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2005 GROUNDWATER REMEDIATION AND MONITORING ANNUAL REPORT VOLUME II



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HALL ENVIRONMENTAL ANALYSIS LABORATORY

hallenvironmental.com

QUALITY ASSURANCE PLAN

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3.0 Introduction

Purpose of Document

The purpose of this Quality Assurance Manual is to formally document the quality assurance policies and procedures of Hall Environmental Analysis Laboratory, Inc. (HEAL), for the benefit of its employees, clients, and accrediting organizations. This laboratory continually implements the aspects of this plan as an essential and integral part of laboratory operations in order to assure that the results and work produced are accurate, precise, and reliable.

Objectives

The objective of HEAL is to achieve and maintain excellence in environmental testing. This is accomplished by developing, incorporating and documenting the procedures and policies specified in this manual. A laboratory staff that is analytically competent, well qualified, and highly trained carries out these activities. An experienced management team, knowledgeable in their area of expertise, monitors them. Finally, a comprehensive Quality Assurance program governs laboratory practices and assures that the analytical results are valid and defensible.

HEAL establishes and thoroughly documents its practices so that there is no uncertainty in determining appropriate procedures. Routine laboratory activities are detailed in method specific Standard Operating Procedures (SOP's) and Quality Assurance practices are outlined in this QA/QC manual

The management assures that this documentation is correct in terms of required accuracy, data reproducibility, and that the procedures contain proper Quality Control measures. The management additionally assures that all equipment is reliable, well maintained and calibrated. The procedures and practices of the laboratory are able to conform to client specifications and regulatory requirements. Meticulous records are maintained for all samples and their respective analyses so that results are well documented and defensible in a court of law.

The HEAL management is responsible for supervising and administering this quality assurance program, insuring each individual is responsible for its proper implementation. Accordingly, the HEAL management remains committed to the encouragement of excellence in analytical testing and will continue to provide the necessary resources and environment conducive to its achievement.

Understanding that quality cannot be mandated, it is the policy of this laboratory to provide an environment that encourages all staff members to take pride in the quality of their work. In addition to furnishing proper equipment and supplies, HEAL stresses the importance of continued training and professional development. Further, HEAL recognizes the time required for data interpretation. Therefore, no analyst feels pressure to sacrifice data quality for data quantity. Each staff member must perform with the highest level of integrity and professional competence, always being alert to problems that could compromise the quality of technical work. Management and senior personnel supervise analysts closely in all operations. The laboratory staff is encouraged to speak

with lab managers or senior management if they feel that there are any commercial, financial, or other undo pressures, which might adversely affect the quality of their work.

When properly conceived and executed, our quality assurance program will result in a measurement system that operates in analytical control and where error is at a minimum level. The goal of HEAL is to produce quality results that are accurate, reliable and reflect the analytical needs of our clients.

This is a controlled document. Each copy is assigned a unique tracking number and when released to a client or accrediting agency the QA Officer keeps the tracking number on file.

4.0 Organization and Responsibility

Company

HEAL is accredited in accordance with NELAC standards (see NELAC accredited analysis list). Additionally, HEAL is qualified as defined under the Petroleum Storage Tank Regulations of the State of New Mexico Environmental Improvement Board (USTR §1201) and the State of New Mexico Water Quality Control Commission regulations. It is a locally owned small business that was established in 1991. HEAL is a full service Environmental Analysis Laboratory with analytical capabilities that include both organic and inorganic methodologies and has performed analyses of soil, water and air samples for many sites statewide. HEAL's client base includes local, state and federal governmental agencies, private consultants as well as individual homeowners. It has performed as a subcontractor to the state of New Mexico and to the State Highway and Transportation Department. HEAL has been acclaimed by its customers as producing quality results and as being adaptive to client-specific needs.

The laboratory is divided into a volatile organic section, a semi-volatile organic section, and an inorganic section. Each section has a designated supervisor. The section supervisors report directly to the laboratory manager, who oversees all of the operations.

Certifications

National Environmental Laboratory Accreditation Program (NELAP) – Oregon Primary accrediting authority. Accredited for EPA methods 8260, 8310, 8015, 8021.

Personnel

Laboratory Manager

The Laboratory Manager is responsible for the daily operations of the laboratory. Additionally, the laboratory manager reviews and approves new analytical procedures and methods, and performs a technical review of most analytical results. The Lab Manager also observes the performance of supervisors to ensure good laboratory practices and proper techniques are being taught and utilized. Also, the Lab Manager is responsible for meeting with clients, assisting in overall quality control implementation, and strategic planning for the future of the company. Other duties include assisting in establishing laboratory policies which lead to the fulfillment of requirements for various certification programs, assuring that all Quality Assurance and Quality Control documents are reviewed and approved, and assisting in conducting Quality Assurance Audits. The lab manager addresses questions or complaints that cannot be answered by the section managers. Someone with a minimum of 7 years of directly related experience and a scientific degree should fill this position.

Business/ Project Manager

The role of the business/project manager is to act as a liaison between the client and the laboratory. The business project manager reviews reports, updates clients on the status of projects in-house, prepares quotations for new work, and is responsible for the marketing effort. All new work is assessed by the project manager and reviewed with the other managers so as the not exceed the laboratories capacity. It is also the duty of the project manager to work with government agencies and accrediting authorities to make certain that the laboratory is compliant on new regulations or policies. Someone with a minimum of 5 years of directly related experience and a scientific degree should fill this position.

Quality Assurance Officer

The Quality Assurance Officer (QAO) is responsible for developing and carrying out the approved Quality Assurance Program, and advising and assisting management in meeting these requirements. The QAO monitors quality control activities of the laboratory in order to determine conformance with the Quality Assurance Program, performing Quality Assurance Audits, writing reports, providing follow-up action, and issuing Observation and Corrective Action Reports as needed. Additional responsibilities include cataloged documentation of the following: Staff Training and Demonstration Of Capability (DOC) records, Instrument Detection Limits (IDL), Method Detection Limits (MDL), and Instrument/Equipment Certification and/or Maintenance records. Complaints from clients are logged on a complaint form, which is reviewed by the QAO to ensure that it is handled according to the Quality Systems Section 5.5.3.1 and kept on file. When procedures are not in compliance with the requirements of this plan, "stop work orders" can be issued. Finally, the QAO provides clients with Quality Control data and Quality Assurance reports as requested. This position should be filled by someone with a minimum of 3 years of directly related experience and can also be filled by a senior manager.

Section Supervisors

The Section Supervisors are responsible for training and supervising departmental staff. The Section Supervisors schedule incoming work and monitor laboratory personnel to ensure that proper procedures and techniques are being used. The section supervisors implement new Quality Control procedures as directed by the QAO, update and maintain quality control records and evaluate laboratory personnel in their Quality Control activities. They are the technical director of the associated section and review analytical data to acknowledge that data meets all criteria set forth for good Quality Assurance practices. Someone with a minimum of 3 years of directly related experience should fill this position.

Senior Analyst

A senior analyst performs soil and water analysis in a section of the laboratory. A senior analyst shall have a minimum of one year of analytical instrument experience. A scientific degree is strongly recommended.

Analyst

An analyst performs soil and water analysis in the laboratory. The analyst also performs instrument maintenance. All analysts shall have a minimum 6 months of relevant prior experience or training. A scientific degree is encouraged. An analyst may also perform the duties of a lab technician.

Lab Technician

A lab technician performs multiple duties in the laboratory. These duties may include, but not be limited to sample preparation, glassware washing, sample kit preparation.

Sample Control Manager

The sample control manager is responsible for receiving samples and reviewing the sample login information after it has been entered into the computer. The sample control manager also checks the samples against the chain-of-custody for any sample and/or labeling discrepancies prior to distribution.

The sample control manager is also responsible for sending out samples to the sub-contractors along with the review and shipping of field sampling bottle kits. The sample control manager acts as a liaison between the laboratory and field sampling crew to assure the appropriate analytical tests is assigned.

Delegations in the Absence of Key Personnel

Planned absences shall be preceded by notification to the laboratory manager. The appropriate staff members shall be informed of the absence. In the case of unplanned absences, the organizational superior shall either assume the responsibilities and duties or delegate the responsibilities and duties to an appropriately qualified member.

Laboratory Personnel Qualification and Training

All personnel joining HEAL shall undergo orientation and training. During this period the new personnel shall be introduced to the organization and their responsibilities, as well as the policies and procedures of the company. They shall also undergo on the job training and shall work with trained staff. They will be shown required tasks and be observed while performing them. Initial demonstration of capability must be completed and documented prior to performing assignments unsupervised. New employees that do not have prior analysis experience will not be allowed to perform analysis until they have demonstrated attention to detail with minimal errors in the assigned tasks. To ensure a

sustained level of quality performance among staff members, continuing demonstration of capability shall be performed at least once a year. Laboratory staff must successfully pass an external Proficiency Evaluation (PE) sample or initial PE sample. Each new employee shall sign an ethics and data integrity agreement to ensure that they know that data quality is our main objective. Every HEAL employee recognizes that although turn around time is important, quality is put above any pressure to complete the task expediently. Analysts are not compensated for passing QC parameters nor are incentives given for the quantity of work produced.

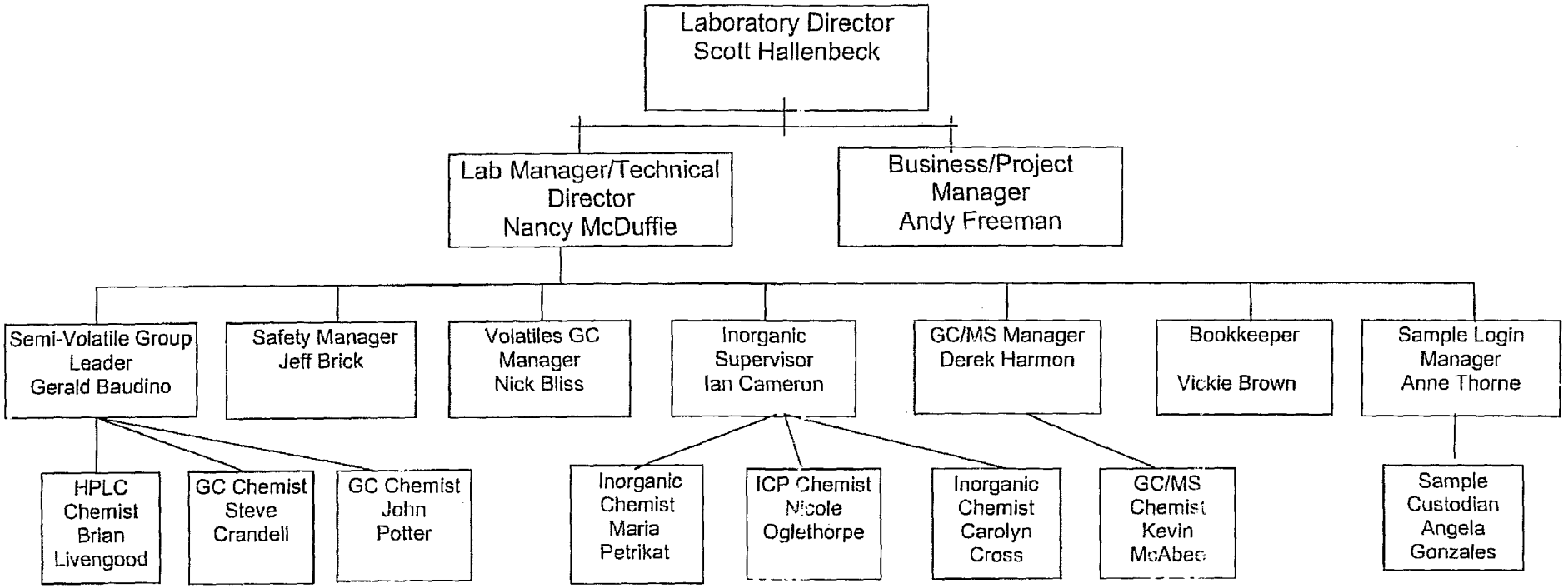


Diagram of organizational Structure

5.0 Receipt and Handling of Samples

Sampling

Procedures

HEAL does not provide field sampling for any projects. Sample kits are prepared and provided for clients upon request. The sample kits contain the appropriate sampling containers (with a preservative when necessary), labels, blue ice, a cooler, chain-of-custody forms, plastic bags, bubble wrap, and any special sampling instructions. The sample control manager reviews the kits prior to shipment.

Containers

Containers which are sent out for sampling are purchased by HEAL from a commercial source. Glass containers are certified "EPA Cleaned" QA level 1. Those containers are received with a Certificate of Analysis verifying that the containers have been cleaned according to the EPA wash procedure.

Preservation

If sampling for an analyte(s) requires preservation, the sample custodians fortify the containers prior to shipment to the field. The required preservative is introduced into the vials in uniform amounts and done so rapidly to minimize the risk of contamination. Vials that contain a preservative are labeled appropriately.

The following pages contain tables specifying additional preservation requirements for samples.

Tables of Standard Holding Times, Preservation, and Containers

Organic Compounds

Compound	Matrix	Container	Preservative	Holding Time
Purgeable halocarbons and aromatics	aqueous	40 mL glass voas, teflon-lined septum	$HgCl_2$, or HCl, pH <2; cool	14 days to analysis
Purgeable halocarbons and aromatics	Soil/MeOH*	4 oz. Jar/2-20 ml VOAs w/ methanol	cool, 4° C	14 days to analysis
Semi-volatiles	aqueous	1 L amber	cool, 4° C	7 days to extract, 40 days after extraction to analyze
Semi-volatiles	soil	8 oz. Jar	cool, 4° C	14 days to extract, 40 days after extraction to analyze
PCBs, pesticides, herbicides	aqueous	1 L amber	cool, 4° C	7 days to extract, 40 days after extraction to analyze
PCBs, pesticides, herbicides	soil	8 oz. Jar	cool, 4° C	14 days to extract, 40 days after extraction to analyze

*Use of field methanol kits are available and recommended for the PSTB.

