San Diego County Regional Airport Authority

Fiscal Year 2009-2010 Industrial Stormwater Permit Annual Report

July 2010

State of California
STATE WATER RESOURCES CONTROL BOARD

2009-2010

ANNUAL REPORT

FOR
STORM WATER DISCHARGES ASSOCIATED
WITH INDUSTRIAL ACTIVITIES

Reporting Period July 1, 2009 through June 30, 2010

An annual report is required to be submitted to your local Regional Water Quality Control Board (Regional Board) by July 1 of each year. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet as an attachment. **Retain a copy of the completed Annual Report for your records.**

Please circle or highlight any information contained in Items A, B, and C below that is new or revised so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a facility operation is relocated or changes ownership.

If you have any questions, please contact your Regional Board Industrial Storm Water Permit Contact. The names, telephone numbers and e-mail addresses of the Regional Board contacts, as well as the Regional Board office addresses can be found at http://www.waterboards.ca.gov/stormwtr/contact.html. To find your Regional Board information, match the first digit of your WDID number with the corresponding number that appears in parenthesis on the first line of each Regional Board office.

GENERAL INFORMATION:

A. Facility Information:

Facility WDID No: 9371018035

Facility Business Name: San Diego International Airport
Contact Person: Richard Gilb
Physical Address: 3225 North Harbor Drive
e-mail: RGilb@san.org
City: San Diego
CA Zip: 92101 Phone: (619)400-2790
Standard Industrial Classification (SIC) Code(s): 4581 – Airports, Flying Fields, and Airport Terminal Services

B. Facility Operator Information:

Operator Name: San Diego County Regional Airport Authority
Contact Person: Richard Gilb
Mailing Address: P.O. Box 82776
e-mail: RGilb@san.org
City: San Diego
State: CA Zip: 92101 Phone: (619)400-2790

C. Facility Billing Information:

Operator Name: San Diego County Regional Airport Authority
Contact Person: Richard Gilb
Mailing Address: P.O. Box 82776
e-mail: RGilb@san.org
City: San Diego
State: CA Zip: 92101 Phone: (619)400-2790

SPECIFIC INFORMATION

MONITORING AND REPORTING PROGRAM

D. SAMPLING AND ANALYSIS EXEMPTIONS AND REDUCTIONS

1. For the reporting period, was your facility exempt from collecting and analyzing samples from **two** storm events in accordance with sections B.12 or 15 of the General Permit?

   ☐ **YES** Go to Item D.2 ☒ **NO** Go to Section E

2. Indicate the reason your facility is exempt from collecting and analyzing samples from **two** storm events. Attach a copy of the first page of the appropriate certification if you check boxes ii, iii, iv, or v.

   i. ☐ Participating in an Approved Group Monitoring Plan **Group Name:** _____

   ii. ☐ Submitted **No Exposure Certification (NEC)** Date Submitted: ___/___/___

   Re-evaluation Date: ___/___/___

   Does facility continue to satisfy NEC conditions? ☐ YES ☐ NO

   iii. ☐ Submitted **Sampling Reduction Certification (SRC)** Date Submitted: ___/___/___

   Re-evaluation Date: ___/___/___

   Does facility continue to satisfy SRC conditions? ☐ YES ☐ NO

   iv. ☐ Received Regional Board Certification Certification Date: ___/___/___

   v. ☐ Received Local Agency Certification Certification Date: ___/___/___

3. If you checked boxes i or iii above, were you scheduled to sample **one** storm event during the reporting year?

   ☐ **YES** Go to Section E ☐ **NO** Go to Section F

4. If you checked boxes ii, iv, or v, go to Section F.

E. SAMPLING AND ANALYSIS RESULTS

1. How many storm events did you sample? 3

   If less than 2, **attach explanation** (if you checked item D.2.i or iii. above, only attach explanation if you answer "0").

2. Did you collect storm water samples from the first storm of the wet season that produced a discharge during scheduled facility operating hours? (Section B.5 of the General Permit)

   ☒ **YES** ☐ **NO** **attach explanation** **(Please note that if you do not sample the first storm event, you are still required to sample 2 storm events)**

3. How many storm water discharge locations are at your facility? 14

4. For each storm event sampled, did you collect and analyze a sample from each of the facility's' storm water discharge locations? ☐ YES, go to Item E.6 ☒ NO

5. Was sample collection or analysis reduced in accordance with Section B.7.d of the General Permit? ☒ YES ☐ NO, **attach explanation**

   If "YES", **attach documentation** supporting your determination that two or more drainage areas are substantially identical.

   Date facility's drainage areas were last evaluated 6/21-23/10

6. Were all samples collected during the first hour of discharge? ☐ YES ☒ NO, **attach explanation**

7. Was all storm water sampling preceded by three (3) working days without a storm water discharge? ☒ YES ☐ NO, **attach explanation**

8. Were there any discharges of storm water that had been temporarily stored or contained? (such as from a pond) ☐ YES ☒ NO, go to Item E.10

9. Did you collect and analyze samples of temporarily stored or contained storm water discharges from two storm events? (or one storm event if you checked item D.2.i or iii. above) ☐ YES ☐ NO, **attach explanation**

10. Section B.5. of the General Permit requires you to analyze storm water samples for pH, Total Suspended Solids (TSS), Specific Conductance (SC), Total Organic Carbon (TOC) or Oil and Grease (O&G), other pollutants likely to be present in storm water discharges in significant quantities, and analytical parameters listed in Table D of the General Permit.

    a. Does Table D contain any additional parameters related to your facility's SIC code(s)? ☒ YES ☐ NO, Go to Item E.11

    b. Did you analyze all storm water samples for the applicable parameters listed in Table D? ☒ YES ☐ NO

    c. If you did not analyze all storm water samples for the applicable Table D parameters, check one of the following reasons:

    _____ In prior sampling years, the parameter(s) have not been detected in significant quantities from two consecutive sampling events. **Attach explanation**

    _____ The parameter(s) is not likely to be present in storm water discharges and authorized non-storm water discharges in significant quantities based upon the facility operator's evaluation. **Attach explanation**

    _____ Other. **Attach explanation**

11. For each storm event sampled, attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1** or its equivalent. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler
- Parameters tested
- Name of analytical testing laboratory
- Discharge location identification
- Testing results
- Test methods used
- Test detection limits
- Date of testing
- Copies of the laboratory analytical results

F. QUARTERLY VISUAL OBSERVATIONS

1. **Authorized Non-Storm Water Discharges**

Section B.3.b of the General Permit requires quarterly visual observations of all authorized non-storm water discharges and their sources.

a. Do authorized non-storm water discharges occur at your facility?

☒ **YES** ☐ **NO** Go to Item F.2

b. Indicate whether you visually observed all authorized non-storm water discharges and their sources during the quarters when they were discharged. **Attach an explanation for any "NO" answers**. Indicate "N/A" for quarters without any authorized non-storm water discharges.

July-September	☐ **YES**	☐ **NO**	☒ **N/A**	October-December	☐ **YES**	☐ **NO**	☒ **N/A**
January-March	☐ **YES**	☐ **NO**	☒ **N/A**	April-June	☐ **YES**	☐ **NO**	☒ **N/A**

c. Use **Form 2** to report quarterly visual observations of authorized non-storm water discharges or provide the following information:

i. name of each authorized non-storm water discharge
ii. date and time of observation
iii. source and location of each authorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** new or revised BMPs necessary to reduce or prevent pollutants in authorized non-storm water discharges. Provide new or revised BMP implementation date.

2. **Unauthorized Non-Storm Water Discharges**

Section B.3.a of the General Permit requires quarterly visual observations of all drainage areas to detect the presence of unauthorized non-storm water discharges and their sources.

a. Indicate whether you visually observed all drainage areas to detect the presence of unauthorized non- storm water discharges and their sources. **Attach an explanation for any "NO" answers**.

July-September	☒ **YES**	☐ **NO**	October-December	☒ **YES**	☐ **NO**
January-March	☒ **YES**	☐ **NO**	April-June	☒ **YES**	☐ **NO**

b. Based upon the quarterly visual observations, were any unauthorized non-storm water discharges detected?

☒ **YES** ☐ **NO** Go to Item F.2.d

c. Have each of the unauthorized non-storm water discharges been eliminated or permitted?

☒ **YES** ☐ **NO** **Attach explanation**

d. Use **Form 3** to report quarterly unauthorized non-storm water discharge visual observations or provide the following information:

i. name of each unauthorized non-storm water discharge
ii. date and time of observation
iii. source and location of each unauthorized non-storm water discharge
iv. characteristics of the discharge at its source and impacted drainage area/discharge location
v. name, title, and signature of observer
vi. **any** corrective actions necessary to eliminate the source of each unauthorized non-storm water discharge and to clean impacted drainage areas. Provide date unauthorized non-storm water discharge(s) was eliminated or scheduled to be eliminated.

G. MONTHLY WET SEASON VISUAL OBSERVATIONS

Section B.4.a of the General Permit requires you to conduct monthly visual observations of storm water discharges at all storm water discharge locations during the wet season. These observations shall occur during the first hour of discharge or, in the case of temporarily stored or contained storm water, at the time of discharge.

1. Indicate below whether monthly visual observations of storm water discharges occurred at all discharge locations. **Attach an explanation for any "NO" answers**. Include in this explanation whether any eligible storm events occurred during scheduled facility operating hours that did not result in a storm water discharge, and provide the date, time, name and title of the person who observed that there was no storm water discharge.

	YES	NO		YES	NO
October	☐	☒	February	☒	☐
November	☐	☒	March	☒	☐
December	☒	☐	April	☒	☐
January	☒	☐	May	☐	☒

2. Report monthly wet season visual observations using **Form 4** or provide the following information:

   a. date, time, and location of observation
   b. name and title of observer
   c. characteristics of the discharge (i.e., odor, color, etc.) and source of any pollutants observed
   d. **any** new or revised BMPs necessary to reduce or prevent pollutants in storm water discharges. Provide new or revised BMP implementation date.

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION (ACSCE)

H. ACSCE CHECKLIST

Section A.9 of the General Permit requires the facility operator to conduct one ACSCE in each reporting period (July 1-June 30). Evaluations must be conducted within 8-16 months of each other. The SWPPP and monitoring program shall be revised and implemented, as necessary, within 90 days of the evaluation. The checklist below includes the minimum steps necessary to complete a ACSCE. Indicate whether you have performed each step below. **Attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and industrial activities areas? ☒ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occurred during the last year
   - outdoor wash and rinse areas
   - process/manufacturing areas
   - loading, unloading, and transfer areas
   - waste storage/disposal areas
   - dust/particulate generating areas
   - erosion areas
   - building repair, remodeling, and construction
   - material storage areas
   - vehicle/equipment storage areas
   - truck parking and access areas
   - rooftop equipment areas
   - vehicle fueling/maintenance areas
   - non-storm water discharge generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and industrial activities areas? ☒ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map is up-to-date? The following site map items should be verified: ☒ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, berms, containment areas, oil/water separators, etc.

4. Have you reviewed all General Permit compliance records generated since the last annual evaluation? ☒ YES ☐ NO

   The following records should be reviewed:

   - quarterly authorized non-storm water discharge visual observations
   - monthly storm water discharge visual observation
   - records of spills/leaks and associated clean-up/response activities
   - quarterly unauthorized non-storm water discharge visual observations
   - Sampling and Analysis records
   - preventative maintenance inspection and maintenance records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the General Permit? ☒ YES ☐ NO

   The following SWPPP items should be reviewed:

   - pollution prevention team
   - list of significant materials
   - description of potential pollutant sources
   - assessment of potential pollutant sources
   - identification and description of the BMPs to be implemented for each potential pollutant source

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☒ YES ☐ NO

   The following BMP categories should be reviewed:

   - good housekeeping practices
   - spill response
   - employee training
   - erosion control
   - quality assurance
   - preventative maintenance
   - material handling and storage practices
   - waste handling/storage
   - structural BMPs

7. Has all material handling equipment and equipment needed to implement the SWPPP been inspected? ☒ YES ☐ NO

I. ACSCE EVALUATION REPORT

The facility operator is required to provide an evaluation report that includes:

- identification of personnel performing the evaluation
- the date(s) of the evaluation
- necessary SWPPP revisions
- schedule for implementing SWPPP revisions
- any incidents of non-compliance and the corrective actions taken

Use **Form 5** to report the results of your evaluation or develop an equivalent form.

J. ACSCE CERTIFICATION

The facility operator is required to certify compliance with the Industrial Activities Storm Water General Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your ACSCE, do you certify compliance with the Industrial Activities Storm Water General Permit? ☒ YES ☐ NO

If you answered "NO" **attach an explanation** to the ACSCE Evaluation Report why you are not in compliance with the Industrial Activities Storm Water General Permit.

2009-2010

ANNUAL REPORT

ATTACHMENT SUMMARY

Answer the questions below to help you determine what should be attached to this annual report. Answer NA (Not Applicable) to questions 2-4 if you are not required to provide those attachments.

1.	Have you attached Forms 1,2,3,4, and 5 or their equivalent?	☒ YES (Mandatory)		
2.	If you conducted sampling and analysis, have you attached the laboratory analytical reports?	☒ YES	☐ NO	☐ NA
3.	If you checked box II, III, IV, or V in item D.2 of this Annual Report, have you attached the first page of the appropriate certifications?	☐ YES	☐ NO	☒ NA
4.	Have you attached an explanation for each "NO" answer in items E.1, E.2, E.5-E.7, E.9, E.10.c, F.1.b, F.2.a, F.2.c, G.1, H.1-H.7, or J?	☒ YES	☐ NO	☐ NA

ANNUAL REPORT CERTIFICATION

I am duly authorized to sign reports required by the INDUSTRIAL ACTIVITIES STORM WATER GENERAL PERMIT (see Standard Provision C.9) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those person directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name: Paul Manasjan

Signature:  Date: 6/16/10

Title: Director, Environmental Affairs Department

SAN DIEGO COUNTY
REGIONAL AIRPORT AUTHORITY

INTER-OFFICE COMMUNICATION

Date: June 27, 2003

To: Thella F. Bowens
President/CEO

From: Ted Sexton
Vice President, Operations

Subject: Authorization to Sign National Pollutant Discharge Elimination System (NPDES) Documents

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NPDES Permits (including General NPDES Permits) require submission of various reports and certifications, which must be prepared and signed by a principal executive office or duly authorized representative. A person is a duly authorized representative if: (1) the authorization is made in writing by the executive officer and (2) a copy of the authorization is retained as part of the permit records for each facility. The authorized representative must be the individual or position having overall responsibility for environmental matters.

This is to request your approval, evidenced by your signature below, authorizing the Director of Environmental Affairs for the Authority to serve as the duly authorized representative for purposed of executing all documents related to the NPDES Permit requirements.

Thella F. Bowens
President/CEO
San Diego County Regional Airport Authority

30 June '03
Date

Cc: Paul Manasjan, Director, Environmental Affairs
Zane Gresham, Morris & Foerster

SAN DIEGO
INTERNATIONAL
AIRPORT

Attachment 1

Explanations and Discussion of Analytical Data

2009 – 2010
ANNUAL REPORT
SAN DIEGO INTERNATIONAL AIRPORT (SDIA)
ATTACHMENT #1
REQUIRED EXPLANATIONS AND DISCUSSION OF ANALYTICAL DATA

1) Explanations to General Information (pages 1-7 of the Annual Report)

The following explanations are provided where necessary to comply with the General Annual Report format. The item numbers are presented in the order of the Annual Report.

E.1
December 11, 2009 was the second monitored storm event of the 2009/2010 wet season. The consultant (MACTEC) mobilized for the event and was able to collect samples at all locations except for C-B03-2, where insufficient water was available. This site was sampled during the next storm event on January 18, 2010 to insure that each location was sampled for two storms. Lab data for all three sampling events is provided in Attachment 4.

E.5
In 2005, the Airport Authority initiated a project to analyze the hydrology of the airport and to evaluate the existing storm water sampling plan. The project resulted in the development of a new storm water sampling plan that replaced many of the previous sample sites and also added additional sampling locations. That sampling plan identified pollutants of concern and provided statistical power to future analysis of pollutant loads. The sampling plan was finalized in November 2005, and was implemented for the first time in the 2005-2006 wet season. The sampling plan divides the airport into fourteen drainage basins. Ten sites within those 14 basins have been chosen to represent the areas of industrial activity at the airport. The sampling plan was last reviewed and incorporated into the storm water management program in March 2008.

E.6
As noted in previous Annual Reports, program experience has led to the practical determination that sample collection can only be accomplished during storm events with a rainfall intensity of at least 0.10 inches per hour over at least a two-hour period. With ten sample sites identified for the monitoring program, practice has shown that more than one hour of time elapses between the initiation of sampling and the collection of the tenth sample. Such was the case again this year, and therefore, not all samples were collected during the first hour of discharge.

G.1
During the months of October 2009, November 2009, and May 2010, there were no rain events occurring during daylight hours of sufficient intensity or duration to allow for visual observations. The history of storm events during daylight hours for this reporting period is provided on Form 4.

2) Discussion of Analytical Results

The following information provides a brief discussion of the analytical data included with this Annual Report (see Form 1 and attached Analytical Lab Reports). A total of 20 samples were taken during the reporting period and all were compared to the USEPA Multi-Sector General Permit benchmarks. Only pollutants that had results that went above their benchmarks are discussed below. Based on this information, the Airport Authority continues to evaluate the effectiveness of the BMPs being implemented at the airport.

BASIC PARAMETERS

Basic parameters include pH, total suspended solids (TSS), specific conductance (SC), and oil and grease (O&G). One sample had a pH level above the higher benchmark value of 9.0 pH units.

METALS

The samples were analyzed for total aluminum, total and dissolved copper, total iron, total lead, and total and dissolved zinc. Ten samples had total aluminum concentrations above the benchmark of 0.750 mg/L. Samples above the benchmark ranged from 0.770 – 4.300 mg/L. Twenty samples had total copper concentrations above the benchmark of 0.014 mg/L. Samples above the benchmark ranged from 0.023 – 0.910 mg/L. Eighteen samples had dissolved copper concentrations above the benchmark level of 0.014 mg/L. Samples above the benchmark ranged from 0.020 – 0.850 mg/L. Nine samples had total iron concentrations at or above the benchmark of 1.0 mg/L. Samples above the benchmark ranged from 1.2 – 4.0 mg/L. Sixteen samples had total zinc concentrations above the benchmark level of 0.120 mg/L. Samples above the benchmark ranged from 0.130 – 1.200 mg/L. Thirteen samples had dissolved zinc concentrations above the benchmark level of 0.120 mg/L. Samples above the benchmark ranged from 0.130 – 1.100 mg/L.

OTHER PARAMETERS

Other parameters analyzed were methylene blue active substances (MBAS), diesel range organics (C10-C24), Jet-A, oil range organics (C10-C36), biological oxygen demand (BOD), chemical oxygen demand (COD), ammonia as N, and glycols. BOD exceeded the benchmark level of 30 mg/L in nine of the samples. Samples above the benchmark ranged from 43.8 – 89.0 mg/L. COD exceeded the benchmark level of 120 mg/L in nine of the samples. Samples above the benchmark ranged from 172 – 302 mg/L.

3) Summary of Analytical Results

A total of 380 analyses were performed on the 20 samples taken during the 2009-2010 reporting period. Of these 380 analyses, a total of 113 samples had USEPA Multi-Sector Permit benchmark exceedances. The pollutants with USEPA Multi-Sector Permit Benchmark levels are listed in the table below with the percentage of times each was exceeded during the two sampling events. The pollutants that exceeded the benchmarks

50% or more of the time were ammonia, total aluminum, total and dissolved copper, and total and dissolved zinc. Historically these pollutants have exceeded benchmark levels in previous monitoring reports and are associated with day to day operations at an airport.

Pollutant	USEPA Multi Sector Permit Benchmark	Number of Analyses	Number of Exceedances	Exceedance Frequency
Ammonia as N	2.14 mg/L	20	10	50%
BOD	30 mg/L	20	9	45%
COD	120 mg/L	20	9	45%
Oil & Grease	15 mg/L	20	0	0%
pH	6.0 – 9.0 s.u.	20	1	5%
TSS	100 mg/L	20	0	0%
Al, Total	0.750 mg/L	20	10	50%
Cu, Total	0.014 mg/L	20	20	100%
Cu, Dissolved	0.014 mg/L	20	18	90%
Fe, Total	1 mg/L	20	7	35%
Pb, Total	0.082 mg/L	20	0	0%
Zn, Total	0.120 mg/L	20	16	80%
Zn, Dissolved	0.120 mg/L	20	13	65%

Sites C-B01-1, C-B05-4, C-B06-5, C-B07-6, C-B07-7, and C-B09-10 had the highest number of individual pollutant exceedances across the two sampling events. Exceedances ranged from 16 pollutants exceeding the benchmarks at site C-B09-10 to 11 pollutants exceeding benchmarks at site C-B01-1. These areas are in the vicinity of the runway, taxiways, and ground service vehicle operations. The Airport Authority will use this data to re-evaluate the adequacy and effectiveness of the BMPs implemented near these sample sites, and to identify any needed improvements.

The analytical results for stormwater samples collected during the 2009-2010 reporting period are consistent with historic sampling data at the airport. Total copper and dissolved copper, total zinc and dissolved zinc have been consistently identified as contaminants of concern in previous runoff monitoring. Past analysis has suggested that tire and brake pad wear from landing aircraft and/or vehicles, as well as building roofs, may be a likely source of heavy metals. In response, the Airport Authority has continued to revise and develop their stormwater sampling plan to identify the sources of these heavy metals. The Airport Authority is simultaneously evaluating the BMPs currently in place to control and eliminate heavy metal concentrations in stormwater runoff at the airport. A two year pilot project assessing the effectiveness of downspout filters for the removal of heavy metals was implemented during the 2008/2009 wet season but the filters were found to be ineffective. Other pilot projects to address known storm water pollutants are in the planning phase.

Along with evaluating its sampling plan and BMPs, the Airport Authority also conducts site audits every 2 years of all its tenants and their respective activities. Audits were conducted 2005, 2007, and most recently in the spring of 2009. The site audit results serve as a means to aid in the identification of potential pollutant sources and help to evaluate the current BMPs implemented by the tenants. These efforts are intended to outline new,

additional, or modified BMPs that can be implemented to control or eliminate contaminants and to provide storm water BMP education for tenants who perform activities with the potential to impact stormwater runoff. Overall, the results of the 2007 and 2009 audits indicate a continued improvement in BMP implementation at San Diego International Airport. The site audits identify deficiencies in BMP implementation and provide a list of recommended changes for the Authority's Stormwater Management Program. Revisions were made to the Authority's 2008 Storm Water Management Plan based on the findings from previous audits. As more storm water data is collected in the future, the increased statistical power of the dataset will be used to determine long-term adequacy and effectiveness of both BMPs and the runoff monitoring program.

Attachment 2

Storm Drain System and Sampling Locations Map

Legend

- Storm Drain Lines
- Sampling Locations
- Airport Boundary

Storm Drain System and Sampling Locations

San Diego International Airport

Attachment 3

Forms

2009-2010 ANNUAL REPORT
FORM 1 - SAMPLING & ANALYSIS RESULTS
FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

NAME OF PERSON COLLECTING SAMPLES: Amanda Archenhold TITLE: Mactec, Consultant SIGNATURE: A. J. Archenhold

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS for First Storm Event									
			Basic Parameters				Other Parameters					
			pH	TSS	SC	O&G	MBAS	DIESEL RANGE ORGANICS (C10-C24)	JET-A	OIL RANGE ORGANICS (C22-C36)	TOTAL IRON Fe_t	TOTAL ZINC Zn_t
C-B01-1	12/7/2009 6:33 AM	12/7/2009 5:30 AM	7.17	16.0	195	2.50	0.130	ND	0.47	0.62	2.6	240
C-B03-2	12/7/2009 11:51 AM	12/7/2009 5:30 AM	7.34	2.00	103	ND	ND	ND	ND	ND	0.43	200
C-B05-3	12/7/2009 6:04 AM	12/7/2009 5:30 AM	7.88	19.0	1970	2.10	0.180	ND	0.095	0.13	4.0	94
C-B05-4	12/7/2009 11:38 AM	12/7/2009 5:30 AM	6.35	25.0	370	ND	0.240	ND	1.5	2.3	1.2	660
C-B06-5	12/7/2009 12:24 PM	12/7/2009 5:30 AM	6.54	18.0	583	2.20	0.210	ND	1.2	1.4	0.89	620
C-B07-6	12/7/2009 8:15 AM	12/7/2009 5:30 AM	7.26	26.0	56.0	ND	0.110	ND	0.30	0.86	0.94	430
		TEST REPORTING UNITS:	pH units	mg/L	µmhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
		TEST METHOD DETECTION LIMIT:	0.100	1.00	0.100	2.00	0.0500	0.05	0.05	0.05	0.050	2.0
		TEST METHOD USED:	EPA 150.1	EPA 160.2	EPA 120.1	EPA 1664	EPA 425.1	EPA 8015B	EPA 8015B	EPA 8015B	EPA 200.8	EPA 200.8
		ANALYZED BY (SELF/LAB):	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil and Grease MBAS - Methylene Blue Active Substances

2009-2010 ANNUAL REPORT
FORM 1 - SAMPLING & ANALYSIS RESULTS
FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLES: Amanda Archenhold TITLE: Mactec, Consultant SIGNATURE: A. J. Archenhold

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS for First Storm Event									
			Basic Parameters				Other Parameters					
			pH	TSS	SC	O&G	MBAS	DIESEL RANGE ORGANICS (C10-C24)	JET-A	OIL RANGE ORGANICS (C22-C36)	TOTAL IRON Fe_t	TOTAL ZINC Zn_t
C-B07-7	12/7/2009 12:05 PM	12/7/2009 5:30 AM	6.68	42.0	380	2.80	0.310	ND	1.2	1.4	0.79	1200
C-B08-8	12/7/2009 4:33 PM	12/7/2009 5:30 AM	7.41	2.00	97.3	ND	ND	ND	0.22	0.17	ND	59
C-B12-9	12/7/2009 7:40 PM	12/7/2009 5:30 AM	7.21	3.00	2220	ND	ND	ND	0.51	1.1	0.46	130
C-B09-10	12/7/2009 6:35 PM	12/7/2009 5:30 AM	7.40	31.0	260	2.90	0.150	ND	0.42	0.63	1.9	240
TEST REPORTING UNITS:			pH units	mg/L	µmhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
TEST METHOD DETECTION LIMIT:			0.100	1.00	0.100	2.00	0.0500	0.05	0.05	0.05	0.050	2.0
TEST METHOD USED:			EPA 150.1	EPA 160.2	EPA 120.1	EPA 1664	EPA 425.1	EPA 8015B	EPA 8015B	EPA 8015B	EPA 200.8	EPA 200.8
ANALYZED BY (SELF/LAB):			LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease MBAS - Methylene Blue Active Substances

2009-2010 ANNUAL REPORT
FORM 1 - SAMPLING & ANALYSIS RESULTS
FIRST STORM EVENT

· If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)

· When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.

· Make additional copies of this form as necessary.

· If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

NAME OF PERSON COLLECTING SAMPLES: Amanda Archenhold

TITLE: Mactec, Consultant

SIGNATURE: A. J. Archenhold

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS for First Storm Event								
			Other Parameters								
			DISSOLVED ZINC Zn_d	TOTAL LEAD Pb_t	TOTAL ALUMINUM Al_t	TOTAL COPPER Cu_t	DISSOLVED COPPER Cu_d	BOD[1]	COD	AMMONIA as N	GLYCOLS
C-B01-1	12/7/2009 6:33 AM	12/7/2009 5:30 AM	130	24	1900	310	220	27.0	95.0	2.55	ND
C-B03-2	12/7/2009 11:51 AM	12/7/2009 5:30 AM	190	11	320	150	130	4.60	14.0	1.95	ND
C-B05-3[1]	12/7/2009 6:04 AM	12/7/2009 5:30 AM	13	19	3500	29	14	80.0	302	2.10	ND
C-B05-4	12/7/2009 11:38 AM	12/7/2009 5:30 AM	620	6.6	870	910	850	84.0	285	5.6	ND
C-B06-5	12/7/2009 12:24 PM	12/7/2009 5:30 AM	560	4.4	770	770	700	89.0	302	6.70	ND
C-B07-6	12/7/2009 8:15 AM	12/7/2009 5:30 AM	350	7.5	580	140	97	16.2	52.0	1.10	ND
		TEST REPORTING UNITS:	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		TEST METHOD DETECTION LIMIT:	2.0	2.0	50	2.0	2.0	2.0	0.100	0.100	10
		TEST METHOD USED:	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 405.1	EPA 410.4	SM 4500-NH3	EPA 8015B
		ANALYZED BY (SELF/LAB):	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

BOD - Biological Oxygen Demand

COD - Chemical Oxygen Demand

[1] CB05-3 dilution factor is 10 for aluminum.

2009-2010 ANNUAL REPORT
FORM 1 - SAMPLING & ANALYSIS RESULTS
FIRST STORM EVENT

· If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)

· If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

· When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.

· Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLES: Amanda Archenhold

TITLE: Mactec, Consultant

SIGNATURE: A. S. Archenhold

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS for First Storm Event								
			Other Parameters								
			DISSOLVED ZINC Zn_d	TOTAL LEAD Pb_t	TOTAL ALUMINUM Al_t	TOTAL COPPER Cu_t	DISSOLVED COPPER Cu_d	BOD[1]	COD	AMMONIA as N	GLYCOLS
C-B07-7	12/7/2009 12:05 PM	12/7/2009 5:30 AM	1100	6.8	730	360	310	78.0	280	2.50	ND
C-B08-8	12/7/2009 4:33 PM	12/7/2009 5:30 AM	55	ND	56	23	20	ND	5.00	0.900	ND
C-B12-9	12/7/2009 7:40 PM	12/7/2009 5:30 AM	120	2.1	210	34	27	75.0	274	1.45	ND
C-B09-10	12/7/2009 6:35 PM	12/7/2009 5:30 AM	200	5.6	1400	94	80	47.0	172	3.05	ND
TEST REPORTING UNITS:			µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
TEST METHOD DETECTION LIMIT:			2.0	2.0	50	2.0	2.0	2.0	0.100	0.100	10
TEST METHOD USED:			EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 405.1	EPA 410.4	SM 4500-NH3	EPA 8015B
ANALYZED BY (SELF/LAB):			LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

BOD - Biological Oxygen Demand

COD - Chemical Oxygen Demand

2009-2010 ANNUAL REPORT
FORM 1 - SAMPLING & ANALYSIS RESULTS
SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLES: Lijun Xu TITLE: Mactec, Consultant SIGNATURE:

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS for Second Storm Event									
			Basic Parameters				Other Parameters					
			pH	TSS	SC	O&G	MBAS	DIESEL RANGE ORGANICS (C10-C24)	JET-A	OIL RANGE ORGANICS (C22-C36)	TOTAL IRON Fe_t	TOTAL ZINC Zn_t
C-B01-1	12/11/09 11:50 AM	12/11/09 11:16 AM	7.19	16.0	138	ND	0.150	ND	0.12	0.20	1.0	67
C-B03-2	01/18/10 3:15 PM	1/19/10 3:00 PM	7.02	24.0	147	ND	0.180	ND	ND	0.40	0.80	210
C-B05-3	12/11/09 12:10 PM	12/11/09 11:16 AM	8.19	14.0	328	ND	0.180	ND	0.085	0.15	4.4	160
C-B05-4	12/11/09 12:40 PM	12/11/09 11:16 AM	7.13	8.00	230	ND	0.160	ND	0.50	0.53	0.70	280
C-B06-5	12/11/09 1:00 PM	12/11/09 11:16 AM	7.12	11.0	173	ND	0.120	ND	0.14	0.062	2.4	170
C-B07-6	12/11/09 11:40 AM	12/11/09 11:16 AM	6.47	17.0	196	ND	0.110	ND	0.95	2.7	1.7	970
		TEST REPORTING UNITS:	pH units	mg/L	µmhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
		TEST METHOD DETECTION LIMIT:	0.100	1.00	0.100	2.00	0.0500	0.050	0.050	0.050	0.050	2.0
		TEST METHOD USED:	EPA 150.1	EPA 160.2	EPA 120.1	EPA 1664	EPA 425.1	EPA 8015B	EPA 8015B	EPA 8015B	EPA 200.8	EPA 200.8
		ANALYZED BY (SELF/LAB):	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease MBAS - Methylene Blue Active Substances

2009-2010 ANNUAL REPORT
FORM 1 - SAMPLING & ANALYSIS RESULTS
SECOND STORM EVENT

· If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)

· If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

· When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.

· Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLES: Lijun Xu

TITLE: Mactec, Consultant SIGNATURE:

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS for Second Storm Event									
			Basic Parameters				Other Parameters					
			pH	TSS	SC	O&G	MBAS	DIESEL RANGE ORGANICS (C10-C24)	JET-A	OIL RANGE ORGANICS (C22-C36)	TOTAL IRON Fe_t	TOTAL ZINC Zn_t
C-B07-7	12/11/09 1:20 PM	12/11/09 11:16 AM	6.66	12.0	237	ND	0.180	ND	0.48	0.79	1.0	580
C-B08-8[1]	12/11/09 11:50 AM	12/11/09 11:16 AM	7.16	4.00	467	ND	0.110	ND	0.78	0.42	0.15	380
C-B12-9	12/11/09 11:30 AM	12/11/09 11:16 AM	9.96	38.0	1890	3.10	0.140	ND	0.38	0.44	0.11	24
C-B09-10	12/11/09 11:30 AM	12/11/09 11:16 AM	7.53	29.0	285	2.50	0.170	ND	0.39	0.77	0.79	160
TEST REPORTING UNITS:			pH units	mg/L	µmhos/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L
TEST METHOD DETECTION LIMIT:			0.100	1.00	0.100	2.00	0.0500	0.050	0.050	0.050	0.050	2.0
TEST METHOD USED:			EPA 150.1	EPA 160.2	EPA 120.1	EPA 1664	EPA 425.1	EPA 8015B	EPA 8015B	EPA 8015B	EPA 200.8	EPA 200.8
ANALYZED BY (SELF/LAB):			LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

TSS - Total Suspended Solids SC - Specific Conductance O&G - Oil & Grease MBAS - Methylene Blue Active Substances

[1]CB08-8 dilution factor is 1 for total iron and total zinc

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FORM 1 - SAMPLING & ANALYSIS RESULTS
SECOND STORM EVENT

· If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)

· If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

· When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.

· Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLES: Lijun Xu

TITLE: Mactec, Consultant

SIGNATURE:

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS for Second Storm Event								
			Other Parameters								
			DISSOLVED ZINC Zn_d	TOTAL LEAD Pb_t	TOTAL ALUMINUM Al_t	TOTAL COPPER Cu_t	DISSOLVED COPPER Cu_d	BOD	COD	AMMONIA as N	GLYCOLS
C-B01-1	12/11/09 11:50 AM	12/11/09 11:16 AM	40	5.1	850	87	65	7.80	25.0	2.45	ND
C-B03-2[1]	01/18/10 3:15 PM	1/19/10 3:00 PM	140	3.3	660	200	140	28.0	55.0	1.30	ND
C-B05-3[2]	12/11/09 12:10 PM	12/11/09 11:16 AM	9.7	24	4300	30	9.8	11.9	41.0	1.80	ND
C-B05-4	12/11/09 12:40 PM	12/11/09 11:16 AM	230	2.7	540	290	240	20.9	87.0	3.55	ND
C-B06-5	12/11/09 1:00 PM	12/11/09 11:16 AM	120	7.0	2000	180	130	6.30	26.0	2.90	ND
C-B07-6	12/11/09 11:40 AM	12/11/09 11:16 AM	780	13.0	1000	220	140	24.3	98.0	1.55	ND
		TEST REPORTING UNITS:	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		TEST METHOD DETECTION LIMIT:	2.0	2.0	50	2.0	2.0	2.00	0.100	0.100	10.0
		TEST METHOD USED:	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 405.1	EPA 410.4	SM 4500-NH3	EPA 8015B
		ANALYZED BY (SELF/LAB):	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

BOD - Biological Oxygen Demand

COD - Chemical Oxygen Demand

[1] CB03-2 dilution factor is 2 for dissolved zinc and dissolved copper

[2] CB05-3 dilution factor is 10 for aluminum.

2009-2010 ANNUAL REPORT
FORM 1 - SAMPLING & ANALYSIS RESULTS
SECOND STORM EVENT

· If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)

· If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank

· When analysis is done using portable analysis (such as portable pH meters, SC meters, etc.), indicate "PA" in the appropriate test method used box.

· Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLES: Lijun Xu

TITLE: Mactec, Consultant

SIGNATURE:

DESCRIBE DISCHARGE LOCATION Example: NW Out Fall	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS for Second Storm Event								
			Other Parameters								
			DISSOLVED ZINC Zn_d	TOTAL LEAD Pb_t	TOTAL ALUMINUM Al_t	TOTAL COPPER Cu_t	DISSOLVED COPPER Cu_d	BOD	COD	AMMONIA as N	GLYCOLS
C-B07-7	12/11/09 1:20 PM	12/11/09 11:16 AM	480	7.3	860	130	100	27.2	103	1.40	ND
C-B08-8	12/11/09 11:50 AM	12/11/09 11:16 AM	320	ND	160	120	83	43.8	207	1.35	17.32 [1]
C-B12-9	12/11/09 11:30 AM	12/11/09 11:16 AM	20	ND	93	30	24	79.0	325	2.45	ND
C-B09-10	12/11/09 11:30 AM	12/11/09 11:16 AM	130	2.2	420	56	47	45.0	175	2.95	ND
		TEST REPORTING UNITS:	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L
		TEST METHOD DETECTION LIMIT:	2.0	2.0	50	2.0	2.0	2.0	0.100	0.100	10.0
		TEST METHOD USED:	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 200.8	EPA 405.1	EPA 410.4	SM 4500-NH3	EPA 8015B
		ANALYZED BY (SELF/LAB):	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB	LAB

BOD - Biological Oxygen Demand

COD - Chemical Oxygen Demand

[1]The value reflects propylene glycol. Ethylene gycol was ND.

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ANNUAL REPORT

SIDE A

FORM 2-QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- Quarterly dry weather visual observations are required of each authorized NSWD.
- Observe each authorized NSWD source, impacted drainage area, and discharge location.
- Authorized NSWDs must meet the conditions provided in Section D (pages 5-6), of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** DATE: Sept. 29 – 30, 2009	**Observers Name:** Annie Martin **Title:** Associate Environmental Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**	☐ **YES** ■ **NO** If **YES**, complete reverse side of this form.
QUARTER: **OCT.-DEC.** DATE: Dec. 15 – 16, 2009	**Observers Name:** Annie Martin **Title:** Associate Environmental Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**	☐ **YES** ■ **NO** If **YES**, complete reverse side of this form.
QUARTER: **JAN.-MARCH** DATE: March 26 & 29, 2010	**Observers Name:** Annie Martin **Title:** Associate Environmental Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**	☐ **YES** ■ **NO** If **YES**, complete reverse side of this form.
QUARTER: **APRIL-JUNE** DATE: Apr. 19 – May 21, 2010	**Observers Name:** Annie Martin **Title:** Associate Environmental Specialist **Signature:**	**WERE ANY AUTHORIZED NSWDs DISCHARGED DURING THIS QUARTER?**	☐ **YES** ■ **NO** If **YES**, complete reverse side of this form.

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ANNUAL REPORT

SIDE B

FORM 2-QUARTERLY VISUAL OBSERVATIONS OF AUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

DATE /TIME OF OBSERVATION	SOURCE AND LOCATION OF AUTHORIZED NSWD EXAMPLE: Air conditioner Units on Building C	NAME OF AUTHORIZED NSWD EXAMPLE: Air conditioner condensate	DESCRIBE AUTHORIZED NSWD CHARACTERISTICS Indicate whether authorized NSWD is clear, cloudy, or discolored, causing staining, contains floating objects or an oil sheen, has odors, etc.		DESCRIBE ANY REVISED OR NEW BMPs AND PROVIDE THEIR IMPLEMENTATION DATE
			At the NSWD Source	At the NSWD Drainage Area and Discharge Location	
___/___/___ ___:___ ☐AM ☐PM					
___/___/___ ___:___ ☐AM ☐PM					
___/___/___ ___:___ ☐AM ☐PM					
___/___/___ ___:___ ☐AM ☐PM					
___/___/___ ___:___ ☐AM ☐PM					

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SIDE A

ANNUAL REPORT
FORM 3-QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

- Unauthorized NSWDs are discharges (such as wash or rinse waters) that do not meet the conditions provided in Section D (pages 5-6) of the General Permit.
- Quarterly visual observations are required to observe current and detect prior unauthorized NSWDs.
- Quarterly visual observations are required during dry weather and at all facility drainage areas.
- Each unauthorized NSWD source, impacted drainage area, and discharge location must be identified and observed.
- Unauthorized NSWDs that cannot be eliminated within 90 days of observation must be reported to the Regional Board in accordance with Section A.10.e of the General Permit.
- Make additional copies of this form as necessary.

QUARTER: **JULY-SEPT.** **DATE/TIME OF OBSERVATIONS** ☐ AM 9/29-30/09 2:04+ ■ PM	**Observers Name:** Annie Martin **Title:** Associate Environmental Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ■ YES ☐ NO **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES ■ NO	If **YES** to either question, complete reverse side.
QUARTER: **OCT.-DEC.** **DATE/TIME OF OBSERVATIONS** ■ AM 12/15-16/09 10:46+ ☐ PM	**Observers Name:** Annie Martin **Title:** Associate Environmental Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ■ YES ☐ NO **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES ■ NO	If **YES** to either question, complete reverse side.
QUARTER: **JAN.-MARCH** **DATE/TIME OF OBSERVATIONS** ■ AM 3/26+29/10 10:53+ ☐ PM	**Observers Name:** Annie Martin **Title:** Associate Environmental Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ■ YES ☐ NO **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES ■ NO	If **YES** to either question, complete reverse side.
QUARTER: **APRIL-JUNE** **DATE/TIME OF OBSERVATIONS** ■ AM 4/19–5/21/10 9:00+ ☐ PM	**Observers Name:** Annie Martin **Title:** Associate Environmental Specialist **Signature:**	**WERE UNAUTHORIZED NSWDs OBSERVED?** ■ YES ☐ NO **WERE THERE INDICATIONS OF PRIOR UNAUTHORIZED NSWDs?** ☐ YES ■ NO	If **YES** to either question, complete reverse side.

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ANNUAL REPORT

SIDE B

FORM 3 QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

OBSERVATION DATE (FROM REVERSE SIDE)	NAME OF UNAUTHORIZED NSWD EXAMPLE: Vehicle Wash Water	SOURCE AND LOCATION OF UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	DESCRIBE UNAUTHORIZED NSWD CHARACTERISTICS Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.	DESCRIBE CORRECTIVE ACTIONS TO ELIMINATE UNAUTHORIZED NSWD AND TO CLEAN IMPACTED DRAINAGE AREAS. PROVIDE UNAUTHORIZED NSWD ELIMINATION DATE.
9/29/10 2:04 ☐ AM ■ PM	Used absorbent	GAT cargo yard	Used absorbent left out in several areas within the GAT cargo yard.	Confirmation of issue(s) resolution received 10/16/09. Email sent to Delta (GAT is their subtenant). Absorbent was properly disposed of.
9/29/10 2:27 ☐ AM ■ PM	Used absorbent	ASIG fuel truck parking lot	Used absorbent left out in several areas in ASIG fuel truck lot.	Confirmation of issue(s) resolution received 10/20/09. Email sent to ASIG. Absorbent was properly disposed of.
9/29/10 2:41 ☐ AM ■ PM	Soapy water	United Airlines Gate	Evidence of outdoor hand washing, including multiple bottles of hand soap, were observed at an outdoor hose between Gates 11 & 12.	Confirmation of issue(s) resolution received 10/16/09. Email sent to United. Absorbent was properly disposed of.
9/29/10 3 :01 ☐ AM ■ PM	Used absorbent and trash	US Airlines Gate	Used absorbent left out under Gate. Trash and debris accumulated by Gate 33.	Confirmation of issue(s) resolution received 10/30/09. Email sent to US Airlines. Absorbent and trash were properly disposed of.

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ANNUAL REPORT

FORM 3 QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

OBSERVATION DATE (FROM REVERSE SIDE)	NAME OF UNAUTHORIZED NSWD EXAMPLE: Vehicle Wash Water	SOURCE AND LOCATION OF UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	DESCRIBE UNAUTHORIZED NSWD CHARACTERISTICS Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.	DESCRIBE CORRECTIVE ACTIONS TO ELIMINATE UNAUTHORIZED NSWD AND TO CLEAN IMPACTED DRAINAGE AREAS. PROVIDE UNAUTHORIZED NSWD ELIMINATION DATE.
9/30 /09 2:49 ☐ AM ■ PM	Trash and debris	SDCRAA storage yard	Piles of painting debris (glass beads) from runway painting in the SDCRAA storage yard. Trash and debris around large dumpsters in the SDCRAA storage yard.	Confirmation of issue(s) resolution received 10/10/09. Work order submitted for these items to be taken care of by SDCRAA.
12/15 / 09 10:46 ■ AM ☐ PM	Soapy water	United Airlines Gate	Evidence of outdoor hand washing, including multiple bottles of hand soap, were observed at an outdoor hose between Gates 11 & 12.	Confirmation of issue(s) resolution received 1/16/09. Email sent to United. Water connection was shut off.
12/15 / 09 11:25 ■ AM ☐ PM	Sediment	SDCRAA, Gate 22	Sediment from underground plumbing repair work at Gate 22 was not properly cleaned up.	Confirmation of issue(s) resolution received 12/21/09. Ocean Blue was contacted to remove sediment and clean area.
12/15/09 11:39 ■ AM ☐ PM	Trash	HMS Host grease container storage area	Significant amount to trash accumulated around the base of the grease container at the T2 connector area.	Confirmation of issue(s) resolution received 12/16/09. Email sent to HMS Host. Area was cleaned and trash was removed.

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ANNUAL REPORT

FORM 3 QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

OBSERVATION DATE (FROM REVERSE SIDE)	NAME OF UNAUTHORIZED NSWD EXAMPLE: Vehicle Wash Water	SOURCE AND LOCATION OF UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	DESCRIBE UNAUTHORIZED NSWD CHARACTERISTICS Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.	DESCRIBE CORRECTIVE ACTIONS TO ELIMINATE UNAUTHORIZED NSWD AND TO CLEAN IMPACTED DRAINAGE AREAS. PROVIDE UNAUTHORIZED NSWD ELIMINATION DATE.
3/26/10 2:02 ☐ AM ■ PM	Grease spill and trash	HMS Host, Terminal 1 and 2	Many spills and used absorbent were present at grease trap area between Gates 10 and 11. Trash accumulation around the base of the grease bin at the Terminal 2 connector dumpster area.	Confirmation of issue(s) resolution received 4/9/10. Email was sent to HMS Host. Both areas were cleaned.
3/26/10 2:29 ☐ AM ■ PM	Leaking Equipment	Hawaiian Airlines Gate	Leaking piece of Aviation Port Services equipment between Gates 20 and 21.	Confirmation of issue(s) resolution received 3/30/10. Spoke with APS via phone and sent email to Hawaiian (the master tenant). Equipment was serviced and area was cleaned.
3/26/10 2:42 ☐ AM ■ PM	Broken sand bags	American Airlines Gate	Broken absorbent bags at American Airlines gate.	Confirmation of issue(s) resolution received 4/14/10. Email was send to American Airlines. Sand bags were disposed of.
3/26/10 2:50 ☐ AM ■ PM	Trash	US Airways Gate	A trash bin at Gate 34 was observed tipped over with trash coming out of it onto the ramp.	Confirmation of issue(s) resolution received 4/14/10. Email was sent to US Airways. Trash was properly disposed of.

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FORM 3 QUARTERLY VISUAL OBSERVATIONS OF UNAUTHORIZED NON-STORM WATER DISCHARGES (NSWDs)

OBSERVATION DATE (FROM REVERSE SIDE)	NAME OF UNAUTHORIZED NSWD EXAMPLE: Vehicle Wash Water	SOURCE AND LOCATION OF UNAUTHORIZED NSWD EXAMPLE: NW Corner of Parking Lot	DESCRIBE UNAUTHORIZED NSWD CHARACTERISTICS Indicate whether unauthorized NSWD is clear, cloudy, discolored, causing stains; contains floating objects or an oil sheen, has odors, etc.	DESCRIBE CORRECTIVE ACTIONS TO ELIMINATE UNAUTHORIZED NSWD AND TO CLEAN IMPACTED DRAINAGE AREAS. PROVIDE UNAUTHORIZED NSWD ELIMINATION DATE.
3/29/10 11:40 ■ AM ☐ PM	Oil Staining	Landmark Aviation workshop area	Fresh staining by the shop building.	Confirmation of issue(s) resolution received 4/14/10. Email was sent to Landmark Aviation. Staining was cleaned using dry absorbent.
5/4/10 10:45 ■ AM ☐ PM	Oil leak	Landmark Aviation fuel truck parking area	Leaking vehicle without drip pan.	Confirmation of issue(s) resolution received 5/26/10. Email was sent to Landmark Aviation. Leaked material was properly cleaned up and drip pan was provided for the vehicle.
6/21/10 10:30 ■ AM ☐ PM	Debris and broken sand bags	SDCRAA shops and storage areas	Broken sand bags by maintenance shops. Debris on ground by runway lighting vaults. Debris on ground in bone yard.	Confirmation of issue(s) resolution received 6/29/10. Work order was submitted for areas to be addressed and debris to be properly disposed of.
/ / : ☐ AM ☐ PM				

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FORM 4 – MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

SIDE A

- Storm water discharge visual observations are required for at least one storm event per month between October 1 and May 31.
- Visual observations must be conducted during the first hour of discharge at all discharge locations.
- Discharges of temporarily stored or contained storm water must be observed at the time of discharge.
- Indicate "None" in the first column of this form if you did not conduct a monthly visual observation.
- Make additional copies of this form as necessary.
- Until a monthly visual observation is made, record any eligible storm events that do not result in a storm water discharge and note the date, time, name, and title of who observed there was no storm water discharge.

Observation Date: October 2009

Observers Name: Annie Martin

Title: Associate Environmental Specialist

Signature:

Time Discharge Began: None – no storms during daylight hours

Observation Time: NA

Were Pollutants Observed: NA
(If yes, complete reverse side)

Drainage Location Description	Observation Time	Were Pollutants Observed
C-B01-1	: A.M. / PM	☐ YES ☐ NO
C-B03-2	: A.M. / PM	☐ YES ☐ NO
C-B05-3	: A.M. / PM	☐ YES ☐ NO
C-B05-4	: A.M. / PM	☐ YES ☐ NO
C-B06-5	: A.M. / PM	☐ YES ☐ NO
C-B07-6	: A.M. / PM	☐ YES ☐ NO
C-B07-7	: A.M. / PM	☐ YES ☐ NO
C-B08-8	: A.M. / PM	☐ YES ☐ NO
C-B12-9	: A.M. / PM	☐ YES ☐ NO
C-B09-10	: A.M. / PM	☐ YES ☐ NO

Observation Date: November 2009

Observers Name: Annie Martin

Title: Associate Environmental Specialist

Signatures:

Time Discharge Began: None – no storms during daylight hours

Observation Time: NA

Were Pollutants Observed: NA
(If yes, complete reverse side)

Drainage Location Description	Observation Time	Were Pollutants Observed
C-B01-1	10: 27 A.M.	☐ YES ☐ NO
C-B03-2	10:10 A.M.	☐ YES ☐ NO
C-B05-3	9: 00 A.M.	☐ YES ☐ NO
C-B05-4	10: 35 A.M.	☐ YES ☐ NO
C-B06-5	9: 45 A.M.	☐ YES ☐ NO
C-B07-6	10: 45 A.M.	☐ YES ☐ NO
C-B07-7	9: 25 A.M.	☐ YES ☐ NO
C-B08-8	10: 50 A.M.	☐ YES ☐ NO
C-B12-9	11: 00 A.M.	☐ YES ☐ NO
C-B09-10	9: 10 A.M.	☐ YES ☐ NO

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SIDE B

FORM 4-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

DATE/TIME OF OBSERVATION (From Reverse Side)	DRAINAGE AREA DESCRIPTION	DESCRIBE STORM WATER DISCHARGE CHARACTERISTICS Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	IDENTIFY AND DESCRIBE SOURCE(S) OF POLLUTANTS	DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION
NA / / _____ □ AM □ PM				
NA / / ___ : ___ □ AM □ PM				
NA / / ___ : ___ □ AM □ PM				
NA / / ___ : ___ □ AM □ PM				
NA / / ___ : ___ □ AM □ PM				
NA / / ___ : ___ □ AM □ PM				

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ANNUAL REPORT
FORM 4-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

SIDE A

ADDITIONAL PAGES

Observation Date: December 7, 2009

Observers Name: Mariamawit Yirsaligh

Title: Mactec, Consultant

Signature:

Time Discharge Began: 12/7/08 5:30 AM

Observation Time: 6:20 – 8:30 AM

Were Pollutants Observed: No
(If yes, complete reverse side)

Drainage Location Description	Observation Time	Were Pollutants Observed
C-B01-1	6: 33 A.M.	☐ YES ■ NO
C-B03-2	6: 52 A.M.	☐ YES ■ NO
C-B05-3	6: 20 A.M.	☐ YES ■ NO
C-B05-4	7: 01 A.M.	☐ YES ■ NO
C-B06-5	7: 50 A.M.	☐ YES ■ NO
C-B07-6	8: 15 A.M.	☐ YES ■ NO
C-B07-7	8: 30 A.M.	☐ YES ■ NO
C-B08-8	6: 50 A.M.	☐ YES ■ NO
C-B12-9	7: 40 A.M.	☐ YES ■ NO
C-B09-10	6: 20 A.M.	☐ YES ■ NO

Observation Date: January 18, 2010

Observers Name: Lijun Xu

Title: Mactec, Consultant

Signature:

Time Discharge Began: 1/18/10 3:00 PM

Observation Time: 3:10 – 4:40 PM

Were Pollutants Observed: Yes
(If yes, complete reverse side)

Drainage Location Description	Observation Time	Were Pollutants Observed
C-B01-1	3:36 PM	☐ YES ■ NO
C-B03-2	3:10 PM	☐ YES ■ NO
C-B05-3	3:55 PM	☐ YES ■ NO
C-B05-4	3:20 PM	☐ YES ■ NO
C-B06-5	3:45 PM	☐ YES ■ NO
C-B07-6	4:40 PM	■ YES ☐ NO
C-B07-7	4:15 PM	☐ YES ■ NO
C-B08-8	3:50 PM	☐ YES ■ NO
C-B12-9	4:30 PM	☐ YES ■ NO
C-B09-10	4:10 PM	☐ YES ■ NO

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SIDE B

FORM 4-MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

DATE/TIME OF OBSERVATION (From Reverse Side)	DRAINAGE AREA DESCRIPTION	DESCRIBE STORM WATER DISCHARGE CHARACTERISTICS Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	IDENTIFY AND DESCRIBE SOURCE(S) OF POLLUTANTS	DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION
1/ 18/ 10 4:40 □ AM ■ PM	CB07-6	Discharge was cloudy, brown, with visible sheen, slight foam (from turbulence of the water), and a petroleum smell. No unusual activities were observed upstream.	Site is connected to the effluent from an oil water separator.	Oil water separator is serviced as needed.
NA / / _ : □ AM □ PM				
NA / / _ : □ AM □ PM				
NA / / _ : □ AM □ PM				
NA / / _ : □ AM □ PM				
NA / / _ : □ AM □ PM				

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ANNUAL REPORT
FORM 4 – MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

SIDE A

ADDITIONAL PAGES

Observation Date: February 27, 2010

Observers Name: Mariamawit Yirsaligh

Title: MACTEC, Consultant

Signature:

Time Discharge Began: 2/27/10 6:51 AM

Observation Time: 6:55 AM – 8:53 AM

Were Pollutants Observed: No
(If yes, complete reverse side)

Drainage Location Description	Observation Time	Were Pollutants Observed
C-B01-1	7:40 AM	☐ YES ■ NO
C-B03-2	7:36 AM	☐ YES ■ NO
C-B05-3	8:05 PM	☐ YES ■ NO
C-B05-4	7:16 AM	☐ YES ■ NO
C-B06-5	7:45 AM	☐ YES ■ NO
C-B07-6	8:53 AM	☐ YES ■ NO
C-B07-7	7:05 PM	☐ YES ■ NO
C-B08-8	8:43 AM	☐ YES ■ NO
C-B12-9	8:31 AM	☐ YES ■ NO
C-B09-10	6:55 AM	☐ YES ■ NO

Observation Date: March 6, 2010

Observers Name: Lijun Xu

Title: MACTEC, Consultant

Signature:

Time Discharge Began: 3/6/10 4:42 PM

Observation Time: 4:42 PM – 5:52 PM

Were Pollutants Observed: No
(If yes, complete reverse side)

Drainage Location Description	Observation Time	Were Pollutants Observed
C-B01-1	5:10 PM	☐ YES ■ NO
C-B03-2	5:06 PM	☐ YES ■ NO
C-B05-3	5:25 PM	■ YES ☐ NO
C-B05-4	4:58 PM	☐ YES ■ NO
C-B06-5	5:14 PM	☐ YES ■ NO
C-B07-6	5:45 PM	☐ YES ■ NO
C-B07-7	5:52 PM	☐ YES ■ NO
C-B08-8	5:39 PM	☐ YES ■ NO
C-B12-9*	5:37 PM	☐ YES ■ NO
C-B09-10	4:42 PM	☐ YES ■ NO

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FORM 4 – MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

SIDE B

ADDITIONAL PAGES

DATE/TIME OF OBSERVATION (From Reverse Side)	DRAINAGE AREA DESCRIPTION	DESCRIBE STORM WATER DISCHARGE CHARACTERISTICS Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	IDENTIFY AND DESCRIBE SOURCE(S) OF POLLUTANTS	DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION
3 / 6 /10 5:25 □ AM ■ PM	CB05-3	Discharge was cloudy and brown. A small amount of sediment was observed in the runoff.	No sources identified.	NA
3 / 6 /10 5 :37 □ AM ■ PM	CB12-9 / SB12-13	*CB12-9 was not accessible due to construction. SB12-13 was observed as an alternate upstream location. No pollutants were observed.	NA	NA
NA / / : □ AM □ PM				
NA / / : □ AM □ PM				
NA / / : □ AM □ PM				
NA / / : □ AM □ PM				

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FORM 4 – MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

SIDE A

ADDITIONAL PAGES

Observation Date: April 5, 2010

Observers Name: Lijun Xu

Title: Mactec, Consultant

Signature:

Time Discharge Began: 4/5/10 1:36 PM

Observation Time: 1:36PM – 2:45PM

Were Pollutants Observed: Yes
(If yes, complete reverse side)

Drainage Location Description	Observation Time	Were Pollutants Observed
C-B01-1	2:00 PM	■ YES □ NO
C-B03-2	1:56 PM	■ YES □ NO
C-B05-3	2:17 PM	□ YES ■ NO
C-B05-4	1:50 PM	□ YES ■ NO
C-B06-5	2:10 PM	■ YES □ NO
C-B07-6	2:33 PM	□ YES ■ NO
C-B07-7	1:36 PM	□ YES ■ NO
C-B08-8	2:30 PM	□ YES ■ NO
C-B12-9*	2:27 PM	□ YES ■ NO
C-B09-10	2:45 PM	□ YES ■ NO

Observation Date: May 2009

Observers Name: Annie Martin

Title: Associate Environmental Specialist

Signature:

Time Discharge Began: None – no storms during daylight hours

Observation Time: NA

Were Pollutants Observed: NA
(If yes, complete reverse side)

Drainage Location Description	Observation Time	Were Pollutants Observed
C-B01-1	: A.M. / PM	□ YES □ NO
C-B03-2	: A.M. / PM	□ YES □ NO
C-B05-3	: A.M. / PM	□ YES □ NO
C-B05-4	: A.M. / PM	□ YES □ NO
C-B06-5	: A.M. / PM	□ YES □ NO
C-B07-6	: A.M. / PM	□ YES □ NO
C-B07-7	: A.M. / PM	□ YES □ NO
C-B08-8	: A.M. / PM	□ YES □ NO
C-B12-9	: A.M. / PM	□ YES □ NO
C-B09-10	: A.M. / PM	□ YES □ NO

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SIDE B

FORM 4 – MONTHLY VISUAL OBSERVATIONS OF STORM WATER DISCHARGES

DATE/TIME OF OBSERVATION (From Reverse Side)	DRAINAGE AREA DESCRIPTION	DESCRIBE STORM WATER DISCHARGE CHARACTERISTICS Indicate whether storm water discharge is clear, cloudy, or discolored; causing staining; containing floating objects or an oil sheen, has odors, etc.	IDENTIFY AND DESCRIBE SOURCE(S) OF POLLUTANTS	DESCRIBE ANY REVISED OR NEW BMPs AND THEIR DATE OF IMPLEMENTATION
4/5/10 2:00 □ AM ■ PM	CB01-1	Foam (small bubbles) was observed in the discharge.	Possible source was nearby construction or water turbulence. No true source identified.	NA
4/5/10 1:56 □ AM ■ PM	CB03-2	Foam (small bubbles) was observed in the discharge.	Possible source was water turbulence. Could not determine source.	NA
4/5/10 2:10 □ AM ■ PM	CB06-5	Foam (small bubbles) was observed in the discharge.	Possible source was water turbulence. Could not determine source.	NA
4/5/10 2:27 □ AM ■ PM	CB12-9 / SB12-13	*CB12-9 was not accessible due to construction. SB12-13 was observed as an alternate upstream location. No pollutants were observed.	NA	NA
NA / / : □ AM □ PM				
NA / / : □ AM □ PM				

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FORM 5 - ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

VALUATION DATE: April – June 2010 **INSPECTOR NAME:** Annie Martin **TITLE:** Associate Environmental Specialist **SIGNATURE:** Annie Martin

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Air Tran Airways (5/11/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO	If yes, to either question, complete the next two columns of this form	• FOD bucket at the gate without a lid	Air Tran was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 5/28/10.
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ■ NO			
Allied Aviation (5/12/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO	If yes, to either question, complete the next two columns of this form	• Drums stored outside without overhead cover	Allied was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/29/10.
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ■ NO			
American Airlines (5/4/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO	If yes, to either question, complete the next two columns of this form	• FOD bucket at the gate without a lid	American was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 5/11/10.
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ■ NO			

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FORM 5 - ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

/ALUATION DATE: April – June 2010 **INSPECTOR NAME:** Annie Martin **TITLE:** Associate Environmental Specialist **SIGNATURE:**

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
American Eagle (4/27/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Trash can on the ramp without a lid	American Eagle was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/15/10.
ASIG (4/22/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Oily equipment stored by a doorway without secondary containment	ASIG was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 4/23/10.
Elite Line Services (4/16/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Spill pallets stored outdoors that are filling with rain water	ELS was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 4/22/10.
FedEx (5/11/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Outdoor trash can without a lid	FedEx was notified deficiency by e-mail. Confirmation that deficiencies were abated was received on 5/14/10.

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FORM 5 - ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

'ALUATION DATE: April – June 2010 **INSPECTOR NAME:** Annie Martin **TITLE:** Associate Environmental Specialist **SIGNATURE:**

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Flagship (4/19/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Outdoor trash cans without lids	Flagship was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 4/19/10.
Frontier Airlines (5/21/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• FOD bucket without a lid at the gate	Frontier was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 5/24/10.
Hawaiian Airlines (6/3/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• FOD bucket without a lid at the gate	Hawaiian was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/23/09.
HMS Host (5/7/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Grease being stored/transported in open containers outside	Host was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 5/10/10.

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FORM 5 - ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

EVALUATION DATE: April – June 2010 **INSPECTOR NAME:** Annie Martin **TITLE:** Associate Environmental Specialist **SIGNATURE:**

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Landmark Aviation (5/4/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Outdoor trash receptacle without lids • Used drip pans stored outdoors • Leaky equipment without drip pans • Hazardous materials storage area without over head cover	Landmark was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 5/26/10.
LPI (4/28/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Outdoor trash can without lid • Soaps stored outdoors without secondary containment	LPI was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 4/28/10
Sky West (4/26/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Outdoor trash cans without lids	Sky West was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/29/10.
Southwest Airlines (5/7/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Outdoor trash receptacles and FOD buckets without lids • Spill pallet being used in an area without overhead cover is filling with water.	Southwest was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 5/7/10.

