

August 15, 2009

92-002-230

Ms. Maureen Essenthier (3WC22)  
U.S. Environmental Protection Agency  
1650 Arch Street  
Philadelphia, PA 19103

Mr. Ronald Brezinski  
PA Department of Environmental Protection  
Northeast Regional Office – 2 Public Square  
Wilkes-Barre, PA 18711

RE: Quarterly Progress Report No. 12  
Second Quarter 2009  
Marjol Battery Site, Throop, Pennsylvania

Dear Ms. Essenthier and Mr. Brezinski:

Enclosed please find Quarterly Progress Report No. 12 (Second Quarter 2009) for the Marjol Battery Site in Throop, Pennsylvania. This report is submitted as required by Section VI.L.3 of the Final Administrative Order on Consent which became effective on July 13, 2006.

If you have any questions, please contact Barbara Forslund at (610) 840-9145 or Jen DiJoseph at (610) 840-9189.

Sincerely,

ADVANCED GEOSERVICES

Jennifer W. DiJoseph, P.E.  
AGC Project Manager



Barbara L. Forslund, P.E.  
AGC Project Coordinator

JWD:BLF:vm

Enclosures

cc: L. Ayers (2 copies)  
L. Cimini  
R. Moose  
J. Cronmiller  
R. DiPietro  
A. Doubleday  
L. Zelinka  
Throop Borough Council



**MARJOL BATTERY SITE  
QUARTERLY PROGRESS REPORT  
NO. 12**



**MARJOL BATTERY SITE  
QUARTERLY PROGRESS REPORT  
NO. 12**

*Prepared For:*

**GOULD ELECTRONICS  
Eastlake, Ohio**

*Prepared By:*

**ADVANCED GEOSERVICES  
West Chester, Pennsylvania**

**August 15, 2009  
Project No. 92-002-230**

CERTIFICATION STATEMENT

I certify that the information contained in or accompanying Quarterly Progress Report No. 12 dated August 15, 2009 for the Marjol Battery Site in Throop, Pennsylvania is true, accurate and complete.

As to those portions of Quarterly Progress Report No. 12 for which I cannot personally verify their accuracy, I certify under penalty of law that this and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibilities of fines and imprisonment for knowing violations.

SIGNATURE:

*Thomas N. Rich*

---

NAME:

Thomas N. Rich

---

TITLE:

Chief Administrative Officer

---

DATE:

August 15, 2009

---

**QUARTERLY PROGRESS REPORT NO. 12  
MARJOL BATTERY SITE**

DATE: August 15, 2009 92-002-230

REPORTING PERIOD: Second Quarter 2009 (April 1 to June 30)

This document was prepared to satisfy quarterly progress reporting requirements in the Final Administrative Order on Consent (AOC) U.S. EPA Docket No. RCRA-03-2006-0041 CA effective July 13, 2006 between the United States Environmental Protection Agency (USEPA), Pennsylvania Department of Environmental Protection (PADEP) and Gould Electronics Inc. (Gould).

**ACTIONS DURING SECOND QUARTER 2009**

**PERMITTING AND DESIGN**

The following activities were accomplished during Second Quarter 2009:

- On April 1, 2009, a co-permittee application for General NPDES Permit No. PAG2-0035-09-005 associated with the Throop Borough Borrow Area was submitted to Lackawanna County Conservation District. The co-permittee application added SCE Environmental, the contractor, to the permit.
- On April 3, 2009, USEPA approved the use of a E284 Dial-Type Pocket Penetrometer for in-situ testing of the solidified materials.
- On April 6, 2009, drawings related to revised Design Addendum No. 7 were issued to USEPA and PADEP.
- On April 6, 2009, responses to comments on NPDES Permit Minor Modification No. 4 were submitted to LCCD. The Minor Modification was approved by LCCD on April 28, 2009.
- On June 12, 2009, Design Addendum No. 8 was issued to SCE. This design addendum provided revised drawings E310 and E320 for revised berm and solidified waste grades, respectively. On June 17, 2009, USEPA and PADEP indicated there were no comments on Design Addendum No. 8.
- On June 18, 2009, Design Addendum No. 9 was issued to SCE. This design addendum provided revised Drawing E330 and E332 for revised final grades. (Design Addenda Nos. 8 and 9 were subsequently revised by Design Addendum No. 10 during Third Quarter 2009.)

Table 1 provides the status of permit applications. Table 2 provides a summary of design addenda and permit modifications.

## CORRECTIVE MEASURES CONSTRUCTION

The following activities were accomplished during Second Quarter 2009:

- CMX Engineering was onsite throughout the Second Quarter to continue survey control.
- Excavation activities within the Facility were continued throughout the quarter. The following excavation areas were completed from April through June of 2009:
  - SWNW-1, SWNW-2, SWNW-4, SWNW-5
  - W-5, W-7
  - Area I
  - Area J
  - Area K
  - Area O
  - Area N
  - Area P
  - Area R
  - Area Q
  - Area D
  - Area A
  - Area B
  - Area C
  - Area E
  - Area V
  - Area H (topsoil surface)
  - Grove Street
  - Remaining sections of Areas O, M, and U (Delaware Street entrance)
  - Extended excavation along Grove Street
- Grade work was conducted throughout the Site with bulldozers and smooth drum rollers throughout the second quarter.
- Construction activities in the South Swale were continued throughout the quarter.
  - Channel 16 and portions of Channel 15 were completed with topsoil, permanent seed, and permanent erosion control matting (ECM) throughout the quarter. The installation of the ECM followed the intermittent anchor trench design as required by the details and manufacturer's specifications found on Design Drawing E0405.
  - The installation of the geotextile and gabion mattresses for Check Dam (CD)-14 was completed on June 30, 2009. The rough grading for CD-12 began concurrently with the installation of CD-14.
- Stump grinding of wooden debris on the Facility resumed on April 6, 2009 and was completed on May 9, 2009.

- Temporary stabilization activities were resumed and completed during the second quarter due to a delay in placement of topsoil.
  - The North Woods front slope area (NW-19, NW-20, and NW-21) was temporarily stabilized with temporary ECM. These activities began on April 2, 2009 and were completed on April 6, 2009.
  - Stabilization with straw mulch was conducted on disturbed areas throughout the Facility, including Area F and Area G, was completed on April 10, 2009.
  - Temporary seed and straw mulch were applied over the Southwest North Woods on May 18, 2009 to stabilize the area until the importation of topsoil could be started. Tackifier was applied on top of the straw to further stabilize the area on May 19, 2009.
  
- The road plates on Delaware Street were removed on April 3, 2009, at the request of the Throop Borough Council.
- The contractor began preparing the Throop Borough borrow source for excavation activities on April 6, 2009 and continued throughout the quarter until excavation activities began on May 1, 2009.
  - Survey control, performed by Dunda Associates, began on April 6, 2009.
  - The installation of erosion and sedimentation measures began on April 9, 2009 and continued through April 16, 2009.
  - Clearing and grubbing activities began on April 15, 2009 and continued through May 9, 2009. Grinding of trees and stumps began on May 4, 2009 and was completed on May 9, 2009.
  - The excavation and grading of the haul road to the Throop Borough borrow source began on April 21, 2009.
  
- Restoration activities were resumed.
  - Area T and Area U were regraded on April 7, 2009. Amended topsoil from the Facility stockpile was placed and the area was seeded with permanent seed mixture via broadcast seeding on April 30, 2009. The installation of permanent ECM was completed on May 1, 2009.
  - Reseeding of areas in the North Woods that were not exhibiting grass growth began on April 15, 2009 and continued as necessary throughout the quarter.
  - Area M was backfilled with structural fill excavated from Area F on April 21 and April 22, 2009 in order to expedite the relocation of the alternate support zone.
  - Topsoil was placed on the North Woods front slope (NW-19, NW-20, NW-21, Area I, and Area J) starting on June 24, 2009 and continued throughout the remainder of the quarter.

- Topsoil and permanent seed mix were applied to the Permanent Diversion Berm via hydroseeding equipment starting on June 29, 2009 and continuing through the end of the quarter. Permanent erosion control mat was placed once seeding was completed.
- SCE resumed construction of the permanent access road. On April 28, 2009, crews began boxing out the road in preparation of stone placement along the north end of the sediment basin berm and continued traveling southwest. An excavator and bulldozer were used to perform the activities. The excess clean material that was generated during the excavation was stockpiled for later use as structural fill for the interior Containment Area (CA) berm construction. Additional work on the permanent access road will be conducted during the next quarter.
- The contractor resumed excavation of the eastern section of Area O, which included the stained soils area, on April 30, 2009. AGC field staff remained with excavation activities at all times to perform XRF and PID screenings to identify material to be segregated.
  - Excavation and segregation of the identified material by SCE began on May 1, 2009 and the initial excavation was completed on May 9, 2009.
  - Subsurface investigations were performed by SCE using a geoprobe at AGC's request on May 7, May 8, and May 12, 2009.
  - Additional samples were removed from the segregated stockpiles located within the CA on May 8 and May 22, 2009. SCE provided an operator and excavator at AGC's request and direction to obtain the samples.
  - SCE provided an operator and excavator on May 22, 2009 to obtain additional samples from the sidewalls of the stained soils excavation. This work was performed at AGC's request and direction.
- The relocation of the Support Zone to the alternate location began on April 22, 2009 with the transport of the support trailers.
  - Electricity was taken offline and restored to certain trailers (i.e. the Guard Trailer) on April 22, 2009. Reestablishment of electricity continued throughout April 28, 2009.
  - Internet capabilities were restored Site wide by May 1, 2009.
  - The construction of the parking area began on April 23, 2009 and was completed on April 27, 2009. Geotextile was placed over the subgrade and modified 2A stone was applied to create the parking surface.
- Importation of structural fill from the Throop Borough borrow source was initiated on April 23, 2009. The import of fill material was continued throughout the entire quarter for backfilling and construction purposes.
  - The initial material imported for backfill purposes was generated from the excavation of temporary channel TC-1 and the haul road within the Gould owned property (North Woods). On May 1, 2009, SCE began importing

structural fill generated from the designed grading cuts at the borrow source.

- Due to specification requirements, the contractor began sizing the structural fill material at the borrow source on May 2, 2009 using a pneumatic hammer. As the volume of material requiring sizing increased, additional equipment was mobilized to the borrow source to handle the quantity of oversized material that needed to be processed.
  
- The tree stumps running along the western side of Grove Street were removed and the area was grubbed in preparation of continued excavation activities on May 2, 2009. An excavator with a grapple attachment was used to remove the stumps and transport them to a stockpile for later grinding activities.
- The decontamination trailer was relocated to an area adjacent to Area H on May 4, 2009. The trailer will remain in this location for the duration of the project. A generator is being used to provide electricity to the trailer and water service has been installed via a temporary underground pipeline. Grey water is being containerized in a temporary underground storage tank for later management.
- SCE continued working on the punchlist generated during Site walks and from field observations throughout the quarter.
- The construction of Diversion Berm 14, surrounding Area H, began on May 12, 2009. Structural fill imported from the Throop Borough borrow source was used to create the berm. Temporary erosion control mat and woodchips were used for stabilization purposes. The berm construction was completed on May 14, 2009.
- Once approval was given, the backfill of the stained soils area was completed. Preparation of the subgrade for backfill activities began on May 22, 2009 and backfill activities were completed on May 28, 2009.
- Construction of the CA berm resumed on May 29, 2009 along the southeastern section of the CA and continued along the berm in a northeast direction. Material imported from the Throop Borough borrow source was used to build the berm. Construction activities continued throughout the quarter and further work is required to meet final grades.
- SCE resumed stormwater management activities to control the standing water accumulating in the CA. Additional storm water management actions were taken in response to the standing water breaching the capacity within the CA on May 29, 2009.
  - On May 29, 2009, additional capacity within the interior of the CA was created by excavating a pit. The standing water was then pumped from the west end of the CA into the pit and allowed to infiltrate.
  - On June 1, 2009, SCE started pumping the standing water from the west end of the CA into Area B, where excavation had not yet been completed at the time. A hard pipeline was installed from the pump, located at the western end of the CA, across the eastern slope and into Area B. The sections of pipe were connected and sealed with rubber gaskets to prevent any leakage from occurring. No water loss from the piping was observed.

This water was later pumped from Area B into water trucks and used as dust suppression within the CA prior to the completion of excavation.

- On June 2, 2009, SCE excavated the sediment build up from the interior of the CA berm along the southwest and west sides of the CA to create additional capacity for storm water. An excavator was used to remove the material and place it within the interior of the CA.
  - On June 3, 2009, two diversion berms were constructed using structural fill material to divert surface runoff from the eastern portion of the Facility and the North Woods into the North and South Swales in an attempt to limit the amount of stormwater reaching the CA.
  - On June 5, 2009, two temporary stone diversion berms were constructed on the southwest and northwest corners of the CA berm to divert any surface run off from the CA berm into the North and South Swales.
  - On June 10, 2009, a frac tank was delivered to the Site and located within the CA for water storage. A pipeline extending from the pump across the CA to the frac tank was installed and water was pumped into the frac tank as necessary. The water was gradually released from the tank into a standpipe installed directly into the interior of the CA and allowed to infiltrate.
- On June 2, 2009, SCE removed the top six inches of structural fill along the western portion of the CA berm in an area delineated by AGC based on elevated lead concentrations as indicated by XRF analysis. The material was removed using a bulldozer and an excavator. All material was placed in the CA.
  - The construction of a diversion berm to divert stormwater from the haul road, Area H to the CA, occurred on June 11, 2009. Structural fill from the Throop Borough borrow source was used to build the berm.
  - The importation of topsoil from the Church borrow source began on June 23, 2009. Material was transported to a stockpile located in the North Woods within the perimeter fence line. Topsoil was blended with peat onsite to meet organic content specifications following placement.
  - SCE performed an initial in-situ solidification pilot study in Area H on June 24, 2009. An excavator was used to spread the lime kiln dust and a water truck was used to add moisture to the mixture. Additional testing and practice with solidification equipment is scheduled to take place during the next quarter.
  - On June 25, 2009, additional erosion and sedimentation control measures were installed along the slope of the 825 Hill Street property adjacent to Grove Street. The additional silt fence was installed in preparation for the extended excavation along Grove and Delaware Streets.
  - One roll-off of office and construction trash was shipped off-site on June 8, 2009 for disposal at Keystone Landfill in Dunmore, Pennsylvania. The total quantity disposed off-site was 2.93 tons. The bill of lading and weight ticket are provided on the enclosed CD.
  - Personnel air monitoring was conducted on April 1, 2, 7, 13, 16, 20, and 27; May 1, 8, 12, 13, 20; and June 2, 5, 15, 17, 18, 19, 2009 by SCE. The results of the sampling are provided on the enclosed CD.

- No decon water sampling was conducted during the quarter as all decon water was re-used for dust control in contaminated areas.

Items provided on the web portal including construction schedules, daily QC reports, meeting minutes, and approved submittals are provided on the enclosed CD.

## QUALITY ASSURANCE

The following activities were accomplished during Second Quarter 2009:

- AGC personnel continued to monitor construction activities throughout the quarter. Daily Field Reports are included in the Daily Quality Assurance reports.
- Daily erosion and sediment control inspections onsite were continued throughout the second quarter unless weather prevented the inspection. Weekly inspections at the Throop Borough borrow source began the week of May 1, 2009 and continued throughout the quarter.
- AGC personnel submitted revised XRF Control Charts to USEPA for review and approval. Updates were generated on April 1, May 4 and June 1, 2009. Per USEPA, the May 4, 2009 XRF control chart was not used, and the April 1, 2009 XRF control chart was used until the June 1, 2009 chart was created. The June 1, 2009 XRF control chart was approved by USEPA on June 3, 2009. During the generation of the June 2009 control chart the runtime was increased from 30 nominal seconds to 60 nominal seconds as suggested by USEPA in order to gain more accurate readings that fall within the acceptable range for the SRM2586 control material.
- The Site Operations Meetings were continued on an as needed or requested basis throughout the quarter. AGC attended each meeting that took place. An open invitation to regulatory agencies, Cocciardi, and Throop Council members was extended.
- AGC performed X-Ray Fluorescence (XRF) screenings to assist in the determination of the final depth of the excavation in all excavation areas. AGC personnel conducted screenings concurrently with excavation activities for the duration of the quarter.
- AGC performed confirmation sampling for lead in excavation areas. Sampling was conducted in accordance with the Sampling and Analysis Plan. Excavation areas are provided in Table 4. The results were submitted to USEPA for final review and approval. All results were approved by USEPA and the excavated areas were approved for backfill. Results are provided on the enclosed CD.
- PCB/PAH confirmation sampling in excavation areas was completed for the excavations listed below. Sampling was conducted in accordance with the Sampling and Analysis Plan. Final sample results were forwarded to the USEPA for review and approval. All results were approved by USEPA and the excavated areas were approved for backfill. Results are provided on the enclosed CD.
  - Area J, AWC-CA-E-02, collected on April 8, 2009. The laboratory results indicated PCB/PAH levels above the performance standard. AGC

directed excavation to extend below 4 feet depth to remove the additional contaminated material. Further sampling was not required because of the depth of the excavation.

