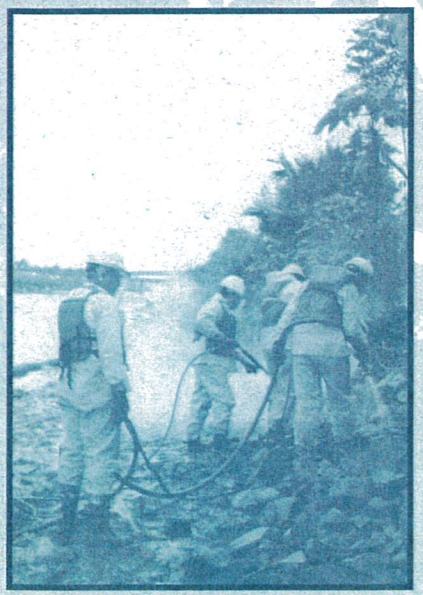
# PHASE II
# ENVIRONMENTAL SITE ASSESSMENT
# MONARCH SCHOOL
# 808 WEST CEDAR STREET
# SAN DIEGO, CALIFORNIA



Geotechnical

and

Environmental

Sciences

Consultants

Ninyo & Moore

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Geotechnical and Environmental Sciences Consultants

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**PREPARED FOR:**
Centre City Development Corporation
225 Broadway, Suite 1100
San Diego, California 92101

**PREPARED BY:**
Ninyo & Moore
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May 25, 2006
Project No. 105740002

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Project No. 105740002

Mr. David Allsbrook
Centre City Development Corporation
225 Broadway, Suite 1100
San Diego, California 92101

Subject: Phase II Environmental Site Assessment
Monarch School, 808 West Cedar Street,
San Diego, California

Dear Mr. Allsbrook:

In accordance with our approved proposal and work plan, Ninyo & Moore is pleased to present this Phase II Environmental Site Assessment Report, which documents the environmental investigation performed at the Monarch School site (site) located at 808 West Cedar Street in San Diego, California. This investigation collected and analyzed soil and groundwater samples for petroleum hydrocarbons, lead, and volatile organic compounds, located in subsurface soils beneath the Monarch School.

We appreciate the opportunity to provide continued environmental consulting services to the Centre City Development Corporation on this important project. If you have any questions regarding this report, please contact the undersigned at your convenience.

Respectfully submitted,
**NINYO & MOORE**

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VJS/SB/kes

Distribution: (4) Addressee

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## EXECUTIVE SUMMARY

It is our understanding that the Monarch School, located at 808 West Cedar Street in San Diego, California (Figure 1), is scheduled for redevelopment, which may include construction of a three-story facility with one-level of subterranean parking. The findings of a Phase I Environmental Site Assessment (ESA) of the property (Ninyo & Moore, 2005) indicated the potential presence of recognized environmental conditions at the site. Based on the findings and recommendations presented in the Phase I ESA, Ninyo & Moore was retained by the Centre City Development Corporation (CCDC) to conduct a Phase II ESA for the property. This report was prepared to describe the field activities, methodologies, procedures, and associated documentation for the Phase II ESA at the Monarch School.

On April 29 and 30, 2006, soil and groundwater samples were collected from eight borings using Direct Push Technology (DPT) drilling methods. Samples were analyzed for lead, total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), Title 22 metals, and polynuclear aromatic hydrocarbons (PAHs).

Results from these analyses indicate that shallow subsurface fill soils (1 - 5 feet below ground surface (bgs)) contain detectable lead concentrations ranging from 2.8 milligrams per kilogram (mg/kg) to 610 mg/kg. Eight samples that equaled or exceeded 50 mg/kg were tested for leachability using the California Waste Extraction Test (WET) and three samples that equaled or exceeded 100 mg/kg were tested for leachability using the federal Toxicity Characteristic Leaching Procedure (TCLP). Results from the WET method indicate that the shallow fill soils are above the California hazardous waste criteria for lead contamination. Results from the TCLP method were lower than the method detection limit, and therefore do not classify the soil as federal hazardous waste for lead. Assuming that lead contaminated soil that would be classified as California hazardous waste exists to an average depth of 3 feet bgs across the entire site, we estimate that 1,600 to 2,000 cubic yards of soil may require excavation, transportation, and disposal as a California hazardous waste.

Analytical results of fill soil samples tested for Title 22 Metals, except for lead, appear to be representative of background soil concentrations. Volatile organic compounds and PAHs were not detected in the soil samples analyzed. Of 32 fill soil samples analyzed for TPH, two collected at 3.5 and 12.0 feet bgs from different borings contained detectable concentrations of high molecular weight (i.e., >C18) TPH (13 and 160 mg/kg). Based on the limited occurrence, high molecular weight, and lack of indicator compounds (e.g., VOCs, PAHs), it does not appear that a significant release of TPH has occurred at the site.

Six groundwater samples were collected and analyzed for VOCs. The only detected VOC was chloroform in two of the samples (5.3 and 11 micrograms per liter {ug/l}). It is unlikely that these concentrations, which may represent laboratory contamination, represent a significant threat to human health (e.g., the California Preliminary Remediation Goal for chloroform in tap water is 53 ug/l).

It should be noted that at three of the boring locations, refusal was met at approximately 8-inches below the top of the concrete slab within the building. Based on field observations and verbal information provided by the property owner subsequent to attempting these borings, it is suspected that a secondary concrete foundation slab or concrete ramp exists in these locations. Based on the findings of the Phase I ESA and this Phase II ESA, there are no obvious indications that the soil or groundwater beneath these inaccessible locations represents a significant environmental issue. However, if CCDC would like to have additional information regarding soil conditions beneath the lower slab, Ninyo & Moore can submit a proposal to re-core these areas and attempt to collect soil samples using hand auger methods.

Based upon the site assessment activities conducted and described herein, Ninyo & Moore recommends that a plan be prepared that presents procedures for soil excavation monitoring, characterization, and verification sampling and analysis; waste handling, disposal, and tracking; addressing unknown hazardous waste issues that may be encountered; and, site and community health and safety .

## 1. INTRODUCTION

The Monarch School, located at 808 West Cedar Street in San Diego (Figure 1 and 2), California, provides homeless children with an accredited education while caring for their basic needs. Re-development of the school, and sale of the existing property, is underway. The plans for redevelopment include construction of a three-story facility with one-level of subterranean parking. Ninyo & Moore was retained by the CCDC to conduct a Phase I ESA of the property (Ninyo & Moore, 2005).

According to historical and regulatory sources consulted for the Phase I ESA, numerous facilities of potential environmental concern were located in the vicinity of the Monarch School site since the early 1900s. Additionally, the use and/or storage of hazardous substances and wastes was documented at the site. Therefore, the Phase I ESA concludes that it is possible that items/issues of environmental concern could be encountered during future development activities, particularly if they involve grading, dewatering, excavation, or other subsurface disturbances at the subject site. Ninyo & Moore was retained by CCDC to perform a Phase II ESA to evaluate if there are significant subsurface environmental impacts from previous activities on the site.

This report was prepared to describe the field activities, methodologies, procedures, and associated documentation for the Phase II ESA.

## 2. PROJECT OBJECTIVE

The purpose and objective of this investigation was to evaluate the soil and groundwater conditions beneath the site for potential contamination and/or significant environmental concerns. Activities included drilling eight borings to approximately 22-feet below ground surface (bgs) with collection and analysis of soil and groundwater samples. Three other borings were attempted, but met shallow refusal.

## 3. SCOPE OF WORK

The scope of services provided for this Phase II ESA is summarized below:

- Provided project management and coordination;
- Prepared a site work plan and health and safety plan;
- Conducted a geophysical survey of the site (inside and outside) to assess for the potential to encounter buried structures and identify line traces within the building;
- Applied for a boring permit through the County of San Diego, Department of Environmental Health (DEH);
- Marked proposed boring locations and notified Underground Service Alert 48 hours prior to drilling;
- Coordinated boring locations with Underground Service Alert (USA);
- Cored the concrete foundation slab in 10 locations;
- Drilled eight borings (attempted 11) using a direct push method to depths up to 22 feet bgs;
- Screened soil samples for volatile organic compounds (VOCs) using a photoionization detector (PID);
- Logged soil borings according to the Unified Soil Classification System (USCS);
- Obtained 50 soil and six groundwater samples for analysis;
- Analyzed selected soil samples for lead, Title 22 metals, TPH, VOCs, and PAHs;
- Analyzed 6 groundwater samples for VOCs using USEPA Method 8260B;
- Prepared and submitted a 60-day Report with the DEH as required; and
- Prepared this report summarizing the field activities and results, including tabulated data, illustrations, with conclusions and recommendations.

## 4. SITE DESCRIPTION

The site consists of 0.3 acres of land located northwest of the intersection of California Street and West Cedar Street, approximately 100 feet east of Pacific Coast Highway, in the City of San Diego, California (Figure 1 and Figure 2). According to information obtained from the San Diego County Assessor's office, the site has been assigned Assessor's Parcel Numbers (APNs) 533-311-07-00 and 533-311-08-00.

## 5. SITE HISTORY

Based on a review of historical and regulatory sources, the site was residentially developed from at least as early as 1906 until sometime between 1945 and 1950, at which time the site was occupied by a commercial flooring company known as Astra Flooring Co. or Wullich Flooring Contractor. AABCO, a plastic products and countertop manufacturer, occupied the site from sometime between 1955 and 1960 until approximately 2000, at which time tenant improvements were initiated to convert the site usage to the Monarch School and Cabo Café. In addition, the site was intermittently occupied by other tenants, including Gilbert's Café (a restaurant), locksmith companies, plumbers, and tile companies. During this time, multiple structures on the site were constructed and demolished. In 1960 and 1964, major additions and/or renovations were made to the existing, L-shaped building on the site, which was constructed sometime between 1950 and 1954.

According to historical and regulatory sources consulted for this assessment, numerous facilities of potential environmental concern have been located near the subject site since the early 1900s. Specifically, a gas station was located southwest and adjacent to the site located at 1569 Pacific Highway from the 1940s to the 1960s. In addition, a used car lot was located west and adjacent to the site in 1950, and was documented as a gas station from approximately 1955 to sometime before 1985, at which time it became a Jack-in-the-Box restaurant. A printing company was located at 805 West Cedar Street (south and adjacent to the site) from the 1950s to the 1970s. The Gray Line Tour Bus Company formerly stored buses and performed vehicle maintenance at a facility adjacent to the east of the site (across California Street and the railroad tracks) in the 1980s. Another gas station was reportedly located to the east-southeast of the site at 1566 Kettner Boulevard in the 1940s. Hercules Oil Company was located southeast of the site on Kettner Boulevard from as early as 1906 until at least 1966. Aside from those facilities specifically mentioned above, multiple other automobile repair shops, rental car facilities, engine shops, automobile wreckers, and other industrial facilities were historically located in the vicinity of the site.

## 6. GEOGRAPHY

This section summarizes the regional and local geologic setting and hydrogeologic conditions at the site. The information is based on a review of the referenced, published, and unpublished reports, and observations made by Ninyo & Moore at the site.

### 6.1. Regional Geologic Setting

The subject site lies within the Peninsular Ranges geomorphic province at the western margin of the province. This province encompasses a large area, extending from the Transverse Ranges geomorphic province to the north, into approximately 750 miles south into the Baja Peninsula of Mexico. The Peninsular Ranges geomorphic province is defined as northwest-trending mountain ranges separated by subparallel fault zones (Norris and Webb, 1990). Overall, this province consists of a series of uneven mountain ranges underlain by Mesozoic-age metamorphic and crystalline rocks to the east, with a dissected coastal plain underlain by Cenozoic-age sediments to the west.

### 6.2. Site Geologic Conditions

Based on a review of the United States Geological Survey, Point Loma, California, 7.5-minute Quadrangle Map, the site elevation is approximately 20 feet above mean sea level (USGS, 1967, photorevised 1975).

Artificial fill and Quaternary-age marine and non-marine deposits of the Bay Point Formation (Kennedy, 1975) (Kennedy and Tan, 2005) underlie the site. The artificial fill has lithology comparable of silty sand as defined and classified using the USCS. Fill material observed during drilling generally consisted of brown to light brown, moist, silty, fine silty sand. Small amounts of what appears to be burn ash of varying thickness were observed within shallow soils (1 - 3.5 feet bgs) throughout the site during drilling. The thickest section of burn ash observed was an approximately 6-inch layer of soil within the furthest northwest boring, B-6.

Beneath the artificial fill, a sandstone member of the Bay Point Formation was dominant throughout the site subsurface. This member primarily consisted of light brown to gray, fine-grained, well sorted, sub-round to round, weakly cemented sand.

### 6.3. Regional Hydrologic Setting

According to State Water Resources Control Board (SWRCB) Geotracker website, the site lies within the Lindbergh Hydrologic Subarea of the San Diego Mesa Hydrologic Area, within the Pueblo San Diego Hydrologic Unit. According to the Water Quality Control Plan for the San Diego Basin by the California Regional Water Quality Control Board (1994), there are no existing or potential beneficial uses of groundwater in the Lindbergh Hydrologic Subarea.

### 6.4. Site Hydrologic Conditions

During this investigation, the depth to groundwater was approximately 20 feet bgs. The first observation of water trapped within the capillary fringe of the vadose zone was approximately 13.5 feet bgs. Groundwater levels can readily fluctuate due to seasonal variations, lithologic materials, groundwater withdrawal or injection, and other associated factors.

Surface drainage and runoff are towards the west and south. Drainage from the Monarch School building runs onto Cedar Street and flows south towards the San Diego Bay.

A detailed analysis of geologic condition, including faults, landslides, or other geologic hazards, was not part of the scope of work for this Phase II ESA.

## 7. SUBSURFACE ASSESSMENT OF SOIL AND GROUNDWATER

The Phase II ESA was performed on April 29 and 30, 2006, in accordance with the approved work plan and proposal and is summarized below.

### 7.1. Site Health and Safety Plan

Prior to the start of fieldwork, a site-specific health and safety plan (HASP) was written by Ninyo & Moore to inform personnel of hazards associated with the work, illustrate closest medical aid, and outline procedures and safety guidelines for this work. The HASP provides policies, information, requirements, and guidelines regarding work procedures for personnel performing specific tasks at the site.

Prior to commencing field activities, site workers were required to read and sign the plan, acknowledging their familiarity with its provisions. In addition, prior to beginning daily fieldwork at the site, Ninyo & Moore field personnel conducted a tailgate meeting to discuss relevant sections of the HASP and daily work activities.

### 7.2. Site Work Plan

Prior to the start of fieldwork, a site-specific work plan was written by Ninyo & Moore to inform personnel working at the site of the scope of work for the drilling and sampling of soil and groundwater scheduled for this event. The work plan provided a site introduction, purpose and objective, and listed site activities and guidelines for this work.

### 7.3. Permits and Notifications

Ninyo & Moore applied for and received the required County of San Diego, DEH permit for drilling 10 borings in this location. Permit number LMON103906 was issued April 17, 2006. The DEH was notified 48 hours prior to drilling activities.

### 7.4. Boring Location Markout

Prior to the start of fieldwork, a representative of Ninyo & Moore marked the locations of the proposed borings and requested that these areas be accessible prior to the start of drilling. Based on the drawings available to Ninyo & Moore and information provided by the Monarch School, underground utilities were identified along with irrigation, and

telephone lines within walls, overhead, and within the concrete foundation slab. Borings were marked using a white-colored, chalk-based spray paint.

### 7.5. Geophysical Survey

Prior to the start of field activities, Southwest Geophysics, Incorporated of San Diego, California, conducted a geophysical survey of the site on April 19, 2006. The geophysical survey included the use of GSSI SIR 3000 ground-penetrating radar (GPR) equipment using a 400 MHz transducer, Schonstedt GA-52C magnetic gradiometer, and Metrotech 9860 line tracer. Multiple traverses using these instruments were conducted over specified locations to delineate potential subsurface interference. The interpretation of these data occurred in real-time and confirmed presence and/or absence of shallow interferences. The geophysical survey report is presented in Appendix A.

### 7.6. Underground Service Alert Notification

After the geophysical survey, boring locations were marked and on April 26, 2006, Ninyo & Moore contacted USA of Southern California, a public utility locator, to evaluate the chosen boring locations for possible underground utility conflicts. Ticket number A1171340 was issued for this site. USA contacted private companies and city and county agencies that may have underground utilities or structures in the area of the proposed work.

### 7.7. Concrete Coring

Once proposed boring locations were cleared using geophysical methods, the concrete foundation of the site was cored in those locations. Ten of 11 potential boring locations (Figure 3) required coring. The concrete slab throughout the site was approximately 4 - 6 inches in thickness. Ninyo & Moore retained the services of Cut-N-Core, of San Diego, California to cut 4-inch diameter cores at these locations.

### 7.8. Drilling and Sampling

On April 29 and 30, 2006, Interphase Environmental, Incorporated (Interphase), a bonded, C-57 licensed, drilling contractor with the appropriate current certificates, experience, training, and personnel attempted to drill borings at the cleared boring locations. Borings were drilled using a GeoProbe™ direct push dill rig to depths up to 22 feet bgs (Figure 3). Sample names were created to identify the boring and depth obtained e.g., NM-B-06-2.0 indicates boring number 6 at a sample depth of 2.0-feet bgs).

Eleven borings (B-1 through B-11) were attempted during this investigation (Figure 3). Three of the 11 borings (B-5, B-7, and B-9) met refusal at less than 1-foot bgs. Boring B-2 met refusal at 8.5 feet bgs. Based on verbal information provided by the property owner subsequent to attempting these borings, it is suspected that a secondary concrete foundation slab or concrete ramp exists in these locations. These borings were backfilled with concrete immediately following refusal.

Soil samples were collected at regular intervals of 1-foot, 2-, 5-, 10-, 15-, and 20-feet bgs, unless indications of contamination, such as staining, odor, or presence of burn ash were observed. Samples were collected at 1- and 2-foot intervals in all borings, except borings B-5, B-7, and B-9, as they met refusal, using hand augering equipment. Samples were dispensed into new, Teflon-capped glass jars, properly labeled, bagged, and stored in an ice-filled cooler until transport to the state-certified laboratory. The borings were backfilled with hydrated bentonite chips and capped with concrete.

Subsurface soils encountered during drilling were logged in the field in general accordance with the USCS by a California Professional Geologist. The soil lithology, sample intervals, PID readings, and total depths of borings are presented in the boring logs in Appendix B.

Groundwater samples were collected by driving the drill point just below the proposed sampling depth, and allowing water to pass through the screen within the drill tip. A section of new nylon tubing with an attached one-way check valve was placed within

the drill tip and agitated to allow passage of water upward through the tubing until it reached the surface. Six groundwater samples were collected and dispensed into new, laboratory-supplied containers, properly labeled, bagged, and stored in an ice-filled cooler until transport to the state-certified laboratory. The drilling and abandonment of borings complied with the requirements of the approved DEH permit and the DEH Site Assessment and Mitigation (SAM) Division Manual (2004).

### 7.9. Analytical Testing

Discrete soil sampling was accomplished using a small diameter (approximately 1-inch inside diameter) sampler lined with 2-foot long acetate sleeves driven into the soil using the DPT method drill rig. Cored soil samples were typically 1-foot to 2-feet in length, depending upon resistance of the material and recovery of samples. The acetate sleeves were cut at the desired sampling interval, capped with Teflon-coated plastic caps, and labeled with the project name and number, location and depth, collection date and time, samplers name, and other pertinent information.

Shallow subsurface (between 1-foot and 3.5-feet intervals) were analyzed for lead using USEPA Method 6010B. Deeper soil samples (from 5 to 20 feet bgs) were analyzed for TPH-E by 8015B (Modified) and VOCs using USEPA Method 8260B. Various soil samples were analyzed for Title 22 metals using USEPA Methods 6010B/7470A/7471A and PAHs using USEPA Method 8270C. Three duplicate soil samples were collected. Soil sample analytical results are presented in Table 1 and Appendix C.

Soil samples containing lead concentrations higher than background values were subjected to additional testing using the criteria below:

- Submitted eight samples that equaled or exceeded 50 mg/kg of total lead for leachability testing using the WET; and
- Submitted three samples that equaled or exceeded 100 mg/kg of total lead for leachability testing using the TCLP.

Six groundwater samples were analyzed for VOCs using USEPA Method 8260B. One duplicate groundwater sample was collected. Groundwater analytical results are presented in Table 2 and Appendix C.

Sample custody procedures were followed through sample collection, transfer, and analysis to ensure that the integrity of samples was maintained. A description of the sample custody procedures used for sample collection is provided below.

Field personnel logged samples onto triplicate chain-of-custody forms when the sample was collected. Information for each sample was recorded on each chain-of-custody form, which included sample identification number, matrix, date and time of collection, number and type of containers, sampler name, analytical methods to be performed on the sample, laboratory turn-around time, and preservatives added (as applicable). Upon relinquishing the samples, the sampler signed and dated the chain-of-custody form, and the person accepting the samples, from the laboratory, signed and dated the chain-of-custody form upon receipt. The chain-of-custody documentation accompanied the samples from the field to the laboratory. Copies of the chain-of-custody forms are presented in Appendix C.

### 7.10. Investigative Derived Waste (IDW)

During the field activities for this project, no IDW was generated.

## 8. CONCLUSIONS AND RECOMMENDATIONS

Based on available background information and data from this subsurface investigation, the following conclusions and recommendations are provided.

### 8.1. Conclusions

- Fill soil contaminated with lead exists throughout the site. Shallow soils (1 - 5.0 feet bgs) exhibit the highest concentrations, and meet the criteria defined as California hazardous waste. Soils deeper than 5-feet bgs were below these criteria. The highest reported lead result was 610 mg/kg within boring B-11 at 1-foot bgs.

- The northwest portion of the site, within boring B-6, exhibited the highest lead and TPH concentrations in shallow soil (at 3.5 feet bgs).
- Title 22 Metals analytical results, except for lead, appear to be within the range of background concentrations.
- Soil containing TPH reported only in samples NM-B-03-12.0 and NM-B06-3.5 as 13 and 160 mg/kg, respectively.
- Soil samples tested for VOCs and PAHs were non-detect for these constituents.
- The only VOC detected in groundwater samples was chloroform in samples NM -B-03 and NM-B-08 (11 and 5.3 µ./L, respectively). These results may indicate laboratory contamination.

### 8.2. Recommendations

Based upon the site assessment activities conducted and described herein, the following recommendations are provided at this time:

- Based upon the site assessment activities conducted and described herein, Ninyo & Moore recommends that a plan be prepared that presents procedures for soil excavation monitoring, characterization, and verification sampling and analysis; waste handling, disposal, and tracking; addressing unknown hazardous waste issues that may be encountered; and site and community health and safety

It should be noted that at three of the boring locations, refusal was met at approximately 8-inches below the top of the concrete slab within the building. Based on field observations and verbal information provided by the property owner subsequent to attempting these borings, it is suspected that a secondary concrete foundation slab or concrete ramp exists in these locations. Based on the findings of the Phase I ESA and this Phase II ESA, there are no obvious indications that the soil or groundwater beneath these inaccessible locations represents a significant environmental issue. However, if CCDC would like to have additional information regarding soil conditions beneath the lower slab, Ninyo & Moore can submit a proposal to re-core these areas and attempt to collect soil samples using hand auger methods.

## 9. LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consult-

ants performing similar work in the project area. No warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further assessment of potential adverse environmental impacts from past on-site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between sampling locations. Variations in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory which is certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions, recommendations, and opinions are based on an analysis of the observed site conditions. It should be understood that the conditions of a site could change with time as a result of natural processes or the activities of man at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

This report is intended exclusively for use by the client. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the client is undertaken at said parties' sole risk

## 10. SELECTED REFERENCES

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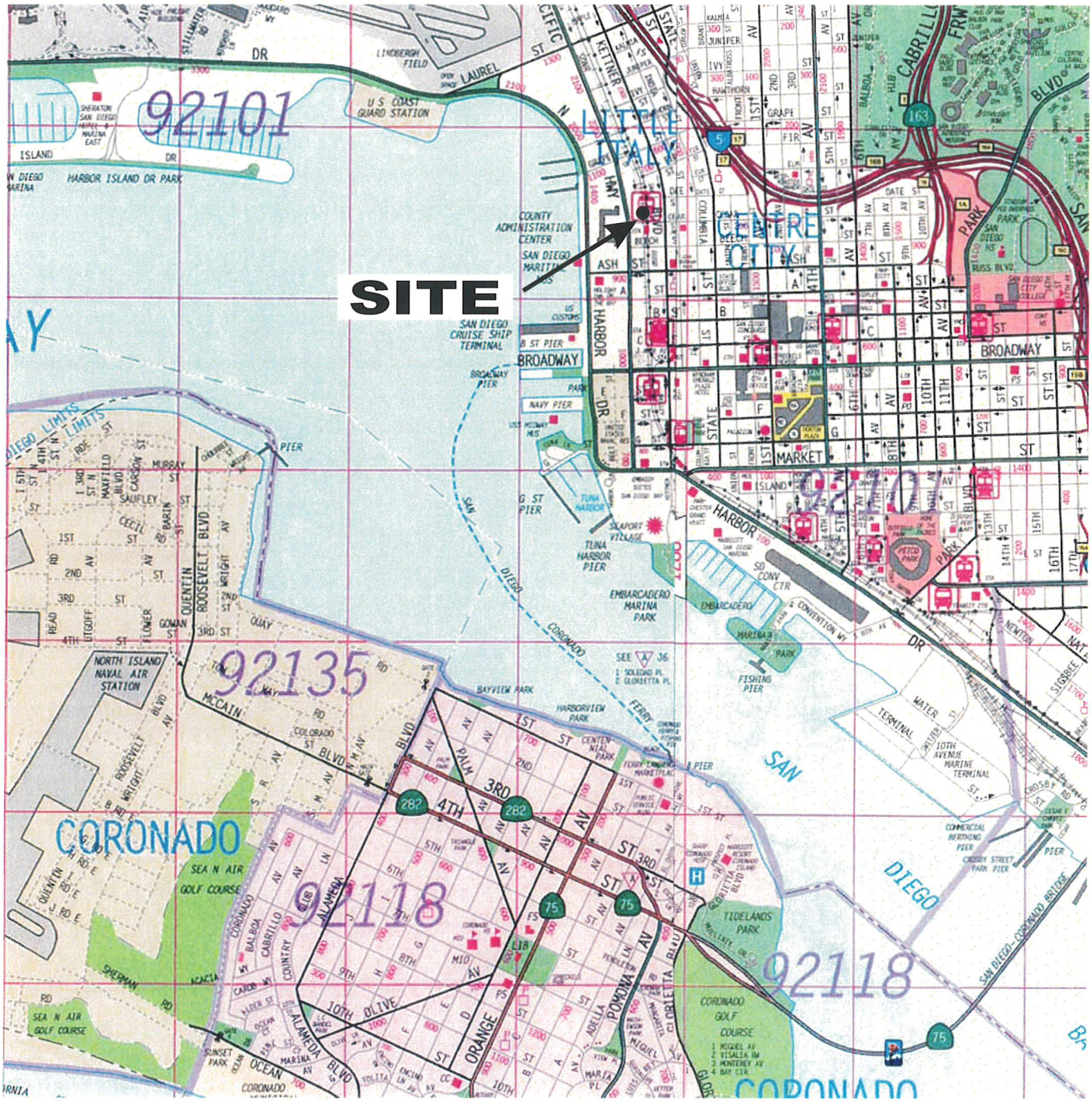



REFERENCE: 2005 THOMAS GUIDE FOR SAN DIEGO COUNTY, STREET GUIDE AND DIRECTORY

0 2400 4800

Approximate Scale in Feet

N

| Ninyo & Moore | SITE LOCATION MAP | FIGURE |
|---|---|---|
| PROJECT NO. 105740002 / DATE 6/06 | MONARCH SCHOOL<br>808 W. CEDAR STREET<br>SAN DIEGO, CALIFORNIA | 1 |

105740002 F slm Fig 1

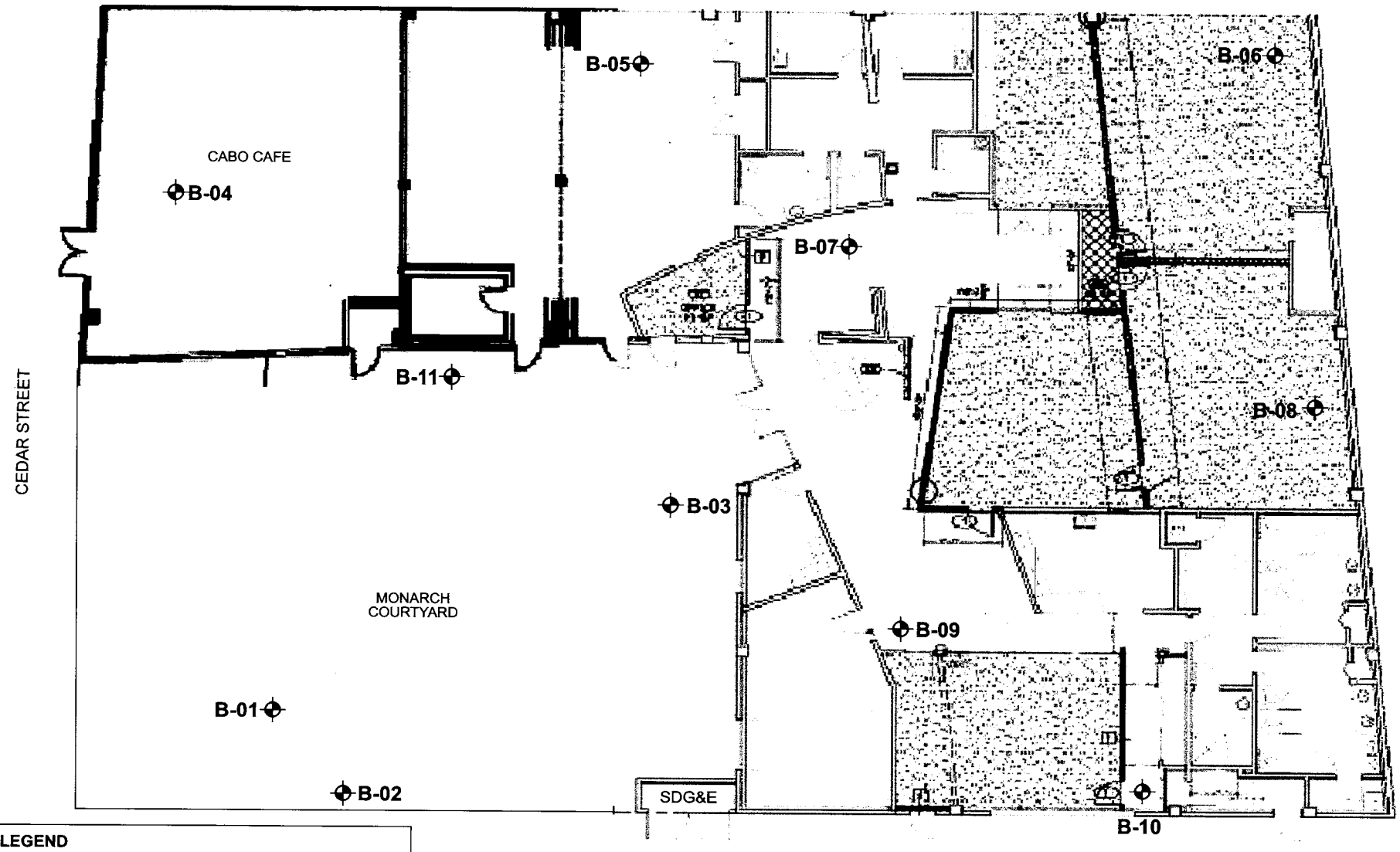
**LEGEND**

Approximate location of site boundary

N

70 35 0 70 Feet

| Ninyo & Moore | | SITE AND VICINITY MAP | FIGURE |
|---|---|---|---|
| PROJECT NO. | DATE | MONARCH SCHOOL<br>808 W. CEDAR STREET<br>SAN DIEGO, CALIFORNIA | 2 |
| 105740002 | 6/06 | | |



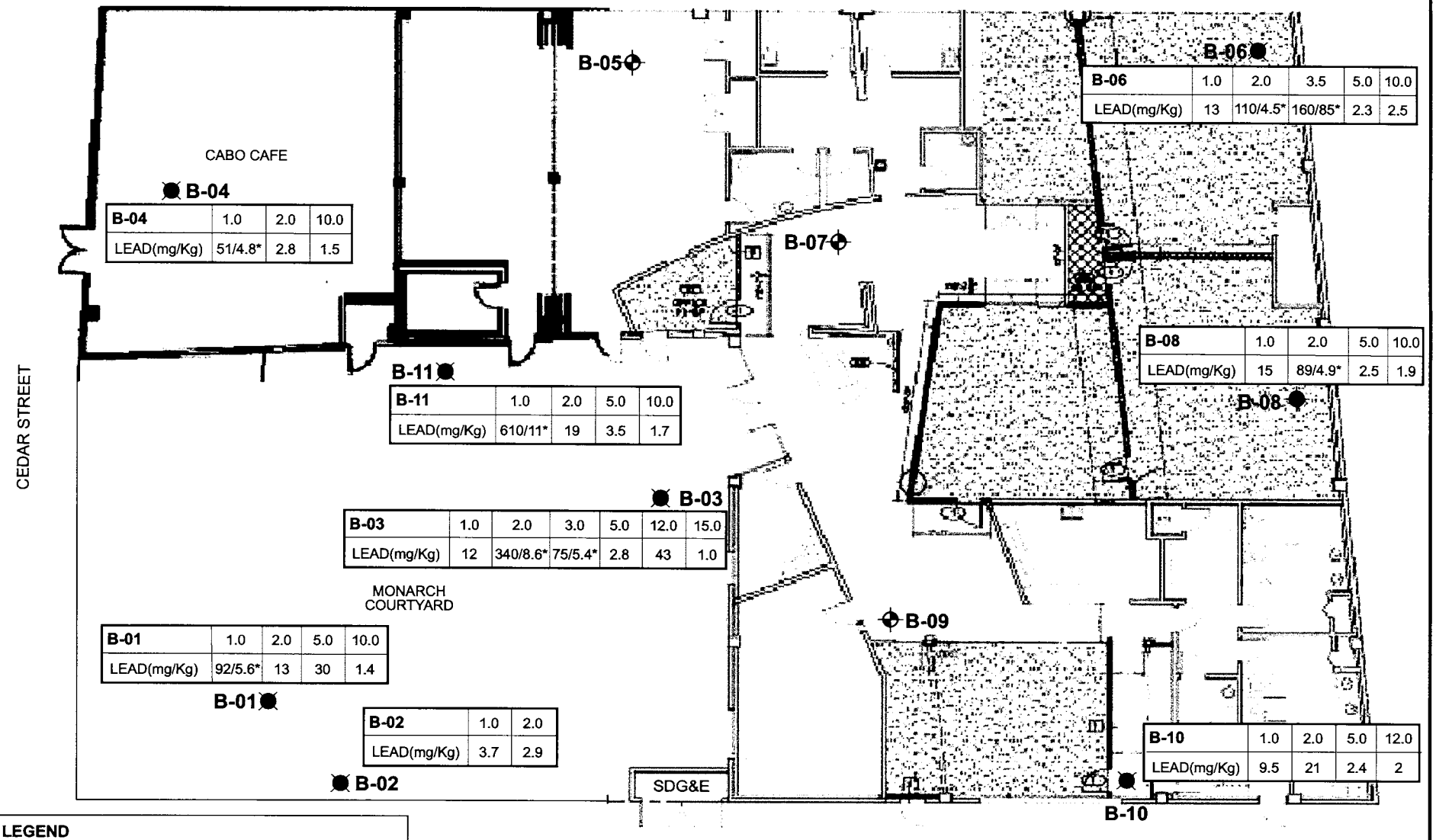

| LEGEND | |
|---|---|
| B-11 | Boring location |

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

NOT TO SCALE

| Ninyo & Moore | BORING LOCATION MAP | FIGURE |
|---|---|---|
| PROJECT NO. 105740002 / DATE 6/06 | MONARCH SCHOOL<br>808 W. CEDAR STREET<br>SAN DIEGO, CALIFORNIA | 3 |

105740002 Fig3 BLM.cdr




| B-04 | 1.0 | 2.0 | 10.0 |
|---|---|---|---|
| LEAD(mg/Kg) | 51/4.8* | 2.8 | 1.5 |

| B-11 | 1.0 | 2.0 | 5.0 | 10.0 |
|---|---|---|---|---|
| LEAD(mg/Kg) | 610/11* | 19 | 3.5 | 1.7 |

| B-03 | 1.0 | 2.0 | 3.0 | 5.0 | 12.0 | 15.0 |
|---|---|---|---|---|---|---|
| LEAD(mg/Kg) | 12 | 340/8.6* | 75/5.4* | 2.8 | 43 | 1.0 |

| B-01 | 1.0 | 2.0 | 5.0 | 10.0 |
|---|---|---|---|---|
| LEAD(mg/Kg) | 92/5.6* | 13 | 30 | 1.4 |

| B-02 | 1.0 | 2.0 |
|---|---|---|
| LEAD(mg/Kg) | 3.7 | 2.9 |

| B-06 | 1.0 | 2.0 | 3.5 | 5.0 | 10.0 |
|---|---|---|---|---|---|
| LEAD(mg/Kg) | 13 | 110/4.5* | 160/85* | 2.3 | 2.5 |

| B-08 | 1.0 | 2.0 | 5.0 | 10.0 |
|---|---|---|---|---|
| LEAD(mg/Kg) | 15 | 89/4.9* | 2.5 | 1.9 |

| B-10 | 1.0 | 2.0 | 5.0 | 12.0 |
|---|---|---|---|---|
| LEAD(mg/Kg) | 9.5 | 21 | 2.4 | 2 |

**LEGEND**

B-11 ● Approximate location of boring; lead reported

B-09 ⊕ Boring had refusal

* Wet Method Used, Result in mg/L

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

N

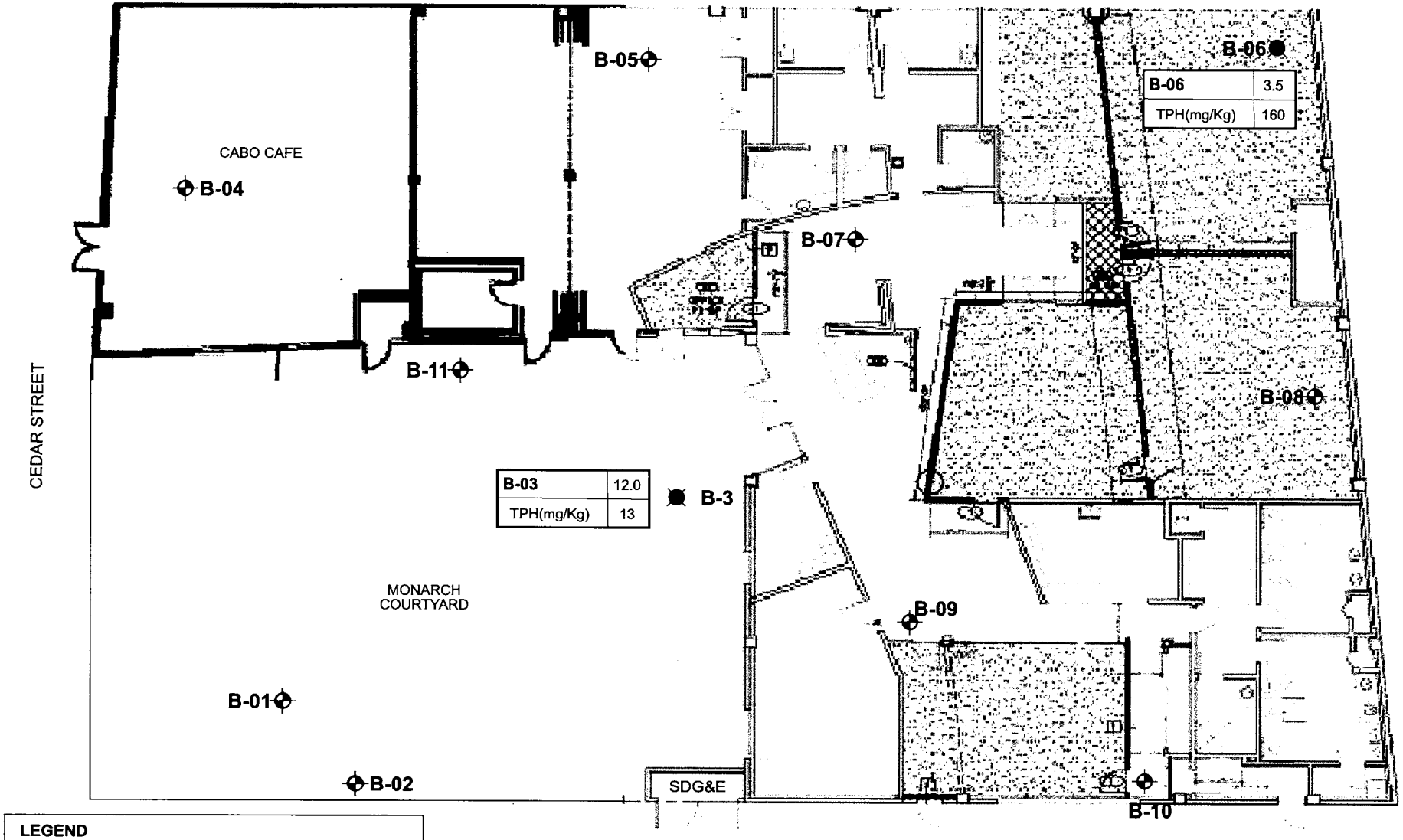
NOT TO SCALE

BORING ID → B-11 | 1.0 | 2.0 ← DEPTH

ANALYTE → LEAD(mg/Kg) | 610 | 19 ← RESULTS

| Ninyo & Moore | SOIL SAMPLE ANALYTICAL RESULTS-LEAD | FIGURE |
|---|---|---|
| PROJECT NO. 105740002 / DATE 6/06 | MONARCH SCHOOL<br>808 W. CEDAR STREET<br>SAN DIEGO, CALIFORNIA | 4 |