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FORM 5 - ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

/ALUATION DATE: April – June 2010 **INSPECTOR NAME:** Annie Martin **TITLE:** Associate Environmental Specialist **SIGNATURE:**

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
United Airlines (5/7/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Radiator fluid stored outdoors without proper secondary containment • Outdoor trash receptacles and FOD buckets without lids	United was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/29/10.
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
UPS (5/6/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Hazardous materials stored with overhead cover but no secondary containment underneath	UPS was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/15/10.
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
US Airways (4/29/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• Oil cans outdoors without secondary containment • Grease buckets outdoors without overhead cover and secondary containment • Outdoor trash receptacles and FOD buckets without lids	US Air was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/2/10.
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
West Jet Airlines (4/28/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ YES ■ NO	If yes, to either question, complete the next two columns of this form	• FOD bucket without a lid at the gate	West Jet was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/23/10.

2009 – 2010
Annual Report

FORM 5 - ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY BMP STATUS

VALUATION DATE: April – June 2010 **INSPECTOR NAME:** Annie Martin **TITLE:** Associate Environmental Specialist **SIGNATURE:**

POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
Allegiant (6/11/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO	If yes, to either question, complete the next two columns of this form	• FOD bucket without a lid at the gate	Allegiant was notified of the deficiency by e-mail. Confirmation that deficiencies were abated was received on 6/23/10.
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ■ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
San Diego County Regional Airport Authority (6/21/10)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ■ YES ☐ NO	If yes, to either question, complete the next two columns of this form	• Broken sand bags by maintenance shops • Debris on ground by runway lighting vaults • Debris on ground in bone yard	SDCRAA was notified of the deficiency by work order. Confirmation that deficiencies were abated was received on 6/29/10.
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ■ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			
POTENTIAL POLLUTANT SOURCE/INDUSTRIAL ACTIVITY AREA (as identified in your SWPPP)			**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			

Attachment 4

Analytical Data for Storm Events

First Storm Event

SIERRA ANALYTICAL

18 December 2009

Amanda Archenhold
MACTEC Engineering & Consulting
9177 Sky Park Court Suite A
San Diego, CA 92123

RE:San Diego Airport

Work Order No.: 0912126

Attached are the results of the analyses for samples received by the laboratory on 12/07/09 13:00.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report.
If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

Richard K. Forsyth

Laboratory Director

Sierra Analytical Labs, Inc. is certified by the California Department of Health Services (DOHS),
Environmental Laboratory Accredidation Program (ELAP) No. 2320.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
C-B01-1-12-7-09	0912126-01	Liquid	12/07/09 06:33	12/07/09 13:00
C-B05-3-12-7-09	0912126-02	Liquid	12/07/09 06:04	12/07/09 13:00
C-B07-6-12-7-09	0912126-03	Liquid	12/07/09 08:15	12/07/09 13:00
C-B12-9-12-7-09	0912126-05	Liquid	12/07/09 07:40	12/07/09 13:00
C-B09-10-12-7-09	0912126-06	Liquid	12/07/09 06:35	12/07/09 13:00
C-B07-6-12-7-09-DUP	0912126-13	Liquid	12/07/09 08:17	12/07/09 13:00
C-B12-9-12-7-09-BL	0912126-14	Liquid	12/07/09 07:50	12/07/09 13:00

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 4°C, and accompanied by chain of custody documentation.
PRESERVATION: Samples requiring preservation were verified prior to sample preparation and analysis.
HOLDING TIMES: All holding times were met, unless otherwises noted in the report with data qualifiers.
QA/QC CRITERIA: All quality objective criteria were met, except as noted in the report with data qualifiers.

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B01-1-12-7-09 (0912126-01) Liquid	**Sampled: 12/07/09 06:33**		**Received: 12/07/09 13:00**						
Ammonia as N	**2.55**	0.100	mg/L	1	B9L1521	12/07/09	12/07/09 16:45	SM 4500-NH3	
Biochemical Oxygen Demand	**27.0**	2.00	"	"	"	"	12/12/09 16:45	EPA 405.1	
Chemical Oxygen Demand	**95.0**	0.100	"	"	"	"	12/07/09 16:45	EPA 410.4	
Specific Conductance (EC)	**195**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	**2.50**	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.130**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.17**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**16.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B05-3-12-7-09 (0912126-02) Liquid	**Sampled: 12/07/09 06:04**		**Received: 12/07/09 13:00**						
Ammonia as N	**2.10**	0.100	mg/L	1	B9L1521	12/07/09	12/07/09 16:45	SM 4500-NH3	
Biochemical Oxygen Demand	**80.0**	2.00	"	"	"	"	12/12/09 16:45	EPA 405.1	
Chemical Oxygen Demand	**302**	0.100	"	"	"	"	12/07/09 16:45	EPA 410.4	
Specific Conductance (EC)	**1970**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	**2.10**	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.180**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.88**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**19.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B07-6-12-7-09 (0912126-03) Liquid	**Sampled: 12/07/09 08:15**		**Received: 12/07/09 13:00**						
Ammonia as N	**1.10**	0.100	mg/L	1	B9L1521	12/07/09	12/07/09 16:45	SM 4500-NH3	
Biochemical Oxygen Demand	**16.2**	2.00	"	"	"	"	12/12/09 16:45	EPA 405.1	
Chemical Oxygen Demand	**52.0**	0.100	"	"	"	"	12/07/09 16:45	EPA 410.4	
Specific Conductance (EC)	**56.0**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.110**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.26**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**26.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B12-9-12-7-09 (0912126-05) Liquid	**Sampled: 12/07/09 07:40**		**Received: 12/07/09 13:00**						
Ammonia as N	**1.45**	0.100	mg/L	1	B9L1521	12/07/09	12/07/09 16:45	SM 4500-NH3	
Biochemical Oxygen Demand	**75.0**	2.00	"	"	"	"	12/12/09 16:45	EPA 405.1	
Chemical Oxygen Demand	**274**	0.100	"	"	"	"	12/07/09 16:45	EPA 410.4	
Specific Conductance (EC)	**2220**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	ND	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.21**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**3.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B09-10-12-7-09 (0912126-06) Liquid	**Sampled: 12/07/09 06:35**		**Received: 12/07/09 13:00**						
Ammonia as N	**3.05**	0.100	mg/L	1	B9L1521	12/07/09	12/07/09 16:45	SM 4500-NH3	
Biochemical Oxygen Demand	**47.0**	2.00	"	"	"	"	12/12/09 16:45	EPA 405.1	
Chemical Oxygen Demand	**172**	0.100	"	"	"	"	12/07/09 16:45	EPA 410.4	
Specific Conductance (EC)	**260**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	**2.90**	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.150**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.40**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**31.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B07-6-12-7-09-DUP (0912126-13) Liquid	**Sampled: 12/07/09 08:17**		**Received: 12/07/09 13:00**						
Ammonia as N	**1.15**	0.100	mg/L	1	B9L1521	12/07/09	12/07/09 16:45	SM 4500-NH3	
Biochemical Oxygen Demand	**15.5**	2.00	"	"	"	"	12/12/09 16:45	EPA 405.1	
Chemical Oxygen Demand	**49.0**	0.100	"	"	"	"	12/07/09 16:45	EPA 410.4	
Specific Conductance (EC)	**49.0**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.110**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.19**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**23.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B12-9-12-7-09-BL (0912126-14) Liquid	**Sampled: 12/07/09 07:50 Received: 12/07/09 13:00**								
Ammonia as N	ND	0.100	mg/L	1	B9L1521	12/07/09	12/07/09 16:45	SM 4500-NH3	
Biochemical Oxygen Demand	ND	2.00	"	"	"	"	12/12/09 16:45	EPA 405.1	
Chemical Oxygen Demand	**2.00**	0.100	"	"	"	"	12/07/09 16:45	EPA 410.4	
Specific Conductance (EC)	**1.20**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	ND	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.31**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	ND	1.00	mg/L	"	"	"	"	EPA 160.2	

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TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B01-1-12-7-09 (0912126-01) Liquid	**Sampled: 12/07/09 06:33**		**Received: 12/07/09 13:00**						
Aluminum	**1900**	50	µg/L	2	B9L1410	12/14/09	12/17/09 12:56	EPA 200.8	
Copper	**310**	2.0	"	"	"	"	12/15/09 12:31	"	
Iron	**2.6**	0.050	mg/L	"	"	"	"	"	
Lead	**24**	2.0	µg/L	"	"	"	"	"	
Zinc	**240**	2.0	"	"	"	"	"	"	
C-B05-3-12-7-09 (0912126-02) Liquid	**Sampled: 12/07/09 06:04**		**Received: 12/07/09 13:00**						
Aluminum	**3500**	250	µg/L	10	B9L1410	12/14/09	12/17/09 12:58	EPA 200.8	
Copper	**29**	2.0	"	2	"	"	12/15/09 12:43	"	
Iron	**4.0**	0.050	mg/L	"	"	"	"	"	
Lead	**19**	2.0	µg/L	"	"	"	"	"	
Zinc	**94**	2.0	"	"	"	"	"	"	
C-B07-6-12-7-09 (0912126-03) Liquid	**Sampled: 12/07/09 08:15**		**Received: 12/07/09 13:00**						
Aluminum	**580**	50	µg/L	2	B9L1410	12/14/09	12/17/09 12:58	EPA 200.8	
Copper	**140**	2.0	"	"	"	"	12/15/09 12:47	"	
Iron	**0.94**	0.050	mg/L	"	"	"	"	"	
Lead	**7.5**	2.0	µg/L	"	"	"	"	"	
Zinc	**430**	2.0	"	"	"	"	"	"	
C-B12-9-12-7-09 (0912126-05) Liquid	**Sampled: 12/07/09 07:40**		**Received: 12/07/09 13:00**						
Aluminum	**210**	50	µg/L	2	B9L1410	12/14/09	12/17/09 12:59	EPA 200.8	
Copper	**34**	2.0	"	"	"	"	12/15/09 12:51	"	
Iron	**0.46**	0.050	mg/L	"	"	"	"	"	
Lead	**2.1**	2.0	µg/L	"	"	"	"	"	
Zinc	**130**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Metals (Dissolved) by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B01-1-12-7-09 (0912126-01) Liquid	**Sampled: 12/07/09 06:33**		**Received: 12/07/09 13:00**						
Copper	**220**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 17:14	EPA 200.8	
Zinc	**130**	2.0	"	"	"	"	"	"	
C-B05-3-12-7-09 (0912126-02) Liquid	**Sampled: 12/07/09 06:04**		**Received: 12/07/09 13:00**						
Copper	**14**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 17:18	EPA 200.8	
Zinc	**13**	2.0	"	"	"	"	"	"	
C-B07-6-12-7-09 (0912126-03) Liquid	**Sampled: 12/07/09 08:15**		**Received: 12/07/09 13:00**						
Copper	**97**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 17:22	EPA 200.8	
Zinc	**350**	2.0	"	"	"	"	"	"	
C-B12-9-12-7-09 (0912126-05) Liquid	**Sampled: 12/07/09 07:40**		**Received: 12/07/09 13:00**						
Copper	**27**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 17:26	EPA 200.8	
Zinc	**120**	2.0	"	"	"	"	"	"	
C-B09-10-12-7-09 (0912126-06) Liquid	**Sampled: 12/07/09 06:35**		**Received: 12/07/09 13:00**						
Copper	**80**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 17:45	EPA 200.8	
Zinc	**200**	2.0	"	"	"	"	"	"	
C-B07-6-12-7-09-DUP (0912126-13) Liquid	**Sampled: 12/07/09 08:17**		**Received: 12/07/09 13:00**						
Copper	**93**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 17:49	EPA 200.8	
Zinc	**390**	2.0	"	"	"	"	"	"	
C-B12-9-12-7-09-BL (0912126-14) Liquid	**Sampled: 12/07/09 07:50**		**Received: 12/07/09 13:00**						
Copper	ND	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 17:53	EPA 200.8	
Zinc	ND	2.0	"	"	"	"	"	"	

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TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B09-10-12-7-09 (0912126-06) Liquid	**Sampled: 12/07/09 06:35**		**Received: 12/07/09 13:00**						
Aluminum	**1400**	50	µg/L	2	B9L1410	12/14/09	12/17/09 12:59	EPA 200.8	
Copper	**94**	2.0	"	"	"	"	12/15/09 13:02	"	
Iron	**1.9**	0.050	mg/L	"	"	"	"	"	
Lead	**5.6**	2.0	µg/L	"	"	"	"	"	
Zinc	**240**	2.0	"	"	"	"	"	"	
C-B07-6-12-7-09-DUP (0912126-13) Liquid	**Sampled: 12/07/09 08:17**		**Received: 12/07/09 13:00**						
Aluminum	**1100**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:00	EPA 200.8	
Copper	**190**	2.0	"	"	"	"	12/15/09 13:06	"	
Iron	**1.7**	0.050	mg/L	"	"	"	"	"	
Lead	**18**	2.0	µg/L	"	"	"	"	"	
Zinc	**500**	2.0	"	"	"	"	"	"	
C-B12-9-12-7-09-BL (0912126-14) Liquid	**Sampled: 12/07/09 07:50**		**Received: 12/07/09 13:00**						
Aluminum	ND	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:02	EPA 200.8	
Copper	ND	2.0	"	"	"	"	12/15/09 13:10	"	
Iron	ND	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	ND	2.0	"	"	"	"	"	"	

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SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Total Petroleum Hydrocarbons (TPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B01-1-12-7-09 (0912126-01) Liquid	**Sampled: 12/07/09 06:33**		**Received: 12/07/09 13:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L0905	12/09/09	12/10/09 10:54	EPA 8015B	
Surrogate: o-Terphenyl		*135 %*	*60-175*		"	"	"	"	
Jet-A	**0.47**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*135 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.62**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*135 %*	*60-175*		"	"	"	"	
C-B05-3-12-7-09 (0912126-02) Liquid	**Sampled: 12/07/09 06:04**		**Received: 12/07/09 13:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L0905	12/09/09	12/10/09 10:54	EPA 8015B	
Surrogate: o-Terphenyl		*96.7 %*	*60-175*		"	"	"	"	
Jet-A	**0.095**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*96.7 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.13**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*96.7 %*	*60-175*		"	"	"	"	
C-B07-6-12-7-09 (0912126-03) Liquid	**Sampled: 12/07/09 08:15**		**Received: 12/07/09 13:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L0905	12/09/09	12/10/09 10:54	EPA 8015B	
Surrogate: o-Terphenyl		*103 %*	*60-175*		"	"	"	"	
Jet-A	**0.30**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*103 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.86**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*103 %*	*60-175*		"	"	"	"	
C-B12-9-12-7-09 (0912126-05) Liquid	**Sampled: 12/07/09 07:40**		**Received: 12/07/09 13:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L0905	12/09/09	12/10/09 10:54	EPA 8015B	
Surrogate: o-Terphenyl		*95.0 %*	*60-175*		"	"	"	"	
Jet-A	**0.51**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*95.0 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**1.1**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*95.0 %*	*60-175*		"	"	"	"	

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SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Total Petroleum Hydrocarbons (TPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B09-10-12-7-09 (0912126-06) Liquid	**Sampled: 12/07/09 06:35 Received: 12/07/09 13:00**								
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L0905	12/09/09	12/10/09 10:54	EPA 8015B	
Surrogate: o-Terphenyl		*114 %*	*60-175*		"	"	"	"	
Jet-A	**0.42**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*114 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.63**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*114 %*	*60-175*		"	"	"	"	
C-B07-6-12-7-09-DUP (0912126-13) Liquid	**Sampled: 12/07/09 08:17 Received: 12/07/09 13:00**								
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L0905	12/09/09	12/10/09 10:54	EPA 8015B	
Surrogate: o-Terphenyl		*91.5 %*	*60-175*		"	"	"	"	
Jet-A	**0.30**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*91.5 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.87**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*91.5 %*	*60-175*		"	"	"	"	
C-B12-9-12-7-09-BL (0912126-14) Liquid	**Sampled: 12/07/09 07:50 Received: 12/07/09 13:00**								
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L0905	12/09/09	12/10/09 10:54	EPA 8015B	
Surrogate: o-Terphenyl		*74.6 %*	*60-175*		"	"	"	"	
Jet-A	ND	0.050	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*74.6 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	ND	0.050	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*74.6 %*	*60-175*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	
San Diego CA, 92123	Project Manager: Amanda Archenhold	**Reported:** 12/18/09 13:09

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1410 - EPA 200 Series										
Blank (B9L1410-BLK1)				Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	ND	50	µg/L							
Copper	ND	2.0	"							
Iron	ND	0.050	mg/L							
Lead	ND	2.0	µg/L							
Zinc	ND	2.0	"							
Blank (B9L1410-BLK2)				Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	ND	50	µg/L							
Copper	ND	2.0	"							
Iron	ND	0.050	mg/L							
Lead	ND	2.0	µg/L							
Zinc	ND	2.0	"							
LCS (B9L1410-BS1)				Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	116	50	µg/L	100		116	85-120			
Copper	96.0	2.0	"	100		96.0	85-115			
Iron	1.05	0.050	mg/L	1.00		105	85-115			
Lead	108	2.0	µg/L	100		108	85-115			
Zinc	103	2.0	"	100		103	85-115			
LCS (B9L1410-BS2)				Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	108	50	µg/L	100		108	85-120			
Copper	96.0	2.0	"	100		96.0	85-115			
Iron	1.03	0.050	mg/L	1.00		103	85-115			
Lead	110	2.0	µg/L	100		110	85-115			
Zinc	105	2.0	"	100		105	85-115			
Matrix Spike (B9L1410-MS1)	**Source: 0912126-01**			Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	1860	50	µg/L	100	1900	NR	70-130			QM-07
Copper	376	2.0	"	100	310	66.0	70-130			QM-07
Iron	3.41	0.050	mg/L	1.00	2.6	81.0	70-130			
Lead	122	2.0	µg/L	100	24	98.0	70-130			
Zinc	331	2.0	"	100	240	91.0	70-130			

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TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
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SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1410 - EPA 200 Series										
Matrix Spike (B9L1410-MS2)	**Source: 0912155-04**			Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	1490	50	µg/L	100	970	520	70-130			QM-07
Copper	116	2.0	"	100	25	91.0	70-130			
Iron	2.65	0.050	mg/L	1.00	1.5	115	70-130			
Lead	114	2.0	µg/L	100	8.5	106	70-130			
Zinc	219	2.0	"	100	110	109	70-130			
Matrix Spike Dup (B9L1410-MSD1)	**Source: 0912126-01**			Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	1840	50	µg/L	100	1900	NR	70-130	1.08	20	QM-07
Copper	360	2.0	"	100	310	50.0	70-130	4.35	20	QM-07
Iron	3.26	0.050	mg/L	1.00	2.6	66.0	70-130	4.50	20	QM-07
Lead	122	2.0	µg/L	100	24	98.0	70-130	0.00	20	
Zinc	300	2.0	"	100	240	60.0	70-130	9.83	20	QM-07
Matrix Spike Dup (B9L1410-MSD2)	**Source: 0912155-04**			Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	1560	50	µg/L	100	970	590	70-130	4.59	20	QM-07
Copper	122	2.0	"	100	25	97.0	70-130	5.04	20	
Iron	2.65	0.050	mg/L	1.00	1.5	115	70-130	0.00	20	
Lead	117	2.0	µg/L	100	8.5	108	70-130	2.60	20	
Zinc	231	2.0	"	100	110	121	70-130	5.33	20	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1413 - EPA 200 Series										
Blank (B9L1413-BLK1)				Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	ND	2.0	µg/L							
Zinc	ND	2.0	"							
Blank (B9L1413-BLK2)				Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	ND	2.0	µg/L							
Zinc	ND	2.0	"							
LCS (B9L1413-BS1)				Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	93.9	2.0	µg/L	100		93.9	85-115			
Zinc	103	2.0	"	100		103	85-115			
LCS (B9L1413-BS2)				Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	91.5	2.0	µg/L	100		91.5	85-115			
Zinc	99.6	2.0	"	100		99.6	85-115			
Matrix Spike (B9L1413-MS1)	**Source: 0912126-05**			Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	114	2.0	µg/L	100	27	87.0	70-130			
Zinc	207	2.0	"	100	120	87.0	70-130			
Matrix Spike (B9L1413-MS2)	**Source: 0912155-04**			Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	110	2.0	µg/L	100	16	94.0	70-130			
Zinc	163	2.0	"	100	60	103	70-130			
Matrix Spike Dup (B9L1413-MSD1)	**Source: 0912126-05**			Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	113	2.0	µg/L	100	27	86.0	70-130	0.881	20	
Zinc	200	2.0	"	100	120	80.0	70-130	3.44	20	
Matrix Spike Dup (B9L1413-MSD2)	**Source: 0912155-04**			Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	107	2.0	µg/L	100	16	91.0	70-130	2.76	20	
Zinc	158	2.0	"	100	60	98.0	70-130	3.12	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Total Petroleum Hydrocarbons (TPH) by GC/FID - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L0905 - EPA 3510C Sep Funnel										
Blank (B9L0905-BLK1)				Prepared: 12/02/09 Analyzed: 12/08/09						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L							
Jet-A	ND	0.050	"							
Oil Range Organics (C22-C36)	ND	0.050	"							
Surrogate: o-Terphenyl	*0.109*		"	*0.100*		*109*	*60-175*			
Surrogate: o-Terphenyl	*0.109*		"	*0.100*		*109*	*60-175*			
Surrogate: o-Terphenyl	*0.109*		"	*0.100*		*109*	*60-175*			
LCS (B9L0905-BS1)				Prepared: 12/02/09 Analyzed: 12/08/09						
Diesel Range Organics (C10-C24)	0.568	0.050	mg/L	0.500		114	80-120			
Diesel Range Organics (C10-C24)	0.568	0.050	"	0.500		114	80-120			
Diesel Range Organics (C10-C24)	0.568	0.050	"	0:500		114	80-120			
LCS (B9L0905-BS2)				Prepared: 12/02/09 Analyzed: 12/08/09						
Diesel Range Organics (C10-C24)	0.475	0.050	mg/L	0.500		95.0	80-120			
Diesel Range Organics (C10-C24)	0.475	0.050	"	0.500		95.0	80-120			
Diesel Range Organics (C10-C24)	0.475	0.050	"	0.500		95.0	80-120			
LCS Dup (B9L0905-BSD1)				Prepared: 12/02/09 Analyzed: 12/08/09						
Diesel Range Organics (C10-C24)	0.485	0.050	mg/L	0.500		97.0	80-120	15.8	30	
Diesel Range Organics (C10-C24)	0.485	0.050	"	0.500		97.0	80-120	15.8	30	
Diesel Range Organics (C10-C24)	0.485	0.050	"	0.500		97.0	80-120	15.8	30	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:09

Notes and Definitions

D-41	Sample appears to be a mixture of fuel hydrocarbons. Oil Range Hydrocarbons (C22-C36) reported.
D-49	Sample appears to be a mixture of fuel hydrocarbons. Total Petroleum Hydrocarbons quantified using a Jet-A standard for calibration.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
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Client: Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite #105
Laguna Hills, CA 92653

Attention: Nick Forsyth
Sample: Liquid / 12 Samples
Project Name: #0912126
Method : EPA 8015B
Investigation: Glycols

REPORT

Laboratory No: 986759
Report Date: December 16, 2009
Sampling Date: December 7, 2009
Receiving Date: December 10, 2009
Analysis Date: December 15, 2009
Units: mg/L
Dilution Factor: 2
Reported By: LES

Analytical Results

Sample ID	Sample Description	Propylene Glycol	Ethylene Glycol	Surrogate (1-Butanol)	Surrogate % Recovery
708593-MB	Method Blank	ND	ND	192	95.9%
986759-1	C-B01-1-12-7-09	ND	ND	217	108%
986759-2	C-B05-3-12-7-09	ND	ND	237	119%
986759-3	C-B07-6-12-7-09	ND	ND	235	118%
986759-4	S-B08-14/C-B08-8-12-7-09	ND	ND	232	116%
986759-5	C-B12-9-12-7-09	ND	ND	206	103%
986759-6	C-B09-10-12-7-09	ND	ND	219	109%
986759-7	S-B08-1-12-7-09	ND	ND	192	95.9%
986759-8	S-B08-2-12-7-09	ND	ND	226	113%
986759-9	S-B11-4-12-7-09	ND	ND	217	108%
986759-10	S-B12-13-12-7-09	ND	ND	196	98.0%
986759-11	S-B06-12-12-7-09	ND	ND	209	105%
986759-12	C-B07-6-12-7-09-DUP	ND	ND	188	94.0%
Practical Quantitation Limits		5.0	5.0	Surrogate Conc. = 200	APR = 50-200%
Sample RLs		**10.0**	**10.0**		

ND: Not detected, or below limit of detection.
RL: Reporting limit, or least amount of analyte quantifiable based on average sample size used and analytical technique employed.
APR: Allowable Percent Recovery

Rossina Tomova, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite #105
Laguna Hills, CA 92653

Attention: Nick Forsyth
Sample: Liquid / 12 Samples
Project Name: #0912126
Method Number: EPA 8015B
Investigation: Glycols

QA/QC Batch No: 708593
Laboratory No: 986759
Report Date: December 16, 2009
Sampling Date: December 7, 2009
Receiving Date: December 10, 2009
Analysis Date: December 15, 2009
Units: mg/L
Reported By: LES

Quality Control/Quality Assurance Calibration Check Report

MRCVS (1)

Parameter	Spiked Concentration	Recovered Concentration	Percent Recovery	Flag	Accuracy Control Limits
Propylene Glycol	50.0	40.8	81.7%	PASS	70-130
Ethylene Glycol	50.0	44.7	89.4%	PASS	70-130

Quality Control/Quality Assurance Spikes Report

LCS/LCSD

Parameter	Spike Conc.	Recovered Concentration		Percent Recovery (%)		RPD (%)	Flag	Accuracy Control Limits	
		LCS	LCSD	LCS	LCSD			RPD	% Recovery
Propylene Glycol	50.0	49.7	51.1	99%	102%	2.91%	PASS	20	70-130
Ethylene Glycol	50.0	61.7	61.7	123%	123%	0.02%	PASS	20	70-130

MRCVS: Mid Range Calibration Verification Standard
LCS: Laboratory Control Spike
LCSD: Laboratory Control Spike Duplicate
RPD: Relative Percent Difference
Flag: "Pass" if within Control Limits; otherwise "Fail"

Rossina Tomova, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

PTS Laboratories, Inc.

8100 Secura Way • Santa Fe Springs, CA 90670
Telephone (562) 347-2500 • Fax (562) 907-3610

December 23, 2009

Nick Forsyth
Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite 105
Laguna Hills, CA 92653

Re: PTS File No: 391049
Physical Properties Data
0912126

Dear Mr. Forsyth:

Please find enclosed report for Physical Properties analyses conducted upon fluid received from your 0912126 project. All analyses were performed by applicable ASTM, EPA, or API methodologies. An electronic version of the report has previously been sent to your attention via the internet. The sample is currently in storage and will be retained for thirty days past completion of testing at no charge. Please note that the sample will be disposed of at that time. You may contact me regarding storage, disposal, or return of the sample.

PTS Laboratories appreciates the opportunity to be of service. If you have any questions or require additional information, please give me a call at (562) 347-2504.

Sincerely,
PTS Laboratories

Rachel Spitz
Project Manager

Encl.

PTS Laboratories

Project Name: N/A
Project Number: 0912126

PTS File No: 391049
Client: Sierra Analytical Labs, Inc.

TEST PROGRAM

FLUID ID	Date	Time	Fluid Type / Matrix	Particle Size: Microsize				Notes
Method:				ASTM D4464				
Received 12/9/09								
S-B06-12-PAR-12-7-09 (0912126-11)	12/7/09	0555	Aqueous	X				
TOTALS:			1 Water	1				

Laboratory Test Program Notes

PTS Laboratories, Inc.

Sierra Analytical Labs, Inc.
PTS File No: 391049

PARTICLE SIZE SUMMARY
(METHODOLOGY: ASTM D4464M)

PROJECT NAME: N/A
PROJECT NO: 0912126

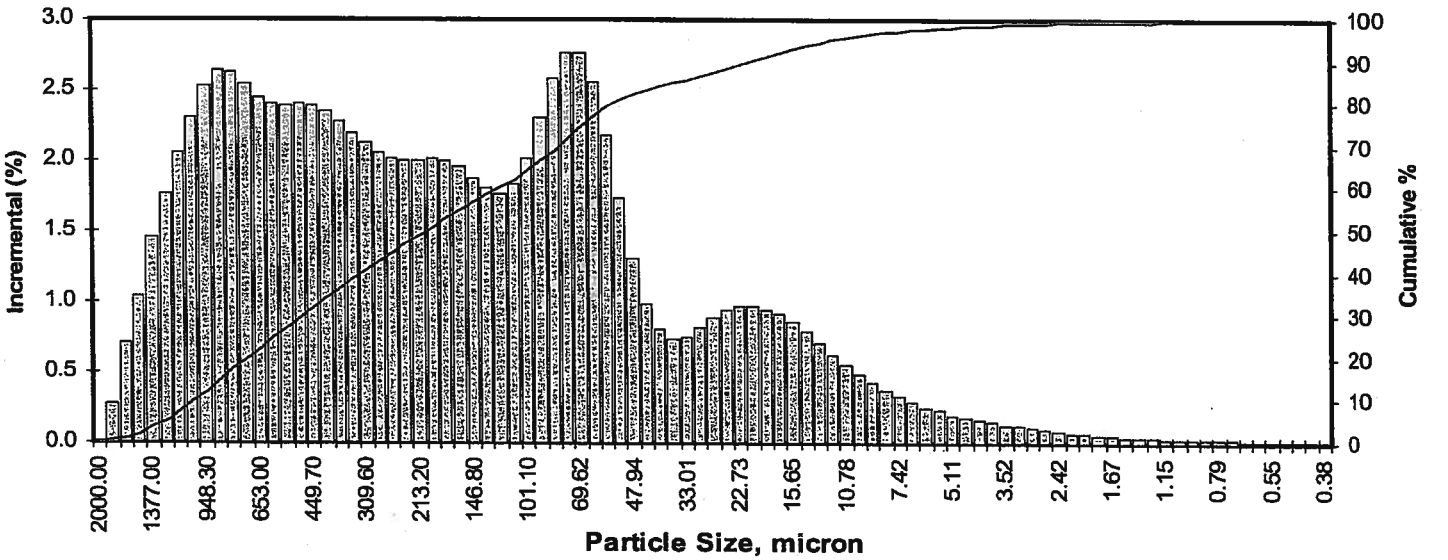
Sample ID	Matrix	Median Grain Size, micron (1)	CUMULATIVE PERCENT GREATER THAN Distribution percent, microns										
			5%	10%	16%	25%	40%	50%	60%	75%	84%	90%	95%
S-B06-12-PAR-12-7-09 (0912126-11)	Aqueous	202.411	1314.277	1029.129	820.445	585.327	316.586	202.411	124.132	68.513	40.702	21.365	12.013

(1) Based on Trask Median

PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client:	Sierra Analytical Labs, Inc.	**PTS File No:**	391049
Project:	N/A	**Sample ID:**	S-B06-12-PAR-12-7-09 (0912126-11)
Project No:	0912126	**Matrix:**	Aqueous



Particle Diameter, micron	Particle Distribution	
	Incremental percent	Cumulative percent
2000.00	0.00	0.0
1822.00	0.28	0.3
1660.00	0.71	1.0
1512.00	1.04	2.0
1377.00	1.46	3.5
1255.00	1.76	5.3
1143.00	2.05	7.3
1041.00	2.31	9.6
948.30	2.53	12.1
863.90	2.64	14.8
787.00	2.62	17.4
716.90	2.54	19.9
653.00	2.45	22.4
594.90	2.40	24.8
541.90	2.39	27.2
493.60	2.40	29.6
449.70	2.39	32.0
409.60	2.35	34.3
373.10	2.28	36.6
339.90	2.20	38.8
309.60	2.12	40.9
282.10	2.06	43.0
256.90	2.02	45.0
234.10	2.00	47.0
213.20	2.00	49.0
194.20	2.01	51.0
176.90	2.00	53.0
161.20	1.96	55.0
146.80	1.88	56.9
133.80	1.80	58.7
121.80	1.77	60.4
111.00	1.84	62.3
101.10	2.02	64.3
92.10	2.30	66.6
83.90	2.58	69.2
76.43	2.77	71.9
69.62	2.76	74.7
63.42	2.55	77.2
57.77	2.18	79.4
52.63	1.73	81.2
47.94	1.31	82.5
43.67	0.99	83.5
39.78	0.81	84.3
36.24	0.74	85.0
33.01	0.75	85.8
30.07	0.82	86.6
27.39	0.89	87.5
24.95	0.94	88.4
22.73	0.97	89.4
20.71	0.97	90.3
18.86	0.95	91.3
17.18	0.92	92.2
15.65	0.86	93.1
14.26	0.79	93.9
12.99	0.71	94.6
11.83	0.63	95.2
10.78	0.55	95.8
9.82	0.49	96.2
8.94	0.43	96.7
8.15	0.37	97.0
7.42	0.33	97.4
6.76	0.29	97.7
6.16	0.25	97.9
5.61	0.23	98.1
5.11	0.20	98.3
4.66	0.18	98.5
4.24	0.16	98.7
3.86	0.15	98.8
3.52	0.13	99.0
3.21	0.12	99.1
2.92	0.11	99.2
2.66	0.10	99.3
2.42	0.09	99.4
2.21	0.08	99.4
2.01	0.07	99.5
1.83	0.06	99.6
1.67	0.05	99.6
1.52	0.05	99.7
1.385	0.041	99.7
1.261	0.036	99.7
1.149	0.033	99.8
1.047	0.030	99.8
0.954	0.028	99.8
0.869	0.026	99.9
0.791	0.024	99.9
0.721	0.022	99.9
0.657	0.020	99.9
0.598	0.018	99.9
0.545	0.015	100.0
0.496	0.012	100.0
0.452	0.009	100.0
0.412	0.006	100.0
0.375	0.003	100.0
TOTALS:	**99.99**	**100.0**

Measure	Trask	Inman
Median, mm	0.2024	0.2024
Median, micron	202.411	202.411
Mean, mm	0.3269	0.1827
Mean, micron	326.920	182.740
Sorting	2.9229	2.167
Skewness	0.9894	0.068
Kurtosis	0.2564	0.563

Cumulative Percent greater than		
Distribution percent	Particle Size	
	Micron	Millimeters
5	1314.277	1.3143
10	1029.129	1.0291
16	820.445	0.8204
25	585.327	0.5853
40	316.586	0.3166
50	202.411	0.2024
60	124.132	0.1241
75	68.513	0.0685
84	40.702	0.0407
90	21.365	0.0214
95	12.013	0.0120

Phone: (562) 907-3607
Fax: (562) 907-3611

4349044
12-9-09
JF

SIERRA ANALYTICAL

SUBCONTRACT ORDER

Sierra Analytical Labs, Inc.