Inorganic Compounds

Compound	Matrix	Container	Preservative	Holding Time
Acidity	aqueous	250-mL HDP	cool, 4° C	14 days
Alkalinity	aqueous	250-mL HDP	cool, 4° C	14 days
Ammonia	aqueous	1-L HDP	cool, 4° C, H_2SO_4 pH<2	28 days
Biochemical Oxygen Demand	aqueous	2-L HDP	cool, 4° C	48 hours
Bromide	aqueous	250-mL HDP	none required	28 days
Chemical Oxygen Demand	aqueous	125-mL HDP	cool, 4° C, H_2SO_4 pH<2	28 days
Chloride	aqueous	125-mL HDP	none required	28 days
Chloride	solid	4-oz jar	none required	28 days
Chlorine, total residual	aqueous	500-mL HDP	none required	analyze immediately
Chromium VI	aqueous	250-mL HDP	cool, 4° C	24 hours
Chromium VI	solid	8-oz jar	cool, 4° C	as soon as possible
Color	aqueous	125-mL HDP	cool, 4° C	48 hours
Cyanide	aqueous	1-L HDP	cool, 4° C NaOH pH>12	14 days
Cyanide	solid	4-oz jar	cool, 4° C	14 days
Fluoride	aqueous	500-mL HDP	none required	28 days
Hardness	aqueous	250-mL HDP	HNO_3 or H_2SO_4 pH<2	6 months
Hydrogen ion (pH)	aqueous	60-mL HDP	none required	analyze immediately
Hydrogen ion (pH)	solid	4-oz jar	none required	analyze immediately
Kjeldahl and organic nitrogen	aqueous	1-L HDP	cool, 4° C, H_2SO_4 pH<2	28 days

Compound	Matrix	Container	Preservative	Holding Time
Mercury	aqueous	250-mL HDP	HNO_3 pH < 2	28 days
Mercury	solid	8-oz jar	none required	28 days
Metals (except Cr VI and Hg)	aqueous	500-mL HDP	HNO_3 pH < 2	6 months
Metals (except Cr VI and Hg)	solid	8-oz jar		6 months
Nitrate	aqueous	250-mL HDP	cool, 4° C	48 hours
Nitrate	solid	8-oz jar	cool, 4° C	analyze immediately
Nitrate-Nitrite	aqueous	250-mL HDP	cool, 4° C, H_2SO_4 pH<2	28 days
Nitrate-Nitrite	solid	8-oz jar	cool, 4° C	28 days
Nitrite	aqueous	125-mL HDP	cool, 4° C	48 hours
Oil and Grease	aqueous	2-L wide-mouth glass	cool, 4° C, H_2SO_4 pH<2	28 days
Oil and Grease	solid	2-L wide-mouth glass	cool, 4° C	28 days
Organic Carbon	aqueous	125-mL HDP	cool, 4° C, HCl or H_2SO_4 pH<2	28 days
Organic Carbon	solid	4-oz jar	cool, 4° C	28 days
Orthophosphate	aqueous	125-mL HDP	Cool, 4° C	48 hours
Phenolics	aqueous	1-L Boston Round	cool, 4° C, H_2SO_4 pH<2	28 days
Phenolics	solid	8-oz jar (glass only)	cool, 4° C	28 days
Phosphorous (elemental)	aqueous	1-L Boston Round	cool, 4° C	48 hours
Phosphorous (total)	aqueous	125-mL HDP	cool, 4° C, H_2SO_4 pH<2	28 days
Residue, total	aqueous	250-mL HDP	cool, 4° C	7 days
Residue, filterable(TDS)	aqueous	250-mL HDP	cool, 4° C	7 days
Residue, non-filterable (TSS)	aqueous	250-mL HDP	cool, 4° C	7 days
Residue, settleable	aqueous	Imhoff Cone	cool, 4° C	48 hours
Residue, volatile	aqueous	250-mL HDP	cool, 4° C	7 days

Compound	Matrix	Container	Preservative	Holding Time
Silica	aqueous	125-mL HDP	cool, 4° C	28 days
Specific conductance	aqueous	250-mL HDP	cool, 4° C	28 days
Specific conductance	solid	8-oz jar	cool, 4° C	28 days
Sulfate	aqueous	125-mL HDP	cool, 4° C	28 days
Sulfate	solid	4-oz jar	cool, 4° C	28 days
Sulfide	aqueous	1-L HDP	cool, 4° C, ZnAc + NaOH pH>9	7 days
Sulfide	solid	8-oz jar	cool, 4° C	7 days
Surfactants	aqueous	500-mL HDP	cool, 4° C	48 hours
Turbidity	aqueous	250-mL HDP	cool, 4° C	48 hours

Sample Custody

Chain-of-Custody Form

A Chain-of-Custody (CoC) form is used to provide a record of sample chronology starting with the field sampling through laboratory analysis. HEALs CoC contains the client's name, address, phone and fax numbers, the project name and number, the project manager's name, and the field sampler's name. It also identifies the date and time of sample collection, sample matrix, field sample ID number, number/volume of sample containers, sample temperature upon receipt, and any sample preservative information.

There is also a space to record the HEAL ID number assigned to samples after they are received. Next to the sample information is a space for the client to indicate the desired analyses to be performed. Finally, there is a section to track the actual custody of the samples. The custody section contains lines for signatures, dates and times when samples are relinquished and received. The CoC form also includes a space to record special sample related instructions, sampling anomalies, time constraints, and any sample disposal considerations.

A sample chain-of-custody form can be found at the end of this section.

Receiving Samples

Samples are received by authorized HEAL personnel. Upon arrival, the CoC is compared to the respective samples. After the samples and CoC have been determined to be complete and accurate, the sampler signs over the CoC. The HEAL staff member in turn signs the chain-of-custody, also noting the current date and time. This relinquishes custody of the samples from the sampler and delegates sample custody to HEAL. The third (pink) copy of the CoC form is given to the person who has relinquished custody of the samples.

Logging in Samples and Storage

Each sample set is given a unique HEAL tracking ID number. Individual sample locations within a defined sample set are given a unique sample ID suffix-number. Labels with the HEAL numbers, and analytes requested, are generated and placed on their respective containers. The samples are reviewed by the sample control manager prior to being distributed to the storage refrigerators or appropriate laboratory personnel.

Samples are stored in the volatile section refrigerator, the semi-volatile section refrigerator, or the inorganic section refrigerator. If a soil sample must be extracted for both volatile and semi-volatile analysis, it is first placed into the volatile soil sample refrigerator. After the volatile extraction, the sample is moved to the semi-volatile refrigerator to minimize any risk of contamination.

Each project (sample set) is entered into the Laboratory Information Management System (LIMS) with a unique ID given to every container. The ID tag includes the Lab ID, Client ID, date and time of collection, and the analysis/analyses to be performed. The LIMS continually updates throughout the lab. Therefore, at any time, an analyst or manager may inquire about a project and/or samples status. For more information about the login procedures, reference the Sample Login SOP.

Disposal of Samples

Analytical results are used to characterize their respective sample contamination level(s) so that the proper disposal can be performed. These wastes will be disposed of according to their hazard as well as their type and level of contamination. Refer to the Hall Environmental Analysis Laboratory Chemical Hygiene Plan for details regarding waste disposal.

Waste drums are provided by an outside agency. These drums are removed by the outside agency and disposed of in a proper manner.

The wastes that are determined to be non-hazardous are disposed of as non-hazardous waste.

CHAIN-OF-CUSTODY RECORD

Accreditation Applied:
NELAC ☐ USACE ☐
Other:

Client:

Address:

Phone #:

Fax #:

Project Name:

Project #:

Project Manager:

Sampler:

Sample Temperature:

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative			HEAL No.
					H_2Cl_2	HNO_3		

Date: Time: Relinquished By: (Signature) Remarks:

Date: Time: Relinquished By: (Signature) Remarks:

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ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260 (VOA)	8270 (Semi-VOA)				Air Bubbles or Headspace (Y or N)

Remarks:

6.0 Analytical Procedures

All analytical methods used at HEAL incorporate necessary and sufficient Quality Assurance and Quality Control practices. A Standard Operating Procedure is used for each method to provide the necessary criteria to yield acceptable results. These procedures are updated each year or more often if necessary and are attached as a pdf file in the Laboratory Information Management System (LIMS) for easy access by each analyst. The sample is almost always consumed or altered during the analytical process. Therefore, it is important that each step in the analytical process be correctly followed in order to yield valid data.

When unforeseen problems arise, the analyst, section supervisor, and lab manager meet to discuss the factors involved. The analytical requirements are evaluated and a suitable corrective action, or resolution is established.

List of Procedures Used

Typically, the procedures used by HEAL are EPA approved methodologies. However, proprietary methods for client specific samples, are sometimes used. The following tables list EPA Method numbers with their corresponding analytes and/or instrument classification.

Organic Analysis

Methodology	Title of Method
8021B	"Halogenated and Aromatic Volatile Organics by Gas Chromatography"
8015B	"Nonhalogenated Volatile Organics by Gas Chromatography" (Gasoline Range and Diesel Range Organics)
8081A	"Organochlorine Pesticides by Gas Chromatography"
8082	"PCBs as Aroclors by Gas Chromatography"
8151A	"Chlorinated Herbicides by GC using Methylation or Pentafluorobenzylation Derivitization"
8310	"Polynuclear Aromatic Hydrocarbons"
8330	"Nitroaromatics and Nitramines"
8315	"Formaldehyde"
1005	"TNRCC – Total Petroleum Hydrocarbons"
504.1	"EDB" & "DBCP"
418.1	"Total Petroleum Hydrocarbons"
413.2	"Oil and Grease"

Gas Chromatographic/Mass Spectrometric Methods

Methodology	Title of Method
8260B	"Volatile Organic Compounds by GC/MS: Capillary Column Technique"
8270D	"Semivolatile Organic Compounds by GC/MS: Capillary Column Technique"
624	"Purgeables"
625	"Base/Neutrals and Acids"

Inorganic Analysis

Methodology	Title of Method
310.1	Alkalinity
350.3	Ammonia
300.0/300.1	Anions (aqueous)
9065	Anion (soil)
120.1	Electrical Conductivity
3500	Ferrous Iron
351.2	Total Kjeldhal Nitrogen (TKN)
9095	Paint Filter
150.1	pH
420.3	Phenols
160.1	Total Dissolved Solids (TDS)
160.2	Total Suspended Solids (TSS)
180.1	Turbidity
Metals	
200.7/6010C	ICP Metals
7470	Mercury (aqueous)
7471	Mercury (soil)

Preparative Methodologies

Methodology	Title of Method
1311	Toxicity Characteristic Leaching Procedure
1312	Synthetic Precipitation Leaching Procedure
3005	Acid Digestion of Waters for Total Recoverable or Dissolved Metals
3010	Acid Digestion of Aqueous Samples and Extracts for Total Metals
3050	Acid Digestion of Sediment, Sludge, and Soil samples
3510C	Separatory Funnel Liquid-Liquid Extraction
3540	Soxhlet Extraction
3665	Sulfuric Acid/Permanganate Cleanup (PCB)
5030	Purge-and-Trap for Aqueous Samples
5035	Closed-System Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste Samples

7.0 Calibration

Instrument Calibration

An instrument calibration is the relationship between the known concentrations of a set of calibration standards introduced into an analytical instrument and the measured response they produce. Calibration curve standards are a prepared series of aliquots at various known concentrations levels from a primary source reference standard. Specific mathematical types of calibration techniques are outlined in SW-846 8000B. Analysts choose the proper calibration type following guidelines set fourth in their method specific protocol. Field samples are then analyzed on the instrument. The unknown concentration in the sample can be extrapolated from the calibration curve as a function of the instrument response. Any sample with an analyte response which exceeds the highest calibration standard response must be diluted to fall within the calibration range (ideally at or near the mid-level calibration standard response) of that analyte.

Standards

All of the source reference standards used are ordered from a reliable commercial vendor. A Certificate of Analysis (CoA), which verifies the quality of the standard, accompanies the standards from the vendor. The Certificates of Analysis are dated and stored on file by the QAO. These standards are traceable to the National Institute of Standards (NIST).

All standard solutions, calibration curve preparations, and all other quality control solutions are labeled in a manner that can be traced back to the original source reference standard. All source reference standards are entered into the LIMS with an appropriate description of the standard. Dilutions of the source reference standard (or any mixes of the source standards) are fully tracked in the LIMS as well. Standards are labeled with the date received, date opened for use, and an expiration date. New source standards received into the laboratory are checked with current standard solutions. Source standard vials will never be altered. Rather, small aliquots are removed and stored in working standard solution vials from which measured amounts can be withdrawn.

As part of the quality assurance procedures at HEAL, analysts strictly adhere to method protocols for storage times and policies of analytical standards and quality control solutions.

Procedures

Reagents

HEAL assures that the reagents used are of acceptable quality for their intended purpose. This is accomplished by ordering high quality reagents and adhering to good laboratory practices so as to minimize contamination or chemical degradation. All reagents must meet any specifications noted in the analytical method.

Upon receipt, all reagents are assigned a separate ID number, and logged into the LIMS. All reagents shall be labeled with the date received into the laboratory and again with the date opened for use. Recommended shelf life shall be documented and controlled. Dilutions or solutions prepared shall be clearly labeled, dated, and signed. These solutions are traceable back to their primary reagents.

All gases used with an instrument shall meet specifications of the manufacturer. Recommended shelf life shall be documented and controlled. All safety requirements that relate to maximum and/or minimum allowed pressure, fitting types, and leak test frequency, shall be followed. When a new tank of gas is delivered, it shall be checked for leaks and marked with the date put in use. The date and initial pressure of a new tank will be noted on the new tank.

HEAL has a Quality Assurance Procedure designed to assure that the quality of laboratory reagent water meets established criteria for all analytical methods. HEAL continuously monitors the quality of the reagent water and provides the necessary indicators for maintenance of the purification systems.

Analytical balance

All of the analytical balances are capable of weighing to a minimum precision of 0.1 grams. Records are kept of daily calibration checks for the balances in use. Class S weights are used in these checks. The balances are annually certified by an outside source and the certifications are on file with the QAO.

pH Meter

The pH meter measures to a precision of 0.01 pH units. Records showing its calibration before each use, or each day, if used more than once per day. It is calibrated using a certified buffer. Also available with the pH meter is a magnetic stirrer with a temperature sensor.

Thermometers

The thermometers in the laboratory are used to measure the temperatures of the refrigerators/freezers, ovens, water baths, TCLP Extractions and sample log-in.

Refrigerators/Freezers

Each laboratory refrigerator or freezer contains a thermometer capable of measuring to a minimum precision of 1°C. The thermometers are kept with the bulb immersed in liquid. Each workday, the temperatures of the refrigerators are recorded in a designated logbook to insure that the refrigerators are between ± 2° C. Samples are stored separately from the standards to reduce the risk of contamination.