105740002 Lead fig 4.cdr




| LEGEND | |
|---|---|
| B-03 | Approximate location of boring; TPH reported |
| B-09 | Boring had refusal |

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

BORING ID — DEPTH

| B-06 | 3.5 |
|---|---|
| TPH(mg/Kg) | 160 |

ANALYTE — RESULTS

| Ninyo & Moore | | SOIL SAMPLE ANALYTICAL RESULTS-TPH | FIGURE |
|---|---|---|---|
| PROJECT NO. | DATE | MONARCH SCHOOL<br>808 W. CEDAR STREET<br>SAN DIEGO, CALIFORNIA | 5 |
| 105740002 | 6/06 | | |

105740002 Fig5 TPH.cdr

# Table 1
## Soil Analytical Results
## Monarch School Site, San Diego, California
## April 2006

| Sample ID | Sample Matrix | Date Sampled | TPH $C_8$-$C_{40}$ | VOCs | PAHs | Mercury by Cold Vapor Technique | Title 22 Metals | Lead | Lead by WET | Lead by TCLP |
|---|---|---|---|---|---|---|---|---|---|---|
| **Units** | | | (mg/kg) | (µg/kg) | (µg/kg) | (mg/kg) | | | mg/L | |
| **EPA Method** | | | *8015B (M)* | *8260B* | *8270C* | *7471A* | *6010B / 7420* | | | |
| NM-B06-1.0 | Soil | 4/29/2006 | NA | NA | NA | NA | NA | **13** | NA | NA |
| NM-B06-2.0 | Soil | 4/29/2006 | NA | NA | NA | NA | NA | **110** | **4.5** | NA |
| NM-B06-3.5 | Soil | 4/29/2006 | **160*** | ND | ND | **0.20** | **Lead = 150** | **160** | **85** | ND |
| NM-B06-5.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | **2.3** | NA | NA |
| NM-B06-10.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | **2.5** | NA | NA |
| NM-B06-15.0 | Soil | 4/30/2006 | ND | ND | ND | ND | **Lead = 1.5** | NA | NA | NA |
| NM-B06-20.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | NA | NA | NA |
| NM-B08-1.0 | Soil | 4/29/2006 | NA | NA | NA | NA | NA | **15** | NA | NA |
| NM-B08-2.0 | Soil | 4/29/2006 | NA | NA | NA | NA | NA | **89** | **4.9** | NA |
| NM-B08-5.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | **2.5** | NA | NA |
| NM-B08-5.0D** | Soil | 4/30/2006 | ND | ND | NA | NA | NA | NA | NA | NA |
| NM-B08-10.0 | Soil | 4/30/2006 | ND | ND | ND | ND | **Lead = 1.9** | NA | NA | NA |
| NM-B08-15.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | ND | NA | NA |
| NM-B08-20.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | NA | NA | NA |
| NM-B10-1.0 | Soil | 4/29/2006 | NA | NA | NA | NA | NA | **9.5** | NA | NA |
| NM-B10-2.0 | Soil | 4/29/2006 | NA | NA | NA | NA | NA | **21** | NA | NA |
| NM-B10-5.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | **2.4** | NA | NA |
| NM-B10-12.0 | Soil | 4/30/2006 | ND | ND | ND | ND | **Lead = 2.0** | NA | NA | NA |
| NM-B10-15.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | NA | NA | NA |
| NM-B10-20.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | NA | NA | NA |

Ninyo & Moore

# Table 1

## Soil Analytical Results

## Monarch School Site, San Diego, California

## April 2006

| Sample ID | Sample Matrix | Date Sampled | TPH $C_8$-$C_{40}$ | VOCs | PAHs | Mercury by Cold Vapor Technique | Title 22 Metals | Lead | Lead by WET | Lead by TCLP |
|---|---|---|---|---|---|---|---|---|---|---|
| **Units** | | | (mg/kg) | (µg/kg) | (µg/kg) | (mg/kg) | | | mg/L | |
| **EPA Method** | | | *8015B (M)* | *8260B* | *8270C* | *7471A* | *6010B / 7420* | | | |
| NM-B11-1.0 | Soil | 4/29/2006 | NA | NA | NA | NA | NA | **610** | **11** | ND |
| NM-B11-2.0 | Soil | 4/29/2006 | NA | NA | NA | NA | NA | **19** | NA | NA |
| NM-B11-5.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | **3.5** | NA | NA |
| NM-B11-10.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | **1.7** | NA | NA |
| NM-B11-15.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | ND | NA | NA |
| NM-B11-20.0 | Soil | 4/30/2006 | ND | ND | NA | NA | NA | NA | NA | NA |

**Notes:**

| | | | |
|---|---|---|---|
| TPH | Total Petroleum Hydrocarbons | TCLP | Toxicity Characteristic Leaching Procedure |
| VOCs | Volatile Organic Compounds | µg/Kg | micrograms/kilogram |
| PAHs | Polynuclear Aromatic Hydrocarbons | mg/Kg | milligrams/kilogram |
| ND | Not Detected at the Reporting limit | * | $C_{18}$-$C_{28}$ Total |
| NA | Not Analyzed | ** | Duplicate sample |
| WET | Waste Extraction Technique | | |

# APPENDIX A
# GEOPHYSICAL SURVEY

SOUTHWEST
GEOPHYSICS, INC.
YOUR SUBSURFACE SOLUTION

May 1, 2006
Project No. 106017

Mr. Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, California 92123

Subject: Geophysical Evaluation
Monarch School
808 W. Cedar Street
San Diego, California

Dear Mr. Schneider:

In accordance with your authorization, we have performed a geophysical survey services at the subject site (Figure 1). The purpose of the survey was to assess the presence of utilities at 11 proposed boring locations at the property. This report presents our survey methodology, equipment used, analysis, and findings.

The subject property consists of a single story "L" shaped structure with a relatively small concrete paved patio area. The majority of the building is occupied by the Monarch School, with a small portion of the building occupied by a Mexican restaurant. It is our understanding that the site is currently under evaluation for the future construction of a new school building.

Our scope of services for the project included performance of geophysical surveys in the areas of the proposed borings, analysis of the data obtained, and preparation of this letter-report presenting our findings. The geophysical evaluation included the use of a GSSI SIR 3000 ground penetrating radar (GPR) with a 400 MHz transducer, Schonstedt GA-52C magnetic gradiometer, and Metrotech 9860 line tracer.

The proposed boring locations were selected by your office and marked on the ground surface with paint prior to our site visit (Figures 2a & 2b). The primary scope of our evaluation was to delineate subsurface utilities in roughly a 10-foot radius around each of the proposed soil boring locations. Traverses using the instruments described above were conducted over each of the areas on random profiles, which were oriented to optimally recognize buried structures. Where risers were present, the line tracer was used to trace out the lines.

Our interpretation of the collected data took place in real time as the survey progressed, and the findings of our evaluation were marked on the ground and reported to you at the completion of the survey. The results of our surveys indicate that several utility lines are present onsite, some of which are in close proximity to the proposed boreholes. Accordingly, a few of the borehole locations were moved slightly, away from the detected lines. It should be noted that the GPR penetration depth was on the order of 3 feet. Therefore, nonmetallic pipes/lines deeper than 3 feet could not be detected.

The field evaluation and geophysical analyses presented in this report have been conducted in general accordance with current practice and the standard of care exercised by consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be present. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface surveying will be performed upon request. Please note that our evaluation was limited to the assessment of the possible presence of detectable buried utilities, and that "USA" or "Dig Alert" should also be contacted prior to conducting subsurface exploration activities. In addition, we recommend that available utility plans/drawings of the project site be reviewed as appropriate.

Southwest Geophysics, Inc. should be contacted if the reader requires additional information or has questions regarding the content, interpretations presented, or completeness of this document.

This report is intended exclusively for use by the client. Any use or reuse of this report by parties other than the client is undertaken at said parties' sole risk.

We appreciate the opportunity to be of service on this project. Should you have any questions related to this report, please contact the undersigned at your convenience.

Sincerely,
**SOUTHWEST GEOPHYSICS, INC.**

Patrick F. Lehrmann, P.G., R.Gp.
Principal Geologist/Geophysicist

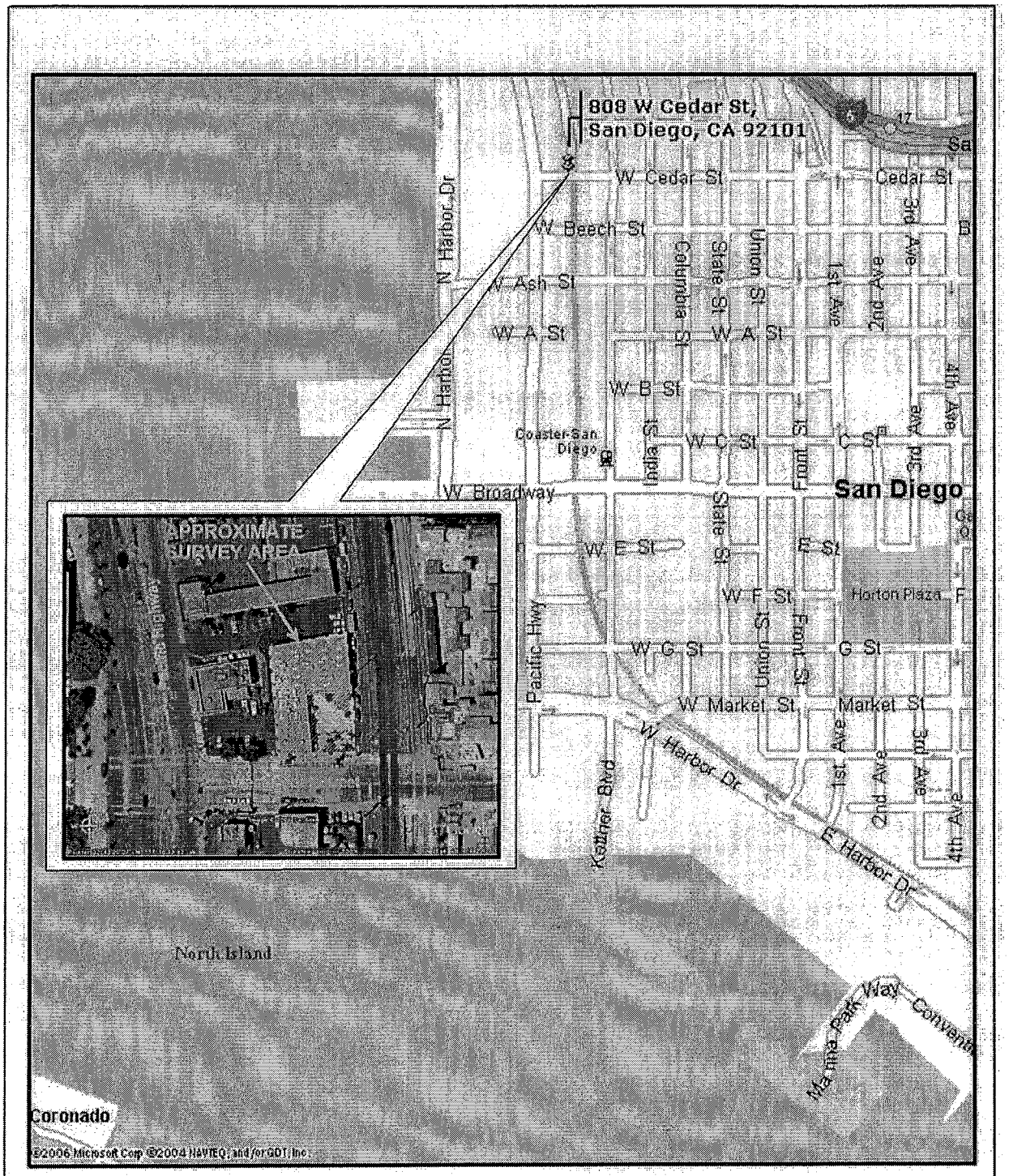
Hans van de Vrugt, C.E.G., R.Gp.
Principal Geologist/Geophysicist

REGISTERED GEOPHYSICIST
Hans van de Vrugt
No 1012
Exp. 2/21/08
STATE OF CALIFORNIA

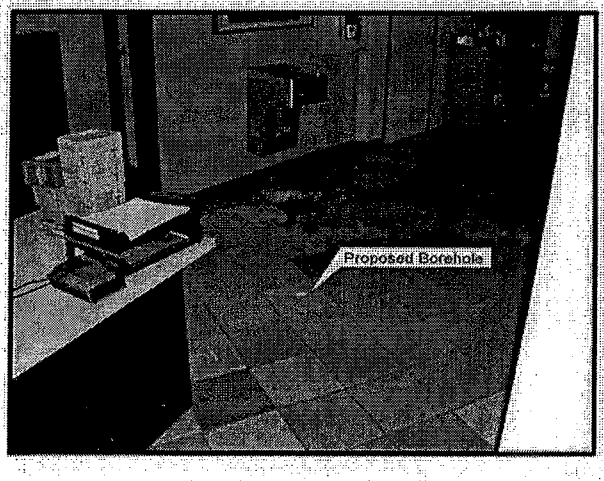
PFL/HV/hv

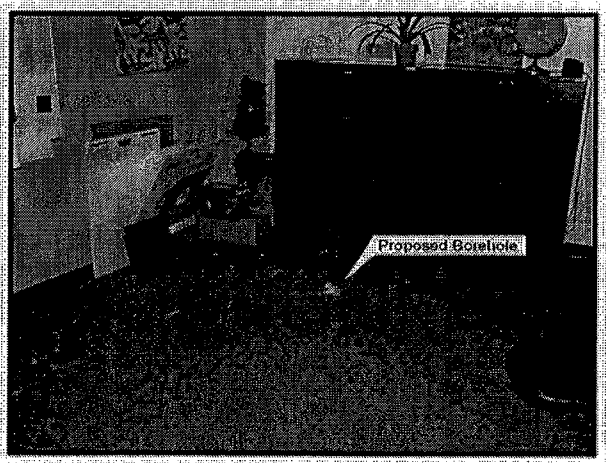
Attachments: Figure 1 – Site Location Map
Figures 2a & 2b – Site Photographs

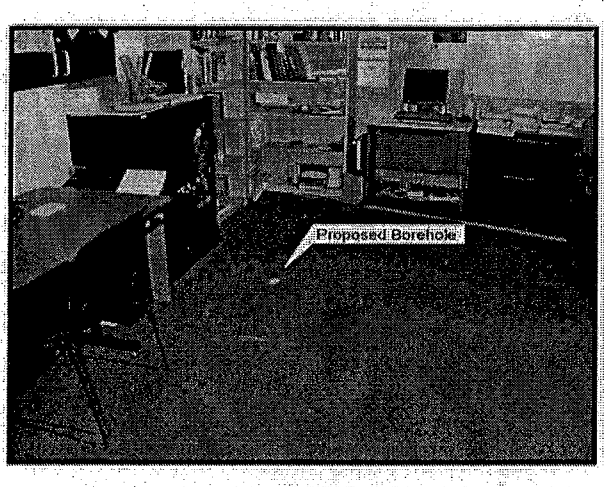
Distribution: Addressee (electronic)

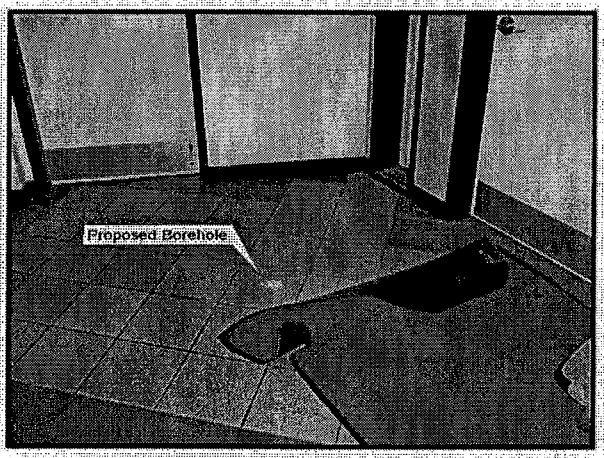


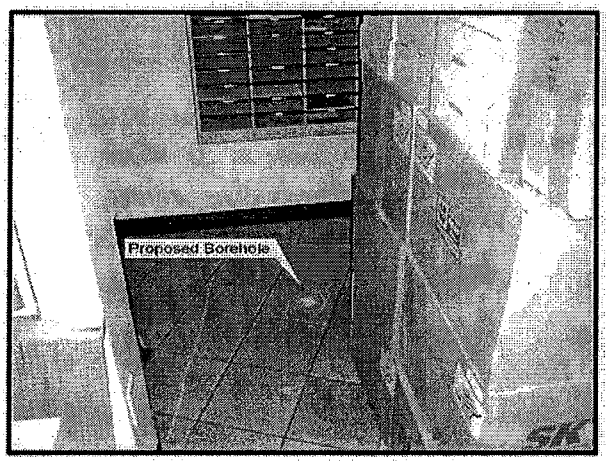

| SITE LOCATION MAP | N | Monarch School<br>808 W. Cedar Street<br>San Diego, California | SOUTHWEST GEOPHYSICS INC. |
|---|---|---|---|
| | | Project No.: 106017 Date: 05/08 | Figure 1 |

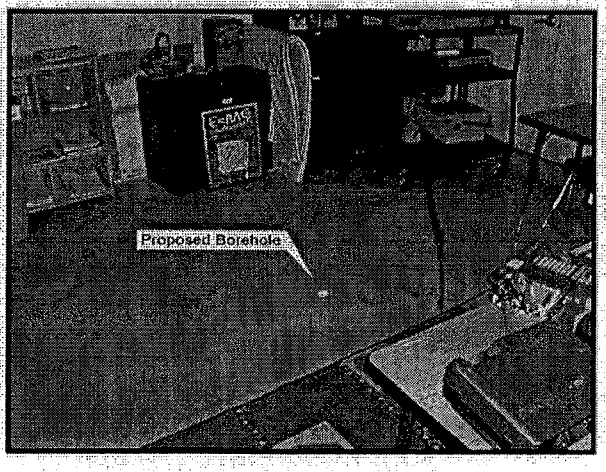


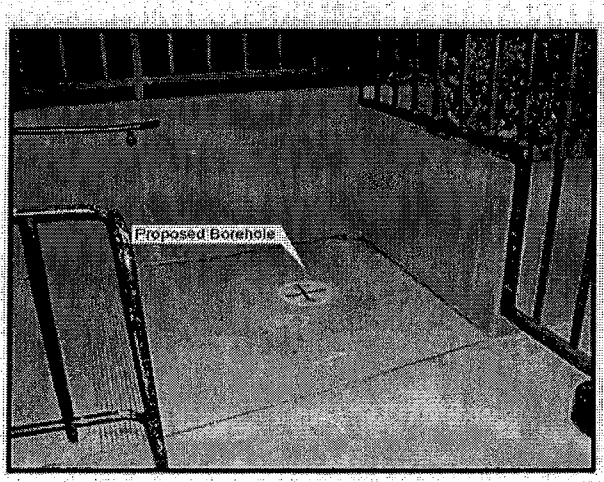



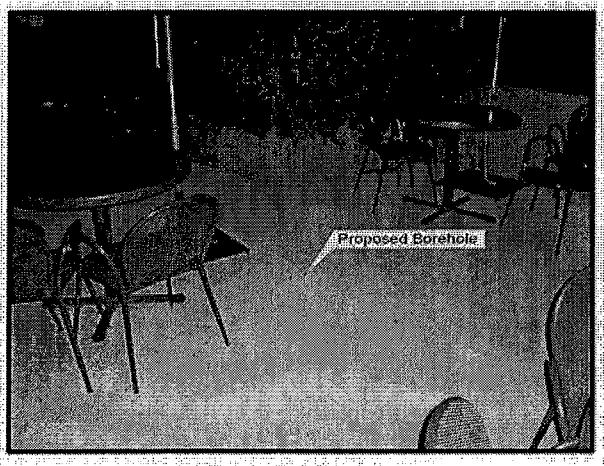



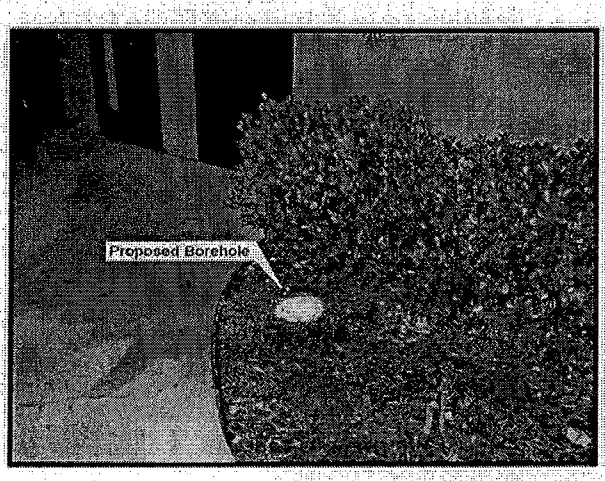



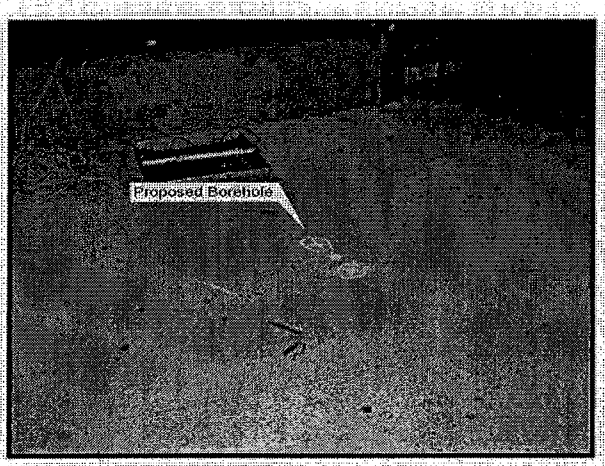



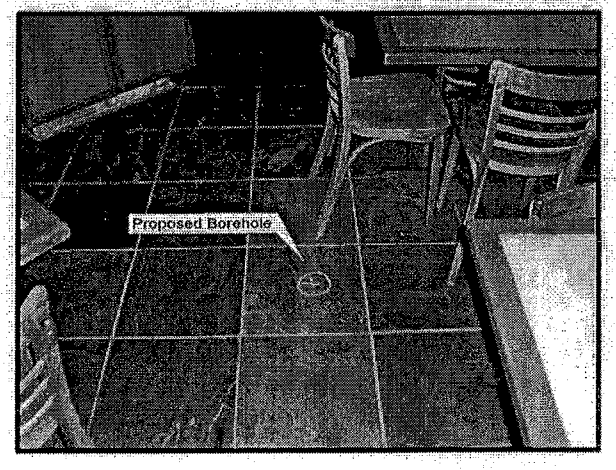

| SITE PHOTOGRAPHS | Monarch School<br>808 W. Cedar Street<br>San Diego, California | SOUTHWEST GEOPHYSICS INC |
|---|---|---|
| | Project No.: 106017 / Date: 05/06 | Figure 2a |




**SITE PHOTOGRAPHS**

Monarch School
808 W. Cedar Street
San Diego, California

Project No.: 106017 | Date: 05/06

SOUTHWEST GEOPHYSICS INC

Figure 2b

# APPENDIX B
# BORING LOGS

# BORING LOG EXPLANATION SHEET

| DEPTH (feet) | SAMPLES: Bulk | SAMPLES: Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | SYMBOL | CLASSIFICATION U.S.C.S. | |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | Bulk sample. |
| | | | | | | | | Modified split-barrel drive sampler. |
| | | | | | | | | No recovery with modified split-barrel drive sampler. |
| | | | | | | | | Sample retained by others. |
| | | | | | | | | Standard Penetration Test (SPT). |
| 5 | | | | | | | | No recovery with a SPT. |
| | | | XX/XX | | | | | Shelby tube sample. Distance pushed in inches/length of sample recovered in inches. |
| | | | | | | | | No recovery with Shelby tube sampler. |
| | | | | | | | | Continuous Push Sample. |
| | | | | ⚲ | | | | Seepage. |
| 10 | | | | ▽ | | | | Groundwater encountered during drilling. |
| | | | | ▼ | | | | Groundwater measured after drilling. |
| | | | | | | | SM | ALLUVIUM: Solid line denotes unit change. |
| | | | | | | | | Dashed line denotes material change. |
| | | | | | | | | Attitudes: Strike/Dip<br>b: Bedding<br>c: Contact<br>j: Joint<br>f: Fracture<br>F: Fault<br>cs: Clay Seam<br>s: Shear<br>bss: Basal Slide Surface<br>sf: Shear Fracture<br>sz: Shear Zone<br>sbs: Sheared Bedding Surface |
| 15 | | | | | | | | |
| 20 | | | | | | | | The total depth line is a solid line that is drawn at the bottom of the boring. |

Ninyo & Moore

**BORING LOG**

EXPLANATION OF BORING LOG SYMBOLS

| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| | Rev. 01/03 | |

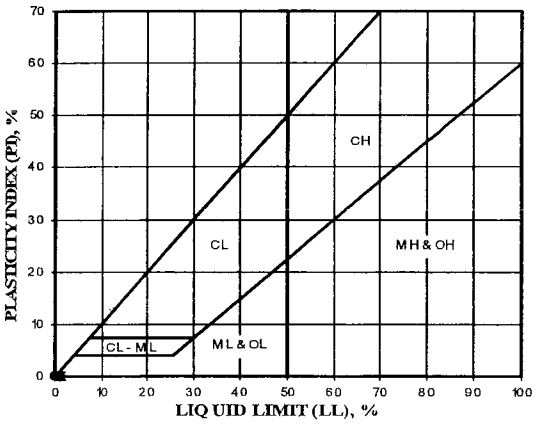
# U.S.C.S. METHOD OF SOIL CLASSIFICATION

| MAJOR DIVISIONS | | SYMBOL | TYPICAL NAMES |
|---|---|---|---|
| COARSE-GRAINED SOILS (More than 1/2 of soil >No. 200 sieve size) | GRAVELS (More than 1/2 of coarse fraction > No. 4 sieve size) | GW | Well graded gravels or gravel-sand mixtures, little or no fines |
| | | GP | Poorly graded gravels or gravel-sand mixtures, little or no fines |
| | | GM | Silty gravels, gravel-sand-silt mixtures |
| | | GC | Clayey gravels, gravel-sand-clay mixtures |
| | SANDS (More than 1/2 of coarse fraction <No. 4 sieve size) | SW | Well graded sands or gravelly sands, little or no fines |
| | | SP | Poorly graded sands or gravelly sands, little or no fines |
| | | SM | Silty sands, sand-silt mixtures |
| | | SC | Clayey sands, sand-clay mixtures |
| FINE-GRAINED SOILS (More than 1/2 of soil <No. 200 sieve size) | SILTS & CLAYS Liquid Limit <50 | ML | Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with |
| | | CL | Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean |
| | | OL | Organic silts and organic silty clays of low plasticity |
| | SILTS & CLAYS Liquid Limit >50 | MH | Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts |
| | | CH | Inorganic clays of high plasticity, fat clays |
| | | OH | Organic clays of medium to high plasticity, organic silty clays, organic silts |
| HIGHLY ORGANIC SOILS | | Pt | Peat and other highly organic soils |

## GRAIN SIZE CHART

| CLASSIFICATION | RANGE OF GRAIN SIZE | |
|---|---|---|
| | U.S. Standard Sieve Size | Grain Size in Millimeters |
| BOULDERS | Above 12" | Above 305 |
| COBBLES | 12" to 3" | 305 to 76.2 |
| GRAVEL | 3" to No. 4 | 76.2 to 4.76 |
| Coarse | 3" to 3/4" | 76.2 to 19.1 |
| Fine | 3/4" to No. 4 | 19.1 to 4.76 |
| SAND | No. 4 to No. 200 | 4.76 to 0.075 |
| Coarse | No. 4 to No. 10 | 4.76 to 2.00 |
| Medium | No. 10 to No. 40 | 2.00 to 0.420 |
| Fine | No. 40 to No. 200 | 0.420 to 0.075 |
| SILT & CLAY | Below No. 200 | Below 0.075 |

## PLASTICITY CHART




Ninyo & Moore

U.S.C.S. METHOD OF SOIL CLASSIFICATION

DATE DRILLED 04/29/06 BORING NO. B-1

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | CONCRETE: ≅ 4" thick. |
| | | | | | 0.4 | | SM | FILL: Dark brown, moist, loose, silty SAND; some gravel clasts up to 1/2" diameter. |
| | | | | | 0.0 | | | Light brown. |
| 5 | | | | | 0.0 | | | Light brown, moist, dense, mottled with oxidized zones, small amounts of burn ash present. |
| | | | | | | | | BAY POINT FORMATION: Light brown to light gray, moist, fine-grained, poorly graded SANDSTONE; weak cementation. |
| 10 | | | | | 0.0 | | | Light brown to brown. |
| 15 | | | ▽ | | 0.0 | | | Light gray to light brown, saturated. |
| 20 | | | | | | | | |

Ninyo & Moore

**BORING LOG**

Monarch School
808 West Cedar St., San Diego, California

| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| 105740002 | 05/06 | |

DATE DRILLED 04/29/06 BORING NO. B-1

GROUND ELEVATION ≅ 20' MSL SHEET 2 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 20 | | | | | 0.0 | | | BAY POINT FORMATION: (Continued)<br>Light gray to light brown, saturated. |

Total Depth = 20.5 feet bgs.
Groundwater encountered at ≅ 15.0 feet bgs during drilling.
Boring backfilled with hydrated bentonite chips and capped with concrete on 04/29/06.
Bentonite: 0.11 cubic feet
Water: ≅ 5 gallons
Concrete 0.03 cubic feet

25

30

35

40

PROFESSIONAL GEOLOGIST
VICTOR J. SCHNEIDER
No. 7914
Exp. 3/07
STATE OF CALIFORNIA

Ninyo & Moore

**BORING LOG**

Monarch School
808 West Cedar St., San Diego, California

| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| 105740002 | 05/06 | |

DATE DRILLED 04/29/06 BORING NO. B-2

GROUND ELEVATION ≅ 21' MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | CONCRETE: ≅ 4" thick. |
| | | | | | 0.0 | | SM | FILL:<br>Brown to dark brown, moist, loose, silty SAND; fine sand. |
| 5 | | | | | | | | Brown to reddish-brown. |
| | | | | | | | | BAY POINT FORMATION:<br>Light brown to tan, dry, weak cementation, fine-grained SANDSTONE. |
| 10 | | | | | | | | Very dense, refusal, no sample collected. |
| | | | | | | | | Total Depth = 8.5 feet bgs.<br>Groundwater not encountered during drilling.<br>Boring backfilled with hydrated bentonite chips and capped with concrete on 04/29/06.<br>Bentonite: 0.11 cubic feet<br>Water: ≅ 5 gallons<br>Concrete 0.03 cubic feet |
| 15 | | | | | | | | |
| 20 | | | | | | | | |

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**BORING LOG**

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| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| 105740002 | 05/06 | |

DATE DRILLED 04/29/06 BORING NO. B-3

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | CONCRETE: ≅ 4" thick. |
| | | | | | 0.0 | | SM | FILL:<br>Brown, moist, loose, silty, SAND; fine sand. |
| | | | | | 0.0 | | | |
| 5 | | | | | 0.0 | | | Brown, moist, medium dense, small amount of burn ash present. |
| 10 | | | | | | | | Dense. |
| | | | | | | | | Burn ash observed, approximately 1" in thickness. |
| | | | | | 0.0 | | | BAY POINT FORMATION:<br>Light brown, moist, weak cementationm fine-grained SANDSTONE; burn ash observed in upper portion of sample. |
| 15 | | | | | 0.0 | | | Light tan to light gray. |
| | | | ▽ | | | | | Wet. |
| 20 | | | | | | | | |

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| PROJECT NO. | DATE | FIGURE |
|---|---|---|
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DATE DRILLED 04/29/06 BORING NO. B-3

GROUND ELEVATION ≅ 20' MSL SHEET 2 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES: Bulk | SAMPLES: Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|---|
| 20 | | | | | | 0.0 | | | BAY POINT FORMATION: (Continued)<br>Light tan to light gray, moist, weak cementation, fine-grained SANDSTONE. |
| | | | | | | | | | Total Depth = 22.0 feet bgs.<br>Groundwater encountered at ≅ 19.0 feet bgs during drilling.<br>Boring backfilled with hydrated bentonite chips and capped with concrete on 04/29/06.<br>Bentonite: 0.12 cubic feet<br>Water: ≅ 5 gallons<br>Concrete 0.03 cubic feet |
| 25 | | | | | | | | | |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |
| 40 | | | | | | | | | |

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| PROJECT NO. | DATE | FIGURE |
|---|---|---|
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DATE DRILLED 04/29/06 BORING NO. B-4

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | CONCRETE: ≅ 4-5" thick. |
| | | | | | 0.0 | | SM | FILL: Light brown, moist, loose, silty SAND; fine sand; concrete clasts present up to 3" in diameter. |
| 5 | | | | | 0.0 | | | Brown, medium dense, indications of burn ash present (small blackened areas within sample). |
| | | | | | | | | Poorly graded. |
| 10 | | | | | 0.0 | | | BAY POINT FORMATION: Light brown, moist, dense, fine sand with silt. |
| | | | | | | | | Medium dense. |
| | | | | | | | | Little to no fines. |
| 15 | | | | | 0.0 | | | |
| 20 | | | | | | | | |

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DATE DRILLED 04/29/06 BORING NO. B-4

GROUND ELEVATION ≅ 20' MSL SHEET 2 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES Bulk | SAMPLES Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|---|
| 20 | | | | ▽ | | 0.1 | | | BAY POINT FORMATION: (Continued)<br>Light brown, saturated, weak cementation, fine-grained SANDSTONE; fine sand; micaceous; little fines. |
| 25 | | | | | | | | | Total Depth = 25.0 feet bgs.<br>Groundwater encountered at ≅ 20.0 feet during drilling.<br>Boring backfilled with hydrated bentonite chips and capped with concrete on 04/29/06.<br>Bentonite: 0.11 cubic feet<br>Water: ≅ 5 gallons<br>Concrete 0.03 cubic feet |
| 30 | | | | | | | | | |
| 35 | | | | | | | | | |
| 40 | | | | | | | | | |

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|---|---|---|
| 105740002 | 05/06 | |

DATE DRILLED 04/29/06 BORING NO. B-5

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES: Bulk | SAMPLES: Driven | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | | CONCRETE: ≅ 3" thick; second concrete slab encounterd at 8" below concrete surface. |
| | | | | | | | | | Total Depth = 8.0 inches bgs. |
| | | | | | | | | | Groundwater not encountered during drilling. |
| | | | | | | | | | No samples taken or soil removed. |
| | | | | | | | | | Boring abandoned with concrete; concrete capped. |
| | | | | | | | | | Concrete: 0.02 cubic feet |
| 5 | | | | | | | | | |
| 10 | | | | | | | | | |
| 15 | | | | | | | | | |
| 20 | | | | | | | | | |

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DATE DRILLED 04/29/06-04/30/06 BORING NO. B-6

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | CONCRETE: ≅ 4" thick. |
| | | | | | 0.0 | | SM | FILL:<br>Brown, moist, loose, silty SAND; fine sand. |
| | | | | | 0.0 | | | Burn ash present in small clasts up to 1/2" diamater. |
| | | | | | | | | Burn ash approximately 6" thick. |
| 5 | | | | | 0.0 | | | Dark brown; burn ash clasts up to 1/2" diameter observed to 6' bgs. |
| 10 | | | | | 0.0 | | | Light brown. |
| | | | | | | | | BAY POINT FORMATION:<br>Gray, moist, weak cementation, fine-grained SANDSTONE; wet; strong petroleum odor. |
| 15 | | | ▽ | | 22.0 | | | Saturated. |
| 20 | | | | | | | | |

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DATE DRILLED 04/29/06-04/30/06 BORING NO. B-6

GROUND ELEVATION ≅ 20' MSL SHEET 2 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 20 | | | | | 0.6 | | | BAY POINT FORMATION: (Continued)<br>Light gray, moist, weak cementation, fine-grained SANDSTONE; wet; petroleum odor. |
| 25 | | | | | | | | Total Depth = 22.0 feet bgs.<br>Groundwater encountered at ≅ 15.0 feet bgs during drilling.<br>Boring backfilled with hydrated bentonite chips and capped with concrete on 04/30/06.<br>Bentonite: 0.13 cubic feet<br>Water: ≅ 5 gallons<br>Concrete: 0.03 cubic feet |
| 30 | | | | | | | | |
| 35 | | | | | | | | |
| 40 | | | | | | | | |

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DATE DRILLED 04/29/06-04/30/06 BORING NO. B-7

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | SM | CONCRETE: ≅ 4" thick<br>Gray, moist, loose, silty SAND, fine sand. |
| | | | | | | | | Total Depth = 1.5 feet bgs.<br>Groundwater not encountered during drilling.<br>No samples collected.<br>Boring abandoned; second concrete slab encountered at 8" below concrete surface.<br>Backfilled with concrete.<br>Concrete: ≅ 0.01 cubic feet |
| 5 | | | | | | | | |
| 10 | | | | | | | | |
| 15 | | | | | | | | |
| 20 | | | | | | | | |

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| PROJECT NO. | DATE | FIGURE |
|---|---|---|
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DATE DRILLED 04/29/06-04/30/06 BORING NO. B-8

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | CONCRETE: ≅ 4" concrete core. |
| | | | | | 0.0 | | SM | FILL:<br>Brown, moist, loose, silty SAND; fine sand |
| | | | | | 0.0 | | | |
| 5 | | | | | 0.0 | | | Reddish-brown, dense. |
| 10 | | | | | 0.0 | | | Light brown to greenish-brown, medium dense. |
| | | | | | | | | BAY POINT FORMATION:<br>Light tan, moist, weak cementation, fine-grained SANDSTONE. |
| 15 | | | ▽ | | 0.0 | | | Light gray, wet. |
| 20 | | | | | | | | |

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DATE DRILLED 04/29/06-04/30/06 BORING NO. B-8

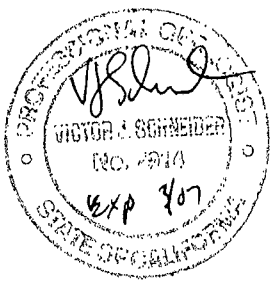
GROUND ELEVATION ≅ 20' MSL SHEET 2 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 20 | | | | | 0.0 | | | BAY POINT FORMATION: (Continued)<br>Light gray, moist, medium dense, fine SAND. |
| | | | | | | | | Total Depth = 22.0 feet bgs.<br>Groundwater encountered at ≅ 16.0 feet bgs.<br>Boring backfilled with hydrated bentonite chips and capped with concrete on 04/30/06.<br>Bentonite: 0.13 cubic feet<br>Water: ≅ 5 gallons<br>Concrete" 0.03 cubic feet |
| 25 | | | | | | | | |
| 30 | | | | | | | | |
| 35 | | | | | | | | |
| 40 | | | | | | | | |