- Area O/P, AWC-CA-S-01, collected on May 11, 2009.
- Area C, AWC-CA-N-01, collected on June 8, 2009.
  
- AGC completed sampling of the Throop Borough borrow source as required by the Regulated Fill Permit as summarized below. Depths shown are below the original ground surface. The samples were collected from test pit excavations performed by SCE at the direction of AGC. Samples were collected and processed according to the AGC sampling plan dated February 12, 2009. The sampling plan was previously approved by PADEP. All samples were analyzed for RCRA 8 Metals. All depth intervals met Regulated Fill requirements and were cleared for use as structural fill material within the Facility property lines. Results were provided to PADEP on May 6, 2009 and June 2, 2009, and are also provided on the enclosed CD.
  - April 15, 2009
    - 0-2'
    - 2-4'
  - April 23 and 24, 2009
    - 4-8'
    - 8-12'
    - 12-16'
  - May 27, 2009
    - 16-20'
    - 20-24'
  
- On April 17, 2009, AGC met with USEPA and PADEP via conference call to discuss procedures to be followed during the excavation of the eastern section of Area O where stained soils were identified during previous excavation activities. Among the items discussed included criteria for material segregation, location of segregated stockpiles, stockpile maintenance, and oversight during all excavation activities.
  
- AGC monitored excavation activities in the stained soils excavation (eastern section of Area O) from April 30, 2009 through May 9, 2009. As previously discussed with the USEPA and PADEP, constant oversight was present during excavation activities and the material was screened using both a PID and XRF meter. AGC field staff used the instruments to direct further excavation and segregation of the material.
  
- AGC conducted geoprobe sampling in the stained soils area in an attempt to characterize the material and delineate the extent of contamination. The sampling was performed over three days from May 7 through May 12, 2009. During the geoprobe sampling events, a total of 16 locations were probed at various depth intervals. Samples were selected for analysis based on PID readings taken at the time of sampling. A total of nine samples were sent to the laboratory for analysis

- of VOCs, SVOCs, and PCBs. Results were provided to USEPA and PADEP in AGC's June 26, 2009 letter, and are provided in the enclosed CD.
- AGC conducted additional sampling of the stained soil stockpiles for characterization purposes on May 8, 2009, May 13, 2009 and May 22, 2009.
    - On May 8, 2009, five samples were collected from the segregated stained soils stockpiles located within the CA. An excavator was used to break through the cover and obtain the material. Three samples were extracted from the interior of the low lead stockpile and two samples were taken from the elevated lead stockpile. All five samples were sent to the laboratory for VOCs, SVOCs, and PCBs analysis. Results were provided to USEPA and PADEP in AGC's June 8, 2009 letter, and are provided in the enclosed CD.
    - On May 13, 2009, three samples were collected from the sidewalls within the excavation area using an excavator to obtain the material. These samples were sent to the laboratory for VOCs, SVOCs, and PCBs analysis. Results were provided to USEPA and PADEP in AGC's June 26, 2009 letter, and are provided in the enclosed CD.
    - On May 22, 2009, fifteen additional samples were collected from the low lead segregated stockpile within the CA. The samples were collected using an excavator to break through the cover and extract the material from the interior of the stockpile. All of the samples were analyzed for VOCs, SVOCs, pesticides, herbicides, RCRA 8 Metals, and TCLP Metals. Results were provided to USEPA and PADEP in AGC's June 8, 2009 letter, and are provided in the enclosed CD.
  - Dunda Associates was onsite at the request of AGC to perform survey control on two occasions throughout the quarter.
    - On May 13, 2009, survey control was requested and performed on the vertical and horizontal extent of excavation activities in the stained soils area as well as the geoprobe locations.
    - On June 2, 2009, survey control was requested and performed on the existing topography of contaminated material placed in the CA.
  - On May 20 and 21, 2009, AGC pumped the standing water that had accumulated in the North Woods Basin out of the basin and into protected vegetation areas within the North Woods. Once the water level was reduced adequately, the bottom of the basin was aerated to promote infiltration in the future.
  - AGC and SCE met with Tim Matechak from the Lackawanna County Conservation District for an Erosion and Sedimentation Inspection at the Throop Borough borrow source on May 29, 2009. No issues or violations were noted at the time of the inspection.
  - In response to the standing water breaching the capacity within the CA on May 29, 2009, AGC conducted XRF screening on the CA berm, sediment sampling within the South Swale, and water sampling in the South Swale and Sediment

Basin. The sampling was conducted May 29 through June 3, 2009. A sketch and results are provided in the enclosed CD.

- On May 29, 2009, initial screening along the southwest portion of the CA berm was conducted. All XRF results were below the performance standard of 500 mg/kg. Three water samples were also collected: two from the standing puddles within the South Swale and one from the Sediment Basin at the entry point from CD-15. A sediment sample was also collected from the bottom of the sediment basin at the entry point from CD-15. The water samples and CD-15 sediment sample were archived.
- On June 1, 2009, additional XRF screening was conducted along the western portion of the CA berm. Several of the readings indicated elevated lead levels above the performance standard. The area where the elevated concentrations were present was identified and delineated for surface excavation. The top six inches of berm material were removed using a bulldozer and excavator and placed into the CA. Three additional sediment samples were also collected from within the South Swale. These samples were dried in the microwave and screened using the XRF. All sediment screenings were below the performance standard.
- On June 3, 2009, final XRF screening was conducted along the portion of the western CA berm where the top six inches of material were removed. All readings were below the performance standard.
- On June 19 and 22, 2009, AGC used the XRF to delineate the approximate area of the extended excavation along both Grove and Delaware Streets. The extended areas were identified during the initial excavation of Grove Street and the remaining portions of Excavation Areas O, M, and U.
- On June 27 and 29, 2009, AGC directed the extended excavation along Grove Street based on XRF screenings. Due to elevated lead concentrations, a total of twelve additional pine trees were removed along Grove Street. The excavation was completed on June 29, 2009.

Items provided on the web portal including daily QA reports and photographs are provided on the attached CD.

## **MONITORING**

The following activities were accomplished during Second Quarter 2009:

- On May 4, 2009, USEPA comments were received on the additional analysis of Off-Site Verification Samples SS-3-PRE-15A and SS-3-PRE-15B that provided direction on how to compare the post-construction data to the pre-construction data for this property.
- Weekly air monitoring continued at the Site, and the results show that the ambient air lead levels are well below the National Ambient Air Quality Standard of 1.5

ug/m<sup>3</sup> and the proposed National Ambient Air Quality Standard of 0.15 ug/m<sup>3</sup>. The Second Quarter 2009 Ambient Air Monitoring Report is provided on the enclosed CD. PADEP continues to periodically split samples with Advanced GeoServices at high volume sampler locations #1 and #4. The results from the April 24, 2009 PADEP air sampling are provided on the enclosed CD.

- Real-time aerosol (dust) monitoring continued during working and non-working hours. Real-time air monitoring was conducted at three to five locations per day depending on Site activities. Hourly average readings were collected. A summary of real-time monitoring is provided in Table 5 and on the enclosed CD. The following exceedances occurred during working and non-working hour real-time monitoring:

- May 14, 2009, non-working hour, AM-3. The collocated personal air monitors (PAM) was submitted to the laboratory for analysis, and results were non-detect.
- May 15, 2009, working hour, AM-3. The collocated PAM was submitted to the laboratory for analysis, and results were 0.306 ug/m<sup>3</sup> total lead.
- May 15 to 16, May 16 to 17, 2009, non-working hour, AM-5 and AM-6. The collocated PAMs at AM-5 and perimeter high-volume air monitor samples at all locations were submitted to the laboratory for analysis. PAM results were 0.037 ug/m<sup>3</sup> total lead and non-detect. Perimeter high-volume air monitor samples ranged from 0.005 to 0.009 ug/m<sup>3</sup> total lead.
- May 22, 2009, working hour, AM-1, and AM-3. The collocated PAMs were submitted to the laboratory for analysis. PAM results were non-detect.
- May 27, 2009, working hour, AM-3. The collocated PAM was submitted to the laboratory for analysis. PAM results were non-detect.
- May 27, 2009, non-working hour, AM-3 and AM-4. The collocated PAMs were submitted to the laboratory for analysis. Results were non-detect.
- June 9, 2009, working hour morning, AM-3. The collocated PAM was submitted to the laboratory for analysis. PAM results were 0.102 ug/m<sup>3</sup> total lead.

All collocated PAM results were below the 1.5 ug/m<sup>3</sup> action level for lead.

- PAMs were collocated with real-time dust monitors or placed on perimeter fence lines on a daily basis downwind of excavation and containment areas. Samplers were collocated with Dust Track Monitors. Samples were submitted to the lab for analysis if a total suspended particulate hourly recording exceeded the Action Level, if a Dust Track Monitor malfunctioned, if excavation activities were conducted in a new location/contaminated material, for a periodic random analysis, or if requested by USEPA. Remaining samples were archived with all information necessary to calculate an air lead level if the sample was analyzed. Archived samples were analyzed on days when dust monitors exceed the immediate action level. In addition, if any observation reading exceeds the action

level during a given day, observation reading frequency was increased to every half-hour until the activity that was occurring during the exceedance is completed. When excavation is occurring in BCM, observation readings were also taken every 20 minutes downwind of the activity and at least three observation readings were taken each time. A summary of collocated PAM air monitoring and laboratory data are provided in Table 5 and on the enclosed CD. All PAMs were less than 1.5 ug/m<sup>3</sup> action level, with the exception of 042909-WH-PGS (1.590 ug/m<sup>3</sup>). Several samples preceding and following this date were analyzed in response to the result above the site action level and an assessment of site activities performed. The conclusion was presented in an email from Barbara Forslund dated May 12, 2009. The elevated air result was concluded to have been caused by equipment maintenance in the former support zone directly upwind of the PAM sampler.

- On June 4, 2009, Advanced GeoServices personnel collected Second Quarter 2009 sediment samples as part of the Final (100%) Design Sampling and Analysis Plan. The sampling consisted of one composite sample of the original locations 3, 6, 7, and 8. The sample result of 52.7 mg/kg was slightly greater than the calculated 95<sup>th</sup> upper confidence limit of the mean (52 mg/kg) for historic sample results at the mouth of Sulphur Creek. There were no surface water discharges from the site during this reporting period. After the original data package was received and the data were evaluated to determine the reason for the exceedance, the laboratory was directed to take two additional splits from the same jar and analyze the splits for lead. The preliminary results for the splits were 41.9 and 34.5 mg/kg yielding an average concentration of the 43 mg/kg for the second quarter composite which is below the performance standard. For future sampling, the laboratory will be instructed to analyze three splits from each jar of sediment. The Second Quarter 2009 Sediment Sampling Report is provided on the enclosed CD.
- No discharge occurred from the Proposed Sediment Basin during Second Quarter 2009. Discharge monitoring reports were prepared for April, May and June 2009, and are included in the Second Quarter 2009 Sediment Sampling Report provided on the enclosed CD.
- Precipitation for April, May, and June 2009 was 1.72", 5.47", and 4.86" respectively, mostly in the form of rain.
- No 10-year storms (3.68 inches of rainfall within a 24-hour period) occurred during the second quarter.
- Beginning April 30, 2009, AGC began placing weather data from the Site on the web portal. Weather data is provided on the enclosed CD.

## **SITE MAINTENANCE**

The following activities were accomplished during Second Quarter 2009:

- Environmental Products and Services of Vermont (f/k/a TEEM Environmental) was off-site during April, May, and June 2009 to perform the following maintenance activities.
  - Cut/trim grass at residential areas adjacent to Site and slope near main entrance.
  - Cut fallen trees removed from North Woods.
- A daily perimeter inspection was conducted by AGC and SCE on days when work activities are conducted.
- Beginning May 9, 2009, Securitas Security (f/k/a Burns Security) conducted a walking inspection of the Throop Borough borrow area, haul road, and North Woods Monday through Friday evenings and Sunday mornings.

## **COMMUNITY RELATIONS**

The following activities were accomplished during Second Quarter 2009:

1. Throughout the second quarter 2009, Gould's web site, <http://www.marjolcleanup.com>, for the Marjol Battery Site was updated regularly with air monitoring data, photos, the construction schedule, and other site information. A notification was sent to those individuals who signed up for web-site update notices each time the web site was updated.
2. Throop Borough, Cocciardi & Associates (Cocciardi), USEPA, and PADEP were kept informed regarding the status of work activities throughout the second quarter 2009. Summaries were e-mailed to Cocciardi, USEPA, and PADEP regarding the real-time air monitoring, PAM sample results, and the schedule for the next day's activities on a daily basis.
3. Throughout the second quarter 2009, Throop Borough and Cocciardi were notified of action level exceedances on the dust monitors and incidents where the air monitors did not run properly. Throop Borough and Cocciardi were also provided information on Personal Air Monitoring (PAM) area lead results.
4. On April 2, 2009, Gould sent a letter to Throop Borough Council regarding the Delaware Street road plates. The letter said that SCE planned to remove the road plates to address council's concerns.
5. On April 8, 2009, a conference call was held with representatives of Throop Borough, USEPA, PADEP, Gould, and AGC to discuss the diesel contaminated soils.

6. On April 8 and 9, 2009 flyers were placed at homes on Martarano Drive and Bush Street in Throop to inform residents of the activities that would be taking place with regard to construction of the haul road and transportation of fill material from the Borough's 48-acre property to the Marjol Site. Several residents on those streets were also contacted by telephone.
7. On April 9, 2009, Cocciardi was at the Site to collect samples of the diesel contaminated soils. Throop Borough was notified that liquid was found in the second sample area and that AGC collected a sample from that area.
8. On April 9, 2009, Throop Borough was contacted regarding chipping of trees on the Borough's 48-acre property. A representative from Throop Borough met with SCE to discuss the Borough's preferred location for piling the cleared trees from its property.
9. On April 10, 2009, a conference call was held with representatives of Throop Borough, Gould, SCE and AGC to discuss the clearing of the Borough's 48-acre borrow source property. Following the conference call, representatives from Throop Borough, SCE, and AGC walked the Borough's borrow source property to identify potential placement of trees from clearing.
10. On April 14, 2009, a second conference call was held with representatives of Throop Borough, Gould, and AGC to discuss the clearing of the Borough's 48-acre borrow source property. During the call, Gould agreed to chip the trees on the Borough's property in order to keep construction activities proceeding.
11. On April 14, 2009, Throop Borough was notified of Gould's analytical results for the samples taken of the diesel contaminated soils. These results were provided to USEPA, PADEP, and Cocciardi.
12. On April 15, 2009, AGC delivered a letter from Gould to Throop Borough regarding the chipping of the trees on the Borough's borrow source property. In the letter, Gould offered to pay for the chipping of the trees and stumps on the Borough's property.
13. On April 15, 2009, AGC delivered a letter to Throop Borough regarding the relocation or removal of the Borough's trailer that was at the Site.
14. On April 15, 2009, AGC attended Throop Borough Council's Special Monthly Work Session and Meeting to provide an update to Throop Borough Council. At that meeting, Throop Borough passed a motion agreeing to Gould's proposal on chipping the material on the Borough's borrow source property. Throop Borough also stated at that meeting that it did not feel the Borough needed a trailer at the Site any longer and arrangements could be made with the Borough to have it removed when the trailer was accessible. (See notes attached.)