Ovens

The oven contains a thermometer graduated by 1° C. the temperature is measured before and after a cycle when the operating procedure demands this level of precision.

Analytical Instrumentation (GC, IC, HPLC, ICP, Hg analyzer, IR, GCMS)

A calibration curve is analyzed on each instrument according to specific method protocols. The calibration curve typically consists of the analysis a blank and a minimum of five dilutions of the analyte list (or lists) outlined in the analytical method. The quality assurance program requires a second source verification of a calibration curve. Ideally, a second source verification is provided from a separate vendor. However, a different Lot Number from the same vendor is acceptable for second source verification. In the absence of standards from a separate vendor or the same vendor with two different Lot Numbers, two separate preparations from the same source standard can be used for second source verification.

Each day that an analysis is performed on the instrument, the calibration must be verified. This is accomplished by analyzing a calibration standard usually (but not exclusively), a mid-point standard. Another calibration verification is analyzed according to method specific protocols. If during the analysis the specified QC criteria are no longer satisfied, then the analysis should be stopped and the problem examined. When the calibration curve is determined to be no longer acceptable, a new curve is prepared and the instrument re-calibrated. Any samples not bracketed with acceptable daily calibration verifications should be re-analyzed or the results may be subject data qualification or rejection.

Reagent blank samples are also analyzed to ensure that no contamination is present at detectable levels. The frequency of reagent blank analysis is the same as calibration verification samples. The reagent blank and calibration verification should be analyzed successively.

Analytical methods vary in QC acceptance criteria. HEAL follows the method specific guidelines for QC acceptance. The specific acceptance criteria are outlined in the analytical methods and its corresponding SOP.

Other Analytical Instrumentation and Equipment

The conductivity probe constant shall be determined prior to use.

Eppendorf (or equivalent brands) pipettes are calibrated gravimetrically prior to use.

8.0 Maintenance

Maintenance logs are kept for each major instrument. In the front of the log, the following information is included:

Unique name of the item or equipment
Manufacturer
Type of Instrument
Model Number
Serial Number
Date received and date placed into service
Location of Instrument
Condition of instrument upon receipt

For routine maintenance, the following information shall be included in the log:

Maintenance Date
Maintenance Description
Maintenance Performed by Initials

A manufacturer service agreement (or equivalent) covers most major instrumentation to assure prompt and reliable response to maintenance needs beyond HEAL instrument operator capabilities.

9.0 Quality Control

Internal Quality Control Checks

Hall Environmental Analysis Laboratory, Inc. utilizes various internal quality control checks, including replicates, spiked samples, blanks, quality control samples, calibration standards, quality control charts, and surrogate samples.

Replicates, or duplicates, are identical tests repeated for the same sample in order to determine the precision of such a method. A Relative Percent Difference (RPD) is calculated as a measure of this precision.

Spiked Samples are samples evaluated with a known added quantity of a target compound. This is to help determine the accuracy of the analyses. A percent recovery is calculated to assess the quality of the accuracy.

Duplicate samples and spiked samples are performed according to the following schedule for each area:

Organics: LCS and MS/MSD samples are analyzed for every batch of 20 samples (sufficient sample volume permitting for the MS/MSD).

Metals and wet chemistry: LCS, MS, and sample duplicate analysis are performed, at a minimum, for every batch of 20 samples (sufficient sample volume permitting for the MS and sample duplicate).

Anions: LCS, MS, and sample duplicate analysis are performed, at a minimum, for every batch of 10 samples (sufficient sample volume permitting for the MS and sample duplicate).

Blanks consist of all the reagents measured and treated as they are with samples, except without the samples. This enables the laboratory to assure clean reagents and procedures.

Blind Quality Control Samples are samples provided by an unbiased third party. They contain a pre-determined concentration of the target compound, which is unknown to the analyst. They are analyzed quarterly, and enable the laboratory to assess the quality of its results.

Calibration standards are standards run to calibrate and confirm the consistency of the instrumentation. Calibration standards are utilized at the beginning and end of each batch, and more frequently for larger batches.

Quality Control Charts are charts with acceptable ranges of the values of quality control checks. If a value falls outside the appropriate range, immediate evaluation and assessment of the procedures is required.

A surrogate compound, a substance that has similar properties to the target compounds (but not expected to be present), is added in all applicable tests. It is a measure of the level of recovery achieved in testing.

The specific types and frequency of QC sample analysis differ from method to method and section to section. Individual method specific QC sample criteria are outlined in the each Methods SOP.

SOPs will be update annually or more often if changes are deemed necessary. SOPs are stored as a linked pdf file in the test portion of the LIMS. This is done by right clicking on the SOP tab of the test screen and adding the appropriate path where the current SOPs are located on the server. The QAO will update these links as necessary.

An initial demonstration of capability is performed everytime there is a change in instrument type, personnel, or test method. A minimum of 4 replicate samples are prepared and analyzed according to the test method. Sample results are compared against current acceptable LCS recovery limits. On-going DOCs are performed annually through the use of proficiency testing, LCS recoveries, and/or MDL analysis.

Precision, Accuracy, Detection Levels

Precision

The laboratory uses sample duplicates to assess precision. A duplicate sample is analyzed for each batch of 20 samples (5% frequency) when possible. HEAL requires the RPD to fall within the 99% confidence interval of established control charts or a RPD of less than 20 if control charts are not available. RPDs greater than these limits are considered out-of-control and require an appropriate response. Allowances can be made for high RPD values when the sample results are above the detection limit but less than less than 5X the detection limit. Criteria (based on sample matrix and methodology) for these situations require analyst/supervisor review to determine appropriate corrective action required.

Accuracy

The accuracy of an analysis refers to the difference between the calculated value and the actual value of a measurement. The accuracy of a laboratory result is evaluated by comparing the measured amount of QC reference material recovered from a sample and the known amount added. Control limits are established for each analytical method and sample matrix. Recoveries are assessed to determine the method efficiency and/or the matrix effect.

Analytical accuracy is expressed as the percent recovery (%R) of an analyte or parameter. A known amount of analyte is added to an environmental sample before the sample is prepared and subsequently analyzed. The equation used to calculate percent recovery is:

%Recovery = {(concentration* recovered)/(concentration* added)} X 100

*or amount

HEAL requires that the Percent Recovery to fall within the 99 % confidence interval of established control limits. A value that falls outside of the confidence interval requires a warning and process evaluation. The confidence intervals are calculated by determining the mean and sample standard deviation. If control limits are not available, the range of 85 to 115% is used unless the specific method dictates otherwise. Percent Recoveries outside of this range mandate additional action such as analyses by Method of Standard Additions, additional sample preparation(s) where applicable, method changes, out-of-control action or data qualification.

Detection Limit

Current practices at HEAL define the Detection Limit (DL) as the smallest amount that can be detected above the baseline noise in a procedure within a stated confidence level.

HEAL presently utilize an Instrument Detection Limit (IDL), a Method Detection Limit (MDL), and a Practical Quantitation Limit (PQL). The relationship between these levels is approximately
IDL: MDL: PQL = 1:5:5.

The IDL is a measure of the sensitivity of an analytical instrument. The IDL is the amount which, when injected, produces a detectable signal in 99% of the analyses at that concentration. An IDL can be considered the minimum level of analyte concentration that is detectable above random baseline noise.

The MDL is a laboratories measure of the sensitivity of an analytical method. An MDL determination (also outlined in SW-846 Chapter 1) consists of replicate spiked samples carried through all necessary preparation steps. The spike concentration is three to five times the lowest calibration standard level. The replicates are then analyzed successively and their Standard Deviation (s) calculated. The method detection limit (MDL) can be calculated using the standard deviation according to the formula:

$$MDL = s * t\ (99\%)$$

Where t (99%) is the student's t value for the 99% confidence interval. It depends on the number of trials used in calculating the sample standard deviation, so choose the appropriate value according to the number of trials.

Number of Trials	t(99%)
3	6.96
4	4.54
5	3.75
6	3.36
7	3.14
8	3.00
9	2.90

The PQL is significant because different laboratories can produce different MDLs although they may employ the same analytical procedures, instruments and sample matrices. The PQL is about two to five times the MDL and represents a practical, and routinely achievable, reporting level with a good certainty that the reported value is reliable. The reported PQL for a sample is dependent on the dilution factor utilized during sample analysis.

Quality Control Parameter Calculations

Mean

The sample mean is also known as the arithmetic average. It can be calculated by adding all of the appropriate values together, and dividing this sum by the number of values.

$$\text{Average} = (\Sigma x_i) / n$$

x_i = the value x in the i^{th} trial
n = the number of trials

Standard Deviation

The sample standard deviation, represented by s, is a measure of dispersion. The dispersion is considered to be the difference between the average and each of the values x_i. The variance, s^2, can be calculated by summing the squares of the differences and dividing by the number of differences. The sample standard deviation, s, can be found by taking the square root of the variance.

$$\text{Standard deviation} = s = [\Sigma (x_i - \text{average})^2 / (n - 1)]^{1/2}$$

Percent Recovery (MS, MSD, LCS and LCSD)

$$\text{Percent Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{(\text{Spike Added})} \times 100$$

Confidence Intervals

Confidence intervals are calculated using the average (x), the sample standard deviation (s), and the Student's t distribution (s-dist), which depends on the number of values used to calculate the average and sample standard deviation.

The formula is:

$$\text{confidence interval} = x \pm s * \text{s-dist}$$

Student's t Distribution

#values	10	15	20	25	31	41	61	121	≥ 124
95 %	2.262	2.145	2.093	2.064	2.042	2.021	2.000	1.980	1.960
99%	3.250	2.977	2.861	2.797	2.750	2.704	2.660	2.617	2.576

Unless there is insufficient data, at least 20 values will always be used in calculating the confidence intervals.

RPD (Relative Percent Difference)

Analytical precision is expressed as a percentage of the difference between the results of duplicate samples for a given analyst. Relative percent difference (RPD) is calculated as follows:

$$\text{RPD} = 2 \times \frac{(\text{Sample Result} - \text{Duplicate Result})}{(\text{Sample Result} + \text{Duplicate Result})} \times 100$$

10.0 Data Reduction, Validation, Reporting, and Record Keeping

All data reported must be of the highest possible accuracy and quality. During the processes of data reduction, validation, and report generation, the work is thoroughly checked to insure that error is minimized.

Data Reduction

The analyst who generated the data usually performs the data reduction. The calculations include evaluation of surrogate recoveries (where applicable), response factor calculations for manual calculations, and other miscellaneous calculations related to the sample quantitation.

If the results are computer generated, then the formulas must be confirmed by hand calculations.

Validation

A senior analyst, most often the section supervisor, validates the data. The data is checked at a minimum of 20% after an analyst has shown analytical proficiency. If an error is detected, all of the current data generated by that analyst is reviewed. Previous and/or common mistake areas are stringently monitored throughout the validation process. Data is reported using appropriate significant figure criteria. In most cases, two significant digits are utilized, but three significant digits can be used in QC calculations. Significant digits are not rounded until after the last step of a sample calculation.

If data is to be manually transferred from one medium to another, the transcribed data is checked at a minimum of 20%. This includes data typing, computer data entry, chromatographic data transfer, data table inclusion to a cover letter, or when data results are combined with other data fields.

All hand written data from run logs, analytical standard logbooks, hand entered data logbooks, or on instrument generated chromatograms, are systematically archived should the need for future retrieval arise.

Data that is being reported is treated with the utmost respect and care to help eliminate errors. Unethical practices will be detected through peer review and be dealt with the utmost severity.

Reports and Records

The reports are compiled by the Laboratory Information Management System (LIMS). Most data is transferred directly from the instruments to the LIMS. After being processed by the analyst and reviewed by the section supervisor, reports are approved and signed by the senior laboratory management. A comparative analysis of the data is performed at this point. For example, if TKN and NH3 are analyzed on the same sample the NH3 result should never be greater than the TKN result. Lab

results and reports are released only to appropriately designated individuals. Release of the data can be by fax, email, diskette deliverables, or mailed hard copy.

When a project is completed, the project file folder is stored with a hard copy of the report, relevant supporting data, and the quality assurance/control worksheets. These folders are kept on file and are arranged by project number. Additionally, all electronic data is backed up daily on the HEAL main server. The backup includes raw data, chromatograms and report documents. Hard copies of chromatograms are stored separately according to the instrument and the analysis date. All records and analytical data reports are retained in a secure location as permanent records for a minimum period of five years (unless specified otherwise in a client contract). Access to archived information shall be documented with an access log. Access to archived electronic reports and data will be protected by a project manager password. In the event that HEAL transfers ownership or terminates business practices, complete records will be maintained or transferred according to the client's instructions.

After issuance, the original report shall remain unchanged. If a correction to the report is necessary, then an additional document shall be issued. This document shall have a title of "Addendum to Test Report or Correction to Original Report", or equivalent. Demonstration of original report integrity comes in two forms. First, the report date is included on each page of the final report. Second, each page is numbered in sequential order, making the addition or omission of any data page(s) readily detectable.

11.0 Corrective Action

The limits that have been defined for data acceptability also form the basis for corrective action initiation. Initiation of corrective action occurs when the data generated from continuing calibration standard, sample surrogate recovery, laboratory control spike, matrix spike or sample duplicates exceed acceptance criteria. If corrective action is necessary, the analyst or the section supervisor will coordinate to take the following steps to determine and correct the measurement system deficiency:

Check all calculations and data measurements systems (Calibrations, reagents, instrument performance checks etc.).

Assure that proper procedures were followed.

Unforeseen problems that arise during sample preparation and/or sample analysis that lead to treating a sample differently from documented procedures shall be documented with a corrective action report. The section supervisor and lab manager shall be made aware of the problem at the time of the occurrence. See the SOP regarding departures from documented procedures.

Continuing calibration standards below acceptance criteria can not be used for reporting analytical data unless method specific criteria states otherwise.

An analyte above control limits in a Continuing Calibration may be acceptable if the previous continuing calibration standard was acceptable for that analyte. Further, the target analyte in the samples analyzed after the acceptable calibration standard and before calibration standard with the high bias, are reported as non-detected. Finally, the samples following an analyte that is above control limits for a continuing calibration standard can not be reported for that analyte.

Samples with non-compliant surrogate recoveries should be reanalyzed unless deemed un-necessary by the supervisor for matrix, historical data, or other analysis related anomalies.

Laboratory and Matrix Spike acceptance criteria vary significantly depending on method and matrix. Analysts and supervisors meet and discuss appropriate corrective action measures as spike failures occur.