Sierra Project #: 0912126

Comments

SENDING LABORATORY:

Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite 105
Laguna Hills, CA 92653
Phone: (949) 348-9389
Fax: (949) 348-9115
Laboratory Contact: Nick Forsyth

Turn Around Time Requested: ☒ Normal ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day

RECEIVING LABORATORY:

PTS Laboratories
8100 Secura Way
Santa Fe Springs, CA 90670
Phone : (562) 907-3607
Fax: (562) 907-3610

Analysis	Expires	Sampled:	Laboratory ID	Comments
Sample ID: S-B06-12-PAR-12-7-09 (0912126-11)	**Liquid**	**12/07/09 05:55**		
Full Particle Sizing	06/05/10 05:55			

Containers Supplied:
1L Amber (A)

Special Instructions :

☑ Intact ☐ Sample Seals
☑ Properly Labeled ☑ Chilled TEMP (°C) 5.1°C
☐ Appropriate Container ☐ Preservatives Verified By

Relinquished By	12.9.09 / 14:10 Date / Time	Received By	12/9/09 1410 Date / Time
Relinquished By	Date / Time	Received By	Date / Time
Relinquished By	Date / Time	Received By	Date / Time

SIERRA ANALYTICAL
TEL: 949 • 348 • 9389
FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

CHAIN OF CUSTODY RECORD

Date: 12/7/09 Page: 1 of 7

Lab Work Order No.: 0912186

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Geotracker EDD Info:
Client LOGCODE
Site Global ID
Field Point Names / Comments

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)
C-B01-1- 12-7-09	01	12/7/09	0633	STORMWATER	NONE	PLASTIC	2	X			
C-B01-1- 12-7-09	↓	12/7/09	0633	STORMWATER	NONE	40ml VOA	2		X		
C-B01-1- 12-7-09		12/7/09	0633	STORMWATER	NONE	CLR GLASS	1			X	
C-B01-1- 12-7-09	↓	12/7/09	0633	STORMWATER	NONE	AMBER GLASS	1				X
~~C-B03-2-~~				STORMWATER	NONE	PLASTIC	2	X			
C-B03-2-				STORMWATER	NONE	40ml VOA	2		X		
~~C-B03-2-~~				STORMWATER	NONE	CLR GLASS	1			X	
~~C-B03-2-~~				STORMWATER	NONE	AMBER GLASS	1				X
C-B05-3- 12-7-09	02	12/7/09	0604	STORMWATER	NONE	PLASTIC	2	X			
C-B05-3- 12-7-09	↓	12/7/09	0604	STORMWATER	NONE	40ml VOA	2		X		

Analyses Requested

1 Sampler Signature: A. J. Archenhold
Printed Name: AMANDA ARCHENHOLD

Shipped Via: SIERRA DRIVER
Carrier/Waybill No.:

Total Number of Containers Submitted to Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

2 Relinquished By:	AJArchenhold	Date: 12/7/09	Received By:		Date: 12-7-09
Company:	MACTEC	Time: 13:00	Company:	SIERRA	Time: 13:00
3 Relinquished By:		Date: 12-7-09	Received By:		Date: 12/7/09
Company:	SIERRA	Time: 15:50	Company:	SIERRA	Time: 1530
4 Relinquished By:		Date:	Received By:		Date:
Company:		Time:	Company:		Time:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Special Instructions:

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☒ Intact ☒ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☒ Properly Labelled ☐ Other
☒ Appropriate Sample Container ☒ Storage Location RIEZ

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

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CHAIN OF CUSTODY RECORD

Date: 12/7/09 Page: 2 of 7

Lab Work Order No.: 0912126

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) Ion(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)
C-B05-3-12-7-09	02	12/7/09	0604	STORMWATER	NONE	CLR GLASS	1			X	
C-B05-3-12-7-09	↓	12/7/09	0604	STORMWATER	NONE	AMBER GLASS	1				X
C-B05-4				STORMWATER	NONE	PLASTIC	2	X			
C-B05-4				STORMWATER	NONE	40ml VOA	2		X		
C-B05-4				STORMWATER	NONE	CLR GLASS	1			X	
C-B05-4				STORMWATER	NONE	AMBER GLASS	1				X
C-B06-5-				STORMWATER	NONE	PLASTIC	2	X			
C-B06-5-				STORMWATER	NONE	40ml VOA	2		X		
C-B06-5				STORMWATER	NONE	CLR GLASS	1			X	
C-B06-5				STORMWATER	NONE	AMBER GLASS	1				X

Geotracker EDD Info:
Client LOGCODE
Site Global ID
Field Point Names / Comments

1 Sampler Signature: A.J. Archenhold
Printed Name: AMANDA ARCHENHOLD
Shipped Via: SIERRA DRIVER
(Carrier/Waybill No.)

2 Relinquished By: AJ Archenhold	Date: 12/7/09	Received By: TJ Kyle	Date: 12-7-09
Company: MACTEC	Time: 13:00	Company: SIERRA	Time: 13:00
3 Relinquished By: TJ Kyle	Date: 12-7-09	Received By:	Date: 12-7-09
Company: SIERRA	Time: 15:30	Company: Sierra	Time: 1530
4 Relinquished By:	Date:	Received By:	Date:
Company:	Time:	Company:	Time:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location RIES

Rev: 112104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

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FAX: 949 • 348 • 9115
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CHAIN OF CUSTODY RECORD

Date: 12,7,09 Page: 3 of 7

Lab Work Order No.: 0912126

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn) BOD, COD, ammonia, MBAS, O&G, TPH (jet fuel,motor oil,diesel)	Field Point Names / Comments
C-B07-6-12-7-09	03	12/7/09	0815	STORMWATER	NONE	PLASTIC	2	X					
C-B07-6-12-7-09	↓	12/7/09	0815	STORMWATER	NONE	40ml VOA	2		X				
C-B07-6-12-7-09		12/7/09	0815	STORMWATER	NONE	CLR GLASS	1			X			
C-B07-6-12-7-09		12/7/09	0815	STORMWATER	NONE	AMBER GLASS	1				X		
~~C-B07-7-~~				STORMWATER	NONE	PLASTIC	2	X					
~~C-B07-7-~~				STORMWATER	NONE	40ml VOA	2		X				
~~C-B07-7-~~				STORMWATER	NONE	CLR GLASS	1			X			
~~C-B07-7-~~				STORMWATER	NONE	AMBER GLASS	1				X		
~~S-B08-14/C-B08-8-~~				STORMWATER	NONE	5 GAL GLASS						X	
S-B08-14/C-B08-8-12-7-09	04	12/07/09	0837	STORMWATER	NONE	40ml VOA	2		X				

[1] Sampler Signature: A. J. Archenhold
Printed Name: AMANDA ARCHENHOLD
Shipped Via: SIERRA DRIVER (Carrier/Waybill No.)

[2] Relinquished By: A. J. Archenhold Date: 12/7/09 Time: 3:00 Received By: TJ Date: 12-7-09 Time: 13:00
Company: MACTEC Company: SIERRA

[3] Relinquished By: TJ Date: 12-7-09 Time: 15:30 Received By: Date: 12/7/09 Time: 1570
Company: SIERRA Company: Sierra

[4] Relinquished By: Date: Time: Received By: Date: Time:
Company: Company:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal: ☐ Return to Client ☐ Lab Disposal * ☐ Archive ____ mos. ☐ Other ____

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location NLAB

Rev: 10/31/04

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

Geotracker EDD Info:
Client LOGCODE
Site Global ID

SIERRA ANALYTICAL

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CHAIN OF CUSTODY RECORD

Date: 12/7/09 Page: 4 of 7

Lab Work Order No.: 0912126

Client: MACTEC
Client Address: 9177 SKY PARK COURT, SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Geotracker EDD Info:
Client LOGCODE
Site Global ID

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn) BOD, COD, O&G								Field Point Names / Comments
C-B12-9-12-7-09	05	12/7/09	0740	STORMWATER	NONE	PLASTIC	2	X												
C-B12-9-12-7-09	↓	12/7/09	0740	STORMWATER	NONE	40ml VOA	2		X											
C-B12-9-12-7-09	↓	12/7/09	0740	STORMWATER	NONE	CLR GLASS	1			X										
C-B12-9-12-7-09	↓	12/7/09	0740	STORMWATER	NONE	AMBER GLASS	1				X									
C-B09-10-12-07-09	06	12/07/09	0635	STORMWATER	NONE	PLASTIC	2	X												
C-B09-10-12-07-09	↓	12/07/09	0635	STORMWATER	NONE	40ml VOA	2		X											
C-B09-10-12-07-09	↓	12/7/09	0635	STORMWATER	NONE	CLR GLASS	1			X										
C-B09-10-12-07-09	↓	12/07/09	0635	STORMWATER	NONE	AMBER GLASS	1				X									
~~S-B08-1-~~				~~STORMWATER~~	~~NONE~~	~~5 GALL GLASS~~						~~X~~								~~composite together with S-B08-2 ... analyzed as 1 sample~~
S-B08-1-12-07-09	07	12/07/09	0640	STORMWATER	NONE	40ml VOA	2		X											

1 Sampler Signature: A. J. Archenhold
Shipped Via: SIERRA DRIVER
Printed Name: AMANDA ARCHENHOLD
(Carrier/Waybill No.)

	Relinquished By	Date / Time	Received By	Date / Time
2	AJ Archenhold (Company: MACTEC)	12/7/09 13:00	[signature] (Company: SIERRA)	12-7-09 13:00
3	[signature] (Company: SIERRA)	12-7-09 15:30	[signature] (Company: Sierra)	12/7/09 1530
4		Date: Time:	Company:	Date: Time:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ______

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact
☐ Sample Seals
☑ Properly Labelled
☑ Appropriate Sample Container
☑ Chilled - Temp (°C) 4.0
☐ Preservatives - Verified By
☐ Other
☑ Storage Location 2-E

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

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FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

CHAIN OF CUSTODY RECORD

Date: 12/7/09 Page: 5 of 7

Lab Work Order No.: 0912126

Client:	MACTEC
Client Address:	9177 SKY PARK COURT SAN DIEGO, CA 92123
Client Tel. No.:	(858) 278-3600
Client Fax. No.:	(858) 278-5300
Client Proj. Mgr.:	

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Geotracker EDD Info:

Client LOGCODE

Site Global ID

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn) BOD, COD, O&G	ethylene glycol	Particle size distribution	Field Point Names / Comments
~~S-B08-2-~~				STORMWATER	NONE	5 GALL GLASS		X			~~[illegible] together with S-B08-1 and analyze as 1 sample~~
S-B08-2-12-7-09	08	12/07/09	0650	STORMWATER	NONE	40ml VOA	2		X		
~~S-B09-3-~~				STORMWATER	NONE	5 GALL GLASS		X			~~[illegible] together with S-B11-4 and analyze as 1 sample~~
~~S-B11-4-~~				STORMWATER	NONE	5 GALL GLASS		X			~~[illegible] together with S-B08-2 and analyze as 1 sample~~
S-B11-4-12-7-09	09	12/07/09	0705	STORMWATER	NONE	40ml VOA	2		X		
~~S-B12-13-~~				STORMWATER	NONE	5 GALL GLASS		X			
S-B12-13-12-7-09	10	12/07/09	0740	STORMWATER	NONE	40ml VOA	2		X		
S-B06-12-PAR-12-07-09	11	12/07/09	555	STORMWATER	NONE	AMBER GLASS	1			X	
~~S-B06-12-~~				STORMWATER	NONE	5 GALL GLASS		X			
S-B06-12-12-7-09	12	12/07/09	0825	STORMWATER	NONE	40ml VOA	2		X		

1 Sampler Signature: A.J Archenhold		Shipped Via: SIERRA DRIVER			
Printed Name: AMANDA ARCHENHOLD		(Carrier/Waybill No.)			
2 Relinquished By: A.J Archenhold	Date: 12/7/09	Received By: T Zirk	Date: 12-7-09		
Company: MACTEC	Time: 17:00	Company: SIERRA	Time: 13:00		
3 Relinquished By: T Zirk	Date: 12-7-09	Received By:	Date: 12/7/09		
Company: SIERRA	Time: 15:30	Company: Sierra	Time: 1530		
4 Relinquished By:	Date:	Received By:	Date:		
Company:	Time:	Company:	Time:		

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location RIEF

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

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CHAIN OF CUSTODY RECORD

Date: 12/7/09 Page: 6 of 7

Lab Work Order No.: 0912126

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Geotracker EDD Info:
Client LOGCODE
Site Global ID
Field Point Names / Comments

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC), ammonia, MBAS tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn), BOD, COD.	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)
C-B07-6-12-7-09-DUP	13	12/7/09	0817	STORMWATER	NONE	PLASTIC	2	X			
C-B07-6-12-7-09-DUP		12/7/09	0817	STORMWATER	NONE	40ml VOA	2		X		
C-B07-6-12-7-09-DUP		12/7/09	0817	STORMWATER	NONE	CLR GLASS	1			X	
C-B07-6-12-7-09-DUP		12/7/09	0817	STORMWATER	NONE	AMBER GLASS	1				X

1 Sampler Signature: A. J. Archenhold
Printed Name: AMANDA ARCHENHOLD
Shipped Via: SIERRA DRIVER (Carrier/Waybill No.)

Total Number of Containers Submitted to Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

2 Relinquished By: A Archenhold	Date: 12/7/09	Received By: T. Park	Date: 12.7.09
Company: MACTEC	Time: 13.00	Company: SIERRA	Time: 13.00
3 Relinquished By: T. Park	Date: 12.7.09	Received By:	Date: 12/7/09
Company: SIERRA	Time: 15:30	Company: Sierra	Time: 1530
4 Relinquished By:	Date:	Received By:	Date:
Company:	Time:	Company:	Time:

Total Number of Containers Received by Laboratory

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location RICS

Special Instructions:

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

Rev: 021104

SIERRA ANALYTICAL
TEL: 949 • 348 • 9389
FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

CHAIN OF CUSTODY RECORD

Date: 12/7/09 Page: 7 of 7

Lab Work Order No.: 0912186

Client:	MACTEC
Client Address:	9177 SKY PARK COURT SAN DIEGO, CA 92123
Client Tel. No.:	(858) 278-3600
Client Fax. No.:	(858) 278-5300
Client Proj. Mgr.:	

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, oil & grease	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), BOD, COD, oil & grease	Field Point Names / Comments
C-12-9-12-7-09 -BL	14	12/7/09	750	STORMWATER	NONE	PLASTIC	2	X					
C-12-9-12-7-09 -BL		12/7/09	750	STORMWATER	NONE	CLR GLASS	1		X				
C-12-9-12-7-09 -BL		12/7/09	750	STORMWATER	NONE	AMBER GLASS	1			X			
S - -DUP				STORMWATER	NONE	5 GALL GLASS					X		
S - -BL				STORMWATER	NONE	5 GALL GLASS						X	

Geotracker EDD Info:

Client LOGCODE

Site Global ID

1 Sampler Signature:	AJArchenhold	Shipped Via:	SIERRA DRIVER
Printed Name:	AMANDA ARCHENHOLD	(Carrier/Waybill No.)	

2 Relinquished By:	AJArchenhold	Date: 12/7/09	Received By: TD Vega	Date: 12-7-09	
Company:	MACTEC	Time: 17:00	Company: SIERRA	Time: 13:00	
3 Relinquished By:	TD Vega	Date: 12.7.09	Received By:	Date: 12/7/09	
Company:	SIERRA	Time: 15:30	Company: Sierra	Time: 1530	
4 Relinquished By:		Date:	Received By:	Date:	
Company:		Time:	Company:	Time:	

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ___ mos.
☐ Other ___

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location RED

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

SIERRA
ANALYTICAL

18 December 2009

Amanda Archenhold
MACTEC Engineering & Consulting
9177 Sky Park Court Suite A
San Diego, CA 92123

RE:San Diego Airport

Work Order No.: 0912155

Attached are the results of the analyses for samples received by the laboratory on 12/08/09 15:40.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report.
If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

Richard K. Forsyth

Laboratory Director

Sierra Analytical Labs, Inc. is certified by the California Department of Health Services (DOHS),
Environmental Laboratory Accredidation Program (ELAP) No. 2320.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
C-B07-7	0912155-01	Liquid	12/07/09 12:05	12/08/09 15:40
S-B08-14/C-B08-8	0912155-02	Liquid	12/07/09 16:33	12/08/09 15:40
Composite S-B08-1/S-B08-2	0912155-03	Liquid	12/08/09 00:00	12/08/09 15:40
Composite S-B09-3/S-B11-4	0912155-04	Liquid	12/08/09 00:00	12/08/09 15:40
S-B12-13	0912155-05	Liquid	12/07/09 16:44	12/08/09 15:40
S-B06-12	0912155-06	Liquid	12/07/09 17:00	12/08/09 15:40
S-B12-13 DUP	0912155-07	Liquid	12/07/09 16:44	12/08/09 15:40
S-B08-1 BL	0912155-08	Liquid	12/07/09 17:45	12/08/09 15:40
C-B05-4	0912155-09	Liquid	12/07/09 11:38	12/08/09 15:40
C-B06-5	0912155-10	Liquid	12/07/09 12:24	12/08/09 15:40
C-B03-2	0912155-11	Liquid	12/07/09 11:51	12/08/09 15:40

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 4°C, and accompanied by chain of custody documentation.
PRESERVATION: Samples requiring preservation were verified prior to sample preparation and analysis.
HOLDING TIMES: All holding times were met, unless otherwises noted in the report with data qualifiers.
QA/QC CRITERIA: All quality objective criteria were met, except as noted in the report with data qualifiers.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B07-7 (0912155-01) Liquid Sampled: 12/07/09 12:05 Received: 12/08/09 15:40									
Ammonia as N	**2.50**	0.100	mg/L	1	B9L1523	12/08/09	12/08/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**78.0**	2.00	"	"	"	"	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**280**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**380**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	**2.80**	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.310**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**6.68**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**42.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B08-14/C-B08-8 (0912155-02) Liquid Sampled: 12/07/09 16:33 Received: 12/08/09 15:40									
Ammonia as N	**0.900**	0.100	mg/L	1	B9L1523	12/08/09	12/08/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	ND	2.00	"	"	"	"	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**5.00**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**97.3**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	ND	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.41**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**2.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
Composite S-B08-1/S-B08-2 (0912155-03) Liquid Sampled: 12/08/09 00:00 Received: 12/08/09 15:40									
Biochemical Oxygen Demand	**13.8**	2.00	mg/L	1	B9L1523	12/08/09	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**52.0**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**98.4**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.08**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**17.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S-B09-3/S-B11-4 (0912155-04) Liquid Sampled: 12/08/09 00:00 Received: 12/08/09 15:40									
Biochemical Oxygen Demand	**9.20**	2.00	mg/L	1	B9L1523	12/08/09	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**30.0**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**72.8**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.04**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**11.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B12-13 (0912155-05) Liquid Sampled: 12/07/09 16:44 Received: 12/08/09 15:40									
Biochemical Oxygen Demand	ND	2.00	mg/L	1	B9L1523	12/08/09	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**2.00**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**78.5**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.17**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**1.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B06-12 (0912155-06) Liquid Sampled: 12/07/09 17:00 Received: 12/08/09 15:40									
Biochemical Oxygen Demand	**28.4**	2.00	mg/L	1	B9L1523	12/08/09	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**102**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**102**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**6.97**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**34.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B12-13 DUP (0912155-07) Liquid Sampled: 12/07/09 16:44 Received: 12/08/09 15:40									
Biochemical Oxygen Demand	ND	2.00	mg/L	1	B9L1523	12/08/09	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**3.00**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**77.6**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.15**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**1.00**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B08-1 BL (0912155-08) Liquid Sampled: 12/07/09 17:45 Received: 12/08/09 15:40									
Biochemical Oxygen Demand	ND	2.00	mg/L	1	B9L1523	12/08/09	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**1.50**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**1.07**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**6.56**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	ND	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B05-4 (0912155-09) Liquid Sampled: 12/07/09 11:38 Received: 12/08/09 15:40									
Ammonia as N	**5.60**	0.100	mg/L	1	B9L1523	12/08/09	12/08/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**84.0**	2.00	"	"	"	"	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**285**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**370**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.240**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**6.35**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**25.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B06-5 (0912155-10) Liquid Sampled: 12/07/09 12:24 Received: 12/08/09 15:40									
Ammonia as N	**6.70**	0.100	mg/L	1	B9L1523	12/08/09	12/08/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**89.0**	2.00	"	"	"	"	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**302**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**583**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	**2.20**	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.210**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**6.54**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**18.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B03-2 (0912155-11) Liquid Sampled: 12/07/09 11:51 Received: 12/08/09 15:40									
Ammonia as N	**1.95**	0.100	mg/L	1	B9L1523	12/08/09	12/08/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**4.60**	2.00	"	"	"	"	12/13/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**14.0**	0.100	"	"	"	"	12/08/09 16:30	EPA 410.4	
Specific Conductance (EC)	**103**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	ND	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.34**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**2.00**	1.00	mg/L	"	"	"	"	EPA 160.2	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B07-7 (0912155-01) Liquid Sampled: 12/07/09 12:05 Received: 12/08/09 15:40									
Aluminum	**730**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:02	EPA 200.8	
Copper	**360**	2.0	"	"	"	"	12/15/09 13:14	"	
Iron	**0.79**	0.050	mg/L	"	"	"	"	"	
Lead	**6.8**	2.0	µg/L	"	"	"	"	"	
Zinc	**1200**	2.0	"	"	"	"	"	"	
S-B08-14/C-B08-8 (0912155-02) Liquid Sampled: 12/07/09 16:33 Received: 12/08/09 15:40									
Aluminum	**56**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:03	EPA 200.8	
Copper	**23**	2.0	"	"	"	"	12/15/09 13:18	"	
Iron	ND	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**59**	2.0	"	"	"	"	"	"	
Composite S-B08-1/S-B08-2 (0912155-03) Liquid Sampled: 12/08/09 00:00 Received: 12/08/09 15:40									
Aluminum	**410**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:04	EPA 200.8	
Copper	**67**	2.0	"	"	"	"	12/15/09 13:22	"	
Iron	**0.63**	0.050	mg/L	"	"	"	"	"	
Lead	**3.0**	2.0	µg/L	"	"	"	"	"	
Zinc	**260**	2.0	"	"	"	"	"	"	
Composite S-B09-3/S-B11-4 (0912155-04) Liquid Sampled: 12/08/09 00:00 Received: 12/08/09 15:40									
Aluminum	**970**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:06	EPA 200.8	
Copper	**25**	2.0	"	"	"	"	12/15/09 13:33	"	
Iron	**1.5**	0.050	mg/L	"	"	"	"	"	
Lead	**8.5**	2.0	µg/L	"	"	"	"	"	
Zinc	**110**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B12-13 (0912155-05) Liquid Sampled: 12/07/09 16:44 Received: 12/08/09 15:40									
Aluminum	**62**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:07	EPA 200.8	
Copper	**18**	2.0	"	"	"	"	12/15/09 13:53	"	
Iron	**0.084**	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**40**	2.0	"	"	"	"	"	"	
S-B06-12 (0912155-06) Liquid Sampled: 12/07/09 17:00 Received: 12/08/09 15:40									
Aluminum	**1300**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:09	EPA 200.8	
Copper	**79**	2.0	"	"	"	"	12/15/09 13:57	"	
Iron	**1.9**	0.050	mg/L	"	"	"	"	"	
Lead	**8.8**	2.0	µg/L	"	"	"	"	"	
Zinc	**320**	2.0	"	"	"	"	"	"	
S-B12-13 DUP (0912155-07) Liquid Sampled: 12/07/09 16:44 Received: 12/08/09 15:40									
Aluminum	**74**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:10	EPA 200.8	
Copper	**30**	2.0	"	"	"	"	12/15/09 14:01	"	
Iron	**0.13**	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**47**	2.0	"	"	"	"	"	"	
S-B08-1 BL (0912155-08) Liquid Sampled: 12/07/09 17:45 Received: 12/08/09 15:40									
Aluminum	ND	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:10	EPA 200.8	
Copper	ND	2.0	"	"	"	"	12/15/09 14:05	"	
Iron	ND	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	ND	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B05-4 (0912155-09) Liquid	**Sampled: 12/07/09 11:38**	**Received: 12/08/09 15:40**							
Aluminum	**870**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:11	EPA 200.8	
Copper	**910**	2.0	"	"	"	"	12/15/09 14:08	"	
Iron	**1.2**	0.050	mg/L	"	"	"	"	"	
Lead	**6.6**	2.0	µg/L	"	"	"	"	"	
Zinc	**660**	2.0	"	"	"	"	"	"	
C-B06-5 (0912155-10) Liquid	**Sampled: 12/07/09 12:24**	**Received: 12/08/09 15:40**							
Aluminum	**770**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:12	EPA 200.8	
Copper	**770**	2.0	"	"	"	"	12/15/09 14:12	"	
Iron	**0.89**	0.050	mg/L	"	"	"	"	"	
Lead	**4.4**	2.0	µg/L	"	"	"	"	"	
Zinc	**620**	2.0	"	"	"	"	"	"	
C-B03-2 (0912155-11) Liquid	**Sampled: 12/07/09 11:51**	**Received: 12/08/09 15:40**							
Aluminum	**320**	50	µg/L	2	B9L1410	12/14/09	12/17/09 13:12	EPA 200.8	
Copper	**150**	2.0	"	"	"	"	12/15/09 14:16	"	
Iron	**0.43**	0.050	mg/L	"	"	"	"	"	
Lead	**11**	2.0	µg/L	"	"	"	"	"	
Zinc	**200**	2.0	"	"	"	"	"	"	

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TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
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SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Metals (Dissolved) by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B07-7 (0912155-01) Liquid Sampled: 12/07/09 12:05 Received: 12/08/09 15:40									
Copper	**310**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 17:57	EPA 200.8	
Zinc	**1100**	2.0	"	"	"	"	"	"	
S-B08-14/C-B08-8 (0912155-02) Liquid Sampled: 12/07/09 16:33 Received: 12/08/09 15:40									
Copper	**20**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:01	EPA 200.8	
Zinc	**55**	2.0	"	"	"	"	"	"	
Composite S-B08-1/S-B08-2 (0912155-03) Liquid Sampled: 12/08/09 00:00 Received: 12/08/09 15:40									
Copper	**50**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:05	EPA 200.8	
Zinc	**210**	2.0	"	"	"	"	"	"	
Composite S-B09-3/S-B11-4 (0912155-04) Liquid Sampled: 12/08/09 00:00 Received: 12/08/09 15:40									
Copper	**16**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:16	EPA 200.8	
Zinc	**60**	2.0	"	"	"	"	"	"	
S-B12-13 (0912155-05) Liquid Sampled: 12/07/09 16:44 Received: 12/08/09 15:40									
Copper	**15**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:36	EPA 200.8	
Zinc	**37**	2.0	"	"	"	"	"	"	
S-B06-12 (0912155-06) Liquid Sampled: 12/07/09 17:00 Received: 12/08/09 15:40									
Copper	**44**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:40	EPA 200.8	
Zinc	**180**	2.0	"	"	"	"	"	"	
S-B12-13 DUP (0912155-07) Liquid Sampled: 12/07/09 16:44 Received: 12/08/09 15:40									
Copper	**14**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:44	EPA 200.8	
Zinc	**40**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Metals (Dissolved) by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B05-4 (0912155-09) Liquid	**Sampled: 12/07/09 11:38**	**Received: 12/08/09 15:40**							
Copper	**850**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:47	EPA 200.8	
Zinc	**620**	2.0	"	"	"	"	"	"	
C-B06-5 (0912155-10) Liquid	**Sampled: 12/07/09 12:24**	**Received: 12/08/09 15:40**							
Copper	**700**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:51	EPA 200.8	
Zinc	**560**	2.0	"	"	"	"	"	"	
C-B03-2 (0912155-11) Liquid	**Sampled: 12/07/09 11:51**	**Received: 12/08/09 15:40**							
Copper	**130**	2.0	µg/L	2	B9L1413	12/14/09	12/15/09 18:55	EPA 200.8	
Zinc	**190**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Total Petroleum Hydrocarbons (TPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B07-7 (0912155-01) Liquid Sampled: 12/07/09 12:05 Received: 12/08/09 15:40									
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L1407	12/11/09	12/11/09 16:54	EPA 8015B	
Surrogate: o-Terphenyl		*169 %*	*60-175*		"	"	"	"	
Jet-A	**1.2**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*169 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**1.4**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*169 %*	*60-175*		"	"	"	"	
S-B08-14/C-B08-8 (0912155-02) Liquid Sampled: 12/07/09 16:33 Received: 12/08/09 15:40									
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L1407	12/11/09	12/11/09 16:32	EPA 8015B	
Surrogate: o-Terphenyl		*92.5 %*	*60-175*		"	"	"	"	
Jet-A	**0.22**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*92.5 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.17**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*92.5 %*	*60-175*		"	"	"	"	
C-B05-4 (0912155-09) Liquid Sampled: 12/07/09 11:38 Received: 12/08/09 15:40									
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L1407	12/11/09	12/11/09 17:05	EPA 8015B	
Surrogate: o-Terphenyl		*234 %*	*60-175*		"	"	"	"	*S-07*
Jet-A	**1.5**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*234 %*	*60-175*		"	"	"	"	*S-07*
Oil Range Organics (C22-C36)	**2.3**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*234 %*	*60-175*		"	"	"	"	*S-07*
C-B06-5 (0912155-10) Liquid Sampled: 12/07/09 12:24 Received: 12/08/09 15:40									
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L1407	12/11/09	12/11/09 16:43	EPA 8015B	
Surrogate: o-Terphenyl		*208 %*	*60-175*		"	"	"	"	*S-07*
Jet-A	**1.2**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*208 %*	*60-175*		"	"	"	"	*S-07*
Oil Range Organics (C22-C36)	**1.4**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*208 %*	*60-175*		"	"	"	"	*S-07*