15. Newsletter #92 was mailed out on April 17, 2009. The newsletter included information on ongoing construction activities, Throop Borough's fill source, and a Project Schedule for Season 2.
16. On April 17, 2009, a conference call was held with USEPA, PADEP, Cocciardi, Gould, and AGC to discuss the stained soils at the Site.
17. On April 21, 2009, communications took place between Throop Borough representatives, Gould, and AGC representatives regarding removal of Throop Borough's trailer from the Site. The exterior of the Borough's trailer was decontaminated and removed from the Site on April 22, 2009 and placed on Gould's property at 806 Woodlawn Street.
18. On April 25, 2009, AGC contacted some of the Throop Borough representatives regarding safety concerns on the Throop Borough borrow source property and informed them that hard hats and safety vests were available at the guard trailer for Borough representatives to wear if they were going to be walking in the construction areas.
19. On April 26, 2009, AGC was contacted by Throop Borough about a brush fire on Gould's 100-acre parcel located north of the facility. Throop Borough emergency responders extinguished the fire. Representatives from SCE and AGC met with Throop Borough representatives and emergency responders at the scene. Notification of the fire was placed on the Marjol web site.
20. On April 27, 2009, AGC provided Throop Borough with a summary of activities at the Site. AGC also attended Throop Borough Council's Monthly Work Session and Meeting that evening. (See notes attached.)
21. On April 28, 2009, as requested by Throop Borough Council, AGC changed the lock on the Borough's Ash Street gate to match the lock on Gould's gate.
22. On April 28, 2009, as requested, AGC provided Throop Borough Council with pictures of the rocky backfill material both in place and once it was removed and stockpiled.
23. On May 6, 2009, AGC placed a second flyer at residences on Bush Street and Martarano Drive. The flyer highlighted safety and asked residents to stay off of the haul road and Throop Borough's borrow source property.
24. On May 6, 2009, a conference call was held with USEPA, PADEP, Gould, Gannett Fleming, Cocciardi, and AGC regarding stained soils encountered. Throop Borough was also notified of the call.
25. On May 8, 2009, AGC delivered a letter to Throop Borough Council conveying Gould's offer to dispose of Throop Borough's trailer that had been at the Marjol Site if the Council no longer wanted the trailer.

26. On May 11, 2009, AGC provided Throop Borough Council with a summary of activities at the Site. AGC also attended Throop Borough's work session and Council meeting that evening to provide an update. At that meeting, Cocciardi provided information regarding air monitoring Cocciardi had done at 613 Dunmore Street. During the meeting, Throop Borough also passed a motion to send a letter to Gould regarding compensation for its trailer that had been at the Marjol Site. (See notes attached.)
27. On May 14, 2009, the Throop Borough Council president, fire chiefs, police chief, chief clerk, and streets commissioner were notified of the evacuation drill that SCE was going to conduct on May 15, 2009. Calls were also made to residents living in the immediate vicinity of the Site and door knockers were posted at the homes in the immediate area. A banner regarding the evacuation drill was also posted on the web site.
28. On May 26, 2009, AGC contacted Throop Borough representatives and Cocciardi regarding a brush fire on Gould's 100-acre property. The fire was quickly put out by Throop Borough's emergency responders. The Throop Police department gathered information for a report.
29. On May 26, 2009, AGC provided Throop Borough with a response to its request for Gould to purchase fire fighting equipment.
30. On May 27, 2009, AGC provided Throop Borough Council with a summary of activities at the Site. AGC also attended Throop Borough Council's Work Session and Meeting that evening. (See notes attached.)
31. On May 29, 2009, AGC notified Throop Borough representatives and Cocciardi of the Containment Area overflow. Information regarding the overflow was also posted on the Marjol web site. XRF sampling results related to the CA overflow were also provided to Cocciardi.
32. On June 1, 2009, AGC delivered a copy of Lackawanna County Conservation District's inspection report for its May 29, 2009, inspection of the Throop Borough borrow area to Throop Borough Council.
33. On June 1, 2009, Gould received a letter from Throop Borough requesting reimbursement for its trailer that it placed at the Marjol Site.
34. On June 5, 2009, AGC provided the property owner at 1030 Martarano Drive with a check to cover landscaping reimbursement and fence repair at his property. The property owner signed off on the fence accepting responsibility for its maintenance moving forward.
35. On June 8, 2009, letters were sent certified to Martarano Drive residents who had the Barrier Fence installed at their properties during site stabilization activities in the early 1990's. The letters informed the residents that Gould would either remove the fence at the end of the project or the fence would now become the property owner's

responsibility. The residents at 1022, 1024, 1026 and 1030 Martarano Drive have notified AGC that they will accept responsibility for the fences at their properties. The resident at 1020 Martarano Drive would like the barrier fence at his property removed.

36. Lisa Ayers did not attend the Throop Borough Council Special Monthly Meeting that was held on June 8, 2009.
37. On June 15, 2009, AGC representatives and representatives from USEPA, PADEP, and Cocciardi attended Throop Borough Council's Special Work Session and Council meeting to provide an update on activities at the Marjol site. (See notes attached.)
38. On June 16, 2009, AGC notified Throop Borough representatives including the Council President, police chief, fire chief, emergency response coordinator, and Borough secretary that the Delaware Street entrance to the Site would be closed on Wednesday, June 17, 2009, due to the excavation of Delaware Street inside the fence; access to visitors would be via Woodlawn Street. Flyers were posted and telephone calls were made to residents on Woodlawn and Delaware Streets to notify them of the excavation and closing of Delaware Street access.
39. On June 23, 2009, AGC provided Pinnacle Health with copies of a flyer regarding the Annual Blood Lead Screening Program that is sponsored by Gould to have available at ATSDR/PADOH's Blood Lead Screening that was conducted at the Throop Borough building on that date.
40. On June 23, 2009, a tour of the Marjol site was provided for Lora Werner from ATSDR and Barbara Allerton of PADOH. Representatives from PADEP, Gannett Fleming, and AGC participated in the tour.
41. On June 25, 2009, AGC provided Throop Borough Council with a summary of activities at the Site. AGC also attended Throop Borough Council's Work Session and Meeting that evening. (See notes attached.)
42. On June 25, 2009, the resident at 817 Hill Street contacted AGC regarding ruts along the Helen Street ditch. SCE placed topsoil and seeded the ruts.
43. On June 25, 2009, AGC met with the Throop Borough Council president regarding potential changes to the Marjol fence location and site restoration plan.
44. On June 26, 2009, AGC contacted Throop Borough representatives, Cocciardi, and residents living along Delaware and Helen Streets to inform them that additional excavation work along Grove Street would occur on Saturday, June 27, 2009.
45. On June 27, 2009, AGC contacted Throop Borough representatives, Cocciardi, and residents living along Delaware and Helen Streets to inform them that the Grove Street excavation had gone further than expected. A second layer of blacktop was identified

and approximately 10 of the trees across the front of the Site had to be taken down to remove the contaminated material.

46. On June 30, 2009, initial letters regarding the in-house blood lead screening part of the Annual Blood Lead Screening Program were sent out to residents living near the Marjol site.

## **SCHEDULE AND PERCENT COMPLETE**

The attached CMI Schedule (Table 3) has been updated with actual dates on which the tasks were accomplished and corresponding revisions to the projected completion dates. Based on the Revised Cost Estimate through June 30, 2009, the CMI is approximately 59% complete.

## **PROBLEMS ENCOUNTERED**

No problems were encountered during Second Quarter 2009.

## **PERSONNEL CHANGES**

No personnel changes occurred during Second Quarter 2009.

## **ACTIONS PLANNED FOR THIRD QUARTER 2009**

### **PERMITTING AND DESIGN**

No permitting or design activities are planned for Third Quarter 2009.

### **CORRECTIVE MEASURES CONSTRUCTION**

The following activities are planned for Third Quarter 2009:

- Backfilling Delaware and Grove Streets.
- Completion of Permanent Access Road.
- Completion of the North Swale and South Swale including gabion mattresses and check dams.
- Completion of grading in the CA to meet final design grades (pre- and post-cap placement).
- Survey and installation of the gas vents.
- Solidification. These activities will include the set up of the solidification area, pilot tests within the CA, and the solidification process within the CA.
- Anchor trench excavation and pipe drainage installation.
- Excavation of Area H and remaining Area F.
- Basin Dewatering for solidification use.
- Removal of Basin sediment.
- Installation of cap geosynthetics.

- geotextile
  - geomembrane
  - geocomposite
- Placement of cap cover soil.
  - Backfilling to final grades.
  - Continue turf establishment activities Site-wide (includes topsoil, hydroseed and stabilization).
  - Continue survey control.

Completion of these activities is weather dependent.

## **QUALITY ASSURANCE**

The following activities are planned for Third Quarter 2009:

- Continue observation of construction activities and photo-documentation.
- Continue daily erosion and sediment control inspections at the facility, and weekly erosion and sediment control inspections at the Throop Borough borrow source.

## **MONITORING**

The following activities are planned for Third Quarter 2009:

- Conduct post-excavation Off-Site Verification Sampling.
- Continue weekly perimeter air monitoring program in accordance with the Sampling and Analysis Plan. Perimeter air lead sample results will be compared to both the current standard and the new standard of 0.15 ug/m<sup>3</sup> (effective October 2009).
- Continue real-time air monitoring and collocated PAMs in accordance with the Sampling and Analysis Plan and August 15, 2008 memo.
- Perform Third Quarter 2009 river sediment monitoring in accordance with the Sampling and Analysis Plan.
- Perform daily basin discharge monitoring and monthly sampling and lead analysis in accordance with the Sampling and Analysis Plan.
- Submit results for the Third Quarter 2009 Ambient Air Monitoring Report.
- Submit results for the Third Quarter 2009 river sediment monitoring.

## **SITE MAINTENANCE**

No activities are planned for Third Quarter 2009.

## COMMUNITY RELATIONS

The following activities are planned for Third Quarter 2009:


- **July through September, 2009** - Continue to regularly update the Marjol web site with air monitoring data, photos, the weekly construction schedules, and other information.
- **July through September, 2009** - Continue to provide summaries to Cocciardi, USEPA, and PADEP regarding air monitoring and the schedule of construction activities.
- **July through September, 2009** - Continue to notify Throop Borough and Cocciardi of any action level exceedances on the dust monitors or any incidents where the air monitors did not run properly. Throop Borough and Cocciardi will also be provided information on Personal Air Monitoring (PAM) area lead results and high-volume air sampling results.
- **July 6 and 16, 2009** - Flyers will be sent to those on the mailing list reminding everyone of the Annual Blood Lead Screening Program.
- **July 9, 2009** - Send out Marjol Battery Site Newsletter Number 93 providing an update on construction activities.
- **July 10, 2009** - Follow-up letters for the Annual Blood Lead Screening Program will be sent to the residents who did not respond to the initial June 30<sup>th</sup> letter regarding in-home blood lead screening.
- **July 10, 2009** - Letters will be sent to local churches, PTA's, and Day Care facilities regarding the Annual Blood Lead Screening Program.
- **July 13, 2009** - Attend Throop Borough Council's Special Monthly Work Session and Meeting.
- **July 16, 2009** - Letters will be sent to the Throop Borough Emergency Responders inviting them to participate in the annual blood lead screening program as part of the medical surveillance program that began in October 1999.
- **July 22, 2009** - Annual Blood Lead Screening Program in the Throop Borough Civic Center.
- **July 27, 2009** - Attend Throop Borough Council's Monthly Work Session and Meeting.
- **August 10, 2009** - Attend Throop Borough Council's Special Monthly Work Session and Meeting.



- **August 31, 2009** - Attend Throop Borough Council's Monthly Work Session and Meeting.
- **September 14, 2009** - Attend Throop Borough Council's Special Monthly Work Session and Meeting.
- **September 15, 2009** - Send out Marjol Battery Site Newsletter Number 94 providing an update on construction activities.
- **September 28, 2009** - Attend Throop Borough Council's Monthly Work Session and Meeting.

### ANTICIPATED PROBLEMS

No problems are anticipated during Third Quarter 2009.

  
Barbara L. Forslund, P.E.  
Advanced GeoServices Project Coordinator

cc: Lisa Ayers, Advanced GeoServices  
James Cronmiller, Gould  
Leonard Zelinka, PADEP  
Adam Doubleday, Advanced GeoServices  
Roger Moose, GF

Throop Borough Council  
Louis Cimini, Throop Borough Solicitor  
Ron Brezinski, PADEP  
Repository (c/o Lisa Ayers)  
Rocco DiPietro, Cocciardi

TABLE 1  
Marjol Corrective Measures Implementation  
Permitting Timeline

Permit Name	Earliest Design Stage When Submitted	Entity Applying for the Permit	Permitting Agency	Time for Processing and Review <sup>1</sup>	Permit Expiration	Pre-Construction Notification	Completion Activities	Date Submitted	Date Approved
Individual NPDES Permit (PA1023508001)	At completion of 90% Design	AGC	LCCD	30 days General; 120 days Individual	5/8/2013; Renewal due 180 days prior to expiration.	30-day public comment period published 3/8/2008. Public hearing held 4/16/2008. LCCD was notified of the pre-construction meeting on 4/18/08.	Submit Notice of Termination within 7 working days after final stabilization is achieved.	12/26/2007 General; 1/31/2008 Individual	2/14/2008 Administratively complete; permit issued 5/9/2008
General NPDES Permit (PAG2-0035-09-005) Throop Borough Borrow Area	N/A	BCM / AGC	LCCD	30 days	3/20/2014	LCCD notified on 3/25/09	Submit Notice of Termination	2/09, 3/09	3/23/2009
Wetlands Waiver	At completion of 30% Design	AGC	PADEP	130 days	No expiration.	PA Fish & Wildlife notified 4/21/2008	None required.	8/3/2007	9/4/2007
Air Permit Request for Determination - Solidification	At completion of 30% Design	AGC	PADEP	30 days	No expiration.	Notify 2 weeks prior to start of solidification	None required.	8/17/2007, Revision submitted 9/13/2007	10/22/2007
Air Permit Request for Determination - Passive Gas Vent	At completion of 90% Design	AGC	PADEP	30 days	No expiration.	None required.	None required.	11/13/2007; 2/20/2008 revisions; 4/24/2008 electronic submission of 2/20/2008 revision	12/18/2007; revision approved 4/28/2008
Regulated Fill General Permit	After approval of other permits	AGC	PADEP	Approx. 60 days	12/24/2013	None required.	Submit proof of recorded deed notice to PADEP.	11/7/2008	11/24/2008 Administratively complete; permit issued 2/25/09
Fence Permit (08-1001)	At completion of 90% Design	AGC	Throop Borough	Approx. 60 days	1 year from issue unless work has begun. Work must be complete in 2 years from issue. Renewal due 60 days prior to expiration.	Zoning Officer notified 4/21/2008.	Zoning Officer inspection.	12/14/2007; amended 5/21/2008; amended 8/6/2008	1/24/2008; 5/27/2008; 8/14/2008
Preliminary Land Development Plan	At completion of 90% Design	AGC	Throop Borough	Approx. 100 days	3 years from issue. 1 year extension request due 90 days prior to expiration.	None required.	None required.	12/5/07 (Borough); 12/10/07 (LCRPC)	12/10/07 (LCRPC, no review); Planning Commission approval 5/5/2008
Stormwater Management Plan	At completion of 90% Design	AGC	Throop Borough	Approx. 150 days	No expiration.	None required.	Provide notification to Borough Engineer when complete. Inspection by Borough Engineer.	12/5/07 (Borough); 12/10/07 (LCRPC)	12/10/07 (LCRPC, no review); R. Nitch letter received 4/25/2008; Planning Commission approval 5/5/2008
Building Permit (if applicable)	At completion of 90% Design	AGC	Throop Borough	To be determined	Begin work within 6 months of issue. Expires 12 months from issue.	None required.	None required.	n/a	6/24/2008
Trailer Occupancy (Special Exemption Use)	After contractor selection	Contractor	Throop Borough	Approx. 60 days	2 years from issue.	Notify Zoning Officer prior to use.	None required.	Discussed at preconstruction meeting 4/29/2008	5/1/2008

NOTE:

- Review time begins when application is administratively complete.
- Because of the extensive clearing and grading activities, the Preliminary Land Development Plan will be submitted to Throop Borough which requires a review by the Planning Commission and Engineer. Gould will work with the Borough to mitigate the impact on the schedule.