Sample duplicates with RPD values outside control limits require supervisor evaluation and possible reanalysis.

A second mechanism for initiation of corrective action is that resulting from Quality Assurance performance audits, system audits, inter and intra-laboratory comparison studies. Corrective Actions initiated through this mechanism will be monitored and coordinated by the laboratory QA officer.

All corrective action forms are reviewed by and filed with the QA Officer.

12.0 Quality Assurance Audits, Reports and Complaints

Internal/External Systems' Audits, Performance Evaluations, and Complaints

Several procedures are used to assess the effectiveness of the quality control system. One of the methods includes internal performance evaluations, which are conducted by the use of control samples, replicate measurements and use control charts. Another method is external performance audits, which are conducted by the use of inter-laboratory checks, such as participation in laboratory evaluation programs and performance evaluation samples available from ERA (Environmental Resource Associates).

Proficiency samples will be obtained twice per year from ERA. We also participate in soil and water Underground Storage Tank PE studies. Copies of our results are available upon request.

Quality Assurance Audits are performed annually by the Quality Assurance Officer. They are performed using the guidelines outlined below:

The system audit consists of a qualitative inspection of the QA system in the laboratory and an assessment of the adequacy of the physical facilities for sampling, calibration, and measurement. This audit includes a careful evaluation and review of laboratory quality control procedures. Including but not limited to:

1. Review of staff qualifications, demonstration of capability, and personnel training programs
2. Storage and handling of reagents, standards and samples
3. Standard preparation logbook and LIMS procedures
4. Extraction logbooks
5. Raw data logbooks
6. Analytical logbooks or batch printouts and instrument maintenance logbooks
7. Data review procedures
8. Corrective action procedures

Review of data packages is performed regularly by the lab manager/QA Officer.

The Quality Assurance Officer will conduct these audits on an annual basis. Performance evaluation will, in part, be based upon the results obtained on the ERA proficiency results.

Complaints

Complaints from clients are documented and given to the laboratory manager. The lab manager shall review the information and contact the client. If doubt is raised concerning the laboratories policies or procedures, then an audit of the section or sections may be performed. All records of complaints and subsequent actions shall be maintained for 3 years unless otherwise stated.

Internal and External Reports

The Quality Assurance Officer is responsible for preparation and submission of quality assurance reports to the appropriate management personnel as problems and issues arise. These reports include the assessment of measurement systems, data precision and accuracy, and the results of performance and system audits. Additionally, they also include significant QA problems, corrective actions, and recommended resolution measures. Reports of these Quality Assurance Audits describe the particular activities audited, procedures utilized in the examination and evaluation of laboratory records, and data validation procedures. Finally, there are procedures for evaluating the performance of Quality Control and Quality Assurance activities, and laboratory deficiencies and the implementation of corrective actions with the review requirements.

13.0 Analytical Protocols Utilized at Hall Environmental Analysis Laboratory, Inc.

1. Standard Methods for the Examination of Water and Wastewater: AOHA, AWWA, and WPCG; 20th Edition, 1999.

2. Methods for Chemical Analysis of Water and Wastes, USEPA, EPA-600/4-79-020, March 1979 and as amended December, 1982 (EPA-600/4-82-055)

3. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, USEPA SW-846, 3rd Edition, Updates I, II, IIA, IIB, III, December, 1996.

4. Methods of Soil Analysis: Parts 1 & 2, 2nd Edition, Agronomy Society of America, Monograph 9

5. Diagnosis & Improvement of Saline & Alkali Soils, Agriculture Handbook No. 60, USDA, 1954

6. Handbook on Reference Methods for Soil Testing, The Council on Soil Testing & Plant Analysis, 1980 and 1992

7. Field and Laboratory Methods Applicable to Overburdens and Mine Soils, USEPA, EPA-600/2-78-054, March 1978

8. Laboratory Procedures for Analyses of Oilfield Waste. Department of Natural Resources, Office of Conservation, Injection and Mining Division, Louisiana, August 1988

9. Soil Testing Methods Used at Colorado State University for the Evaluation of Fertility, Salinity and Trace Element Toxicity, Technical Bulletin LT B88-2 January, 1988

10. Manual of Operating Procedures for the Analysis of Selected Soil, Water, Plant Tissue and Wastes Chemical and physical Parameter. Soil, Water, and Plant Analysis Laboratory, Dept. of Soil and Water Science, The University of Arizona, August 1989

11. Sampling Procedures and Chemical Methods in Use at the U.S. Salinity Laboratory for Characterizing Salt-Affected Soils and Water. USDA Salinity Laboratory.

12. Procedures for Collecting Soil Samples and Methods of Analysis for Soil Survey. USDA Soil Conservation Service, SSIR No. 1.

13. Soil Survey Laboratory Methods Manual. Soil Survey Laboratory Staff. Soil Survey Investigations Report No. 42, version 2.0, August 1992.

14. Methods for the Determination of Metals in Environmental Samples, USEPA, EPA-600/4-91-010, June 1991

15. The Merck Index, Eleventh Edition, Merck & Co., Inc. 1989.

16. Handbook of Chemistry and Physics, 62nd Edition, CRC Press, Inc. 1981-1982.

17. Analytical Chemistry of PCB's. Erickson, Mitchell D., CRC Press, Inc. 1992.

18. Environmental Perspective on the Emerging Oil Shale Industry, EPA Oil & Shale Research Group.

19. Polycyclic Aromatic Hydrocarbons in Water Systems, CRC Press, Inc.

Section 17.0 Chemical Analytical Reports

Title	Tab Number
2005 Semi-Annual Monitoring Wells	1
2005 Annual Monitoring Wells	2
San Juan River Quarterly Analysis	3
River Terrace	4
Tank #33 Monthly Analysis	5

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

April 19, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Semi Annual 2005 Order No.: 0504086

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 5 samples on 4/8/2005 for the analyses presented in the following report.

This report is an addendum to the report dated April 13, 2005. Sample ID Numbers were changed for Lab ID #2 and 3. Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005

Lab Order: 0504086

Lab ID: 0504086-01 **Collection Date:** 4/6/2005 2:45:00 PM
Client Sample ID: RW#14 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	200	4/8/2005 4:52:49 PM
Benzene	1700	100		µg/L	200	4/8/2005 4:52:49 PM
Toluene	15000	100		µg/L	200	4/8/2005 4:52:49 PM
Ethylbenzene	3400	100		µg/L	200	4/8/2005 4:52:49 PM
Xylenes, Total	20000	100		µg/L	200	4/8/2005 4:52:49 PM
Surr: 4-Bromofluorobenzene	107	83.3-121		%REC	200	4/8/2005 4:52:49 PM

Lab ID: 0504086-02 **Collection Date:** 4/6/2005 3:15:00 PM
Client Sample ID: MW#3 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/8/2005 5:23:26 PM
Benzene	ND	0.50		µg/L	1	4/8/2005 5:23:26 PM
Toluene	ND	0.50		µg/L	1	4/8/2005 5:23:26 PM
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005 5:23:26 PM
Xylenes, Total	ND	0.50		µg/L	1	4/8/2005 5:23:26 PM
Surr: 4-Bromofluorobenzene	106	83.3-121		%REC	1	4/8/2005 5:23:26 PM

Lab ID: 0504086-03 **Collection Date:** 4/6/2005 3:50:00 PM
Client Sample ID: MW#29 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	3.7	2.5		µg/L	1	4/8/2005 5:54:02 PM
Benzene	ND	0.50		µg/L	1	4/8/2005 5:54:02 PM
Toluene	ND	0.50		µg/L	1	4/8/2005 5:54:02 PM
Ethylbenzene	ND	0.50		µg/L	1	4/8/2005 5:54:02 PM
Xylenes, Total	ND	0.50		µg/L	1	4/8/2005 5:54:02 PM
Surr: 4-Bromofluorobenzene	106	83.3-121		%REC	1	4/8/2005 5:54:02 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005
Lab Order: 0504086

Lab ID: 0504086-04
Collection Date: 4/7/2005 9:50:00 AM
Client Sample ID: RW#15
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	40	4/8/2005 9:56:31 PM
Benzene	9000	20		µg/L	40	4/8/2005 9:56:31 PM
Toluene	11000	100		µg/L	200	4/11/2005 12:01:14 PM
Ethylbenzene	2500	100		µg/L	200	4/11/2005 12:01:14 PM
Xylenes, Total	19000	100		µg/L	200	4/11/2005 12:01:14 PM
Surr: 4-Bromofluorobenzene	103	83.3-121		%REC	40	4/8/2005 9:56:31 PM

Lab ID: 0504086-05
Collection Date: 4/7/2005 10:45:00 AM
Client Sample ID: RW#16
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	130		µg/L	50	4/11/2005 2:01:44 PM
Benzene	1800	25		µg/L	50	4/11/2005 2:01:44 PM
Toluene	ND	25		µg/L	50	4/11/2005 2:01:44 PM
Ethylbenzene	170	25		µg/L	50	4/11/2005 2:01:44 PM
Xylenes, Total	120	25		µg/L	50	4/11/2005 2:01:44 PM
Surr: 4-Bromofluorobenzene	103	83.3-121		%REC	50	4/11/2005 2:01:44 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *13-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504086
Project: Semi Annual 2005

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15047** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/8/2005 8:25:08 AM** Prep Date
Client ID: Run ID: **PIDFID_050408A** SeqNo: **350499**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.22	0	20	0	96.1	83.3	121	0			

Sample ID **Reagent Blank 5m** Batch ID: **R15061** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/11/2005 9:28:42 AM** Prep Date
Client ID: Run ID: **PIDFID_050411A** SeqNo: **350885**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.9	0	20	0	99.5	83.3	121	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

CLIENT: San Juan Refining
Work Order: 0504086
Project: Semi Annual 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15047** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/8/2005 7:55:35 PM** Prep Date

Client ID: Run ID: **PIDFID_050408A** SeqNo: **350578**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	36.12	2.5	40	0	90.3	64.5	133	0			
Benzene	19.64	0.5	20	0	98.2	88.7	114	0			
Toluene	19.71	0.5	20	0	98.6	89.3	112	0			
Ethylbenzene	20.82	0.5	20	0	104	88.6	113	0			
Xylenes, Total	58.33	0.5	60	0	97.2	89.4	112	0			

Sample ID **BTEX lcs 100ng** Batch ID: **R15061** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/11/2005 11:04:48 PM** Prep Date

Client ID: Run ID: **PIDFID_050411A** SeqNo: **350889**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	38.6	2.5	40	0	96.5	64.5	133	0			
Benzene	21.07	0.5	20	0	105	88.7	114	0			
Toluene	20.71	0.5	20	0	104	89.3	112	0			
Ethylbenzene	22.01	0.5	20	0	110	88.6	113	0			
Xylenes, Total	62.29	0.5	60	0	104	89.4	112	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

I

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 4/8/2005

Work Order Number 0504086 | Received by GLS

Checklist completed by [signature] Signature | 4/8/05 Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 3° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 Rd 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Semi-Annual - 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample temperature: 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0504086	BTEX + MTBE + ~~TMB~~'s (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/06/05	245pm	H2O	RW #14	2-VOA			HCL	-1	X																
4/06/05	315pm	"	MW #3	2-VOA			HCL	-2	X																
4/06/05	350pm	"	MW #29	2-VOA			HCL	-3	X																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	
4/07/05	330pm	Cindy Hurtado		
				1245 @ 4/8/05
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Project Name: Semi-Annual -2005
Address: #50 Rd 4990 Bloomfield, NM 87413
Project #:
Project Manager:
Phone #: 505-632-4161
Sampler: Cindy Hurtado / Angela Folk
Fax #: 505-632-3911
Sample Temperature: 3

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0504086	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/07/05	950A	H_2O	RW #15	2-VOA			HCL	-4	X																
4/07/05	1045A	H_2O	RW #16	2-VOA			HCL	-5	X																
								-6	15																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	
4/07/05	330pm	Cindy Hurtado		1245
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	@ 4/8/05

Remarks:

ANALYSIS REQUEST

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

April 06, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Semi-Annual 2005 Order No.: 0504041

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 4 samples on 4/5/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *06-Apr-05*

CLIENT: San Juan Refining
Project: Semi-Annual 2005
Lab Order: 0504041

CASE NARRATIVE

Analytical Comments for METHOD 8021BTEX_W, SAMPLE 0504041-02a: Sample analyzed at dilution because of foamy matrix. Analytical Comments for METHOD 8021BTEX_W, SAMPLE 0504041-03a: Sample analyzed at dilution because of foamy matrix. Analytical Comments for METHOD 8021BTEX_W, SAMPLE 0504041-04a: Sample analyzed at dilution because of foamy matrix.