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| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| 105740002 | 05/06 | |

DATE DRILLED 04/29/06-04/30/06 BORING NO. B-9

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 0.0 | | | CONCRETE: ≅ 4" thick |
| | | | | | | | SM | Gray, moist, loose, silty SAND, fine sand. |
| | | | | | | | | Total Depth = 1.0 feet bgs. |
| | | | | | | | | Groundwater not encountered during drilling. |
| | | | | | | | | No samples collected. |
| | | | | | | | | Boring abandoned; second concrete clab encountered at 1.0' below concrete surface. |
| | | | | | | | | Backfilled with concrete. |
| | | | | | | | | Concrete: ≅ 0.015 cubic yards. |
| 5 | | | | | | | | |
| 10 | | | | | | | | |
| 15 | | | | | | | | |
| 20 | | | | | | | | |

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| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| 105740002 | 05/06 | |

DATE DRILLED 04/29/06-04/30/06 BORING NO. B-10

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | CONCRETE: ≅ 4" thick. |
| | | | | | 0.0 | | SM | FILL: Brown to reddish-brown, moist, loose, silty SAND; fine sand. |
| | | | | | 0.1 | | | |
| 5 | | | | | 0.0 | | | Light brown, dry to damp, dense, fine SAND. |
| 10 | | | | | | | | Very dense. |
| | | | | | | | | Small amount of burn ash present ≅ 1" in thickness; gravel clasts up to 1/2" diameter present. |
| | | | | | 0.0 | | | BAY POINT FORMATION: Light brown, damp to moist, weak cementation, fine-grained SANDSTONE; micaceous. |
| 15 | | | ▽ | | | | | Light gray, wet. |
| 20 | | | | | | | | |

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DATE DRILLED 04/29/06-04/30/06 BORING NO. B-10

GROUND ELEVATION ≅ 20' MSL SHEET 2 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 20 | | | | | 0.0 | | | BAY POINT FORMATION: (Continued)<br>Light gray, moist, weak cementation, fine-grained SANDSTONE; micaceous. |
| | | | | | | | | Total depth = 22.0 feet bgs.<br>Groundwater encountered at ≅ 15.0 feet bgs.<br>Boring backfilled with hydrated bentonite chips and capped with concrete on 04/30/06.<br>Bentonite: 0.13 cubic feet<br>Water: ≅ 5 gallons<br>Concrete: 0.03 cubic feet |
| 25 | | | | | | | | |
| 30 | | | | | | | | |
| 35 | | | | | | | | |
| 40 | | | | | | | | |

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| PROJECT NO. | DATE | FIGURE |
|---|---|---|
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DATE DRILLED 04/29/06-04/30/06 BORING NO. B-11

GROUND ELEVATION ≅ 20' MSL SHEET 1 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | 0.0 | | SM | FILL:<br>Dark brown, moist, loose, silty SAND; fine sand; some organics observed. |
| | | | | | 0.0 | | | |
| 5 | | | | | 0.0 | | | Light brown, moist, medium dense, fine sand; reddish-brown staining from oxidation. |
| 10 | | | | | 0.0 | | | |
| 15 | | | | | 0.0 | | | BAY POINT FORMATION:<br>Light brown to light gray, moist, weak cementation, fine-grained SANDSTONE. |
| | | | ▽ | | | | | Wet. |
| 20 | | | | | | | | |

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**BORING LOG**

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| PROJECT NO. | DATE | FIGURE |
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| 105740002 | 05/06 | |

DATE DRILLED 04/29/06-04/30/06 BORING NO. B-11

GROUND ELEVATION ≅ 20' MSL SHEET 2 OF 2

METHOD OF DRILLING Direct Push Technology 1" diameter (Interphase)

DRIVE WEIGHT N/A DROP N/A

SAMPLED BY VJS LOGGED BY VJS REVIEWED BY PDC

| DEPTH (feet) | SAMPLES (Bulk / Driven) | BLOWS/FOOT | MOISTURE (%) | DRY DENSITY (PCF) | PID READING (PPM) | SYMBOL | CLASSIFICATION U.S.C.S. | DESCRIPTION/INTERPRETATION |
|---|---|---|---|---|---|---|---|---|
| 20 | | | | | 0.0 | | | BAY POINT FORMATION: (Continued)<br>Light gray, weak cementation, fine-grained SANDSTONE; micaceous. |
| | | | | | | | | Total Depth = 22.0 feet bgs.<br>Groundwater encountered at ≅ 16.5 feet bgs.<br>Boring backfilled with hydrated bentonite chips and capped with concrete on 04/30/06.<br>Bentonite: 0.13 cubic feet<br>Water: ≅ 5 gallons<br>Concrete: 0.03 cubic feet |
| 25 | | | | | | | | |
| 30 | | | | | | | | |
| 35 | | | | | | | | |
| 40 | | | | | | | | |

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**BORING LOG**

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| PROJECT NO. | DATE | FIGURE |
|---|---|---|
| 105740002 | 05/06 | |

# APPENDIX C

# ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

May 22, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084161

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *22-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-2.0 |
| **Lab Order:** | 084161 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 2:02:00 PM |
| **Lab ID:** | 084161-002A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | | **WET/ EPA 7420** | | | | |
| RunID: AA2_060522A | QC Batch: R63576 | | | PrepDate: | | Analyst: **NS** |
| Lead | 4.5 | 0.25 | | mg/L | 1 | 5/22/2006 |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*

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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040



**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-27971 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935712 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: MB-27971A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935713 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: LCS-27971 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935714 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.14 | 0.25 | 5.000 | 0 | 103 | 80 | 120 | | | | |

| Sample ID: 084161-003A-DUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935716 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 84.56 | 5.0 | | | | | | 85.29 | 0.850 | 20 | |

| Sample ID: 084161-003AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935717 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 91.64 | 5.0 | 5.000 | 85.29 | 127 | 70 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: 084161-003AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935718 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 92.12 | 5.0 | 5.000 | 85.29 | 137 | 70 | 130 | 91.64 | 0.530 | 20 | S |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel.: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode:** 7420_ST

| Sample ID: MB-28101 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940382 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: MB-28101A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940383 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: LCS-28101 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940384 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.27 | 0.25 | 5.000 | 0 | 105 | 80 | 120 | | | | |

| Sample ID: 084359-014A-DUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940395 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.48 | 0.25 | | | | | | 5.553 | 1.31 | 20 | |

| Sample ID: 084359-014AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940396 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 10.42 | 0.50 | 5.000 | 5.553 | 97.4 | 70 | 130 | | | | |

| Sample ID: MB-28101B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940397 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Qualifiers:**
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interferenc
- DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-28101B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63576 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | SeqNo: 940397 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.06 | 0.25 | | | | | | | | | |

| Sample ID: 084359-030A-DUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63576 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | SeqNo: 940408 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.76 | 0.25 | | | | | | 5.767 | 0.185 | 20 | |

| Sample ID: 084359-030AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63576 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | SeqNo: 940409 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 10.60 | 0.50 | 5.000 | 5.767 | 96.7 | 70 | 130 | | | | |

| Sample ID: 084359-030AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63576 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | SeqNo: 940410 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 10.55 | 0.50 | 5.000 | 5.767 | 95.6 | 70 | 130 | 10.60 | 0.508 | 20 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out

May 22, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084158

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *22-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-1.0 |
| **Lab Order:** | 084158 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 3:00:00 PM |
| **Lab ID:** | 084158-001A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | | | **WET/ EPA 7420** | | | |
| RunID: AA2_060522A | QC Batch: R63576 | | | PrepDate: | | Analyst: **NS** |
| Lead | 11 | 0.50 | | mg/L | 2 | 5/22/2006 |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

**Date:** *22-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-28101 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940382 | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: MB-28101A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940383 | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: LCS-28101 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940384 | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | 5.27 | 0.25 | 5.000 | 0 | 105 | 80 | 120 | | | | |

| Sample ID: 084359-014A-DUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940395 | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | 5.48 | 0.25 | | | | | | 5.553 | 1.31 | 20 | |

| Sample ID: 084359-014AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940396 | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | 10.42 | 0.50 | 5.000 | 5.553 | 97.4 | 70 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interferenc
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-28101B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63576 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | SeqNo: 940397 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.06 | 0.25 | | | | | | | | | |

| Sample ID: 084359-030A-DUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63576 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | SeqNo: 940408 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.76 | 0.25 | | | | | | 5.767 | 0.185 | 20 | |

| Sample ID: 084359-030AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63576 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | SeqNo: 940409 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 10.60 | 0.50 | 5.000 | 5.767 | 96.7 | 70 | 130 | | | | |

| Sample ID: 084359-030AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63576 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | SeqNo: 940410 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 10.55 | 0.50 | 5.000 | 5.767 | 95.6 | 70 | 130 | 10.60 | 0.508 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

May 22, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084155

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

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# Advanced Technology Laboratories

**Date:** *22-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-3.0 |
| **Lab Order:** | 084155 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 1:58:00 PM |
| **Lab ID:** | 084155-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | | **WET/ EPA 7420** | | | | |
| RunID: AA2_060522A | QC Batch: R63576 | | | PrepDate: | | Analyst: **NS** |
| Lead | 5.4 | 0.25 | | mg/L | 1 | 5/22/2006 |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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Advanced Technology Laboratories
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Advanced Technology Laboratories

Date: *22-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-27950 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935688 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: MB-27950A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935689 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: LCS-27950 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935690 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.13 | 0.25 | 5.000 | 0 | 103 | 80 | 120 | | | | |

| Sample ID: 084284-002ADUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935697 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.52 | 0.25 | | | | | | 0.4815 | 8.14 | 20 | |

| Sample ID: 084284-002AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935698 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.99 | 0.25 | 5.000 | 0.4815 | 90.2 | 70 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-27950B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935699 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: 084284-011A-DUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935709 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.44 | 0.25 | | | | | | 0.4353 | 0.0897 | 20 | |

| Sample ID: 084284-011AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935710 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.81 | 0.25 | 5.000 | 0.4353 | 87.6 | 70 | 130 | | | | |

| Sample ID: 084284-011AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935711 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.84 | 0.25 | 5.000 | 0.4353 | 88.2 | 70 | 130 | 4.814 | 0.611 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-28101 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940382 | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: MB-28101A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940383 | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | ND | 0.25 | | | | | | | | | |

| Sample ID: LCS-28101 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940384 | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | 5.27 | 0.25 | 5.000 | 0 | 105 | 80 | 120 | | | | |

| Sample ID: 084359-014A-DUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940395 | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | 5.48 | 0.25 | | | | | | 5.553 | 1.31 | 20 | |

| Sample ID: 084359-014AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940396 | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Lead | 10.42 | 0.50 | 5.000 | 5.553 | 97.4 | 70 | 130 | | | | |

| Sample ID: MB-28101B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | | | RunNo: 63576 | |
|---|---|---|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | | | SeqNo: 940397 | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-28101B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940397 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.06 | 0.25 | | | | | | | | | |

| Sample ID: 084359-030A-DUP | SampType: DUP | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940408 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.76 | 0.25 | | | | | | 5.767 | 0.185 | 20 | |

| Sample ID: 084359-030AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940409 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 10.60 | 0.50 | 5.000 | 5.767 | 96.7 | 70 | 130 | | | | |

| Sample ID: 084359-030AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63576 |
|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63576 | TestNo: WET/ EPA 74 | | Analysis Date: 5/22/2006 | | SeqNo: 940410 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 10.55 | 0.50 | 5.000 | 5.767 | 95.6 | 70 | 130 | 10.60 | 0.508 | 20 | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interferenc
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

May 18, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084161

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-10.0 |
| **Lab Order:** | 084161 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 8:42:00 AM |
| **Lab ID:** | 084161-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 2.5 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| | | | | | |
|---|---|---|---|---|---|
| Qualifiers: | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories* 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-5.0 |
| **Lab Order:** | 084161 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 8:32:00 AM |
| **Lab ID:** | 084161-008A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 2.3 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| | | | | | |
|---|---|---|---|---|---|
| Qualifiers: | B | Analyte detected in the associated Method Blank | E | Value above quantitation range | |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit | |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified | |
| | DO | Surrogate Diluted Out | | | |





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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *18-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27856A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931336 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-27856 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931337 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 251.62 | 1.0 | 250.0 | 0 | 101 | 80 | 120 | | | | |

| Sample ID: 084161-003AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931346 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 317.69 | 1.0 | 250.0 | 162.3 | 82.1 | 31 | 122 | | | | |

| Sample ID: 084161-003AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931347 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 304.72 | 1.0 | 250.0 | 162.3 | 57.0 | 31 | 122 | 317.7 | 4.17 | 20 | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-28079 | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938767 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-28079 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938768 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 237.48 | 1.0 | 250.0 | 0 | 95.0 | 80 | 120 | | | | |

| Sample ID: 084161-008AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: NM-B06-5.0 | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938783 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 190.83 | 1.0 | 250.0 | 2.302 | 75.4 | 31 | 122 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out

May 18, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084156

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

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## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B02-5.0 |
| **Lab Order:** | 084156 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 3:23:00 PM |
| **Lab ID:** | 084156-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: **RQ** |
| Lead | 2.6 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |

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Advanced Technology Laboratories

**Date:** *18-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27855A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931310 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-27855 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931311 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: 084154-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931315 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: MB-27855B | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931316 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: 084158-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931328 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interferenc
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: 084158-002AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931329 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 215.21 | 1.0 | 250.0 | 18.52 | 78.7 | 31 | 122 | 211.0 | 1.97 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-28079 | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938767 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-28079 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938768 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 237.48 | 1.0 | 250.0 | 0 | 95.0 | 80 | 120 | | | | |

| Sample ID: 084161-008AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938783 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 190.83 | 1.0 | 250.0 | 2.302 | 75.4 | 31 | 122 | | | | |

| Sample ID: 084161-008AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938784 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.61 | 1.0 | 250.0 | 2.302 | 79.7 | 31 | 122 | 190.8 | 5.49 | 20 | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interferenc
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

May 18, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084159

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B10-5.0 |
| **Lab Order:** | 084159 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 10:50:00 AM |
| **Lab ID:** | 084159-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 2.4 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*
*3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel.: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

**Date:** *18-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27856A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931336 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-27856 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931337 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 251.62 | 1.0 | 250.0 | 0 | 101 | 80 | 120 | | | | |

| Sample ID: 084161-003AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931346 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 317.69 | 1.0 | 250.0 | 162.3 | 62.1 | 31 | 122 | | | | |

| Sample ID: 084161-003AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931347 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 304.72 | 1.0 | 250.0 | 162.3 | 57.0 | 31 | 122 | 317.7 | 4.17 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc |
| ND | Not Detected at the Reporting Limit | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-28079 | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938767 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-28079 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938768 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 237.48 | 1.0 | 250.0 | 0 | 95.0 | 80 | 120 | | | | |

| Sample ID: 084161-008AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938783 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 190.83 | 1.0 | 250.0 | 2.302 | 75.4 | 31 | 122 | | | | |

| Sample ID: 084161-008AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938784 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.61 | 1.0 | 250.0 | 2.302 | 79.7 | 31 | 122 | 190.8 | 5.49 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc |
| ND | Not Detected at the Reporting Limit | DO | Surrogate Diluted Out |

May 18, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084160

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-5.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:35:00 AM |
| **Lab ID:** | 084160-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 2.5 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories* 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-15.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:55:00 AM |
| **Lab ID:** | 084160-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | ND | 1.0 | | mg/Kg | 1 | 5/17/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

**Date:** *18-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27856A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931336 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-27856 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931337 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 251.62 | 1.0 | 250.0 | 0 | 101 | 80 | 120 | | | | |

| Sample ID: 084161-003AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931346 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 317.69 | 1.0 | 250.0 | 162.3 | 62.1 | 31 | 122 | | | | |

| Sample ID: 084161-003AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931347 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 304.72 | 1.0 | 250.0 | 162.3 | 57.0 | 31 | 122 | 317.7 | 4.17 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-28079 | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938767 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-28079 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938768 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 237.48 | 1.0 | 250.0 | 0 | 95.0 | 80 | 120 | | | | |

| Sample ID: 084161-008AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938783 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 190.83 | 1.0 | 250.0 | 2.302 | 75.4 | 31 | 122 | | | | |

| Sample ID: 084161-008AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938784 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.61 | 1.0 | 250.0 | 2.302 | 79.7 | 31 | 122 | 190.8 | 5.49 | 20 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out

May 18, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084158

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

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Sincerely,

Eddie F. Rodriguez
Laboratory Director

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## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-5.0 |
| **Lab Order:** | 084158 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 7:30:00 AM |
| **Lab ID:** | 084158-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 3.5 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories* 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-10.0 |
| **Lab Order:** | 084158 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 7:40:00 AM |
| **Lab ID:** | 084158-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 1.7 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| | | | | |
|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories* *3275 Walnut Avenue* *Signal Hill, CA 90755* *Tel: 562 989-4045* *Fax: 562 989-4040*

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-15.0 |
| **Lab Order:** | 084158 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 7:50:00 AM |
| **Lab ID:** | 084158-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | ND | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

## Advanced Technology Laboratories

**Date:** *18-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27855A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931310 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-27855 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931311 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: 084154-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931315 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: MB-27855B | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931316 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: 084158-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: NM-B11-2.0 | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931328 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interferenc
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-28079 | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938767 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-28079 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938768 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 237.48 | 1.0 | 250.0 | 0 | 95.0 | 80 | 120 | | | | |

| Sample ID: 084161-008AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938783 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 190.83 | 1.0 | 250.0 | 2.302 | 75.4 | 31 | 122 | | | | |

| Sample ID: 084161-008AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938784 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.61 | 1.0 | 250.0 | 2.302 | 79.7 | 31 | 122 | 190.8 | 5.49 | 20 | |

**Qualifiers:**
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interferenc
- DO Surrogate Diluted Out

May 18, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084157

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-10.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:44:00 AM |
| **Lab ID:** | 084157-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 1.4 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

**Date:** *18-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27855A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931310 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-27855 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931311 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: 084154-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931315 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: MB-27855B | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931316 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: 084158-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931328 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interferenc
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: 084158-002AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931329 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 215.21 | 1.0 | 250.0 | 18.52 | 78.7 | 31 | 122 | 211.0 | 1.97 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel.: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-28079 | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938767 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-28079 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938768 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 237.48 | 1.0 | 250.0 | 0 | 95.0 | 80 | 120 | | | | |

| Sample ID: 084161-008AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938783 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 190.83 | 1.0 | 250.0 | 2.302 | 75.4 | 31 | 122 | | | | |

| Sample ID: 084161-008AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938784 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.61 | 1.0 | 250.0 | 2.302 | 79.7 | 31 | 122 | 190.8 | 5.49 | 20 | |

**Qualifiers:**

- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interferenc
- DO Surrogate Diluted Out

May 18, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084155

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

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## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-5.0 |
| **Lab Order:** | 084155 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 1:58:00 PM |
| **Lab ID:** | 084155-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 2.8 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-12.0 |
| **Lab Order:** | 084155 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 4:12:00 PM |
| **Lab ID:** | 084155-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 43 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-15.0 |
| **Lab Order:** | 084155 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 4:20:00 PM |
| **Lab ID:** | 084155-006A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: **RQ** |
| Lead | 1.0 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| Qualifiers: | | | |
|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | |



*Advanced Technology Laboratories* 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

**Date:** *18-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27855A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931310 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-27855 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931311 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: 084154-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931315 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: MB-27855B | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931316 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: 084158-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931328 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: 084158-002AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931329 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 215.21 | 1.0 | 250.0 | 18.52 | 78.7 | 31 | 122 | 211.0 | 1.97 | 20 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-28079 | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938767 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-28079 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938768 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 237.48 | 1.0 | 250.0 | 0 | 95.0 | 80 | 120 | | | | |

| Sample ID: 084161-008AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938783 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 190.83 | 1.0 | 250.0 | 2.302 | 75.4 | 31 | 122 | | | | |

| Sample ID: 084161-008AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938784 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.61 | 1.0 | 250.0 | 2.302 | 79.7 | 31 | 122 | 190.8 | 5.49 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

May 18, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084154

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *18-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-10.0 |
| **Lab Order:** | 084154 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 9:41:00 AM |
| **Lab ID:** | 084154-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP6_060517E | QC Batch: 28079 | | | PrepDate: | 5/17/2006 | Analyst: RQ |
| Lead | 1.5 | 1.0 | | mg/Kg | 1 | 5/17/2006 |

| | | | |
|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | |



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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

**Date:** *18-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27855A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931310 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-27855 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931311 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: 084154-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: NM-B04-2.0 | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931315 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: MB-27855B | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931316 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: 084158-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931328 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interferenc
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: 084158-002AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931329 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 215.21 | 1.0 | 250.0 | 18.52 | 78.7 | 31 | 122 | 211.0 | 1.97 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-28079 | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938767 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 1.0 | | | | | | | | | |

| Sample ID: LCS-28079 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938768 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 237.48 | 1.0 | 250.0 | 0 | 95.0 | 80 | 120 | | | | |

| Sample ID: 084161-008AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938783 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 190.83 | 1.0 | 250.0 | 2.302 | 75.4 | 31 | 122 | | | | |

| Sample ID: 084161-008AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/17/2006 | RunNo: 63459 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 28079 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/17/2006 | SeqNo: 938784 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.61 | 1.0 | 250.0 | 2.302 | 79.7 | 31 | 122 | 190.8 | 5.49 | 20 | |

**Qualifiers:**

| | | | |
|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc |
| ND | Not Detected at the Reporting Limit | DO | Surrogate Diluted Out |

May 05, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084157

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

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## Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084157
**Contract No:**

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date | Date Received | Date Reported |
|---|---|---|---|---|---|
| 084157-001A | NM-B01-1.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084157-002A | NM-B01-2.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084157-003A | NM-B01-5.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084157-004A | NM-B01-10.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084157-005A | NM-B01-15.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084157-006A | NM-B01-20.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084157-007A | NM-B01 | Groundwater | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084157-007B | NM-B01 | Groundwater | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084157-008A | NM-B01-2.0D | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-1.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:18:00 AM |
| **Lab ID:** | 084157-001A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 92 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*

*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040*

## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-2.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:22:00 AM |
| **Lab ID:** | 084157-002A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: RQ |
| Lead | 13 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*

*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040*

## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-5.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:36:00 AM |
| **Lab ID:** | 084157-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | | | | | |
| | **EPA 3050B** | | | **EPA 6010B** | | |
| RunID: ICP6_060503D | QC Batch: 27858 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Antimony | ND | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Arsenic | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Barium | 27 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Beryllium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cadmium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Chromium | 17 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cobalt | 4.0 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Copper | 5.0 | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Lead | 3.3 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Molybdenum | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Nickel | 5.3 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Selenium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Silver | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Thallium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Vanadium | 29 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Zinc | 20 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| | **LUFT** | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: | 5/2/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 78.8 | 56-131 | | %REC | 1 | 5/3/2006 |
| **MERCURY BY COLD VAPOR TECHNIQUE** | | | | | | |
| | **EPA 7471** | | | **EPA 7471A** | | |
| RunID: AA5_060504A | QC Batch: 27864 | | | PrepDate: | 5/3/2006 | Analyst: **NS** |
| Mercury | ND | 0.10 | | mg/Kg | 1 | 5/4/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*

*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040*

## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-5.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:36:00 AM |
| **Lab ID:** | 084157-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-5.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:36:00 AM |
| **Lab ID:** | 084157-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 93.7 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 100 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 94.8 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 101 | 84-130 | | %REC | 1 | 5/2/2006 |
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | **EPA 3550B** | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| 2-Methylnaphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-5.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:36:00 AM |
| **Lab ID:** | 084157-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| **EPA 3550B** | | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| Benzo(a)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(a)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(b)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(g,h,i)perylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(k)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Chrysene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Dibenz(a,h)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluorene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Indeno(1,2,3-cd)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Phenanthrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichlorobenzene-d4 | 74.5 | 46-105 | | %REC | 1 | 5/2/2006 |
| Surr: 2-Fluorobiphenyl | 78.0 | 54-112 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Terphenyl-d14 | 82.2 | 46-135 | | %REC | 1 | 5/2/2006 |
| Surr: Nitrobenzene-d5 | 78.1 | 40-116 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-10.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:44:00 AM |
| **Lab ID:** | 084157-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: | 5/2/2006 | Analyst: EES |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 76.9 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-10.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:44:00 AM |
| **Lab ID:** | 084157-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-10.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:44:00 AM |
| **Lab ID:** | 084157-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Surr: 1,2-Dichloroethane-d4 | 91.9 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 94.3 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 102 | 84-130 | | %REC | 1 | 5/2/2006 |

| | | | | |
|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-15.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:54:00 AM |
| **Lab ID:** | 084157-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 75.9 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-15.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:54:00 AM |
| **Lab ID:** | 084157-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-15.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:54:00 AM |
| **Lab ID:** | 084157-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Surr: 1,2-Dichloroethane-d4 | 91.6 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 117 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 92.8 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 102 | 84-130 | | %REC | 1 | 5/2/2006 |

| | | | | |
|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-20.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 12:25:00 PM |
| **Lab ID:** | 084157-006A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 77.8 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-20.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 12:25:00 PM |
| **Lab ID:** | 084157-006A | **Matrix:** | SOIL |

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: MS1_060502A QC Batch: P06VS080 PrepDate: Analyst: TT

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-20.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 12:25:00 PM |
| **Lab ID:** | 084157-006A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Surr: 1,2-Dichloroethane-d4 | 93.1 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 100 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 93.9 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/2/2006 |

| | | | | |
|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 12:08:00 PM |
| **Lab ID:** | 084157-007A | **Matrix:** | GROUNDWATER |

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: MS2_060502A QC Batch: Q06VW082 PrepDate: Analyst: **HH**

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 12:08:00 PM |
| **Lab ID:** | 084157-007A | **Matrix:** | GROUNDWATER |

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: MS2_060502A | QC Batch: Q06VW082 | PrepDate: | Analyst: HH

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| Di-isopropyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Ethyl tert-butyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/L | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/L | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 106 | 70-126 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 97.6 | 63-134 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 112 | 73-124 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 106 | 84-123 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-2.0D |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:22:00 AM |
| **Lab ID:** | 084157-008A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 30 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

| Sample ID: **MB-27858** | SampType: **MBLK** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62965** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27858** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931369** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.00 | 2.0 | | | | | | | | | |
| Arsenic | 0.00 | 1.0 | | | | | | | | | |
| Barium | 0.00 | 1.0 | | | | | | | | | |
| Beryllium | 0.00 | 1.0 | | | | | | | | | |
| Cadmium | 0.00 | 1.0 | | | | | | | | | |
| Chromium | 0.00 | 1.0 | | | | | | | | | |
| Cobalt | 0.00 | 1.0 | | | | | | | | | |
| Copper | 0.00 | 2.0 | | | | | | | | | |
| Lead | 0.00 | 1.0 | | | | | | | | | |
| Molybdenum | 0.00 | 1.0 | | | | | | | | | |
| Nickel | 0.00 | 1.0 | | | | | | | | | |
| Selenium | 0.00 | 1.0 | | | | | | | | | |
| Silver | 0.00 | 1.0 | | | | | | | | | |
| Thallium | 0.00 | 1.0 | | | | | | | | | |
| Vanadium | 0.00 | 1.0 | | | | | | | | | |
| Zinc | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **LCS-27858** | SampType: **LCS** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62965** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27858** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931370** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 48.94 | 2.0 | 50.00 | 0 | 97.9 | 80 | 120 | | | | |
| Arsenic | 47.08 | 1.0 | 50.00 | 0 | 94.2 | 80 | 120 | | | | |
| Barium | 50.29 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |
| Beryllium | 47.23 | 1.0 | 50.00 | 0 | 94.5 | 80 | 120 | | | | |
| Cadmium | 49.69 | 1.0 | 50.00 | 0 | 99.4 | 80 | 120 | | | | |
| Chromium | 49.04 | 1.0 | 50.00 | 0 | 98.1 | 80 | 120 | | | | |
| Cobalt | 47.31 | 1.0 | 50.00 | 0 | 94.6 | 80 | 120 | | | | |
| Copper | 50.11 | 2.0 | 50.00 | 0 | 100 | 80 | 120 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

| Sample ID: LCS-27858 | SampType: LCS | TestCode: 6010_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62965 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27858 | TestNo: EPA 6010B | EPA 3050B | Analysis Date: 5/3/2006 | SeqNo: 931370 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 48.47 | 1.0 | 50.00 | 0 | 96.9 | 80 | 120 | | | | |
| Molybdenum | 49.96 | 1.0 | 50.00 | 0 | 99.9 | 80 | 120 | | | | |
| Nickel | 47.24 | 1.0 | 50.00 | 0 | 94.5 | 80 | 120 | | | | |
| Selenium | 46.30 | 1.0 | 50.00 | 0 | 92.6 | 80 | 120 | | | | |
| Silver | 48.13 | 1.0 | 50.00 | 0 | 96.3 | 80 | 120 | | | | |
| Thallium | 48.65 | 1.0 | 50.00 | 0 | 97.3 | 80 | 120 | | | | |
| Vanadium | 49.53 | 1.0 | 50.00 | 0 | 99.1 | 80 | 120 | | | | |
| Zinc | 47.43 | 1.0 | 50.00 | 0 | 94.9 | 80 | 120 | | | | |

| Sample ID: 084160-004AMS | SampType: MS | TestCode: 6010_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62965 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27858 | TestNo: EPA 6010B | EPA 3050B | Analysis Date: 5/3/2006 | SeqNo: 931374 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 91.19 | 2.0 | 125.0 | 0 | 73.0 | 25 | 108 | | | | |
| Arsenic | 97.30 | 1.0 | 125.0 | 0.9863 | 77.0 | 46 | 118 | | | | |
| Barium | 122.09 | 1.0 | 125.0 | 19.93 | 81.7 | 32 | 131 | | | | |
| Beryllium | 97.33 | 1.0 | 125.0 | 0 | 77.9 | 59 | 104 | | | | |
| Cadmium | 104.00 | 1.0 | 125.0 | 0.08913 | 83.1 | 63 | 105 | | | | |
| Chromium | 110.08 | 1.0 | 125.0 | 8.973 | 80.9 | 49 | 116 | | | | |
| Cobalt | 103.13 | 1.0 | 125.0 | 3.104 | 80.0 | 58 | 104 | | | | |
| Copper | 113.13 | 2.0 | 125.0 | 3.845 | 87.4 | 54 | 126 | | | | |
| Lead | 100.23 | 1.0 | 125.0 | 1.946 | 78.6 | 31 | 122 | | | | |
| Molybdenum | 100.88 | 1.0 | 125.0 | 0.5545 | 80.3 | 61 | 104 | | | | |
| Nickel | 103.24 | 1.0 | 125.0 | 3.953 | 79.4 | 50 | 112 | | | | |
| Selenium | 95.62 | 1.0 | 125.0 | 0 | 76.5 | 53 | 109 | | | | |
| Silver | 101.47 | 1.0 | 125.0 | 0 | 81.2 | 41 | 121 | | | | |
| Thallium | 95.79 | 1.0 | 125.0 | 0 | 76.6 | 54 | 100 | | | | |
| Vanadium | 122.77 | 1.0 | 125.0 | 19.52 | 82.6 | 59 | 109 | | | | |
| Zinc | 108.74 | 1.0 | 125.0 | 12.09 | 77.3 | 27 | 131 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

| Sample ID: 084160-004AMSD | SampType: MSD | TestCode: 6010_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62965 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27858 | TestNo: EPA 6010B | EPA 3050B | Analysis Date: 5/3/2006 | SeqNo: 931375 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 90.85 | 2.0 | 125.0 | 0 | 72.7 | 25 | 108 | 91.19 | 0.379 | 20 | |
| Arsenic | 98.11 | 1.0 | 125.0 | 0.9863 | 77.7 | 46 | 118 | 97.30 | 0.836 | 20 | |
| Barium | 126.00 | 1.0 | 125.0 | 19.93 | 84.9 | 32 | 131 | 122.1 | 3.15 | 20 | |
| Beryllium | 98.44 | 1.0 | 125.0 | 0 | 78.8 | 59 | 104 | 97.33 | 1.14 | 20 | |
| Cadmium | 105.03 | 1.0 | 125.0 | 0.08913 | 84.0 | 63 | 105 | 104.0 | 0.979 | 20 | |
| Chromium | 111.79 | 1.0 | 125.0 | 8.973 | 82.2 | 49 | 116 | 110.1 | 1.54 | 20 | |
| Cobalt | 104.38 | 1.0 | 125.0 | 3.104 | 81.0 | 58 | 104 | 103.1 | 1.20 | 20 | |
| Copper | 114.52 | 2.0 | 125.0 | 3.845 | 88.5 | 54 | 126 | 113.1 | 1.22 | 20 | |
| Lead | 101.24 | 1.0 | 125.0 | 1.946 | 79.4 | 31 | 122 | 100.2 | 1.00 | 20 | |
| Molybdenum | 101.88 | 1.0 | 125.0 | 0.5545 | 81.1 | 61 | 104 | 100.9 | 0.987 | 20 | |
| Nickel | 104.23 | 1.0 | 125.0 | 3.953 | 80.2 | 50 | 112 | 103.2 | 0.955 | 20 | |
| Selenium | 96.50 | 1.0 | 125.0 | 0 | 77.2 | 53 | 109 | 95.62 | 0.915 | 20 | |
| Silver | 102.08 | 1.0 | 125.0 | 0 | 81.7 | 41 | 121 | 101.5 | 0.595 | 20 | |
| Thallium | 96.40 | 1.0 | 125.0 | 0 | 77.1 | 54 | 100 | 95.79 | 0.636 | 20 | |
| Vanadium | 124.29 | 1.0 | 125.0 | 19.52 | 83.8 | 59 | 109 | 122.8 | 1.23 | 20 | |
| Zinc | 109.92 | 1.0 | 125.0 | 12.09 | 78.3 | 27 | 131 | 108.7 | 1.08 | 20 | |

| Sample ID: 084160-004AMS | SampType: MS | TestCode: 6010_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 63017 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27858 | TestNo: EPA 6010B | EPA 3050B | Analysis Date: 5/4/2006 | SeqNo: 932061 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 101.34 | 1.0 | 125.0 | 1.919 | 79.5 | 31 | 122 | | | | |

| Sample ID: 084160-004AMSD | SampType: MSD | TestCode: 6010_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 63017 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27858 | TestNo: EPA 6010B | EPA 3050B | Analysis Date: 5/4/2006 | SeqNo: 932062 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 99.04 | 1.0 | 125.0 | 1.919 | 77.7 | 31 | 122 | 101.3 | 2.29 | 20 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27855A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931310 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: LCS-27855 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931311 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: 084154-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931315 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: MB-27855B | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931316 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: 084158-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931328 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

| Sample ID: 084158-002AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931329 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Qualifiers:**

- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interferenc
- DO Surrogate Diluted Out



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**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: **084158-002AMSD** | SampType: **MSD** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931329** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 215.21 | 1.0 | 250.0 | 18.52 | 78.7 | 31 | 122 | 211.0 | 1.97 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7471_S**

| Sample ID: 084161-005A-MS | SampType: MS | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931789 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | | | | |

| Sample ID: 084161-005A-MSD | SampType: MSD | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931790 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | 1.141 | 0.444 | 20 | |

| Sample ID: LCS-27864 | SampType: LCS | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931791 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 2.37 | 0.10 | 2.080 | 0 | 114 | 80 | 120 | | | | |

| Sample ID: MB-27864 | SampType: MBLK | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931792 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.00 | 0.10 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **LCSS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930748**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 110.34 | 5.0 | 100.0 | 0 | 110 | 76 | 126 | | | | |
| Benzene | 113.05 | 5.0 | 100.0 | 0 | 113 | 77 | 131 | | | | |
| Chlorobenzene | 119.94 | 5.0 | 100.0 | 0 | 120 | 81 | 136 | | | | |
| MTBE | 116.66 | 5.0 | 100.0 | 0 | 117 | 50 | 143 | | | | |
| Toluene | 111.84 | 5.0 | 100.0 | 1.320 | 111 | 78 | 129 | | | | |
| Trichloroethene | 117.66 | 5.0 | 100.0 | 0 | 118 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 47.46 | | 50.00 | | 94.9 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.08 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.75 | | 50.00 | | 93.5 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.59 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060502MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930749**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 110.32 | 5.0 | 100.0 | 0 | 110 | 59 | 146 | | | | |
| Benzene | 114.37 | 5.0 | 100.0 | 0 | 114 | 68 | 137 | | | | |
| Chlorobenzene | 121.46 | 5.0 | 100.0 | 0 | 121 | 64 | 144 | | | | |
| MTBE | 115.61 | 5.0 | 100.0 | 0 | 116 | 54 | 141 | | | | |
| Toluene | 112.56 | 5.0 | 100.0 | 1.320 | 111 | 53 | 150 | | | | |
| Trichloroethene | 119.29 | 5.0 | 100.0 | 0 | 119 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 46.87 | | 50.00 | | 93.7 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.95 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.88 | | 50.00 | | 93.8 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.38 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060502MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930750**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 112.82 | 5.0 | 100.0 | 0 | 113 | 59 | 146 | 110.3 | 2.24 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930750**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 116.18 | 5.0 | 100.0 | 0 | 116 | 68 | 137 | 114.4 | 1.57 | 30 | |
| Chlorobenzene | 124.04 | 5.0 | 100.0 | 0 | 124 | 64 | 144 | 121.5 | 2.10 | 30 | |
| MTBE | 113.78 | 5.0 | 100.0 | 0 | 114 | 54 | 141 | 115.6 | 1.60 | 30 | |
| Toluene | 114.84 | 5.0 | 100.0 | 1.320 | 114 | 53 | 150 | 112.6 | 2.01 | 30 | |
| Trichloroethene | 121.81 | 5.0 | 100.0 | 0 | 122 | 58 | 155 | 119.3 | 2.09 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 46.44 | | 50.00 | | 92.9 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 51.90 | | 50.00 | | 104 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 47.38 | | 50.00 | | 94.8 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.67 | | 50.00 | | 103 | 84 | 130 | | 0 | 30 | |

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

| Sample ID: **P060502MB2** | SampType: **MBLK** | TestCode: **8260_S** | Units: **µg/Kg** | Prep Date: | RunNo: **62912** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **P06VS080** | TestNo: **EPA 8260B** | | Analysis Date: **5/2/2006** | SeqNo: **930753** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 1.32 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.17 | | 50.00 | | 90.3 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.90 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.69 | | 50.00 | | 93.4 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.48 | | 50.00 | | 103 | 84 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

| Sample ID: Q050206LC1 | SampType: LCS | TestCode: 8260_WP | Units: µg/L | Prep Date: | RunNo: 62893 |
|---|---|---|---|---|---|
| Client ID: LCSW | Batch ID: Q06VW082 | TestNo: EPA 8260B | | Analysis Date: 5/2/2006 | SeqNo: 930579 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.45 | 5.0 | 20.00 | 0 | 117 | 76 | 132 | | | | |
| Benzene | 21.27 | 5.0 | 20.00 | 0 | 106 | 90 | 123 | | | | |
| Chlorobenzene | 20.44 | 5.0 | 20.00 | 0 | 102 | 76 | 118 | | | | |
| MTBE | 20.39 | 5.0 | 20.00 | 0 | 102 | 78 | 134 | | | | |
| Toluene | 21.43 | 5.0 | 20.00 | 0 | 107 | 91 | 124 | | | | |
| Trichloroethene | 21.84 | 5.0 | 20.00 | 0 | 109 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 52.53 | | 50.00 | | 105 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 57.57 | | 50.00 | | 115 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 52.95 | | 50.00 | | 106 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 58.74 | | 50.00 | | 117 | 84 | 123 | | | | |

| Sample ID: Q050206MB1MS | SampType: MS | TestCode: 8260_WP | Units: µg/L | Prep Date: | RunNo: 62893 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: Q06VW082 | TestNo: EPA 8260B | | Analysis Date: 5/2/2006 | SeqNo: 930580 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 22.55 | 5.0 | 20.00 | 0 | 113 | 76 | 132 | | | | |
| Benzene | 21.26 | 5.0 | 20.00 | 0 | 106 | 90 | 123 | | | | |
| Chlorobenzene | 21.37 | 5.0 | 20.00 | 0 | 107 | 76 | 118 | | | | |
| MTBE | 20.46 | 5.0 | 20.00 | 0 | 102 | 78 | 134 | | | | |
| Toluene | 22.06 | 5.0 | 20.00 | 0 | 110 | 91 | 124 | | | | |
| Trichloroethene | 21.22 | 5.0 | 20.00 | 0 | 106 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 51.66 | | 50.00 | | 103 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 57.27 | | 50.00 | | 115 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 52.44 | | 50.00 | | 105 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 57.86 | | 50.00 | | 116 | 84 | 123 | | | | |

| Sample ID: Q050206MB1MSD | SampType: MSD | TestCode: 8260_WP | Units: µg/L | Prep Date: | RunNo: 62893 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: Q06VW082 | TestNo: EPA 8260B | | Analysis Date: 5/2/2006 | SeqNo: 930581 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.47 | 5.0 | 20.00 | 0 | 117 | 76 | 132 | 22.55 | 4.00 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930581**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 21.94 | 5.0 | 20.00 | 0 | 110 | 90 | 123 | 21.26 | 3.15 | 30 | |
| Chlorobenzene | 21.96 | 5.0 | 20.00 | 0 | 110 | 76 | 118 | 21.37 | 2.72 | 30 | |
| MTBE | 21.40 | 5.0 | 20.00 | 0 | 107 | 78 | 134 | 20.46 | 4.49 | 30 | |
| Toluene | 22.17 | 5.0 | 20.00 | 0 | 111 | 91 | 124 | 22.06 | 0.497 | 30 | |
| Trichloroethene | 22.18 | 5.0 | 20.00 | 0 | 111 | 87 | 125 | 21.22 | 4.42 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 53.00 | | 50.00 | | 106 | 70 | 126 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 56.98 | | 50.00 | | 114 | 63 | 134 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 54.39 | | 50.00 | | 109 | 73 | 124 | | 0 | 30 | |
| Surr: Toluene-d8 | 58.41 | | 50.00 | | 117 | 84 | 123 | | 0 | 30 | |