Table 2  
DESIGN ADDENDUM SUMMARY  
Marjol Battery Site

Addendum No.	Description	Submission Date	USEPA/PADEP Approval Date	Applicable Permit Revision (if any)					Change Order		
				Permit	Submission Date	Description	Receiving Party	Approval Date	No.	Submission Date	Approval Date
n/a	Change super silt fence to 24 inch silt sock	5/23/2008	n/a	NPDES	5/23/2008	Minor Modification	LCCD	5/27/2008	n/a	5/23/2008	5/23/2008
n/a	Add permanent fence at low area at North Woods	5/21/2008	n/a	Fence	5/21/2008	Permit Addendum	Throop Borough	5/27/2008	n/a		
1	Immediate Action Level for real-time monitoring at non-contaminated areas	6/4/2008	6/9/2008	n/a	n/a	n/a	n/a	n/a	n/a		
n/a	Install temporary 6 ft chain link fence at south and west facility boundary	6/6/2008	n/a	n/a	n/a	n/a	n/a	n/a	1	6/17/2008	6/23/2008
2	Excavation at NW-24 and NW-25	6/24/2008	7/2/2008	NPDES	6/25/2008	Minor Modification No. 2	LCCD	7/23/2008			
3	Anti-seep collar location	6/25/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Alternate grout for boring abandonment	7/1/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
4	Stockpile cover, Excavation Sequence, Outlet Structure, Anti-Seep Collar, SS-8a & 8b location	7/14/2008	n/a	NPDES	7/14/08	Minor Modification No. 3	LCCD	7/23/2008	n/a	n/a	n/a
5	Interim Proposed Basin Discharge procedures	7/30/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Extend toe of slope due to existing grade. Additional clearing, silt sock relocation, temporary fence relocation	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2	6/4/2008	6/6/2008
n/a	Gate at Ash Street extension	8/6/2008	n/a	Fence	8/6/2008	Permit Addendum No. 2	Throop Borough	8/14/2008	n/a	n/a	n/a
n/a	Problem Resolution Procedures	8/6/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Collocated PAM monitoring, increased observation readings for real-time TSP	8/15/2008	n/a	n/a	n/a	n/a	n/a	n/a	5	9/8/2008	9/9/2008
n/a	Survey at additional North Woods Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3	8/26/2008	8/26/2008
n/a	Existing Basin Dewatering System	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6	9/11/2008	9/11/2008
n/a	Additional T&M rate sheet	n/a	n/a	n/a	n/a	n/a	n/a	n/a	7	9/12/2008	9/25/2008
6	Change reinforced slope to 2:1 slope	9/15/2008	10/2/2008	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	seed 10/20/08	n/a	n/a	n/a
n/a	Costs for terra tubes and Pond Clear	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8	9/15/2008	9/30/2008
n/a	Re-establish Exclusion Zone	9/21/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Suspend real-time air monitoring during days with precipitation	9/26/2008	9/26/2008	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	Revisions to subcontractor documentation and invoice procedures	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4	9/30/2008	10/8/2008
7	Martarano alternate seed mix	10/29/2008, 3/10/09, revised 4/3/09	12/15/2009	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	verbal 10/30/08	n/a	n/a	n/a
n/a	Change stabilization to mulch only, in lieu of seed and mulch due to winter weather	n/a	12/5/2008	NPDES	verbal	n/a	LCCD	verbal 11/25/08	11	12/9/2008	3/3/2009
7	Revise excavation sequence to reflect work performed in Phase I and remaining work to be performed in Phase II	10/2/2008, 11/11/2008, 3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	pending	n/a	n/a	n/a
7	Revise SAP Tab 2 and 8	3/10/09, revised 4/3/09	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
7	Change 2:1 slope seed mix as recommended by EPA	3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	4/28/2009	n/a	n/a	n/a
7	Revised permanent access road stone	3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	4/28/2009	12	2/17/2009	3/3/2009
7	Franko Street extension	3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	4/28/2009	pending	pending	pending
7	Grove Street removal and restoration	3/10/09, revised 4/3/09	n/a	NPDES	3/10/09, 4/3/09	Minor Modification No. 4	LCCD	4/28/2009	n/a	n/a	n/a
n/a	Regulated Fill Permit WMGR096	2/25/2009	PADEP	Regulated Fill	2/12/2009	Soil Sampling Plan	PADEP	2/25/2009	n/a	n/a	n/a
n/a	General NPDES Permit PAG-2-0035-09-005	2/26/2009	3/23/2009	NPDES	3/10/2009	Throop Borrow Fill Removal Project	PADEP, LCCD	3/23/2009	pending	pending	pending
8	Revised berm and solidified waste grades.	6/12/2009	6/17/2009	n/a	n/a	n/a	n/a	n/a	pending	pending	pending
9	Revised final grades	6/18/2009	n/a	n/a	n/a	n/a	n/a	n/a	pending	pending	pending



**TABLE 3  
CORRECTIVE MEASURES IMPLEMENTATION SCHEDULE  
SECOND QUARTER 2009**



Estimated time for construction is 17 months of construction with minimum winter shutdown of 120 days (December through March).

	Milestone		Projected Dates from CMI		Actual Dates
			Work Plan	Revised Projected Dates	
1)	Restart Letter Received	Actual	9/19/2005	n/a	9/19/2005
2)	Notice on Dispute	Actual	9/26/2005	n/a	9/26/2005
3)	Consent Order Rec'd	Actual	12/1/2005	n/a	12/1/2005
4)	Consent Order Signed	Actual	7/13/2006	n/a	7/13/2006
5)	Proj. Coord. And Consultant Notice	In Order	7/13/2006	n/a	7/13/2006
6)	Title Notice Submitted	due 30 days after 4)	8/14/2006	n/a	8/14/2006 (Draft submitted) 5/29/2007 (approved) 6/4/2007 (recorded)
7)	Cost Estimates Submitted	due 30 days after 4)	8/14/2006	n/a	8/14/2006*
8)	CMI Work Plan Submitted	due 60 days after 4)	7/21/2006	n/a	7/21/2006*
9)	Financial Assurances Due	60 days after approval of 7)	11/10/2006 (assumed 30 days to approve 7)	12/31/2007	8/11/2008
10)	CMI WP Approved	assumed 60 days after 8). Can approve PDI early (14 days)	9/19/2006 for entire WP. 8/4/2006 for PDI	n/a	9/1/2006 (mine fire), 11/2/2006 (geoprobe), 2/13/2007 (Work Plan except soil sampling), 4/20/2007 (soil), 5/3/2007 (Work Plan except Section 7.5)
11)	PDI Start	assumed 3 weeks after PDI Work Plan approval, weather permitting	8/28/2006	n/a	9/12/2006 (mine fire), 11/27/2006 (geoprobe), 4/23/2007 (soil, lead), 8/6/2007 (soil, PCB PAH)
12)	PDI Complete	assumed 3 weeks after 11)	9/18/2006	n/a	10/16/2006 (mine fire), 11/29/2006 (geoprobe), 5/25/2007 (soil, lead), 8/5/2007 (soil, PCB PAH)
13)	Prelim. Design Submitted	due 90 days after 12)	12/18/2006	n/a	6/29/2007
14)	Prelim. Design Comments	Assumed 45 days after 13)	2/1/2007	n/a	8/10/2007
15)	Revised Cost Estimate	due on 2/15/2007	2/15/2007	n/a	2/15/2007
16)	90% Design Submitted	due 90 days after 14)	5/2/2007	n/a	11/8/2007
17)	Request for Bid Issued	assumed 2 weeks after 16)	5/16/2007	n/a	12/7/2007
18)	90% Design Approved with Comments	Assumed 30 days after 16)	6/1/2007	n/a	12/13/07 (except SAP)
19)	100% Design Complete to Bidders and EPA	due 2 weeks after 18)	6/15/2007	n/a	4/11/2008, Revised 5/12/2008, Revised 6/3/2008
20)	100% Design Approval	assumed 2 weeks after 19)	6/29/2007	4/25/2008	5/9/2008, 5/29/2008, 6/9/2008
20a)	Permit Approvals Complete			4/28/2008	2/25/2009
21)	Final Title Notice Submitted	due 30 days after 20)	7/30/2007	11/30/2009	
22)	Bids Received	due 3 weeks after 20)	7/20/2007	n/a	2/11/2008
23)	Award	assumed 2 weeks after 22)	8/3/2007	n/a	4/2/2008
24)	Notice of Contractor to EPA/DEP	Day after award	8/4/2007	n/a	4/3/2008
25)	Revised Cost Estimate	due on 8/15/2007	8/15/2007	n/a	8/15/2007
26)	Construction Start	assumed 2 weeks after award and approvals, weather permitting	8/20/2007	5/12/2008	5/12/2008
27)	Revised Cost Estimate	due 60 days after 20)	8/28/2007	5/25/2008	5/23/2008, approved 6/12/2008
28)	Revised Cost Estimate	due on 2/15/2008	2/15/2008	5/25/2008	5/23/2008, approved 6/12/2008
29)	Revised Cost Estimate	due on 8/15/2008	8/15/2008	8/15/2008	7/9/2008
30)	Revised Cost Estimate	due on 2/15/2009	2/15/2009	2/15/2009	2/15/2009
31)	Construction Complete	See note above	7/20/2009	11/30/2009	
32)	Revised Cost Estimate	due on 8/15/2009	8/15/2009	8/15/2009	8/15/2009
33)	Submit CMI Report	due 90 days after 31)	10/19/2009	2/28/2010	
34)	CMI Report Approved	assumed 30 days after 33)	11/18/2009	3/30/2010	

**NOTES**

- The dates in bold are committed dates for submissions. Other dates are assumed time frames for activities. The projected dates are thus minimum dates that depend on earlier dates meeting the schedule. The schedule assumes that the Borough permitting process will not extend the time frame for construction start.
- \* indicates that USEPA and PADEP approval of the submitted document has not yet been received.
- Projected dates are from CMI Work Plan Table 11-1 and represent the original schedule for the CMI. The revised projected dates reflect the current schedule based on approvals received to date.
- USEPA and PADEP approved not submitting the February 15, 2008 revised cost estimate until the 100% Design was approved and construction costs were finalized.