Hall Environmental Analysis Laboratory

Date: *06-Apr-05*

CLIENT: San Juan Refining
Project: Semi-Annual 2005

Lab Order: 0504041

Lab ID: 0504041-01 **Collection Date:** 4/4/2005 1:20:00 PM
Client Sample ID: MW #12 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/6/2005 1:17:27 AM
Benzene	ND	0.50		µg/L	1	4/6/2005 1:17:27 AM
Toluene	ND	0.50		µg/L	1	4/6/2005 1:17:27 AM
Ethylbenzene	ND	0.50		µg/L	1	4/6/2005 1:17:27 AM
Xylenes, Total	0.72	0.50		µg/L	1	4/6/2005 1:17:27 AM
Surr: 4-Bromofluorobenzene	107	83.3-121		%REC	1	4/6/2005 1:17:27 AM

Lab ID: 0504041-02 **Collection Date:** 4/4/2005 1:45:00 PM
Client Sample ID: MW #34 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	13		µg/L	5	4/6/2005 1:47:23 AM
Benzene	ND	2.5		µg/L	5	4/6/2005 1:47:23 AM
Toluene	24	2.5		µg/L	5	4/6/2005 1:47:23 AM
Ethylbenzene	4.1	2.5		µg/L	5	4/6/2005 1:47:23 AM
Xylenes, Total	3.9	2.5		µg/L	5	4/6/2005 1:47:23 AM
Surr: 4-Bromofluorobenzene	104	83.3-121		%REC	5	4/6/2005 1:47:23 AM

Lab ID: 0504041-03 **Collection Date:** 4/4/2005 2:10:00 PM
Client Sample ID: MW #35 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	13		µg/L	5	4/6/2005 2:17:22 AM
Benzene	ND	2.5		µg/L	5	4/6/2005 2:17:22 AM
Toluene	ND	2.5		µg/L	5	4/6/2005 2:17:22 AM
Ethylbenzene	ND	2.5		µg/L	5	4/6/2005 2:17:22 AM
Xylenes, Total	2.6	2.5		µg/L	5	4/6/2005 2:17:22 AM
Surr: 4-Bromofluorobenzene	108	83.3-121		%REC	5	4/6/2005 2:17:22 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *06-Apr-05*

CLIENT: San Juan Refining
Project: Semi-Annual 2005
Lab Order: 0504041

Lab ID: 0504041-04
Collection Date: 4/4/2005 2:30:00 PM
Client Sample ID: MW #37
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	13		µg/L	5	4/6/2005 2:47:19 AM
Benzene	ND	2.5		µg/L	5	4/6/2005 2:47:19 AM
Toluene	ND	2.5		µg/L	5	4/6/2005 2:47:19 AM
Ethylbenzene	ND	2.5		µg/L	5	4/6/2005 2:47:19 AM
Xylenes, Total	ND	2.5		µg/L	5	4/6/2005 2:47:19 AM
Surr: 4-Bromofluorobenzene	106	83.3-121		%REC	5	4/6/2005 2:47:19 AM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

CLIENT: San Juan Refining
Work Order: 0504041
Project: Semi-Annual 2005

QC SUMMARY REPORT

Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15012** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/5/2005 8:24:01 AM** Prep Date

Client ID: Run ID: **PIDFID_050405A** SeqNo: **349429**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	20.47	0	20	0	102	83.3	121	0			

Sample ID **Reagent Blank 5m** Batch ID: **R15012** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/5/2005 3:15:00 PM** Prep Date

Client ID: Run ID: **PIDFID_050405A** SeqNo: **349450**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	20.51	0	20	0	103	83.3	121	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *06-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504041
Project: Semi-Annual 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15012** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/5/2005 8:47:35 PM** Prep Date

Client ID: Run ID: **PIDFID_050405A** SeqNo: **349430**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	38.22	2.5	40	0	95.6	64.5	133	0			
Benzene	20.16	0.5	20	0	101	88.7	114	0			
Toluene	20.23	0.5	20	0	101	89.3	112	0			
Ethylbenzene	20.77	0.5	20	0	104	88.6	113	0			
Xylenes, Total	60.03	0.5	60	0	100	89.4	112	0			

Sample ID **BTEX lcs II 100ng** Batch ID: **R15012** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/5/2005 9:17:39 PM** Prep Date

Client ID: Run ID: **PIDFID_050405A** SeqNo: **349451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	35.08	2.5	40	0	87.7	64.5	133	0			
Benzene	19.95	0.5	20	0	99.8	88.7	114	0			
Toluene	20.03	0.5	20	0	100	89.3	112	0			
Ethylbenzene	20.84	0.5	20	0	104	88.6	113	0			
Xylenes, Total	60.2	0.5	60	0	100	89.4	112	0			

Sample ID **BTEX lcsdll 100n** Batch ID: **R15012** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/5/2005 9:47:43 PM** Prep Date

Client ID: Run ID: **PIDFID_050405A** SeqNo: **349452**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	36.29	2.5	40	0	90.7	64.5	133	35.08	3.39	28	
Benzene	19.39	0.5	20	0	97.0	88.7	114	19.95	2.85	27	
Toluene	19.49	0.5	20	0	97.5	89.3	112	20.03	2.69	19	
Ethylbenzene	20.05	0.5	20	0	100	88.6	113	20.84	3.87	10	
Xylenes, Total	59.21	0.5	60	0	98.7	89.4	112	60.2	1.66	13	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 4/5/2005

Work Order Number 0504041 | Received by AT

Checklist completed by _____ 4/5/05
Signature Date

Matrix | Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? **2°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐
Other:

Client: San Juan Refining
Project Name: Semi-Annual 2005
Address: #50 Rd 4990 Bloomfield, NM 87413
Project #:
Project Manager:
Phone #: 505-632-4161
Sampler: Cindy Hurtado / Angela Folk
Fax #: 505-632-3911
Sample Temperature: 2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + ~~TMB's (8021)~~ 8021B	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/04/05	120pm	H_2O	MW #12	2-VOA			HCL	050414 1	X																
	145pm		MW #34	2-VOA			HCL	-2	X																
	210pm		MW #35	2-VOA			HCL	-3	X																
	230pm		MW #37	2-VOA			HCL	-4	X																

Date: 4/04/05 Time: 3pm Relinquished By: (Signature) Cindy Hurtado
Received By: (Signature) 4/5/05 1008
Date: Time: Relinquished By: (Signature)
Received By: (Signature)
Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

April 19, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Semi Annual 2005 Order No.: 0504131

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 4/14/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Client Sample ID: MW #7
Lab Order: 0504131
Collection Date: 4/13/2005 2:00:00 PM
Project: Semi Annual 2005
Lab ID: 0504131-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/16/2005 12:11:53 AM
Benzene	ND	0.50		µg/L	1	4/16/2005 12:11:53 AM
Toluene	ND	0.50		µg/L	1	4/16/2005 12:11:53 AM
Ethylbenzene	ND	0.50		µg/L	1	4/16/2005 12:11:53 AM
Xylenes, Total	0.67	0.50		µg/L	1	4/16/2005 12:11:53 AM
Surr: 4-Bromofluorobenzene	104	83.3-121		%REC	1	4/16/2005 12:11:53 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Lab Order: 0504131
Project: Semi Annual 2005
Lab ID: 0504131-02

Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/16/2005 3:43:43 AM
Benzene	ND	0.50		µg/L	1	4/16/2005 3:43:43 AM
Toluene	ND	0.50		µg/L	1	4/16/2005 3:43:43 AM
Ethylbenzene	ND	0.50		µg/L	1	4/16/2005 3:43:43 AM
Xylenes, Total	ND	0.50		µg/L	1	4/16/2005 3:43:43 AM
Surr: 4-Bromofluorobenzene	97.5	83.3-121		%REC	1	4/16/2005 3:43:43 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504131
Project: Semi Annual 2005

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15110** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/15/2005 7:48:44 AM** Prep Date
Client ID: Run ID: **PIDFID_050415A** SeqNo: **352651**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	20.82	0	20	0	104	83.3	121	0			

Sample ID **Reagent Blank 5m** Batch ID: **R15124** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/18/2005 8:46:36 AM** Prep Date
Client ID: Run ID: **PIDFID_050418A** SeqNo: **352993**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	22.11	0	20	0	111	83.3	121	0			

3 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

I

CLIENT: San Juan Refining
Work Order: 0504131
Project: Semi Annual 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15110** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/16/2005 2:42:59 AM** Prep Date

Client ID: Run ID: **PIDFID_050415A** SeqNo: **352679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	35.68	2.5	40	0	89.2	64.5	133	0			
Benzene	19.05	0.5	20	0	95.2	88.7	114	0			
Toluene	19.25	0.5	20	0	96.3	89.3	112	0			
Ethylbenzene	19.66	0.5	20	0	98.3	88.6	113	0			
Xylenes, Total	57.34	0.5	60	0	95.6	89.4	112	0			

Sample ID **BTEX lcs 100ng** Batch ID: **R15124** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/19/2005 4:07:51 AM** Prep Date

Client ID: Run ID: **PIDFID_050418A** SeqNo: **353013**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	43.22	2.5	40	0	108	64.5	133	0			
Benzene	22.14	0.5	20	0	111	88.7	114	0			
Toluene	22.12	0.5	20	0	111	89.3	112	0			
Ethylbenzene	22.95	0.5	20	0	115	88.6	115	0			
Xylenes, Total	66.61	0.5	60	0	111	89.4	112	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 4/14/2005

Work Order Number 0504131 | Received by AT

Checklist completed by _____ 4/14/05
Signature | Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 1° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: San Juan Refining

Project Name: Semi-Annual 2005

Address: #50 Rd 4990
Bloomfield, NM
87413

Project #:

Project Manager:

Phone #: 505-632-4161

Sampler: Cindy Hurtado / Angela Folk

Fax #: 505-632-3911

Sample Temperature: 1°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
4/13/05	3pm	H2O	MW #7	2-VOA			HCl	050413I-1
			Trip Blank					-2

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
4/13/05	3pm	Cindy Hurtado	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 4/14/05

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

BTEX + MTBE + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
X																
X																

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

April 14, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Semi Annual 2005 Order No.: 0504120

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 12 samples on 4/13/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *14-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005
Lab Order: 0504120

Lab ID: 0504120-01 **Collection Date:** 4/11/2005 8:45:00 AM
Client Sample ID: RW #22 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	9600	1300		µg/L	500	4/13/2005 10:22:11 PM
Benzene	9800	250		µg/L	500	4/13/2005 10:22:11 PM
Toluene	83	20		µg/L	40	4/13/2005 2:15:56 PM
Ethylbenzene	1800	20		µg/L	40	4/13/2005 2:15:56 PM
Xylenes, Total	7900	20		µg/L	40	4/13/2005 2:15:56 PM
Surr: 4-Bromofluorobenzene	100	83.3-121		%REC	40	4/13/2005 2:15:56 PM

Lab ID: 0504120-02 **Collection Date:** 4/11/2005 9:20:00 AM
Client Sample ID: MW #39 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	4/13/2005 2:46:56 PM
Benzene	520	10		µg/L	20	4/13/2005 2:46:56 PM
Toluene	57	10		µg/L	20	4/13/2005 2:46:56 PM
Ethylbenzene	1300	10		µg/L	20	4/13/2005 2:46:56 PM
Xylenes, Total	1500	10		µg/L	20	4/13/2005 2:46:56 PM
Surr: 4-Bromofluorobenzene	111	83.3-121		%REC	20	4/13/2005 2:46:56 PM

Lab ID: 0504120-03 **Collection Date:** 4/11/2005 2:30:00 PM
Client Sample ID: MW #1 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/13/2005 3:17:41 PM
Benzene	1.3	0.50		µg/L	1	4/13/2005 3:17:41 PM
Toluene	ND	0.50		µg/L	1	4/13/2005 3:17:41 PM
Ethylbenzene	ND	0.50		µg/L	1	4/13/2005 3:17:41 PM
Xylenes, Total	1.1	0.50		µg/L	1	4/13/2005 3:17:41 PM
Surr: 4-Bromofluorobenzene	98.7	83.3-121		%REC	1	4/13/2005 3:17:41 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *14-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005

Lab Order: 0504120

Lab ID: 0504120-04 **Collection Date:** 4/11/2005 3:10:00 PM
Client Sample ID: RW #18 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	8900	500		µg/L	200	4/13/2005 3:48:20 PM
Benzene	920	100		µg/L	200	4/13/2005 3:48:20 PM
Toluene	160	100		µg/L	200	4/13/2005 3:48:20 PM
Ethylbenzene	540	100		µg/L	200	4/13/2005 3:48:20 PM
Xylenes, Total	1100	100		µg/L	200	4/13/2005 3:48:20 PM
Surr: 4-Bromofluorobenzene	104	83.3-121		%REC	200	4/13/2005 3:48:20 PM

Lab ID: 0504120-05 **Collection Date:**
Client Sample ID: Trip Blank **Matrix:** TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/13/2005 4:18:57 PM
Benzene	ND	0.50		µg/L	1	4/13/2005 4:18:57 PM
Toluene	ND	0.50		µg/L	1	4/13/2005 4:18:57 PM
Ethylbenzene	ND	0.50		µg/L	1	4/13/2005 4:18:57 PM
Xylenes, Total	ND	0.50		µg/L	1	4/13/2005 4:18:57 PM
Surr: 4-Bromofluorobenzene	102	83.3-121		%REC	1	4/13/2005 4:18:57 PM

Lab ID: 0504120-06 **Collection Date:** 4/12/2005 9:00:00 AM
Client Sample ID: MW #44 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	4.1	2.5		µg/L	1	4/13/2005 4:49:22 PM
Benzene	ND	0.50		µg/L	1	4/13/2005 4:49:22 PM
Toluene	ND	0.50		µg/L	1	4/13/2005 4:49:22 PM
Ethylbenzene	ND	0.50		µg/L	1	4/13/2005 4:49:22 PM
Xylenes, Total	ND	0.50		µg/L	1	4/13/2005 4:49:22 PM
Surr: 4-Bromofluorobenzene	103	83.3-121		%REC	1	4/13/2005 4:49:22 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *14-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005
Lab Order: 0504120

Lab ID: 0504120-07 **Collection Date:** 4/12/2005 9:35:00 AM
Client Sample ID: MW #30 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	40	4/13/2005 5:19:44 PM
Benzene	5700	20		µg/L	40	4/13/2005 5:19:44 PM
Toluene	3700	20		µg/L	40	4/13/2005 5:19:44 PM
Ethylbenzene	4400	20		µg/L	40	4/13/2005 5:19:44 PM
Xylenes, Total	12000	20		µg/L	40	4/13/2005 5:19:44 PM
Surr: 4-Bromofluorobenzene	113	83.3-121		%REC	40	4/13/2005 5:19:44 PM

Lab ID: 0504120-08 **Collection Date:** 4/12/2005 10:15:00 AM
Client Sample ID: RW #3 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	4/13/2005 5:50:03 PM
Benzene	100	10		µg/L	20	4/13/2005 5:50:03 PM
Toluene	100	10		µg/L	20	4/13/2005 5:50:03 PM
Ethylbenzene	100	10		µg/L	20	4/13/2005 5:50:03 PM
Xylenes, Total	450	10		µg/L	20	4/13/2005 5:50:03 PM
Surr: 4-Bromofluorobenzene	112	83.3-121		%REC	20	4/13/2005 5:50:03 PM

Lab ID: 0504120-09 **Collection Date:** 4/12/2005 12:50:00 PM
Client Sample ID: MW #21 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	41	13		µg/L	5	4/13/2005 6:20:25 PM
Benzene	130	2.5		µg/L	5	4/13/2005 6:20:25 PM
Toluene	ND	2.5		µg/L	5	4/13/2005 6:20:25 PM
Ethylbenzene	25	2.5		µg/L	5	4/13/2005 6:20:25 PM
Xylenes, Total	28	2.5		µg/L	5	4/13/2005 6:20:25 PM
Surr: 4-Bromofluorobenzene	112	83.3-121		%REC	5	4/13/2005 6:20:25 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *14-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005