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Total Petroleum Hydrocarbons (TPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B03-2 (0912155-11) Liquid Sampled: 12/07/09 11:51 Received: 12/08/09 15:40									
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L1407	12/11/09	12/11/09 16:21	EPA 8015B	
Surrogate: o-Terphenyl		*87.7 %*	*60-175*		"	"	"	"	
Jet-A	ND	0.050	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*87.7 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	ND	0.050	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*87.7 %*	*60-175*		"	"	"	"	

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26052 Merit Circle Suite 105, Laguna Hills, California 92653
Telephone: (949) 348-9389 Fax: (949) 348-9115
E-Mail: sierralabs @ sierralabs.net

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1410 - EPA 200 Series										
Blank (B9L1410-BLK1)				Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	ND	50	µg/L							
Copper	ND	2.0	"							
Iron	ND	0.050	mg/L							
Lead	ND	2.0	µg/L							
Zinc	ND	2.0	"							
Blank (B9L1410-BLK2)				Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	ND	50	µg/L							
Copper	ND	2.0	"							
Iron	ND	0.050	mg/L							
Lead	ND	2.0	µg/L							
Zinc	ND	2.0	"							
LCS (B9L1410-BS1)				Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	116	50	µg/L	100		116	85-120			
Copper	96.0	2.0	"	100		96.0	85-115			
Iron	1.05	0.050	mg/L	1.00		105	85-115			
Lead	108	2.0	µg/L	100		108	85-115			
Zinc	103	2.0	"	100		103	85-115			
LCS (B9L1410-BS2)				Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	108	50	µg/L	100		108	85-120			
Copper	96.0	2.0	"	100		96.0	85-115			
Iron	1.03	0.050	mg/L	1.00		103	85-115			
Lead	110	2.0	µg/L	100		110	85-115			
Zinc	105	2.0	"	100		105	85-115			
Matrix Spike (B9L1410-MS1)	**Source: 0912126-01**			Prepared: 12/14/09 Analyzed: 12/17/09						
Aluminum	1860	50	µg/L	100	1900	NR	70-130			QM-07
Copper	376	2.0	"	100	310	66.0	70-130			QM-07
Iron	3.41	0.050	mg/L	1.00	2.6	81.0	70-130			
Lead	122	2.0	µg/L	100	24	98.0	70-130			
Zinc	331	2.0	"	100	240	91.0	70-130			

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1410 - EPA 200 Series										
Matrix Spike (B9L1410-MS2)	**Source: 0912155-04**			Prepared: 12/14/09	Analyzed: 12/17/09					
Aluminum	1490	50	µg/L	100	970	520	70-130			QM-07
Copper	116	2.0	"	100	25	91.0	70-130			
Iron	2.65	0.050	mg/L	1.00	1.5	115	70-130			
Lead	114	2.0	µg/L	100	8.5	106	70-130			
Zinc	219	2.0	"	100	110	109	70-130			
Matrix Spike Dup (B9L1410-MSD1)	**Source: 0912126-01**			Prepared: 12/14/09	Analyzed: 12/17/09					
Aluminum	1840	50	µg/L	100	1900	NR	70-130	1.08	20	QM-07
Copper	360	2.0	"	100	310	50.0	70-130	4.35	20	QM-07
Iron	3.26	0.050	mg/L	1.00	2.6	66.0	70-130	4.50	20	QM-07
Lead	122	2.0	µg/L	100	24	98.0	70-130	0.00	20	
Zinc	300	2.0	"	100	240	60.0	70-130	9.83	20	QM-07
Matrix Spike Dup (B9L1410-MSD2)	**Source: 0912155-04**			Prepared: 12/14/09	Analyzed: 12/17/09					
Aluminum	1560	50	µg/L	100	970	590	70-130	4.59	20	QM-07
Copper	122	2.0	"	100	25	97.0	70-130	5.04	20	
Iron	2.65	0.050	mg/L	1.00	1.5	115	70-130	0.00	20	
Lead	117	2.0	µg/L	100	8.5	108	70-130	2.60	20	
Zinc	231	2.0	"	100	110	121	70-130	5.33	20	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1413 - EPA 200 Series										
Blank (B9L1413-BLK1)				Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	ND	2.0	µg/L							
Zinc	ND	2.0	"							
Blank (B9L1413-BLK2)				Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	ND	2.0	µg/L							
Zinc	ND	2.0	"							
LCS (B9L1413-BS1)				Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	93.9	2.0	µg/L	100		93.9	85-115			
Zinc	103	2.0	"	100		103	85-115			
LCS (B9L1413-BS2)				Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	91.5	2.0	µg/L	100		91.5	85-115			
Zinc	99.6	2.0	"	100		99.6	85-115			
Matrix Spike (B9L1413-MS1)	**Source: 0912126-05**			Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	114	2.0	µg/L	100	27	87.0	70-130			
Zinc	207	2.0	"	100	120	87.0	70-130			
Matrix Spike (B9L1413-MS2)	**Source: 0912155-04**			Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	110	2.0	µg/L	100	16	94.0	70-130			
Zinc	163	2.0	"	100	60	103	70-130			
Matrix Spike Dup (B9L1413-MSD1)	**Source: 0912126-05**			Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	113	2.0	µg/L	100	27	86.0	70-130	0.881	20	
Zinc	200	2.0	"	100	120	80.0	70-130	3.44	20	
Matrix Spike Dup (B9L1413-MSD2)	**Source: 0912155-04**			Prepared: 12/14/09 Analyzed: 12/15/09						
Copper	107	2.0	µg/L	100	16	91.0	70-130	2.76	20	
Zinc	158	2.0	"	100	60	98.0	70-130	3.12	20	

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SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Total Petroleum Hydrocarbons (TPH) by GC/FID - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1407 - EPA 3510C Sep Funnel										
Blank (B9L1407-BLK1)				Prepared & Analyzed: 12/11/09						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L							
Jet-A	ND	0.050	"							
Oil Range Organics (C22-C36)	ND	0.050	"							
Surrogate: o-Terphenyl	*0.0934*		"	*0.100*		*93.4*	*60-175*			
Surrogate: o-Terphenyl	*0.0934*		"	*0.100*		*93.4*	*60-175*			
Surrogate: o-Terphenyl	*0.0934*		"	*0.100*		*93.4*	*60-175*			
LCS (B9L1407-BS1)				Prepared & Analyzed: 12/11/09						
Diesel Range Organics (C10-C24)	0.463	0.050	mg/L	0.500		92.6	80-120			
Diesel Range Organics (C10-C24)	0.463	0.050	"	0.500		92.6	80-120			
Diesel Range Organics (C10-C24)	0.463	0.050	"	0.500		92.6	80-120			
LCS (B9L1407-BS2)				Prepared & Analyzed: 12/11/09						
Diesel Range Organics (C10-C24)	0.444	0.050	mg/L	0.500		88.8	80-120			
Diesel Range Organics (C10-C24)	0.444	0.050	"	0.500		88.8	80-120			
Diesel Range Organics (C10-C24)	0.444	0.050	"	0.500		88.8	80-120			
LCS Dup (B9L1407-BSD1)				Prepared & Analyzed: 12/11/09						
Diesel Range Organics (C10-C24)	0.498	0.050	mg/L	0.500		99.6	80-120	7.28	30	
Diesel Range Organics (C10-C24)	0.498	0.050	"	0.500		99.6	80-120	7.28	30	
Diesel Range Organics (C10-C24)	0.498	0.050	"	0.500		99.6	80-120	7.28	30	

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/18/09 13:27

Notes and Definitions

D-41	Sample appears to be a mixture of fuel hydrocarbons. Oil Range Hydrocarbons (C22-C36) reported.
D-49	Sample appears to be a mixture of fuel hydrocarbons. Total Petroleum Hydrocarbons quantified using a Jet-A standard for calibration.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
S-07	Surrogate recovery outside of control limits due to coelution with high levels of petroleum hydrocarbons.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

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Client: **Sierra Analytical Labs, Inc.**
26052 Merit Circle, Suite #105
Laguna Hills, CA 92653

Attention: **Nick Forsyth**
Sample: Liquid / 4 Samples
Project Name: #0912155
Method : **EPA 8015B**
Investigation: **Glycols**

REPORT

Laboratory No: 986761
Report Date: December 17, 2009
Sampling Date: December 7, 2009
Receiving Date: December 10, 2009
Analysis Date: December 16, 2009
Units: mg/L
Dilution Factor: 2
Reported By: LES

Analytical Results

Sample ID	Sample Description	Propylene Glycol	Ethylene Glycol	Surrogate (1-Butanol)	Surrogate % Recovery
708593-MB	Method Blank	ND	ND	205	103%
986761-1	C-B07-7	ND	ND	199	99.3%
986761-2	C-B05-4	ND	ND	224	112%
986761-3	C-B06-5	ND	ND	204	102%
986761-4	C-B03-2	ND	ND	200	100%
Practical Quantitation Limits		5.0	5.0	Surrogate Conc. = 200	APR = 50-200%
Sample RLs		**10.0**	**10.0**		

ND: Not detected, or below limit of detection.
RL: Reporting limit, or least amount of analyte quantifiable based on average sample size used and analytical technique employed.
APR: Allowable Percent Recovery

Rossina Tomova, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

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Established 1931

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(714) 730-6239 · FAX (714) 730-6462 · www.truesdail.com

REPORT

Client: Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite #105
Laguna Hills, CA 92653

Attention: Nick Forsyth
Sample: Liquid / 4 Samples
Project Name: #0912155
Method Number: EPA 8015B
Investigation: Glycols

QA/QC Batch No: 708593
Laboratory No: 986761
Report Date: December 17, 2009
Sampling Date: December 7, 2009
Receiving Date: December 10, 2009
Analysis Date: December 16, 2009
Units: mg/L
Reported By: LES

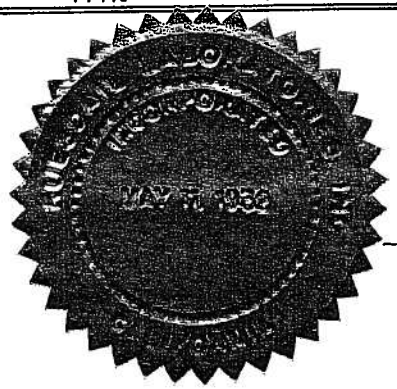
Quality Control/Quality Assurance Calibration Check Report

	MRCVS (1)				
Parameter	Spiked Concentration	Recovered Concentration	Percent Recovery	Flag	Accuracy Control Limits
Propylene Glycol	50.0	47.0	94.1%	PASS	70-130
Ethylene Glycol	50.0	54.8	110%	PASS	70-130

Quality Control/Quality Assurance Spikes Report

	LCS/LCSD							
Parameter	Spike Conc.	Recovered Concentration		Percent Recovery (%)		RPD (%)	Flag	Accuracy Control Limits
		LCS	LCSD	LCS	LCSD			RPD / % Recovery
Propylene Glycol	50.0	46.9	45.5	93.9%		#VALUE!	PASS	20 / 70-130
Ethylene Glycol	50.0	57.2	53.8	114%	108%	5.99%	PASS	20 / 70-130

MRCVS: Mid Range Calibration Verification Standard
LCS: Laboratory Control Spike
LCSD: Laboratory Control Spike Duplicate
RPD: Relative Percent Difference
Flag: "Pass" if within Control Limits; otherwise "Fail"



Rossina Tomova, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

SIERRA ANALYTICAL
TEL: 949•348•9389
FAX: 949•348•9115
26052 Merit Circle• Suite 105•Laguna Hills, CA•92653

CHAIN OF CUSTODY RECORD

Date: 12/8/09 Page 1 of 1

Lab Project No.: 0912155

Client: MACTEC
Client Address: 9177 Sky Park Court
San Diego, CA 92123

Client Tel. No.:
Client Fax. No.:
Client Proj. Mgr.: Amanda Arrowhead

Client Project ID:

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☒ 5 Day ☐ Normal ☐ Mobile

Geotracker EDD Info:

Client LOGCODE

Site Global ID

Analysis Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	O+G	TPH (jet fuel, Diesel, motor oil)	Ethylene glycols	pH TSS COND	Total Al, Cu, Fe, Pb, Zn	Diss Cu, Zn	BOD	COD	Ammonia	MBAS			Field Point Names/ Comments
C-B07-7	01	12-7	16:05	LIQ	N/A	VARIOUS		X	X	X	X	X	X	X	X	X	X			
S-B08-14/C-B08-8	02	12-7	1633	↓	↓	↓		X	X		X	X	X	X	X	X	X			
Comp. S-B08-1/S-B08-2	03	12-8	—	↓	↓	↓		X			X	X	X	X	X					
Comp. S-B08-3/S-B11-4	04	12-8	—	↓	↓	↓		X			X	X	X	X	X					
S-B11-13	05	12-7	1644	↓	↓	↓		X			X	X	X	X	X					
S-B06-12	06	12-7	1700	↓	↓	↓		X			X	X	X	X	X					
S-B11-13 DUP	07	12-7	1644	↓	↓	↓		X			X	X	X	X	X					
S-B08-1 BL	08	12-7	1745	↓	↓	↓		X			X	X		X	X					
C-B05-4	09	12-7	11:38	↓	↓	↓		X	X	X	X	X	X	X	X	X	X			
C-B06-5	10	12-7	12:34	↓	↓	↓		X	X	X	X	X	X	X	X	X	X			

1 Sampler Signature: | Shipped Via: | Printed Name: | (Carrier/Waybill No.)

2 Relinquished By: | Date | Received By: [illegible] | Date: 12/8/09
Company: | Time: | Company: Sierra | Time: 1540

3 Relinquished By: | Date | Received By: | Date:
Company: | Time: | Company: | Time:

4 Relinquished By: | Date | Received By: | Date:
Company: | Time: | Company: | Time:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analysis specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal*
☐ Archive ____ mos.
☐ Other ______

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☒ Intact
☐ Sample Seals
☒ Properly Labelled
☒ Appropriate Sample Container
☒ Chilled - Temp. (°C) 4.0°
☐ ~~Preservatives - Verified By~~
☐ Other
☒ Storage Location R105

SIERRA ANALYTICAL
TEL: 949•348•9389
FAX: 949•348•9115
26052 Merit Circle• Suite 105•Laguna Hills, CA•92653

CHAIN OF CUSTODY RECORD

Date: 12/8/09 Page 1 of 1

Lab Project No.: 0912155

Client: MACTEC
Client Address: 9177 Sky Park Court
San Diego, CA 92123
Client Tel. No.:
Client Fax. No.:
Client Proj. Mgr.: Amanda Archambault

Client Project ID:

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☒ 5 Day ☐ Normal ☐ Mobile

Geotracker EDD Info:
Client LOGCODE
Site Global ID

Analysis Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	O&G	TPH (gasoline, Diesel, motor oil)	Ethylene Glycols	PH TSS COND	Total Al, Cu, Fe, Pb, Zn	Diss Cu, Zn	BOD	COD	Ammonia	MBAS			Field Point Names/ Comments
C-B03-2	11	12-7	11:51	Liq	N/A	Various	—	X	X	X	X	X	X	X	X	X	X			

Sampler Signature:
Printed Name:

Shipped Via:
(Carrier/Waybill No.)

Relinquished By:	Date	Received By: [signature]	Date: 12/8/09
Company:	Time:	Company: Sierra	Time: 1540
Relinquished By:	Date	Received By:	Date:
Company:	Time:	Company:	Time:
Relinquished By:	Date	Received By:	Date:
Company:	Time:	Company:	Time:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analysis specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal*
☐ Archive ______ mos.
☐ Other ______

FOR LABORATORY USE ONLY - Sample Receipt Conditions:

☒ Intact
☐ Sample Seals
☒ Properly Labelled
☒ Appropriate Sample Container
☒ Chilled - Temp. (°C) 4.0
☐ Preservatives - Verified By
☐ Other
☒ Storage Location VC05

DISTRIBUTION: White - To Accompany Samples. Yellow - Laboratory Copy. Pink - Field Personnel Copy

Second Storm Event

SIERRA
ANALYTICAL

28 December 2009

Amanda Archenhold
MACTEC Engineering & Consulting
9177 Sky Park Court Suite A
San Diego, CA 92123

RE:San Diego Airport

Work Order No.: 0912228

Attached are the results of the analyses for samples received by the laboratory on 12/12/09 14:00.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report.
If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

Laboratory Director

Sierra Analytical Labs, Inc. is certified by the California Department of Health Services (DOHS), Environmental Laboratory Accredidation Program (ELAP) No. 2320.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
C-B01-1-12-11-09	0912228-01	Liquid	12/11/09 11:50	12/12/09 14:00
C-B05-3-12-11-09	0912228-02	Liquid	12/11/09 12:10	12/12/09 14:00
C-B05-4-12-11-09	0912228-03	Liquid	12/11/09 12:40	12/12/09 14:00
C-B06-5-12-11-09	0912228-04	Liquid	12/11/09 13:00	12/12/09 14:00
C-B07-6-12-11-09	0912228-05	Liquid	12/11/09 11:40	12/12/09 14:00
C-B07-7-12-11-09	0912228-06	Liquid	12/11/09 13:20	12/12/09 14:00
S-B08-14/C-B08-8-12-11-09	0912228-07	Liquid	12/11/09 23:50	12/12/09 14:00
C-B12-9-12-11-09	0912228-09	Liquid	12/11/09 11:30	12/12/09 14:00
C-B09-10-12-11-09	0912228-10	Liquid	12/11/09 11:30	12/12/09 14:00
S-B12-13-12-11-09	0912228-18	Liquid	12/11/09 15:17	12/12/09 14:00
S-B06-12-12-11-09	0912228-21	Liquid	12/11/09 00:16	12/12/09 14:00
C-06-5-12-11-09-DUP	0912228-23	Liquid	12/11/09 13:00	12/12/09 14:00
C-05-4-12-11-09-BL	0912228-24	Liquid	12/11/09 12:40	12/12/09 14:00
S-B08-14-12-11-09-DUP	0912228-25	Liquid	12/11/09 23:50	12/12/09 14:00
S-06-12-12-11-09-BL	0912228-26	Liquid	12/11/09 12:10	12/12/09 14:00
Composite S-B08-1/S-B08-2	0912228-27	Liquid	12/12/09 00:00	12/12/09 14:00
Composite S-B09-3/S-B11-4	0912228-28	Liquid	12/12/09 00:00	12/12/09 14:00

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 4°C, and accompanied by chain of custody documentation.
PRESERVATION: Samples requiring preservation were verified prior to sample preparation and analysis.
HOLDING TIMES: All holding times were met, unless otherwises noted in the report with data qualifiers.
QA/QC CRITERIA: All quality objective criteria were met, except as noted in the report with data qualifiers.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B01-1-12-11-09 (0912228-01) Liquid	**Sampled: 12/11/09 11:50**		**Received: 12/12/09 14:00**						
Ammonia as N	**2.45**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**7.80**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**25.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**138**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.150**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.19**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**16.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B05-3-12-11-09 (0912228-02) Liquid	**Sampled: 12/11/09 12:10**		**Received: 12/12/09 14:00**						
Ammonia as N	**1.80**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**11.9**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**41.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**328**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.180**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**8.19**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**14.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B05-4-12-11-09 (0912228-03) Liquid	**Sampled: 12/11/09 12:40**		**Received: 12/12/09 14:00**						
Ammonia as N	**3.55**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**20.9**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**87.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**230**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.160**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.13**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**8.00**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B06-5-12-11-09 (0912228-04) Liquid	**Sampled: 12/11/09 13:00**		**Received: 12/12/09 14:00**						
Ammonia as N	**2.90**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**6.30**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**26.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**173**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.120**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.12**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**11.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B07-6-12-11-09 (0912228-05) Liquid	**Sampled: 12/11/09 11:40**		**Received: 12/12/09 14:00**						
Ammonia as N	**1.55**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**24.3**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**98.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**196**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.110**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**6.47**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**17.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B07-7-12-11-09 (0912228-06) Liquid	**Sampled: 12/11/09 13:20**		**Received: 12/12/09 14:00**						
Ammonia as N	**1.40**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**27.2**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**103**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**237**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.180**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**6.66**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**12.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B08-14/C-B08-8-12-11-09 (0912228-07) Liquid Sampled: 12/11/09 23:50 Received: 12/12/09 14:00									
Ammonia as N	**1.35**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**43.8**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**207**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**467**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.110**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.16**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**4.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B12-9-12-11-09 (0912228-09) Liquid Sampled: 12/11/09 11:30 Received: 12/12/09 14:00									
Ammonia as N	**2.45**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**79.0**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**325**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**1890**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	**3.10**	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.140**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**9.96**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**38.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B09-10-12-11-09 (0912228-10) Liquid Sampled: 12/11/09 11:30 Received: 12/12/09 14:00									
Ammonia as N	**2.95**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**45.0**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**175**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**285**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	**2.50**	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.170**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.53**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**29.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B12-13-12-11-09 (0912228-18) Liquid	**Sampled: 12/11/09 15:17**		**Received: 12/12/09 14:00**						
Biochemical Oxygen Demand	**16.3**	2.00	mg/L	1	B9L2207	12/12/09	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**62.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**279**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.18**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**4.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B06-12-12-11-09 (0912228-21) Liquid	**Sampled: 12/11/09 00:16**		**Received: 12/12/09 14:00**						
Biochemical Oxygen Demand	**7.60**	2.00	mg/L	1	B9L2207	12/12/09	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**29.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**243**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.32**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**7.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
C-06-5-12-11-09-DUP (0912228-23) Liquid	**Sampled: 12/11/09 13:00**		**Received: 12/12/09 14:00**						
Ammonia as N	**2.75**	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	**6.70**	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**27.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**172**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.130**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.09**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**10.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-05-4-12-11-09-BL (0912228-24) Liquid	**Sampled: 12/11/09 12:40**		**Received: 12/12/09 14:00**						
Ammonia as N	ND	0.100	mg/L	1	B9L2207	12/12/09	12/12/09 16:30	SM 4500-NH3	
Biochemical Oxygen Demand	ND	2.00	"	"	"	"	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	ND	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**1.42**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	ND	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.43**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	ND	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B08-14-12-11-09-DUP (0912228-25) Liquid	**Sampled: 12/11/09 23:50**		**Received: 12/12/09 14:00**						
Biochemical Oxygen Demand	**49.5**	2.00	mg/L	1	B9L2207	12/12/09	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**190**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**442**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.17**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**14.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-06-12-12-11-09-BL (0912228-26) Liquid	**Sampled: 12/11/09 12:10**		**Received: 12/12/09 14:00**						
Biochemical Oxygen Demand	ND	2.00	mg/L	1	B9L2207	12/12/09	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	ND	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**3.04**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.38**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	ND	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S-B08-1/S-B08-2 (0912228-27) Liquid Sampled: 12/12/09 00:00 Received: 12/12/09 14:00									
Biochemical Oxygen Demand	**22.6**	2.00	mg/L	1	B9L2207	12/12/09	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**80.0**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**193**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**6.43**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**23.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
Composite S-B09-3/S-B11-4 (0912228-28) Liquid Sampled: 12/12/09 00:00 Received: 12/12/09 14:00									
Biochemical Oxygen Demand	**34.8**	2.00	mg/L	1	B9L2207	12/12/09	12/17/09 16:30	EPA 405.1	
Chemical Oxygen Demand	**130**	0.100	"	"	"	"	12/12/09 16:30	EPA 410.4	
Specific Conductance (EC)	**252**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	**2.00**	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**6.67**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**26.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B01-1-12-11-09 (0912228-01) Liquid	**Sampled: 12/11/09 11:50**		**Received: 12/12/09 14:00**						
Aluminum	**850**	50	µg/L	2	B9L1810	12/18/09	12/22/09 11:48	EPA 200.8	
Copper	**87**	2.0	"	"	"	"	"	"	
Iron	**1.0**	0.050	mg/L	"	"	"	"	"	
Lead	**5.1**	2.0	µg/L	"	"	"	"	"	
Zinc	**67**	2.0	"	"	"	"	"	"	
C-B05-3-12-11-09 (0912228-02) Liquid	**Sampled: 12/11/09 12:10**		**Received: 12/12/09 14:00**						
Aluminum	**4300**	250	µg/L	10	B9L1810	12/18/09	12/22/09 17:29	EPA 200.8	
Copper	**30**	2.0	"	2	"	"	12/22/09 12:00	"	
Iron	**4.4**	0.050	mg/L	"	"	"	"	"	
Lead	**24**	2.0	µg/L	"	"	"	"	"	
Zinc	**160**	2.0	"	"	"	"	"	"	
C-B05-4-12-11-09 (0912228-03) Liquid	**Sampled: 12/11/09 12:40**		**Received: 12/12/09 14:00**						
Aluminum	**540**	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:03	EPA 200.8	
Copper	**290**	2.0	"	"	"	"	"	"	
Iron	**0.70**	0.050	mg/L	"	"	"	"	"	
Lead	**2.7**	2.0	µg/L	"	"	"	"	"	
Zinc	**280**	2.0	"	"	"	"	"	"	
C-B06-5-12-11-09 (0912228-04) Liquid	**Sampled: 12/11/09 13:00**		**Received: 12/12/09 14:00**						
Aluminum	**2000**	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:07	EPA 200.8	
Copper	**180**	2.0	"	"	"	"	"	"	
Iron	**2.4**	0.050	mg/L	"	"	"	"	"	
Lead	**7.0**	2.0	µg/L	"	"	"	"	"	
Zinc	**170**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B07-6-12-11-09 (0912228-05) Liquid	**Sampled: 12/11/09 11:40**		**Received: 12/12/09 14:00**						
Aluminum	**1000**	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:11	EPA 200.8	
Copper	**220**	2.0	"	"	"	"	"	"	
Iron	**1.7**	0.050	mg/L	"	"	"	"	"	
Lead	**13**	2.0	µg/L	"	"	"	"	"	
Zinc	**970**	2.0	"	"	"	"	"	"	
C-B07-7-12-11-09 (0912228-06) Liquid	**Sampled: 12/11/09 13:20**		**Received: 12/12/09 14:00**						
Aluminum	**860**	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:15	EPA 200.8	
Copper	**130**	2.0	"	"	"	"	"	"	
Iron	**1.0**	0.050	mg/L	"	"	"	"	"	
Lead	**7.3**	2.0	µg/L	"	"	"	"	"	
Zinc	**580**	2.0	"	"	"	"	"	"	
S-B08-14/C-B08-8-12-11-09 (0912228-07) Liquid	**Sampled: 12/11/09 23:50**		**Received: 12/12/09 14:00**						
Aluminum	**160**	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:19	EPA 200.8	
Copper	**120**	2.0	"	"	"	"	"	"	
Iron	**0.15**	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**380**	2.0	"	"	"	"	"	"	
C-B12-9-12-11-09 (0912228-09) Liquid	**Sampled: 12/11/09 11:30**		**Received: 12/12/09 14:00**						
Aluminum	**93**	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:23	EPA 200.8	
Copper	**30**	2.0	"	"	"	"	"	"	
Iron	**0.11**	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**24**	2.0	"	"	"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B09-10-12-11-09 (0912228-10) Liquid	**Sampled: 12/11/09 11:30**		**Received: 12/12/09 14:00**						
Aluminum	**420**	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:34	EPA 200.8	
Copper	**56**	2.0	"	"	"	"	"	"	
Iron	**0.79**	0.050	mg/L	"	"	"	"	"	
Lead	**2.2**	2.0	µg/L	"	"	"	"	"	
Zinc	**160**	2.0	"	"	"	"	"	"	
S-B12-13-12-11-09 (0912228-18) Liquid	**Sampled: 12/11/09 15:17**		**Received: 12/12/09 14:00**						
Aluminum	ND	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:46	EPA 200.8	
Copper	**63**	2.0	"	"	"	"	"	"	
Iron	**0.087**	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**130**	2.0	"	"	"	"	"	"	
S-B06-12-12-11-09 (0912228-21) Liquid	**Sampled: 12/11/09 00:16**		**Received: 12/12/09 14:00**						
Aluminum	**92**	50	µg/L	2	B9L1810	12/18/09	12/22/09 12:58	EPA 200.8	
Copper	**35**	2.0	"	"	"	"	"	"	
Iron	**0.18**	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**110**	2.0	"	"	"	"	"	"	
C-06-5-12-11-09-DUP (0912228-23) Liquid	**Sampled: 12/11/09 13:00**		**Received: 12/12/09 14:00**						
Aluminum	**1700**	50	µg/L	2	B9L1810	12/18/09	12/22/09 13:02	EPA 200.8	
Copper	**190**	2.0	"	"	"	"	"	"	
Iron	**2.3**	0.050	mg/L	"	"	"	"	"	
Lead	**6.5**	2.0	µg/L	"	"	"	"	"	
Zinc	**170**	2.0	"	"	"	"	"	"	

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-05-4-12-11-09-BL (0912228-24) Liquid Sampled: 12/11/09 12:40 Received: 12/12/09 14:00									
Aluminum	ND	50	µg/L	2	B9L1810	12/18/09	12/22/09 13:05	EPA 200.8	
Copper	ND	2.0	"	"	"	"	"	"	
Iron	ND	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	ND	2.0	"	"	"	"	"	"	
S-B08-14-12-11-09-DUP (0912228-25) Liquid Sampled: 12/11/09 23:50 Received: 12/12/09 14:00									
Aluminum	ND	50	µg/L	2	B9L1810	12/18/09	12/22/09 13:09	EPA 200.8	
Copper	**110**	2.0	"	"	"	"	"	"	
Iron	ND	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**370**	2.0	"	"	"	"	"	"	
S-06-12-12-11-09-BL (0912228-26) Liquid Sampled: 12/11/09 12:10 Received: 12/12/09 14:00									
Aluminum	ND	50	µg/L	2	B9L1810	12/18/09	12/22/09 13:21	EPA 200.8	
Copper	ND	2.0	"	"	"	"	"	"	
Iron	ND	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	ND	2.0	"	"	"	"	"	"	
Composite S-B08-1/S-B08-2 (0912228-27) Liquid Sampled: 12/12/09 00:00 Received: 12/12/09 14:00									
Aluminum	**640**	50	µg/L	2	B9L1810	12/18/09	12/22/09 13:25	EPA 200.8	
Copper	**92**	2.0	"	"	"	"	"	"	
Iron	**1.0**	0.050	mg/L	"	"	"	"	"	
Lead	**4.2**	2.0	µg/L	"	"	"	"	"	
Zinc	**320**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S-B09-3/S-B11-4 (0912228-28) Liquid	**Sampled: 12/12/09 00:00**		**Received: 12/12/09 14:00**						
Aluminum	**1100**	50	µg/L	2	B9L1810	12/18/09	12/22/09 13:29	EPA 200.8	
Copper	**73**	2.0	"	"	"	"	"	"	
Iron	**1.7**	0.050	mg/L	"	"	"	"	"	
Lead	**9.6**	2.0	µg/L	"	"	"	"	"	
Zinc	**250**	2.0	"	"	"	"	"	"	