Table 4  
Marjol Battery Site  
Excavation Area  
Confirmation Sampling Data

Sample ID	Location of Excavation Area	Excavation Completion Date	Is backfill depth less than or greater than 2 feet?	Sample Area (<2 ft backfill - 0.5 acre; >2 ft backfill - 1 acre) <sup>1</sup>	XRF Confirmation Sampling Date	XRF Confirmation Results (86th UCL, total lead mg/kg)	Excavation Depth	PCB/PAH Sample ID (not required if excavation depth >4ft)	PCB/PAH Sampling Result	EPA Approval of Sampling Results	Date Backfill Approval given to SCE	Backfill & Topsoil Completion Date (within 7 days of approval)	Permanent Seed Completion Date (within 7 days of grading completion)
EXS	Facility	8/12/2008	>2 ft	0.16 Acres	8/13/2008	139	4-20 ft	N/A	N/A	See note 2 below	8/13/2008 <sup>2</sup>	Final grading continues	Final grading continues
CNW-3C	North Woods	10/13/2008	<2 ft	0.19 Acres	10/14/2008	174	6"	N/A	N/A	YES	10/16/2008	10/16/2008	10/21/2008
CNW-1	North Woods	10/13/2008	<2 ft	0.39 Acres	10/13/2008	199	6"	N/A	N/A	YES	10/14/2008	10/16/2008	10/21/2008
CNW-2 R-4	North Woods	10/13/2008	<2 ft	0.57 Acres	10/13/2008	192	6"	N/A	N/A	YES	10/14/2008	10/16/2008	10/21/2008
CNW-3A NW-5 NW-6	North Woods	10/16/2008	<2 ft	0.74 Acres	10/16/2008	142	6"	N/A	N/A	YES	10/17/2008	10/23/2008 <sup>3</sup>	10/21/2008 <sup>3</sup>
CM-1	North Woods	10/20/2008	<2 ft	0.24 Acres	10/20/2008	176	6"	N/A	N/A	YES	10/21/2008	10/21/2008	11/4/2008
CNW5-DB	North Woods	10/22/2008	<2 ft	0.28 Acres	11/11/2008	176	6"	N/A	N/A	YES	11/12/2008	12/1/2008	12/3/2008
CNW-7D	North Woods	10/22/2008	<2 ft	<0.50 Acres	10/22/2008	143	6"	N/A	N/A	YES	10/23/2008	10/23/2008	11/4/2008 <sup>3</sup>
EXFW	Facility	10/24/2008	>2 ft	<0.74 Acres	10/23/2008	359	10-30'	N/A	N/A	YES	10/24/2008	pending topsoil	pending topsoil
CW-1GB NW-10 NW9	North Woods	10/24/2008	>2 ft	<0.74 Acres	10/23/2008	229	6"	N/A	N/A	YES	10/24/2008	10/24/2008	4/15/2009
EXFE	Facility	10/27/2008	>2 ft	<0.74 Acres	10/23/2008	102	6"	N/A	N/A	YES	10/27/2008	10/27/2008	4/15/2009
CNW-7AC NW-24	North Woods	10/27/2008	>2 ft	0.46 Acres	10/31/2008	184	5-10'	Not required	N/A	YES	10/31/2008	pending topsoil	pending topsoil
CNW-12AD	North Woods	10/30/2008	>2 ft	0.2 Acres	11/1/2008	111	6"	N/A	N/A	YES	10/31/2008	11/3/2008	11/4/2008
CNW-13 NW-14 W-1A	North Woods	10/30/2008	>2 ft	0.85 Acres	11/1/2008	175	6"	N/A	N/A	YES	11/5/2008	12/1/2008	4/15/2009
CW-6CD	North Woods	10/30/2008	>2 ft	0.39 Acres	11/1/2008	109	6"	N/A	N/A	YES	11/5/2008	12/1/2008	4/15/2009
EXGKJ	Facility	10/21/2008	>2 ft	0.42 Acres	11/3/2008	270	20-30'	N/A	N/A	YES	11/3/2008	12/1/2008	4/15/2009
CNW-15 NW-16	North Woods	11/3/2008	>2 ft	0.86 Acres	11/8/2008	241	6"	N/A	N/A	YES	11/7/2008	pending topsoil	pending topsoil
CNW-19	North Woods	11/6/2008	>2 ft	0.48 Acres	11/7/2008	423	6"	N/A	N/A	YES	11/8/2008	12/2/2008	7/14/2009
CW2-NW18D	North Woods	11/6/2008	>2 ft	0.92 Acres	11/7/2008	115	6"	N/A	N/A	YES	12/1/2008	12/2/2008	7/14/2009
CNW17-NW18ABC	North Woods	11/6/2008	>2 ft	0.92 Acres	11/7/2008	130	6"	N/A	N/A	YES	12/1/2008	12/2/2008	7/14/2009
CW8-W8D	North Woods	11/6/2008	>2 ft	0.75 Acres	11/7/2008	104	6"	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CW3	North Woods	11/6/2008	>2 ft	0.51 Acres	11/7/2008	129	6"	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CW4-ABC	North Woods	10/30/2008	>2 ft	0.23 Acres	11/7/2008	106	6"	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CW12C-W8B	North Woods	10/30/2008	>2 ft	0.36 Acres	11/10/2008	231	6"	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CNW-21	North Woods	11/10/2008	>2 ft	0.28 Acres	11/10/2008	192	2-4'	N/A	N/A	YES	11/11/2008	12/1/2008	12/3/2008
CNW-20	North Woods	11/10/2008	>2 ft	0.4 Acres	11/10/2008	192	2-4'	N/A	N/A	YES	11/11/2008	6/29/2009	7/14/2009
CNR-2B	North Woods	11/19/2008	>2 ft	0.075 Acres	11/18/2008	129	2-3'	N/A	N/A	YES	11/11/2008	6/29/2009	7/14/2009
EXT	Facility	12/4/2008	>2 ft	0.14 Acres	12/4/2008	302	4-17'	N/A	N/A	YES	12/4/2008	4/30/2009	4/30/2009
EXU-NE <sup>4</sup>	Facility	12/3/2008	>2 ft	0.052 Acres	12/3/2008	200	6-13'	N/A	N/A	YES	12/4/2008	4/30/2009	4/30/2009
EXJM-B <sup>4</sup>	Facility	12/18/2008	>2 ft		12/19/2008	130	2-4'	AWC-CA-E-01	All results below Performance Standards	YES	1/22/2009	pending topsoil	pending topsoil
EXJM-A <sup>4</sup>	Facility	12/15/2008	>2 ft	0.06 Acres	12/15/2008	186	4'	N/A	N/A	YES	12/15/2008	pending topsoil	pending topsoil
CW-10	North Woods	12/16/2008	>2 ft	0.09 Acres	2/29/2009	87	6"	N/A	N/A	YES	3/14/2009	7/10/2009	not complete
CSWNNW3	North Woods	12/16/2008	>2 ft	0.33 Acres	3/16/2009	132	6"	N/A	N/A	YES	3/18/2009	7/10/2009	not complete
EXJ	Facility	4/6/2009	>2 ft	0.92 Acres	4/7/2009	268	2-10'	N/A	N/A	YES	4/16/2009	Topsoil pending	Pending topsoil completion
EXLJ	Facility	4/6/2009	>2 ft	0.36 Acres	4/8/2009	241	5-15'	N/A	N/A	YES	4/17/2009	Topsoil pending	Pending topsoil completion
EXEW	Facility	6/8/2009	>2 ft	0.39 Acres	6/8/2009	162	5-20'	N/A	N/A	YES	6/8/2009	Topsoil pending	Pending topsoil completion
EXDS	Facility	6/2/2009	>2 ft	0.35 Acres	6/2/2009	184	8-10'	N/A	N/A	YES	6/3/2009	Topsoil pending	Pending topsoil completion
EXDN	Facility	5/15/2009	>2 ft	0.47 Acres	5/21/2009	190	5-10'	N/A	N/A	YES	5/22/2009	Topsoil pending	Pending topsoil completion
EXAE	Facility	5/20/2009	>2 ft	0.37 Acres	5/20/2009	322	4-20'	N/A	N/A	YES	5/21/2009	Topsoil pending	Pending topsoil completion
EXAW	Facility	5/20/2009	>2 ft	0.20 Acres	5/20/2009	278	3-8'	N/A	N/A	YES	5/21/2009	Topsoil pending	Pending topsoil completion
EXOE	Facility	5/5/2009	>2 ft	<5 Acres	5/18/2009	198	5-30'	N/A	N/A	YES	5/21/2009	Topsoil pending	Parking Area
EXPS	Facility	5/12/2009	>2 ft	0.35 Acres	5/18/2009	150	4-8'	N/A	N/A	YES	5/18/2009	Topsoil pending	Pending topsoil completion
EXRQW	Facility	5/12/2009	>2 ft	0.40 Acres	5/14/2009	131	4-12'	N/A	N/A	YES	5/15/2009	Pending CA berm construction completion	Pending CA berm construction completion
EXPN	Facility	5/12/2009	>2 ft	0.35 Acres	5/13/2009	260	4-6'	N/A	N/A	YES	5/14/2009	Pending CA berm construction completion	Pending CA berm construction completion
EXQE	Facility	5/12/2009	>2 ft	0.33 Acres	5/13/2009	256	4-10'	N/A	N/A	YES	5/14/2009	Pending CA berm construction completion	Pending CA berm construction completion
EXONC	Facility	5/6/2009	>2 ft	0.44 Acres	5/8/2009	262	4-8'	N/A	N/A	YES	5/9/2009	Pending South Swale/CA Berm completion	Pending South Swale/CA Berm completion
EXONS	Facility	5/6/2009	>2 ft	0.77 Acres	5/8/2009	316	5-8'	AWC-CA-S-01	All results below Performance Standards	YES	5/9/2009 (>4' deep) 5/20/09 (<4' deep)	Pending South Swale/CA Berm completion	Pending South Swale/CA Berm completion
EXKE	Facility	4/20/2009	>2 ft	0.54 Acres	4/20/2009	244	6-16'	N/A	N/A	YES	4/21/2009	Pending topsoil/CA berm completion	Pending topsoil/CA berm completion
EXKW	Facility	4/20/2009	>2 ft	0.52 Acres	4/20/2009	317	6-16'	N/A	N/A	YES	4/21/2009	Pending topsoil/CA berm completion	Pending topsoil/CA berm completion
EXJW	Facility	4/16/2009	>2 ft	0.31 Acres	4/16/2009	395	4-13'	N/A	N/A	YES	4/17/2009	Clean fill had road/pend topsoil	Pending topsoil completion
CSWNNW4-5	North Woods	4/15/2009	>2 ft	0.92 Acres	4/16/2009	334	6-18"	N/A	N/A	YES	4/17/2009	Pending topsoil	Pending topsoil completion
CW5-W7	North Woods	4/9/2009	>2 ft	<1.0 Acre	4/13/2009	105	6"-3"	N/A	N/A	YES	4/17/2009	Pending topsoil	Pending topsoil completion
CSWNNW1-2	North Woods	4/9/2009	>2 ft	<1.0 Acre	4/13/2009	482	6"-1"	N/A	N/A	YES	4/17/2009	7/10/2009	Pending topsoil completion
EXE	Facility	4/4/2009	>2 ft	0.31 Acres	4/17/2009	349	3'(intact rock) to 8'	N/A	N/A	YES	4/29/2009	6/29/2009	7/14/2009
EXW	Facility	4/4/2009	>2 ft	0.35 Acres	4/16/2009	249	3'(intact rock) to 8'	N/A	N/A	YES	4/29/2009	6/29/2009	7/14/2009
EXCE	Facility	6/5/2009	>2 ft	0.25 Acres	6/8/2009	254	3-4'	AWC-CA-N-01	All results below Performance Standards	YES	6/15/2009	pending topsoil	Pending topsoil completion
EXCW	Facility	6/5/2009	>2 ft	0.36 Acres	6/8/2009	150	3-4'	AWC-CA-N-01	All results below Performance Standards	YES	6/15/2009	pending topsoil	Pending topsoil completion
EXBE	Facility	6/10/2009	>2 ft	0.25 Acres	6/11/2009	304	2-20'	N/A	N/A	YES	6/11/2009	pending topsoil	Pending topsoil completion
EXV <sup>4</sup>	Facility	6/19/2009	>2 ft	0.22 Acres	6/19/2009	105	4'-10'	N/A	N/A	YES	6/22/2009	pending topsoil	Pending topsoil completion
EXDMU	Facility	6/17/2009	>2 ft	<0.50 Acres	6/17/2009	268	4'-6"	N/A	N/A	YES	6/17/2009	6/17/2009	RCE/STONE
EXBW	Facility	6/17/2009	>2 ft	0.4 Acres	6/17/2009	161	10-15'	N/A	N/A	YES	6/18/2009	pending topsoil	Pending topsoil completion
EXGS	Facility	6/19/2009	>2 ft	0.37 Acres	6/22/2009	250	2-4'	N/A	N/A	YES	6/23/2009	pending topsoil	Pending topsoil completion
EXGS2	Facility	6/29/2009	<2 ft	0.37 Acres	6/29/2009	177	2-4'	N/A	N/A	YES	6/30/2009	pending topsoil	Pending topsoil completion
EXDS2	Facility	7/2/2009	varies between and one and six feet	<0.50 Acres	7/2/2009	230	2-9'	N/A	N/A	YES	7/7/2009	pending backfill	Pending backfill and topsoil completion

Notes:  
Excavation start date based on grubbing activities.  
1. Excavation areas sampled during PDI sampling (North Woods) can have a confirmatory sampling area up to one acre in size as per the SAP  
2. AGC approval, onsite regulatory representative observed final excavation area. EPA approval for all other excavation areas.  
3. Areas within excavation area were used for topsoil stockpiling once confirmatory sampling was approved, final topsoil grading and/or seeding was postponed until stockpile was used. Dates may appear to be inconsistent but indicate date of entire area being topsoiled or seeded.  
4. Excavation areas requiring PCB/PAH sampling if excavation is <4 feet  
5. AWC-CA-E-02 was collected at Area J on April 8, 2009. Results indicated PCB/PAH levels above the performance standard. The excavation was extended below four foot depth and additional PCB/PAH sampling was not required.

TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (est.)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
4/1/2009	1	0719 - 1619	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040109-WH-AM1	Archived		
	3	0713 - 1613	SW of HV-1, DW of Area J/L excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040109-WH-AM3	Archived		
	4	0742 - 1542	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0728 - 1628	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040109-WH-AM6 040109-WH-PGS 040109-WH-PDS	Archived Archived Archived		
4/1/2009 NWH	1	1622 - 0722	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040109-NWH-AM1	Archived		
	3	1615 - 0615	SW of HV-1, DW of Area J/L excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040109-NWH-AM3	Archived		
	4	1630 - 0730	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1628 - 0728	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040109-NWH-AM6 040109-NWH-PGS 040109-NWH-PDS	Archived Archived Archived		
4/2/2009	1	0734 - 1633	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040209-WH-AM1	Archived		
	3	0717 - 1517	SW of HV-1, DW of Area J/L excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040209-WH-AM3	Archived		
	4	0720 - 1350	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0744 - 1644	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040209-WH-AM6 040209-WH-PGS 040209-WH-PDS	Archived Archived Archived		
4/2/2009 NWH	1	1722 - 0721	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040209-NWH-AM1	Archived		
	3	1630 - 0630	SW of HV-1, DW of Area J/L excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040209-NWH-AM3	Archived		
	4	1635 - 0734	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1630 - 0729	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040209-NWH-AM6 040209-NWH-PGS 040209-NWH-PDS	Archived Archived Archived		
4/3/2009	1	0758 - 1358	NW of Area O, DW of Area J excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040309-WH-AM1	Void		Blank Display
	2	0733 - 1333	SW of HV-1, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	4	0745 - 1345	West of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040309-WH-AM4	Void		Blank Display
	6	0740 - 1340	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040309-WH-AM6 040309-WH-PLR 040309-WH-PGS	Archived Void < 0.02	Cocciardi Request	Blank Display
4/3 to 4/6 NWH	1	1421 - 0820	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	2	1446 - 0745	SW of HV-1, DW of Area J/L excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1410 - 0809	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1407 - 0806	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	HV-SC HV-1 HV-2 HV-3 HV-4	Archived Archived Archived Archived Archived		
4/6/2009	1	0751 - 1551	NW of Area O, DW of Area J excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040609-WH-AM1	Archived		
	2	0718 - 1518	West of HV-1, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	4	0736 - 1536	West of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040609-WH-AM4	Archived		
	6	0741 - 1540	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040609-WH-AM6 040609-WH-PGS 040609-WH-PDS	Archived Archived Archived		
4/6/2009 NWH	1	1641 - 0640	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040609-NWH-AM1	Archived		
	2	1620 - 0620	SW of HV-1, DW of Area J/L excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040609-NWH-AM2	Archived		
	4	1629 - 0729	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1633 - 0633	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040609-NWH-AM6 040609-NWH-PGS 040609-NWH-PDS	Void Archived Archived		Blank Display
4/7/2009	1	0725 - 1625	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040709-WH-AM1	Archived		
	2	0711 - 1611	NE of Guard Trailer, DW of Area J/K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040709-WH-AM2	Archived		
	3	0821 - 1621	NE of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	0741 - 1641	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
4/7/2009 NWH	1	1712 - 1611	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040709-NWH-AM1	Archived		
	2	1621 - 0721	SW of HV-1, DW of Area J/L excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040709-NWH-AM2	Archived		
	3	1630 - 0630	NE of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1706 - 0706	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
4/7/2009	1	1703 - 0703	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040709-NWH-AM6 040709-NWH-PGS 040709-NWH-PDS	Archived Archived Archived		



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (per-4)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
4/8/2009	1	0819 - 1619	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040809-WH-AM1	Archived		
	3	0730 - 1530	NE of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040809-WH-AM3	Archived		
	4	0753 - 1553	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0748 - 1547	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040809-WH-AM6 040809-WH-PDS 040809-WH-PGS	Archived Archived Archived		
4/8/2009 NWH	1	1636 - 0736	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040809-NWH-AM1	Archived		
	3	1611 - 0711	NE of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040809-NWH-AM3	Archived		
	4	1625 - 0725	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1621 - 0721	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040809-NWH-AM6 040809-NWH-PDS 040809-NWH-PGS	Archived Archived Archived		
4/9/2009	1	0815 - 1615	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040909-WH-AM1	<0.09	Random	
	3	0727 - 1627	NE of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040909-WH-AM3	Archived		
	4	0747 - 1647	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0753 - 1653	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040909-WH-AM6 040909-WH-PGS 040909-WH-PDS	Archived Archived Archived		
4/9 to 4/13 NWH	2	1634 - 0833	NE of Guard Trailer, DW of Area J/K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040909-NWH-AM2	Archived		
	3	1658 - 0757	E of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	040909-NWH-AM3	Archived		
	4	1655 - 0854	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1650 - 0849	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	040909-NWH-AM6 / HV-SC 040909-NWH-PGS 040909-NWH-PDS	Archived Archived Archived		
	2	1634 - 0833	NE of Guard Trailer, DW of Area J/K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041009-NWH-AM2	Void		No Display
	3	1658 - 0757	E of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041009-NWH-AM3 041009-NWH-PDS 041009-NWH-PGS	Archived Archived Archived		
4/13 to 4/14 NWH	2	0852 - 0652	NE of Guard Trailer, DW of Area J/K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041309-NWH-AM2	Archived		
	3	0854 - 0553	E of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041309-NWH-AM3	Archived		
	4	0904 - 0704	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0902 - 0701	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041309-NWH-AM6 041309-NWH-PDS 041309-NWH-PGS	Archived Archived Archived		
4/14/2009	3	1022 - 1522	N of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041409-WH-AM3	Archived		
	2	0726 - 1526	E of Area T, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	4	0740 - 1640	W of Containment Area, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041409-WH-AM4 041409-WH-AM6	Archived Archived		
	6	0734 - 1634	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041409-WH-PDS 041409-WH-PGS	Archived Archived	<0.08	Random
4/14/2009 NWH	1	1618 - 0618	NE of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041409-NWH-AM1	Archived		
	2	1640 - 0640	NE of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	041409-NWH-AM2	Archived		
	4	1657 - 0657	West of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	6	1652 - 0652	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041409-NWH-AM6 041409-NWH-PLR	Archived Archived		
4/15/2009	1	0809 - 1608	SW of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041509-WH-AM1	Archived		
	2	0741 - 1541	NE of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	041509-WH-AM2	Archived		
	6	0749 - 1549	South of CA, DW of CA	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041509-WH-AM6 041509-WH-PSC 041509-WH-PLR	Archived Archived Archived	<0.09	Weekly Perimeter
4/15/2009 NWH	2	1626 - 0626	NE of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	3	1621 - 0621	SW of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041509-NWH-AM3 041509-NWH-AM6	Archived Archived		
	6	1632 - 0732	S of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041509-NWH-PSC 041509-NWH-PLR 041509-NWH-DAM	Archived Archived Archived		
4/16/2009	1	0732 - 1322	SW of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041609-WH-AM1	Archived		
	1	1335 - 1534	East of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	2	0735 - 1335	NE of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	3	1312 - 1612	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1356 - 1556	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0750 - 1350	South of CA, DW of CA / Sulphur Creek	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041609-WH-AM6	Archived		
	6	1353 - 1553	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041609-WH-PLR 041609-WH-PSC 041609-WH-DAM	Archived Archived Archived		