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
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ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

| Sample ID: **Q050206MB1** | SampType: **MBLK** | TestCode: **8260_WP** | Units: **µg/L** | Prep Date: | RunNo: **62893** |
|---|---|---|---|---|---|
| Client ID: **PBW** | Batch ID: **Q06VW082** | TestNo: **EPA 8260B** | | Analysis Date: **5/2/2006** | SeqNo: **930582** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 52.75 | | 50.00 | | 106 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 48.62 | | 50.00 | | 97.2 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 51.96 | | 50.00 | | 104 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 52.99 | | 50.00 | | 106 | 84 | 123 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



*Advanced Technology Laboratories* 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

Sample ID: **MB-27832** SampType: **MBLK** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **PBS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930395**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 0.00 | 330 | | | | | | | | | |
| Acenaphthene | 0.00 | 330 | | | | | | | | | |
| Acenaphthylene | 0.00 | 330 | | | | | | | | | |
| Anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)pyrene | 0.00 | 330 | | | | | | | | | |
| Benzo(b)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Benzo(g,h,i)perylene | 0.00 | 330 | | | | | | | | | |
| Benzo(k)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Chrysene | 0.00 | 330 | | | | | | | | | |
| Dibenz(a,h)anthracene | 0.00 | 330 | | | | | | | | | |
| Fluoranthene | 0.00 | 330 | | | | | | | | | |
| Fluorene | 0.00 | 330 | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | 0.00 | 330 | | | | | | | | | |
| Naphthalene | 0.00 | 330 | | | | | | | | | |
| Phenanthrene | 0.00 | 330 | | | | | | | | | |
| Pyrene | 0.00 | 330 | | | | | | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2751.00 | | 3330 | | 82.6 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2791.00 | | 3330 | | 83.8 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3513.67 | | 3330 | | 106 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2832.00 | | 3330 | | 85.0 | 40 | 116 | | | | |

Sample ID: **LCS-27832** SampType: **LCS** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **LCSS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930396**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3102.33 | 330 | 3330 | 0 | 93.2 | 73 | 118 | | | | |
| Pyrene | 3229.67 | 330 | 3330 | 0 | 97.0 | 74 | 127 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2671.67 | | 3330 | | 80.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2860.67 | | 3330 | | 85.9 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3029.67 | | 3330 | | 91.0 | 46 | 135 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

| Sample ID: LCS-27832 | SampType: LCS | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930396 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: Nitrobenzene-d5 | 2864.33 | | 3330 | | 86.0 | 40 | 116 | | | | |

| Sample ID: MB-27832MS | SampType: MS | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930397 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3263.00 | 330 | 3330 | 0 | 98.0 | 59 | 129 | | | | |
| Pyrene | 3322.00 | 330 | 3330 | 0 | 99.8 | 58 | 138 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2835.67 | | 3330 | | 85.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2966.33 | | 3330 | | 89.1 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3099.67 | | 3330 | | 93.1 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2998.33 | | 3330 | | 90.0 | 40 | 116 | | | | |

| Sample ID: MB-27832MSD | SampType: MSD | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930398 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3266.00 | 330 | 3330 | 0 | 98.1 | 59 | 129 | 3263 | 0.0919 | 30 | |
| Pyrene | 3331.67 | 330 | 3330 | 0 | 100 | 58 | 138 | 3322 | 0.291 | 30 | |
| Surr: 1,2-Dichlorobenzene-d4 | 2732.67 | | 3330 | | 82.1 | 46 | 105 | | 0 | 30 | |
| Surr: 2-Fluorobiphenyl | 2944.00 | | 3330 | | 88.4 | 54 | 112 | | 0 | 30 | |
| Surr: 4-Terphenyl-d14 | 3111.00 | | 3330 | | 93.4 | 46 | 135 | | 0 | 30 | |
| Surr: Nitrobenzene-d5 | 2952.00 | | 3330 | | 88.6 | 40 | 116 | | 0 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID:** 27847

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/2/2006** | SeqNo: **930785** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: p-Terphenyl | 66.17 | | 80.00 | | 82.7 | 56 | 131 | | | | |

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **HC_S_SEMI** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/2/2006** | SeqNo: **930790** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T/R Hydrocarbons: C10-C18 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C40 Total | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C10 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C28-C36 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C36-C40 | 0.00 | 10 | | | | | | | | | |
| Surr: p-Terphenyl | 62.15 | | 80.00 | | 77.7 | 56 | 131 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID:** 27847

Sample ID: **LCS-27847** SampType: **LCS** TestCode: **8015_S_DM** Units: **mg/Kg** Prep Date: **5/2/2006** RunNo: **62915**
Client ID: **LCSS** Batch ID: **27847** TestNo: **EPA 8015B(M LUFT** Analysis Date: **5/2/2006** SeqNo: **930786**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 986.88 | 10 | 1000 | 0 | 98.7 | 67 | 131 | | | | |
| Surr: p-Terphenyl | 68.59 | | 80.00 | | 85.7 | 56 | 131 | | | | |

Sample ID: **084155-006AMS** SampType: **MS** TestCode: **8015_S_DM** Units: **mg/Kg** Prep Date: **5/2/2006** RunNo: **62915**
Client ID: **ZZZZZZ** Batch ID: **27847** TestNo: **EPA 8015B(M LUFT** Analysis Date: **5/2/2006** SeqNo: **930787**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 987.97 | 10 | 1000 | 0 | 98.8 | 49 | 140 | | | | |
| Surr: p-Terphenyl | 65.24 | | 80.00 | | 81.6 | 56 | 131 | | | | |

Sample ID: **084155-006AMSD** SampType: **MSD** TestCode: **8015_S_DM** Units: **mg/Kg** Prep Date: **5/2/2006** RunNo: **62915**
Client ID: **ZZZZZZ** Batch ID: **27847** TestNo: **EPA 8015B(M LUFT** Analysis Date: **5/2/2006** SeqNo: **930788**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 989.66 | 10 | 1000 | 0 | 99.0 | 49 | 140 | 988.0 | 0.171 | 30 | |
| Surr: p-Terphenyl | 67.09 | | 80.00 | | 83.9 | 56 | 131 | | 0 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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# CHAIN OF CUSTODY RECORD

Pg 1 of 1


Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040


**FOR LABORATORY USE ONLY:**

P.O.#: _____

Logged By: _____ Date: 5/1/06

Method of Transport: Client ☐ ATL ☑ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y☐ N☐ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☑

Client: Ninyo & Moore
Attn: VJS
Address: 5710 Ruffin Rd.
City San Diego State CA Zip Code 92123
TEL: (858) 576 1000
FAX: (858) 576 9600

Project Name: CCDC - Monarch Project #: 105740002 Sampler: (Printed Name) J Schneider (Signature)

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by: (Signature and Printed Name) VJS | Date: 5/1/06 | Time: 0900 | Received by: (Signature and Printed Name) | Date: 5-1-06 | Time: 9:30a |
| Relinquished by: (Signature and Printed Name) | Date: 5-1-06 | Time: 6:15 | Received by: (Signature and Printed Name) | Date: 05/01/06 | Time: 1815 |
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | Date: | Time: |

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: J. Schneider (Print Name) 5/1/06 (Date)
(Signature)

Send Report To:
Attn: J. Schneider
Co: Ninyo & Moore
Address 5710 Ruffin Rd
City S.D. State CA Zip 92123

Bill To:
Attn: _____
Co: same
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
LEAD TESTING (up to 5) for the following
If Lead ≥ 50 mg/kg, test using WET
If Lead ≥ 100 mg/kg, test using TCLP
TPH-E = C9-C44

**Sample/Records - Archival & Disposal**
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

Q A / Q C: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

| ITEM | LAB USE ONLY: Batch #: / Lab No. | Sample Description 2006 / Sample I.D. / Location | Date | Time | 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) VOCs + OXY | 8270C (BNA) PAHs | 8010B (Total Metal) | 8015B (GRO) / 8020 (BTEX) | 8015B (DRO) | 8021 (BTEX) | TITLE 22 CAM 17 (6010 / 7000) LEAD (6010 8015M) | TPH-E | SOIL | WATER | GROUND WATER | WASTEWATER | TAT | Container(s) # | Type | PRESERVATION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ✓ | 064157-001 | NM-B01-1.0 | 4/29 | 1118 | | | | | | | | | X | | X | | | | E | 1 | J G | — | |
| ✓ | -002 | NM-B01-2.0 | | 1122 | | | | | | | | | X | | X | | | | | 1 | J G | — | |
| ✓ | -003 | NM-B01-5.0 | | 1136 | | X | X | | | | | X | | X | X | | | | | 1 | T P | — | |
| ✓ | -004 | NM-B01-10.0 | | 1144 | | X | | | | | | | | X | X | | | | | 1 | T P | — | |
| ✓ | -005 | NM-B01-15.0 | | 1154 | | X | | | | | | | | X | X | | | | | 1 | T P | — | |
| ✓ | -006 | NM-B01-20.0 | | 1225 | | X | | | | | | | | X | X | | | | | 1 | T P | — | |
| ✓ | -007 | NM-B01 | | 1208 | | X | | | | | | | | X | X | | X | | | 2 | V G | H | |
| ✓ | -008 | NM-B01-2.0D | | 1122 | | | | | | | | | X | | X | | | | | 1 | J G | — | |

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=$HNO_3$ S=$H_2SO_4$ C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

May 05, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084154

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084154
**Contract No:**

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date | Date Received | Date Reported |
|---|---|---|---|---|---|
| 084154-001A | NM-B04-1.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084154-002A | NM-B04-2.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084154-003A | NM-B04-5.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084154-004A | NM-B04-10.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084154-005A | NM-B04-15.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084154-006A | NM-B04-20.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084154-007A | NM-B04 | Ground Water | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084154-008A | NM-B04D | Ground Water | 4/29/2006 | 5/1/2006 | 5/5/2006 |



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**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084154

## CASE NARRATIVE

Analytical Comments for EPA 6010B

RPD for Matrix Spike (MS)/Matrix Spike Duplicate (MSD) is outside criteria for sample 084161-005AMSD; however, the analytical batch was validated by the Laboratory Control Sample (LCS).



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-1.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:05:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-001 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 51 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-2.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:10:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-002 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 2.8 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-5.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:30:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | | | | | |
| | **EPA 3050B** | | | **EPA 6010B** | | |
| RunID: ICP6_060503C | QC Batch: 27859 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Antimony | ND | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Arsenic | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Barium | 40 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Beryllium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cadmium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Chromium | 14 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cobalt | 6.5 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Copper | 5.1 | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Lead | 4.1 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Molybdenum | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Nickel | 5.6 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Selenium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Silver | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Thallium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Vanadium | 34 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Zinc | 16 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| | **LUFT** | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: | 5/2/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| Surr: p-Terphenyl | 80.5 | 56-131 | | %REC | 1 | 5/2/2006 |
| **MERCURY BY COLD VAPOR TECHNIQUE** | | | | | | |
| | **EPA 7471** | | | **EPA 7471A** | | |
| RunID: AA5_060504A | QC Batch: 27864 | | | PrepDate: | 5/3/2006 | Analyst: **NS** |
| Mercury | ND | 0.10 | | mg/Kg | 1 | 5/4/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-5.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:30:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-003 | **Matrix:** | SOIL |

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: MS1_060503A QC Batch: P06VS081 PrepDate: Analyst: TT

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-5.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:30:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 93.6 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 102 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 95.1 | 58-135 | | %REC | 1 | 5/3/2006 |
| Surr: Toluene-d8 | 102 | 84-130 | | %REC | 1 | 5/3/2006 |
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | **EPA 3550B** | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| 2-Methylnaphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(a)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(a)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(b)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(g,h,i)perylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B04-5.0
**Lab Order:** 084154 **Collection Date:** 4/29/2006 9:30:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084154-003 **Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| **EPA 3550B** | | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| Benzo(k)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Chrysene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Dibenz(a,h)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluorene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Indeno(1,2,3-cd)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Phenanthrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichlorobenzene-d4 | 74.3 | 46-105 | | %REC | 1 | 5/2/2006 |
| Surr: 2-Fluorobiphenyl | 77.9 | 54-112 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Terphenyl-d14 | 94.8 | 46-135 | | %REC | 1 | 5/2/2006 |
| Surr: Nitrobenzene-d5 | 76.8 | 40-116 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-10.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:41:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-004 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| Surr: p-Terphenyl | 83.2 | 56-131 | | %REC | 1 | 5/2/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-10.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:41:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-004 | **Matrix:** | SOIL |

**VOLATILE ORGANIC COMPOUNDS BY GC/MS** — **EPA 8260B**

RunID: MS1_060503A | QC Batch: P06VS081 | PrepDate: | Analyst: TT

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 90.8 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 93.3 | 58-135 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-10.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:41:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-004 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-15.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:55:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-005 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: | 5/2/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| Surr: p-Terphenyl | 87.6 | 56-131 | | %REC | 1 | 5/2/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Client Sample ID:** NM-B04-15.0
**Lab Order:** 084154
**Collection Date:** 4/29/2006 9:55:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084154-005
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 92.2 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 94.0 | 58-135 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike/Surrogate outside of limits due to matrix interference
Results are wet unless otherwise specified
DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-15.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 9:55:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-005 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B04-20.0
**Lab Order:** 084154 **Collection Date:** 4/29/2006 10:10:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084154-006 **Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| Surr: p-Terphenyl | 82.7 | 56-131 | | %REC | 1 | 5/2/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-20.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 10:10:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-006 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 89.4 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 97.8 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 91.7 | 58-135 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04-20.0 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 10:10:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-006 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| Surr: Toluene-d8 | 102 | 84-130 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 10:35:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-007 | **Matrix:** | GROUND WATER |

**VOLATILE ORGANIC COMPOUNDS BY GC/MS** **EPA 8260B**

RunID: MS2_060503A QC Batch: Q06VW083 PrepDate: Analyst: **HH**

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromoform | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |

**Qualifiers:**
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04 |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 10:35:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-007 | **Matrix:** | GROUND WATER |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS2_060503A | QC Batch: Q06VW083 | | | PrepDate: | | Analyst: **HH** |
| Dibromomethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Ethyl tert-butyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/L | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/L | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 114 | 70-126 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 98.7 | 63-134 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 114 | 73-124 | | %REC | 1 | 5/3/2006 |
| Surr: Toluene-d8 | 107 | 84-123 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04D |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 10:35:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-008 | **Matrix:** | GROUND WATER |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS2_060503A | QC Batch: Q06VW083 | | | PrepDate: | | Analyst: **HH** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromoform | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B04D |
| **Lab Order:** | 084154 | **Collection Date:** | 4/29/2006 10:35:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084154-008 | **Matrix:** | GROUND WATER |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS2_060503A | QC Batch: Q06VW083 | | | PrepDate: | | Analyst: **HH** |
| Dibromomethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Ethyl tert-butyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/L | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/L | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 111 | 70-126 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 94.5 | 63-134 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 117 | 73-124 | | %REC | 1 | 5/3/2006 |
| Surr: Toluene-d8 | 107 | 84-123 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

| Sample ID: **MB-27859** | SampType: **MBLK** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62964** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27859** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931354** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.00 | 2.0 | | | | | | | | | |
| Arsenic | 0.00 | 1.0 | | | | | | | | | |
| Barium | 0.00 | 1.0 | | | | | | | | | |
| Beryllium | 0.00 | 1.0 | | | | | | | | | |
| Cadmium | 0.00 | 1.0 | | | | | | | | | |
| Chromium | 0.00 | 1.0 | | | | | | | | | |
| Cobalt | 0.00 | 1.0 | | | | | | | | | |
| Copper | 0.00 | 2.0 | | | | | | | | | |
| Lead | 0.00 | 1.0 | | | | | | | | | |
| Molybdenum | 0.00 | 1.0 | | | | | | | | | |
| Nickel | 0.00 | 1.0 | | | | | | | | | |
| Selenium | 0.00 | 1.0 | | | | | | | | | |
| Silver | 0.00 | 1.0 | | | | | | | | | |
| Thallium | 0.00 | 1.0 | | | | | | | | | |
| Vanadium | 0.00 | 1.0 | | | | | | | | | |
| Zinc | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **LCS-27859** | SampType: **LCS** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62964** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27859** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931355** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 51.80 | 2.0 | 50.00 | 0 | 104 | 80 | 120 | | | | |
| Arsenic | 49.96 | 1.0 | 50.00 | 0 | 99.9 | 80 | 120 | | | | |
| Barium | 53.81 | 1.0 | 50.00 | 0 | 108 | 80 | 120 | | | | |
| Beryllium | 50.61 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |
| Cadmium | 53.10 | 1.0 | 50.00 | 0 | 106 | 80 | 120 | | | | |
| Chromium | 52.63 | 1.0 | 50.00 | 0 | 105 | 80 | 120 | | | | |
| Cobalt | 50.56 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |
| Copper | 53.79 | 2.0 | 50.00 | 0 | 108 | 80 | 120 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

Sample ID: **LCS-27859** SampType: **LCS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62964**
Client ID: **LCSS** Batch ID: **27859** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931355**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 51.59 | 1.0 | 50.00 | 0 | 103 | 80 | 120 | | | | |
| Molybdenum | 53.35 | 1.0 | 50.00 | 0 | 107 | 80 | 120 | | | | |
| Nickel | 50.45 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |
| Selenium | 49.16 | 1.0 | 50.00 | 0 | 98.3 | 80 | 120 | | | | |
| Silver | 51.40 | 1.0 | 50.00 | 0 | 103 | 80 | 120 | | | | |
| Thallium | 51.58 | 1.0 | 50.00 | 0 | 103 | 80 | 120 | | | | |
| Vanadium | 53.11 | 1.0 | 50.00 | 0 | 106 | 80 | 120 | | | | |
| Zinc | 50.62 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |

Sample ID: **084161-005AMS** SampType: **MS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62964**
Client ID: **ZZZZZZ** Batch ID: **27859** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931360**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 95.15 | 2.0 | 125.0 | 0 | 76.1 | 25 | 108 | | | | |
| Arsenic | 102.14 | 1.0 | 125.0 | 2.513 | 79.7 | 46 | 118 | | | | |
| Barium | 118.76 | 1.0 | 125.0 | 14.58 | 83.3 | 32 | 131 | | | | |
| Beryllium | 99.98 | 1.0 | 125.0 | 0 | 80.0 | 59 | 104 | | | | |
| Cadmium | 106.35 | 1.0 | 125.0 | 0.1466 | 85.0 | 63 | 105 | | | | |
| Chromium | 110.80 | 1.0 | 125.0 | 7.363 | 82.8 | 49 | 116 | | | | |
| Cobalt | 105.77 | 1.0 | 125.0 | 2.613 | 82.5 | 58 | 104 | | | | |
| Copper | 114.75 | 2.0 | 125.0 | 2.758 | 89.6 | 54 | 126 | | | | |
| Lead | 102.67 | 1.0 | 125.0 | 1.493 | 80.9 | 31 | 122 | | | | |
| Molybdenum | 103.91 | 1.0 | 125.0 | 0.3638 | 82.8 | 61 | 104 | | | | |
| Nickel | 105.00 | 1.0 | 125.0 | 2.718 | 81.8 | 50 | 112 | | | | |
| Selenium | 98.56 | 1.0 | 125.0 | 0 | 78.8 | 53 | 109 | | | | |
| Silver | 103.06 | 1.0 | 125.0 | 0 | 82.4 | 41 | 121 | | | | |
| Thallium | 98.51 | 1.0 | 125.0 | 0 | 78.8 | 54 | 100 | | | | |
| Vanadium | 120.44 | 1.0 | 125.0 | 13.87 | 85.3 | 59 | 109 | | | | |
| Zinc | 109.34 | 1.0 | 125.0 | 9.653 | 79.8 | 27 | 131 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

Sample ID: **084161-005AMSD** SampType: **MSD** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62964**
Client ID: **ZZZZZZ** Batch ID: **27859** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931361**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 78.02 | 2.0 | 125.0 | 0 | 62.4 | 25 | 108 | 95.15 | 19.8 | 20 | |
| Arsenic | 82.73 | 1.0 | 125.0 | 2.513 | 64.2 | 46 | 118 | 102.1 | 21.0 | 20 | R |
| Barium | 97.00 | 1.0 | 125.0 | 14.58 | 65.9 | 32 | 131 | 118.8 | 20.2 | 20 | R |
| Beryllium | 81.78 | 1.0 | 125.0 | 0 | 65.4 | 59 | 104 | 99.98 | 20.0 | 20 | R |
| Cadmium | 86.50 | 1.0 | 125.0 | 0.1466 | 69.1 | 63 | 105 | 106.3 | 20.6 | 20 | R |
| Chromium | 90.72 | 1.0 | 125.0 | 7.363 | 66.7 | 49 | 116 | 110.8 | 19.9 | 20 | |
| Cobalt | 85.79 | 1.0 | 125.0 | 2.613 | 66.5 | 58 | 104 | 105.8 | 20.9 | 20 | R |
| Copper | 92.78 | 2.0 | 125.0 | 2.758 | 72.0 | 54 | 126 | 114.8 | 21.2 | 20 | R |
| Lead | 84.03 | 1.0 | 125.0 | 1.493 | 66.0 | 31 | 122 | 102.7 | 20.0 | 20 | |
| Molybdenum | 84.91 | 1.0 | 125.0 | 0.3638 | 67.6 | 61 | 104 | 103.9 | 20.1 | 20 | R |
| Nickel | 85.31 | 1.0 | 125.0 | 2.718 | 66.1 | 50 | 112 | 105.0 | 20.7 | 20 | R |
| Selenium | 79.34 | 1.0 | 125.0 | 0 | 63.5 | 53 | 109 | 98.56 | 21.6 | 20 | R |
| Silver | 84.76 | 1.0 | 125.0 | 0 | 67.8 | 41 | 121 | 103.1 | 19.5 | 20 | |
| Thallium | 81.41 | 1.0 | 125.0 | 0 | 65.1 | 54 | 100 | 98.51 | 19.0 | 20 | |
| Vanadium | 98.22 | 1.0 | 125.0 | 13.87 | 67.5 | 59 | 109 | 120.4 | 20.3 | 20 | R |
| Zinc | 89.31 | 1.0 | 125.0 | 9.653 | 63.7 | 27 | 131 | 109.3 | 20.2 | 20 | R |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27855A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931310 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: LCS-27855 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931311 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: 084154-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: NM-B04-2.0 | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931315 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: MB-27855B | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931316 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: 084158-002AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931328 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

| Sample ID: 084158-002AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62961 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27855 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931329 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: **084158-002AMSD** | SampType: **MSD** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931329** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 215.21 | 1.0 | 250.0 | 18.52 | 78.7 | 31 | 122 | 211.0 | 1.97 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7471_S**

| Sample ID: 084161-005A-MS | SampType: MS | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931789 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | | | | |

| Sample ID: 084161-005A-MSD | SampType: MSD | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931790 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | 1.141 | 0.444 | 20 | |

| Sample ID: LCS-27864 | SampType: LCS | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931791 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 2.37 | 0.10 | 2.080 | 0 | 114 | 80 | 120 | | | | |

| Sample ID: MB-27864 | SampType: MBLK | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931792 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.00 | 0.10 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
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DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **LCSS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931484**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 109.22 | 5.0 | 100.0 | 0 | 109 | 76 | 126 | | | | |
| Benzene | 113.96 | 5.0 | 100.0 | 0 | 114 | 77 | 131 | | | | |
| Chlorobenzene | 121.03 | 5.0 | 100.0 | 0 | 121 | 81 | 136 | | | | |
| MTBE | 111.68 | 5.0 | 100.0 | 0 | 112 | 50 | 143 | | | | |
| Toluene | 112.34 | 5.0 | 100.0 | 0 | 112 | 78 | 129 | | | | |
| Trichloroethene | 117.70 | 5.0 | 100.0 | 0 | 118 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.68 | | 50.00 | | 91.4 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.33 | | 50.00 | | 103 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.27 | | 50.00 | | 94.5 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.06 | | 50.00 | | 102 | 84 | 130 | | | | |

Sample ID: **P060503MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931485**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 113.17 | 5.0 | 100.0 | 0 | 113 | 59 | 146 | | | | |
| Benzene | 112.71 | 5.0 | 100.0 | 0 | 113 | 68 | 137 | | | | |
| Chlorobenzene | 120.42 | 5.0 | 100.0 | 0 | 120 | 64 | 144 | | | | |
| MTBE | 117.72 | 5.0 | 100.0 | 0 | 118 | 54 | 141 | | | | |
| Toluene | 110.45 | 5.0 | 100.0 | 0 | 110 | 53 | 150 | | | | |
| Trichloroethene | 116.26 | 5.0 | 100.0 | 0 | 116 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 47.80 | | 50.00 | | 95.6 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.35 | | 50.00 | | 101 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 48.09 | | 50.00 | | 96.2 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.22 | | 50.00 | | 102 | 84 | 130 | | | | |

Sample ID: **P060503MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931486**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 108.71 | 5.0 | 100.0 | 0 | 109 | 59 | 146 | 113.2 | 4.02 | 30 | |

**Qualifiers:**
E Value above quantitation range
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ND Not Detected at the Reporting Limit
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S Spike/Surrogate outside of limits due to matrix interferenc
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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

| Sample ID: **P060503MSD** | SampType: **MSD** | TestCode: **8260_S** | Units: **µg/Kg** | Prep Date: | RunNo: **62973** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **P06VS081** | TestNo: **EPA 8260B** | | Analysis Date: **5/3/2006** | SeqNo: **931486** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 112.37 | 5.0 | 100.0 | 0 | 112 | 68 | 137 | 112.7 | 0.302 | 30 | |
| Chlorobenzene | 119.51 | 5.0 | 100.0 | 0 | 120 | 64 | 144 | 120.4 | 0.759 | 30 | |
| MTBE | 114.30 | 5.0 | 100.0 | 0 | 114 | 54 | 141 | 117.7 | 2.95 | 30 | |
| Toluene | 110.79 | 5.0 | 100.0 | 0 | 111 | 53 | 150 | 110.4 | 0.307 | 30 | |
| Trichloroethene | 117.13 | 5.0 | 100.0 | 0 | 117 | 58 | 155 | 116.3 | 0.746 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 46.30 | | 50.00 | | 92.6 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 50.36 | | 50.00 | | 101 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 47.22 | | 50.00 | | 94.4 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.04 | | 50.00 | | 102 | 84 | 130 | | 0 | 30 | |

| Sample ID: **P060503MB2** | SampType: **MBLK** | TestCode: **8260_S** | Units: **µg/Kg** | Prep Date: | RunNo: **62973** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **P06VS081** | TestNo: **EPA 8260B** | | Analysis Date: **5/3/2006** | SeqNo: **931487** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
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**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.11 | | 50.00 | | 90.2 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.04 | | 50.00 | | 100 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.53 | | 50.00 | | 93.1 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 50.69 | | 50.00 | | 101 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
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**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050306LC1** SampType: **LCS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **LCSW** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931071**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.09 | 5.0 | 20.00 | 0 | 115 | 76 | 132 | | | | |
| Benzene | 21.67 | 5.0 | 20.00 | 0 | 108 | 90 | 123 | | | | |
| Chlorobenzene | 21.30 | 5.0 | 20.00 | 0 | 106 | 76 | 118 | | | | |
| MTBE | 21.26 | 5.0 | 20.00 | 0 | 106 | 78 | 134 | | | | |
| Toluene | 22.39 | 5.0 | 20.00 | 0 | 112 | 91 | 124 | | | | |
| Trichloroethene | 22.28 | 5.0 | 20.00 | 0 | 111 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 53.31 | | 50.00 | | 107 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 58.46 | | 50.00 | | 117 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 54.83 | | 50.00 | | 110 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 59.11 | | 50.00 | | 118 | 84 | 123 | | | | |

Sample ID: **Q050306MB1MS** SampType: **MS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **ZZZZZZ** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931072**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.14 | 5.0 | 20.00 | 0 | 116 | 76 | 132 | | | | |
| Benzene | 22.65 | 5.0 | 20.00 | 0 | 113 | 90 | 123 | | | | |
| Chlorobenzene | 22.03 | 5.0 | 20.00 | 0 | 110 | 76 | 118 | | | | |
| MTBE | 21.43 | 5.0 | 20.00 | 0 | 107 | 78 | 134 | | | | |
| Toluene | 23.08 | 5.0 | 20.00 | 0 | 115 | 91 | 124 | | | | |
| Trichloroethene | 23.64 | 5.0 | 20.00 | 0 | 118 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 53.31 | | 50.00 | | 107 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 58.65 | | 50.00 | | 117 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 54.72 | | 50.00 | | 109 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 59.52 | | 50.00 | | 119 | 84 | 123 | | | | |

Sample ID: **Q050306MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **ZZZZZZ** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931073**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 22.33 | 5.0 | 20.00 | 0 | 112 | 76 | 132 | 23.14 | 3.56 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050306MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **ZZZZZZ** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931073**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 22.01 | 5.0 | 20.00 | 0 | 110 | 90 | 123 | 22.65 | 2.87 | 30 | |
| Chlorobenzene | 21.75 | 5.0 | 20.00 | 0 | 109 | 76 | 118 | 22.03 | 1.28 | 30 | |
| MTBE | 21.08 | 5.0 | 20.00 | 0 | 105 | 78 | 134 | 21.43 | 1.65 | 30 | |
| Toluene | 22.70 | 5.0 | 20.00 | 0 | 114 | 91 | 124 | 23.08 | 1.66 | 30 | |
| Trichloroethene | 22.19 | 5.0 | 20.00 | 0 | 111 | 87 | 125 | 23.64 | 6.33 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 51.93 | | 50.00 | | 104 | 70 | 126 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 55.23 | | 50.00 | | 110 | 63 | 134 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 52.41 | | 50.00 | | 105 | 73 | 124 | | 0 | 30 | |
| Surr: Toluene-d8 | 59.75 | | 50.00 | | 120 | 84 | 123 | | 0 | 30 | |

Sample ID: **Q050306MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **PBW** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931074**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050306MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **PBW** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931074**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050306MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **PBW** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931074**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 55.80 | | 50.00 | | 112 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 48.36 | | 50.00 | | 96.7 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 57.80 | | 50.00 | | 116 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 52.46 | | 50.00 | | 105 | 84 | 123 | | | | |

**Qualifiers:**
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DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

Sample ID: **MB-27832** SampType: **MBLK** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **PBS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930395**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 0.00 | 330 | | | | | | | | | |
| Acenaphthene | 0.00 | 330 | | | | | | | | | |
| Acenaphthylene | 0.00 | 330 | | | | | | | | | |
| Anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)pyrene | 0.00 | 330 | | | | | | | | | |
| Benzo(b)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Benzo(g,h,i)perylene | 0.00 | 330 | | | | | | | | | |
| Benzo(k)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Chrysene | 0.00 | 330 | | | | | | | | | |
| Dibenz(a,h)anthracene | 0.00 | 330 | | | | | | | | | |
| Fluoranthene | 0.00 | 330 | | | | | | | | | |
| Fluorene | 0.00 | 330 | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | 0.00 | 330 | | | | | | | | | |
| Naphthalene | 0.00 | 330 | | | | | | | | | |
| Phenanthrene | 0.00 | 330 | | | | | | | | | |
| Pyrene | 0.00 | 330 | | | | | | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2751.00 | | 3330 | | 82.6 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2791.00 | | 3330 | | 83.8 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3513.67 | | 3330 | | 106 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2832.00 | | 3330 | | 85.0 | 40 | 116 | | | | |

Sample ID: **LCS-27832** SampType: **LCS** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **LCSS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930396**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3102.33 | 330 | 3330 | 0 | 93.2 | 73 | 118 | | | | |
| Pyrene | 3229.67 | 330 | 3330 | 0 | 97.0 | 74 | 127 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2671.67 | | 3330 | | 80.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2860.67 | | 3330 | | 85.9 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3029.67 | | 3330 | | 91.0 | 46 | 135 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

| Sample ID: LCS-27832 | SampType: LCS | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930396 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: Nitrobenzene-d5 | 2864.33 | | 3330 | | 86.0 | 40 | 116 | | | | |

| Sample ID: MB-27832MS | SampType: MS | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930397 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3263.00 | 330 | 3330 | 0 | 98.0 | 59 | 129 | | | | |
| Pyrene | 3322.00 | 330 | 3330 | 0 | 99.8 | 58 | 138 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2835.67 | | 3330 | | 85.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2966.33 | | 3330 | | 89.1 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3099.67 | | 3330 | | 93.1 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2998.33 | | 3330 | | 90.0 | 40 | 116 | | | | |

| Sample ID: MB-27832MSD | SampType: MSD | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930398 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3266.00 | 330 | 3330 | 0 | 98.1 | 59 | 129 | 3263 | 0.0919 | 30 | |
| Pyrene | 3331.67 | 330 | 3330 | 0 | 100 | 58 | 138 | 3322 | 0.291 | 30 | |
| Surr: 1,2-Dichlorobenzene-d4 | 2732.67 | | 3330 | | 82.1 | 46 | 105 | | 0 | 30 | |
| Surr: 2-Fluorobiphenyl | 2944.00 | | 3330 | | 88.4 | 54 | 112 | | 0 | 30 | |
| Surr: 4-Terphenyl-d14 | 3111.00 | | 3330 | | 93.4 | 46 | 135 | | 0 | 30 | |
| Surr: Nitrobenzene-d5 | 2952.00 | | 3330 | | 88.6 | 40 | 116 | | 0 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27847**

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930785** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: p-Terphenyl | 66.17 | | 80.00 | | 82.7 | 56 | 131 | | | | |

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **HC_S_SEMI** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930790** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T/R Hydrocarbons: C10-C18 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C40 Total | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C10 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C28-C36 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C36-C40 | 0.00 | 10 | | | | | | | | | |
| Surr: p-Terphenyl | 62.15 | | 80.00 | | 77.7 | 56 | 131 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084154
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27847**

| Sample ID: **LCS-27847** | SampType: **LCS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930786** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 986.88 | 10 | 1000 | 0 | 98.7 | 67 | 131 | | | | |
| Surr: p-Terphenyl | 68.59 | | 80.00 | | 85.7 | 56 | 131 | | | | |

| Sample ID: **084155-006AMS** | SampType: **MS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930787** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 987.97 | 10 | 1000 | 0 | 98.8 | 49 | 140 | | | | |
| Surr: p-Terphenyl | 65.24 | | 80.00 | | 81.6 | 56 | 131 | | | | |

| Sample ID: **084155-006AMSD** | SampType: **MSD** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930788** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 989.66 | 10 | 1000 | 0 | 99.0 | 49 | 140 | 988.0 | 0.171 | 30 | |
| Surr: p-Terphenyl | 67.09 | | 80.00 | | 83.9 | 56 | 131 | | 0 | 30 | |

**Qualifiers:**
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S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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# CHAIN OF CUSTODY RECORD

Pg 1 of 1


**Advanced Technology Laboratories**
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040


**FOR LABORATORY USE ONLY:**

P.O.#: _____

Logged By: DK Date: 05/01/06

Method of Transport: Client ☐ ATL ☑ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y☑ N☐ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☑ N☐

Client: Ninyo & Moore
Attn: VJS
Address: 5710 Ruffin Rd
City San Diego State CA Zip Code 92123
TEL: (858) 576-1000
FAX: (858) 576-9600
Project Name: CCDC - Monarch
Project #: 105740002
Sampler: (Printed Name) J. Schneider (Signature)

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by: (Signature and Printed Name) VJS | Date: 5/1/06 | Time: 0900 | Received by: (Signature and Printed Name) | Date: 5-1-06 | Time: 9:30 |
| Relinquished by: (Signature and Printed Name) | Date: 5-1-06 | Time: 6:15p | Received by: (Signature and Printed Name) | Date: 05/1/06 | Time: 1915 |
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | Date: | Time: |

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: J. Schneider (Print Name) _____ (Date) (Signature)

Send Report To: Attn: VJS Co: N&M Address 5710 Ruffin Rd. City S.D. State CA Zip 92123

Bill To: Attn: _____ Co: Same Address _____ City _____ State _____ Zip _____

Special Instructions/Comments:
~~LEAD~~ If ≥50 mg/kg, test using WET
≥100 mg/kg, test using TCLP

**Sample/Records - Archival & Disposal**
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

| ITEM | LAB USE ONLY: Batch #: / Lab No. | Sample Description 2006 / Sample I.D. / Location | Date | Time | 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) | 8270C (BNA) | 6010B (Total Metal) | 8015B (GRO) / 8020 (BTEX) | 8015B (DRO) | 8021 (BTEX) | CAM 17 (6010 / 7000) | LEAD | TPH-E | 6010 | 8015M | SOIL | WATER | GROUND WATER | WASTEWATER | TAT | Container(s) # | Container(s) Type | PRESERVATION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 084154-001 | NM-B04-1.0 | 4/29 | 0905 | | | | | | | | | X | | | | | X | | | | E | 1 | JG | | |
| | -002 | NM-B04-2-0 | 4/29 | 0910 | | | | | | | | | X | | | | | X | | | | | 1 | JG | | |
| | -003 | NM-B04-5-0 | 4/29 | 0930 | | X | X | | | | | X | | X | | | | X | | | | | 1 | TP | | |
| | -004 | NM-B04-10-0 | 4/29 | 0941 | | X | | | | | | | | X | | | | X | | | | | 1 | TP | | |
| | -005 | NM-B04-15-0 | 4/29 | 0955 | | X | | | | | | | | X | | | | X | | | | | 1 | TP | | |
| | -006 | NM-B04-20-0 | 4/29 | 1010 | | X | | | | | | | | X | | | | X | | | | | 1 | TP | | |
| | -007 | NM-B04 | 4/29 | 1035 | | X | | | | | | | | | | | | | | X | | | 2 | VG | H | |
| | -008 | NM-B04D | 4/29 | 1035 | | X | | | | | | | | | | | | | | X | | | 1 | VG | H | |

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=$HNO_3$ S=$H_2SO_4$ C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

May 04, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084155

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084155
**Contract No:**

# Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date | Date Received | Date Reported |
|---|---|---|---|---|---|
| 084155-001A | NM-B03-1.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084155-002A | NM-B03-2.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084155-003A | NM-B03-3.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084155-004A | NM-B03-5.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084155-005A | NM-B03-12.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084155-006A | NM-B03-15.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084155-007A | NM-B03-20.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084155-008A | NM-B03-20.0D | Soil | 4/20/2006 | 5/1/2006 | 5/4/2006 |
| 084155-009A | NM-B03 | Ground Water | 4/29/2006 | 5/1/2006 | 5/4/2006 |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-1.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 1:55:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-001 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 12 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-2.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 1:57:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-002 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 340 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-3.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 1:58:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 75 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-5.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 1:58:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-004 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| Surr: p-Terphenyl | 86.5 | 56-131 | | %REC | 1 | 5/2/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-5.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 1:58:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-004 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 95.0 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 94.8 | 58-135 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-5.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 1:58:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-004 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084155
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084155-005