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals (Dissolved) by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B01-1-12-11-09 (0912228-01) Liquid	**Sampled: 12/11/09 11:50**		**Received: 12/12/09 14:00**						
Copper	**65**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 14:54	EPA 200.8	
Zinc	**40**	2.0	"	"	"	"	"	"	
C-B05-3-12-11-09 (0912228-02) Liquid	**Sampled: 12/11/09 12:10**		**Received: 12/12/09 14:00**						
Copper	**9.8**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:06	EPA 200.8	
Zinc	**9.7**	2.0	"	"	"	"	"	"	
C-B05-4-12-11-09 (0912228-03) Liquid	**Sampled: 12/11/09 12:40**		**Received: 12/12/09 14:00**						
Copper	**240**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:09	EPA 200.8	
Zinc	**230**	2.0	"	"	"	"	"	"	
C-B06-5-12-11-09 (0912228-04) Liquid	**Sampled: 12/11/09 13:00**		**Received: 12/12/09 14:00**						
Copper	**130**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:13	EPA 200.8	
Zinc	**120**	2.0	"	"	"	"	"	"	
C-B07-6-12-11-09 (0912228-05) Liquid	**Sampled: 12/11/09 11:40**		**Received: 12/12/09 14:00**						
Copper	**140**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:17	EPA 200.8	
Zinc	**780**	2.0	"	"	"	"	"	"	
C-B07-7-12-11-09 (0912228-06) Liquid	**Sampled: 12/11/09 13:20**		**Received: 12/12/09 14:00**						
Copper	**100**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:21	EPA 200.8	
Zinc	**480**	2.0	"	"	"	"	"	"	
S-B08-14/C-B08-8-12-11-09 (0912228-07) Liquid	**Sampled: 12/11/09 23:50**		**Received: 12/12/09 14:00**						
Copper	**83**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:25	EPA 200.8	
Zinc	**320**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals (Dissolved) by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B12-9-12-11-09 (0912228-09) Liquid	**Sampled: 12/11/09 11:30**		**Received: 12/12/09 14:00**						
Copper	**24**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:29	EPA 200.8	
Zinc	**20**	2.0	"	"	"	"	"	"	
C-B09-10-12-11-09 (0912228-10) Liquid	**Sampled: 12/11/09 11:30**		**Received: 12/12/09 14:00**						
Copper	**47**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:40	EPA 200.8	
Zinc	**130**	2.0	"	"	"	"	"	"	
S-B12-13-12-11-09 (0912228-18) Liquid	**Sampled: 12/11/09 15:17**		**Received: 12/12/09 14:00**						
Copper	**49**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 15:52	EPA 200.8	
Zinc	**110**	2.0	"	"	"	"	"	"	
S-B06-12-12-11-09 (0912228-21) Liquid	**Sampled: 12/11/09 00:16**		**Received: 12/12/09 14:00**						
Copper	**25**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 16:04	EPA 200.8	
Zinc	**85**	2.0	"	"	"	"	"	"	
C-06-5-12-11-09-DUP (0912228-23) Liquid	**Sampled: 12/11/09 13:00**		**Received: 12/12/09 14:00**						
Copper	**140**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 16:08	EPA 200.8	
Zinc	**120**	2.0	"	"	"	"	"	"	
C-05-4-12-11-09-BL (0912228-24) Liquid	**Sampled: 12/11/09 12:40**		**Received: 12/12/09 14:00**						
Copper	ND	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 16:11	EPA 200.8	
Zinc	ND	2.0	"	"	"	"	"	"	
S-B08-14-12-11-09-DUP (0912228-25) Liquid	**Sampled: 12/11/09 23:50**		**Received: 12/12/09 14:00**						
Copper	**90**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 16:15	EPA 200.8	
Zinc	**320**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals (Dissolved) by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S-B08-1/S-B08-2 (0912228-27) Liquid Sampled: 12/12/09 00:00 Received: 12/12/09 14:00									
Copper	**71**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 16:31	EPA 200.8	
Zinc	**270**	2.0	"	"	"	"	"	"	
Composite S-B09-3/S-B11-4 (0912228-28) Liquid Sampled: 12/12/09 00:00 Received: 12/12/09 14:00									
Copper	**56**	2.0	µg/L	2	B9L1812	12/18/09	12/22/09 16:35	EPA 200.8	
Zinc	**170**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Total Petroleum Hydrocarbons (TPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B01-1-12-11-09 (0912228-01) Liquid	**Sampled: 12/11/09 11:50**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 12:22	EPA 8015B	
Surrogate: o-Terphenyl		*84.6 %*	*60-175*		"	"	"	"	
Jet-A	**0.12**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*84.6 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.20**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*84.6 %*	*60-175*		"	"	"	"	
C-B05-3-12-11-09 (0912228-02) Liquid	**Sampled: 12/11/09 12:10**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 12:45	EPA 8015B	
Surrogate: o-Terphenyl		*96.3 %*	*60-175*		"	"	"	"	
Jet-A	**0.085**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*96.3 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.15**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*96.3 %*	*60-175*		"	"	"	"	
C-B05-4-12-11-09 (0912228-03) Liquid	**Sampled: 12/11/09 12:40**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 12:11	EPA 8015B	
Surrogate: o-Terphenyl		*124 %*	*60-175*		"	"	"	"	
Jet-A	**0.50**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*124 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.53**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*124 %*	*60-175*		"	"	"	"	
C-B06-5-12-11-09 (0912228-04) Liquid	**Sampled: 12/11/09 13:00**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 11:25	EPA 8015B	
Surrogate: o-Terphenyl		*93.5 %*	*60-175*		"	"	"	"	
Jet-A	**0.14**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*93.5 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.062**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*93.5 %*	*60-175*		"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Total Petroleum Hydrocarbons (TPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B07-6-12-11-09 (0912228-05) Liquid	**Sampled: 12/11/09 11:40**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 13:08	EPA 8015B	
Surrogate: o-Terphenyl		*123 %*	*60-175*		"	"	"	"	
Jet-A	**0.95**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*123 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**2.7**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*123 %*	*60-175*		"	"	"	"	
C-B07-7-12-11-09 (0912228-06) Liquid	**Sampled: 12/11/09 13:20**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 12:57	EPA 8015B	
Surrogate: o-Terphenyl		*123 %*	*60-175*		"	"	"	"	
Jet-A	**0.48**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*123 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.79**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*123 %*	*60-175*		"	"	"	"	
S-B08-14/C-B08-8-12-11-09 (0912228-07) Liquid	**Sampled: 12/11/09 23:50**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 11:36	EPA 8015B	
Surrogate: o-Terphenyl		*137 %*	*60-175*		"	"	"	"	
Jet-A	**0.78**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*137 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.42**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*137 %*	*60-175*		"	"	"	"	
C-B12-9-12-11-09 (0912228-09) Liquid	**Sampled: 12/11/09 11:30**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 11:59	EPA 8015B	
Surrogate: o-Terphenyl		*79.0 %*	*60-175*		"	"	"	"	
Jet-A	**0.38**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*79.0 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.44**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*79.0 %*	*60-175*		"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Total Petroleum Hydrocarbons (TPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B09-10-12-11-09 (0912228-10) Liquid	**Sampled: 12/11/09 11:30**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 12:34	EPA 8015B	
Surrogate: o-Terphenyl		*118 %*	*60-175*		"	"	"	"	
Jet-A	**0.39**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*118 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.77**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*118 %*	*60-175*		"	"	"	"	
C-06-5-12-11-09-DUP (0912228-23) Liquid	**Sampled: 12/11/09 13:00**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 11:48	EPA 8015B	
Surrogate: o-Terphenyl		*93.9 %*	*60-175*		"	"	"	"	
Jet-A	**0.18**	0.050	"	"	"	"	"	"	D-49
Surrogate: o-Terphenyl		*93.9 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.15**	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*93.9 %*	*60-175*		"	"	"	"	
C-05-4-12-11-09-BL (0912228-24) Liquid	**Sampled: 12/11/09 12:40**		**Received: 12/12/09 14:00**						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B9L2101	12/18/09	12/18/09 11:14	EPA 8015B	
Surrogate: o-Terphenyl		*83.4 %*	*60-175*		"	"	"	"	
Jet-A	ND	0.050	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*83.4 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	ND	0.050	"	"	"	"	"	"	D-41
Surrogate: o-Terphenyl		*83.4 %*	*60-175*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1810 - EPA 200 Series										
Blank (B9L1810-BLK1)				Prepared: 12/18/09 Analyzed: 12/22/09						
Aluminum	ND	50	µg/L							
Copper	ND	2.0	"							
Iron	ND	0.050	mg/L							
Lead	ND	2.0	µg/L							
Zinc	ND	2.0	"							
Blank (B9L1810-BLK2)				Prepared: 12/18/09 Analyzed: 12/22/09						
Aluminum	ND	50	µg/L							
Copper	ND	2.0	"							
Iron	ND	0.050	mg/L							
Lead	ND	2.0	µg/L							
Zinc	ND	2.0	"							
LCS (B9L1810-BS1)				Prepared: 12/18/09 Analyzed: 12/22/09						
Aluminum	118	50	µg/L	100		118	85-120			
Copper	95.7	2.0	"	100		95.7	85-115			
Iron	0.932	0.050	mg/L	1.00		93.2	85-115			
Lead	93.3	2.0	µg/L	100		93.3	85-115			
Zinc	107	2.0	"	100		107	85-115			
LCS (B9L1810-BS2)				Prepared: 12/18/09 Analyzed: 12/22/09						
Aluminum	104	50	µg/L	100		104	85-120			
Copper	94.7	2.0	"	100		94.7	85-115			
Iron	0.973	0.050	mg/L	1.00		97.3	85-115			
Lead	95.8	2.0	µg/L	100		95.8	85-115			
Zinc	105	2.0	"	100		105	85-115			
Matrix Spike (B9L1810-MS1)	**Source: 0912228-01**			Prepared: 12/18/09 Analyzed: 12/22/09						
Aluminum	1380	50	µg/L	100	850	530	70-130			QM-07
Copper	197	2.0	"	100	87	110	70-130			
Iron	2.95	0.050	mg/L	1.00	1.0	195	70-130			QM-07
Lead	109	2.0	µg/L	100	5.1	104	70-130			
Zinc	191	2.0	"	100	67	124	70-130			

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1810 - EPA 200 Series										
Matrix Spike (B9L1810-MS2)	**Source: 0912228-18**			Prepared: 12/18/09	Analyzed: 12/22/09					
Aluminum	161	50	µg/L	100	28	133	70-130			QM-07
Copper	150	2.0	"	100	63	87.0	70-130			
Iron	2.97	0.050	mg/L	1.00	0.087	288	70-130			QM-07
Lead	93.1	2.0	µg/L	100	0.68	92.4	70-130			
Zinc	222	2.0	"	100	130	92.0	70-130			
Matrix Spike Dup (B9L1810-MSD1)	**Source: 0912228-01**			Prepared: 12/18/09	Analyzed: 12/22/09					
Aluminum	1440	50	µg/L	100	850	590	70-130	4.26	20	QM-07
Copper	187	2.0	"	100	87	100	70-130	5.21	20	
Iron	2.49	0.050	mg/L	1.00	1.0	149	70-130	16.9	20	QM-07
Lead	104	2.0	µg/L	100	5.1	98.9	70-130	4.69	20	
Zinc	184	2.0	"	100	67	117	70-130	3.73	20	
Matrix Spike Dup (B9L1810-MSD2)	**Source: 0912228-18**			Prepared: 12/18/09	Analyzed: 12/22/09					
Aluminum	159	50	µg/L	100	28	131	70-130	1.25	20	QM-07
Copper	152	2.0	"	100	63	89.0	70-130	1.32	20	
Iron	1.15	0.050	mg/L	1.00	0.087	106	70-130	88.3	20	QM-07
Lead	92.6	2.0	µg/L	100	0.68	91.9	70-130	0.539	20	
Zinc	225	2.0	"	100	130	95.0	70-130	1.34	20	

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L1812 - EPA 200 Series										
Blank (B9L1812-BLK1)				Prepared: 12/18/09 Analyzed: 12/22/09						
Copper	ND	2.0	µg/L							
Zinc	ND	2.0	"							
Blank (B9L1812-BLK2)				Prepared: 12/18/09 Analyzed: 12/22/09						
Copper	ND	2.0	µg/L							
Zinc	ND	2.0	"							
LCS (B9L1812-BS1)				Prepared: 12/18/09 Analyzed: 12/22/09						
Copper	95.3	2.0	µg/L	100		95.3	85-115			
Zinc	101	2.0	"	100		101	85-115			
LCS (B9L1812-BS2)				Prepared: 12/18/09 Analyzed: 12/22/09						
Copper	90.7	2.0	µg/L	100		90.7	85-115			
Zinc	100	2.0	"	100		100	85-115			
Matrix Spike (B9L1812-MS1)	**Source: 0912228-01**			Prepared: 12/18/09 Analyzed: 12/22/09						
Copper	161	2.0	µg/L	100	65	96.0	70-130			
Zinc	138	2.0	"	100	40	98.0	70-130			
Matrix Spike (B9L1812-MS2)	**Source: 0912228-18**			Prepared: 12/18/09 Analyzed: 12/22/09						
Copper	133	2.0	µg/L	100	49	84.0	70-130			
Zinc	197	2.0	"	100	110	87.0	70-130			
Matrix Spike Dup (B9L1812-MSD1)	**Source: 0912228-01**			Prepared: 12/18/09 Analyzed: 12/22/09						
Copper	159	2.0	µg/L	100	65	94.0	70-130	1.25	20	
Zinc	136	2.0	"	100	40	96.0	70-130	1.46	20	
Matrix Spike Dup (B9L1812-MSD2)	**Source: 0912228-18**			Prepared: 12/18/09 Analyzed: 12/22/09						
Copper	141	2.0	µg/L	100	49	92.0	70-130	5.84	20	
Zinc	211	2.0	"	100	110	101	70-130	6.86	20	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Total Petroleum Hydrocarbons (TPH) by GC/FID - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9L2101 - EPA 3510C Sep Funnel										
Blank (B9L2101-BLK1)				Prepared & Analyzed: 12/18/09						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L							
Jet-A	ND	0.050	"							
Oil Range Organics (C22-C36)	ND	0.050	"							
Surrogate: o-Terphenyl	*0.0876*		"	*0.100*		*87.6*	*60-175*			
Surrogate: o-Terphenyl	*0.0876*		"	*0.100*		*87.6*	*60-175*			
Surrogate: o-Terphenyl	*0.0876*		"	*0.100*		*87.6*	*60-175*			
LCS (B9L2101-BS1)				Prepared & Analyzed: 12/18/09						
Diesel Range Organics (C10-C24)	0.499	0.050	mg/L	0.500		99.8	80-120			
Diesel Range Organics (C10-C24)	0.499	0.050	"	0.500		99.8	80-120			
Diesel Range Organics (C10-C24)	0.499	0.050	"	0.500		99.8	80-120			
LCS (B9L2101-BS2)				Prepared & Analyzed: 12/18/09						
Diesel Range Organics (C10-C24)	0.539	0.050	mg/L	0.500		108	80-120			
Diesel Range Organics (C10-C24)	0.539	0.050	"	0.500		108	80-120			
Diesel Range Organics (C10-C24)	0.539	0.050	"	0.500		108	80-120			
LCS Dup (B9L2101-BSD1)				Prepared & Analyzed: 12/18/09						
Diesel Range Organics (C10-C24)	0.532	0.050	mg/L	0.500		106	80-120	6.40	30	
Diesel Range Organics (C10-C24)	0.532	0.050	"	0.500		106	80-120	6.40	30	
Diesel Range Organics (C10-C24)	0.532	0.050	"	0.500		106	80-120	6.40	30	

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	12/28/09 10:40

Notes and Definitions

D-41	Sample appears to be a mixture of fuel hydrocarbons. Oil Range Hydrocarbons (C22-C36) reported.
D-49	Sample appears to be a mixture of fuel hydrocarbons. Total Petroleum Hydrocarbons quantified using a Jet-A standard for calibration.
H-01	Sample received without sufficient time to complete analysis within recommended holding time.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

PTS Laboratories, Inc.

8100 Secura Way • Santa Fe Springs, CA 90670
Telephone (562) 347-2500 • Fax (562) 907-3610

December 29, 2009

Nick Forsyth
Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite 105
Laguna Hills, CA 92653

Re: PTS File No: 391066
Physical Properties Data
0912228

Dear Mr. Forsyth:

Please find enclosed report for Physical Properties analyses conducted upon the sample received from your 0912228 project. All analyses were performed by applicable ASTM, EPA, or API methodologies. An electronic version of the report has previously been sent to your attention via the internet. The sample is currently in storage and will be retained for thirty days past completion of testing at no charge. Please note that the sample will be disposed of at that time. You may contact me regarding storage, disposal, or return of the sample.

PTS Laboratories appreciates the opportunity to be of service. If you have any questions or require additional information, please give me a call at (562) 347-2504.

Sincerely,
PTS Laboratories

Rachel Spitz
Project Manager

Encl.

PTS Laboratories

Project Name: N/A
Project Number: 0912228

PTS File No: 391066
Client: Sierra Analytical Labs, Inc.

TEST PROGRAM

FLUID ID	Date	Time	Fluid Type / Matrix	Particle Size: Microsize				Notes
Method:				ASTM D4464				
Received 12/16/09								
S-B06-12-12-11-09 (0912228-20)	12/11/09	1210	Aqueous	X				
TOTALS:			1 Water	1				

Laboratory Test Program Notes

PTS Laboratories, Inc.

Sierra Analytical Labs, Inc.
PTS File No: 391066

PARTICLE SIZE SUMMARY
(METHODOLOGY: ASTM D4464M)

ROJECT NAME: N/A
ROJECT NO: 0912228

Sample ID	Matrix	Median Grain Size, micron (1)	CUMULATIVE PERCENT GREATER THAN Distribution percent, microns										
			5%	10%	16%	25%	40%	50%	60%	75%	84%	90%	95%
S-B06-12-12-11-09 (0912228-20)	N/A	74.202	110.122	102.212	96.929	89.512	79.934	74.202	67.698	56.445	44.888	25.723	14.362

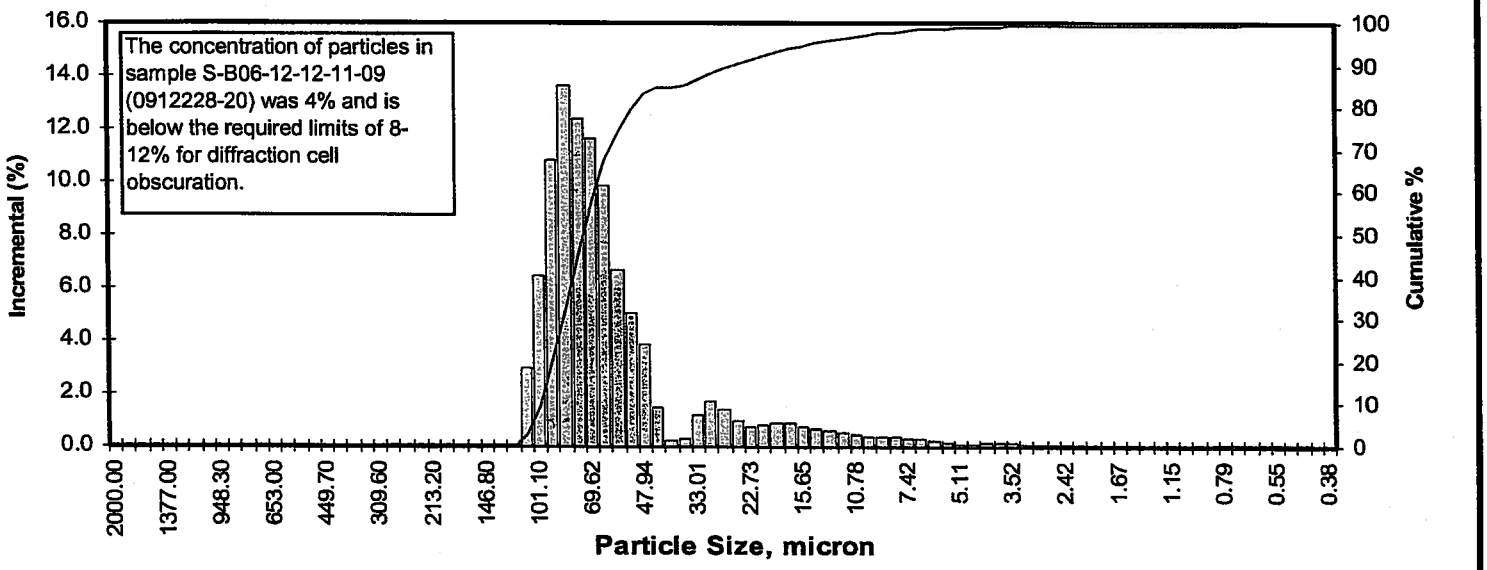
he concentration of particles in sample S-B06-12-12-11-09 (0912228-20) was 4%.
e sample was below the required limits of 8-12% for diffraction cell obscuration.

(1) Based on Trask Median

PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client:	Sierra Analytical Labs, Inc.	**PTS File No:**	391066
Project:	N/A	**Sample ID:**	S-B06-12-12-11-09 (0912228-20)
Project No:	0912228	**Matrix:**	N/A



Particle Diameter, micron	Particle Distribution	
	Incremental percent	Cumulative percent
2000.00	0.00	0.0
1822.00	0.00	0.0
1660.00	0.00	0.0
1512.00	0.00	0.0
1377.00	0.00	0.0
1255.00	0.00	0.0
1143.00	0.00	0.0
1041.00	0.00	0.0
948.30	0.00	0.0
863.90	0.00	0.0
786.90	0.00	0.0
716.90	0.00	0.0
653.00	0.00	0.0
594.90	0.00	0.0
541.90	0.00	0.0
493.60	0.00	0.0
449.70	0.00	0.0
409.60	0.00	0.0
373.10	0.00	0.0
339.90	0.00	0.0
309.60	0.00	0.0
282.10	0.00	0.0
256.90	0.00	0.0
234.10	0.00	0.0
213.20	0.00	0.0
194.20	0.00	0.0
176.90	0.00	0.0
161.20	0.00	0.0
146.80	0.00	0.0
133.70	0.00	0.0
121.80	0.00	0.0
111.00	2.98	3.0
101.10	6.48	9.5
92.10	10.80	20.3
83.90	13.60	33.9
76.43	12.40	46.3
69.62	11.60	57.9
63.42	9.82	67.7
57.77	6.70	74.4

Particle Diameter, micron	Particle Distribution	
	Incremental percent	Cumulative percent
52.63	5.04	79.4
47.94	3.83	83.3
43.67	1.46	84.7
39.78	0.20	84.9
36.24	0.28	85.2
33.01	1.18	86.4
30.07	1.74	88.1
27.39	1.40	89.5
24.95	0.96	90.5
22.73	0.76	91.2
20.71	0.78	92.0
18.86	0.91	92.9
17.18	0.89	93.8
15.65	0.74	94.6
14.26	0.66	95.2
12.99	0.62	95.8
11.83	0.52	96.4
10.78	0.42	96.8
9.82	0.37	97.1
8.94	0.36	97.5
8.15	0.36	97.9
7.42	0.33	98.2
6.76	0.26	98.5
6.16	0.19	98.6
5.61	0.13	98.8
5.11	0.10	98.9
4.66	0.10	99.0
4.24	0.12	99.1
3.86	0.13	99.2
3.52	0.12	99.3
3.21	0.09	99.4
2.92	0.06	99.5
2.66	0.03	99.5
2.42	0.01	99.5
2.21	0.00	99.5
2.01	0.00	99.5
1.83	0.01	99.5
1.67	0.02	99.6
1.52	0.02	99.6

Particle Diameter, micron	Particle Distribution	
	Incremental percent	Cumulative percent
1.385	0.013	99.6
1.261	0.008	99.6
1.149	0.006	99.6
1.047	0.007	99.6
0.954	0.012	99.6
0.869	0.021	99.6
0.791	0.031	99.7
0.721	0.043	99.7
0.657	0.055	99.8
0.598	0.064	99.8
0.545	0.067	99.9
0.496	0.063	100.0
0.452	0.050	100.0
0.412	0.031	100.1
0.375	0.016	100.1
TOTALS:	**100.07**	**100.1**

Measure	Trask	Inman
Median, mm	0.0742	0.0742
Median, micron	74.202	74.202
Mean, mm	0.0730	0.0660
Mean, micron	72.979	65.962
Sorting	1.2593	0.555
Skewness	0.9579	0.306
Kurtosis	0.2162	1.646

Cumulative Percent greater than		
Distribution percent	Particle Size	
	Micron	Millimeters
5	110.122	0.1101
10	102.212	0.1022
16	96.929	0.0969
25	89.512	0.0895
40	79.934	0.0799
50	74.202	0.0742
60	67.698	0.0677
75	56.445	0.0564
84	44.888	0.0449
90	25.723	0.0257
95	14.362	0.0144

Phone: (562) 907-2607

SUBCONTRACT ORDER

Sierra Analytical Labs, Inc.

Sierra Project #: 0912228

391066

Comments

SENDING LABORATORY:

Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite 105
Laguna Hills, CA 92653
Phone: (949) 348-9389
Fax: (949) 348-9115
Laboratory Contact: Nick Forsyth

Turn Around Time Requested: ☒ Normal ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day

RECEIVING LABORATORY:

PTS Laboratories
8100 Secura Way
Santa Fe Springs, CA 90670
Phone : (562) 907-3607
Fax: (562) 907-3610

Analysis	Expires	Sampled:	Laboratory ID	Comments
Sample ID: S-B06-12-12-11-09 (0912228-20) Liquid		**12/11/09 12:10**		
Full Particle Sizing	06/09/10 12:10			

Containers Supplied:
1L Amber (A)

Special Instructions :

☑ Intact ☐ Sample Seals
☑ Properly Labeled ☑ Chilled TEMP (°C) 5.6°F
☑ Appropriate Container ☐ Preservatives - Verified By

TDK	12.16.09 / 13:00	PTS Labs Inc	12/16/09 13:00
Relinquished By	Date / Time	Received By	Date / Time
Relinquished By	Date / Time	Received By	Date / Time
Relinquished By	Date / Time	Received By	Date / Time

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Established 1931

14201 FRANKLIN AVENUE · TUSTIN, CALIFORNIA 92780-7008
(714) 730-6239 · FAX (714) 730-6462 · www.truesdail.com

Client: **Sierra Analytical Labs, Inc.**
26052 Merit Circle, Suite #105
Laguna Hills, CA 92653

Attention: **Nick Forsyth**
Sample: Liquid / 15 Samples
Project Name: #0912228
Method : **EPA 8015B**
Investigation: **Glycols**

REPORT

Laboratory No: 986878
Report Date: December 22, 2009
Sampling Date: December 11, 2009
Receiving Date: December 17, 2009
Analysis Date: December 21, 2009
Units: mg/L
Dilution Factor: 2
Reported By: LES

Analytical Results

Sample ID	Sample Description	Propylene Glycol	Ethylene Glycol	Surrogate (1-Butanol)	Surrogate % Recovery
708610-MB	Method Blank	ND	ND	245	122%
986878-1	C-B01-1-12-11-09	ND	ND	253	126%
986878-2	C-B05-3-12-11-09	ND	ND	227	113%
986878-3	C-B05-4-12-11-09	ND	ND	217	109%
986878-4	C-B06-5-12-11-09	ND	ND	252	126%
986878-5	C-B07-6-12-11-09	ND	ND	245	122%
986878-6	C-B07-7-12-11-09	ND	ND	223	112%
986878-7	S-B08-14/C-B08-8-12-11-09	17.3	ND	204	102%
986878-8	C-B12-9-12-11-09	ND	ND	221	110%
986878-9	C-B09-10-12-11-09	ND	ND	216	108%
986878-10	S-B08-1-12-11-09	ND	ND	217	108%
986878-11	S-B08-2-12-11-09	ND	ND	227	113%
986878-12	S-B11-4-12-11-09	ND	ND	223	112%
986878-13	S-B12-13-12-11-09	ND	ND	226	113%
986878-14	S-B06-12-12-11-09	ND	ND	219	110%
986878-15	C-06-5-12-11-09-Dup	ND	ND	210	105%
Practical Quantitation Limits		5.0	5.0	Surrogate Conc. = 200	APR = 50-200%
Sample RLs		**10.0**	**10.0**		

ND: Not detected, or below limit of detection.
RL: Reporting limit, or least amount of analyte quantifiable based on average sample size used and analytical technique employed.
APR: Allowable Percent Recovery

Rossina Tomova, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

TRUESDAIL LABORATORIES, INC.

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REPORT

Client: Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite #105
Laguna Hills, CA 92653

Attention: Nick Forsyth
Sample: Liquid / 15 Samples
Project Name: #0912228
Method Number: EPA 8015B
Investigation: Glycols

QA/QC Batch No: 708610
Laboratory No: 986878
Report Date: December 22, 2009
Sampling Date: December 11, 2009
Receiving Date: December 17, 2009
Analysis Date: December 21, 2009
Units: mg/L
Reported By: LES

Quality Control/Quality Assurance Calibration Check Report

MRCVS (1)

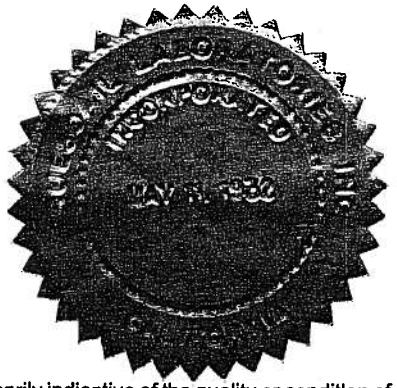
Parameter	Spiked Concentration	Recovered Concentration	Percent Recovery	Flag	Accuracy Control Limits
Propylene Glycol	50.0	51.1	102%	PASS	70-130
Ethylene Glycol	50.0	57.4	115%	PASS	70-130

Quality Control/Quality Assurance Spikes Report

LCS/LCSD

Parameter	Spike Conc.	Recovered Concentration		Percent Recovery (%)		RPD (%)	Flag	Accuracy Control Limits	
		LCS	LCSD	LCS	LCSD			RPD	% Recovery
Propylene Glycol	50.0	49.5	51.4	99.0%	103%	3.86%	PASS	20	70-130
Ethylene Glycol	50.0	60.4	53.6	121%	107%	11.9%	PASS	20	70-130

MRCVS: Mid Range Calibration Verification Standard
LCS: Laboratory Control Spike
LCSD: Laboratory Control Spike Duplicate
RPD: Relative Percent Difference
Flag: "Pass" if within Control Limits; otherwise "Fail"



Rossina Tomova, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

SIERRA ANALYTICAL
TEL: 949 • 348 • 9389
FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

CHAIN OF CUSTODY RECORD

Date: ___/___/___ Page: 1 of 7

Lab Work Order No.: 0912338

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	Field Point Names / Comments
C-B01-1- 12-11-09	01	12-11-09	1150	STORMWATER	NONE	PLASTIC	2	X				
C-B01-1- 12-11-09	↓	12-11-09	1150	STORMWATER	NONE	40ml VOA	2		X			
C-B01-1- 12-11-09		12-11-09	1150	STORMWATER	NONE	CLR GLASS	1			X		
C-B01-1- 12-11-09		12-11-09	1150	STORMWATER	NONE	AMBER GLASS	1				X	
~~C-B02-2-~~				STORMWATER	NONE	PLASTIC	2	X				
~~C-B03-2-~~				STORMWATER	NONE	40ml VOA	2		X			
~~C-B03-2-~~				STORMWATER	NONE	CLR GLASS	1			X		
~~C-B03-2-~~				STORMWATER	NONE	AMBER GLASS	1				X	
C-B05-3- 12-11-09	03	12-11-09	1210	STORMWATER	NONE	PLASTIC	2	X				
C-B05-3- 12-11-09	↓	12-11-09	1210	STORMWATER	NONE	40ml VOA	2		X			

Geotracker EDD Info:
Client LOGCODE
Site Global ID

Sampler Signature: Monica Stacy
Printed Name: MONICA STACY
Shipped Via
(Carrier/Waybill No.)