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (mm:ss)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
4/16/2009	NWH	1	1635 - 0732	East of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041609-NWH-AM1	Archived	
		3	1642 - 0742	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041609-NWH-AM2	Archived	
		4	1620 - 0720	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	041609-NWH-AM3	Archived	
		6	1617 - 0717	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041609-NWH-AM6 041609-NWH-PGS	Archived Archived	
4/17/2009		1	0743 - 1543	East of AGC Trailer, DW of Area K excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041709-WH-AM1	Archived	
		3	0829 - 1529	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0			
		4	0812 - 1611	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	041709-WH-AM3	Archived	
		6	0750 - 1350	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	041709-WH-AM6 041709-WH-PGS 041709-WH-PDS 041709-WH-DAM	Archived Archived Archived Archived	
4/17 to 4/20 NWH		1	1623 - 0722	East of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041709-NWH-AM1	Archived	
		3	1650 - 0656	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	041709-NWH-AM3	Archived	
		4	1640 - 0739	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0			
		6	1635 - 0734	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	HV-SC 041709-NWH-PGS 041709-NWH-PDS 041709-NWH-DAM 041809-NWH-PGS 041809-NWH-PDS 041809-NWH-DAM	Archived Archived Archived Archived Archived Archived Archived	
4/20/2009		1	0749 - 1449	East of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042009-WH-AM1	Archived	
		4	0829 - 1429	East of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0			
		6	0822 - 1522	South of CA, DW of CA / Sulphur Creek	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	042009-WH-AM6 042009-WH-PLR 042009-WH-PGS 042009-WH-DAM 042009-WH-PSC	Archived Archived Archived Archived Archived	
4/20/2009 NWH		1	1515 - 0615	East of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042009-NWH-AM1	Archived	
		4	1527 - 0727	East of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0			
		6	1531 - 0730	South of CA, DW of CA / Sulphur Creek	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	042009-NWH-AM6 042009-NWH-DAM 042009-NWH-PSC 042009-NWH-PLR	Archived Archived Archived Archived	
4/21/2009		1	0727 - 1527	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042109-WH-AM1	<0.09	Random
		4	0806 - 1606	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0			
		6	0800 - 1600	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042109-WH-AM6 042109-WH-DAM 042109-WH-PGS 042109-WH-PDS	Archived Archived Archived Archived	Perimeter
4/21/2009 NWH		1	1553 - 0653	East of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042109-NWH-AM1	Archived	
		4	1614 - 0714	East of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0			
		6	1610 - 0710	South of CA, DW of CA / Sulphur Creek	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042109-NWH-AM6 042109-NWH-PSC 042109-NWH-PGS 042109-NWH-PDS 042109-NWH-DAM	Archived Archived Archived Archived Archived	
4/22/2009		1	0720 - 1620	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042209-WH-AM1		
		4	0756 - 1556	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0			
		6	0750 - 1650	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042209-WH-AM6 042209-WH-PDS 042209-WH-PGS	Archived Archived Archived	
4/22/2009 NWH		1	1649 - 0659	East of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042209-NWH-AM1	Archived	
		4	1654 - 0654	East of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0			
		6	1659 - 0659	South of CA, DW of CA / Sulphur Creek	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042209-NWH-AM6 042209-NWH-PDS 042209-NWH-PGS 042209-NWH-DAM	Archived Archived Archived Void	flow fault
4/23/2009		1	0726 - 1626	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042309-WH-AM1	Archived	
		4	0712 - 1612	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0			
		6	0714 - 1614	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042309-WH-AM6 042309-WH-PGS 042309-WH-PDS	Archived Archived Archived	



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (Start-End)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
4/23/2009 NWH	1	1638 - 0737	East of PADEP Trailer, DW of Area K	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042309-NWH-AM1	Archived		
	4	1626 - 0726	East of Guard Trailer, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1622 - 0722	South of CA, DW of CA / Sulphur Creek	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042309-NWH-AM6 042309-NWH-PGS 042309-NWH-PDS	Archived Archived Archived		
4/24/2009	1	0806 - 1506	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042409-WH-AM1	Archived		
	4	0753 - 1553	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0749 - 1548	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042409-WH-AM6 042409-WH-PDS 042409-WH-PGS	Archived Archived Archived		
4/24 to 4/25 NWH	3	1627 - 0327	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042409-NWH-AM3	0.036	Monitor failure	
	4	1621 - 0821	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1621 - 0821	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042409-NWH-PDS 042409-NWH-PGS	Archived Archived		
4/25 to 4/27 NWH	3	1026 - 0726	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	0840 - 0639	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0838 - 0637	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	HV-SC HV-1 HV-2 HV-3 HV-4	Archived Archived Archived Archived Archived		
4/27/2009	1	0749 - 1549	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042709-WH-AM1	Archived		
	4	0740 - 1540	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0735 - 1535	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042709-WH-AM6 042709-WH-PDS 042709-WH-PGS	<0.058 <0.077 Archived	elevated levels Weekly Perimeter	
4/27/2009 NWH	1	1624 - 0624	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042709-NWH-AM1	Archived		
	4	1629 - 0629	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1628 - 0628	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042709-NWH-AM6 042709-NWH-PDS 042709-NWH-PGS	Archived <0.034 0.170	elevated levels elevated levels	
4/28/2009	1	0713 - 1613	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042809-WH-AM1	<0.077	elevated levels	
	4	0728 - 1527	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0722 - 1622	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042809-WH-AM6 042809-WH-PDS 042809-WH-PGS	<0.053 0.490 1.420	elevated levels cocciardi sampling elevated levels	
4/28/2009 NWH	1	1620 - 0719	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042809-NWH-AM1	Archived		
	4	1627 - 0727	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1625 - 0725	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042809-NWH-AM6 042809-NWH-PDS 042809-NWH-PGS	Archived <0.035 <0.038	elevated levels elevated levels	
4/29/2009	1	0730 - 1530	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042909-WH-AM1	<0.056	elevated levels	
	4	0749 - 1549	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0743 - 1543	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042909-WH-AM6 042909-WH-PDS 042909-WH-PGS	<0.059 0.400 1.590	elevated levels cocciardi sampling cocciardi sampling	
4/29/2009 NWH	1	1618 - 0717	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042909-NWH-AM1	Archived		
	4	1654 - 0653	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1623 - 0723	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	042909-NWH-AM6 042909-NWH-PDS 042909-NWH-PGS	Archived <0.047 <0.047	elevated levels elevated levels	
4/30/2009	1	0744 - 1544	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	043009-WH-AM1	Archived		
	3	0731 - 1630	East of Area Q, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	043009-WH-AM3	<0.077	new excavation	
	4	0811 - 1611	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
4/30/2009 NWH	1	1614 - 0713	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	043009-NWH-AM1	Archived		
	3	1637 - 0637	East of Area Q, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	043009-NWH-AM3	Archived		
	4	1623 - 0723	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
4/30/2009 NWH	1	1614 - 0713	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	043009-NWH-AM6 043009-NWH-PDS 043009-NWH-PGS	Archived <0.056 <0.059	cocciardi sampling cocciardi sampling	
	3	1637 - 0637	East of Area Q, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1623 - 0723	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
4/30/2009 NWH	1	1614 - 0713	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	043009-NWH-AM6 043009-NWH-PDS 043009-NWH-PGS	Archived Archived Archived		
	3	1637 - 0637	East of Area Q, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1623 - 0723	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (mm-ss)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
5/1/2009	1	0751 - 1551	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050109-WH-AM1	Archived		
	3	0743 - 1542	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050109-WH-AM3	0.128	new excavation	
	4	0803 - 1603	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0759 - 1559	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050109-WH-AM6	Archived		
5/1/2009 NWH							050109-WH-PDS	0.827	coocardi sampling	
							050109-WH-PGS	0.084	coocardi sampling	
	1	1627 - 0727	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050109-NWH-AM1	Archived		flow fault
	3	1636 - 0636	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050109-NWH-AM3	Archived		
	4	1644 - 0744	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1643 - 0743	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
5/2/2009							050109-NWH-PGS	Archived		
							050109-NWH-PDS	Archived		
	1	0730 - 1530	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050209-WH-AM1	Archived		
	3	0739 - 1339	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050209-WH-AM3	0.113	new excavation	
	4	0754 - 1253	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0749 - 1349	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
5/2/2009 NWH							050209-WH-PDS	Archived		
							050209-WH-PGS	Archived		
5/2 to 5/3 NWH	1	1348 - 1247	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	3	1358 - 1258	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
5/3 to 5/4 NWH	1	1342 - 0642	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	3	1340 - 0640	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
5/2 to 5/4 NWH Hi-Vols	6	1351 - 0751	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	HV-SC (5/1/09 to 5/4/09)	Archived		
							HV-1	0.008	elevated levels on 4/29	
							HV-2	0.008	elevated levels on 4/29	
							HV-3	0.021	elevated levels on 4/29	
							HV-4	Archived		
5/4/2009	1	0748 - 1548	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050409-WH-AM1	Archived		
	3	0742 - 1641	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050409-WH-AM3	0.057	new excavation	
	4	0812 - 1612	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0801 - 1601	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050409-WH-AM6	Archived		
5/4/2009 NWH							050409-WH-PDS	0.164	Perimeter	
							050409-WH-PGS	0.259	Perimeter	
	1	1629 - 0729	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050409-NWH-AM1	Archived		
	3	1642 - 0641	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050409-NWH-AM3	Archived		
	4	1635 - 0735	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1634 - 0734	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050409-NWH-AM6	Archived		
5/5/2009							050409-NWH-PDS	Archived		
							050409-NWH-PGS	Archived		
	1	0749 - 1549	SW of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050509-WH-AM1	<0.077	new excavation	
	3	0741 - 1541	East of Area O, Upwind of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0755 - 1555	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
							050509-WH-PDS	Archived		
5/5/2009 NWH							050509-WH-PGS	Archived		
							050509-WH-PSC	Archived		
	1	1629 - 0729	SW of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050509-NWH-AM1	Archived		
	3	1627 - 0727	East of Area O, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	-6	1634 - 0734	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050509-NWH-AM6	Archived		
							050509-NWH-PDS	Archived		
5/6/2009							050509-NWH-FLR	Archived		
							050509-NWH-PSC	Void		Flow Fault
	1	0755 - 1555	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050609-WH-AM1	Archived		
	3	0735 - 1535	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050609-WH-AM3	<0.079	new excavation	
	4	0812 - 1612	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0806 - 1606	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050609-WH-AM6	Archived		
5/6/2009 NWH							050609-WH-PGS	Archived		
							050609-WH-PDS	Archived		
	1	1632 - 0732	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050609-NWH-AM1	Archived		
	3	1631 - 0731	East of Area O, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050609-NWH-AM3	Archived		
	4	1617 - 0737	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1636 - 0736	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050609-NWH-AM6	Archived		
						050609-NWH-PGS	Archived			
						050609-NWH-PDS	Archived			



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED FAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (est.)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
5/7/2009	1	0743 - 1543	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050709-WH-AM1	Archived		
	3	0731 - 1531	East of Area P, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050709-WH-AM3	Archived		
	4	0754 - 1554	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0749 - 1549	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050709-WH-AM6	Archived		
							050709-WH-PGS	<0.058	elevated levels in 042809-WH-PGS	
							050709-WH-PDS	<0.057	elevated levels in 042809-WH-PGS	
5/7/2009 NWH	1	1635 - 0735	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050709-NWH-AM1	Archived		
	3	1623 - 0723	East of Area Q, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050709-NWH-AM3	Archived		
	4	1633 - 0733	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1635 - 0735	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050709-NWH-AM6	Archived		
							050709-NWH-PDS	Archived		
							050709-NWH-PGS	Archived		
5/8/2009	1	0817 - 1617	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050809-WH-AM1	Archived		
	3	0735 - 1535	East of Area P, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050809-WH-AM3	Archived		
	4	0752 - 1552	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0758 - 1558	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050809-WH-AM6	Archived		
							050809-WH-PDS	<0.078	elevated levels in 042809-WH-PGS	
							050809-WH-PGS	0.059	elevated levels in 042809-WH-PGS	
5/9/2009	2	0810 - 1310	SW of Area K, DW of Grinding Activities	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	050909-WH-AM2	Archived		
5/8 to 5/11 NWH	1	1647 - 0646	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	3	1649 - 0647	East of Area P, DW of Excavation (P/Q/R)	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1615 - 0714	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1613 - 0712	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
							HV-SC	Archived		
							HV-1	Archived		
						HV-2	Archived			
						HV-3	Archived			
						HV-4	Archived			
5/11/2009	1	0738 - 1538	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051109-WH-AM1	Archived		
	3	0737 - 1537	East of Area Q, DW of Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051109-WH-AM3	Archived		
	4	0751 - 1551	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0747 - 1647	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051109-WH-AM6	Archived		
							051109-WH-PDS	<0.077	elevated levels in 042809-WH-PGS	
							051109-WH-PGS	<0.056	elevated levels in 042809-WH-PGS	
5/11/2009 NWH	1	1631 - 0630	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051109-NWH-AM1	Archived		
	3	1632 - 0632	East of Area P, DW of Excavation (P/Q/R)	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051109-NWH-AM3	Archived		
	4	1650 - 0650	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1653 - 0653	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051109-NWH-AM6	Archived		
							051109-NWH-PGS	Archived		
							051109-NWH-PDS	Archived		
5/12/2009	1	0715 - 1615	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051209-WH-AM1	Archived		
	3	0714 - 1613	East of Area P, DW of Excavation (P/Q/R)	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051209-WH-AM3	Archived		
	4	0732 - 1632	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0728 - 1628	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051209-WH-AM6	Archived		
							051209-WH-DAOF	Archived		
							051209-WH-PDS	<0.058	elevated levels in 042809-WH-PGS	
						051209-WH-PGS	<0.056	elevated levels in 042809-WH-PGS		
5/12/2009 NWH	1	1621 - 0720	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051209-NWH-AM1	Archived		
	3	1620 - 0720	East of Area P, DW of Excavation (P/Q/R)	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051209-NWH-AM3	Archived		
	4	1644 - 0744	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1639 - 0739	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051209-NWH-AM6	Archived		
							051209-NWH-PDS	Archived		
							051209-NWH-PGS	Archived		



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (est.)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
5/13/2009 AM	1	0742 - 1215	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	0513-09-WH-AM1.2	Archived		
	2	0835 - 1135	West of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	0513-09-WH-AM1.2	Archived		
	3	0800 - 1200	South of SWNW, DW of Haul Road Construction	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	0513-09-WH-AM3	Archived		
	6	0829 - 1629	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	0513-09-WH-AM6	Archived		
							0513-09-WH-PLR	<0.065	elevated levels in 042809-WH-PGS	
							051309-WH-PGS	<0.053	elevated levels in 042809-WH-PGS	
						051309-WH-PDS	<0.054	elevated levels in 042809-WH-PGS		
						051309-WH-PQR	Archived			
5/13/2009 PM	1	1216 - 1650	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	3	1212 - 1612	South of SWNW, DW of Haul Road Construction	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1203 - 1641	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0829 - 1629	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
5/13/2009 NWH	1	1603 - 1801	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	1	1802 - 0702	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	2	1630 - 0730	NE of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	0513-09-NWH-AM2	Archived		
	3	1618 - 0718	South of SWNW, DW of Haul Road Construction	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	0513-09-NWH-AM3	Archived		
	6	1639 - 0639	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	0513-09-NWH-AM6	Archived		
							051309-NWH-PN	Archived		
						051309-NWH-PSZ	Archived			
5/14/2009	2	0735 - 1535	North of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051409-WH-AM2	Archived		
	3	0718 - 1618	South of SWNW, DW of Haul Road Construction	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051409-WH-AM3	Archived		
	6	0728 - 1528	South of CA, UW of Site/Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051409-WH-AM6	Archived		
							051409-WH-PN	<0.070	elevated levels in 042809-WH-PGS	
							051409-WH-PSZ	<0.054	elevated levels in 042809-WH-PGS	
							051409-WH-PGS	<0.107	elevated levels in 042809-WH-PGS	
						051409-WH-PDS	<0.123	elevated levels in 042809-WH-PGS		
5/14/2009 NWH	2	1611 - 0711	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051409-NWH-AM2	Archived		
	3	1631 - 0731	South of SWNW, DW of Haul Road Construction	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	1	051409-NWH-AM3	<0.05 total lead	random	action level exceedance
	4	1620 - 0750	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	1623 - 0723	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051409-NWH-AM6	Archived		
							051409-NWH-PDS	Archived		
							051409-NWH-PGS	Archived		
5/15/2009	1	0729 - 1529	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051509-WH-AM1	Archived		
	3	0741 - 1441	South of SWNW, DW of Area A Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	1	051509-WH-AM3	0.306	action level exceedance	
	4	0806 - 1536	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	6	0800 - 1500	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051509-WH-AM6	Archived		
							051509-WH-PGS	<0.058	Perimeter	
							051509-WH-PDS	<0.079	Perimeter	
						051509-WH-DBF <sup>a</sup>	<0.073	Random		
5/15 to 5/16 NWH	1	1601 - 1101	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1546 - 1046	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	5	1637 - 1030	South of SWNW, DW of Area A Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	multiple				
	6	1547 - 0946	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
5/16 to 5/17 NWH	1	1119 - 1119	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1049 - 1049	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	5	1107 - 0307	South of SWNW, DW of Area A Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	multiple	051609-NWH-AM5	0.037	action level exceedance	
	6	1049 - 1048	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	multiple				
5/17 - 5/18 NWH	1	1210 - 0810	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	2	1146 - 0746	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1102 - 0802	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	5	1114 - 0013	South of SWNW, DW of Area D Haul Road	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051709-NWH-AM5	<0.036	action level exceedance	
5/15 to 5/18 NWH Hi-Vols							HV-1	0.005	action level exceedance	
							HV-2	0.005	action level exceedance	
							HV-3	0.009	action level exceedance	
							HV-4	0.008	action level exceedance	
							HV-SC	0.005	action level exceedance	