**Client Sample ID:** NM-B03-12.0
**Collection Date:** 4/29/2006 4:12:00 PM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | | PrepDate: 5/2/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | 13 | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | 13 | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 85.5 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | | PrepDate: | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B03-12.0
**Lab Order:** 084155 **Collection Date:** 4/29/2006 4:12:00 PM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084155-005 **Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 96.0 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 99.9 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 95.3 | 58-135 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-12.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 4:12:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-005 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-15.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 4:20:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-006 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: EES |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| Surr: p-Terphenyl | 83.6 | 56-131 | | %REC | 1 | 5/2/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-15.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 4:20:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-006 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 90.8 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 99.6 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 93.0 | 58-135 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-15.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 4:20:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-006 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-20.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 4:29:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-007 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| Surr: p-Terphenyl | 85.3 | 56-131 | | %REC | 1 | 5/2/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060504A | QC Batch: P06VS082 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/4/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Client Sample ID:** NM-B03-20.0
**Lab Order:** 084155
**Collection Date:** 4/29/2006 4:29:00 PM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084155-007
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060504A | QC Batch: P06VS082 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/4/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/4/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/4/2006 |
| Surr: 1,2-Dichloroethane-d4 | 83.1 | 58-138 | | %REC | 1 | 5/4/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/4/2006 |
| Surr: Dibromofluoromethane | 89.2 | 58-135 | | %REC | 1 | 5/4/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-20.0 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 4:29:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-007 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060504A | QC Batch: P06VS082 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/4/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-20.0D |
| **Lab Order:** | 084155 | **Collection Date:** | 4/20/2006 4:29:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-008 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: EES |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 82.3 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-20.0D |
| **Lab Order:** | 084155 | **Collection Date:** | 4/20/2006 4:29:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-008 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 92.9 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 94.8 | 58-135 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-20.0D |
| **Lab Order:** | 084155 | **Collection Date:** | 4/20/2006 4:29:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-008 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 102 | 84-130 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 4:45:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-009 | **Matrix:** | GROUND WATER |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS2_060503A | QC Batch: Q06VW083 | | | PrepDate: | | Analyst: **HH** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromoform | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloroform | 11 | 5.0 | | µg/L | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03 |
| **Lab Order:** | 084155 | **Collection Date:** | 4/29/2006 4:45:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084155-009 | **Matrix:** | GROUND WATER |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS2_060503A | QC Batch: Q06VW083 | | | PrepDate: | | Analyst: **HH** |
| Dibromomethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Ethyl tert-butyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/L | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/L | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/L | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 116 | 70-126 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 96.5 | 63-134 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 123 | 73-124 | | %REC | 1 | 5/3/2006 |
| Surr: Toluene-d8 | 108 | 84-123 | | %REC | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: **MB-27855A** | SampType: **MBLK** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931310** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **LCS-27855** | SampType: **LCS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931311** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: **084154-002AMS** | SampType: **MS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931315** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: **MB-27855B** | SampType: **MBLK** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931316** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **084158-002AMS** | SampType: **MS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931328** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

Sample ID: **084158-002AMSD** SampType: **MSD** TestCode: **6010_SPB_N** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62961**
Client ID: **ZZZZZZ** Batch ID: **27855** TestNo: **EPA 6010B** **EPA 3050M** Analysis Date: **5/3/2006** SeqNo: **931329**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 215.21 | 1.0 | 250.0 | 18.52 | 78.7 | 31 | 122 | 211.0 | 1.97 | 20 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **LCSS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931484**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 109.22 | 5.0 | 100.0 | 0 | 109 | 76 | 126 | | | | |
| Benzene | 113.96 | 5.0 | 100.0 | 0 | 114 | 77 | 131 | | | | |
| Chlorobenzene | 121.03 | 5.0 | 100.0 | 0 | 121 | 81 | 136 | | | | |
| MTBE | 111.68 | 5.0 | 100.0 | 0 | 112 | 50 | 143 | | | | |
| Toluene | 112.34 | 5.0 | 100.0 | 0 | 112 | 78 | 129 | | | | |
| Trichloroethene | 117.70 | 5.0 | 100.0 | 0 | 118 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.68 | | 50.00 | | 91.4 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.33 | | 50.00 | | 103 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.27 | | 50.00 | | 94.5 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.06 | | 50.00 | | 102 | 84 | 130 | | | | |

Sample ID: **P060503MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931485**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 113.17 | 5.0 | 100.0 | 0 | 113 | 59 | 146 | | | | |
| Benzene | 112.71 | 5.0 | 100.0 | 0 | 113 | 68 | 137 | | | | |
| Chlorobenzene | 120.42 | 5.0 | 100.0 | 0 | 120 | 64 | 144 | | | | |
| MTBE | 117.72 | 5.0 | 100.0 | 0 | 118 | 54 | 141 | | | | |
| Toluene | 110.45 | 5.0 | 100.0 | 0 | 110 | 53 | 150 | | | | |
| Trichloroethene | 116.26 | 5.0 | 100.0 | 0 | 116 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 47.80 | | 50.00 | | 95.6 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.35 | | 50.00 | | 101 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 48.09 | | 50.00 | | 96.2 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.22 | | 50.00 | | 102 | 84 | 130 | | | | |

Sample ID: **P060503MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931486**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 108.71 | 5.0 | 100.0 | 0 | 109 | 59 | 146 | 113.2 | 4.02 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

## TestCode: 8260_S

Sample ID: **P060503MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931486**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 112.37 | 5.0 | 100.0 | 0 | 112 | 68 | 137 | 112.7 | 0.302 | 30 | |
| Chlorobenzene | 119.51 | 5.0 | 100.0 | 0 | 120 | 64 | 144 | 120.4 | 0.759 | 30 | |
| MTBE | 114.30 | 5.0 | 100.0 | 0 | 114 | 54 | 141 | 117.7 | 2.95 | 30 | |
| Toluene | 110.79 | 5.0 | 100.0 | 0 | 111 | 53 | 150 | 110.4 | 0.307 | 30 | |
| Trichloroethene | 117.13 | 5.0 | 100.0 | 0 | 117 | 58 | 155 | 116.3 | 0.746 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 46.30 | | 50.00 | | 92.6 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 50.36 | | 50.00 | | 101 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 47.22 | | 50.00 | | 94.4 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.04 | | 50.00 | | 102 | 84 | 130 | | 0 | 30 | |

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.11 | | 50.00 | | 90.2 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.04 | | 50.00 | | 100 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.53 | | 50.00 | | 93.1 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 50.69 | | 50.00 | | 101 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
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ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060504LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62985**
Client ID: **LCSS** Batch ID: **P06VS082** TestNo: **EPA 8260B** Analysis Date: **5/4/2006** SeqNo: **931662**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 119.18 | 5.0 | 100.0 | 0 | 119 | 76 | 126 | | | | |
| Benzene | 109.88 | 5.0 | 100.0 | 0 | 110 | 77 | 131 | | | | |
| Chlorobenzene | 116.74 | 5.0 | 100.0 | 0 | 117 | 81 | 136 | | | | |
| MTBE | 113.58 | 5.0 | 100.0 | 0 | 114 | 50 | 143 | | | | |
| Toluene | 108.98 | 5.0 | 100.0 | 0 | 109 | 78 | 129 | | | | |
| Trichloroethene | 116.48 | 5.0 | 100.0 | 0 | 116 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 46.38 | | 50.00 | | 92.8 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 52.10 | | 50.00 | | 104 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.98 | | 50.00 | | 94.0 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.39 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060504MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62985**
Client ID: **ZZZZZZ** Batch ID: **P06VS082** TestNo: **EPA 8260B** Analysis Date: **5/4/2006** SeqNo: **931663**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 129.30 | 5.0 | 100.0 | 0 | 129 | 59 | 146 | | | | |
| Benzene | 109.78 | 5.0 | 100.0 | 0 | 110 | 68 | 137 | | | | |
| Chlorobenzene | 118.42 | 5.0 | 100.0 | 0 | 118 | 64 | 144 | | | | |
| MTBE | 115.19 | 5.0 | 100.0 | 0 | 115 | 54 | 141 | | | | |
| Toluene | 109.17 | 5.0 | 100.0 | 0 | 109 | 53 | 150 | | | | |
| Trichloroethene | 116.73 | 5.0 | 100.0 | 0 | 117 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 48.08 | | 50.00 | | 96.2 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 52.06 | | 50.00 | | 104 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.66 | | 50.00 | | 95.3 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 50.67 | | 50.00 | | 101 | 84 | 130 | | | | |

Sample ID: **P060504MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62985**
Client ID: **ZZZZZZ** Batch ID: **P06VS082** TestNo: **EPA 8260B** Analysis Date: **5/4/2006** SeqNo: **931664**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 114.41 | 5.0 | 100.0 | 0 | 114 | 59 | 146 | 129.3 | 12.2 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060504MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62985**
Client ID: **ZZZZZZ** Batch ID: **P06VS082** TestNo: **EPA 8260B** Analysis Date: **5/4/2006** SeqNo: **931664**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 111.28 | 5.0 | 100.0 | 0 | 111 | 68 | 137 | 109.8 | 1.36 | 30 | |
| Chlorobenzene | 118.52 | 5.0 | 100.0 | 0 | 119 | 64 | 144 | 118.4 | 0.0844 | 30 | |
| MTBE | 112.89 | 5.0 | 100.0 | 0 | 113 | 54 | 141 | 115.2 | 2.02 | 30 | |
| Toluene | 109.22 | 5.0 | 100.0 | 0 | 109 | 53 | 150 | 109.2 | 0.0458 | 30 | |
| Trichloroethene | 118.26 | 5.0 | 100.0 | 0 | 118 | 58 | 155 | 116.7 | 1.30 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 45.53 | | 50.00 | | 91.1 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 51.61 | | 50.00 | | 103 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 46.54 | | 50.00 | | 93.1 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.00 | | 50.00 | | 102 | 84 | 130 | | 0 | 30 | |

Sample ID: **P060504MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62985**
Client ID: **PBS** Batch ID: **P06VS082** TestNo: **EPA 8260B** Analysis Date: **5/4/2006** SeqNo: **931665**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
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ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060504MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62985**
Client ID: **PBS** Batch ID: **P06VS082** TestNo: **EPA 8260B** Analysis Date: **5/4/2006** SeqNo: **931665**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060504MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62985**
Client ID: **PBS** Batch ID: **P06VS082** TestNo: **EPA 8260B** Analysis Date: **5/4/2006** SeqNo: **931665**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 48.09 | | 50.00 | | 96.2 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.75 | | 50.00 | | 104 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.33 | | 50.00 | | 94.7 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 52.04 | | 50.00 | | 104 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
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ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050306LC1** SampType: **LCS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **LCSW** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931071**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.09 | 5.0 | 20.00 | 0 | 115 | 76 | 132 | | | | |
| Benzene | 21.67 | 5.0 | 20.00 | 0 | 108 | 90 | 123 | | | | |
| Chlorobenzene | 21.30 | 5.0 | 20.00 | 0 | 106 | 76 | 118 | | | | |
| MTBE | 21.26 | 5.0 | 20.00 | 0 | 106 | 78 | 134 | | | | |
| Toluene | 22.39 | 5.0 | 20.00 | 0 | 112 | 91 | 124 | | | | |
| Trichloroethene | 22.28 | 5.0 | 20.00 | 0 | 111 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 53.31 | | 50.00 | | 107 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 58.46 | | 50.00 | | 117 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 54.83 | | 50.00 | | 110 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 59.11 | | 50.00 | | 118 | 84 | 123 | | | | |

Sample ID: **Q050306MB1MS** SampType: **MS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **ZZZZZZ** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931072**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.14 | 5.0 | 20.00 | 0 | 116 | 76 | 132 | | | | |
| Benzene | 22.65 | 5.0 | 20.00 | 0 | 113 | 90 | 123 | | | | |
| Chlorobenzene | 22.03 | 5.0 | 20.00 | 0 | 110 | 76 | 118 | | | | |
| MTBE | 21.43 | 5.0 | 20.00 | 0 | 107 | 78 | 134 | | | | |
| Toluene | 23.08 | 5.0 | 20.00 | 0 | 115 | 91 | 124 | | | | |
| Trichloroethene | 23.64 | 5.0 | 20.00 | 0 | 118 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 53.31 | | 50.00 | | 107 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 58.65 | | 50.00 | | 117 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 54.72 | | 50.00 | | 109 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 59.52 | | 50.00 | | 119 | 84 | 123 | | | | |

Sample ID: **Q050306MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **ZZZZZZ** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931073**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 22.33 | 5.0 | 20.00 | 0 | 112 | 76 | 132 | 23.14 | 3.56 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050306MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **ZZZZZZ** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931073**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 22.01 | 5.0 | 20.00 | 0 | 110 | 90 | 123 | 22.65 | 2.87 | 30 | |
| Chlorobenzene | 21.75 | 5.0 | 20.00 | 0 | 109 | 76 | 118 | 22.03 | 1.28 | 30 | |
| MTBE | 21.08 | 5.0 | 20.00 | 0 | 105 | 78 | 134 | 21.43 | 1.65 | 30 | |
| Toluene | 22.70 | 5.0 | 20.00 | 0 | 114 | 91 | 124 | 23.08 | 1.66 | 30 | |
| Trichloroethene | 22.19 | 5.0 | 20.00 | 0 | 111 | 87 | 125 | 23.64 | 6.33 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 51.93 | | 50.00 | | 104 | 70 | 126 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 55.23 | | 50.00 | | 110 | 63 | 134 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 52.41 | | 50.00 | | 105 | 73 | 124 | | 0 | 30 | |
| Surr: Toluene-d8 | 59.75 | | 50.00 | | 120 | 84 | 123 | | 0 | 30 | |

Sample ID: **Q050306MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **PBW** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931074**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050306MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **PBW** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931074**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050306MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62935**
Client ID: **PBW** Batch ID: **Q06VW083** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931074**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 55.80 | | 50.00 | | 112 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 48.36 | | 50.00 | | 96.7 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 57.80 | | 50.00 | | 116 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 52.46 | | 50.00 | | 105 | 84 | 123 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27847**

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/2/2006** | SeqNo: **930785** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: p-Terphenyl | 66.17 | | 80.00 | | 82.7 | 56 | 131 | | | | |

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **HC_S_SEMI** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/2/2006** | SeqNo: **930790** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T/R Hydrocarbons: C10-C18 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C10 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C28-C36 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C36-C40 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C40 Total | 0.00 | 10 | | | | | | | | | |
| Surr: p-Terphenyl | 62.15 | | 80.00 | | 77.7 | 56 | 131 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27847**

| Sample ID: **LCS-27847** | SampType: **LCS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930786** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 986.88 | 10 | 1000 | 0 | 98.7 | 67 | 131 | | | | |
| Surr: p-Terphenyl | 68.59 | | 80.00 | | 85.7 | 56 | 131 | | | | |

| Sample ID: **084155-006AMS** | SampType: **MS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **NM-B03-15.0** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930787** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 987.97 | 10 | 1000 | 0 | 98.8 | 49 | 140 | | | | |
| Surr: p-Terphenyl | 65.24 | | 80.00 | | 81.6 | 56 | 131 | | | | |

| Sample ID: **084155-006AMSD** | SampType: **MSD** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **NM-B03-15.0** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930788** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 989.66 | 10 | 1000 | 0 | 99.0 | 49 | 140 | 988.0 | 0.171 | 30 | |
| Surr: p-Terphenyl | 67.09 | | 80.00 | | 83.9 | 56 | 131 | | 0 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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# CHAIN OF CUSTODY RECORD

Pg 1 of 1


Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040


**FOR LABORATORY USE ONLY:**

P.O.#:

Logged By: W Date: 050104

Method of Transport: Client ☐ ATL ☒ CA OverN ☐ FEDEX ☐ Other:

Sample Condition Upon Receipt
1. CHILLED Y☒ N☐ 4. SEALED Y☐ N☒
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☒ N☐
3. CONTAINER INTACT Y☐ N☐ 6. PRESERVED Y☒ N☐

Client: Ninyo & Moore
Attn: VJS
Address: 5710 Ruffin Rd
City San Diego State CA Zip Code 92123
TEL: (858) 576 1000
FAX: (858) 576 9600

Project Name: CCDC - Monarch
Project #: 105740002
Sampler: (Printed Name) J. Schneider (Signature)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Relinquished by: (Signature and Printed Name) VJS | Date: 5/1/06 | Time: 0900 | Received by: (Signature and Printed Name) | Date: 5-1-06 | Time: 9:30 |
| Relinquished by: (Signature and Printed Name) | Date: 5-1-06 | Time: 1630 | Received by: (Signature and Printed Name) | Date: | Time: |
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | Date: 050106 | Time: 1815 |

I hereby authorize ATL to perform the work Indicated below:
Project Mgr /Submitter: VJS 4/29/06
Print Name Date
Signature

Send Report To:
Attn: VJS
Co: N&M
Address 5710 Ruffin Rd
City S.D. State CA Zip 92123

Bill To:
Attn:
Co: SAME
Address
City State Zip

Special Instructions/Comments:
~~LEAD~~ If ≥50 mg/kg, test using WET
≥100 mg/kg, test using TCLP

**Sample/Records - Archival & Disposal**
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides); 8082 (PCB); 8260B (Volatiles) VOC +OXY PAH; 8270C (BNA); 8010B (Total Metal); 8015B (GRO) / 8020 (BTEX); 8015B (DRO); 8021 (BTEX); TRPH; CAM 17 (6010 / 7000) LEAD TPH-E 8015M

SPECIFY APPROPRIATE MATRIX: SOIL; WATER; GROUND WATER; WASTEWATER

| ITEM | LAB USE ONLY: Batch #: / Lab No. | Sample Description: Sample I.D. / Location | Date | Time | TAT | Container(s) # | Container(s) Type | PRESERVATION |
|---|---|---|---|---|---|---|---|---|
| | 1054155 - 001 | NM-B03-1.0 | 4/29 | 1355 | E | 1 | JG | - |
| | - 002 | NM-B03-2.0 | 4/29 | 1357 | | 1 | JG | - |
| | - 003 | NM-B03-3.0 | 4/29 | 1358 | | 1 | JG | - |
| | - 004 | NM-B03-5.0 | 4/29 | 1358 | | 1 | JG | - |
| | - 005 | NM-B03-12.0 | 4/29 | 1612 | | 1 | TP | - |
| | - 006 | NM-B03-15.0 | 4/29 | 1620 | | 1 | TP | - |
| | - 007 | NM-B03-20.0 | 4/29 | 1629 | | 1 | TP | - |
| | - 008 | NM-B03-20.0D | 4/29 | 1629 | | 1 | TP | - |
| | - 009 | NM-B03 | 4/29 | 1645 | | 2 | VG | H |

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____ REMARKS

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=$HNO_3$ S=$H_2SO_4$ C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

May 04, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084156

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084156
**Contract No:**

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date | Date Received | Date Reported |
|---|---|---|---|---|---|
| 084156-001A | NM-B02-1.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084156-002A | NM-B02-2.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084156-003A | NM-B02-5.0 | Soil | 4/30/2006 | 5/1/2006 | 5/4/2006 |



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*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B02-1.0 |
| **Lab Order:** | 084156 | **Collection Date:** | 4/29/2006 12:50:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084156-001 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 3.7 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B02-2.0 |
| **Lab Order:** | 084156 | **Collection Date:** | 4/29/2006 12:55:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084156-002 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: RQ |
| Lead | 2.9 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B02-5.0 |
| **Lab Order:** | 084156 | **Collection Date:** | 4/30/2006 3:23:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084156-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: EES |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 80.3 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

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- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B02-5.0 |
| **Lab Order:** | 084156 | **Collection Date:** | 4/30/2006 3:23:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084156-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 90.5 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 94.5 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

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- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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## Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B02-5.0 |
| **Lab Order:** | 084156 | **Collection Date:** | 4/30/2006 3:23:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084156-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: **MB-27855A** | SampType: **MBLK** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931310** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **LCS-27855** | SampType: **LCS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931311** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: **084154-002AMS** | SampType: **MS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931315** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: **MB-27855B** | SampType: **MBLK** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931316** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **084158-002AMS** | SampType: **MS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931328** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

Sample ID: **084158-002AMSD** SampType: **MSD** TestCode: **6010_SPB_N** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62961**
Client ID: **ZZZZZZ** Batch ID: **27855** TestNo: **EPA 6010B** **EPA 3050M** Analysis Date: **5/3/2006** SeqNo: **931329**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 215.21 | 1.0 | 250.0 | 18.52 | 78.7 | 31 | 122 | 211.0 | 1.97 | 20 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **LCSS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930748**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 110.34 | 5.0 | 100.0 | 0 | 110 | 76 | 126 | | | | |
| Benzene | 113.05 | 5.0 | 100.0 | 0 | 113 | 77 | 131 | | | | |
| Chlorobenzene | 119.94 | 5.0 | 100.0 | 0 | 120 | 81 | 136 | | | | |
| MTBE | 116.66 | 5.0 | 100.0 | 0 | 117 | 50 | 143 | | | | |
| Toluene | 111.84 | 5.0 | 100.0 | 1.320 | 111 | 78 | 129 | | | | |
| Trichloroethene | 117.66 | 5.0 | 100.0 | 0 | 118 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 47.46 | | 50.00 | | 94.9 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.08 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.75 | | 50.00 | | 93.5 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.59 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060502MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930749**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 110.32 | 5.0 | 100.0 | 0 | 110 | 59 | 146 | | | | |
| Benzene | 114.37 | 5.0 | 100.0 | 0 | 114 | 68 | 137 | | | | |
| Chlorobenzene | 121.46 | 5.0 | 100.0 | 0 | 121 | 64 | 144 | | | | |
| MTBE | 115.61 | 5.0 | 100.0 | 0 | 116 | 54 | 141 | | | | |
| Toluene | 112.56 | 5.0 | 100.0 | 1.320 | 111 | 53 | 150 | | | | |
| Trichloroethene | 119.29 | 5.0 | 100.0 | 0 | 119 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 46.87 | | 50.00 | | 93.7 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.95 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.88 | | 50.00 | | 93.8 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.38 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060502MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930750**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 112.82 | 5.0 | 100.0 | 0 | 113 | 59 | 146 | 110.3 | 2.24 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930750**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 116.18 | 5.0 | 100.0 | 0 | 116 | 68 | 137 | 114.4 | 1.57 | 30 | |
| Chlorobenzene | 124.04 | 5.0 | 100.0 | 0 | 124 | 64 | 144 | 121.5 | 2.10 | 30 | |
| MTBE | 113.78 | 5.0 | 100.0 | 0 | 114 | 54 | 141 | 115.6 | 1.60 | 30 | |
| Toluene | 114.84 | 5.0 | 100.0 | 1.320 | 114 | 53 | 150 | 112.6 | 2.01 | 30 | |
| Trichloroethene | 121.81 | 5.0 | 100.0 | 0 | 122 | 58 | 155 | 119.3 | 2.09 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 46.44 | | 50.00 | | 92.9 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 51.90 | | 50.00 | | 104 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 47.38 | | 50.00 | | 94.8 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.67 | | 50.00 | | 103 | 84 | 130 | | 0 | 30 | |

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
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**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 1.32 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.17 | | 50.00 | | 90.3 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.90 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.69 | | 50.00 | | 93.4 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.48 | | 50.00 | | 103 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27847**

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/2/2006** | SeqNo: **930785** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: p-Terphenyl | 66.17 | | 80.00 | | 82.7 | 56 | 131 | | | | |

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **HC_S_SEMI** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/2/2006** | SeqNo: **930790** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T/R Hydrocarbons: C10-C18 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C10 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C28-C36 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C36-C40 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C40 Total | 0.00 | 10 | | | | | | | | | |
| Surr: p-Terphenyl | 62.15 | | 80.00 | | 77.7 | 56 | 131 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084156
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27847**

| Sample ID: **LCS-27847** | SampType: **LCS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930786** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 986.88 | 10 | 1000 | 0 | 98.7 | 67 | 131 | | | | |
| Surr: p-Terphenyl | 68.59 | | 80.00 | | 85.7 | 56 | 131 | | | | |

| Sample ID: **084155-006AMS** | SampType: **MS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930787** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 987.97 | 10 | 1000 | 0 | 98.8 | 49 | 140 | | | | |
| Surr: p-Terphenyl | 65.24 | | 80.00 | | 81.6 | 56 | 131 | | | | |

| Sample ID: **084155-006AMSD** | SampType: **MSD** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930788** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 989.66 | 10 | 1000 | 0 | 99.0 | 49 | 140 | 988.0 | 0.171 | 30 | |
| Surr: p-Terphenyl | 67.09 | | 80.00 | | 83.9 | 56 | 131 | | 0 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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# CHAIN OF CUSTODY RECORD

Pg 1 of 1


**Advanced Technology Laboratories**
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040


**FOR LABORATORY USE ONLY:**

P.O.#: _____
Logged By: _____ Date: 5/1/06

Method of Transport: Client ☐ ATL ☒ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED Y☐ N☐ 4. SEALED Y☐ N☐
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐
3. CONTAINER INTACT Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: Ninyo & Moore
Attn: VJS
Address: 5710 Ruffin Rd.
City San Diego State CA Zip Code 92123
TEL: (858) 576 1000
FAX: (858) 576 9600
Project Name: CCDC - Monarch Project #: 105140002
Sampler: (Printed Name) (Signature)

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | Date: 5-1-06 | Time: 9:30a |
| Relinquished by: (Signature and Printed Name) | Date: 5-1-06 | Time: 6:15P | Received by: (Signature and Printed Name) | Date: 05/01/06 | Time: 1615 |
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | Date: | Time: |

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: J. Schneider (Print Name) / (Date)
(Signature)

Send Report To:
Attn: VJS
Co: Ninyo & Moore
Address 5710 Ruffin Rd
City S.D. State CA Zip 92123

Bill To:
Attn: _____
Co: Same
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
LEAD if ≥ 50 mg/kg, test using WET
if ≥ 100 mg/kg, test using TCLP

**Sample/Records - Archival & Disposal**
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

| ITEM | LAB USE ONLY: Batch #: / Lab No. | Sample Description 2006 / Sample I.D. / Location | Date | Time | 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) | 8270C (BNA) | 6010B (Total Metal) | 8015B (GRO) / 8020 (BTEX) | 8015B (DRO) | 8021 (BTEX) | TITLE 22 CAM 17 (6010 / 7000) | LEAD 6010 | TPH-E 8015M | SOIL | WATER | GROUND WATER | WASTEWATER | TAT | Container(s) # | Container(s) Type | PRESERVATION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0841560 001 | NM-B02-1.0 | 4/29 | 1250 | | | | | | | | | X | X | | X | | | | E | 1 | J | G | | |
| 2 | -002 | NM-B02-2.0 | 4/29 | 1255 | | | | | | | | | X | X | | X | | | | | 1 | J | G | | |
| 3 | -003 | NM-B02-5.0 | 4/30 | 1523 | | X | | | | | | | X | X | | X | | | | ↓ | 1 | T | P | | |
| | | ~~NM-B02-10.0~~ VJS | | | | | | | | | | | | | | X | | | | | | | | | |
| | | ~~NM-B02-15.0~~ VJS | | | | | | | | | | | | | | X | | | | | | | | | |
| | | ~~NM-B02-20.0~~ VJS | | | | | | | | | | | | | | X | | | | | | | | | |
| | | ~~NM-B02~~ VJS | | | | | | | | | | | | | | L X | | | | | | | | | |

**QA/QC**
RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=$HNO_3$ S=$H_2SO_4$ C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: **White** with report, **Yellow** to folder, **Pink** to submitter.

May 12, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084157

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
for Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *12-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B01-1.0 |
| **Lab Order:** | 084157 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 11:18:00 AM |
| **Lab ID:** | 084157-001A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | | **WET/ EPA 7420** | | | | |
| RunID: AA2_060512F | QC Batch: R63261 | | | PrepDate: | | Analyst: **NS** |
| Lead | 5.6 | 0.25 | | mg/L | 1 | 5/12/2006 |

| | | | | | |
|---|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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Advanced Technology Laboratories

**Date:** *12-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-27950 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935688 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: MB-27950A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935689 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: LCS-27950 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935690 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.13 | 0.25 | 5.000 | 0 | 103 | 80 | 120 | | | | |

| Sample ID: 084284-002AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935698 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.99 | 0.25 | 5.000 | 0.4815 | 90.2 | 70 | 130 | | | | |

| Sample ID: MB-27950B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935699 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Calculations are based on raw values

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084157
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: 084284-011AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935710 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.81 | 0.25 | 5.000 | 0.4353 | 87.6 | 70 | 130 | | | | |

| Sample ID: 084284-011AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935711 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.84 | 0.25 | 5.000 | 0.4353 | 88.2 | 70 | 130 | 4.814 | 0.611 | 20 | |

**Qualifiers:**

- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interferenc
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

May 04, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084158

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084158
**Contract No:**

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date | Date Received | Date Reported |
|---|---|---|---|---|---|
| 084158-001A | NM-B11-1.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084158-002A | NM-B11-2.0 | Soil | 4/29/2006 | 5/1/2006 | 5/4/2006 |
| 084158-003A | NM-B11-5.0 | Soil | 4/30/2006 | 5/1/2006 | 5/4/2006 |
| 084158-004A | NM-B11-10.0 | Soil | 4/30/2006 | 5/1/2006 | 5/4/2006 |
| 084158-005A | NM-B11-15.0 | Soil | 4/30/2006 | 5/1/2006 | 5/4/2006 |
| 084158-006A | NM-B11-20.0 | Soil | 4/30/2006 | 5/1/2006 | 5/4/2006 |



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# Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-1.0 |
| **Lab Order:** | 084158 | **Collection Date:** | 4/29/2006 3:00:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084158-001 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 610 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-2.0 |
| **Lab Order:** | 084158 | **Collection Date:** | 4/29/2006 3:05:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084158-002 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503D | QC Batch: 27855 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 19 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-5.0 |
| **Lab Order:** | 084158 | **Collection Date:** | 4/30/2006 7:30:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084158-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: | 5/2/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/2/2006 |
| Surr: p-Terphenyl | 78.1 | 56-131 | | %REC | 1 | 5/2/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084158
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084158-003

**Client Sample ID:** NM-B11-5.0
**Collection Date:** 4/30/2006 7:30:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 91.6 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 100 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 93.7 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-5.0 |
| **Lab Order:** | 084158 | **Collection Date:** | 4/30/2006 7:30:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084158-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084158
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084158-004

**Client Sample ID:** NM-B11-10.0
**Collection Date:** 4/30/2006 7:40:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: | 5/2/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 83.9 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084158
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084158-004

**Client Sample ID:** NM-B11-10.0
**Collection Date:** 4/30/2006 7:40:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 91.7 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 100 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 94.8 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-10.0 |
| **Lab Order:** | 084158 | **Collection Date:** | 4/30/2006 7:40:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084158-004 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | **EPA 8260B** | | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084158
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084158-005

**Client Sample ID:** NM-B11-15.0
**Collection Date:** 4/30/2006 7:50:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: 5/2/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 77.5 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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# Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084158
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084158-005

**Client Sample ID:** NM-B11-15.0
**Collection Date:** 4/30/2006 7:50:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 91.5 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 100 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 94.9 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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# Advanced Technology Laboratories

**Date:** *04-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-15.0 |
| **Lab Order:** | 084158 | **Collection Date:** | 4/30/2006 7:50:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084158-005 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *04-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084158
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084158-006

**Client Sample ID:** NM-B11-20.0
**Collection Date:** 4/30/2006 8:00:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_060502A | QC Batch: 27847 | | | PrepDate: | 5/2/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 79.0 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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**CLIENT:** Ninyo & Moore
**Lab Order:** 084158
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084158-006

**Client Sample ID:** NM-B11-20.0
**Collection Date:** 4/30/2006 8:00:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 94.0 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 100 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 94.1 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



*Advanced Technology Laboratories* *3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-20.0 |
| **Lab Order:** | 084158 | **Collection Date:** | 4/30/2006 8:00:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084158-006 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 102 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories* *3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: **MB-27855A** | SampType: **MBLK** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931310** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **LCS-27855** | SampType: **LCS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931311** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 250.00 | 1.0 | 250.0 | 0 | 100 | 80 | 120 | | | | |

| Sample ID: **084154-002AMS** | SampType: **MS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931315** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 201.98 | 1.0 | 250.0 | 2.830 | 79.7 | 31 | 122 | | | | |

| Sample ID: **MB-27855B** | SampType: **MBLK** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931316** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **084158-002AMS** | SampType: **MS** | TestCode: **6010_SPB_N** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62961** |
|---|---|---|---|---|---|
| Client ID: **NM-B11-2.0** | Batch ID: **27855** | TestNo: **EPA 6010B** | **EPA 3050M** | Analysis Date: **5/3/2006** | SeqNo: **931328** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 211.01 | 1.0 | 250.0 | 18.52 | 77.0 | 31 | 122 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **LCSS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930748**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 110.34 | 5.0 | 100.0 | 0 | 110 | 76 | 126 | | | | |
| Benzene | 113.05 | 5.0 | 100.0 | 0 | 113 | 77 | 131 | | | | |
| Chlorobenzene | 119.94 | 5.0 | 100.0 | 0 | 120 | 81 | 136 | | | | |
| MTBE | 116.66 | 5.0 | 100.0 | 0 | 117 | 50 | 143 | | | | |
| Toluene | 111.84 | 5.0 | 100.0 | 1.320 | 111 | 78 | 129 | | | | |
| Trichloroethene | 117.66 | 5.0 | 100.0 | 0 | 118 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 47.46 | | 50.00 | | 94.9 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.08 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.75 | | 50.00 | | 93.5 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.59 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060502MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930749**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 110.32 | 5.0 | 100.0 | 0 | 110 | 59 | 146 | | | | |
| Benzene | 114.37 | 5.0 | 100.0 | 0 | 114 | 68 | 137 | | | | |
| Chlorobenzene | 121.46 | 5.0 | 100.0 | 0 | 121 | 64 | 144 | | | | |
| MTBE | 115.61 | 5.0 | 100.0 | 0 | 116 | 54 | 141 | | | | |
| Toluene | 112.56 | 5.0 | 100.0 | 1.320 | 111 | 53 | 150 | | | | |
| Trichloroethene | 119.29 | 5.0 | 100.0 | 0 | 119 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 46.87 | | 50.00 | | 93.7 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.95 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.88 | | 50.00 | | 93.8 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.38 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060502MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930750**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 112.82 | 5.0 | 100.0 | 0 | 113 | 59 | 146 | 110.3 | 2.24 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930750**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 116.18 | 5.0 | 100.0 | 0 | 116 | 68 | 137 | 114.4 | 1.57 | 30 | |
| Chlorobenzene | 124.04 | 5.0 | 100.0 | 0 | 124 | 64 | 144 | 121.5 | 2.10 | 30 | |
| MTBE | 113.78 | 5.0 | 100.0 | 0 | 114 | 54 | 141 | 115.6 | 1.60 | 30 | |
| Toluene | 114.84 | 5.0 | 100.0 | 1.320 | 114 | 53 | 150 | 112.6 | 2.01 | 30 | |
| Trichloroethene | 121.81 | 5.0 | 100.0 | 0 | 122 | 58 | 155 | 119.3 | 2.09 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 46.44 | | 50.00 | | 92.9 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 51.90 | | 50.00 | | 104 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 47.38 | | 50.00 | | 94.8 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.67 | | 50.00 | | 103 | 84 | 130 | | 0 | 30 | |

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 1.32 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.17 | | 50.00 | | 90.3 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.90 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.69 | | 50.00 | | 93.4 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.48 | | 50.00 | | 103 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Walnut, Mill, 755 62. 9 F 989.

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27847**

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930785** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: p-Terphenyl | 66.17 | | 80.00 | | 82.7 | 56 | 131 | | | | |

| Sample ID: **MB-27847** | SampType: **MBLK** | TestCode: **HC_S_SEMI** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930790** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T/R Hydrocarbons: C10-C18 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C40 Total | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C10 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C28-C36 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C36-C40 | 0.00 | 10 | | | | | | | | | |
| Surr: p-Terphenyl | 62.15 | | 80.00 | | 77.7 | 56 | 131 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27847**

| Sample ID: **LCS-27847** | SampType: **LCS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930786** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 986.88 | 10 | 1000 | 0 | 98.7 | 67 | 131 | | | | |
| Surr: p-Terphenyl | 68.59 | | 80.00 | | 85.7 | 56 | 131 | | | | |

| Sample ID: **084155-006AMS** | SampType: **MS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930787** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 987.97 | 10 | 1000 | 0 | 98.8 | 49 | 140 | | | | |
| Surr: p-Terphenyl | 65.24 | | 80.00 | | 81.6 | 56 | 131 | | | | |

| Sample ID: **084155-006AMSD** | SampType: **MSD** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/2/2006** | RunNo: **62915** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27847** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/2/2006** | SeqNo: **930788** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 989.66 | 10 | 1000 | 0 | 99.0 | 49 | 140 | 988.0 | 0.171 | 30 | |
| Surr: p-Terphenyl | 67.09 | | 80.00 | | 83.9 | 56 | 131 | | 0 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



Advanced Technology Walnut, Hill, 755 62. 9 F 989.

