN OF CUSTODY (COC)	YES	NO	NA	COMMENTS
COC is present and includes the following information for each container:				
• Sample ID / Sample Description	✓			
• Date of Sample Collection	✓			
• Time of Sample Collection	✓			
• Identification of the Sampler	✓			
• Preservation Type			✓	
• Requested Tests Method(s)	✓			
• Necessary Signatures	✓			
Internal Chain of Custody (ICOC) Required			✓	
If yes to above, ICOC Record initiated for every Worksheet			✓	

SAMPLE INTEGRITY / USABILITY	YES	NO	NA	COMMENTS
The sample container matches the COC	✓			
Appropriate sample containers were received for the tests requested	✓			
Samples were received within holding time	✓			
Sufficient amount of sample is provided for requested analyses	✓			
VOA vials do not have headspace or a bubble >6mm (1/4" diameter)			✓	
Appropriate preservatives were used for the tests requested			✓	
pH of inorganic samples checked and is within method specification			✓	
If no, attach Inorganic Sample pH Adjustment Form			✓	

ANOMALY / NCR SUMMARY

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

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