Total Number of Containers Submitted to Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

Relinquished By:	Date:	Received By:	Date:
Company: MACTEC	Time: 1400	Company: SA	Time: 1400
Relinquished By:	Date:	Received By:	Date:
Company:	Time:	Company:	Time:
Relinquished By:	Date:	Received By:	Date:
Company:	Time	Company:	Time

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Special Instructions:

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☒ Intact ☒ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☒ Properly Labelled ☐ Other
☒ Appropriate Sample Container ☒ Storage Location R105-Wareh

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

SIERRA ANALYTICAL

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CHAIN OF CUSTODY RECORD

Date: ____/____/____ Page: 2 of 7

Lab Work Order No.: 0912338

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)
C-B05-3- 12-11-09	02	12-11-09	1210	STORMWATER	NONE	CLR GLASS	1			X	
C-B05-3- 12-11-09	↓	12-11-09	1210	STORMWATER	NONE	AMBER GLASS	1				X
C-B05-4- 12-11-09	03	12/11/09	1240	STORMWATER	NONE	PLASTIC	2	X			
C-B05-4- 12-11-09		12/11/09	1240	STORMWATER	NONE	40ml VOA	2		X		
C-B05-4- 12-11-09		12/11/09	1240	STORMWATER	NONE	CLR GLASS	1			X	
C-B05-4- 12-11-09	↓	12/11/09	1240	STORMWATER	NONE	AMBER GLASS	1				X
C-B06-5- 12-11-09	04	12/11/09	1300	STORMWATER	NONE	PLASTIC	2	X			
C-B06-5- 12-11-09		12/11/09	1300	STORMWATER	NONE	40ml VOA	2		X		
C-B06-5- 12-11-09		12/11/09	1300	STORMWATER	NONE	CLR GLASS	1			X	
C-B06-5- 12-11-09	↓	12/11/09	1300	STORMWATER	NONE	AMBER GLASS	1				X

Geotracker EDD Info:
Client LOGCODE
Site Global ID
Field Point Names / Comments

1 Sampler Signature: Monica Stacy
Printed Name: MONICA STACY
Shipped Via:
Carrier/Waybill No.:

2 Relinquished By: [signature] Date: 12/12/09 Time: 1400
Company: MACTEC
Received By: B. Moff Date: 12.12.09 Time: 1400
Company: SA

3 Relinquished By: Date: Time:
Company:
Received By: Date: Time:
Company:

4 Relinquished By: Date: Time:
Company:
Received By: Date: Time:
Company:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT. * - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☒ Intact ☒ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☒ Properly Labelled ☐ Other
☒ Appropriate Sample Container ☒ Storage Location R105

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

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FAX: 949 • 348 • 9115
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CHAIN OF CUSTODY RECORD

Date: ____/____/____ Page: 3 of 7

Lab Work Order No.: 0912338

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn) BOD, COD, ammonia, MBAS, O&G, TPH (jet fuel,motor oil,diesel)							Field Point Names / Comments
C-B07-6-12-11-09	05	12-11-09	1140	STORMWATER	NONE	PLASTIC	2	X											
C-B07-6-12-11-09		12-11-09	1140	STORMWATER	NONE	40ml VOA	2		X										
C-B07-6-12-11-09		12-11-09	1140	STORMWATER	NONE	CLR GLASS	1			X									
C-B07-6-12-11-09		12-11-09	1140	STORMWATER	NONE	AMBER GLASS	1				X								
C-B07-7-12-11-09	06	12/11/09	1320	STORMWATER	NONE	PLASTIC	2	X											
C-B07-7-12-11-09		12/11/09	1320	STORMWATER	NONE	40ml VOA	2		X										
C-B07-7-12-11-09		12/11/09	1320	STORMWATER	NONE	CLR GLASS	1			X									
C-B07-7-12-11-09		12/11/09	1320	STORMWATER	NONE	AMBER GLASS	1				X								
S-B08-14/C-B08-8-12-11-09	07	12/11/09	2350	STORMWATER	NONE	5 GALL GLASS						X							
S-B08-14/C-B08-8-12-11-09	08	12/11/09	1230	STORMWATER	NONE	40ml VOA	2		X										

Geotracker EDD Info:
Client LOGCODE
Site Global ID

1 Sampler Signature: Monica Stacy
Printed Name: MONICA STACY
Shipped Via:
Carrier/Waybill No.:

Total Number of Containers Submitted to Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

2 Relinquished By:	Date: 12/12/09	Received By: B- Meff	Date: 12.12.09
Company: MACTEC	Time: 1400	Company: SDA	Time: 1400
3 Relinquished By:	Date:	Received By:	Date:
Company:	Time	Company:	Time:
4 Relinquished By:	Date:	Received By:	Date:
Company:	Time	Company:	Time:

Total Number of Containers Received by Laboratory

Special Instructions:

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☒ Intact ☒ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☒ Properly Labelled ☐ Other
☒ Appropriate Sample Container ☒ Storage Location 4405

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

CHAIN OF CUSTODY RECORD

SIERRA ANALYTICAL
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FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

Date: ____/____/____ Page: 4 of 7

Lab Work Order No.: 0912288

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn) BOD, COD, O&G	Field Point Names / Comments
C-B12-9- 12-11-09	09	12-11-09	1130	STORMWATER	NONE	PLASTIC	2	X					
C-B12-9- 12-11-09		12-11-09	1130	STORMWATER	NONE	40ml VOA	2		X				
C-B12-9- 12-11-09		12-11-09	1130	STORMWATER	NONE	CLR GLASS	1			X			
C-B12-9- 12-11-09		12-11-09	1130	STORMWATER	NONE	AMBER GLASS	1				X		
C-B09-10- 12-11-09	10	12-11-09	1130	STORMWATER	NONE	PLASTIC	2	X					
C-B09-10- 12-11-09		12-11-09	1130	STORMWATER	NONE	40ml VOA	2		X				
C-B09-10- 12-11-09		12-11-09	1130	STORMWATER	NONE	CLR GLASS	1			X			
C-B09-10- 12-11-09		12-11-09	1130	STORMWATER	NONE	AMBER GLASS	1				X		
S-B08-1- 12-11-09	11	12/11/09	2112	STORMWATER	NONE	5 GALL GLASS						X	composite together with S-B08-2 and analyze as 1 sample
S-B08-1- 12-11-09	12	12/11/09	1150	STORMWATER	NONE	40ml VOA	2		X				

Total Number of Containers Submitted to Laboratory

1 Sampler Signature: Monica Stacy
Printed Name: MONICA STACY
Shipped Via:
(Carrier/Waybill No.)

2 Relinquished By: Date: 12/12/09 Received By: B_Mc Date: 12.12.09
Company: MACTEC Time: 1400 Company: SA Time: 1460

3 Relinquished By: Date: Received By: Date:
Company: Time: Company: Time:

4 Relinquished By: Date: Received By: Date:
Company: Time: Company: Time:

Special Instructions:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location VIDS

Geotracker EDD Info:
Client LOGCODE
Site Global ID

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

Rev: 021104

SIERRA ANALYTICAL
TEL: 949 • 348 • 9389
FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

CHAIN OF CUSTODY RECORD

Date: ___/___/___

Lab Work Order No.: 0912228

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Geotracker EDD Info:
Client LOGCODE
Site Global ID

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn), BOD, COD, O&G	ethylene glycol	Particle size distribution									Field Point Names / Comments
S-B08-2-12-11-09	13	12/11/09	1249	STORMWATER	NONE	5 GALL GLASS		X											composite together with S-B08-1 and analyze as 1 sample
S-B08-2-12-11-09	14	12/11/09	1200	STORMWATER	NONE	40ml VOA	2		X										
S-B09-3-12-11-09	15	12/11/09	2208	STORMWATER	NONE	5 GALL GLASS		X											composite together with S-B11-4 and analyze as 1 sample
S-B11-4-12-11-09	16	12/11/09	1328	STORMWATER	NONE	5 GALL GLASS		X											composite together with S-B09-3 and analyze as 1 sample
S-B11-4-12-11-09	17	12/11/09	1140	STORMWATER	NONE	40ml VOA	2		X										
S-B12-13-12-11-09	18	12/11/09	1517	STORMWATER	NONE	5 GALL GLASS		X											
S-B12-13-12-11-09	19	12/11/09	1240	STORMWATER	NONE	40ml VOA	2		X										
S-B06-12-12-11-09	20	12/11/09	1210	STORMWATER	NONE	AMBER GLASS	1			X									
S-B06-12-12-11-09	21	12/12/09	0016	STORMWATER	NONE	5 GALL GLASS		X											
S-B06-12-12-11-09	22	12/11/09	1210	STORMWATER	NONE	40ml VOA	2		X										

1. Sampler Signature: [signature] Shipped Via:
Printed Name: Lijun Xu (Carrier/Waybill No.)

2. Relinquished By: [signature] Date: 12/12/09 Received By: B. [signature] Date: 12.12.09
Company: MACTEC Time: 1400 Company: SA Time: 1400

3. Relinquished By: Date: Received By: Date:
Company: Time: Company: Time:

4. Relinquished By: Date: Received By: Date:
Company: Time: Company: Time:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ___ mos.
☐ Other ___

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☒ Intact ☒ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☒ Properly Labelled ☐ Other
☒ Appropriate Sample Container ☒ Storage Location A05

CHAIN OF CUSTODY RECORD

SIERRA ANALYTICAL
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FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

Date: ___/___/___ Page: 6 of 7

Lab Work Order No.: 0912220

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC), ammonia, MBAS tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn), BOD, COD.	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	Field Point Names / Comments
C-06-5-12-11-09 -DUP	23	12/11/09	1300	STORMWATER	NONE	PLASTIC	2	X				
C-06-5-12-11-09 -DUP		12/11/09	1300	STORMWATER	NONE	40ml VOA	2		X			
C-06-5-12-11-09 -DUP		12/11/09	1300	STORMWATER	NONE	CLR GLASS	1			X		
C-06-5-12-11-09 -DUP		12/11/09	1300	STORMWATER	NONE	AMBER GLASS	1				X	

Geotracker EDD Info:
Client LOGCODE
Site Global ID

1 Sampler Signature: Monica Stacy
Printed Name: MONICA STACY
Shipped Via:
(Carrier/Waybill No.)

2 Relinquished By: Date: 12/14/09 Received By: B-Mess Date: 12.12.09
Company: MACTEC Time: 1400 Company: SA Time: 1400

3 Relinquished By: Date: Received By: Date:
Company: Time: Company: Time:

4 Relinquished By: Date: Received By: Date:
Company: Time: Company: Time:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ max.
☐ Other ____

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☒ Intact ☒ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☒ Properly Labelled ☐ Other
☒ Appropriate Sample Container ☒ Storage Location 4565

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

Rev: 021104

CHAIN OF CUSTODY RECORD

SIERRA ANALYTICAL
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FAX: 949 • 348 • 9115
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Date: ____/____/____ Page: 7 of 7

Lab Work Order No.: 0912222

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, oil & grease	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), BOD, COD, oil & grease
C-05-4-12-11-09 -BL	24	12/11/09	1240	STORMWATER	NONE	PLASTIC	2	X				
C-05-4-12-11-09 -BL		12/11/09	1240	STORMWATER	NONE	CLR GLASS	1		X			
C-05-4-12-11-09 -BL		12/11/09	1240	STORMWATER	NONE	AMBER GLASS	1			X		
S-08-1K-12-11-09 -DUP	25	12/11/09	2350	STORMWATER	NONE	5 GALL GLASS					X	
S-06-12-[redacted] -BL	26	12/11/09	1210	STORMWATER	NONE	5 GALL GLASS						X
-12-11-09												
Comp. S-B06-1/S-B06-4	27										X	
Comp. S-B09-7/S-B11-4	28										X	

Geotracker EDD Info:
Client LOGCODE
Site Global ID
Field Point Names / Comments

1 Sampler Signature: Monica Stacy
Printed Name: MONICA STACY
Shipped Via: (Carrier/Waybill No.)

Total Number of Containers Submitted to Laboratory

Sample Disposal: ☐ Return to Client ☐ Lab Disposal * ☐ Archive ____ mos. ☐ Other ____

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

2 Relinquished By:		Date: 12/12/09	Received By: B. Mcff		Date: 12.17.09
Company: MACTEC		Time: 1400	Company: SA		Time: 1400
3 Relinquished By:		Date:	Received By:		Date:
Company:		Time:	Company:		Time:
4 Relinquished By:		Date:	Received By:		Date:
Company:		Time:	Company:		Time:

Total Number of Containers Received by Laboratory

Special Instructions:

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location [redacted] 1205

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

Rev: 021101

Third Storm Event

SIERRA ANALYTICAL

27 January 2010

Amanda Archenhold
MACTEC Engineering & Consulting
9177 Sky Park Court Suite A
San Diego, CA 92123

RE:San Diego Airport

Work Order No.: 1001264

Attached are the results of the analyses for samples received by the laboratory on 01/19/10 12:20.

The samples were received by Sierra Analytical Labs, Inc. with a chain of custody record attached or completed at the submittal of the samples.

The analyses were performed according to the prescribed method as outlined by EPA, Standard Methods, and A.S.T.M.

The remaining portions of the samples will be disposed of within 30 days from the date of this report.
If you require any additional retaining time, please advise us.

Sincerely,

Richard K. Forsyth

Richard K. Forsyth

Laboratory Director

Sierra Analytical Labs, Inc. is certified by the California Department of Health Services (DOHS), Environmental Laboratory Accredidation Program (ELAP) No. 2320.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
S-B08-1-1-18-10	1001264-02	Liquid	01/18/10 16:20	01/19/10 12:20
S-B08-2-1-18-10	1001264-04	Liquid	01/18/10 16:30	01/19/10 12:20
S-B09-3-1-18-10	1001264-06	Liquid	01/18/10 16:10	01/19/10 12:20
S-B11-4-1-18-10	1001264-08	Liquid	01/18/10 16:15	01/19/10 12:20
S-B06-12-1-18-10	1001264-09	Liquid	01/18/10 17:35	01/19/10 12:20
S-B06-12-1-18-10	1001264-10	Liquid	01/18/10 15:30	01/19/10 12:20
S-B12-13-1-18-10	1001264-11	Liquid	01/18/10 17:46	01/19/10 12:20
S-B12-13-1-18-10	1001264-12	Liquid	01/18/10 16:00	01/19/10 12:20
S-B08-14-1-18-10	1001264-13	Liquid	01/18/10 22:08	01/19/10 12:20
S-B08-14-1-18-10	1001264-14	Liquid	01/18/10 15:50	01/19/10 12:20
S-B06-12-1-18-10-DUP	1001264-15	Liquid	01/18/10 17:35	01/19/10 12:20
S-B09-3-1-18-10-BL	1001264-16	Liquid	01/18/10 17:55	01/19/10 12:20
C-B03-2-1-18-10	1001264-18	Liquid	01/18/10 15:15	01/19/10 12:20
Composite S-B08-1/ S-B08-2	1001264-19	Liquid	01/19/10 00:00	01/19/10 12:20
Composite S-B09-3/ S-B11-4	1001264-20	Liquid	01/19/10 00:00	01/19/10 12:20

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 4°C, and accompanied by chain of custody documentation.
PRESERVATION: Samples requiring preservation were verified prior to sample preparation and analysis.
HOLDING TIMES: All holding times were met, unless otherwises noted in the report with data qualifiers.
QA/QC CRITERIA: All quality objective criteria were met, except as noted in the report with data qualifiers.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B06-12-1-18-10 (1001264-09) Liquid	**Sampled: 01/18/10 17:35**		**Received: 01/19/10 12:20**						
Biochemical Oxygen Demand	**3.60**	2.00	mg/L	1	B0A2508	01/19/10	01/24/10 16:00	EPA 405.1	
Chemical Oxygen Demand	**7.00**	0.100	"	"	"	"	01/19/10 16:00	EPA 410.4	
Specific Conductance (EC)	**52.0**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.43**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**3.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B12-13-1-18-10 (1001264-11) Liquid	**Sampled: 01/18/10 17:46**		**Received: 01/19/10 12:20**						
Biochemical Oxygen Demand	**3.40**	2.00	mg/L	1	B0A2508	01/19/10	01/24/10 16:00	EPA 405.1	
Chemical Oxygen Demand	**10.0**	0.100	"	"	"	"	01/19/10 16:00	EPA 410.4	
Specific Conductance (EC)	**51.5**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.36**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**2.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B08-14-1-18-10 (1001264-13) Liquid	**Sampled: 01/18/10 22:08**		**Received: 01/19/10 12:20**						
Biochemical Oxygen Demand	ND	2.00	mg/L	1	B0A2508	01/19/10	01/24/10 16:00	EPA 405.1	
Chemical Oxygen Demand	**4.00**	0.100	"	"	"	"	01/19/10 16:00	EPA 410.4	
Specific Conductance (EC)	**106**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.25**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**4.00**	1.00	mg/L	"	"	"	"	EPA 160.2	
S-B06-12-1-18-10-DUP (1001264-15) Liquid	**Sampled: 01/18/10 17:35**		**Received: 01/19/10 12:20**						
Biochemical Oxygen Demand	**3.20**	2.00	mg/L	1	B0A2508	01/19/10	01/24/10 16:00	EPA 405.1	
Chemical Oxygen Demand	**8.00**	0.100	"	"	"	"	01/19/10 16:00	EPA 410.4	
Specific Conductance (EC)	**52.3**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.40**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**2.00**	1.00	mg/L	"	"	"	"	EPA 160.2	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B09-3-1-18-10-BL (1001264-16) Liquid	**Sampled: 01/18/10 17:55**		**Received: 01/19/10 12:20**						
Biochemical Oxygen Demand	ND	2.00	mg/L	1	B0A2508	01/19/10	01/24/10 16:00	EPA 405.1	
Chemical Oxygen Demand	ND	0.100	"	"	"	"	01/19/10 16:00	EPA 410.4	
Specific Conductance (EC)	**1.66**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.14**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	ND	1.00	mg/L	"	"	"	"	EPA 160.2	
C-B03-2-1-18-10 (1001264-18) Liquid	**Sampled: 01/18/10 15:15**		**Received: 01/19/10 12:20**						
Ammonia as N	**1.30**	0.100	mg/L	1	B0A2508	01/19/10	01/19/10 16:00	SM 4500-NH3	
Biochemical Oxygen Demand	**28.0**	2.00	"	"	"	"	01/24/10 16:00	EPA 405.1	
Chemical Oxygen Demand	**55.0**	0.100	"	"	"	"	01/19/10 16:00	EPA 410.4	
Specific Conductance (EC)	**147**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
Methylene Blue Active Substances	**0.180**	0.0500	"	"	"	"	"	EPA 425.1	
pH	**7.02**	0.100	pH Units	"	"	"	"	EPA 150.1	H-01
Total Suspended Solids	**24.0**	1.00	mg/L	"	"	"	"	EPA 160.2	
Composite S-B08-1/ S-B08-2 (1001264-19) Liquid	**Sampled: 01/19/10 00:00**		**Received: 01/19/10 12:20**						
Biochemical Oxygen Demand	**12.0**	2.00	mg/L	1	B0A2508	01/19/10	01/24/10 16:00	EPA 405.1	
Chemical Oxygen Demand	**27.0**	0.100	"	"	"	"	01/19/10 16:00	EPA 410.4	
Specific Conductance (EC)	**43.4**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.47**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**9.00**	1.00	mg/L	"	"	"	"	EPA 160.2	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Conventional Chemistry Parameters by APHA/EPA Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite S-B09-3/ S-B11-4 (1001264-20) Liquid	**Sampled: 01/19/10 00:00**		**Received: 01/19/10 12:20**						
Biochemical Oxygen Demand	**20.6**	2.00	mg/L	1	B0A2508	01/19/10	01/24/10 16:00	EPA 405.1	
Chemical Oxygen Demand	**42.0**	0.100	"	"	"	"	01/19/10 16:00	EPA 410.4	
Specific Conductance (EC)	**60.1**	0.100	µmhos/cm	"	"	"	"	EPA 120.1	
Hexane Extractable Material (HEM)	ND	2.00	mg/L	"	"	"	"	EPA 1664	
pH	**7.16**	0.100	pH Units	"	"	"	"	EPA 150.1	
Total Suspended Solids	**17.0**	1.00	mg/L	"	"	"	"	EPA 160.2	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B06-12-1-18-10 (1001264-09) Liquid	**Sampled: 01/18/10 17:35**		**Received: 01/19/10 12:20**						
Aluminum	**260**	50	µg/L	2	B0A2109	01/21/10	01/25/10 17:53	EPA 200.8	
Copper	**39**	2.0	"	"	"	"	"	"	
Iron	**0.39**	0.050	mg/L	"	"	"	"	"	
Lead	**2.3**	2.0	µg/L	"	"	"	"	"	
Zinc	**110**	2.0	"	"	"	"	"	"	
S-B12-13-1-18-10 (1001264-11) Liquid	**Sampled: 01/18/10 17:46**		**Received: 01/19/10 12:20**						
Aluminum	**130**	50	µg/L	2	B0A2109	01/21/10	01/25/10 18:05	EPA 200.8	
Copper	**16**	2.0	"	"	"	"	"	"	
Iron	**0.18**	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**72**	2.0	"	"	"	"	"	"	
S-B08-14-1-18-10 (1001264-13) Liquid	**Sampled: 01/18/10 22:08**		**Received: 01/19/10 12:20**						
Aluminum	**160**	50	µg/L	2	B0A2109	01/21/10	01/25/10 18:09	EPA 200.8	
Copper	**41**	2.0	"	"	"	"	"	"	
Iron	**0.16**	0.050	mg/L	"	"	"	"	"	
Lead	**2.3**	2.0	µg/L	"	"	"	"	"	
Zinc	**140**	2.0	"	"	"	"	"	"	
S-B06-12-1-18-10-DUP (1001264-15) Liquid	**Sampled: 01/18/10 17:35**		**Received: 01/19/10 12:20**						
Aluminum	**160**	50	µg/L	2	B0A2109	01/21/10	01/25/10 18:12	EPA 200.8	
Copper	**20**	2.0	"	"	"	"	"	"	
Iron	**0.23**	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	**72**	2.0	"	"	"	"	"	"	

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
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E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Metals by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B09-3-1-18-10-BL (1001264-16) Liquid Sampled: 01/18/10 17:55 Received: 01/19/10 12:20									
Aluminum	ND	50	µg/L	2	B0A2109	01/21/10	01/25/10 18:16	EPA 200.8	
Copper	ND	2.0	"	"	"	"	"	"	
Iron	ND	0.050	mg/L	"	"	"	"	"	
Lead	ND	2.0	µg/L	"	"	"	"	"	
Zinc	ND	2.0	"	"	"	"	"	"	
C-B03-2-1-18-10 (1001264-18) Liquid Sampled: 01/18/10 15:15 Received: 01/19/10 12:20									
Aluminum	**660**	50	µg/L	2	B0A2109	01/21/10	01/25/10 18:20	EPA 200.8	
Copper	**200**	2.0	"	"	"	"	"	"	
Iron	**0.80**	0.050	mg/L	"	"	"	"	"	
Lead	**3.3**	2.0	µg/L	"	"	"	"	"	
Zinc	**210**	2.0	"	"	"	"	"	"	
Composite S-B08-1/ S-B08-2 (1001264-19) Liquid Sampled: 01/19/10 00:00 Received: 01/19/10 12:20									
Aluminum	**1400**	50	µg/L	2	B0A2109	01/21/10	01/25/10 18:32	EPA 200.8	
Copper	**43**	2.0	"	"	"	"	"	"	
Iron	**1.8**	0.050	mg/L	"	"	"	"	"	
Lead	**7.9**	2.0	µg/L	"	"	"	"	"	
Zinc	**180**	2.0	"	"	"	"	"	"	
Composite S-B09-3/ S-B11-4 (1001264-20) Liquid Sampled: 01/19/10 00:00 Received: 01/19/10 12:20									
Aluminum	**5200**	500	µg/L	20	B0A2109	01/21/10	01/26/10 14:45	EPA 200.8	
Copper	**66**	2.0	"	2	"	"	01/25/10 18:36	"	
Iron	**6.0**	0.050	mg/L	"	"	"	"	"	
Lead	**42**	2.0	µg/L	"	"	"	"	"	
Zinc	**400**	2.0	"	"	"	"	"	"	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Metals (Dissolved) by EPA 200 Series Methods

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
S-B06-12-1-18-10 (1001264-09) Liquid	**Sampled: 01/18/10 17:35**		**Received: 01/19/10 12:20**						
Copper	**5.7**	1.0	µg/L	1	B0A2133	01/21/10	01/25/10 20:32	EPA 200.8	
Zinc	**37**	1.0	"	"	"	"	"	"	
S-B12-13-1-18-10 (1001264-11) Liquid	**Sampled: 01/18/10 17:46**		**Received: 01/19/10 12:20**						
Copper	**6.1**	1.0	µg/L	1	B0A2133	01/21/10	01/25/10 20:36	EPA 200.8	
Zinc	**34**	1.0	"	"	"	"	"	"	
S-B08-14-1-18-10 (1001264-13) Liquid	**Sampled: 01/18/10 22:08**		**Received: 01/19/10 12:20**						
Copper	**23**	1.0	µg/L	1	B0A2133	01/21/10	01/25/10 20:40	EPA 200.8	
Zinc	**88**	1.0	"	"	"	"	"	"	
S-B06-12-1-18-10-DUP (1001264-15) Liquid	**Sampled: 01/18/10 17:35**		**Received: 01/19/10 12:20**						
Copper	**5.0**	1.0	µg/L	1	B0A2133	01/21/10	01/25/10 20:51	EPA 200.8	
Zinc	**31**	1.0	"	"	"	"	"	"	
C-B03-2-1-18-10 (1001264-18) Liquid	**Sampled: 01/18/10 15:15**		**Received: 01/19/10 12:20**						
Copper	**140**	1.0	µg/L	1	B0A2133	01/21/10	01/25/10 20:59	EPA 200.8	
Zinc	**140**	1.0	"	"	"	"	"	"	
Composite S-B08-1/ S-B08-2 (1001264-19) Liquid	**Sampled: 01/19/10 00:00**		**Received: 01/19/10 12:20**						
Copper	**10**	1.0	µg/L	1	B0A2133	01/21/10	01/25/10 21:03	EPA 200.8	
Zinc	**42**	1.0	"	"	"	"	"	"	
Composite S-B09-3/ S-B11-4 (1001264-20) Liquid	**Sampled: 01/19/10 00:00**		**Received: 01/19/10 12:20**						
Copper	**8.5**	1.0	µg/L	1	B0A2133	01/21/10	01/25/10 21:07	EPA 200.8	
Zinc	**37**	1.0	"	"	"	"	"	"	

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E-MAIL: SIERRALABS @ SIERRALABS.NET

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Total Petroleum Hydrocarbons (TPH) by GC/FID

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C-B03-2-1-18-10 (1001264-18) Liquid	**Sampled: 01/18/10 15:15 Received: 01/19/10 12:20**								
Diesel Range Organics (C10-C24)	ND	0.050	mg/L	1	B0A2622	01/22/10	01/22/10 19:28	EPA 8015B	
Surrogate: o-Terphenyl		*105 %*	*60-175*		"	"	"	"	
Jet-A	ND	0.050	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*105 %*	*60-175*		"	"	"	"	
Oil Range Organics (C22-C36)	**0.40**	0.050	"	"	"	"	"	"	
Surrogate: o-Terphenyl		*105 %*	*60-175*		"	"	"	"	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0A2109 - EPA 200 Series										
Blank (B0A2109-BLK1)				Prepared: 01/21/10 Analyzed: 01/25/10						
Aluminum	ND	50	µg/L							
Copper	ND	2.0	"							
Iron	ND	0.050	mg/L							
Lead	ND	2.0	µg/L							
Zinc	ND	2.0	"							
Blank (B0A2109-BLK2)				Prepared: 01/21/10 Analyzed: 01/25/10						
Aluminum	ND	50	µg/L							
Copper	ND	2.0	"							
Iron	ND	0.050	mg/L							
Lead	ND	2.0	µg/L							
Zinc	ND	2.0	"							
LCS (B0A2109-BS1)				Prepared: 01/21/10 Analyzed: 01/25/10						
Aluminum	109	50	µg/L	100		109	85-115			
Copper	95.8	2.0	"	100		95.8	85-115			
Iron	0.958	0.050	mg/L	1.00		95.8	85-115			
Lead	106	2.0	µg/L	100		106	85-115			
Zinc	105	2.0	"	100		105	85-115			
LCS (B0A2109-BS2)				Prepared: 01/21/10 Analyzed: 01/25/10						
Aluminum	106	50	µg/L	100		106	85-115			
Copper	94.8	2.0	"	100		94.8	85-115			
Iron	0.942	0.050	mg/L	1.00		94.2	85-115			
Lead	108	2.0	µg/L	100		108	85-115			
Zinc	105	2.0	"	100		105	85-115			
Matrix Spike (B0A2109-MS1)	**Source: 1001264-09**			Prepared: 01/21/10 Analyzed: 01/25/10						
Aluminum	331	50	µg/L	100	260	71.0	70-130			
Copper	118	2.0	"	100	39	79.0	70-130			
Iron	1.23	0.050	mg/L	1.00	0.39	84.0	70-130			
Lead	105	2.0	µg/L	100	2.3	103	70-130			
Zinc	184	2.0	"	100	110	74.0	70-130			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Metals by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0A2109 - EPA 200 Series										
Matrix Spike (B0A2109-MS2)	**Source: 1001278-01**			Prepared: 01/21/10	Analyzed: 01/25/10					
Aluminum	223	50	µg/L	100	110	113	70-130			
Copper	599	2.0	"	100	530	69.0	70-130			QM-07
Iron	1.10	0.050	mg/L	1.00	0.17	93.0	70-130			
Lead	116	2.0	µg/L	100	6.3	110	70-130			
Zinc	244	2.0	"	100	140	104	70-130			
Matrix Spike Dup (B0A2109-MSD1)	**Source: 1001264-09**			Prepared: 01/21/10	Analyzed: 01/25/10					
Aluminum	339	50	µg/L	100	260	79.0	70-130	2.39	30	
Copper	129	2.0	"	100	39	90.0	70-130	8.91	30	
Iron	1.26	0.050	mg/L	1.00	0.39	87.0	70-130	2.41	30	
Lead	103	2.0	µg/L	100	2.3	101	70-130	1.92	30	
Zinc	183	2.0	"	100	110	73.0	70-130	0.545	30	
Matrix Spike Dup (B0A2109-MSD2)	**Source: 1001278-01**			Prepared: 01/21/10	Analyzed: 01/25/10					
Aluminum	222	50	µg/L	100	110	112	70-130	0.449	30	
Copper	595	2.0	"	100	530	65.0	70-130	0.670	30	QM-07
Iron	1.15	0.050	mg/L	1.00	0.17	98.0	70-130	4.44	30	
Lead	108	2.0	µg/L	100	6.3	102	70-130	7.14	30	
Zinc	241	2.0	"	100	140	101	70-130	1.24	30	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting 9177 Sky Park Court Suite A San Diego CA, 92123	Project: San Diego Airport Project Number: [none] Project Manager: Amanda Archenhold	**Reported:** 01/27/10 15:34

Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0A2133 - EPA 200 Series										
Blank (B0A2133-BLK1)				Prepared: 01/21/10 Analyzed: 01/25/10						
Copper	ND	1.0	µg/L							
Zinc	ND	1.0	"							
Blank (B0A2133-BLK2)				Prepared: 01/21/10 Analyzed: 01/25/10						
Copper	ND	1.0	µg/L							
Zinc	ND	1.0	"							
LCS (B0A2133-BS1)				Prepared: 01/21/10 Analyzed: 01/25/10						
Copper	85.7	1.0	µg/L	100		85.7	85-115			
Zinc	88.4	1.0	"	100		88.4	85-115			
LCS (B0A2133-BS2)				Prepared: 01/21/10 Analyzed: 01/25/10						
Copper	87.7	1.0	µg/L	100		87.7	85-115			
Zinc	91.1	1.0	"	100		91.1	85-115			
Matrix Spike (B0A2133-MS1)	**Source: 1001263-01**			Prepared: 01/21/10 Analyzed: 01/25/10						
Copper	98.9	1.0	µg/L	100	13	85.9	70-130			
Zinc	274	1.0	"	100	180	94.0	70-130			
Matrix Spike (B0A2133-MS2)	**Source: 1001263-10**			Prepared: 01/21/10 Analyzed: 01/25/10						
Copper	88.9	1.0	µg/L	100	0.15	88.8	70-130			
Zinc	93.0	1.0	"	100	0.31	92.7	70-130			
Matrix Spike Dup (B0A2133-MSD1)	**Source: 1001263-01**			Prepared: 01/21/10 Analyzed: 01/25/10						
Copper	99.4	1.0	µg/L	100	13	86.4	70-130	0.504	30	
Zinc	272	1.0	"	100	180	92.0	70-130	0.733	30	
Matrix Spike Dup (B0A2133-MSD2)	**Source: 1001263-10**			Prepared: 01/21/10 Analyzed: 01/25/10						
Copper	90.1	1.0	µg/L	100	0.15	90.0	70-130	1.34	30	
Zinc	96.7	1.0	"	100	0.31	96.4	70-130	3.90	30	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Total Petroleum Hydrocarbons (TPH) by GC/FID - Quality Control