Lab Order: 0504120

Lab ID: 0504120-10 **Collection Date:** 4/12/2005 2:00:00 PM
Client Sample ID: East Outfall #3 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/13/2005 6:50:40 PM
Benzene	ND	0.50		µg/L	1	4/13/2005 6:50:40 PM
Toluene	ND	0.50		µg/L	1	4/13/2005 6:50:40 PM
Ethylbenzene	ND	0.50		µg/L	1	4/13/2005 6:50:40 PM
Xylenes, Total	ND	0.50		µg/L	1	4/13/2005 6:50:40 PM
Surr: 4-Bromofluorobenzene	103	83.3-121		%REC	1	4/13/2005 6:50:40 PM

Lab ID: 0504120-11 **Collection Date:** 4/12/2005 2:20:00 PM
Client Sample ID: East Outfall #2 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/13/2005 7:20:54 PM
Benzene	ND	0.50		µg/L	1	4/13/2005 7:20:54 PM
Toluene	ND	0.50		µg/L	1	4/13/2005 7:20:54 PM
Ethylbenzene	ND	0.50		µg/L	1	4/13/2005 7:20:54 PM
Xylenes, Total	ND	0.50		µg/L	1	4/13/2005 7:20:54 PM
Surr: 4-Bromofluorobenzene	98.5	83.3-121		%REC	1	4/13/2005 7:20:54 PM

Lab ID: 0504120-12 **Collection Date:** 4/12/2005 1:40:00 PM
Client Sample ID: MW-8 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/13/2005 8:51:43 PM
Benzene	0.53	0.50		µg/L	1	4/13/2005 8:51:43 PM
Toluene	ND	0.50		µg/L	1	4/13/2005 8:51:43 PM
Ethylbenzene	ND	0.50		µg/L	1	4/13/2005 8:51:43 PM
Xylenes, Total	0.83	0.50		µg/L	1	4/13/2005 8:51:43 PM
Surr: 4-Bromofluorobenzene	103	83.3-121		%REC	1	4/13/2005 8:51:43 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *14-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504120
Project: Semi Annual 2005

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15087** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/13/2005 8:42:45 AM** Prep Date
Client ID: Run ID: **PIDFID_050413A** SeqNo: **351592**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.92	0	20	0	99.6	83.3	121	0			

Sample ID **Reagent Blank 5m** Batch ID: **R15091** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/14/2005 7:12:38 AM** Prep Date
Client ID: Run ID: **PIDFID_050414A** SeqNo: **351653**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	20.24	0	20	0	101	83.3	121	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Date: *14-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504120
Project: Semi Annual 2005

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0504120-12a ms** Batch ID: **R15087** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/13/2005 9:21:58 PM** Prep Date
Client ID: **MW-8** Run ID: **PIDFID_050413A** SeqNo: **351621**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	42.15	2.5	40	0.9348	103	64.5	133	0			
Benzene	19.99	0.5	20	0.5286	97.3	88.7	114	0			
Toluene	19.8	0.5	20	0	99.0	89.3	112	0			
Ethylbenzene	20.6	0.5	20	0	103	88.6	113	0			
Xylenes, Total	59.37	0.5	60	0.829	97.6	89.4	112	0			
Surr: 4-Bromofluorobenzene	22.87	0	24	0	95.3	83.3	121	0			

Sample ID **0504120-12a msd** Batch ID: **R15087** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/13/2005 9:52:05 PM** Prep Date
Client ID: **MW-8** Run ID: **PIDFID_050413A** SeqNo: **351622**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	39.35	2.5	40	0.9348	96.0	64.5	133	42.15	6.89	28	
Benzene	19.67	0.5	20	0.5286	95.7	88.7	114	19.99	1.64	27	
Toluene	19.51	0.5	20	0	97.6	89.3	112	19.8	1.45	19	
Ethylbenzene	20.45	0.5	20	0	102	88.6	113	20.6	0.748	10	
Xylenes, Total	59.62	0.5	60	0.829	98.0	89.4	112	59.37	0.418	13	
Surr: 4-Bromofluorobenzene	23.95	0	24	0	99.8	83.3	121	22.87	4.61	0	

8 / 9

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Date: *14-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504120
Project: Semi Annual 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15087** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/13/2005 8:21:31 PM** Prep Date

Client ID: Run ID: **PIDFID_050413A** SeqNo: **351623**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	43.43	2.5	40	0	109	64.5	133	0			
Benzene	19.59	0.5	20	0	98.0	88.7	114	0			
Toluene	19.74	0.5	20	0	98.7	89.3	112	0			
Ethylbenzene	20.85	0.5	20	0	104	88.6	113	0			
Xylenes, Total	59.63	0.5	60	0	99.4	89.4	112	0			

7 / 8

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 4/13/2005

Work Order Number 0504120 | Received by AT

Checklist completed by _____ (Signature) 4/13/05 (Date)

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 3° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 Rd 4990
Bloomfield, NM
87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Semi-Annual - 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: 3

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.	BTEX + MTBE + ~~TMB~~'s (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles or Headspace (Y or N)
~~4/11/05~~																							
4/11/05	845A	H20	RW #22	2-VOA	X		0504120-1	X															
	920A		MW #39	2-VOA	X		-2	X															
	230pm		MW #1	2-VOA	X		-3	X															
	310pm		RW #18	2-VOA	X		-4	X															
			Trip Blank	2x	"		-5																

Date: 4/12/05 Time: 3pm Relinquished By: (Signature) Cindy Hurtado
Received By: (Signature) 4/13/05 1127
Date: Time: Relinquished By: (Signature)
Received By: (Signature)

Remarks:

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: San Juan Refining

Project Name: SEMI-Annual-2005

Address: #50 Rd 4990 Bloomfield, NM 87413

Project #:

Project Manager:

Phone #: 505-632-4161

Sampler: Cindy Hurtado/Angela Folk

Fax #: 505-632-3911

Sample Temperature: 3

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + ~~THBs~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/12/05	9AM	H2O	MW #44	2-VOA	X			050412-6	X																
	935A		MW #30	2-VOA	X			-7	X																
	1015A		RW #3	2-VOA	X			-8	X																
	1250pm		MW #21	2-VOA			HCl	-9	X																
	2pm		East outfall #3	2-VOA			HCl	-10	X																
	2:20pm		East outfall #2	2-VOA			HCl	-11	X																
4/12/05	1340		MW-8				HCl	-12	X																

Date: 4/12/05 Time: 3pm Relinquished By: (Signature) Cindy Hurtado

Received By: (Signature) 4/13/05 1127

Date: Time: Relinquished By: (Signature)

Received By: (Signature)

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

April 19, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Semi Annual 2005 Order No.: 0504065

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 10 samples on 4/7/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005
Lab Order: 0504065

CASE NARRATIVE

Analytical Comments for METHOD 8021BTEX_W, SAMPLE 0504065-06a: Elevated surrogate due to matrix interference.
Analytical Comments for METHOD 8015DRO_W, SAMPLE 0504065-10A: DNOP not recovered due to dilution

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005
Lab Order: 0504065

Lab ID: 0504065-01 **Collection Date:** 4/5/2005 8:00:00 AM
Client Sample ID: MW #38 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	7.1	2.5		µg/L	1	4/7/2005 3:26:16 PM
Benzene	ND	0.50		µg/L	1	4/7/2005 3:26:16 PM
Toluene	ND	0.50		µg/L	1	4/7/2005 3:26:16 PM
Ethylbenzene	ND	0.50		µg/L	1	4/7/2005 3:26:16 PM
Xylenes, Total	1.5	0.50		µg/L	1	4/7/2005 3:26:16 PM
Surr: 4-Bromofluorobenzene	104	83.3-121		%REC	1	4/7/2005 3:26:16 PM

Lab ID: 0504065-02 **Collection Date:** 4/5/2005 8:20:00 AM
Client Sample ID: MW #36 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/7/2005 3:56:38 PM
Benzene	ND	0.50		µg/L	1	4/7/2005 3:56:38 PM
Toluene	ND	0.50		µg/L	1	4/7/2005 3:56:38 PM
Ethylbenzene	ND	0.50		µg/L	1	4/7/2005 3:56:38 PM
Xylenes, Total	1.9	0.50		µg/L	1	4/7/2005 3:56:38 PM
Surr: 4-Bromofluorobenzene	102	83.3-121		%REC	1	4/7/2005 3:56:38 PM

Lab ID: 0504065-03 **Collection Date:** 4/5/2005 9:05:00 AM
Client Sample ID: MW #11 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	40	4/7/2005 4:27:08 PM
Benzene	400	20		µg/L	40	4/7/2005 4:27:08 PM
Toluene	ND	20		µg/L	40	4/7/2005 4:27:08 PM
Ethylbenzene	ND	20		µg/L	40	4/7/2005 4:27:08 PM
Xylenes, Total	280	20		µg/L	40	4/7/2005 4:27:08 PM
Surr: 4-Bromofluorobenzene	113	83.3-121		%REC	40	4/7/2005 4:27:08 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005
Lab Order: 0504065

Lab ID: 0504065-04 **Collection Date:** 4/5/2005 10:00:00 AM
Client Sample ID: MW #32 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/7/2005 4:57:38 PM
Benzene	ND	0.50		µg/L	1	4/7/2005 4:57:38 PM
Toluene	ND	0.50		µg/L	1	4/7/2005 4:57:38 PM
Ethylbenzene	ND	0.50		µg/L	1	4/7/2005 4:57:38 PM
Xylenes, Total	ND	0.50		µg/L	1	4/7/2005 4:57:38 PM
Surr: 4-Bromofluorobenzene	102	83.3-121		%REC	1	4/7/2005 4:57:38 PM

Lab ID: 0504065-05 **Collection Date:** 4/5/2005 10:30:00 AM
Client Sample ID: MW #33 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/7/2005 5:28:07 PM
Benzene	ND	0.50		µg/L	1	4/7/2005 5:28:07 PM
Toluene	ND	0.50		µg/L	1	4/7/2005 5:28:07 PM
Ethylbenzene	ND	0.50		µg/L	1	4/7/2005 5:28:07 PM
Xylenes, Total	ND	0.50		µg/L	1	4/7/2005 5:28:07 PM
Surr: 4-Bromofluorobenzene	99.7	83.3-121		%REC	1	4/7/2005 5:28:07 PM

Lab ID: 0504065-06 **Collection Date:** 4/5/2005 11:00:00 AM
Client Sample ID: MW #27 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/7/2005 8:00:01 PM
Benzene	ND	0.50		µg/L	1	4/7/2005 8:00:01 PM
Toluene	ND	0.50		µg/L	1	4/7/2005 8:00:01 PM
Ethylbenzene	ND	0.50		µg/L	1	4/7/2005 8:00:01 PM
Xylenes, Total	1.0	0.50		µg/L	1	4/7/2005 8:00:01 PM
Surr: 4-Bromofluorobenzene	121	83.3-121	S	%REC	1	4/7/2005 8:00:01 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005
Lab Order: 0504065

Lab ID: 0504065-07 **Collection Date:** 4/5/2005 11:50:00 AM
Client Sample ID: MW- #26 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	40	4/7/2005 8:30:19 PM
Benzene	1300	20		µg/L	40	4/7/2005 8:30:19 PM
Toluene	ND	20		µg/L	40	4/7/2005 8:30:19 PM
Ethylbenzene	440	20		µg/L	40	4/7/2005 8:30:19 PM
Xylenes, Total	450	20		µg/L	40	4/7/2005 8:30:19 PM
Surr: 4-Bromofluorobenzene	110	83.3-121		%REC	40	4/7/2005 8:30:19 PM

Lab ID: 0504065-08 **Collection Date:** 4/5/2005 2:00:00 PM
Client Sample ID: MW #31 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	250		µg/L	100	4/7/2005 9:00:36 PM
Benzene	2600	50		µg/L	100	4/7/2005 9:00:36 PM
Toluene	62	50		µg/L	100	4/7/2005 9:00:36 PM
Ethylbenzene	450	50		µg/L	100	4/7/2005 9:00:36 PM
Xylenes, Total	1200	50		µg/L	100	4/7/2005 9:00:36 PM
Surr: 4-Bromofluorobenzene	118	83.3-121		%REC	100	4/7/2005 9:00:36 PM

Lab ID: 0504065-09 **Collection Date:** 4/5/2005 3:10:00 PM
Client Sample ID: MW #13 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	14	2.5		µg/L	1	4/7/2005 9:30:45 PM
Benzene	ND	0.50		µg/L	1	4/7/2005 9:30:45 PM
Toluene	ND	0.50		µg/L	1	4/7/2005 9:30:45 PM
Ethylbenzene	ND	0.50		µg/L	1	4/7/2005 9:30:45 PM
Xylenes, Total	ND	0.50		µg/L	1	4/7/2005 9:30:45 PM
Surr: 4-Bromofluorobenzene	105	83.3-121		%REC	1	4/7/2005 9:30:45 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Project: Semi Annual 2005

Lab Order: 0504065

Lab ID: 0504065-10
Client Sample ID: MW #25

Collection Date: 4/6/2005 8:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	180	50		mg/L	50	4/13/2005 7:52:27 AM
Motor Oil Range Organics (MRO)	ND	250		mg/L	50	4/13/2005 7:52:27 AM
Surr: DNOP	0	58-140	S	%REC	50	4/13/2005 7:52:27 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	10		mg/L	200	4/8/2005 8:25:52 PM
Surr: BFB	105	78.3-120		%REC	200	4/8/2005 8:25:52 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	500		µg/L	200	4/7/2005 10:00:51 PM
Benzene	ND	100		µg/L	200	4/7/2005 10:00:51 PM
Toluene	ND	100		µg/L	200	4/7/2005 10:00:51 PM
Ethylbenzene	ND	100		µg/L	200	4/7/2005 10:00:51 PM
Xylenes, Total	110	100		µg/L	200	4/7/2005 10:00:51 PM
Surr: 4-Bromofluorobenzene	114	83.3-121		%REC	200	4/7/2005 10:00:51 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504065
Project: Semi Annual 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB-7741	Batch ID: 7741	Test Code: SW8015	Units: mg/L	Analysis Date 4/13/2005 5:23:14 AM	Prep Date 4/11/2005
Client ID:		Run ID: FID(17A) 2_050412A		SeqNo: 351425	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.079	0	1	0	108	58	140	0			

Sample ID Reagent Blank 5m	Batch ID: R15047	Test Code: SW8015	Units: mg/L	Analysis Date 4/8/2005 8:25:08 AM	Prep Date
Client ID:		Run ID: PIDFID_050408A		SeqNo: 350502	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	19.39	0	20	0	96.9	78.3	120	0			