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (min.)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
5/18/2009	1	0831 - 1631	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051809-WH-AM1	Archived		
	2	0807 - 1607	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051809-WH-AM2	Archived		
	3	0753 - 1553	South of SWNW, DW of Area D Haul Road	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	0501809-WH-AM3	Void		Blank Screen
	4	0807 - 1607	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	051809-WH-PGS	Archived		
5/18/2009 NWH	1	1710 - 0718	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051809-NWH-AM1	Archived		
	2	1703 - 0803	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051809-NWH-AM2	Archived		
	3	1652 - 0552	South of SWNW, DW of Area D Haul Road	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	0501809-NWH-AM3	Archived		
	4	1704 - 0804	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	051809-NWH-PDS	Archived		
5/19/2009	1	0745 - 1545	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051909-WH-AM1	Archived		
	2	0809 - 1609	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051909-WH-AM2	Archived		
	3	0759 - 1558	South of SWNW, DW of Area A	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051909-WH-AM3	<0.064	New Excavation	
	4	0822 - 1622	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	051909-WH-PDS	Archived		
5/19/2009 NWH	1	1633 - 0633	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051909-NWH-AM1	Archived		
	2	1645 - 0645	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051909-NWH-AM2	Archived		
	3	1636 - 0636	South of SWNW, DW of Area D Haul Road	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	051909-NWH-AM3	Archived		
	4	1653 - 0652	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	051909-NWH-PDS	Archived		
5/20/2009	1	0704 - 1704	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052009-WH-AM1	Archived		
	2	0714 - 1614	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052009-WH-AM2	Archived		
	3	0706 - 1706	South of SWNW, DW of Area A	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052009-WH-AM3	<0.077	New Excavation	
	4	0724 - 1624	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052009-WH-PGS	Archived		
5/20/2009 NWH	1	1709 - 0709	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052009-NWH-AM1	Archived		
	2	1714 - 0713	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052009-NWH-AM2	Archived		
	3	1708 - 0708	South of SWNW, DW of Area D Haul Road	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052009-NWH-AM3	Archived		
	4	1720 - 0719	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052009-NWH-PDS	Archived		
5/21/2009	1	0723 - 1623	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052109-WH-AM1	Archived		
	2	0738 - 1537	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052109-WH-AM2	Archived		
	3	0730 - 1530	South of SWNW, DW of Area A	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052109-WH-AM3	0.121	New excavation	
	4	0747 - 1547	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052109-WH-PDS	Archived		
5/21/2009 NWH	1	1639 - 0639	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052109-NWH-AM1	Archived		
	2	1630 - 0729	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052109-NWH-AM2	Archived		
	3	1620 - 0720	South of SWNW, DW of Area D Haul Road	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052109-NWH-AM3	Archived		
	4	1632 - 0732	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052109-NWH-PDS	Archived		
5/22/2009	1	0730 - 1529	East of CA, DW of CA	BCM	0.028 mg/m <sup>3</sup>	6	052209-WH-AM1	<0.061	action level exceedance	
	2	0750 - 1550	South of CA, Sulphur Creek Monitoring	BCM	0.028 mg/m <sup>3</sup>	0	052209-WH-AM2	Archived		
	3	0734 - 1534	South of SWNW, DW of Area A	BCM	0.028 mg/m <sup>3</sup>	8	052209-WH-AM3	<0.107	action level exceedance	
	4	0750 - 1550	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052209-WH-PDS	Archived		
5/22 to 5/24 NWH Hi-Vols							052209-WH-PGS	Archived		
							HV-1	Archived		
							HV-2	Archived		
							HV-3	Archived		
5/22 to 5/26 NWH	1	1545 - 0644	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052409-NWH-AM1	Archived		
	2	1600 - 0658	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	3	1549 - 0248	South of SWNW, DW of Area B/C	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052409-NWH-AM3	<0.013	Monitor failure	
	4	1601 - 2259	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052409-NWH-PGS	<0.012	Random	
						052409-NWH-PDS	Archived			



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (est.)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
5/26/2009 AM	1	0727 - 1327	East of CA, DW of CA	BCM	0.028 mg/m <sup>3</sup>	0	052609-WH-AM1	Archived		
	2	0739 - 1538	South of CA, Sulphur Creek Monitoring	BCM	0.028 mg/m <sup>3</sup>	0	052609-WH-AM2	Archived		
	3	0732 - 1232	South of SWNW, DW of Area B/C	BCM	0.028 mg/m <sup>3</sup>	0	052609-WH-AM3	Archived		
	4	0748 - 1348	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							052609-WH-PGS	Archived		
							052609-WH-PDS	Archived		
5/26/2009 PM	1	1408 - 1608	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052609-WH-AM1	Archived		
	2	0739 - 1538	South of CA, Sulphur Creek Monitoring	BCM	0.028 mg/m <sup>3</sup>	0	052609-WH-AM2	Archived		
	3	1355 - 1555	West of Area B, DW of Area B/C Excavation	BCM	0.028 mg/m <sup>3</sup>	0	052609-WH-AM3	Archived		
	4	1349 - 1549	West of CA, DW of CA	BCM	0.028 mg/m <sup>3</sup>	0				
							052609-WH-PGS	Archived		
							052609-WH-PDS	Archived		
5/26/2009 NWH	1	1700 - 0700	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	2	1637 - 0736	South of CA, Sulphur Creek Monitoring	BCM	0.028 mg/m <sup>3</sup>	0	052609-NWH-AM2	Archived		
	3	1642 - 0441	West of Area B, DW of Area B/C Excavation	BCM	0.028 mg/m <sup>3</sup>	0	052609-NWH-AM3	<0.048	monitor failure	
	4	1638 - 0738	West of CA, DW of CA	BCM	0.028 mg/m <sup>3</sup>	0	052609-NWH-AM4	Void		flow fault
							052609-NWH-PGS	Archived		
							052609-NWH-PDS	Archived		
5/27/2009	2	0745 - 1545	South of Containment Area, UW of Site Activities/Sulphur Creek	non-contaminated	2.0 mg/m <sup>3</sup>	0	052709-WH-PSC	Archived		
	3	0803 - 1603	South of SWNW, DW of Area B/C	BCM	0.028 mg/m <sup>3</sup>	1	052709-WH-AM3	<0.060	action level exceedance	
	4	0756 - 1556	North of CA, DW of CA	BCM	0.028 mg/m <sup>3</sup>	0	052709-WH-AM4	Archived		
								052709-WH-PGS	Archived	
							052709-WH-PDS	Archived		
5/27/2009 NWH	2	1624 - 0723	South of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052709-NWH-AM2	<0.033	action level exceedance	
	3	1641 - 0241	South of SWNW, DW of Area B/C	BCM	0.028 mg/m <sup>3</sup>	multiple	052709-NWH-AM3	<0.035	action level exceedance	
	4	1635 - 0735	North of CA, DW of CA	BCM	0.028 mg/m <sup>3</sup>	multiple	052709-NWH-AM4	<0.048	action level exceedance	
								052709-NWH-PGS	Archived	
							052709-NWH-PDS	Archived		
5/28/2009	1	0731 - 1631	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	052809-WH-AM1	Archived		
	2	0752 - 1552	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052809-WH-AM2	Archived		
	3	0740 - 1639	West of SWNW, DW of Area B/C Excavation	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052809-WH-AM3	Archived		
	4	0752 - 1551	Northwest of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
							052809-WH-PGS	Archived		
							052809-WH-PDS	Archived		
5/28/2009 NWH	1	1637 - 0636	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052809-NWH-AM1	Archived		
	2	1636 - 0736	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052809-NWH-AM2	Archived		
	3	1648 - 0648	South of SWNW, DW of Area B/C	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052809-NWH-AM3	Archived		
	4	1647 - 0647	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							052809-NWH-PGS	Archived		
							052809-NWH-PDS	Archived		
5/29/2009	1	0723 - 1623	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052909-WH-AM1	Archived		
	2	0747 - 1647	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052909-WH-AM2	Archived		
	3	0728 - 1628	South of SWNW, DW of Area D	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052909-WH-AM3	Archived		
	4	0751 - 1651	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							052909-WH-PGS	Archived		
							052909-WH-PDS	Archived		
5/29/2009 NWH	1	1650 - 0649	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052909-NWH-AM1	Archived		
	2	1703 - 0703	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	3	1652 - 0652	South of SWNW, DW of Area D	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	052909-NWH-AM3	Archived		
	4	1710 - 0709	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							052909-NWH-PGS	Archived		
							052909-NWH-PDS	Archived		
5/30/2009	1	0743 - 1343	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	053009-WH-AM1	Archived		
	2	0755 - 1355	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	3	0744 - 1344	South of SWNW, DW of Area D	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	053009-WH-AM3	Archived		
	4	0755 - 1355	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							053009-WH-PGS	Archived		
							053009-WH-PDS	Archived		
5/30 to 6/1 NWH	1	1418 - 0718	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	053009-NWH-AM1	Archived		
	2	1433 - 0633	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	3	1426 - 0726	South of SWNW, DW of Area D	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	053009-NWH-AM3	Archived		
	4	1441 - 0640	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							053009-NWH-PGS	Archived		
							053009-NWH-PDS	Archived		



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (Start - End)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
5/29 to 6/1							HV-SC (5/29/09 to 6/1/09)	Archived		
6/1/2009	1	0803 - 1603	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060109-WH-AM1	Archived		
	2	0733 - 1633	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060109-WH-AM2	Archived		
	3	0751 - 1551	South of SWNW, DW of Area D	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060109-WH-AM3	Archived		
	4	0742 - 1642	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060109-WH-PGS	Archived		
							060109-WH-PDS	Archived		
6/1/2009 NWH	1	1641 - 0640	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060109-NWH-AM1	Archived		
	2	1648 - 0648	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060109-NWH-AM2	Archived		
	3	1642 - 0641	South of SWNW, DW of Area D	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060109-NWH-AM3	Archived		
	4	1656 - 0656	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060109-NWH-PGS	Archived		
							060109-NWH-PDS	Archived		
6/2/2009	1	0725 - 1625	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060209-WH-AM1	Archived		
	2	0732 - 1532	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060209-WH-AM2	Archived		
	3	0726 - 1626	South of SWNW, DW of Area D/E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060209-WH-AM3	Archived		
	4	0741 - 1541	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060209-WH-PGS	Archived		
							060209-WH-PDS	Archived		
6/2/2009 NWH	1	1640 - 0640	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060209-NWH-AM1	Archived		
	2	1617 - 0717	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060209-NWH-AM2	Archived		
	3	1630 - 0629	South of SWNW, DW of Area D/E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060209-NWH-AM3	Archived		
	4	1625 - 0725	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060209-NWH-PGS	Archived		
							060209-NWH-PDS	Archived		
6/3/2009	1	0726 - 1626	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060309-WH-AM1	<0.057	Random	
	2	0735 - 1535	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060309-WH-AM2	Archived		
	3	0727 - 1627	South of SWNW, DW of Area D/E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060309-WH-AM3	Archived		
	4	0746 - 1545	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060309-WH-PGS	Archived		
							060309-WH-PDS	Archived		
6/3/2009 NWH	1	1628 - 0627	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060309-NWH-AM1	Archived		
	2	1635 - 0714	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060309-NWH-AM2	Archived		
	3	1647 - 0647	South of SWNW, DW of Area D/E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060309-NWH-AM3	Archived		
	4	1643 - 0743	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060309-NWH-PGS	Archived		
							060309-NWH-PDS	Archived		
6/4/2009	1	0733 - 1533	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060409-WH-AM1	Archived		
	2	0750 - 1550	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060409-WH-AM2	Archived		
	3	0735 - 1535	South of SWNW, DW of Area D/E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060409-WH-AM3	Archived		
	4	0802 - 1602	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060409-WH-PGS	Archived		
							060409-WH-PDS	Archived		
6/4/2009 NWH	1	1629 - 0728	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060409-NWH-AM1	Archived		
	2	1641 - 0740	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060409-NWH-AM2	Archived		
	3	1652 - 0652	South of SWNW, DW of Area D/E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060409-NWH-AM3	Archived		
	4	1649 - 0749	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060409-NWH-PGS	Archived		
							060409-NWH-PDS	Archived		
6/5/2009	1	0735 - 1535	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060509-WH-AM2	Archived		
	2	0801 - 1601	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060509-WH-AM3	Archived		
	3	0753 - 1551	West of Area E, DW of Area B/E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060509-WH-AM4	Archived		
	4	0810 - 1609	W of Containment Area, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060509-WH-PGS	Archived		
							060509-WH-PDS	Archived		
							060509-WH-PLR	Archived		



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (est. 15)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
6/5 to 6/8 NWH	1	1626 - 0725	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060509-NWH-AM1	Archived		
	2	1649 - 0648	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060509-NWH-AM2 / HV-SC	Void / Archived		Hi-Vol running
	3	1626 - 0726	South of SWNW, DW of Area E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060509-NWH-AM3	Archived		
	4	1637 - 0736	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060509-NWH-AM4	Archived		
Hi-Vols							060509-NWH-PGS	Archived		
							060509-NWH-PDS	Archived		
							060509-NWH-PLR	Archived		
							HV-1	Archived		
6/8/2009	1	0744 - 1543	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060809-WH-AM1	Archived		
	2	0759 - 1559	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060809-WH-AM2	Archived		
	3	0752 - 1552	South of SWNW, DW of Area E	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060809-WH-AM3	Archived		
	4	0808 - 1608	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060809-WH-PGS	Archived		
6/8/2009 NWH							060809-WH-PDS	Archived		
							060809-NWH-AM1	Archived		
							060809-NWH-AM2	Archived		
							060809-NWH-AM3	Archived		
6/9/2009 AM	1	0739 - 1139	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060909-WH-AM1	0.345	Random	
	2	0743 - 1143	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060909-WH-AM2	Archived		
	3	0725 - 1125	East of Area V, DW of Area B/V	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	1	060909-WH-AM3	0.102	action level exceedance	
	4	0752 - 1152	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	060909-WH-PGS	<0.056	Coecardi Request	
6/9/2009 PM							060909-WH-PDS	<0.077	Random	
	1	1152 - 1652	North of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	2	1200 - 1600	South of CA, UW and Sulphur Creek Monitoring	non-contaminated	2.0 mg/m <sup>3</sup>	0				
6/9/2009 NWH	3	1154 - 1554	South of SWNW, DW of Area B/V	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	1	1644 - 0644	North of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060909-NWH-AM1	Archived		
	2	1626 - 0726	South of CA, UW and Sulphur Creek Monitoring	non-contaminated	2.0 mg/m <sup>3</sup>	0	060909-NWH-SC	Archived		
6/10/2009	3	1634 - 0634	South of SWNW, DW of Area B/V	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	060909-NWH-AM3	Archived		
							060909-NWH-PGS	Archived		
							060909-NWH-PDS	Archived		
6/10/2009 NWH	1	0750 - 1550	North of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061009-WH-AM1	Archived		
	2	0800 - 1600	South of CA, UW and Sulphur Creek Monitoring	non-contaminated	2.0 mg/m <sup>3</sup>	0	061009-WH-SC	Archived		
	3	0753 - 1553	South of SWNW, DW of Area B/V	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061009-WH-AM3	Archived		
6/10/2009							061009-WH-PDS	Archived		
	1	1644 - 0644	North of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061009-NWH-AM1	Archived		
	2	1626 - 0726	South of CA, UW and Sulphur Creek Monitoring	non-contaminated	2.0 mg/m <sup>3</sup>	0	061009-NWH-AM2	Archived		
6/11/2009	3	1634 - 0634	South of SWNW, DW of Area B/V	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061009-NWH-AM3	Archived		
							061009-NWH-PGS	Archived		
							061009-NWH-PDS	Archived		
6/11/2009	1	0757 - 1557	North of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061109-WH-AM1	Archived		
	2	0800 - 1500	South of CA, UW and Sulphur Creek Monitoring	non-contaminated	2.0 mg/m <sup>3</sup>	0	061109-WH-AM2	Archived		
	3	0744 - 1543	South of SWNW, DW of Area B/V	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061109-WH-AM3	Archived		
	4	0859 - 1559	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	061109-WH-PGS	Archived		
6/11/2009 NWH							061109-WH-PDS	Archived		
	1	1613 - 0713	North of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061109-NWH-AM1	Archived		
	2	1602 - 0802	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061109-NWH-AM2	Archived		
	3	1615 - 0715	South of SWNW, DW of Area H	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061109-NWH-AM3	Archived		
6/12/2009	4	1602 - 0702	East of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	061109-NWH-PGS	Archived		
							061109-NWH-PDS	Archived		
	1	0813 - 1513	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0	061209-WH-AM2	Archived		
6/12/2009	2	0809 - 1509	South of CA, Sulphur Creek Monitoring	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061209-WH-AM3	Archived		
	3	0758 - 1458	South of SWNW, DW of Area H	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061209-WH-AM4	Archived		
	4	0754 - 1454	East of CA, DW of CA	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061209-WH-PGS	Archived		
							061209-WH-PDS	Archived		