Sierra Analytical Labs, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B0A2622 - EPA 3510C Sep Funnel										
Blank (B0A2622-BLK1)				Prepared & Analyzed: 01/22/10						
Diesel Range Organics (C10-C24)	ND	0.050	mg/L							
Jet-A	ND	0.050	"							
Oil Range Organics (C22-C36)	ND	0.050	"							
Surrogate: o-Terphenyl	*0.113*		"	*0.100*		*113*	*60-175*			
Surrogate: o-Terphenyl	*0.113*		"	*0.100*		*113*	*60-175*			
Surrogate: o-Terphenyl	*0.113*		"	*0.100*		*113*	*60-175*			
LCS (B0A2622-BS1)				Prepared & Analyzed: 01/22/10						
Diesel Range Organics (C10-C24)	0.567	0.050	mg/L	0.500		113	80-120			
Diesel Range Organics (C10-C24)	0.567	0.050	"	0.500		113	80-120			
Diesel Range Organics (C10-C24)	0.567	0.050	"	0.500		113	80-120			
LCS (B0A2622-BS2)				Prepared & Analyzed: 01/22/10						
Diesel Range Organics (C10-C24)	0.540	0.050	mg/L	0.500		108	80-120			
Diesel Range Organics (C10-C24)	0.540	0.050	"	0.500		108	80-120			
Diesel Range Organics (C10-C24)	0.540	0.050	"	0.500		108	80-120			
LCS Dup (B0A2622-BSD1)				Prepared & Analyzed: 01/22/10						
Diesel Range Organics (C10-C24)	0.506	0.050	mg/L	0.500		101	80-120	11.4	30	
Diesel Range Organics (C10-C24)	0.506	0.050	"	0.500		101	80-120	11.4	30	
Diesel Range Organics (C10-C24)	0.506	0.050	"	0.500		101	80-120	11.4	30	

SIERRA ANALYTICAL

MACTEC Engineering & Consulting	Project: San Diego Airport	
9177 Sky Park Court Suite A	Project Number: [none]	**Reported:**
San Diego CA, 92123	Project Manager: Amanda Archenhold	01/27/10 15:34

Notes and Definitions

H-01	Sample received without sufficient time to complete analysis within recommended holding time.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

26052 MERIT CIRCLE SUITE 105, LAGUNA HILLS, CALIFORNIA 92653
TELEPHONE: (949) 348-9389 FAX: (949) 348-9115
E-MAIL: SIERRALABS @ SIERRALABS.NET

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Client: Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite #105
Laguna Hills, CA 92653

Attention: Nick Forsyth
Sample: Liquid / 8 Samples
Project Name: #1001264
Method : EPA 8015B
Investigation: Glycols

REPORT

Laboratory No: 987360
Report Date: January 22, 2010
Sampling Date: January 18, 2010
Receiving Date: January 20, 2010
Analysis Date: January 22, 2010
Units: mg/L
Dilution Factor: 2
Reported By: LES

Analytical Results

Sample ID	Sample Description	Propylene Glycol	Ethylene Glycol	Surrogate (1-Butanol)	Surrogate % Recovery
708660-MB	Method Blank	ND	ND	209	105%
987360-1	S-B08-1-1-18-10	ND	ND	204	102%
987360-2	S-B08-2-1-18-10	ND	ND	286	143%
987360-3	S-B09-3-1-18-10	ND	ND	370	185%
987360-4	S-B11-4-1-18-10	ND	ND	200	100%
987360-5	S-B06-12-1-18-10	ND	ND	221	110%
987360-6	S-B12-13-1-18-10	ND	ND	255	128%
987360-7	S-B08-14-1-18-10	ND	ND	207	103%
987360-8	C-B03-2-1-18-10	ND	ND	204	102%
Practical Quantitation Limits		5.0	5.0	Surrogate Conc. = 200	APR = 50-200%
Sample RLs		**10.0**	**10.0**		

ND: Not detected, or below limit of detection.
RL: Reporting limit, or least amount of analyte quantifiable based on average sample size used and analytical technique employed.
APR: Allowable Percent Recovery

Rossina Tomova, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

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REPORT

Client: Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite #105
Laguna Hills, CA 92653

Attention: Nick Forsyth
Sample: Liquid / 8 Samples
Project Name: #1001264
Method Number: EPA 8015B
Investigation: Glycols

QA/QC Batch No: 708660
Laboratory No: 987360
Report Date: January 22, 2010
Sampling Date: January 18, 2010
Receiving Date: January 20, 2010
Analysis Date: January 22, 2010
Units: mg/L
Reported By: LES

Quality Control/Quality Assurance Calibration Check Report

Parameter	MRCVS (1) Spiked Concentration	Recovered Concentration	Percent Recovery	Flag	Accuracy Control Limits
Propylene Glycol	50.0	43.6	87.3%	PASS	70-130
Ethylene Glycol	50.0	50.6	101%	PASS	70-130

Quality Control/Quality Assurance Spikes Report

Parameter	LCS/LCSD Spike Conc.	Recovered Concentration LCS	Recovered Concentration LCSD	Percent Recovery (%) LCS	Percent Recovery (%) LCSD	RPD (%)	Flag	Accuracy Control Limits RPD	Accuracy Control Limits % Recovery
Propylene Glycol	50.0	42.8	51.3	85.7%	103%	17.9%	PASS	20	70-130
Ethylene Glycol	50.0	44.9	41.9	89.7%	83.8%	6.84%	PASS	20	70-130

MRCVS: Mid Range Calibration Verification Standard
LCS: Laboratory Control Spike
LCSD: Laboratory Control Spike Duplicate
RPD: Relative Percent Difference
Flag: "Pass" if within Control Limits; otherwise "Fail"

Rossina Tomova, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

PTS Laboratories, Inc.

8100 Secura Way • Santa Fe Springs, CA 90670
Telephone (562) 347-2500 • Fax (562) 907-3610

February 8, 2010

Nick Forsyth
Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite 105
Laguna Hills, CA 92653

Re: PTS File No: 40050
Physical Properties Data
1001264

Dear Mr. Forsyth:

Please find enclosed report for Physical Properties analyses conducted upon waters received from your 1001264 project. All analyses were performed by applicable ASTM, EPA, or API methodologies. An electronic version of the report has previously been sent to your attention via the internet. Please note that the samples were consumed during testing.

PTS Laboratories appreciates the opportunity to be of service. If you have any questions or require additional information, please give me a call at (562) 347-2504.

Sincerely,
PTS Laboratories

Rachel Spitz
Project Manager

Encl.

PTS Laboratories

Project Name: N/A
Project Number: 1001264

PTS File No: 40050
Client: Sierra Analytical Labs, Inc.

TEST PROGRAM

FLUID ID	Date	Time	Fluid Type / Matrix	Particle Size: Microsize				Notes
Method:				ASTM D4464				
Date Received: 1/20/10								
S-B06-12-1-18-10	1/18/10	1735	Aqueous	X				
S-B06-12-PAR-1-18-10	1/18/10	1530	Aqueous	X				
TOTALS:			2 Waters	2				

Laboratory Test Program Notes

PTS Laboratories, Inc.

Sierra Analytical Labs, Inc.
PTS File No: 40050

PARTICLE SIZE SUMMARY
(METHODOLOGY: ASTM D4464M)

PROJECT NAME: N/A
PROJECT NO: 1001264

Sample ID	Matrix	Median Grain Size, micron (1)	CUMULATIVE PERCENT GREATER THAN Distribution percent, microns										
			5%	10%	16%	25%	40%	50%	60%	75%	84%	90%	95%
S-B06-12-1-18-10	Aqueous	111.552	487.844	232.779	198.097	167.991	133.310	111.552	90.889	47.045	23.244	14.760	8.023
S-B06-12-PAR-1-18-10	Aqueous	64.746	113.579	102.343	94.752	85.195	72.852	64.746	54.944	26.874	14.743	8.756	4.112

* The concentration of particles in samples S-B06-12-1-18-10 was 4% and S-B06-12-PAR-1-18-10 was 3%. These samples were below the required limits of 8-12% for diffraction cell obscuration.

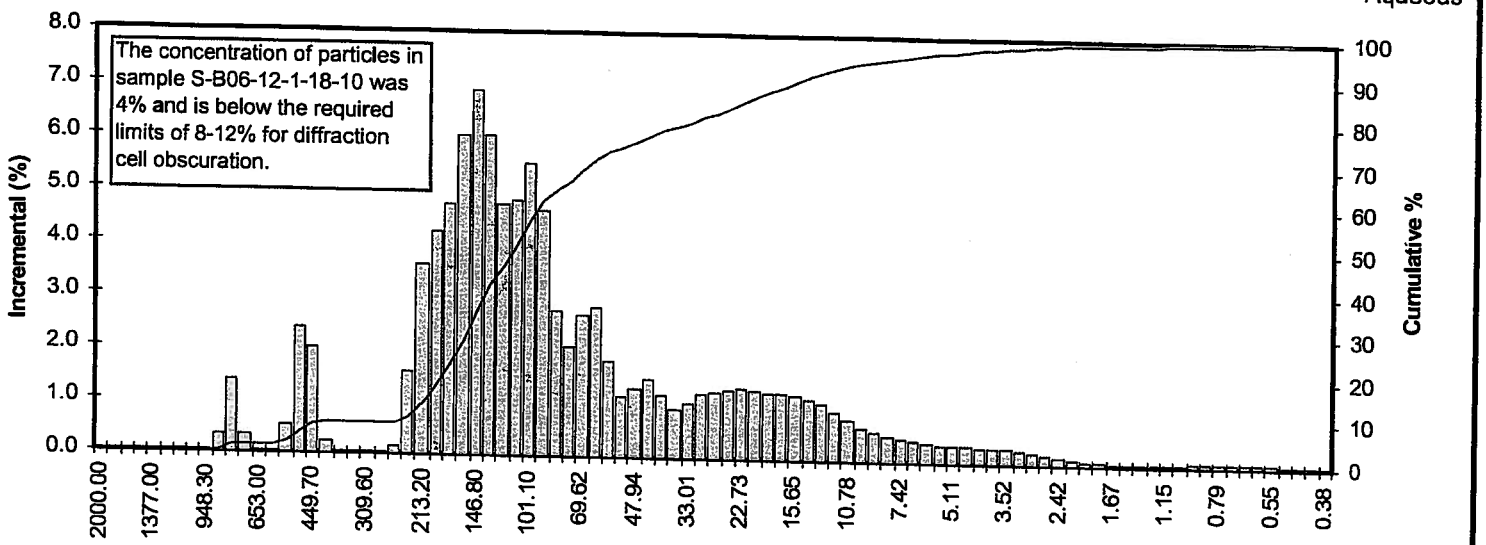
(1) Based on Trask Median

PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client: Sierra Analytical Labs, Inc.
Project: N/A
Project No: 1001264

PTS File No: 40050
Sample ID: S-B06-12-1-18-10
Matrix: Aqueous



Particle Size, micron

Particle Diameter, micron	Particle Distribution	
	Incremental percent	Cumulative percent
2000.00	0.00	0.0
1822.00	0.00	0.0
1660.00	0.00	0.0
1512.00	0.00	0.0
1377.00	0.00	0.0
1255.00	0.00	0.0
1143.00	0.00	0.0
1041.00	0.00	0.0
948.30	0.00	0.0
863.90	0.34	0.3
786.90	1.36	1.7
716.90	0.34	2.0
653.00	0.00	2.0
594.90	0.02	2.1
541.90	0.53	2.6
493.60	2.36	4.9
449.70	2.00	6.9
409.60	0.23	7.2
373.10	0.00	7.2
339.90	0.00	7.2
309.60	0.00	7.2
282.10	0.00	7.2
256.90	0.14	7.3
234.10	1.56	8.9
213.20	3.60	12.5
194.20	4.21	16.7
176.90	4.74	21.4
161.20	6.02	27.4
146.80	6.90	34.3
133.70	6.03	40.4
121.80	4.73	45.1
111.00	4.80	49.9
101.10	5.52	55.4
92.10	4.63	60.1
83.90	2.73	62.8
76.43	2.09	64.9
69.62	2.67	67.5
63.42	2.82	70.4
57.77	1.82	72.2
52.63	1.15	73.3
47.94	1.29	74.6
43.67	1.49	76.1
39.78	1.17	77.3
36.24	0.91	78.2
33.01	1.03	79.2
30.07	1.21	80.4
27.39	1.27	81.7
24.95	1.31	83.0
22.73	1.33	84.3
20.71	1.30	85.6
18.86	1.26	86.9
17.18	1.25	88.2
15.65	1.23	89.4
14.26	1.16	90.5
12.99	1.06	91.6
11.83	0.93	92.5
10.78	0.77	93.3
9.82	0.64	93.9
8.94	0.54	94.5
8.15	0.48	95.0
7.42	0.44	95.4
6.76	0.41	95.8
6.16	0.37	96.2
5.61	0.35	96.5
5.11	0.33	96.9
4.66	0.32	97.2
4.24	0.31	97.5
3.86	0.30	97.8
3.52	0.28	98.1
3.21	0.26	98.3
2.92	0.22	98.6
2.66	0.18	98.7
2.42	0.14	98.9
2.21	0.11	99.0
2.01	0.08	99.1
1.83	0.06	99.1
1.67	0.05	99.2
1.52	0.04	99.2
1.385	0.035	99.3
1.261	0.037	99.3
1.149	0.042	99.3
1.047	0.049	99.4
0.954	0.058	99.4
0.869	0.066	99.5
0.791	0.072	99.6
0.721	0.076	99.7
0.657	0.076	99.7
0.598	0.073	99.8
0.545	0.066	99.9
0.496	0.055	99.9
0.452	0.042	100.0
0.412	0.026	100.0
0.375	0.014	100.0
TOTALS:	**100.01**	**100.0**

Measure	Trask	Inman
Median, mm	0.1116	0.1116
Median, micron	111.552	111.552
Mean, mm	0.1075	0.0679
Mean, micron	107.518	67.856
Sorting	1.8897	1.546
Skewness	0.7969	0.464
Kurtosis	0.2774	0.917

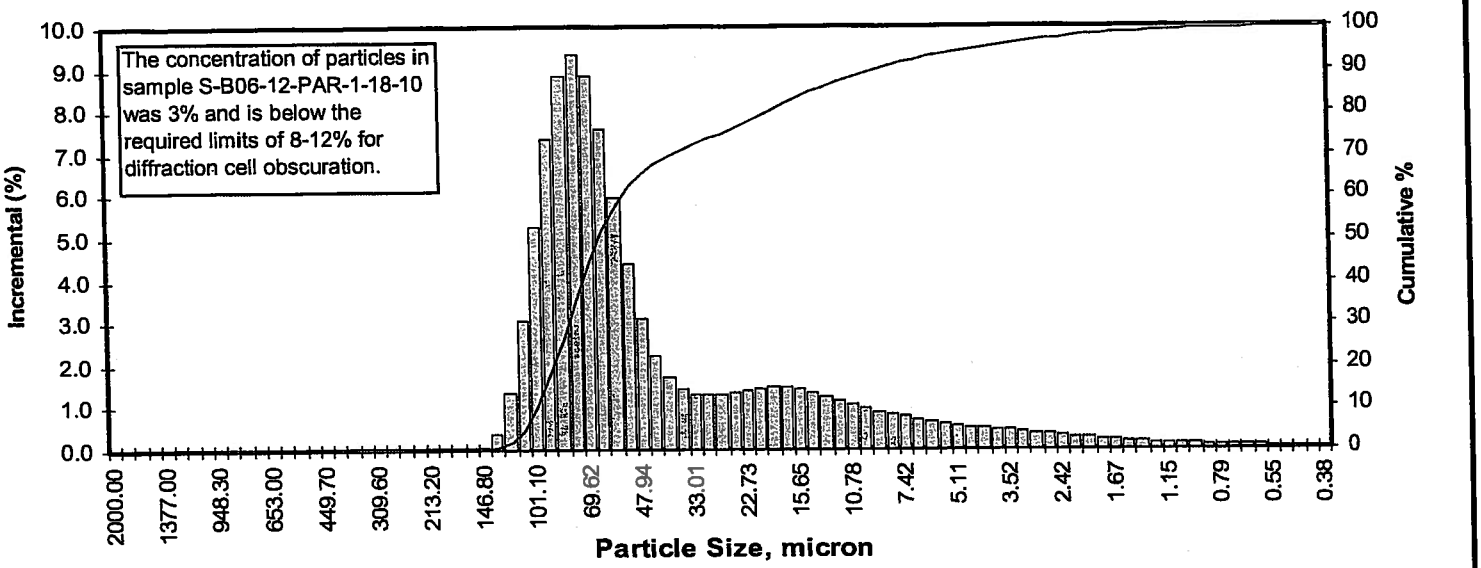
Cumulative Percent greater than		
Distribution percent	Particle Size	
	Micron	Millimeters
5	487.844	0.4878
10	232.779	0.2328
16	198.097	0.1981
25	167.991	0.1680
40	133.310	0.1333
50	111.552	0.1116
60	90.889	0.0909
75	47.045	0.0470
84	23.244	0.0232
90	14.760	0.0148
95	8.023	0.0080

Phone: (562) 907-3607
Fax: (562) 907-3611

PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client:	Sierra Analytical Labs, Inc.	**PTS File No:**	40050
Project:	N/A	**Sample ID:**	S-B06-12-PAR-1-18-10
Project No:	1001264	**Matrix:**	Aqueous



Particle Diameter, micron	Particle Distribution	
	Incremental percent	Cumulative percent
2000.00	0.00	0.0
1822.00	0.00	0.0
1660.00	0.00	0.0
1512.00	0.00	0.0
1377.00	0.00	0.0
1255.00	0.00	0.0
1143.00	0.00	0.0
1041.00	0.00	0.0
948.30	0.00	0.0
863.90	0.00	0.0
786.90	0.00	0.0
716.90	0.00	0.0
653.00	0.00	0.0
594.90	0.00	0.0
541.90	0.00	0.0
493.60	0.00	0.0
449.70	0.00	0.0
409.60	0.00	0.0
373.10	0.00	0.0
339.90	0.00	0.0
309.60	0.00	0.0
282.10	0.00	0.0
256.90	0.00	0.0
234.10	0.00	0.0
213.20	0.00	0.0
194.20	0.00	0.0
176.90	0.00	0.0
161.20	0.00	0.0
146.80	0.05	0.1
133.70	0.37	0.4
121.80	1.32	1.7
111.00	3.05	4.8
101.10	5.26	10.1
92.10	7.37	17.4
83.90	8.84	26.3
76.43	9.34	35.6
69.62	8.82	44.4
63.42	7.57	52.0
57.77	5.97	58.0

Particle Diameter, micron	Particle Distribution	
	Incremental percent	Cumulative percent
52.63	4.39	62.4
47.94	3.11	65.5
43.67	2.22	67.7
39.78	1.69	69.4
36.24	1.42	70.8
33.01	1.31	72.1
30.07	1.29	73.4
27.39	1.29	74.7
24.95	1.32	76.0
22.73	1.37	77.4
20.71	1.42	78.8
18.86	1.47	80.3
17.18	1.48	81.7
15.65	1.45	83.2
14.26	1.36	84.6
12.99	1.25	85.8
11.83	1.15	87.0
10.78	1.05	88.0
9.82	0.97	89.0
8.94	0.90	89.9
8.15	0.83	90.7
7.42	0.77	91.5
6.76	0.71	92.2
6.16	0.66	92.8
5.61	0.61	93.5
5.11	0.57	94.0
4.66	0.53	94.6
4.24	0.50	95.1
3.86	0.47	95.5
3.52	0.44	96.0
3.21	0.41	96.4
2.92	0.38	96.8
2.66	0.35	97.1
2.42	0.32	97.4
2.21	0.29	97.7
2.01	0.26	98.0
1.83	0.24	98.2
1.67	0.21	98.4
1.52	0.19	98.6

Particle Diameter, micron	Particle Distribution	
	Incremental percent	Cumulative percent
1.385	0.170	98.8
1.261	0.150	98.9
1.149	0.140	99.1
1.047	0.130	99.2
0.954	0.120	99.3
0.869	0.110	99.4
0.791	0.100	99.5
0.721	0.094	99.6
0.657	0.084	99.7
0.598	0.074	99.8
0.545	0.064	99.9
0.496	0.051	99.9
0.452	0.036	99.9
0.412	0.025	100.0
0.375	0.014	100.0
TOTALS:	**99.98**	**100.0**

Measure	Trask	Inman
Median, mm	0.0647	0.0647
Median, micron	64.746	64.746
Mean, mm	0.0560	0.0374
Mean, micron	56.034	37.376
Sorting	1.7805	1.342
Skewness	0.7390	0.591
Kurtosis	0.3116	0.784

Distribution percent	Cumulative Percent greater than Particle Size	
	Micron	Millimeters
5	113.579	0.1136
10	102.343	0.1023
16	94.752	0.0948
25	85.195	0.0852
40	72.852	0.0729
50	64.746	0.0647
60	54.944	0.0549
75	26.874	0.0269
84	14.743	0.0147
90	8.756	0.0088
95	4.112	0.0041

Phone: (562) 907-3607 Fax: (562) 907-3611

40050
1-20-10
TF

SIERRA ANALYTICAL

SUBCONTRACT ORDER

Sierra Analytical Labs, Inc.

Sierra Project #: 1001264

Comments

SENDING LABORATORY:

Sierra Analytical Labs, Inc.
26052 Merit Circle, Suite 105
Laguna Hills, CA 92653
Phone: (949) 348-9389
Fax: (949) 348-9115
Laboratory Contact: Nick Forsyth

Turn Around Time Requested: ☒ Normal ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day

RECEIVING LABORATORY:

PTS Laboratories
8100 Secura Way
Santa Fe Springs, CA 90670
Phone : (562) 907-3607
Fax: (562) 907-3610

Analysis	Expires	Sampled:	Laboratory ID	Comments
Sample ID: S-B06-12-1-18-10 (1001264-09)	**Liquid**	**01/18/10 17:35**	[redacted]	
Full Particle Sizing	07/17/10 17:35			
Containers Supplied: 1L Amber (C)				
Sample ID: S-B06-12-PAR-1-18-10 (1001264-17)	**Liquid**	**01/18/10 15:30**	[redacted]	
Full Particle Sizing	07/17/10 15:30			
Containers Supplied: 1L Amber (A)				

Special Instructions :

☒ Intact ☐ Sample Seals
☒ Properly Labeled ☐ Chilled TEMP (°C) 4.3°C
☐ Appropriate Container ☐ Preservatives - Verified By

Relinquished By	Date / Time	Received By	Date / Time
[signature]	1-20-10 11:40	[signature]	1/20/10 1145

CHAIN OF CUSTODY RECORD

Date: 1/18/10 Page: 1 of 4

Lab Work Order No.: 1001264

SIERRA ANALYTICAL
TEL: 949 • 348 • 9389
FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Geotracker EDD Info:
Client LOGCODE
Site Global ID

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn) BOD, COD, O&G	ethylene glycol	Total & dissolved Cu and Zn	Field Point Names / Comments
S-B08-1-1-18-10	01	1/18/10	1730	STORMWATER	NONE	5 GALL GLASS	1	X			composite together with S-B08-2 and analyze as 1 sample
S-B08-1-1-18-10	02	1/18/10	1620	STORMWATER	NONE	40ml VOA	2		X		
S-B08-2-1-18-10	03	1/18/10	1730	STORMWATER	NONE	5 GALL GLASS	1	X			composite together with S-B08-1 and analyze as 1 sample
S-B08-2-1-18-10	04	1/18/10	1630	STORMWATER	NONE	40ml VOA	2		X		
S-B09-3-1-18-10	05	1-18-10	1755	STORMWATER	NONE	5 GALL GLASS	1	X			composite together with S-B11-4 and analyze as 1 sample
S-B09-3-1-18-10	06	1/18/10	1610	STORMWATER	NONE	40ml VOA	2		X		
S-B11-4-1-18-10	07	1/18/10	1728	STORMWATER	NONE	5 GALL GLASS	1	X			composite together with S-B09-3 and analyze as 1 sample
S-B11-4-1-18-10	08	1/18/10	1615	STORMWATER	NONE	40ml VOA	2		X		
~~S-B05-5~~				STORMWATER	NONE	5 GALL GLASS				X	
~~S-B07-6~~				STORMWATER	NONE	PLASTIC	1			X	

Total Number of Containers Submitted to Laboratory

1 Sampler Signature: [signature] Shipped Via: Sierra (Carrier/Waybill No.)
Printed Name: Lijun Xu

2 Relinquished By: A J Archibald Date: 1/19/10 Time: 1220 Received By: B. Maff Date: 1/19/10 Time: 1220
Company: MACTEC Company: SA

3 Relinquished By: B. Maff Date: 1/19/10 Time: 1540 Received By: [signature] Date: 1/19/10 Time: 1540
Company: SA Company: Sierra

4 Relinquished By: Date: Time: Received By: Date: Time:
Company: Company:

Special Instructions:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location R1D2

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

Rev: 021104

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FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

CHAIN OF CUSTODY RECORD

Date: 1/18/10 Page: 2 of 2

Lab Work Order No.: 10012644

Client:	MACTEC
Client Address:	9177 SKY PARK COURT SAN DIEGO, CA 92123
Client Tel. No.:	(858) 278-3600
Client Fax. No.:	(858) 278-5300
Client Proj. Mgr.:	

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	Total & dissolved Cu and Zn	ethylene glycol	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn); diss(Cu,Zn) BOD, COD, O&G	O&G, SC, pH, TSS, total (Al, Cu, Fe, Pb, Zn), dissolved (Cu, Zn), BOD, COD, particle size distribution
~~S-B12-7~~				~~STORMWATER~~	~~NONE~~	~~PLASTIC~~	~~1~~	~~X~~			
~~S-B08-8~~				~~STORMWATER~~	~~NONE~~	~~PLASTIC~~	~~1~~	~~X~~			
~~S-B08-9~~				~~STORMWATER~~	~~NONE~~	~~PLASTIC~~	~~1~~	~~X~~			
~~S-B03-10~~				~~STORMWATER~~	~~NONE~~	~~PLASTIC~~	~~1~~	~~X~~			
~~S-B06-11~~				~~STORMWATER~~	~~NONE~~	~~PLASTIC~~	~~1~~	~~X~~			
S-B06-12-1-18-10	09	1/18/10	1735	STORMWATER	NONE	5 GALL GLASS	1				X
S-B06-12-1-18-10	10	1/18/10	1530	STORMWATER	NONE	40ml VOA	2		X		
S-B12-13-1-18-10	11	1/18/10	1746	STORMWATER	NONE	5 GALL GLASS	1			X	
S-B12-13-1-18-10	12	1/18/10	1600	STORMWATER	NONE	40ml VOA	2		X		
S-B08-14-1-18-10	13	1/18/10	2208	STORMWATER	NONE	5 GALL GLASS	1			X	

Geotracker EDD Info:
Client LOGCODE
Site Global ID
Field Point Names / Comments

1 Sampler Signature: [signature] Printed Name: Lijun Xu
Shipped Via: Sierra (Carrier/Waybill No.)

Total Number of Containers Submitted to Laboratory

Sample Disposal: ☐ Return to Client ☐ Lab Disposal * ☐ Archive ____ mos. ☐ Other ____

2 Relinquished By: AJ Archibald Date: 1/19/10 Time: 1220 Company: MACTEC
Received By: B. Mott Date: 1/19/10 Time: 1220 Company: SA

3 Relinquished By: B. Mott Date: 1/19/10 Time: 1540 Company: SA
Received By: [signature] Date: 1/19/10 Time: 1540 Company: Sierra

4 Relinquished By: Date: Time: Company:
Received By: Date: Time: Company:

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Special Instructions:

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location R103

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

CHAIN OF CUSTODY RECORD

SIERRA ANALYTICAL
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FAX: 949 • 348 • 9115
26052 Merit Circle • Suite 105 • Laguna Hills, CA • 92653

Date: 1/18/10 Page: 3 of 3

Lab Work Order No.: 1001264

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), diss(Cu,Zn) BOD, COD, O&G	ethylene glycol	pH, TSS, SC, tot(Al,Cu,Fe,Pb,Zn), BOD, COD, O&G
S-B08-14-1-18-10	14	1/18/10	1550	STORMWATER	NONE	40ml VOA	2		X	
S-06-12-1-18-10 -DUP	15	1/18/10	1735	STORMWATER	NONE	5 GALL GLASS	1	X		
S-09-3-1-18-10 -BL	16	1/18/10	1755	STORMWATER	NONE	5 GALL GLASS	1			X

Geotracker EDD Info:
Client LOGCODE
Site Global ID
Field Point Names / Comments

1 Sampler Signature: [signature] Shipped Via: Sierra
Printed Name: Lijun Xu (Carrier/Waybill No.)

Total Number of Containers Submitted to Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ____

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

2 Relinquished By: A Zaremba	Date: 1/19/10	Received By: B- Mott	Date: 1/19/10
Company: MACTEC	Time: 1220	Company: SA	Time: 1220
3 Relinquished By: B- Mott	Date: 1/19/10	Received By: [signature]	Date: 1/19/10
Company: SA	Time: 1540	Company: Sierra	Time: 1540
4 Relinquished By:	Date:	Received By:	Date:
Company:	Time:	Company:	Time:

Total Number of Containers Received by Laboratory

Special Instructions:

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled - Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location VOA

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy

Rev: 02/11/04

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FAX: 949 • 348 • 9115
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CHAIN OF CUSTODY RECORD

Date: 1/18/10

Lab Work Order No.: 1001264

Client: MACTEC
Client Address: 9177 SKY PARK COURT
SAN DIEGO, CA 92123
Client Tel. No.: (858) 278-3600
Client Fax. No.: (858) 278-5300
Client Proj. Mgr.:

Client Project ID: SAN DIEGO AIRPORT

Turn Around Time Requested: ☐ Immediate ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 4 Day ☐ 5 Day ☐ Normal ☐ Mobile

Geotracker EDD Info:
Client LOGCODE
Site Global ID

Analyses Requested

Client Sample ID.	Sierra No.	Date	Time	Matrix	Preservative	Container Type	No. of Containers	pH, TSS, Specific Conductance, (SC) tot(Al,Cu,Fe, Pb,Zn), diss(Cu,Zn), BOD, COD, ammonia, MBAS	ethylene glycol	oil and grease (O&G)	TPH (jet fuel, diesel, motor oil)	Particle Size Distribution	pH TSS SC Total Al, Cu, Fe, Pb, Zn	Diss Cu, Zn BOD COD O&G						Field Point Names / Comments
				STORMWATER	NONE	PLASTIC														
				STORMWATER	NONE	40ml VOA														
				STORMWATER	NONE	CLR GLASS														
S-BO6-12-PAR-1-18-10	17	1/18/10	1530	STORMWATER	NONE	AMBER GLASS	1					X								
C-B03-2-1-18-10	18	1/18/10	1515	STORMWATER	NONE	PLASTIC	2	X												
C-B03-2-1-18-10	↓	"	"	STORMWATER	NONE	40ml VOA	2		X											
C-B03-2-1-18-10	↓	"	"	STORMWATER	NONE	CLR GLASS	1			X										
C-B03-2-1-18-10	↓	"	"	STORMWATER	NONE	AMBER GLASS	1				X									
Composite B08-1/B08-2	19			STORMWATER	NONE	PLASTIC							X	X						
Composite SB03-3/S-B03-4	20			STORMWATER	NONE	40ml VOA							X	X						

1 Sampler Signature: [signature]
Printed Name: Lijun Xu
Shipped Via: Sierra
(Carrier/Waybill No.)

2 Relinquished By: A J Ardenfold Date: 1/19/10 Received By: B-Matt Date: 1/19/10
Company: MACTEC Time: 1220 Company: SA Time: 1220

3 Relinquished By: B-Matt Date: 1/19/10 Received By: [signature] Date: 1/19/10
Company: SA Time: 1540 Company: Sierra Time: 1540

4 Relinquished By: Date: Received By: Date:
Company: Time: Company: Time:

Special Instructions:

Total Number of Containers Submitted to Laboratory

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under SIERRA's Terms and Conditions, unless otherwise agreed upon in writing between SIERRA and CLIENT.
* - Samples determined to be hazardous by SIERRA will be returned to CLIENT.

Total Number of Containers Received by Laboratory

Sample Disposal:
☐ Return to Client
☐ Lab Disposal *
☐ Archive ____ mos.
☐ Other ______

FOR LABORATORY USE ONLY - Sample Receipt Conditions:
☑ Intact ☑ Chilled Temp (°C) 4.0
☐ Sample Seals ☐ Preservatives - Verified By
☑ Properly Labelled ☐ Other
☑ Appropriate Sample Container ☑ Storage Location R-02

Rev: 021104

DISTRIBUTION: White - To Accompany Samples, Yellow - Laboratory Copy, Pink - Field Personnel Copy