# CHAIN OF CUSTODY RECORD

Pg 1 of 1


Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040


**FOR LABORATORY USE ONLY:**

P.O.#: _____

Logged By: _____ Date: 5/1/06

Method of Transport: Client ☐ ATL ☑ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y☑ N☐ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☑

Client: Ninyo & Moore
Attn: J. Schneider
Address: 5710 Ruffin Rd
City San Diego State CA Zip Code 92123
TEL: (858) 576 1000
FAX: (858) 576 9600
Project Name: CCDC Monarch
Project #: 105740002
Sampler: (Printed Name) J. Schneider (Signature)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Relinquished by: (Signature and Printed Name) VJS | Date: 5/1/06 | Time: 0900 | Received by: (Signature and Printed Name) | | Date: 5-1-06 | Time: 9:30 |
| Relinquished by: (Signature and Printed Name) | Date: 5-1-06 | Time: 6:15 | Received by: (Signature and Printed Name) | | Date: | Time: |
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | | Date: 050106 | Time: 1815 |

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: J. Schneider 4/30/06 (Print Name / Date)
Signature

Send Report To:
Attn: VJS
Co: Ninyo & Moore
Address 5710 Ruffin Rd
City SD State CA Zip 92123

Bill To:
Attn: same
Co:
Address
City State Zip

Special Instructions/Comments:
LEAD If ≤ 50 mg/kg, test using WET
≥ 100 mg/kg, test using TCLP

**Sample/Records - Archival & Disposal**
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

| ITEM | LAB USE ONLY: Batch # / Lab No. | Sample Description: Sample I.D. / Location | Date (2006) | Time | 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) VOC + OXY | 8270C (BNA) | 6010B (Total Metal) | 8015B (GRO) / 8020 (BTEX) | 8015B (DRO) | 8021 (BTEX) | TITLE 22 CAM 17 (6010 / 7000) LEAD | TPH-E 8015M | SOIL | WATER | GROUND WATER | WASTEWATER | TAT | Container(s) # | Container(s) Type | PRESERVATION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0841158-001 | NM-B11-1.0 | 4/29 | 1500 | | | X | | | | | | X | | X | | | | E | 1 | JG | 1 | |
| | -002 | NM-B11-2.0 | 4/29 | 1505 | | | X | | | | | | X | | X | | | | E | 1 | JG | 1 | |
| | -003 | NM-B11-5.0 | 4/30 | 0730 | X | X | X | X | X | X | X | X | X | X | X | | | | | 1 | TP | 1 | |
| | -004 | NM-B11-10.0 | 4/30 | 0740 | X | X | X | X | X | X | X | X | X | X | X | | | | | 1 | TP | 1 | |
| | -005 | NM-B11-15.0 | 4/30 | 0750 | X | X | X | X | X | X | X | X | X | X | X | | | | | 1 | TP | 1 | |
| | -006 | NM-B11-20.0 | 4/30 | 0800 | X | X | X | X | X | X | X | X | X | X | X | | | | | 1 | TP | 1 | |
| | | NM-B11 | 4/30 | | X | X | X | X | X | X | X | X | X | X | X | X | | | | 2 | VGH | S | |

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=$HNO_3$ S=$H_2SO_4$ C=4°C Z=Zn(AC)$_2$ O=NaOH T=$Na_2S_2O_3$

May 12, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084158

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *12-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-1.0 |
| **Lab Order:** | 084158 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 3:00:00 PM |
| **Lab ID:** | 084158-001A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | **EPA 3010A** | | | **EPA 1311/ 7420** | | |
| RunID: AA2_060512D | QC Batch: 27967 | | | PrepDate: | 5/10/2006 | Analyst: **NS** |
| Lead | ND | 1.2 | | mg/L | 1 | 5/12/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories* 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

# Advanced Technology Laboratories

**Date:** *12-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_TC**

| Sample ID: MB-27967 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935594 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: MB-27954A TCLP 1 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935595 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.2 | | | | | | | | | |

| Sample ID: LCS-27967 | SampType: LCS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935596 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 1.05 | 0.25 | 1.000 | 0 | 105 | 80 | 120 | | | | |

| Sample ID: 084155-002A-MS | SampType: MS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935600 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.73 | 1.2 | 12.50 | 0 | 110 | 70 | 130 | | | | |

| Sample ID: 084155-002A-MSD | SampType: MSD | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935601 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.57 | 1.2 | 12.50 | 0 | 109 | 70 | 130 | 13.73 | 1.18 | 20 | |

**Qualifiers:**

- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interferenc
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

May 05, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084159

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084159
**Contract No:**

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date | Date Received | Date Reported |
|---|---|---|---|---|---|
| 084159-001A | NM-B10-1.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084159-002A | NM-B10-2.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084159-003A | NM-B10-5.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084159-004A | NM-B10-12.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084159-005A | NM-B10-15.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084159-006A | NM-B10-20.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084159-007A | NM-B10 | Ground Water | 4/30/2006 | 5/1/2006 | 5/5/2006 |



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*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040*

# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B10-1.0 |
| **Lab Order:** | 084159 | **Collection Date:** | 4/29/2006 2:33:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084159-001 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503E | QC Batch: 27856 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 9.5 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*

*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B10-2.0 |
| **Lab Order:** | 084159 | **Collection Date:** | 4/29/2006 2:35:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084159-002 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503E | QC Batch: 27856 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 21 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
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| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*

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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084159
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-003

**Client Sample ID:** NM-B10-5.0
**Collection Date:** 4/30/2006 10:50:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 82.5 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



*Advanced Technology Laboratories*
*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084159
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-003

**Client Sample ID:** NM-B10-5.0
**Collection Date:** 4/30/2006 10:50:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 106 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 120 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 119 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



*Advanced Technology Laboratories* 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B10-5.0 |
| **Lab Order:** | 084159 | **Collection Date:** | 4/30/2006 10:50:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084159-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 128 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
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*Advanced Technology Laboratories*

*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B10-12.0 |
| **Lab Order:** | 084159 | **Collection Date:** | 4/30/2006 11:10:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084159-004 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | | | | | |
| | **EPA 3050B** | | | **EPA 6010B** | | |
| RunID: ICP6_060503D | QC Batch: 27858 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Antimony | ND | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Arsenic | 1.4 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Barium | 18 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Beryllium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cadmium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Chromium | 11 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cobalt | 2.7 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Copper | 4.0 | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Lead | 2.0 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Molybdenum | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Nickel | 5.0 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Selenium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Silver | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Thallium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Vanadium | 18 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Zinc | 14 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| | **LUFT** | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 83.1 | 56-131 | | %REC | 1 | 5/3/2006 |
| **MERCURY BY COLD VAPOR TECHNIQUE** | | | | | | |
| | **EPA 7471** | | | **EPA 7471A** | | |
| RunID: AA5_060504A | QC Batch: 27864 | | | PrepDate: | 5/3/2006 | Analyst: **NS** |
| Mercury | ND | 0.10 | | mg/Kg | 1 | 5/4/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



*Advanced Technology Laboratories* 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084159
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-004

**Client Sample ID:** NM-B10-12.0
**Collection Date:** 4/30/2006 11:10:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



*Advanced Technology Laboratories* 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084159
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-004

**Client Sample ID:** NM-B10-12.0
**Collection Date:** 4/30/2006 11:10:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | **EPA 8260B** | | | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 91.1 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 99.1 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 104 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 107 | 84-130 | | %REC | 1 | 5/2/2006 |
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | **EPA 3550B** | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| 2-Methylnaphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(a)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(a)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(b)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(g,h,i)perylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B10-12.0
**Lab Order:** 084159 **Collection Date:** 4/30/2006 11:10:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-004 **Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| **EPA 3550B** | | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| Benzo(k)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Chrysene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Dibenz(a,h)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluorene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Indeno(1,2,3-cd)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Phenanthrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichlorobenzene-d4 | 67.5 | 46-105 | | %REC | 1 | 5/2/2006 |
| Surr: 2-Fluorobiphenyl | 73.5 | 54-112 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Terphenyl-d14 | 81.1 | 46-135 | | %REC | 1 | 5/2/2006 |
| Surr: Nitrobenzene-d5 | 71.1 | 40-116 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
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S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084159
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-005

**Client Sample ID:** NM-B10-15.0
**Collection Date:** 4/30/2006 11:17:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: 5/3/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 82.3 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084159
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-005

**Client Sample ID:** NM-B10-15.0
**Collection Date:** 4/30/2006 11:17:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 107 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 111 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 113 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B10-15.0 |
| **Lab Order:** | 084159 | **Collection Date:** | 4/30/2006 11:17:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084159-005 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 117 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084159
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-006

**Client Sample ID:** NM-B10-20.0
**Collection Date:** 4/30/2006 11:39:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 82.8 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B10-20.0
**Lab Order:** 084159 **Collection Date:** 4/30/2006 11:39:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-006 **Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 101 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 105 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 108 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike/Surrogate outside of limits due to matrix interference
Results are wet unless otherwise specified
DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B10-20.0 |
| **Lab Order:** | 084159 | **Collection Date:** | 4/30/2006 11:39:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084159-006 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | **EPA 8260B** | | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 113 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*

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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B10
**Lab Order:** 084159 **Collection Date:** 4/30/2006 11:40:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084159-007 **Matrix:** GROUND WATER

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS2_060502A | QC Batch: Q06VW082 | | | PrepDate: | | Analyst: **HH** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B10 |
| **Lab Order:** | 084159 | **Collection Date:** | 4/30/2006 11:40:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084159-007 | **Matrix:** | GROUND WATER |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS2_060502A | QC Batch: | Q06VW082 | | PrepDate: | | Analyst: **HH** |
| Dibromomethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Ethyl tert-butyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/L | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/L | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 115 | 70-126 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 97.9 | 63-134 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 118 | 73-124 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 105 | 84-123 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |




*Advanced Technology Laboratories* 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

| Sample ID: **084160-004AMSD** | SampType: **MSD** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62965** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27858** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931375** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 90.85 | 2.0 | 125.0 | 0 | 72.7 | 25 | 108 | 91.19 | 0.379 | 20 | |
| Arsenic | 98.11 | 1.0 | 125.0 | 0.9863 | 77.7 | 46 | 118 | 97.30 | 0.836 | 20 | |
| Barium | 126.00 | 1.0 | 125.0 | 19.93 | 84.9 | 32 | 131 | 122.1 | 3.15 | 20 | |
| Beryllium | 98.44 | 1.0 | 125.0 | 0 | 78.8 | 59 | 104 | 97.33 | 1.14 | 20 | |
| Cadmium | 105.03 | 1.0 | 125.0 | 0.08913 | 84.0 | 63 | 105 | 104.0 | 0.979 | 20 | |
| Chromium | 111.79 | 1.0 | 125.0 | 8.973 | 82.2 | 49 | 116 | 110.1 | 1.54 | 20 | |
| Cobalt | 104.38 | 1.0 | 125.0 | 3.104 | 81.0 | 58 | 104 | 103.1 | 1.20 | 20 | |
| Copper | 114.52 | 2.0 | 125.0 | 3.845 | 88.5 | 54 | 126 | 113.1 | 1.22 | 20 | |
| Lead | 101.24 | 1.0 | 125.0 | 1.946 | 79.4 | 31 | 122 | 100.2 | 1.00 | 20 | |
| Molybdenum | 101.88 | 1.0 | 125.0 | 0.5545 | 81.1 | 61 | 104 | 100.9 | 0.987 | 20 | |
| Nickel | 104.23 | 1.0 | 125.0 | 3.953 | 80.2 | 50 | 112 | 103.2 | 0.955 | 20 | |
| Selenium | 96.50 | 1.0 | 125.0 | 0 | 77.2 | 53 | 109 | 95.62 | 0.915 | 20 | |
| Silver | 102.08 | 1.0 | 125.0 | 0 | 81.7 | 41 | 121 | 101.5 | 0.595 | 20 | |
| Thallium | 96.40 | 1.0 | 125.0 | 0 | 77.1 | 54 | 100 | 95.79 | 0.636 | 20 | |
| Vanadium | 124.29 | 1.0 | 125.0 | 19.52 | 83.8 | 59 | 109 | 122.8 | 1.23 | 20 | |
| Zinc | 109.92 | 1.0 | 125.0 | 12.09 | 78.3 | 27 | 131 | 108.7 | 1.08 | 20 | |

| Sample ID: **084160-004AMS** | SampType: **MS** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **63017** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27858** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/4/2006** | SeqNo: **932061** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 101.34 | 1.0 | 125.0 | 1.919 | 79.5 | 31 | 122 | | | | |

| Sample ID: **084160-004AMSD** | SampType: **MSD** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **63017** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27858** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/4/2006** | SeqNo: **932062** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 99.04 | 1.0 | 125.0 | 1.919 | 77.7 | 31 | 122 | 101.3 | 2.29 | 20 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories — Walnut Creek, San Ramon, CA 94583 — 925.988.9600 — Fax 925.988.9673

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27856A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931336 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: LCS-27856 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931337 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 251.62 | 1.0 | 250.0 | 0 | 101 | 80 | 120 | | | | |

| Sample ID: 084161-003AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931346 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 317.69 | 1.0 | 250.0 | 162.3 | 62.1 | 31 | 122 | | | | |

| Sample ID: 084161-003AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931347 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 304.72 | 1.0 | 250.0 | 162.3 | 57.0 | 31 | 122 | 317.7 | 4.17 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7471_S**

| Sample ID: 084161-005A-MS | SampType: MS | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931789 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | | | | |

| Sample ID: 084161-005A-MSD | SampType: MSD | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931790 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | 1.141 | 0.444 | 20 | |

| Sample ID: LCS-27864 | SampType: LCS | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931791 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 2.37 | 0.10 | 2.080 | 0 | 114 | 80 | 120 | | | | |

| Sample ID: MB-27864 | SampType: MBLK | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931792 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.00 | 0.10 | | | | | | | | | |

**Qualifiers:**

- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike/Surrogate outside of limits due to matrix interferenc
- DO Surrogate Diluted Out



Advanced Technology

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502LCS1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **LCSS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930806**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 89.65 | 5.0 | 100.0 | 0 | 89.6 | 76 | 126 | | | | |
| Benzene | 95.05 | 5.0 | 100.0 | 0 | 95.0 | 77 | 131 | | | | |
| Chlorobenzene | 96.08 | 5.0 | 100.0 | 0 | 96.1 | 81 | 136 | | | | |
| MTBE | 98.18 | 5.0 | 100.0 | 0 | 98.2 | 50 | 143 | | | | |
| Toluene | 89.40 | 5.0 | 100.0 | 0 | 89.4 | 78 | 129 | | | | |
| Trichloroethene | 90.22 | 5.0 | 100.0 | 0 | 90.2 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 44.85 | | 50.00 | | 89.7 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 49.91 | | 50.00 | | 99.8 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.45 | | 50.00 | | 94.9 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 48.24 | | 50.00 | | 96.5 | 84 | 130 | | | | |

Sample ID: **R060502MB2MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930807**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 82.89 | 5.0 | 100.0 | 0 | 82.9 | 59 | 146 | | | | |
| Benzene | 90.81 | 5.0 | 100.0 | 0 | 90.8 | 68 | 137 | | | | |
| Chlorobenzene | 91.28 | 5.0 | 100.0 | 0 | 91.3 | 64 | 144 | | | | |
| MTBE | 88.38 | 5.0 | 100.0 | 0 | 88.4 | 54 | 141 | | | | |
| Toluene | 86.63 | 5.0 | 100.0 | 0 | 86.6 | 53 | 150 | | | | |
| Trichloroethene | 86.49 | 5.0 | 100.0 | 0 | 86.5 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 44.06 | | 50.00 | | 88.1 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 54.93 | | 50.00 | | 110 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 50.66 | | 50.00 | | 101 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 56.84 | | 50.00 | | 114 | 84 | 130 | | | | |

Sample ID: **R060502MB2MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930808**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 97.76 | 5.0 | 100.0 | 0 | 97.8 | 59 | 146 | 82.89 | 16.5 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502MB2MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930808**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 100.45 | 5.0 | 100.0 | 0 | 100 | 68 | 137 | 90.81 | 10.1 | 30 | |
| Chlorobenzene | 102.52 | 5.0 | 100.0 | 0 | 103 | 64 | 144 | 91.28 | 11.6 | 30 | |
| MTBE | 95.35 | 5.0 | 100.0 | 0 | 95.4 | 54 | 141 | 88.38 | 7.59 | 30 | |
| Toluene | 96.17 | 5.0 | 100.0 | 0 | 96.2 | 53 | 150 | 86.63 | 10.4 | 30 | |
| Trichloroethene | 96.32 | 5.0 | 100.0 | 0 | 96.3 | 58 | 155 | 86.49 | 10.8 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 48.12 | | 50.00 | | 96.2 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 58.76 | | 50.00 | | 118 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 56.56 | | 50.00 | | 113 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 60.90 | | 50.00 | | 122 | 84 | 130 | | 0 | 30 | |

Sample ID: **R060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **PBS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930809**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **PBS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930809**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **PBS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930809**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 54.57 | | 50.00 | | 109 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 59.57 | | 50.00 | | 119 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 59.31 | | 50.00 | | 119 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 64.75 | | 50.00 | | 130 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Walnut Ave, Suite Hill, CA 95 2.98 Fax 989.4

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206LC1** SampType: **LCS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **LCSW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930579**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.45 | 5.0 | 20.00 | 0 | 117 | 76 | 132 | | | | |
| Benzene | 21.27 | 5.0 | 20.00 | 0 | 106 | 90 | 123 | | | | |
| Chlorobenzene | 20.44 | 5.0 | 20.00 | 0 | 102 | 76 | 118 | | | | |
| MTBE | 20.39 | 5.0 | 20.00 | 0 | 102 | 78 | 134 | | | | |
| Toluene | 21.43 | 5.0 | 20.00 | 0 | 107 | 91 | 124 | | | | |
| Trichloroethene | 21.84 | 5.0 | 20.00 | 0 | 109 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 52.53 | | 50.00 | | 105 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 57.57 | | 50.00 | | 115 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 52.95 | | 50.00 | | 106 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 58.74 | | 50.00 | | 117 | 84 | 123 | | | | |

Sample ID: **Q050206MB1MS** SampType: **MS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930580**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 22.55 | 5.0 | 20.00 | 0 | 113 | 76 | 132 | | | | |
| Benzene | 21.26 | 5.0 | 20.00 | 0 | 106 | 90 | 123 | | | | |
| Chlorobenzene | 21.37 | 5.0 | 20.00 | 0 | 107 | 76 | 118 | | | | |
| MTBE | 20.46 | 5.0 | 20.00 | 0 | 102 | 78 | 134 | | | | |
| Toluene | 22.06 | 5.0 | 20.00 | 0 | 110 | 91 | 124 | | | | |
| Trichloroethene | 21.22 | 5.0 | 20.00 | 0 | 106 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 51.66 | | 50.00 | | 103 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 57.27 | | 50.00 | | 115 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 52.44 | | 50.00 | | 105 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 57.86 | | 50.00 | | 116 | 84 | 123 | | | | |

Sample ID: **Q050206MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930581**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.47 | 5.0 | 20.00 | 0 | 117 | 76 | 132 | 22.55 | 4.00 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930581**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 21.94 | 5.0 | 20.00 | 0 | 110 | 90 | 123 | 21.26 | 3.15 | 30 | |
| Chlorobenzene | 21.96 | 5.0 | 20.00 | 0 | 110 | 76 | 118 | 21.37 | 2.72 | 30 | |
| MTBE | 21.40 | 5.0 | 20.00 | 0 | 107 | 78 | 134 | 20.46 | 4.49 | 30 | |
| Toluene | 22.17 | 5.0 | 20.00 | 0 | 111 | 91 | 124 | 22.06 | 0.497 | 30 | |
| Trichloroethene | 22.18 | 5.0 | 20.00 | 0 | 111 | 87 | 125 | 21.22 | 4.42 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 53.00 | | 50.00 | | 106 | 70 | 126 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 56.98 | | 50.00 | | 114 | 63 | 134 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 54.39 | | 50.00 | | 109 | 73 | 124 | | 0 | 30 | |
| Surr: Toluene-d8 | 58.41 | | 50.00 | | 117 | 84 | 123 | | 0 | 30 | |

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 52.75 | | 50.00 | | 106 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 48.62 | | 50.00 | | 97.2 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 51.96 | | 50.00 | | 104 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 52.99 | | 50.00 | | 106 | 84 | 123 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

Sample ID: **MB-27832** SampType: **MBLK** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **PBS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930395**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 0.00 | 330 | | | | | | | | | |
| Acenaphthene | 0.00 | 330 | | | | | | | | | |
| Acenaphthylene | 0.00 | 330 | | | | | | | | | |
| Anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)pyrene | 0.00 | 330 | | | | | | | | | |
| Benzo(b)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Benzo(g,h,i)perylene | 0.00 | 330 | | | | | | | | | |
| Benzo(k)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Chrysene | 0.00 | 330 | | | | | | | | | |
| Dibenz(a,h)anthracene | 0.00 | 330 | | | | | | | | | |
| Fluoranthene | 0.00 | 330 | | | | | | | | | |
| Fluorene | 0.00 | 330 | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | 0.00 | 330 | | | | | | | | | |
| Naphthalene | 0.00 | 330 | | | | | | | | | |
| Phenanthrene | 0.00 | 330 | | | | | | | | | |
| Pyrene | 0.00 | 330 | | | | | | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2751.00 | | 3330 | | 82.6 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2791.00 | | 3330 | | 83.8 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3513.67 | | 3330 | | 106 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2832.00 | | 3330 | | 85.0 | 40 | 116 | | | | |

Sample ID: **LCS-27832** SampType: **LCS** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **LCSS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930396**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3102.33 | 330 | 3330 | 0 | 93.2 | 73 | 118 | | | | |
| Pyrene | 3229.67 | 330 | 3330 | 0 | 97.0 | 74 | 127 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2671.67 | | 3330 | | 80.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2860.67 | | 3330 | | 85.9 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3029.67 | | 3330 | | 91.0 | 46 | 135 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

| Sample ID: LCS-27832 | SampType: LCS | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930396 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: Nitrobenzene-d5 | 2864.33 | | 3330 | | 86.0 | 40 | 116 | | | | |

| Sample ID: MB-27832MS | SampType: MS | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930397 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3263.00 | 330 | 3330 | 0 | 98.0 | 59 | 129 | | | | |
| Pyrene | 3322.00 | 330 | 3330 | 0 | 99.8 | 58 | 138 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2835.67 | | 3330 | | 85.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2966.33 | | 3330 | | 89.1 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3099.67 | | 3330 | | 93.1 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2998.33 | | 3330 | | 90.0 | 40 | 116 | | | | |

| Sample ID: MB-27832MSD | SampType: MSD | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930398 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3266.00 | 330 | 3330 | 0 | 98.1 | 59 | 129 | 3263 | 0.0919 | 30 | |
| Pyrene | 3331.67 | 330 | 3330 | 0 | 100 | 58 | 138 | 3322 | 0.291 | 30 | |
| Surr: 1,2-Dichlorobenzene-d4 | 2732.67 | | 3330 | | 82.1 | 46 | 105 | | 0 | 30 | |
| Surr: 2-Fluorobiphenyl | 2944.00 | | 3330 | | 88.4 | 54 | 112 | | 0 | 30 | |
| Surr: 4-Terphenyl-d14 | 3111.00 | | 3330 | | 93.4 | 46 | 135 | | 0 | 30 | |
| Surr: Nitrobenzene-d5 | 2952.00 | | 3330 | | 88.6 | 40 | 116 | | 0 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: HC_S_ATL**

| Sample ID: **MB-27852** | SampType: **MBLK** | TestCode: **HC_S_ATL** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27852** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/3/2006** | SeqNo: **931573** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T/R Hydrocarbons: C8-C10 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C10-C18 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C18-C28 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C28-C36 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C36-C40 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C40 Total | 0.00 | 10 | | | | | | | | | |
| Surr: p-Terphenyl | 69.12 | | 80.00 | | 86.4 | 56 | 131 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084159
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27852**

| Sample ID: **LCS-27852** | SampType: **LCS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27852** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/3/2006** | SeqNo: **931569** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 936.84 | 10 | 1000 | 0 | 93.7 | 67 | 131 | | | | |
| Surr: p-Terphenyl | 69.23 | | 80.00 | | 86.5 | 56 | 131 | | | | |

| Sample ID: **084159-003AMS** | SampType: **MS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **NM-B10-5.0** | Batch ID: **27852** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/3/2006** | SeqNo: **931570** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 944.31 | 10 | 1000 | 0 | 94.4 | 49 | 140 | | | | |
| Surr: p-Terphenyl | 68.15 | | 80.00 | | 85.2 | 56 | 131 | | | | |

| Sample ID: **084159-003AMSD** | SampType: **MSD** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **NM-B10-5.0** | Batch ID: **27852** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/3/2006** | SeqNo: **931571** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 955.46 | 10 | 1000 | 0 | 95.5 | 49 | 140 | 944.3 | 1.17 | 30 | |
| Surr: p-Terphenyl | 68.57 | | 80.00 | | 85.7 | 56 | 131 | | 0 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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# CHAIN OF CUSTODY RECORD

Pg 1 of 1


**Advanced Technology Laboratories**
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040


**FOR LABORATORY USE ONLY:**

P.O.#: _____
Logged By: _____ Date: 5/1/06

Method of Transport: Client ☐ ATL ☑ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y☑ N☐ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☑

Client: Ninyo & Moore
Attn: VJS
Address: 5710 Ruffin Rd
City San Diego State CA Zip Code 92123
TEL: (858) 576-1000
FAX: (858) 576-9600

Project Name: CCDC - Monarch Project #: 10574000 2 Sampler: (Printed Name) J. Schneider (Signature)

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by: (Signature and Printed Name) VJS | Date: 5/1/06 | Time: 0900 | Received by: (Signature and Printed Name) | Date: 5-1-06 | Time: 9:30a |
| Relinquished by: (Signature and Printed Name) | Date: 5-1-06 | Time: 6:00 | Received by: (Signature and Printed Name) | Date: 05/01/06 | Time: 1815 |
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | Date: | Time: |

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: J. Schneider (Print Name) 4/29/06 (Date) (Signature)

Send Report To:
Attn: VJS
Co: N&M
Address 5710 Ruffin Rd
City S.D. State CA Zip 92123

Bill To:
Attn: _____
Co: SAME
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:
LEAD If ≥50 mg/kg, test using WET
≥100 mg/kg, test using TCLP

**Sample/Records - Archival & Disposal**
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER

| ITEM | LAB USE ONLY: Batch #: / Lab No. | Sample Description 2006: Sample I.D. / Location | Date | Time | 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) VOCs + OXY | 8270C (BNA) PAH | 6010B (Total Metal) | 8015B (GRO) / 8020 (BTEX) | 8015B (DRO) | 8021 (BTEX) | TTLC / CAM 17 (6010 / 7000) LEAD | TPH-E 8015M | SOIL | WATER | GROUND WATER | WASTEWATER | TAT | Container(s) # | Container(s) Type | PRESERVATION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ✓ | 0605159-001 | NM-B10-1.0 | 4/29 | 1433 | | | | | | | | | X | | X | | | | E | 1 | JG | — | |
| ✓ | -002 | NM-B10-2.0 | 4/29 | 1435 | | | | | | | | | X | | X | | | | | 1 | JG | — | |
| ✓ | -003 | NM-B10-5.0 | 4/30 | 1050 | | X | | | | | | | | X | X | | | | | | TP | — | |
| ✓ | -004 | NM-B10-12.0 | 4/30 | 1110 | | X | X | | | | | X | | X | X | | | | | | TP | — | |
| ✓ | -005 | NM-B10-15.0 | 4/30 | 1117 | | X | | | | | | | | X | X | | | | | | TP | — | |
| ✓ | -006 | NM-B10-20.0 | 4/30 | 1139 | | X | | | | | | | | X | X | | | | | | TP | — | |
| ✓ | -007 | NM-B10 | 4/30 | 1140 | | X | | | | | | | | | | X | | | ↓ | 2 | VG | H | |

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode _____ OTHER _____

- TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=$HNO_3$ S=$H_2SO_4$ C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

May 05, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084160

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084160
**Contract No:**

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date | Date Received | Date Reported |
|---|---|---|---|---|---|
| 084160-001A | NM-B08-1.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084160-002A | NM-B08-2.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084160-003A | NM-B08-5.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084160-004A | NM-B08-10.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084160-005A | NM-B08-15.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084160-006A | NM-B08-20.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084160-007A | NM-B08 | Ground Water | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084160-008A | NM-B08-5.0D | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |


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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-1.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 2:20:00 PM |
| **Lab ID:** | 084160-001A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503E | QC Batch: 27856 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 15 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-2.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 2:24:00 PM |
| **Lab ID:** | 084160-002A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503E | QC Batch: 27856 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 89 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-5.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:35:00 AM |
| **Lab ID:** | 084160-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: 5/3/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 84.4 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
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- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-5.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:35:00 AM |
| **Lab ID:** | 084160-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

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# Advanced Technology Laboratories

**Date:** *05-May-06*

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|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-5.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:35:00 AM |
| **Lab ID:** | 084160-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Surr: 1,2-Dichloroethane-d4 | 99.7 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 97.8 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 106 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 109 | 84-130 | | %REC | 1 | 5/2/2006 |

| | | | | | |
|---|---|---|---|---|---|
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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-10.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:45:00 AM |
| **Lab ID:** | 084160-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | | | | | |
| | **EPA 3050B** | | | **EPA 6010B** | | |
| RunID: ICP6_060503D | QC Batch: 27858 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Antimony | ND | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Arsenic | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Barium | 20 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Beryllium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cadmium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Chromium | 9.0 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cobalt | 3.1 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Copper | 3.8 | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Lead | 1.9 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Molybdenum | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Nickel | 4.0 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Selenium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Silver | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Thallium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Vanadium | 20 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Zinc | 12 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| | **LUFT** | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 83.1 | 56-131 | | %REC | 1 | 5/3/2006 |
| **MERCURY BY COLD VAPOR TECHNIQUE** | | | | | | |
| | **EPA 7471** | | | **EPA 7471A** | | |
| RunID: AA5_060504A | QC Batch: 27864 | | | PrepDate: | 5/3/2006 | Analyst: **NS** |
| Mercury | ND | 0.10 | | mg/Kg | 1 | 5/4/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-10.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:45:00 AM |
| **Lab ID:** | 084160-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
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| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
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# Advanced Technology Laboratories

**Date:** *05-May-06*

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|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-10.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:45:00 AM |
| **Lab ID:** | 084160-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | **EPA 8260B** | | | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 96.2 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 95.8 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 106 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 104 | 84-130 | | %REC | 1 | 5/2/2006 |
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | **EPA 3550B** | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| 2-Methylnaphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-10.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:45:00 AM |
| **Lab ID:** | 084160-004A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | **EPA 3550B** | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| Benzo(a)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(a)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(b)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(g,h,i)perylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(k)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Chrysene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Dibenz(a,h)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluorene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Indeno(1,2,3-cd)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Phenanthrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichlorobenzene-d4 | 65.2 | 46-105 | | %REC | 1 | 5/2/2006 |
| Surr: 2-Fluorobiphenyl | 70.0 | 54-112 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Terphenyl-d14 | 81.6 | 46-135 | | %REC | 1 | 5/2/2006 |
| Surr: Nitrobenzene-d5 | 68.6 | 40-116 | | %REC | 1 | 5/2/2006 |

| | | | | |
|---|---|---|---|---|
| **Qualifiers:** | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-15.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:55:00 AM |
| **Lab ID:** | 084160-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 81.0 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-15.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:55:00 AM |
| **Lab ID:** | 084160-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-15.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:55:00 AM |
| **Lab ID:** | 084160-005A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Surr: 1,2-Dichloroethane-d4 | 113 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 111 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 120 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 123 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-20.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 10:10:00 AM |
| **Lab ID:** | 084160-006A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: 5/3/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 82.4 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-20.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 10:10:00 AM |
| **Lab ID:** | 084160-006A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: TT |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-20.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 10:10:00 AM |
| **Lab ID:** | 084160-006A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Surr: 1,2-Dichloroethane-d4 | 88.9 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 91.4 | 58-135 | | %REC | 1 | 5/3/2006 |
| Surr: Toluene-d8 | 102 | 84-130 | | %REC | 1 | 5/3/2006 |

| **Qualifiers:** | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 10:25:00 AM |
| **Lab ID:** | 084160-007A | **Matrix:** | GROUND WATER |

**VOLATILE ORGANIC COMPOUNDS BY GC/MS**

**EPA 8260B**

RunID: MS2_060502A QC Batch: Q06VW082 PrepDate: Analyst: **HH**

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloroform | 5.3 | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 10:25:00 AM |
| **Lab ID:** | 084160-007A | **Matrix:** | GROUND WATER |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS2_060502A | QC Batch: Q06VW082 | | | PrepDate: | | Analyst: **HH** |
| Di-isopropyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Ethyl tert-butyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/L | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/L | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 114 | 70-126 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 92.7 | 63-134 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 119 | 73-124 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 108 | 84-123 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-5.0D |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:35:00 AM |
| **Lab ID:** | 084160-008A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 80.8 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-5.0D |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:35:00 AM |
| **Lab ID:** | 084160-008A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-5.0D |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/30/2006 9:35:00 AM |
| **Lab ID:** | 084160-008A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | **EPA 8260B** | | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Surr: 1,2-Dichloroethane-d4 | 105 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 96.4 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 109 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 107 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

| Sample ID: **MB-27858** | SampType: **MBLK** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62965** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27858** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931369** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.00 | 2.0 | | | | | | | | | |
| Arsenic | 0.00 | 1.0 | | | | | | | | | |
| Barium | 0.00 | 1.0 | | | | | | | | | |
| Beryllium | 0.00 | 1.0 | | | | | | | | | |
| Cadmium | 0.00 | 1.0 | | | | | | | | | |
| Chromium | 0.00 | 1.0 | | | | | | | | | |
| Cobalt | 0.00 | 1.0 | | | | | | | | | |
| Copper | 0.00 | 2.0 | | | | | | | | | |
| Lead | 0.00 | 1.0 | | | | | | | | | |
| Molybdenum | 0.00 | 1.0 | | | | | | | | | |
| Nickel | 0.00 | 1.0 | | | | | | | | | |
| Selenium | 0.00 | 1.0 | | | | | | | | | |
| Silver | 0.00 | 1.0 | | | | | | | | | |
| Thallium | 0.00 | 1.0 | | | | | | | | | |
| Vanadium | 0.00 | 1.0 | | | | | | | | | |
| Zinc | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **LCS-27858** | SampType: **LCS** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62965** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27858** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931370** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 48.94 | 2.0 | 50.00 | 0 | 97.9 | 80 | 120 | | | | |
| Arsenic | 47.08 | 1.0 | 50.00 | 0 | 94.2 | 80 | 120 | | | | |
| Barium | 50.29 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |
| Beryllium | 47.23 | 1.0 | 50.00 | 0 | 94.5 | 80 | 120 | | | | |
| Cadmium | 49.69 | 1.0 | 50.00 | 0 | 99.4 | 80 | 120 | | | | |
| Chromium | 49.04 | 1.0 | 50.00 | 0 | 98.1 | 80 | 120 | | | | |
| Cobalt | 47.31 | 1.0 | 50.00 | 0 | 94.6 | 80 | 120 | | | | |
| Copper | 50.11 | 2.0 | 50.00 | 0 | 100 | 80 | 120 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

Sample ID: **LCS-27858** SampType: **LCS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62965**
Client ID: **LCSS** Batch ID: **27858** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931370**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 48.47 | 1.0 | 50.00 | 0 | 96.9 | 80 | 120 | | | | |
| Molybdenum | 49.96 | 1.0 | 50.00 | 0 | 99.9 | 80 | 120 | | | | |
| Nickel | 47.24 | 1.0 | 50.00 | 0 | 94.5 | 80 | 120 | | | | |
| Selenium | 46.30 | 1.0 | 50.00 | 0 | 92.6 | 80 | 120 | | | | |
| Silver | 48.13 | 1.0 | 50.00 | 0 | 96.3 | 80 | 120 | | | | |
| Thallium | 48.65 | 1.0 | 50.00 | 0 | 97.3 | 80 | 120 | | | | |
| Vanadium | 49.53 | 1.0 | 50.00 | 0 | 99.1 | 80 | 120 | | | | |
| Zinc | 47.43 | 1.0 | 50.00 | 0 | 94.9 | 80 | 120 | | | | |

Sample ID: **084160-004AMS** SampType: **MS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62965**
Client ID: **NM-B08-10.0** Batch ID: **27858** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931374**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 91.19 | 2.0 | 125.0 | 0 | 73.0 | 25 | 108 | | | | |
| Arsenic | 97.30 | 1.0 | 125.0 | 0.9863 | 77.0 | 46 | 118 | | | | |
| Barium | 122.09 | 1.0 | 125.0 | 19.93 | 81.7 | 32 | 131 | | | | |
| Beryllium | 97.33 | 1.0 | 125.0 | 0 | 77.9 | 59 | 104 | | | | |
| Cadmium | 104.00 | 1.0 | 125.0 | 0.08913 | 83.1 | 63 | 105 | | | | |
| Chromium | 110.08 | 1.0 | 125.0 | 8.973 | 80.9 | 49 | 116 | | | | |
| Cobalt | 103.13 | 1.0 | 125.0 | 3.104 | 80.0 | 58 | 104 | | | | |
| Copper | 113.13 | 2.0 | 125.0 | 3.845 | 87.4 | 54 | 126 | | | | |
| Lead | 100.23 | 1.0 | 125.0 | 1.946 | 78.6 | 31 | 122 | | | | |
| Molybdenum | 100.88 | 1.0 | 125.0 | 0.5545 | 80.3 | 61 | 104 | | | | |
| Nickel | 103.24 | 1.0 | 125.0 | 3.953 | 79.4 | 50 | 112 | | | | |
| Selenium | 95.62 | 1.0 | 125.0 | 0 | 76.5 | 53 | 109 | | | | |
| Silver | 101.47 | 1.0 | 125.0 | 0 | 81.2 | 41 | 121 | | | | |
| Thallium | 95.79 | 1.0 | 125.0 | 0 | 76.6 | 54 | 100 | | | | |
| Vanadium | 122.77 | 1.0 | 125.0 | 19.52 | 82.6 | 59 | 109 | | | | |
| Zinc | 108.74 | 1.0 | 125.0 | 12.09 | 77.3 | 27 | 131 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

Sample ID: **084160-004AMSD** SampType: **MSD** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62965**
Client ID: **NM-B08-10.0** Batch ID: **27858** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931375**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 90.85 | 2.0 | 125.0 | 0 | 72.7 | 25 | 108 | 91.19 | 0.379 | 20 | |
| Arsenic | 98.11 | 1.0 | 125.0 | 0.9863 | 77.7 | 46 | 118 | 97.30 | 0.836 | 20 | |
| Barium | 126.00 | 1.0 | 125.0 | 19.93 | 84.9 | 32 | 131 | 122.1 | 3.15 | 20 | |
| Beryllium | 98.44 | 1.0 | 125.0 | 0 | 78.8 | 59 | 104 | 97.33 | 1.14 | 20 | |
| Cadmium | 105.03 | 1.0 | 125.0 | 0.08913 | 84.0 | 63 | 105 | 104.0 | 0.979 | 20 | |
| Chromium | 111.79 | 1.0 | 125.0 | 8.973 | 82.2 | 49 | 116 | 110.1 | 1.54 | 20 | |
| Cobalt | 104.38 | 1.0 | 125.0 | 3.104 | 81.0 | 58 | 104 | 103.1 | 1.20 | 20 | |
| Copper | 114.52 | 2.0 | 125.0 | 3.845 | 88.5 | 54 | 126 | 113.1 | 1.22 | 20 | |
| Lead | 101.24 | 1.0 | 125.0 | 1.946 | 79.4 | 31 | 122 | 100.2 | 1.00 | 20 | |
| Molybdenum | 101.88 | 1.0 | 125.0 | 0.5545 | 81.1 | 61 | 104 | 100.9 | 0.987 | 20 | |
| Nickel | 104.23 | 1.0 | 125.0 | 3.953 | 80.2 | 50 | 112 | 103.2 | 0.955 | 20 | |
| Selenium | 96.50 | 1.0 | 125.0 | 0 | 77.2 | 53 | 109 | 95.62 | 0.915 | 20 | |
| Silver | 102.08 | 1.0 | 125.0 | 0 | 81.7 | 41 | 121 | 101.5 | 0.595 | 20 | |
| Thallium | 96.40 | 1.0 | 125.0 | 0 | 77.1 | 54 | 100 | 95.79 | 0.636 | 20 | |
| Vanadium | 124.29 | 1.0 | 125.0 | 19.52 | 83.8 | 59 | 109 | 122.8 | 1.23 | 20 | |
| Zinc | 109.92 | 1.0 | 125.0 | 12.09 | 78.3 | 27 | 131 | 108.7 | 1.08 | 20 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27856A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931336 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: LCS-27856 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931337 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 251.62 | 1.0 | 250.0 | 0 | 101 | 80 | 120 | | | | |

| Sample ID: 084161-003AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931346 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 317.69 | 1.0 | 250.0 | 162.3 | 62.1 | 31 | 122 | | | | |

| Sample ID: 084161-003AMSD | SampType: MSD | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931347 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 304.72 | 1.0 | 250.0 | 162.3 | 57.0 | 31 | 122 | 317.7 | 4.17 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7471_S**

| Sample ID: **084161-005A-MS** | SampType: **MS** | TestCode: **7471_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62996** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27864** | TestNo: **EPA 7471A** | **EPA 7471** | Analysis Date: **5/4/2006** | SeqNo: **931789** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | | | | |

| Sample ID: **084161-005A-MSD** | SampType: **MSD** | TestCode: **7471_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62996** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27864** | TestNo: **EPA 7471A** | **EPA 7471** | Analysis Date: **5/4/2006** | SeqNo: **931790** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | 1.141 | 0.444 | 20 | |

| Sample ID: **LCS-27864** | SampType: **LCS** | TestCode: **7471_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62996** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27864** | TestNo: **EPA 7471A** | **EPA 7471** | Analysis Date: **5/4/2006** | SeqNo: **931791** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 2.37 | 0.10 | 2.080 | 0 | 114 | 80 | 120 | | | | |

| Sample ID: **MB-27864** | SampType: **MBLK** | TestCode: **7471_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62996** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27864** | TestNo: **EPA 7471A** | **EPA 7471** | Analysis Date: **5/4/2006** | SeqNo: **931792** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.00 | 0.10 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **LCSS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931484**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 109.22 | 5.0 | 100.0 | 0 | 109 | 76 | 126 | | | | |
| Benzene | 113.96 | 5.0 | 100.0 | 0 | 114 | 77 | 131 | | | | |
| Chlorobenzene | 121.03 | 5.0 | 100.0 | 0 | 121 | 81 | 136 | | | | |
| MTBE | 111.68 | 5.0 | 100.0 | 0 | 112 | 50 | 143 | | | | |
| Toluene | 112.34 | 5.0 | 100.0 | 0 | 112 | 78 | 129 | | | | |
| Trichloroethene | 117.70 | 5.0 | 100.0 | 0 | 118 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.68 | | 50.00 | | 91.4 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.33 | | 50.00 | | 103 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.27 | | 50.00 | | 94.5 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.06 | | 50.00 | | 102 | 84 | 130 | | | | |