Sample ID Reagent Blank 5m	Batch ID: R15061	Test Code: SW8015	Units: mg/L	Analysis Date 4/11/2005 9:28:42 AM	Prep Date
Client ID:		Run ID: PIDFID_050411A		SeqNo: 350886	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	18.94	0	20	0	94.7	78.3	120	0			

6/13

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

/

CLIENT: San Juan Refining
Work Order: 0504065
Project: Semi Annual 2005

QC SUMMARY REPORT
Method Blank

Sample ID Reagent Blank 5m Batch ID: R15031 Test Code: SW8021 Units: µg/L Analysis Date 4/7/2005 8:45:25 AM Prep Date
Client ID: Run ID: PIDFID_050407A SeqNo: 350059

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.57	0	20	0	97.8	83.3	121	0			

Sample ID Reagent Blank 5m Batch ID: R15047 Test Code: SW8021 Units: µg/L Analysis Date 4/8/2005 8:25:08 AM Prep Date
Client ID: Run ID: PIDFID_050408A SeqNo: 350499

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
1,2,4-Trimethylbenzene	ND	0.5									
1,3,5-Trimethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.22	0	20	0	96.1	83.3	121	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504065
Project: Semi Annual 2005

QC SUMMARY REPORT
Method Blank

Sample ID Reagent Blank 5m Batch ID: R15061 Test Code: SW8021 Units: µg/L Analysis Date 4/11/2005 9:28:42 AM Prep Date
Client ID: Run ID: PIDFID_050411A SeqNo: 350885

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
1,2,4-Trimethylbenzene	ND	0.5									
1,3,5-Trimethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.9	0	20	0	99.5	83.3	121	0			

8/13

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504065
Project: Semi Annual 2005

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID 0504065-05a ms	Batch ID: R15031	Test Code: SW8021	Units: µg/L	Analysis Date 4/7/2005 6:59:21 PM	Prep Date
Client ID: MW #33		Run ID: PIDFID_050407A		SeqNo: 350121	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	39.67	2.5	40	0	99.2	64.5	133	0			
Benzene	20.78	0.5	20	0	104	88.7	114	0			
Toluene	20.32	0.5	20	0	102	89.3	112	0			
Ethylbenzene	21.19	0.5	20	0	106	88.6	113	0			
Xylenes, Total	59.96	0.5	60	0	99.9	89.4	112	0			
Surr: 4-Bromofluorobenzene	24.78	0	24	0	103	83.3	121	0			

Sample ID 0504065-05a msd	Batch ID: R15031	Test Code: SW8021	Units: µg/L	Analysis Date 4/7/2005 7:29:39 PM	Prep Date
Client ID: MW #33		Run ID: PIDFID_050407A		SeqNo: 350122	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	36.98	2.5	40	0	92.4	64.5	133	39.67	7.03	28	
Benzene	20.35	0.5	20	0	102	88.7	114	20.78	2.09	27	
Toluene	19.93	0.5	20	0	99.6	89.3	112	20.32	1.97	19	
Ethylbenzene	20.44	0.5	20	0	102	88.6	113	21.19	3.61	10	
Xylenes, Total	59.58	0.5	60	0	99.3	89.4	112	59.96	0.641	13	
Surr: 4-Bromofluorobenzene	24.42	0	24	0	102	83.3	121	24.78	1.45	0	

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504065
Project: Semi Annual 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID LCS-7741	Batch ID: 7741	Test Code: SW8015	Units: mg/L	Analysis Date 4/13/2005 5:53:08 AM	Prep Date 4/11/2005
Client ID:		Run ID: FID(17A) 2_050412A		SeqNo: 351426	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.687	1	5	0	134	81.2	149	0			

Sample ID LCSD-7741	Batch ID: 7741	Test Code: SW8015	Units: mg/L	Analysis Date 4/13/2005 5:12:01 PM	Prep Date 4/11/2005
Client ID:		Run ID: FID(17A) 2_050412A		SeqNo: 351565	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.592	1	5	0	112	81.2	149	6.687	17.8	23	

Sample ID GRO lcs 2.5ug	Batch ID: R15047	Test Code: SW8015	Units: mg/L	Analysis Date 4/9/2005 3:56:36 AM	Prep Date
Client ID:		Run ID: PIDFID_050408A		SeqNo: 350595	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4986	0.05	0.5	0	99.7	82.6	114	0			

Sample ID GRO lcs 2.5ug	Batch ID: R15061	Test Code: SW8015	Units: mg/L	Analysis Date 4/12/2005 1:05:11 AM	Prep Date
Client ID:		Run ID: PIDFID_050411A		SeqNo: 350892	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4896	0.05	0.5	0	97.9	82.6	114	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504065
Project: Semi Annual 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15031** Test Code: **SW8021** Units: µg/L Analysis Date **4/7/2005 11:29:24 AM** Prep Date

Client ID: Run ID: **PIDFID_050407A** SeqNo: **350061**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	36.16	2.5	40	0	90.4	64.5	133	0			
Benzene	20.94	0.5	20	0	105	88.7	114	0			
Toluene	20.37	0.5	20	0	102	89.3	112	0			
Ethylbenzene	21.18	0.5	20	0	106	88.6	113	0			
Xylenes, Total	61.63	0.5	60	0	103	89.4	112	0			

Sample ID **BTEX lcs 100ng** Batch ID: **R15047** Test Code: **SW8021** Units: µg/L Analysis Date **4/8/2005 7:55:35 PM** Prep Date

Client ID: Run ID: **PIDFID_050408A** SeqNo: **350578**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	36.12	2.5	40	0	90.3	64.5	133	0			
Benzene	19.64	0.5	20	0	98.2	88.7	114	0			
Toluene	19.71	0.5	20	0	98.6	89.3	112	0			
Ethylbenzene	20.82	0.5	20	0	104	88.6	113	0			
1,2,4-Trimethylbenzene	19.63	0.5	20	0	98.2	87.9	112	0			
1,3,5-Trimethylbenzene	19.43	0.5	20	0	97.1	88.2	113	0			
Xylenes, Total	58.33	0.5	60	0	97.2	89.4	112	0			

11/13

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0504065
Project: Semi Annual 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID BTEX lcs 100ng Batch ID: R15061 Test Code: SW8021 Units: µg/L Analysis Date 4/11/2005 11:04:48 PM Prep Date
Client ID: Run ID: PIDFID_050411A SeqNo: 350889

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	38.6	2.5	40	0	96.5	64.5	133	0			
Benzene	21.07	0.5	20	0	105	88.7	114	0			
Toluene	20.71	0.5	20	0	104	89.3	112	0			
Ethylbenzene	22.01	0.5	20	0	110	88.6	113	0			
1,2,4-Trimethylbenzene	21.07	0.5	20	0	105	87.9	112	0			
1,3,5-Trimethylbenzene	20.96	0.5	20	0	105	88.2	113	0			
Xylenes, Total	62.29	0.5	60	0	104	89.4	112	0			

12/13

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 4/7/2005

Work Order Number 0504065 | Received by AT

Checklist completed by _____ 4/7/05
Signature | Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 4° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 Rd 4990
Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Semi-Annual 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: 1.4

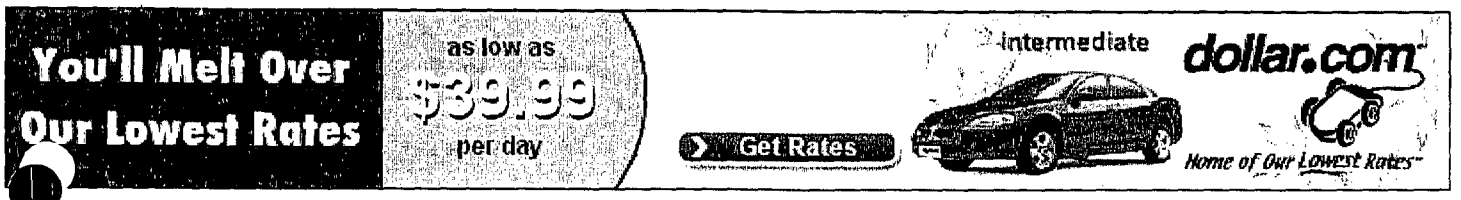
ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles or Headspace (Y or N)
4/05/05	8AM	H_2O	MW #38	2-VOA			HCl	050465-1	X												
	820A		MW #36	2-VOA			HCl	-2	X												
	905A		MW #11	2-VOA			HCl	-3	X												
	10AM		MW #32	2-VOA			HCl	-4	X												
	1030AM		MW #33	2-VOA			HCl	-5	X												
	11AM		MW #27	2-VOA			HCl	-6	X												
	1150AM		MW #26	2-VOA			HCl	-7	X												
	2pm		MW #31	2-VOA			HCl	-8	X												
4/05/05	310pm	H_2O	MW #13	2-VOA			HCl	-9	X												
4/06/05	845AM	H_2O	MW #25	2-VOA			HCl	-10	X												

Date: 4/06/05 Time: 910AM Relinquished By: (Signature) Cindy Hurtado
Received By: (Signature) 4/7/05 1231

Date: Time: Relinquished By: (Signature)
Received By: (Signature)

Remarks: Added DRO/BRO to #10


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HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

August 26, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Annual Sampling 2005 Order No.: 0508119

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 8 samples on 8/10/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Project: Annual Sampling 2005
Lab Order: 0508119

CASE NARRATIVE

Analytical Comments for METHOD 8260_W, SAMPLE 0508119-05a: bfb matrix interference
Analytical Comments for METHOD 8260_W, SAMPLE 0508119-04a: bfb matrix interference

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #27
Lab Order: 0508119
Collection Date: 8/10/2005 8:00:00 AM
Project: Annual Sampling 2005
Lab ID: 0508119-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.24	0.10		mg/L	1	8/11/2005
Chloride	260	1.0		mg/L	10	8/11/2005
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	8/11/2005
Bromide	2.1	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	1000	10		mg/L	20	8/11/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	600	2.0		mg/L CaCO3	1	8/15/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/15/2005
Bicarbonate	600	2.0		mg/L CaCO3	1	8/15/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	8/16/2005
Toluene	ND	1.0		µg/L	1	8/16/2005
Ethylbenzene	ND	1.0		µg/L	1	8/16/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/16/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/16/2005
Naphthalene	ND	2.0		µg/L	1	8/16/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
Acetone	ND	10		µg/L	1	8/16/2005
Bromobenzene	ND	1.0		µg/L	1	8/16/2005
Bromochloromethane	ND	1.0		µg/L	1	8/16/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/16/2005
Bromoform	ND	1.0		µg/L	1	8/16/2005
Bromomethane	ND	2.0		µg/L	1	8/16/2005
2-Butanone	ND	10		µg/L	1	8/16/2005
Carbon disulfide	ND	10		µg/L	1	8/16/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/16/2005
Chlorobenzene	ND	1.0		µg/L	1	8/16/2005
Chloroethane	ND	2.0		µg/L	1	8/16/2005
Chloroform	ND	1.0		µg/L	1	8/16/2005
Chloromethane	ND	1.0		µg/L	1	8/16/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-01

Client Sample ID: MW #27
Collection Date: 8/10/2005 8:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/16/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/16/2005
Dibromomethane	ND	2.0		µg/L	1	8/16/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/16/2005
2-Hexanone	ND	10		µg/L	1	8/16/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/16/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/16/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/16/2005
Methylene Chloride	ND	3.0		µg/L	1	8/16/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/16/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
Styrene	ND	1.0		µg/L	1	8/16/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/16/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/16/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/16/2005
Vinyl chloride	ND	1.0		µg/L	1	8/16/2005
Xylenes, Total	ND	1.0		µg/L	1	8/16/2005
Surr: 1,2-Dichloroethane-d4	97.3	87.7-108		%REC	1	8/16/2005
Surr: 4-Bromofluorobenzene	101	88.8-113		%REC	1	8/16/2005
Surr: Dibromofluoromethane	98.7	84.1-111		%REC	1	8/16/2005
Surr: Toluene-d8	91.1	85.9-109		%REC	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-01

Client Sample ID: MW #27
Collection Date: 8/10/2005 8:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: IC
Total Carbon Dioxide	540	1.0		mg CO2/L	1	8/25/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	3500	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 1:33:39 PM
Barium	0.063	0.0020		mg/L	1	8/12/2005 1:33:39 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 1:33:39 PM
Calcium	290	10		mg/L	10	8/15/2005 11:02:18 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 1:33:39 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 1:33:39 PM
Iron	3.4	0.020		mg/L	1	8/12/2005 1:33:39 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 1:33:39 PM
Magnesium	45	1.0		mg/L	1	8/12/2005 1:33:39 PM
Manganese	2.7	0.0020		mg/L	1	8/12/2005 1:33:39 PM
Potassium	3.4	1.0		mg/L	1	8/12/2005 1:33:39 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 1:33:39 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 1:33:39 PM
Sodium	430	10		mg/L	10	8/15/2005 11:02:18 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 1:33:39 PM
Zinc	0.0066	0.0050		mg/L	1	8/12/2005 1:33:39 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	ND	0.0060		mg/L	1	8/15/2005 1:37:03 PM
Lead	ND	0.0050		mg/L	1	8/15/2005 1:37:03 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	2600	50		mg/L	1	8/12/2005

Qualifiers:
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* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #33
Lab Order: 0508119
Collection Date: 8/9/2005 4:00:00 PM
Project: Annual Sampling 2005
Lab ID: 0508119-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.30	0.10		mg/L	1	8/11/2005
Chloride	560	2.0		mg/L	20	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/11/2005
Bromide	3.2	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	26	0.50		mg/L	5	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	1500	10		mg/L	20	8/12/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	160	2.0		mg/L CaCO3	1	8/15/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/15/2005
Bicarbonate	160	2.0		mg/L CaCO3	1	8/15/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	8/16/2005
Toluene	ND	1.0		µg/L	1	8/16/2005
Ethylbenzene	ND	1.0		µg/L	1	8/16/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/16/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/16/2005
Naphthalene	ND	2.0		µg/L	1	8/16/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
Acetone	ND	10		µg/L	1	8/16/2005
Bromobenzene	ND	1.0		µg/L	1	8/16/2005
Bromochloromethane	ND	1.0		µg/L	1	8/16/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/16/2005
Bromoform	ND	1.0		µg/L	1	8/16/2005
Bromomethane	ND	2.0		µg/L	1	8/16/2005
2-Butanone	ND	10		µg/L	1	8/16/2005
Carbon disulfide	ND	10		µg/L	1	8/16/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/16/2005
Chlorobenzene	ND	1.0		µg/L	1	8/16/2005
Chloroethane	ND	2.0		µg/L	1	8/16/2005
Chloroform	ND	1.0		µg/L	1	8/16/2005
Chloromethane	ND	1.0		µg/L	1	8/16/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-02