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED FAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (est.)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	FAM ID	FAM Result (ug/m3)	Reason for Analysis	Reason for Void
6/12 to 6/14 NWH	1	1516 - 0735	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	2	1533 - 0732	South of CA, Sulphur Creek Monitoring	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	HV-SC	Archived		
	3	1526 - 0725	South of SWNW, DW of Area H	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0				
	4	1541 - 0639	East of CA, DW of CA	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0				
Hi-Vols							HV-1	Archived		
							HV-2	Archived		
							HV-3	Archived		
							HV-4	Archived		
6/15/2009 AM	1	0755 - 1255	Northwest of CA, DW of CA	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061509-WH-AM1	Archived		
	2	0743 - 1443	South of CA, Sulphur Creek Monitoring	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061509-WH-AM2	Archived		
	3	0733 - 1233	South of SWNW, DW of Area H	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061509-WH-AM3	0.099	Random	
	4	0731 - 1231	East of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
6/15/2009 PM							061509-WH-PGS	Archived		
							061509-WH-PDS	<0.040	Random	
	1	1328 - 1528	East of CA, DW of CA	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0				
	3	1254 - 1453	East of Area H, DW of Area H	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0				
6/15/2009 NWH	1	1542 - 0742	East of CA, DW of CA	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061509-NWH-AM1	Archived		
	2	1545 - 0745	South of CA, Sulphur Creek Monitoring	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061509-NWH-AM2	Archived		
	3	1552 - 0652	East of Area H, DW of Area H	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061509-NWH-AM3	Archived		
	4	1547 - 0747	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
6/16/2009							061509-NWH-PGS	Archived		
							061509-NWH-PDS	Archived		
	1	0752 - 1652	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	2	0800 - 1600	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061609-WH-AM2	<0.093	requested by the EPA, 062209-WH-AM2 results	
6/16/2009	3 (AM)	0753 - 1253	West of Area H, DW of Area H	low haz / residential topsoil	1.154 mg/m <sup>3</sup>	0	061609-WH-AM3	Archived		
	3 (PM)	1322 - 1622	West of Area B, DW of Area B	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	0808 - 1608	West of Containment Area, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061609-WH-AM4	Archived		
							061609-WH-PGS	Archived		
6/16/2009							061609-WH-PDS	Archived		
	1	1702 - 0702	East of CA, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
	2	1619 - 0719	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061609-NWH-AM2	<0.034	requested by the EPA, 062209-WH-AM2 results	
	3	1629 - 0729	West of Area B, DW of Area B	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061609-NWH-AM3	Archived		
6/17/2009	4	1619 - 0719	West of Containment Area, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061609-NWH-AM4	Archived		
							061609-NWH-PGS	Archived		
							061609-NWH-PDS	Archived		
	1	0753 - 1653	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061709-WH-AM1	Archived		
6/17/2009	2	0724 - 1724	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061709-WH-AM2	<0.030	requested by the EPA, 062209-WH-AM2 results	
	3	0740 - 1639	East of Delaware St, DW of Del. St Excavation	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	061709-WH-AM3	<0.073	New excavation	
	4	0731 - 1731	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							061709-WH-PGS1	<0.057	New excavation	
6/17/2009							061709-WH-PGS2	<0.077	New excavation	
							061709-WH-PDS1	<0.056	New excavation	
							061709-WH-PDS2	<0.101	New excavation	
	1	1735 - 0735	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061709-NWH-AM1	Archived		
6/17/2009	2	1736 - 0736	South of CA, UW / Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061709-NWH-AM2	<0.035	requested by the EPA, 062209-WH-AM2 results	
	3	1718 - 0617	East of Delaware St, DW of Del. St Excavation	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	061709-NWH-AM3	<0.034	New excavation	
	4	1743 - 0743	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							061709-NWH-PGS1	<0.05 total pb	New excavation	Flow fault, no info on air volume
						061709-NWH-PGS2	<0.035	New excavation		
						061709-NWH-PDS1	<0.102	New excavation		
						061709-NWH-PDS2	<0.037	New excavation		



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (est.)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void	
6/18/2009	1	0749 - 1549	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061809-WH-AM1	Archived			
	2	0749 - 1448	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061809-WH-AM2	<0.065	requested by the EPA, 062209-WH-AM2 results		
	3	0729 - 1529	East of Grove Street, DW of Grove St Excavation	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	061809-WH-AM3	<0.094	New excavation		
	4	0756 - 1456	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							061809-WH-PGS1	<0.142	New excavation		
							061809-WH-PGS2	<0.060	New excavation		
							061809-WH-PDS1	<0.071	New excavation		
6/18/2009	1	1554 - 0654	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061809-NWH-AM1	Archived			
	NWH	2	1543 - 0642	South of CA, UW / Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061809-NWH-AM2	<0.05 Total pb	requested by the EPA, 062209-WH-AM2 results	Flow fault, no info on air volume
		4	1542 - 0741	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							061809-NWH-PGSM	<0.040	New excavation		
							061809-NWH-PGS1	<0.034	New excavation		
							061809-NWH-PGS2	<0.047	New excavation		
							061809-NWH-PDS1	<0.05 Total pb	New excavation	Flow fault, no info on air volume	
6/19/2009	1	0740 - 1440	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061909-WH-AM1	Archived			
	2	0743 - 1443	South of CA, UW / Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	061909-WH-AM2	<0.092	requested by the EPA, 062209-WH-AM2 results		
	3	0723 - 1523	Southeast of Grove Street, DW of Grove St Excavation	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	061909-WH-AM3	<0.062	New excavation		
	4	0751 - 1451	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							061909-WH-PGS1	0.076	New excavation		
							061909-WH-PGS2	<0.098	New excavation		
							061909-WH-PDS1	<0.066	New excavation		
6/19 to 6/22	1	1533 - 0732	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0					
	NWH	2	1520 - 0719	South of CA, UW / Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	HV-SC	0.003	requested by the EPA, 062209-WH-AM2 results	
		4	1522 - 0721	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							HV-1	Archived			
							HV-2	Archived			
							HV-3	Archived			
							HV-4	Archived			
6/22/2009	1	0735 - 1435	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062209-WH-AM1	Archived			
	2	0734 - 1434	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062209-WH-AM2	0.212	coccidi sampling		
	4	0746 - 1446	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062209-WH-PGS	Archived			
							062209-WH-PDS	Archived			
6/22/2009	1	1512 - 0612	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062209-NWH-AM1	Archived			
	NWH	2	1512 - 0612	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062209-NWH-AM2	<0.043	requested by the EPA, 062209-WH-AM2 results	
		4	1516 - 0716	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							062209-NWH-PGS	Archived			
							062209-NWH-PDS	Archived			
6/23/2009	1	0713 - 1513	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062309-WH-AM1	Archived			
	2	0715 - 1515	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062309-WH-AM2	0.258	requested by the EPA, 062209-WH-AM2 results		
	4	0724 - 1523	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062309-WH-PGS	Archived			
							062309-WH-PDS	Archived			
6/23/2009	1	1540 - 0740	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062309-NWH-AM1	Archived			
	NWH	2	1531 - 0731	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062309-NWH-AM2	<0.043	requested by the EPA, 062209-WH-AM2 results	
		4	1535 - 0735	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							062309-NWH-PGS	Archived			
							062309-NWH-PDS	Archived			



TABLE 5  
MARJOL BATTERY SITE  
REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
2ND QUARTER 2009

Date	AM-#	Time (est.)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void	
6/24/2009	1	0759 - 1458	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062409-WH-AM1	Archived			
	2	0759 - 1459	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062409-WH-AM2	<0.068	requested by the EPA, 062209-WH-AM2 results		
	4	0808 - 1507	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062409-WH-PGS	Archived			
6/24/2009	1	1544 - 0644	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062409-NWH-AM1	Archived			
	NWH	2	1535 - 0635	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062409-NWH-AM2	<0.046	requested by the EPA, 062209-WH-AM2 results	
	4	1539 - 0639	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062409-NWH-PGS	Archived			
6/25/2009	1	0727 - 1527	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062509-WH-AM1	Archived			
	2	0727 - 1527	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062509-WH-AM2	<0.098	requested by the EPA, 062209-WH-AM2 results		
	4	0737 - 1437	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062509-WH-PGS	Archived			
6/25/2009	1	1540 - 0640	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062509-NWH-AM1	Archived			
	NWH	2	1531 - 0631	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062509-NWH-AM2	<0.031	requested by the EPA, 062209-WH-AM2 results	
	4	1533 - 0732	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062509-NWH-PGS	Archived			
6/26/2009	1	0728 - 1528	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062609-WH-AM1	Archived			
	2	0728 - 1528	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062609-WH-PSC	<0.123	requested by the EPA, 062209-WH-AM2 results		
	4	0736 - 1536	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062609-WH-PGS	Archived			
6/26/2009	1	1533 - 0733	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062609-WH-PDS	Archived			
	NWH	2	1533 - 0733	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0				
	4	1540 - 0739	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062709-WH-AM1	Archived			
6/27/2009	1	0738 - 1138	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062709-WH-AM1	Archived			
	2	0738 - 1138	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0					
	3	0723 - 1125	East of Grove Street, DW of Grove St Excavation	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	062709-WH-AM3	<0.110	Grove Street Excavation		
	4	0747 - 1146	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
						0627209-WH-PGS1	<0.108	Grove Street Excavation			
						062709-WH-PGS2	<0.110	Grove Street Excavation			
						062709-WH-PDS1	<0.150	Grove Street Excavation			
						062709-WH-PDS2	<0.108	Grove Street Excavation			
6/27 to 6/29	1	1219 - 0718	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0					
	2	1216 - 0715	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	HV-SC	Archived			
	4	1222 - 0721	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							HV-1	Archived			
						HV-2	Archived				
						HV-3	Archived				
						HV-4	Archived				
6/29/2009	1	0745 - 1445	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062909-WH-AM1	Archived			
	2	0745 - 1445	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062909-WH-PSC	Archived	Grove Street Excavation		
	3	0719 - 1418	East of Grove Street, DW of Grove St Excavation	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	062909-WH-AM3	<0.096	Grove Street Excavation		
	4	0753 - 1453	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
						062909-WH-PGS1	<0.073	Grove Street Excavation			
						062909-WH-PGS2	<0.131	Grove Street Excavation			
						062909-WH-PDS1	<0.109	Grove Street Excavation			
						062909-WH-PDS2	<0.070	Grove Street Excavation			
6/29/2009	1	1529 - 0728	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062909-NWH-AM1	Archived			
	2	1530 - 0730	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	062909-NWH-PSC	Archived			
	4	1537 - 0737	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0					
							062909-NWH-PGS	Archived			
						062909-NWH-PDS	Archived				



TABLE 5  
 MARJOL BATTERY SITE  
 REAL-TIME AIR MONITORING AND COLLOCATED PAM SUMMARY  
 2ND QUARTER 2009

Date	AM-#	Time (GMT-1)	Location	Waste Type	Action Level	Number of Hourly Average Exceedences	PAM ID	PAM Result (ug/m3)	Reason for Analysis	Reason for Void
6/30/2009	1	0731 - 1331	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	063009-WH-AM1	Archived		
	2	0732 - 1332	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	063009-WH-PSC	Archived		
	3	0715 - 1215	East of Delaware Street, DW of Del. St Excavation	mine spoils / cont. surface soil	0.063 mg/m <sup>3</sup>	0	063009-WH-AM3	<0.094	Delaware St excavation	
	4	0740 - 1340	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							063009-WH-PGS1	<0.127	Delaware St excavation	
							063009-WH-PGS2	0.189	Delaware St excavation	
							063009-WH-PDS1	0.233	Delaware St excavation	
						063009-WH-PDS2	0.09 Total pb	Delaware St excavation		
6/30/2009 NWH	1	1344 - 0644	East of CA, DW of CA	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	063009-NWH-AM1	Void		Blank Screen
	2	1344 - 0644	South of CA, Sulphur Creek Monitoring	mine spoils / cont. surface soil	0.094 mg/m <sup>3</sup>	0	063009-NWH-PSC	Archived		
	4	1348 - 0648	SW of Containment Area, UW of Site Activities	non-contaminated	2.0 mg/m <sup>3</sup>	0				
							063009-NWH-PGS	Archived		
							063009-NWH-PDS	Archived		

**Legend**

- UW Up Wind
- DW Down Wind
- N,S,E,W North, South, East, West
- NWH Non-Working Hours
- PAM Personnel Air Monitor
- PSC Perimeter Sulphur Creek
- PDS Perimeter Delaware Street
- PGS Perimeter Grove Street
- PLR Perimeter Lackawanna River
- DAM Downwind of Area M
- DAOF Downwind of Area O Backfill
- DBF Downwind of Backfill
- PN Perimeter North Woods
- PSZ Perimeter Support Zone
- SWNW South West North Woods

**NOTES:**

1. Non-working hour PAM samples are identified by the date the sample started. Example - a sample run from the evening of 9/19 to morning of 9/20 is labelled as 9/19.
2. PAM samples voided due to inability to record flow, the filter becoming wet or muddy, and/or mechanical failure.
3. Half-hour averages were collected during real-time monitoring through September 21, 2008. Hourly averages of real-time monitoring began September 22, 2008.
4. Real-time air monitors and collocated PAMs were set up at the indicated location in anticipation of upwind work activities. However, as work activities did not occur at the area associated with the monitor, real-time air monitoring was not conducted.
5. High-volume air monitoring equipment was used in lieu of PAMs during non-working hour weekend monitoring.
6. The lab report incorrectly identifies the sample as 051509-NWH-DBF.





## ATTACHMENTS PROVIDED ON CD

Second Quarter 2009 Ambient Air Monitoring Report  
Second Quarter 2009 Lackawanna River Sediment Sampling  
Throop Borough Council Meeting Minutes  
Construction Documents  
    Approved Submittals  
    Construction Schedules  
    Daily QA Reports  
    Daily QC Reports  
    Meeting Minutes  
Monitoring Results  
    Basin Discharge Monitoring  
    Dust Monitoring Working Hours  
    Dust Monitoring Non-Working Hours  
    Perimeter Air Monitoring  
    Perimeter Air Monitoring Non-Working Hours  
    Work Area Monitoring for Lead  
    Work Area PAM Worksheets  
    PADEP Perimeter Air Monitoring  
Photographs  
Design Addenda  
Confirmation Sampling  
Borrow Source Sampling  
Weather Data  
Stained Soils Stockpile Sampling  
Disposal and Recycling