Sample ID: **P060503MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931485**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 113.17 | 5.0 | 100.0 | 0 | 113 | 59 | 146 | | | | |
| Benzene | 112.71 | 5.0 | 100.0 | 0 | 113 | 68 | 137 | | | | |
| Chlorobenzene | 120.42 | 5.0 | 100.0 | 0 | 120 | 64 | 144 | | | | |
| MTBE | 117.72 | 5.0 | 100.0 | 0 | 118 | 54 | 141 | | | | |
| Toluene | 110.45 | 5.0 | 100.0 | 0 | 110 | 53 | 150 | | | | |
| Trichloroethene | 116.26 | 5.0 | 100.0 | 0 | 116 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 47.80 | | 50.00 | | 95.6 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.35 | | 50.00 | | 101 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 48.09 | | 50.00 | | 96.2 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.22 | | 50.00 | | 102 | 84 | 130 | | | | |

Sample ID: **P060503MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931486**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 108.71 | 5.0 | 100.0 | 0 | 109 | 59 | 146 | 113.2 | 4.02 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

| Sample ID: **P060503MSD** | SampType: **MSD** | TestCode: **8260_S** | Units: **µg/Kg** | Prep Date: | RunNo: **62973** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **P06VS081** | TestNo: **EPA 8260B** | | Analysis Date: **5/3/2006** | SeqNo: **931486** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 112.37 | 5.0 | 100.0 | 0 | 112 | 68 | 137 | 112.7 | 0.302 | 30 | |
| Chlorobenzene | 119.51 | 5.0 | 100.0 | 0 | 120 | 64 | 144 | 120.4 | 0.759 | 30 | |
| MTBE | 114.30 | 5.0 | 100.0 | 0 | 114 | 54 | 141 | 117.7 | 2.95 | 30 | |
| Toluene | 110.79 | 5.0 | 100.0 | 0 | 111 | 53 | 150 | 110.4 | 0.307 | 30 | |
| Trichloroethene | 117.13 | 5.0 | 100.0 | 0 | 117 | 58 | 155 | 116.3 | 0.746 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 46.30 | | 50.00 | | 92.6 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 50.36 | | 50.00 | | 101 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 47.22 | | 50.00 | | 94.4 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.04 | | 50.00 | | 102 | 84 | 130 | | 0 | 30 | |

| Sample ID: **P060503MB2** | SampType: **MBLK** | TestCode: **8260_S** | Units: **µg/Kg** | Prep Date: | RunNo: **62973** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **P06VS081** | TestNo: **EPA 8260B** | | Analysis Date: **5/3/2006** | SeqNo: **931487** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
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ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Wain[illegible]ue, [illegible]ill, C[illegible]55 [illegible]2. 98[illegible] Fa[illegible]389.4[illegible]

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.11 | | 50.00 | | 90.2 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.04 | | 50.00 | | 100 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.53 | | 50.00 | | 93.1 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 50.69 | | 50.00 | | 101 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502LCS1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **LCSS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930806**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 89.65 | 5.0 | 100.0 | 0 | 89.6 | 76 | 126 | | | | |
| Benzene | 95.05 | 5.0 | 100.0 | 0 | 95.0 | 77 | 131 | | | | |
| Chlorobenzene | 96.08 | 5.0 | 100.0 | 0 | 96.1 | 81 | 136 | | | | |
| MTBE | 98.18 | 5.0 | 100.0 | 0 | 98.2 | 50 | 143 | | | | |
| Toluene | 89.40 | 5.0 | 100.0 | 0 | 89.4 | 78 | 129 | | | | |
| Trichloroethene | 90.22 | 5.0 | 100.0 | 0 | 90.2 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 44.85 | | 50.00 | | 89.7 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 49.91 | | 50.00 | | 99.8 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.45 | | 50.00 | | 94.9 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 48.24 | | 50.00 | | 96.5 | 84 | 130 | | | | |

Sample ID: **R060502MB2MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930807**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 82.89 | 5.0 | 100.0 | 0 | 82.9 | 59 | 146 | | | | |
| Benzene | 90.81 | 5.0 | 100.0 | 0 | 90.8 | 68 | 137 | | | | |
| Chlorobenzene | 91.28 | 5.0 | 100.0 | 0 | 91.3 | 64 | 144 | | | | |
| MTBE | 88.38 | 5.0 | 100.0 | 0 | 88.4 | 54 | 141 | | | | |
| Toluene | 86.63 | 5.0 | 100.0 | 0 | 86.6 | 53 | 150 | | | | |
| Trichloroethene | 86.49 | 5.0 | 100.0 | 0 | 86.5 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 44.06 | | 50.00 | | 88.1 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 54.93 | | 50.00 | | 110 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 50.66 | | 50.00 | | 101 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 56.84 | | 50.00 | | 114 | 84 | 130 | | | | |

Sample ID: **R060502MB2MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930808**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 97.76 | 5.0 | 100.0 | 0 | 97.8 | 59 | 146 | 82.89 | 16.5 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Wain[illegible]ue, [illegible]Hill, C[illegible]55 [illegible]2. 98[illegible] Fa[illegible]989.4[illegible]

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502MB2MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930808**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 100.45 | 5.0 | 100.0 | 0 | 100 | 68 | 137 | 90.81 | 10.1 | 30 | |
| Chlorobenzene | 102.52 | 5.0 | 100.0 | 0 | 103 | 64 | 144 | 91.28 | 11.6 | 30 | |
| MTBE | 95.35 | 5.0 | 100.0 | 0 | 95.4 | 54 | 141 | 88.38 | 7.59 | 30 | |
| Toluene | 96.17 | 5.0 | 100.0 | 0 | 96.2 | 53 | 150 | 86.63 | 10.4 | 30 | |
| Trichloroethene | 96.32 | 5.0 | 100.0 | 0 | 96.3 | 58 | 155 | 86.49 | 10.8 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 48.12 | | 50.00 | | 96.2 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 58.76 | | 50.00 | | 118 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 56.56 | | 50.00 | | 113 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 60.90 | | 50.00 | | 122 | 84 | 130 | | 0 | 30 | |

Sample ID: **R060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **PBS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930809**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **PBS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930809**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Wain[illegible]uc, S[illegible]Hill, C[illegible]55 [illegible]2. 98[illegible] Fa[illegible]989.4[illegible]

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

| Sample ID: **R060502MB2** | SampType: **MBLK** | TestCode: **8260_S** | Units: **µg/Kg** | Prep Date: | RunNo: **62919** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **R06VS087** | TestNo: **EPA 8260B** | | Analysis Date: **5/2/2006** | SeqNo: **930809** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 54.57 | | 50.00 | | 109 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 59.57 | | 50.00 | | 119 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 59.31 | | 50.00 | | 119 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 64.75 | | 50.00 | | 130 | 84 | 130 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206LC1** SampType: **LCS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **LCSW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930579**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.45 | 5.0 | 20.00 | 0 | 117 | 76 | 132 | | | | |
| Benzene | 21.27 | 5.0 | 20.00 | 0 | 106 | 90 | 123 | | | | |
| Chlorobenzene | 20.44 | 5.0 | 20.00 | 0 | 102 | 76 | 118 | | | | |
| MTBE | 20.39 | 5.0 | 20.00 | 0 | 102 | 78 | 134 | | | | |
| Toluene | 21.43 | 5.0 | 20.00 | 0 | 107 | 91 | 124 | | | | |
| Trichloroethene | 21.84 | 5.0 | 20.00 | 0 | 109 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 52.53 | | 50.00 | | 105 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 57.57 | | 50.00 | | 115 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 52.95 | | 50.00 | | 106 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 58.74 | | 50.00 | | 117 | 84 | 123 | | | | |

Sample ID: **Q050206MB1MS** SampType: **MS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930580**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 22.55 | 5.0 | 20.00 | 0 | 113 | 76 | 132 | | | | |
| Benzene | 21.26 | 5.0 | 20.00 | 0 | 106 | 90 | 123 | | | | |
| Chlorobenzene | 21.37 | 5.0 | 20.00 | 0 | 107 | 76 | 118 | | | | |
| MTBE | 20.46 | 5.0 | 20.00 | 0 | 102 | 78 | 134 | | | | |
| Toluene | 22.06 | 5.0 | 20.00 | 0 | 110 | 91 | 124 | | | | |
| Trichloroethene | 21.22 | 5.0 | 20.00 | 0 | 106 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 51.66 | | 50.00 | | 103 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 57.27 | | 50.00 | | 115 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 52.44 | | 50.00 | | 105 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 57.86 | | 50.00 | | 116 | 84 | 123 | | | | |

Sample ID: **Q050206MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930581**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.47 | 5.0 | 20.00 | 0 | 117 | 76 | 132 | 22.55 | 4.00 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930581**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 21.94 | 5.0 | 20.00 | 0 | 110 | 90 | 123 | 21.26 | 3.15 | 30 | |
| Chlorobenzene | 21.96 | 5.0 | 20.00 | 0 | 110 | 76 | 118 | 21.37 | 2.72 | 30 | |
| MTBE | 21.40 | 5.0 | 20.00 | 0 | 107 | 78 | 134 | 20.46 | 4.49 | 30 | |
| Toluene | 22.17 | 5.0 | 20.00 | 0 | 111 | 91 | 124 | 22.06 | 0.497 | 30 | |
| Trichloroethene | 22.18 | 5.0 | 20.00 | 0 | 111 | 87 | 125 | 21.22 | 4.42 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 53.00 | | 50.00 | | 106 | 70 | 126 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 56.98 | | 50.00 | | 114 | 63 | 134 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 54.39 | | 50.00 | | 109 | 73 | 124 | | 0 | 30 | |
| Surr: Toluene-d8 | 58.41 | | 50.00 | | 117 | 84 | 123 | | 0 | 30 | |

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
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R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology
Walnut [illegible] Hill, C[illegible] [illegible] 989 Fa[illegible] 989.4[illegible]

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 52.75 | | 50.00 | | 106 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 48.62 | | 50.00 | | 97.2 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 51.96 | | 50.00 | | 104 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 52.99 | | 50.00 | | 106 | 84 | 123 | | | | |

**Qualifiers:**
E Value above quantitation range
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ND Not Detected at the Reporting Limit
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S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

Sample ID: **MB-27832** SampType: **MBLK** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **PBS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930395**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 0.00 | 330 | | | | | | | | | |
| Acenaphthene | 0.00 | 330 | | | | | | | | | |
| Acenaphthylene | 0.00 | 330 | | | | | | | | | |
| Anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)pyrene | 0.00 | 330 | | | | | | | | | |
| Benzo(b)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Benzo(g,h,i)perylene | 0.00 | 330 | | | | | | | | | |
| Benzo(k)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Chrysene | 0.00 | 330 | | | | | | | | | |
| Dibenz(a,h)anthracene | 0.00 | 330 | | | | | | | | | |
| Fluoranthene | 0.00 | 330 | | | | | | | | | |
| Fluorene | 0.00 | 330 | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | 0.00 | 330 | | | | | | | | | |
| Naphthalene | 0.00 | 330 | | | | | | | | | |
| Phenanthrene | 0.00 | 330 | | | | | | | | | |
| Pyrene | 0.00 | 330 | | | | | | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2751.00 | | 3330 | | 82.6 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2791.00 | | 3330 | | 83.8 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3513.67 | | 3330 | | 106 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2832.00 | | 3330 | | 85.0 | 40 | 116 | | | | |

Sample ID: **LCS-27832** SampType: **LCS** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **LCSS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930396**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3102.33 | 330 | 3330 | 0 | 93.2 | 73 | 118 | | | | |
| Pyrene | 3229.67 | 330 | 3330 | 0 | 97.0 | 74 | 127 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2671.67 | | 3330 | | 80.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2860.67 | | 3330 | | 85.9 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3029.67 | | 3330 | | 91.0 | 46 | 135 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Wain[illegible]uc, S[illegible]ill, C[illegible]55 [illegible]2. 98[illegible] Fa[illegible]989.4[illegible]

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

| Sample ID: **LCS-27832** | SampType: **LCS** | TestCode: **8270_S_FUL** | Units: **µg/Kg** | Prep Date: **5/2/2006** | RunNo: **62882** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27832** | TestNo: **EPA 8270C** | **EPA 3550B** | Analysis Date: **5/2/2006** | SeqNo: **930396** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: Nitrobenzene-d5 | 2864.33 | | 3330 | | 86.0 | 40 | 116 | | | | |

| Sample ID: **MB-27832MS** | SampType: **MS** | TestCode: **8270_S_FUL** | Units: **µg/Kg** | Prep Date: **5/2/2006** | RunNo: **62882** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27832** | TestNo: **EPA 8270C** | **EPA 3550B** | Analysis Date: **5/2/2006** | SeqNo: **930397** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3263.00 | 330 | 3330 | 0 | 98.0 | 59 | 129 | | | | |
| Pyrene | 3322.00 | 330 | 3330 | 0 | 99.8 | 58 | 138 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2835.67 | | 3330 | | 85.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2966.33 | | 3330 | | 89.1 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3099.67 | | 3330 | | 93.1 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2998.33 | | 3330 | | 90.0 | 40 | 116 | | | | |

| Sample ID: **MB-27832MSD** | SampType: **MSD** | TestCode: **8270_S_FUL** | Units: **µg/Kg** | Prep Date: **5/2/2006** | RunNo: **62882** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27832** | TestNo: **EPA 8270C** | **EPA 3550B** | Analysis Date: **5/2/2006** | SeqNo: **930398** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3266.00 | 330 | 3330 | 0 | 98.1 | 59 | 129 | 3263 | 0.0919 | 30 | |
| Pyrene | 3331.67 | 330 | 3330 | 0 | 100 | 58 | 138 | 3322 | 0.291 | 30 | |
| Surr: 1,2-Dichlorobenzene-d4 | 2732.67 | | 3330 | | 82.1 | 46 | 105 | | 0 | 30 | |
| Surr: 2-Fluorobiphenyl | 2944.00 | | 3330 | | 88.4 | 54 | 112 | | 0 | 30 | |
| Surr: 4-Terphenyl-d14 | 3111.00 | | 3330 | | 93.4 | 46 | 135 | | 0 | 30 | |
| Surr: Nitrobenzene-d5 | 2952.00 | | 3330 | | 88.6 | 40 | 116 | | 0 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: HC_S_ATL**

| | | | | | |
|---|---|---|---|---|---|
| Sample ID: **MB-27852** | SampType: **MBLK** | TestCode: **HC_S_ATL** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
| Client ID: **PBS** | Batch ID: **27852** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/3/2006** | SeqNo: **931573** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T/R Hydrocarbons: C8-C10 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C10-C18 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C18-C28 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C28-C36 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C36-C40 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C40 Total | 0.00 | 10 | | | | | | | | | |
| Surr: p-Terphenyl | 69.12 | | 80.00 | | 86.4 | 56 | 131 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



Advanced Technology

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID: 27852**

| Sample ID: **LCS-27852** | SampType: **LCS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27852** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/3/2006** | SeqNo: **931569** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 936.84 | 10 | 1000 | 0 | 93.7 | 67 | 131 | | | | |
| Surr: p-Terphenyl | 69.23 | | 80.00 | | 86.5 | 56 | 131 | | | | |

| Sample ID: **084159-003AMS** | SampType: **MS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27852** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/3/2006** | SeqNo: **931570** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 944.31 | 10 | 1000 | 0 | 94.4 | 49 | 140 | | | | |
| Surr: p-Terphenyl | 68.15 | | 80.00 | | 85.2 | 56 | 131 | | | | |

| Sample ID: **084159-003AMSD** | SampType: **MSD** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27852** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/3/2006** | SeqNo: **931571** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 955.46 | 10 | 1000 | 0 | 95.5 | 49 | 140 | 944.3 | 1.17 | 30 | |
| Surr: p-Terphenyl | 68.57 | | 80.00 | | 85.7 | 56 | 131 | | 0 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



Advanced Technology Laboratory
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

# CHAIN OF CUSTODY RECORD

Pg 1 of 1


Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040


**FOR LABORATORY USE ONLY:**

P.O.#: _____

Logged By: FD Date: 5/1/06

Method of Transport: Client ☐ ATL ☑ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y☑ N☐ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☐ N☑

Client: Ninyo & Moore
Attn: VJS
Address: 5710 Ruffin Rd
City San Diego State CA Zip Code 92123
TEL: (858) 576-1000
FAX: (858) 576-9600
Project Name: CCDC-Monarch
Project #: 105740002
Sampler: (Printed Name) J. Schneider (Signature)

| | | | | | |
|---|---|---|---|---|---|
| Relinquished by: (Signature and Printed Name) VJS | Date: 5/1/06 | Time: 0900 | Received by: (Signature and Printed Name) | Date: 5-1-06 | Time: 9:30 |
| Relinquished by: (Signature and Printed Name) | Date: 5-1-06 | Time: 6:15p | Received by: (Signature and Printed Name) | Date: 05/1/06 | Time: 1815 |
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | Date: | Time: |

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: J. Schneider 4/29/06
Print Name Date
Signature

Send Report To:
Attn: VJS
Co: N&M
Address 5710 Ruffin
City S.D. State CA Zip 92123

Bill To:
Attn: Same
Co:
Address
City State Zip

Special Instructions/Comments:
LEAD If ≥50 mg/kg, test using WET
≥100 mg/kg, test using TCLP

**Sample/Records - Archival & Disposal**
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

| ITEM | LAB USE ONLY: Batch #: / Lab No. | Sample Description: Sample I.D. / Location | Date (2006) | Time |
|---|---|---|---|---|
| | 054160-001 | NM-B08-1.0 | 4/29 | 1420 |
| | -002 | NM-B08-2.0 | 4/29 | 1424 |
| | -003 | NM-B08-5.0 | 4/30 | 0935 |
| | -004 | NM-B08-10.0 | 4/30 | 0945 |
| | -005 | NM-B08-15.0 | 4/30 | 0955 |
| | -006 | NM-B08-20.0 | 4/30 | 1010 |
| | -007 | NM-B08 | 4/30 | 1025 |
| | -008 | NM-B08-5.0 D | 4/30 | 0935 |

Circle or Add Analysis(es) Requested

| 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) VOCs 8260 | 8270C (BNA) PAHs | 8010B (Total Metal) | 8015B (GRO) / 8020 (BTEX) | 8015B (DRO) | 8021 (BTEX) | CITLE 22 / CAM 17 (6010 / 7000) LEAD 6010 | TPH-E | SOIL | WATER | GROUND WATER | WASTEWATER | TAT | Container(s) # | Type | PRESERVATION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | X | | X | | | | E | 1 | J G | — | |
| | | | | | | | | X | | X | | | | | 1 | J G | — | |
| | | X | | | | | X | | | X | | | | | 1 | T P | — | |
| | | X | X | | | X | | | X | X | | | | | 1 | T P | — | |
| | | X | | | | | | X | | X | | | | | 1 | T P | — | |
| | | X | | | | | | X | | X | | | | | 1 | T P | — | |
| | | X | | | | | | X | | | | | | | 1 | T P | — | |
| | | X | | | | | | X | | X | X | | | | 2 | V G | H | |
| | | X | | | | | | X | | X | | | | | 1 | T P | — | |

QA/QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint Jar Tedlar Glass Plasti =Me Z=Zn O= H T=$Na_2S_2O_3$

Preservatives: H=Hcl N=$HNO_3$ S=$H_2SO_4$ C=4°C

May 12, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084160

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *12-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B08-2.0 |
| **Lab Order:** | 084160 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 2:24:00 PM |
| **Lab ID:** | 084160-002A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | | **WET/ EPA 7420** | | | | |
| RunID: AA2_060512F | QC Batch: R63261 | | | PrepDate: | | Analyst: **NS** |
| Lead | 4.9 | 0.25 | | mg/L | 1 | 5/12/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *12-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-27950 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63261 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | | SeqNo: 935688 | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual | |
| Lead | 0.00 | 0.25 | | | | | | | | | | |

| Sample ID: MB-27950A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63261 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | | SeqNo: 935689 | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual | |
| Lead | 0.00 | 0.25 | | | | | | | | | | |

| Sample ID: LCS-27950 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63261 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | | SeqNo: 935690 | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual | |
| Lead | 5.13 | 0.25 | 5.000 | 0 | 103 | 80 | 120 | | | | | |

| Sample ID: 084284-002AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63261 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | | SeqNo: 935698 | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual | |
| Lead | 4.99 | 0.25 | 5.000 | 0.4815 | 90.2 | 70 | 130 | | | | | |

| Sample ID: MB-27950B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | | RunNo: 63261 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | | SeqNo: 935699 | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual | |
| Lead | 0.00 | 0.25 | | | | | | | | | | |

**Qualifiers:**

- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interferenc
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

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**CLIENT:** Ninyo & Moore
**Work Order:** 084160
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: 084284-011AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935710 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.81 | 0.25 | 5.000 | 0.4353 | 87.6 | 70 | 130 | | | | |

| Sample ID: 084284-011AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935711 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.84 | 0.25 | 5.000 | 0.4353 | 88.2 | 70 | 130 | 4.814 | 0.611 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |
| | Calculations are based on raw values | | | | |

May 05, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084161

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084161
**Contract No:**

## Work Order Sample Summary

| Lab Sample ID | Client Sample ID | Matrix | Collection Date | Date Received | Date Reported |
|---|---|---|---|---|---|
| 084161-001A | NM-B06-1.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084161-002A | NM-B06-2.0 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084161-003A | NM-B06-3.5 | Soil | 4/29/2006 | 5/1/2006 | 5/5/2006 |
| 084161-004A | NM-B06-10.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084161-005A | NM-B06-15.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084161-006A | NM-B06-20.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084161-007A | NM-B06 | Ground Water | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084161-007B | NM-B06 | Ground Water | 4/30/2006 | 5/1/2006 | 5/5/2006 |
| 084161-008A | NM-B06-5.0 | Soil | 4/30/2006 | 5/1/2006 | 5/5/2006 |



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**CLIENT:** Ninyo & Moore
**Project:** CCDC-Monarch, 105740002
**Lab Order:** 084161

# CASE NARRATIVE

Analytical Comments for EPA 6010B

RPD for Matrix Spike (MS)/Matrix Spike Duplicate (MSD) is outside criteria for sample 084161-005AMSD; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Analytical Comments for EPA 8270

Sample 084161-003A: Dilution was necessary due to sample matrix. Extract dark and viscous.



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-1.0 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/29/2006 2:01:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-001 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503E | QC Batch: 27856 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 13 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-2.0 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/29/2006 2:02:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-002 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503E | QC Batch: 27856 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 110 | 1.0 | | mg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084161
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-003

**Client Sample ID:** NM-B06-3.5
**Collection Date:** 4/29/2006 2:10:00 PM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | | | | | |
| | **EPA 3050B** | | | **EPA 6010B** | | |
| RunID: ICP6_060503C | QC Batch: 27859 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Antimony | ND | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Arsenic | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Barium | 140 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Beryllium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cadmium | 1.0 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Chromium | 19 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cobalt | 7.4 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Copper | 35 | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Lead | 150 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Molybdenum | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Nickel | 9.4 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Selenium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Silver | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Thallium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Vanadium | 44 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Zinc | 280 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| **LEAD BY ICP** | | | | | | |
| | **EPA 3050M** | | | **EPA 6010B** | | |
| RunID: ICP5_060503E | QC Batch: 27856 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Lead | 160 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| | **LUFT** | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | 33 | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | 86 | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | 43 | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | 160 | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 78.9 | 56-131 | | %REC | 1 | 5/3/2006 |
| **MERCURY BY COLD VAPOR TECHNIQUE** | | | | | | |
| | **EPA 7471** | | | **EPA 7471A** | | |
| RunID: AA5_060504A | QC Batch: 27864 | | | PrepDate: | 5/3/2006 | Analyst: **NS** |
| Mercury | 0.20 | 0.10 | | mg/Kg | 1 | 5/4/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-3.5 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/29/2006 2:10:00 PM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-003 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B06-3.5
**Lab Order:** 084161 **Collection Date:** 4/29/2006 2:10:00 PM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-003 **Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | **EPA 8260B** | | | |
| RunID: MS1_060503A | QC Batch: P06VS081 | | | PrepDate: | | Analyst: **TT** |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/3/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/3/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/3/2006 |
| Surr: 1,2-Dichloroethane-d4 | 89.6 | 58-138 | | %REC | 1 | 5/3/2006 |
| Surr: 4-Bromofluorobenzene | 99.6 | 74-130 | | %REC | 1 | 5/3/2006 |
| Surr: Dibromofluoromethane | 93.6 | 58-135 | | %REC | 1 | 5/3/2006 |
| Surr: Toluene-d8 | 102 | 84-130 | | %REC | 1 | 5/3/2006 |
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | **EPA 3550B** | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| 2-Methylnaphthalene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Acenaphthene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Acenaphthylene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Anthracene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Benzo(a)anthracene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Benzo(a)pyrene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B06-3.5
**Lab Order:** 084161 **Collection Date:** 4/29/2006 2:10:00 PM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-003 **Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| **EPA 3550B** | | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| Benzo(b)fluoranthene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Benzo(g,h,i)perylene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Benzo(k)fluoranthene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Chrysene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Dibenz(a,h)anthracene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Fluoranthene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Fluorene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Indeno(1,2,3-cd)pyrene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Naphthalene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Phenanthrene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Pyrene | ND | 1600 | | µg/Kg | 5 | 5/2/2006 |
| Surr: 1,2-Dichlorobenzene-d4 | 65.1 | 46-105 | | %REC | 5 | 5/2/2006 |
| Surr: 2-Fluorobiphenyl | 72.1 | 54-112 | | %REC | 5 | 5/2/2006 |
| Surr: 4-Terphenyl-d14 | 57.1 | 46-135 | | %REC | 5 | 5/2/2006 |
| Surr: Nitrobenzene-d5 | 61.3 | 40-116 | | %REC | 5 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084161
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-004

**Client Sample ID:** NM-B06-10.0
**Collection Date:** 4/30/2006 8:42:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: 5/3/2006 | | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 80.1 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interference
- DO Surrogate Diluted Out
- E Value above quantitation range
- ND Not Detected at the Reporting Limit

Results are wet unless otherwise specified



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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B06-10.0
**Lab Order:** 084161 **Collection Date:** 4/30/2006 8:42:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-004 **Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 94.4 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 102 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 93.7 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike/Surrogate outside of limits due to matrix interference
Results are wet unless otherwise specified
DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-10.0 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/30/2006 8:42:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-004 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 101 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-15.0 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/30/2006 8:50:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-005 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP METALS** | | | | | | |
| | **EPA 3050B** | | | **EPA 6010B** | | |
| RunID: ICP6_060503C | QC Batch: 27859 | | | PrepDate: | 5/3/2006 | Analyst: **RQ** |
| Antimony | ND | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Arsenic | 2.5 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Barium | 15 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Beryllium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cadmium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Chromium | 7.4 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Cobalt | 2.6 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Copper | 2.8 | 2.0 | | mg/Kg | 1 | 5/3/2006 |
| Lead | 1.5 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Molybdenum | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Nickel | 2.7 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Selenium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Silver | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Thallium | ND | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Vanadium | 14 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| Zinc | 9.7 | 1.0 | | mg/Kg | 1 | 5/3/2006 |
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| | **LUFT** | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 78.2 | 56-131 | | %REC | 1 | 5/3/2006 |
| **MERCURY BY COLD VAPOR TECHNIQUE** | | | | | | |
| | **EPA 7471** | | | **EPA 7471A** | | |
| RunID: AA5_060504A | QC Batch: 27864 | | | PrepDate: | 5/3/2006 | Analyst: **NS** |
| Mercury | ND | 0.10 | | mg/Kg | 1 | 5/4/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084161
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-005

**Client Sample ID:** NM-B06-15.0
**Collection Date:** 4/30/2006 8:50:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-15.0 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/30/2006 8:50:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-005 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 90.1 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 100 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 93.6 | 58-135 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/2/2006 |
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | **EPA 3550B** | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| 2-Methylnaphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Acenaphthylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(a)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(a)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(b)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Benzo(g,h,i)perylene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out




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*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-15.0 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/30/2006 8:50:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-005 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **SEMIVOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | **EPA 3550B** | | | **EPA 8270C** | | |
| RunID: MS7_060502A | QC Batch: 27832 | | | PrepDate: | 5/2/2006 | Analyst: **MFR** |
| Benzo(k)fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Chrysene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Dibenz(a,h)anthracene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluoranthene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Fluorene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Indeno(1,2,3-cd)pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Phenanthrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Pyrene | ND | 330 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichlorobenzene-d4 | 70.4 | 46-105 | | %REC | 1 | 5/2/2006 |
| Surr: 2-Fluorobiphenyl | 75.9 | 54-112 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Terphenyl-d14 | 83.7 | 46-135 | | %REC | 1 | 5/2/2006 |
| Surr: Nitrobenzene-d5 | 74.5 | 40-116 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084161
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-006

**Client Sample ID:** NM-B06-20.0
**Collection Date:** 4/30/2006 9:00:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 78.9 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084161
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-006

**Client Sample ID:** NM-B06-20.0
**Collection Date:** 4/30/2006 9:00:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: TT |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 92.5 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 101 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 93.2 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike/Surrogate outside of limits due to matrix interference
Results are wet unless otherwise specified
DO Surrogate Diluted Out



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# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-20.0 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/30/2006 9:00:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-006 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS1_060502A | QC Batch: P06VS080 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 103 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories*

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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B06
**Lab Order:** 084161 **Collection Date:** 4/30/2006 9:15:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-007 **Matrix:** GROUND WATER

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS2_060502A | QC Batch: Q06VW082 | | | PrepDate: | | Analyst: **HH** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromoform | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interference
DO Surrogate Diluted Out
E Value above quantitation range
ND Not Detected at the Reporting Limit
Results are wet unless otherwise specified



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**CLIENT:** Ninyo & Moore **Client Sample ID:** NM-B06
**Lab Order:** 084161 **Collection Date:** 4/30/2006 9:15:00 AM
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-007 **Matrix:** GROUND WATER

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS2_060502A | QC Batch: Q06VW082 | | | PrepDate: | | Analyst: **HH** |
| Dibromomethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Ethyl tert-butyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/L | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/L | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/L | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 113 | 70-126 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 96.7 | 63-134 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 121 | 73-124 | | %REC | 1 | 5/2/2006 |
| Surr: Toluene-d8 | 112 | 84-123 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**
B Analyte detected in the associated Method Blank
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike/Surrogate outside of limits due to matrix interference
Results are wet unless otherwise specified
DO Surrogate Diluted Out



*Advanced Technology Laboratories* *3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084161
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-008

**Client Sample ID:** NM-B06-5.0
**Collection Date:** 4/30/2006 8:32:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **HYDROCARBON CHAIN IDENTIFICATION** | | | | | | |
| **LUFT** | | | | **EPA 8015B(M)** | | |
| RunID: GC8_BACK_060503A | QC Batch: 27852 | | | PrepDate: | 5/3/2006 | Analyst: **EES** |
| T/R Hydrocarbons: C8-C10 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C10-C18 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C18-C28 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C28-C36 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C36-C40 | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| T/R Hydrocarbons: C8-C40 Total | ND | 10 | | mg/Kg | 1 | 5/3/2006 |
| Surr: p-Terphenyl | 78.8 | 56-131 | | %REC | 1 | 5/3/2006 |
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,1-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1,2-Trichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,1-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,3-Trichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2,4-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromo-3-chloropropane | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dibromoethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3,5-Trimethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,3-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 1,4-Dichlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2,2-Dichloropropane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 2-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Chlorotoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| 4-Isopropyltoluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Benzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromodichloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



*Advanced Technology Laboratories*
*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040*

# Advanced Technology Laboratories

**Date:** *05-May-06*

**CLIENT:** Ninyo & Moore
**Lab Order:** 084161
**Project:** CCDC-Monarch, 105740002
**Lab ID:** 084161-008

**Client Sample ID:** NM-B06-5.0
**Collection Date:** 4/30/2006 8:32:00 AM
**Matrix:** SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | **EPA 8260B** | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Bromoform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Bromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Carbon tetrachloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chlorobenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloroform | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Chloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| cis-1,3-Dichloropropene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Di-isopropyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromochloromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dibromomethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Dichlorodifluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethyl Tert-butyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Ethylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Hexachlorobutadiene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Isopropylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| m,p-Xylene | ND | 10 | | µg/Kg | 1 | 5/2/2006 |
| Methylene chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| MTBE | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| n-Propylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Naphthalene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| o-Xylene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| sec-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Styrene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-amyl methyl ether | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tert-Butanol | ND | 100 | | µg/Kg | 1 | 5/2/2006 |
| tert-Butylbenzene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Tetrachloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Toluene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| trans-1,2-Dichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichloroethene | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Trichlorofluoromethane | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Vinyl chloride | ND | 5.0 | | µg/Kg | 1 | 5/2/2006 |
| Surr: 1,2-Dichloroethane-d4 | 93.6 | 58-138 | | %REC | 1 | 5/2/2006 |
| Surr: 4-Bromofluorobenzene | 86.4 | 74-130 | | %REC | 1 | 5/2/2006 |
| Surr: Dibromofluoromethane | 99.7 | 58-135 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike/Surrogate outside of limits due to matrix interference
- Results are wet unless otherwise specified
- DO Surrogate Diluted Out



*Advanced Technology Laboratories*
*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

# Advanced Technology Laboratories

**Date:** *05-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-5.0 |
| **Lab Order:** | 084161 | **Collection Date:** | 4/30/2006 8:32:00 AM |
| **Project:** | CCDC-Monarch, 105740002 | | |
| **Lab ID:** | 084161-008 | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **VOLATILE ORGANIC COMPOUNDS BY GC/MS** | | | | | | |
| | | | **EPA 8260B** | | | |
| RunID: MS3_060502A | QC Batch: R06VS087 | | | PrepDate: | | Analyst: **TT** |
| Surr: Toluene-d8 | 101 | 84-130 | | %REC | 1 | 5/2/2006 |

**Qualifiers:**

| | | | |
|---|---|---|---|
| B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| DO | Surrogate Diluted Out | | |



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*3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040*

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

| Sample ID: **MB-27859** | SampType: **MBLK** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62964** |
|---|---|---|---|---|---|
| Client ID: **PBS** | Batch ID: **27859** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931354** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 0.00 | 2.0 | | | | | | | | | |
| Arsenic | 0.00 | 1.0 | | | | | | | | | |
| Barium | 0.00 | 1.0 | | | | | | | | | |
| Beryllium | 0.00 | 1.0 | | | | | | | | | |
| Cadmium | 0.00 | 1.0 | | | | | | | | | |
| Chromium | 0.00 | 1.0 | | | | | | | | | |
| Cobalt | 0.00 | 1.0 | | | | | | | | | |
| Copper | 0.00 | 2.0 | | | | | | | | | |
| Lead | 0.00 | 1.0 | | | | | | | | | |
| Molybdenum | 0.00 | 1.0 | | | | | | | | | |
| Nickel | 0.00 | 1.0 | | | | | | | | | |
| Selenium | 0.00 | 1.0 | | | | | | | | | |
| Silver | 0.00 | 1.0 | | | | | | | | | |
| Thallium | 0.00 | 1.0 | | | | | | | | | |
| Vanadium | 0.00 | 1.0 | | | | | | | | | |
| Zinc | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: **LCS-27859** | SampType: **LCS** | TestCode: **6010_S** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62964** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27859** | TestNo: **EPA 6010B** | **EPA 3050B** | Analysis Date: **5/3/2006** | SeqNo: **931355** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 51.80 | 2.0 | 50.00 | 0 | 104 | 80 | 120 | | | | |
| Arsenic | 49.96 | 1.0 | 50.00 | 0 | 99.9 | 80 | 120 | | | | |
| Barium | 53.81 | 1.0 | 50.00 | 0 | 108 | 80 | 120 | | | | |
| Beryllium | 50.61 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |
| Cadmium | 53.10 | 1.0 | 50.00 | 0 | 106 | 80 | 120 | | | | |
| Chromium | 52.63 | 1.0 | 50.00 | 0 | 105 | 80 | 120 | | | | |
| Cobalt | 50.56 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |
| Copper | 53.79 | 2.0 | 50.00 | 0 | 108 | 80 | 120 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

Sample ID: **LCS-27859** SampType: **LCS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62964**
Client ID: **LCSS** Batch ID: **27859** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931355**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 51.59 | 1.0 | 50.00 | 0 | 103 | 80 | 120 | | | | |
| Molybdenum | 53.35 | 1.0 | 50.00 | 0 | 107 | 80 | 120 | | | | |
| Nickel | 50.45 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |
| Selenium | 49.16 | 1.0 | 50.00 | 0 | 98.3 | 80 | 120 | | | | |
| Silver | 51.40 | 1.0 | 50.00 | 0 | 103 | 80 | 120 | | | | |
| Thallium | 51.58 | 1.0 | 50.00 | 0 | 103 | 80 | 120 | | | | |
| Vanadium | 53.11 | 1.0 | 50.00 | 0 | 106 | 80 | 120 | | | | |
| Zinc | 50.62 | 1.0 | 50.00 | 0 | 101 | 80 | 120 | | | | |

Sample ID: **084161-005AMS** SampType: **MS** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62964**
Client ID: **NM-B06-15.0** Batch ID: **27859** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931360**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 95.15 | 2.0 | 125.0 | 0 | 76.1 | 25 | 108 | | | | |
| Arsenic | 102.14 | 1.0 | 125.0 | 2.513 | 79.7 | 46 | 118 | | | | |
| Barium | 118.76 | 1.0 | 125.0 | 14.58 | 83.3 | 32 | 131 | | | | |
| Beryllium | 99.98 | 1.0 | 125.0 | 0 | 80.0 | 59 | 104 | | | | |
| Cadmium | 106.35 | 1.0 | 125.0 | 0.1466 | 85.0 | 63 | 105 | | | | |
| Chromium | 110.80 | 1.0 | 125.0 | 7.363 | 82.8 | 49 | 116 | | | | |
| Cobalt | 105.77 | 1.0 | 125.0 | 2.613 | 82.5 | 58 | 104 | | | | |
| Copper | 114.75 | 2.0 | 125.0 | 2.758 | 89.6 | 54 | 126 | | | | |
| Lead | 102.67 | 1.0 | 125.0 | 1.493 | 80.9 | 31 | 122 | | | | |
| Molybdenum | 103.91 | 1.0 | 125.0 | 0.3638 | 82.8 | 61 | 104 | | | | |
| Nickel | 105.00 | 1.0 | 125.0 | 2.718 | 81.8 | 50 | 112 | | | | |
| Selenium | 98.56 | 1.0 | 125.0 | 0 | 78.8 | 53 | 109 | | | | |
| Silver | 103.06 | 1.0 | 125.0 | 0 | 82.4 | 41 | 121 | | | | |
| Thallium | 98.51 | 1.0 | 125.0 | 0 | 78.8 | 54 | 100 | | | | |
| Vanadium | 120.44 | 1.0 | 125.0 | 13.87 | 85.3 | 59 | 109 | | | | |
| Zinc | 109.34 | 1.0 | 125.0 | 9.653 | 79.8 | 27 | 131 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_S**

Sample ID: **084161-005AMSD** SampType: **MSD** TestCode: **6010_S** Units: **mg/Kg** Prep Date: **5/3/2006** RunNo: **62964**
Client ID: **NM-B06-15.0** Batch ID: **27859** TestNo: **EPA 6010B** **EPA 3050B** Analysis Date: **5/3/2006** SeqNo: **931361**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 78.02 | 2.0 | 125.0 | 0 | 62.4 | 25 | 108 | 95.15 | 19.8 | 20 | |
| Arsenic | 82.73 | 1.0 | 125.0 | 2.513 | 64.2 | 46 | 118 | 102.1 | 21.0 | 20 | R |
| Barium | 97.00 | 1.0 | 125.0 | 14.58 | 65.9 | 32 | 131 | 118.8 | 20.2 | 20 | R |
| Beryllium | 81.78 | 1.0 | 125.0 | 0 | 65.4 | 59 | 104 | 99.98 | 20.0 | 20 | R |
| Cadmium | 86.50 | 1.0 | 125.0 | 0.1466 | 69.1 | 63 | 105 | 106.3 | 20.6 | 20 | R |
| Chromium | 90.72 | 1.0 | 125.0 | 7.363 | 66.7 | 49 | 116 | 110.8 | 19.9 | 20 | |
| Cobalt | 85.79 | 1.0 | 125.0 | 2.613 | 66.5 | 58 | 104 | 105.8 | 20.9 | 20 | R |
| Copper | 92.78 | 2.0 | 125.0 | 2.758 | 72.0 | 54 | 126 | 114.8 | 21.2 | 20 | R |
| Lead | 84.03 | 1.0 | 125.0 | 1.493 | 66.0 | 31 | 122 | 102.7 | 20.0 | 20 | |
| Molybdenum | 84.91 | 1.0 | 125.0 | 0.3638 | 67.6 | 61 | 104 | 103.9 | 20.1 | 20 | R |
| Nickel | 85.31 | 1.0 | 125.0 | 2.718 | 66.1 | 50 | 112 | 105.0 | 20.7 | 20 | R |
| Selenium | 79.34 | 1.0 | 125.0 | 0 | 63.5 | 53 | 109 | 98.56 | 21.6 | 20 | R |
| Silver | 84.76 | 1.0 | 125.0 | 0 | 67.8 | 41 | 121 | 103.1 | 19.5 | 20 | |
| Thallium | 81.41 | 1.0 | 125.0 | 0 | 65.1 | 54 | 100 | 98.51 | 19.0 | 20 | |
| Vanadium | 98.22 | 1.0 | 125.0 | 13.87 | 67.5 | 59 | 109 | 120.4 | 20.3 | 20 | R |
| Zinc | 89.31 | 1.0 | 125.0 | 9.653 | 63.7 | 27 | 131 | 109.3 | 20.2 | 20 | R |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 6010_SPB_NM**

| Sample ID: MB-27856A | SampType: MBLK | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931336 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.0 | | | | | | | | | |

| Sample ID: LCS-27856 | SampType: LCS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931337 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 251.62 | 1.0 | 250.0 | 0 | 101 | 80 | 120 | | | | |

| Sample ID: 084161-003AMS | SampType: MS | TestCode: 6010_SPB_N | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62962 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: 27856 | TestNo: EPA 6010B | EPA 3050M | Analysis Date: 5/3/2006 | SeqNo: 931346 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 317.69 | 1.0 | 250.0 | 162.3 | 62.1 | 31 | 122 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7471_S**

| Sample ID: 084161-005A-MS | SampType: MS | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: NM-B06-15.0 | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931789 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | | | | |

| Sample ID: 084161-005A-MSD | SampType: MSD | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: NM-B06-15.0 | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931790 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.14 | 0.10 | 0.8300 | 0 | 137 | 52 | 163 | 1.141 | 0.444 | 20 | |

| Sample ID: LCS-27864 | SampType: LCS | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931791 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 2.37 | 0.10 | 2.080 | 0 | 114 | 80 | 120 | | | | |

| Sample ID: MB-27864 | SampType: MBLK | TestCode: 7471_S | Units: mg/Kg | Prep Date: 5/3/2006 | RunNo: 62996 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27864 | TestNo: EPA 7471A | EPA 7471 | Analysis Date: 5/4/2006 | SeqNo: 931792 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.00 | 0.10 | | | | | | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **LCSS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930748**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 110.34 | 5.0 | 100.0 | 0 | 110 | 76 | 126 | | | | |
| Benzene | 113.05 | 5.0 | 100.0 | 0 | 113 | 77 | 131 | | | | |
| Chlorobenzene | 119.94 | 5.0 | 100.0 | 0 | 120 | 81 | 136 | | | | |
| MTBE | 116.66 | 5.0 | 100.0 | 0 | 117 | 50 | 143 | | | | |
| Toluene | 111.84 | 5.0 | 100.0 | 1.320 | 111 | 78 | 129 | | | | |
| Trichloroethene | 117.66 | 5.0 | 100.0 | 0 | 118 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 47.46 | | 50.00 | | 94.9 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.08 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.75 | | 50.00 | | 93.5 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.59 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060502MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930749**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 110.32 | 5.0 | 100.0 | 0 | 110 | 59 | 146 | | | | |
| Benzene | 114.37 | 5.0 | 100.0 | 0 | 114 | 68 | 137 | | | | |
| Chlorobenzene | 121.46 | 5.0 | 100.0 | 0 | 121 | 64 | 144 | | | | |
| MTBE | 115.61 | 5.0 | 100.0 | 0 | 116 | 54 | 141 | | | | |
| Toluene | 112.56 | 5.0 | 100.0 | 1.320 | 111 | 53 | 150 | | | | |
| Trichloroethene | 119.29 | 5.0 | 100.0 | 0 | 119 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 46.87 | | 50.00 | | 93.7 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.95 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.88 | | 50.00 | | 93.8 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.38 | | 50.00 | | 103 | 84 | 130 | | | | |

Sample ID: **P060502MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930750**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 112.82 | 5.0 | 100.0 | 0 | 113 | 59 | 146 | 110.3 | 2.24 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **ZZZZZZ** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930750**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 116.18 | 5.0 | 100.0 | 0 | 116 | 68 | 137 | 114.4 | 1.57 | 30 | |
| Chlorobenzene | 124.04 | 5.0 | 100.0 | 0 | 124 | 64 | 144 | 121.5 | 2.10 | 30 | |
| MTBE | 113.78 | 5.0 | 100.0 | 0 | 114 | 54 | 141 | 115.6 | 1.60 | 30 | |
| Toluene | 114.84 | 5.0 | 100.0 | 1.320 | 114 | 53 | 150 | 112.6 | 2.01 | 30 | |
| Trichloroethene | 121.81 | 5.0 | 100.0 | 0 | 122 | 58 | 155 | 119.3 | 2.09 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 46.44 | | 50.00 | | 92.9 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 51.90 | | 50.00 | | 104 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 47.38 | | 50.00 | | 94.8 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.67 | | 50.00 | | 103 | 84 | 130 | | 0 | 30 | |

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62912**
Client ID: **PBS** Batch ID: **P06VS080** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930753**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 1.32 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.17 | | 50.00 | | 90.3 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.90 | | 50.00 | | 102 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.69 | | 50.00 | | 93.4 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.48 | | 50.00 | | 103 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503LC1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **LCSS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931484**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 109.22 | 5.0 | 100.0 | 0 | 109 | 76 | 126 | | | | |
| Benzene | 113.96 | 5.0 | 100.0 | 0 | 114 | 77 | 131 | | | | |
| Chlorobenzene | 121.03 | 5.0 | 100.0 | 0 | 121 | 81 | 136 | | | | |
| MTBE | 111.68 | 5.0 | 100.0 | 0 | 112 | 50 | 143 | | | | |
| Toluene | 112.34 | 5.0 | 100.0 | 0 | 112 | 78 | 129 | | | | |
| Trichloroethene | 117.70 | 5.0 | 100.0 | 0 | 118 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.68 | | 50.00 | | 91.4 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 51.33 | | 50.00 | | 103 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.27 | | 50.00 | | 94.5 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.06 | | 50.00 | | 102 | 84 | 130 | | | | |

Sample ID: **P060503MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931485**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 113.17 | 5.0 | 100.0 | 0 | 113 | 59 | 146 | | | | |
| Benzene | 112.71 | 5.0 | 100.0 | 0 | 113 | 68 | 137 | | | | |
| Chlorobenzene | 120.42 | 5.0 | 100.0 | 0 | 120 | 64 | 144 | | | | |
| MTBE | 117.72 | 5.0 | 100.0 | 0 | 118 | 54 | 141 | | | | |
| Toluene | 110.45 | 5.0 | 100.0 | 0 | 110 | 53 | 150 | | | | |
| Trichloroethene | 116.26 | 5.0 | 100.0 | 0 | 116 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 47.80 | | 50.00 | | 95.6 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.35 | | 50.00 | | 101 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 48.09 | | 50.00 | | 96.2 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 51.22 | | 50.00 | | 102 | 84 | 130 | | | | |

Sample ID: **P060503MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931486**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 108.71 | 5.0 | 100.0 | 0 | 109 | 59 | 146 | 113.2 | 4.02 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **ZZZZZZ** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931486**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 112.37 | 5.0 | 100.0 | 0 | 112 | 68 | 137 | 112.7 | 0.302 | 30 | |
| Chlorobenzene | 119.51 | 5.0 | 100.0 | 0 | 120 | 64 | 144 | 120.4 | 0.759 | 30 | |
| MTBE | 114.30 | 5.0 | 100.0 | 0 | 114 | 54 | 141 | 117.7 | 2.95 | 30 | |
| Toluene | 110.79 | 5.0 | 100.0 | 0 | 111 | 53 | 150 | 110.4 | 0.307 | 30 | |
| Trichloroethene | 117.13 | 5.0 | 100.0 | 0 | 117 | 58 | 155 | 116.3 | 0.746 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 46.30 | | 50.00 | | 92.6 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 50.36 | | 50.00 | | 101 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 47.22 | | 50.00 | | 94.4 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 51.04 | | 50.00 | | 102 | 84 | 130 | | 0 | 30 | |

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



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**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **P060503MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62973**
Client ID: **PBS** Batch ID: **P06VS081** TestNo: **EPA 8260B** Analysis Date: **5/3/2006** SeqNo: **931487**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 45.11 | | 50.00 | | 90.2 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 50.04 | | 50.00 | | 100 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 46.53 | | 50.00 | | 93.1 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 50.69 | | 50.00 | | 101 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502LCS1** SampType: **LCS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **LCSS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930806**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 89.65 | 5.0 | 100.0 | 0 | 89.6 | 76 | 126 | | | | |
| Benzene | 95.05 | 5.0 | 100.0 | 0 | 95.0 | 77 | 131 | | | | |
| Chlorobenzene | 96.08 | 5.0 | 100.0 | 0 | 96.1 | 81 | 136 | | | | |
| MTBE | 98.18 | 5.0 | 100.0 | 0 | 98.2 | 50 | 143 | | | | |
| Toluene | 89.40 | 5.0 | 100.0 | 0 | 89.4 | 78 | 129 | | | | |
| Trichloroethene | 90.22 | 5.0 | 100.0 | 0 | 90.2 | 78 | 136 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 44.85 | | 50.00 | | 89.7 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 49.91 | | 50.00 | | 99.8 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 47.45 | | 50.00 | | 94.9 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 48.24 | | 50.00 | | 96.5 | 84 | 130 | | | | |

Sample ID: **R060502MB2MS** SampType: **MS** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930807**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 82.89 | 5.0 | 100.0 | 0 | 82.9 | 59 | 146 | | | | |
| Benzene | 90.81 | 5.0 | 100.0 | 0 | 90.8 | 68 | 137 | | | | |
| Chlorobenzene | 91.28 | 5.0 | 100.0 | 0 | 91.3 | 64 | 144 | | | | |
| MTBE | 88.38 | 5.0 | 100.0 | 0 | 88.4 | 54 | 141 | | | | |
| Toluene | 86.63 | 5.0 | 100.0 | 0 | 86.6 | 53 | 150 | | | | |
| Trichloroethene | 86.49 | 5.0 | 100.0 | 0 | 86.5 | 58 | 155 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 44.06 | | 50.00 | | 88.1 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 54.93 | | 50.00 | | 110 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 50.66 | | 50.00 | | 101 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 56.84 | | 50.00 | | 114 | 84 | 130 | | | | |

Sample ID: **R060502MB2MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930808**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 97.76 | 5.0 | 100.0 | 0 | 97.8 | 59 | 146 | 82.89 | 16.5 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Walnut [illegible] Fax [illegible]

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502MB2MSD** SampType: **MSD** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **ZZZZZZ** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930808**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 100.45 | 5.0 | 100.0 | 0 | 100 | 68 | 137 | 90.81 | 10.1 | 30 | |
| Chlorobenzene | 102.52 | 5.0 | 100.0 | 0 | 103 | 64 | 144 | 91.28 | 11.6 | 30 | |
| MTBE | 95.35 | 5.0 | 100.0 | 0 | 95.4 | 54 | 141 | 88.38 | 7.59 | 30 | |
| Toluene | 96.17 | 5.0 | 100.0 | 0 | 96.2 | 53 | 150 | 86.63 | 10.4 | 30 | |
| Trichloroethene | 96.32 | 5.0 | 100.0 | 0 | 96.3 | 58 | 155 | 86.49 | 10.8 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 48.12 | | 50.00 | | 96.2 | 58 | 138 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 58.76 | | 50.00 | | 118 | 74 | 130 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 56.56 | | 50.00 | | 113 | 58 | 135 | | 0 | 30 | |
| Surr: Toluene-d8 | 60.90 | | 50.00 | | 122 | 84 | 130 | | 0 | 30 | |

Sample ID: **R060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **PBS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930809**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 10 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **PBS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930809**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl Tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Walnut, Suite, Hill, CA 95 Fax 989.46

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_S**

Sample ID: **R060502MB2** SampType: **MBLK** TestCode: **8260_S** Units: **µg/Kg** Prep Date: RunNo: **62919**
Client ID: **PBS** Batch ID: **R06VS087** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930809**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 54.57 | | 50.00 | | 109 | 58 | 138 | | | | |
| Surr: 4-Bromofluorobenzene | 59.57 | | 50.00 | | 119 | 74 | 130 | | | | |
| Surr: Dibromofluoromethane | 59.31 | | 50.00 | | 119 | 58 | 135 | | | | |
| Surr: Toluene-d8 | 64.75 | | 50.00 | | 130 | 84 | 130 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562. 989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206LC1** SampType: **LCS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **LCSW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930579**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.45 | 5.0 | 20.00 | 0 | 117 | 76 | 132 | | | | |
| Benzene | 21.27 | 5.0 | 20.00 | 0 | 106 | 90 | 123 | | | | |
| Chlorobenzene | 20.44 | 5.0 | 20.00 | 0 | 102 | 76 | 118 | | | | |
| MTBE | 20.39 | 5.0 | 20.00 | 0 | 102 | 78 | 134 | | | | |
| Toluene | 21.43 | 5.0 | 20.00 | 0 | 107 | 91 | 124 | | | | |
| Trichloroethene | 21.84 | 5.0 | 20.00 | 0 | 109 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 52.53 | | 50.00 | | 105 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 57.57 | | 50.00 | | 115 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 52.95 | | 50.00 | | 106 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 58.74 | | 50.00 | | 117 | 84 | 123 | | | | |

Sample ID: **Q050206MB1MS** SampType: **MS** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930580**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 22.55 | 5.0 | 20.00 | 0 | 113 | 76 | 132 | | | | |
| Benzene | 21.26 | 5.0 | 20.00 | 0 | 106 | 90 | 123 | | | | |
| Chlorobenzene | 21.37 | 5.0 | 20.00 | 0 | 107 | 76 | 118 | | | | |
| MTBE | 20.46 | 5.0 | 20.00 | 0 | 102 | 78 | 134 | | | | |
| Toluene | 22.06 | 5.0 | 20.00 | 0 | 110 | 91 | 124 | | | | |
| Trichloroethene | 21.22 | 5.0 | 20.00 | 0 | 106 | 87 | 125 | | | | |
| Surr: 1,2-Dichloroethane-d4 | 51.66 | | 50.00 | | 103 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 57.27 | | 50.00 | | 115 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 52.44 | | 50.00 | | 105 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 57.86 | | 50.00 | | 116 | 84 | 123 | | | | |

Sample ID: **Q050206MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930581**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethene | 23.47 | 5.0 | 20.00 | 0 | 117 | 76 | 132 | 22.55 | 4.00 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1MSD** SampType: **MSD** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **ZZZZZZ** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930581**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 21.94 | 5.0 | 20.00 | 0 | 110 | 90 | 123 | 21.26 | 3.15 | 30 | |
| Chlorobenzene | 21.96 | 5.0 | 20.00 | 0 | 110 | 76 | 118 | 21.37 | 2.72 | 30 | |
| MTBE | 21.40 | 5.0 | 20.00 | 0 | 107 | 78 | 134 | 20.46 | 4.49 | 30 | |
| Toluene | 22.17 | 5.0 | 20.00 | 0 | 111 | 91 | 124 | 22.06 | 0.497 | 30 | |
| Trichloroethene | 22.18 | 5.0 | 20.00 | 0 | 111 | 87 | 125 | 21.22 | 4.42 | 30 | |
| Surr: 1,2-Dichloroethane-d4 | 53.00 | | 50.00 | | 106 | 70 | 126 | | 0 | 30 | |
| Surr: 4-Bromofluorobenzene | 56.98 | | 50.00 | | 114 | 63 | 134 | | 0 | 30 | |
| Surr: Dibromofluoromethane | 54.39 | | 50.00 | | 109 | 73 | 124 | | 0 | 30 | |
| Surr: Toluene-d8 | 58.41 | | 50.00 | | 117 | 84 | 123 | | 0 | 30 | |

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1,2-Trichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| 1,1-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,3-Trichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2,4-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dibromoethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloroethane | 0.00 | 5.0 | | | | | | | | | |
| 1,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,3,5-Trimethylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,3-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 1,3-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 1,4-Dichlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| 2,2-Dichloropropane | 0.00 | 5.0 | | | | | | | | | |
| 2-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Chlorotoluene | 0.00 | 5.0 | | | | | | | | | |
| 4-Isopropyltoluene | 0.00 | 5.0 | | | | | | | | | |
| Benzene | 0.00 | 5.0 | | | | | | | | | |
| Bromobenzene | 0.00 | 5.0 | | | | | | | | | |
| Bromodichloromethane | 0.00 | 5.0 | | | | | | | | | |
| Bromoform | 0.00 | 5.0 | | | | | | | | | |
| Bromomethane | 0.00 | 5.0 | | | | | | | | | |
| Carbon tetrachloride | 0.00 | 5.0 | | | | | | | | | |
| Chlorobenzene | 0.00 | 5.0 | | | | | | | | | |
| Chloroethane | 0.00 | 5.0 | | | | | | | | | |
| Chloroform | 0.00 | 5.0 | | | | | | | | | |
| Chloromethane | 0.00 | 5.0 | | | | | | | | | |
| cis-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| cis-1,3-Dichloropropene | 0.00 | 5.0 | | | | | | | | | |
| Di-isopropyl ether | 0.00 | 5.0 | | | | | | | | | |
| Dibromochloromethane | 0.00 | 5.0 | | | | | | | | | |
| Dibromomethane | 0.00 | 5.0 | | | | | | | | | |
| Dichlorodifluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Ethyl tert-butyl ether | 0.00 | 5.0 | | | | | | | | | |
| Ethylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Hexachlorobutadiene | 0.00 | 5.0 | | | | | | | | | |
| Isopropylbenzene | 0.00 | 5.0 | | | | | | | | | |
| m,p-Xylene | 0.00 | 10 | | | | | | | | | |
| Methylene chloride | 0.00 | 5.0 | | | | | | | | | |
| MTBE | 0.00 | 5.0 | | | | | | | | | |
| n-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Walnut [illegible] Hill, C[illegible]s [illegible] 989 Fa[illegible] 989.4d[illegible]

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8260_WP**

Sample ID: **Q050206MB1** SampType: **MBLK** TestCode: **8260_WP** Units: **µg/L** Prep Date: RunNo: **62893**
Client ID: **PBW** Batch ID: **Q06VW082** TestNo: **EPA 8260B** Analysis Date: **5/2/2006** SeqNo: **930582**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| n-Propylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Naphthalene | 0.00 | 5.0 | | | | | | | | | |
| o-Xylene | 0.00 | 5.0 | | | | | | | | | |
| sec-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Styrene | 0.00 | 5.0 | | | | | | | | | |
| Tert-amyl methyl ether | 0.00 | 5.0 | | | | | | | | | |
| Tert-Butanol | 0.00 | 100 | | | | | | | | | |
| tert-Butylbenzene | 0.00 | 5.0 | | | | | | | | | |
| Tetrachloroethene | 0.00 | 5.0 | | | | | | | | | |
| Toluene | 0.00 | 5.0 | | | | | | | | | |
| trans-1,2-Dichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichloroethene | 0.00 | 5.0 | | | | | | | | | |
| Trichlorofluoromethane | 0.00 | 5.0 | | | | | | | | | |
| Vinyl chloride | 0.00 | 5.0 | | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 52.75 | | 50.00 | | 106 | 70 | 126 | | | | |
| Surr: 4-Bromofluorobenzene | 48.62 | | 50.00 | | 97.2 | 63 | 134 | | | | |
| Surr: Dibromofluoromethane | 51.96 | | 50.00 | | 104 | 73 | 124 | | | | |
| Surr: Toluene-d8 | 52.99 | | 50.00 | | 106 | 84 | 123 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

Sample ID: **MB-27832** SampType: **MBLK** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **PBS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930395**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 0.00 | 330 | | | | | | | | | |
| Acenaphthene | 0.00 | 330 | | | | | | | | | |
| Acenaphthylene | 0.00 | 330 | | | | | | | | | |
| Anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)anthracene | 0.00 | 330 | | | | | | | | | |
| Benzo(a)pyrene | 0.00 | 330 | | | | | | | | | |
| Benzo(b)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Benzo(g,h,i)perylene | 0.00 | 330 | | | | | | | | | |
| Benzo(k)fluoranthene | 0.00 | 330 | | | | | | | | | |
| Chrysene | 0.00 | 330 | | | | | | | | | |
| Dibenz(a,h)anthracene | 0.00 | 330 | | | | | | | | | |
| Fluoranthene | 0.00 | 330 | | | | | | | | | |
| Fluorene | 0.00 | 330 | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | 0.00 | 330 | | | | | | | | | |
| Naphthalene | 0.00 | 330 | | | | | | | | | |
| Phenanthrene | 0.00 | 330 | | | | | | | | | |
| Pyrene | 0.00 | 330 | | | | | | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2751.00 | | 3330 | | 82.6 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2791.00 | | 3330 | | 83.8 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3513.67 | | 3330 | | 106 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2832.00 | | 3330 | | 85.0 | 40 | 116 | | | | |

Sample ID: **LCS-27832** SampType: **LCS** TestCode: **8270_S_FUL** Units: **µg/Kg** Prep Date: **5/2/2006** RunNo: **62882**
Client ID: **LCSS** Batch ID: **27832** TestNo: **EPA 8270C** **EPA 3550B** Analysis Date: **5/2/2006** SeqNo: **930396**

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3102.33 | 330 | 3330 | 0 | 93.2 | 73 | 118 | | | | |
| Pyrene | 3229.67 | 330 | 3330 | 0 | 97.0 | 74 | 127 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2671.67 | | 3330 | | 80.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2860.67 | | 3330 | | 85.9 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3029.67 | | 3330 | | 91.0 | 46 | 135 | | | | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Walnut, CA Tel: 909.98 Fax: 909.4

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 8270_S_FULL**

| Sample ID: LCS-27832 | SampType: LCS | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930396 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Surr: Nitrobenzene-d5 | 2864.33 | | 3330 | | 86.0 | 40 | 116 | | | | |

| Sample ID: MB-27832MS | SampType: MS | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930397 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3263.00 | 330 | 3330 | 0 | 98.0 | 59 | 129 | | | | |
| Pyrene | 3322.00 | 330 | 3330 | 0 | 99.8 | 58 | 138 | | | | |
| Surr: 1,2-Dichlorobenzene-d4 | 2835.67 | | 3330 | | 85.2 | 46 | 105 | | | | |
| Surr: 2-Fluorobiphenyl | 2966.33 | | 3330 | | 89.1 | 54 | 112 | | | | |
| Surr: 4-Terphenyl-d14 | 3099.67 | | 3330 | | 93.1 | 46 | 135 | | | | |
| Surr: Nitrobenzene-d5 | 2998.33 | | 3330 | | 90.0 | 40 | 116 | | | | |

| Sample ID: MB-27832MSD | SampType: MSD | TestCode: 8270_S_FUL | Units: µg/Kg | Prep Date: 5/2/2006 | RunNo: 62882 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27832 | TestNo: EPA 8270C | EPA 3550B | Analysis Date: 5/2/2006 | SeqNo: 930398 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 3266.00 | 330 | 3330 | 0 | 98.1 | 59 | 129 | 3263 | 0.0919 | 30 | |
| Pyrene | 3331.67 | 330 | 3330 | 0 | 100 | 58 | 138 | 3322 | 0.291 | 30 | |
| Surr: 1,2-Dichlorobenzene-d4 | 2732.67 | | 3330 | | 82.1 | 46 | 105 | | 0 | 30 | |
| Surr: 2-Fluorobiphenyl | 2944.00 | | 3330 | | 88.4 | 54 | 112 | | 0 | 30 | |
| Surr: 4-Terphenyl-d14 | 3111.00 | | 3330 | | 93.4 | 46 | 135 | | 0 | 30 | |
| Surr: Nitrobenzene-d5 | 2952.00 | | 3330 | | 88.6 | 40 | 116 | | 0 | 30 | |

**Qualifiers:**
E Value above quantitation range
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike/Surrogate outside of limits due to matrix interferenc
DO Surrogate Diluted Out



Advanced Technology Laboratories
3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: HC_S_ATL**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sample ID: **MB-27852** | SampType: **MBLK** | TestCode: **HC_S_ATL** | Units: **mg/Kg** | Prep Date: **5/3/2006** | | RunNo: **62978** | |
| Client ID: **PBS** | Batch ID: **27852** | TestNo: **EPA 8015B(M** | **LUFT** | Analysis Date: **5/3/2006** | | SeqNo: **931573** | |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T/R Hydrocarbons: C8-C10 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C10-C18 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C18-C28 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C28-C36 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C36-C40 | 0.00 | 10 | | | | | | | | | |
| T/R Hydrocarbons: C8-C40 Total | 0.00 | 10 | | | | | | | | | |
| Surr: p-Terphenyl | 69.12 | | 80.00 | | 86.4 | 56 | 131 | | | | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



Advanced Technology Wain[illegible] Hill, C[illegible]55 [illegible]2. 98[illegible] Fa[illegible]989.4[illegible]

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**BatchID:** 27852

| Sample ID: **LCS-27852** | SampType: **LCS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **LCSS** | Batch ID: **27852** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/3/2006** | SeqNo: **931569** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 936.84 | 10 | 1000 | 0 | 93.7 | 67 | 131 | | | | |
| Surr: p-Terphenyl | 69.23 | | 80.00 | | 86.5 | 56 | 131 | | | | |

| Sample ID: **084159-003AMS** | SampType: **MS** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27852** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/3/2006** | SeqNo: **931570** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 944.31 | 10 | 1000 | 0 | 94.4 | 49 | 140 | | | | |
| Surr: p-Terphenyl | 68.15 | | 80.00 | | 85.2 | 56 | 131 | | | | |

| Sample ID: **084159-003AMSD** | SampType: **MSD** | TestCode: **8015_S_DM** | Units: **mg/Kg** | Prep Date: **5/3/2006** | RunNo: **62978** |
|---|---|---|---|---|---|
| Client ID: **ZZZZZZ** | Batch ID: **27852** | TestNo: **EPA 8015B(M LUFT** | | Analysis Date: **5/3/2006** | SeqNo: **931571** |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DRO | 955.46 | 10 | 1000 | 0 | 95.5 | 49 | 140 | 944.3 | 1.17 | 30 | |
| Surr: p-Terphenyl | 68.57 | | 80.00 | | 85.7 | 56 | 131 | | 0 | 30 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |



Advanced Technology Laboratories 3275 Walnut Avenue, Signal Hill, CA 90755 Tel: 562.989.4045 Fax: 562.989.4040

# CHAIN OF CUSTODY RECORD

Pg 1 of 1


*Advanced Technology Laboratories*
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040


**FOR LABORATORY USE ONLY:**

P.O.#: _____

Logged By: _____ Date: 5/1/06

Method of Transport: Client ☐ ATL ☑ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED Y☑ N☐ 4. SEALED Y☐ N☑
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☑ N☐
3. CONTAINER INTACT Y☑ N☐ 6. PRESERVED Y☑ N☐

Client: Ninyo & Moore
Attn: VJS
Address: 5710 Ruffin Rd.
City San Diego State CA Zip Code 92123
TEL: (858) 576-1000
FAX: (858) 576-9600
Project Name: CCDC - Monarch
Project #: 1057 40002
Sampler: (Printed Name) J. Schneider (Signature)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Relinquished by: (Signature and Printed Name) VJS | Date: 5/1/06 | Time: 0900 | Received by: (Signature and Printed Name) | Date: 5-1-06 | Time: 9:30 |
| Relinquished by: (Signature and Printed Name) | Date: 5-1-06 | Time: 6:15p | Received by: (Signature and Printed Name) | Date: 05/01/06 | Time: 1815 |
| Relinquished by: (Signature and Printed Name) | Date: | Time: | Received by: (Signature and Printed Name) | Date: | Time: |

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: J. Schneider 4/29/06 (Print Name / Date)
Signature

Send Report To:
Attn: VJS
Co: N&M
Address 5710 Ruffin Rd
City S.D. State CA Zip 92123

Bill To:
Attn:
Co: GAME
Address
City State Zip

Special Instructions/Comments:
LEAD if ≥ 50 mg/kg, test using WET
≥ 100 mg/kg, test using TCLP

**Sample/Records - Archival & Disposal**
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

**Storage Fees (applies when storage is requested):**
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

| ITEM | LAB USE ONLY: Batch #: / Lab No. | Sample Description: Sample I.D. / Location | Date (2006) | Time |
|---|---|---|---|---|
| | 084161-001 | NM-B06-1-0 | 4/29 | 1401 |
| | -002 | NM-B06-2-0 | 4/29 | 1402 |
| | -003 | NM-B06-3.5 | 4/29 | 1410 |
| | -004 | NM-B06-10-0 | 4/30 | 0842 |
| | -005 | NM-B06-15-0 | 4/30 | 0880 |
| | -006 | NM-B06-20-0 | 4/30 | 0900 |
| | -007 | NM-B06 | 4/30 | 0915 |
| | -008Y | NM-B06-5.0 | 4/30 | 0832 |

Circle or Add Analysis(es) Requested

| 8081A (Pesticides) | 8082 (PCB) | 8260B (Volatiles) | 8270C (BNA) | 6010B (Total Metal) | 8015B (GRO) / 8020 (BTEX) | 8015B (DRO) | 8021 (BTEX) | TITLE 22 CAM 17 (6010 / 7000) | LEAD | TPH-E | 6010 | 8015M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | NO3 TCLP | PAHs | | | | | | | | | |
| | | X | X | | | X | X | X | | X | | |
| | | X | | | | | | | | | | |

SPECIFY APPROPRIATE MATRIX

| SOIL | WATER | GROUND WATER | WASTEWATER | TAT | Container(s) # | Container(s) Type | PRESERVATION |
|---|---|---|---|---|---|---|---|
| X | | | | E | 1 | J G | — |
| X | | | | | 1 | J G | — |
| X | | | | | 1 | T P | — |
| X | | | | | 1 | T P | — |
| X | | | | | 1 | T P | — |
| X | | | | | 1 | T P | — |
| X | | | | | 1 | T P | — |
| X | X | | | | 2 | V G | H |
| X | | | | ↓ | 1 | T P | — |

QA / QC: RTNE ☐ CT ☐ SWRCB ☐ Logcode ____ OTHER ____

REMARKS

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plas M=M

Preservatives: H=Hcl N=$HNO_3$ S=$H_2SO_4$ C=4°C Z=Z $_2$ C DH $_2S_2O$

May 12, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084161

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *12-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B06-3.5 |
| **Lab Order:** | 084161 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 2:10:00 PM |
| **Lab ID:** | 084161-003A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | **WET/ EPA 7420** | | |
| RunID: AA2_060512G | QC Batch: R63262 | | | PrepDate: | | Analyst: **NS** |
| Lead | 85 | 5.0 | | mg/L | 20 | 5/12/2006 |
| **LEAD BY ATOMIC ABSORPTION** | | **EPA 3010A** | | **EPA 1311/ 7420** | | |
| RunID: AA2_060512E | QC Batch: 27985 | | | PrepDate: | 5/11/2006 | Analyst: **NS** |
| Lead | ND | 1.2 | | mg/L | 1 | 5/12/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



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Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

# Advanced Technology Laboratories

**Date:** *12-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

## ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-27971 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935712 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: MB-27971A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935713 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: LCS-27971 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935714 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.14 | 0.25 | 5.000 | 0 | 103 | 80 | 120 | | | | |

| Sample ID: 084161-003AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935717 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 91.64 | 5.0 | 5.000 | 85.29 | 127 | 70 | 130 | | | | |

| Sample ID: 084161-003AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63262 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: R63262 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935718 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 92.12 | 5.0 | 5.000 | 85.29 | 137 | 70 | 130 | 91.64 | 0.530 | 20 | S |

**Qualifiers:**

- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interferenc
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_TC**

| Sample ID: MB-27985A | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935602 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: MB-27972A TCLP 1 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935603 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.2 | | | | | | | | | |

| Sample ID: LCS-27985 | SampType: LCS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935604 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 1.03 | 0.25 | 1.000 | 0 | 103 | 80 | 120 | | | | |

| Sample ID: 084075-030A-MS | SampType: MS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935616 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.25 | 1.2 | 12.50 | 0 | 106 | 70 | 130 | | | | |

| Sample ID: MB-27985B | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935617 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: MB-27972B TCLP 1 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935618 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|

**Qualifiers:**
- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interferenc
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084161
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_TC**

| Sample ID: MB-27972B TCLP 1 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935618 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.2 | | | | | | | | | |

| Sample ID: 084161-003A-MS | SampType: MS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935623 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.71 | 1.2 | 12.50 | 0.4410 | 106 | 70 | 130 | | | | |

| Sample ID: 084161-003A-MSD | SampType: MSD | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/11/2006 | RunNo: 63251 |
|---|---|---|---|---|---|
| Client ID: NM-B06-3.5 | Batch ID: 27985 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935624 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.59 | 1.2 | 12.50 | 0.4410 | 105 | 70 | 130 | 13.71 | 0.864 | 20 | |

**Qualifiers:**

- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interferenc
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

May 12, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084155

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

for Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

# Advanced Technology Laboratories

**Date:** *12-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B03-2.0 |
| **Lab Order:** | 084155 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 1:57:00 PM |
| **Lab ID:** | 084155-002A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | | | **WET/ EPA 7420** | | | |
| RunID: AA2_060512F | QC Batch: R63261 | | | PrepDate: | | Analyst: **NS** |
| Lead | 8.6 | 0.25 | | mg/L | 1 | 5/12/2006 |
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | **EPA 3010A** | | **EPA 1311/ 7420** | | | |
| RunID: AA2_060512D | QC Batch: 27967 | | | PrepDate: | 5/10/2006 | Analyst: **NS** |
| Lead | ND | 1.2 | | mg/L | 1 | 5/12/2006 |

| **Qualifiers:** | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories* *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel.: 562 989-4045 Fax: 562 989-4040

## Advanced Technology Laboratories

**Date:** *12-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: MB-27950 | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935688 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: MB-27950A | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935689 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: LCS-27950 | SampType: LCS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935690 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 5.13 | 0.25 | 5.000 | 0 | 103 | 80 | 120 | | | | |

| Sample ID: 084284-002AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935698 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.99 | 0.25 | 5.000 | 0.4815 | 90.2 | 70 | 130 | | | | |

| Sample ID: MB-27950B | SampType: MBLK | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935699 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

**Qualifiers:**

- E Value above quantitation range
- R RPD outside accepted recovery limits
- Calculations are based on raw values
- H Holding times for preparation or analysis exceeded
- S Spike/Surrogate outside of limits due to matrix interferenc
- ND Not Detected at the Reporting Limit
- DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel.: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_ST**

| Sample ID: 084284-011AMS | SampType: MS | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935710 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.81 | 0.25 | 5.000 | 0.4353 | 87.6 | 70 | 130 | | | | |

| Sample ID: 084284-011AMSD | SampType: MSD | TestCode: 7420_ST | Units: mg/L | Prep Date: | RunNo: 63261 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: R63261 | TestNo: WET/ EPA 74 | | Analysis Date: 5/12/2006 | SeqNo: 935711 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 4.84 | 0.25 | 5.000 | 0.4353 | 88.2 | 70 | 130 | 4.814 | 0.611 | 20 | |

**Qualifiers:**
E Value above quantitation range
R RPD outside accepted recovery limits
Calculations are based on raw values
H Holding times for preparation or analysis exceeded
S Spike/Surrogate outside of limits due to matrix interferenc
ND Not Detected at the Reporting Limit
DO Surrogate Diluted Out

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

**CLIENT:** Ninyo & Moore
**Work Order:** 084155
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_TC**

| Sample ID: MB-27967 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27967 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935594 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: MB-27954A TCLP 1 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27967 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935595 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.2 | | | | | | | | | |

| Sample ID: LCS-27967 | SampType: LCS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27967 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935596 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 1.05 | 0.25 | 1.000 | 0 | 105 | 80 | 120 | | | | |

| Sample ID: 084155-002A-MS | SampType: MS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: NM-B03-2.0 | Batch ID: 27967 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935600 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.73 | 1.2 | 12.50 | 0 | 110 | 70 | 130 | | | | |

| Sample ID: 084155-002A-MSD | SampType: MSD | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: NM-B03-2.0 | Batch ID: 27967 | TestNo: EPA 1311/ 74 EPA 3010A | | Analysis Date: 5/12/2006 | SeqNo: 935601 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.57 | 1.2 | 12.50 | 0 | 109 | 70 | 130 | 13.73 | 1.18 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Calculations are based on raw values

May 12, 2006

Jim Schneider
Ninyo & Moore
5710 Ruffin Road
San Diego, CA 92123
TEL: 858-576-1000
FAX: 858-576-9600

ELAP No.: 1838
NELAP No.: 02107CA
NEVADA.: CA-401
Arizona: AZ0689
CSDLAC No.: 10196
Workorder No.: 084158

RE: CCDC-Monarch, 105740002

Attention: Jim Schneider

Enclosed are the results for sample(s) received on May 01, 2006 by Advanced Technology Laboratories . The sample(s) are tested for the parameters as indicated in the enclosed chain of custody in accordance with the applicable laboratory certifications.

This is an addendum report. Please incorporate with documentation previously submitted.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

The cover letter is an integral part of this analytical report. This Laboratory Report cannot be reproduced in part or in its entirety without written permission from the client and Advanced Technology Laboratories.

## Advanced Technology Laboratories

**Date:** *12-May-06*

| | | | |
|---|---|---|---|
| **CLIENT:** | Ninyo & Moore | **Client Sample ID:** | NM-B11-1.0 |
| **Lab Order:** | 084158 | **Tag Number:** | |
| **Project:** | CCDC-Monarch, 105740002 | **Collection Date:** | 4/29/2006 3:00:00 PM |
| **Lab ID:** | 084158-001A | **Matrix:** | SOIL |

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **LEAD BY ATOMIC ABSORPTION** | | | | | | |
| | **EPA 3010A** | | | **EPA 1311/ 7420** | | |
| RunID: AA2_060512D | QC Batch: 27967 | | | PrepDate: | 5/10/2006 | Analyst: **NS** |
| Lead | ND | 1.2 | | mg/L | 1 | 5/12/2006 |

| Qualifiers: | | | | |
|---|---|---|---|---|
| | B | Analyte detected in the associated Method Blank | E | Value above quantitation range |
| | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| | S | Spike/Surrogate outside of limits due to matrix interference | | Results are wet unless otherwise specified |
| | DO | Surrogate Diluted Out | | |



*Advanced Technology Laboratories* *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

**Date:** *12-May-06*

**CLIENT:** Ninyo & Moore
**Work Order:** 084158
**Project:** CCDC-Monarch, 105740002

# ANALYTICAL QC SUMMARY REPORT

**TestCode: 7420_TC**

| Sample ID: MB-27967 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935594 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 0.25 | | | | | | | | | |

| Sample ID: MB-27954A TCLP 1 | SampType: MBLK | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: PBS | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935595 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 0.00 | 1.2 | | | | | | | | | |

| Sample ID: LCS-27967 | SampType: LCS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: LCSS | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935596 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 1.05 | 0.25 | 1.000 | 0 | 105 | 80 | 120 | | | | |

| Sample ID: 084155-002A-MS | SampType: MS | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935600 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.73 | 1.2 | 12.50 | 0 | 110 | 70 | 130 | | | | |

| Sample ID: 084155-002A-MSD | SampType: MSD | TestCode: 7420_TC | Units: mg/L | Prep Date: 5/10/2006 | RunNo: 63250 |
|---|---|---|---|---|---|
| Client ID: ZZZZZZ | Batch ID: 27967 | TestNo: EPA 1311/ 74 | EPA 3010A | Analysis Date: 5/12/2006 | SeqNo: 935601 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 13.57 | 1.2 | 12.50 | 0 | 109 | 70 | 130 | 13.73 | 1.18 | 20 | |

**Qualifiers:**

| | | | | | |
|---|---|---|---|---|---|
| E | Value above quantitation range | H | Holding times for preparation or analysis exceeded | ND | Not Detected at the Reporting Limit |
| R | RPD outside accepted recovery limits | S | Spike/Surrogate outside of limits due to matrix interferenc | DO | Surrogate Diluted Out |

Calculations are based on raw values