Client Sample ID: MW #33
Collection Date: 8/9/2005 4:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/16/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/16/2005
Dibromomethane	ND	2.0		µg/L	1	8/16/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/16/2005
2-Hexanone	ND	10		µg/L	1	8/16/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/16/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/16/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/16/2005
Methylene Chloride	ND	3.0		µg/L	1	8/16/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/16/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
Styrene	ND	1.0		µg/L	1	8/16/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/16/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/16/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/16/2005
Vinyl chloride	ND	1.0		µg/L	1	8/16/2005
Xylenes, Total	ND	1.0		µg/L	1	8/16/2005
Surr: 1,2-Dichloroethane-d4	100	87.7-108		%REC	1	8/16/2005
Surr: 4-Bromofluorobenzene	107	88.8-113		%REC	1	8/16/2005
Surr: Dibromofluoromethane	99.1	84.1-111		%REC	1	8/16/2005
Surr: Toluene-d8	96.3	85.9-109		%REC	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-02

Client Sample ID: MW #33
Collection Date: 8/9/2005 4:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: IC
Total Carbon Dioxide	140	1.0		mg CO2/L	1	8/25/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	4700	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 1:38:01 PM
Barium	0.019	0.0020		mg/L	1	8/12/2005 1:38:01 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 1:38:01 PM
Calcium	340	10		mg/L	10	8/15/2005 11:05:24 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 1:38:01 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 1:38:01 PM
Iron	ND	0.020		mg/L	1	8/12/2005 1:38:01 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 1:38:01 PM
Magnesium	48	1.0		mg/L	1	8/12/2005 1:38:01 PM
Manganese	0.0065	0.0020		mg/L	1	8/12/2005 1:38:01 PM
Potassium	4.9	1.0		mg/L	1	8/12/2005 1:38:01 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 1:38:01 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 1:38:01 PM
Sodium	640	10		mg/L	10	8/15/2005 11:05:24 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 1:38:01 PM
Zinc	0.012	0.0050		mg/L	1	8/12/2005 1:38:01 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	ND	0.0060		mg/L	1	8/15/2005 1:41:10 PM
Lead	ND	0.0050		mg/L	1	8/15/2005 1:41:10 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	3500	50		mg/L	1	8/12/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #34
Lab Order:	0508119	**Collection Date:**	8/9/2005 10:40:00 AM
Project:	Annual Sampling 2005		
Lab ID:	0508119-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.81	0.10		mg/L	1	8/11/2005
Chloride	100	0.50		mg/L	5	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/11/2005
Bromide	1.2	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	0.10	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	9.0	0.50		mg/L	1	8/11/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	1200	2.0		mg/L CaCO3	1	8/15/2005
Carbonate	48	2.0		mg/L CaCO3	1	8/15/2005
Bicarbonate	1100	2.0		mg/L CaCO3	1	8/15/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	5.0		µg/L	5	8/16/2005
Toluene	ND	5.0		µg/L	5	8/16/2005
Ethylbenzene	ND	5.0		µg/L	5	8/16/2005
Methyl tert-butyl ether (MTBE)	5.7	5.0		µg/L	5	8/16/2005
1,2,4-Trimethylbenzene	340	5.0		µg/L	5	8/16/2005
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	8/16/2005
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	8/16/2005
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	8/16/2005
Naphthalene	18	10		µg/L	5	8/16/2005
1-Methylnaphthalene	ND	20		µg/L	5	8/16/2005
2-Methylnaphthalene	ND	20		µg/L	5	8/16/2005
Acetone	ND	50		µg/L	5	8/16/2005
Bromobenzene	ND	5.0		µg/L	5	8/16/2005
Bromochloromethane	ND	5.0		µg/L	5	8/16/2005
Bromodichloromethane	ND	5.0		µg/L	5	8/16/2005
Bromoform	ND	5.0		µg/L	5	8/16/2005
Bromomethane	ND	10		µg/L	5	8/16/2005
2-Butanone	ND	50		µg/L	5	8/16/2005
Carbon disulfide	ND	50		µg/L	5	8/16/2005
Carbon Tetrachloride	ND	5.0		µg/L	5	8/16/2005
Chlorobenzene	ND	5.0		µg/L	5	8/16/2005
Chloroethane	ND	10		µg/L	5	8/16/2005
Chloroform	ND	5.0		µg/L	5	8/16/2005
Chloromethane	ND	5.0		µg/L	5	8/16/2005
2-Chlorotoluene	ND	5.0		µg/L	5	8/16/2005
4-Chlorotoluene	ND	5.0		µg/L	5	8/16/2005
cis-1,2-DCE	ND	5.0		µg/L	5	8/16/2005
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	8/16/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #34
Lab Order: 0508119
Collection Date: 8/9/2005 10:40:00 AM
Project: Annual Sampling 2005
Lab ID: 0508119-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	8/16/2005
Dibromochloromethane	ND	5.0		µg/L	5	8/16/2005
Dibromomethane	ND	10		µg/L	5	8/16/2005
1,2-Dichlorobenzene	ND	5.0		µg/L	5	8/16/2005
1,3-Dichlorobenzene	ND	5.0		µg/L	5	8/16/2005
1,4-Dichlorobenzene	ND	5.0		µg/L	5	8/16/2005
Dichlorodifluoromethane	ND	5.0		µg/L	5	8/16/2005
1,1-Dichloroethane	ND	5.0		µg/L	5	8/16/2005
1,1-Dichloroethene	ND	5.0		µg/L	5	8/16/2005
1,2-Dichloropropane	ND	5.0		µg/L	5	8/16/2005
1,3-Dichloropropane	ND	5.0		µg/L	5	8/16/2005
2,2-Dichloropropane	ND	5.0		µg/L	5	8/16/2005
1,1-Dichloropropene	ND	5.0		µg/L	5	8/16/2005
Hexachlorobutadiene	ND	5.0		µg/L	5	8/16/2005
2-Hexanone	ND	50		µg/L	5	8/16/2005
Isopropylbenzene	44	5.0		µg/L	5	8/16/2005
4-Isopropyltoluene	8.2	5.0		µg/L	5	8/16/2005
4-Methyl-2-pentanone	ND	50		µg/L	5	8/16/2005
Methylene Chloride	ND	15		µg/L	5	8/16/2005
n-Butylbenzene	ND	5.0		µg/L	5	8/16/2005
n-Propylbenzene	38	5.0		µg/L	5	8/16/2005
sec-Butylbenzene	10	5.0		µg/L	5	8/16/2005
Styrene	ND	5.0		µg/L	5	8/16/2005
tert-Butylbenzene	ND	5.0		µg/L	5	8/16/2005
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	8/16/2005
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	5	8/16/2005
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	8/16/2005
trans-1,2-DCE	ND	5.0		µg/L	5	8/16/2005
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	8/16/2005
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	8/16/2005
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	8/16/2005
1,1,1-Trichloroethane	ND	5.0		µg/L	5	8/16/2005
1,1,2-Trichloroethane	ND	5.0		µg/L	5	8/16/2005
Trichloroethene (TCE)	ND	5.0		µg/L	5	8/16/2005
Trichlorofluoromethane	ND	5.0		µg/L	5	8/16/2005
1,2,3-Trichloropropane	ND	10		µg/L	5	8/16/2005
Vinyl chloride	ND	5.0		µg/L	5	8/16/2005
Xylenes, Total	ND	5.0		µg/L	5	8/16/2005
Surr: 1,2-Dichloroethane-d4	93.4	87.7-108		%REC	5	8/16/2005
Surr: 4-Bromofluorobenzene	116	88.8-113	S	%REC	5	8/16/2005
Surr: Dibromofluoromethane	102	84.1-111		%REC	5	8/16/2005
Surr: Toluene-d8	94.6	85.9-109		%REC	5	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT:	San Juan Refining	Client Sample ID:	MW #34
Lab Order:	0508119	Collection Date:	8/9/2005 10:40:00 AM
Project:	Annual Sampling 2005		
Lab ID:	0508119-03	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: IC
Total Carbon Dioxide	1000	1.0		mg CO2/L	1	8/25/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2200	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 1:41:59 PM
Barium	0.77	0.0020		mg/L	1	8/12/2005 1:41:59 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 1:41:59 PM
Calcium	110	10		mg/L	10	8/15/2005 11:08:31 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 1:41:59 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 1:41:59 PM
Iron	4.9	0.020		mg/L	1	8/12/2005 1:41:59 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 1:41:59 PM
Magnesium	20	1.0		mg/L	1	8/12/2005 1:41:59 PM
Manganese	4.2	0.0020		mg/L	1	8/12/2005 1:41:59 PM
Potassium	1.2	1.0		mg/L	1	8/12/2005 1:41:59 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 1:41:59 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 1:41:59 PM
Sodium	390	10		mg/L	10	8/15/2005 11:08:31 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 1:41:59 PM
Zinc	0.10	0.0050		mg/L	1	8/12/2005 1:41:59 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.011	0.0060		mg/L	1	8/15/2005 1:45:19 PM
Lead	0.0078	0.0050		mg/L	1	8/15/2005 1:45:19 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	1500	50		mg/L	1	8/12/2005

Qualifiers:

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- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #35
Lab Order: 0508119
Collection Date: 8/9/2005 11:05:00 AM
Project: Annual Sampling 2005
Lab ID: 0508119-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.45	0.10		mg/L	1	8/11/2005
Chloride	100	0.50		mg/L	5	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/11/2005
Bromide	1.2	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	0.10	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	3.2	0.50		mg/L	1	8/11/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	1100	2.0		mg/L CaCO3	1	8/15/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/15/2005
Bicarbonate	1100	2.0		mg/L CaCO3	1	8/15/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	8/16/2005
Toluene	ND	1.0		µg/L	1	8/16/2005
Ethylbenzene	ND	1.0		µg/L	1	8/16/2005
Methyl tert-butyl ether (MTBE)	6.5	1.0		µg/L	1	8/16/2005
1,2,4-Trimethylbenzene	280	10		µg/L	10	8/18/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/16/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/16/2005
Naphthalene	17	2.0		µg/L	1	8/16/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
Acetone	ND	10		µg/L	1	8/16/2005
Bromobenzene	ND	1.0		µg/L	1	8/16/2005
Bromochloromethane	ND	1.0		µg/L	1	8/16/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/16/2005
Bromoform	ND	1.0		µg/L	1	8/16/2005
Bromomethane	ND	2.0		µg/L	1	8/16/2005
2-Butanone	ND	10		µg/L	1	8/16/2005
Carbon disulfide	ND	10		µg/L	1	8/16/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/16/2005
Chlorobenzene	ND	1.0		µg/L	1	8/16/2005
Chloroethane	ND	2.0		µg/L	1	8/16/2005
Chloroform	ND	1.0		µg/L	1	8/16/2005
Chloromethane	ND	1.0		µg/L	1	8/16/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-04

Client Sample ID: MW #35
Collection Date: 8/9/2005 11:05:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/16/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/16/2005
Dibromomethane	ND	2.0		µg/L	1	8/16/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/16/2005
2-Hexanone	ND	10		µg/L	1	8/16/2005
Isopropylbenzene	30	1.0		µg/L	1	8/16/2005
4-Isopropyltoluene	4.2	1.0		µg/L	1	8/16/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/16/2005
Methylene Chloride	ND	3.0		µg/L	1	8/16/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
n-Propylbenzene	19	1.0		µg/L	1	8/16/2005
sec-Butylbenzene	7.6	1.0		µg/L	1	8/16/2005
Styrene	ND	1.0		µg/L	1	8/16/2005
tert-Butylbenzene	3.2	1.0		µg/L	1	8/16/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/16/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/16/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/16/2005
Vinyl chloride	ND	1.0		µg/L	1	8/16/2005
Xylenes, Total	ND	1.0		µg/L	1	8/16/2005
Surr: 1,2-Dichloroethane-d4	94.6	87.7-108		%REC	1	8/16/2005
Surr: 4-Bromofluorobenzene	102	88.8-113		%REC	10	8/18/2005
Surr: Dibromofluoromethane	94.2	84.1-111		%REC	1	8/16/2005
Surr: Toluene-d8	95.3	85.9-109		%REC	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-04

Client Sample ID: MW #35
Collection Date: 8/9/2005 11:05:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: IC
Total Carbon Dioxide	950	1.0		mg CO2/L	1	8/25/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2100	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 1:46:03 PM
Barium	0.54	0.0020		mg/L	1	8/12/2005 1:46:03 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 1:46:03 PM
Calcium	120	10		mg/L	10	8/15/2005 11:11:36 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 1:46:03 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 1:46:03 PM
Iron	5.9	0.020		mg/L	1	8/12/2005 1:46:03 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 1:46:03 PM
Magnesium	22	1.0		mg/L	1	8/12/2005 1:46:03 PM
Manganese	3.0	0.0020		mg/L	1	8/12/2005 1:46:03 PM
Potassium	2.9	1.0		mg/L	1	8/12/2005 1:46:03 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 1:46:03 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 1:46:03 PM
Sodium	310	10		mg/L	10	8/15/2005 11:11:36 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 1:46:03 PM
Zinc	0.095	0.0050		mg/L	1	8/12/2005 1:46:03 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.017	0.0060		mg/L	1	8/15/2005 1:49:46 PM
Lead	0.017	0.0050		mg/L	1	8/15/2005 1:49:46 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	1400	50		mg/L	1	8/12/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #36
Lab Order: 0508119
Collection Date: 8/9/2005 2:30:00 PM
Project: Annual Sampling 2005
Lab ID: 0508119-05
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.52	0.10		mg/L	1	8/11/2005
Chloride	60	0.50		mg/L	5	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/11/2005
Bromide	0.54	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	66	0.50		mg/L	1	8/11/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	740	2.0		mg/L CaCO3	1	8/15/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/15/2005
Bicarbonate	740	2.0		mg/L CaCO3	1	8/15/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	8/16/2005
Toluene	ND	1.0		µg/L	1	8/16/2005
Ethylbenzene	ND	1.0		µg/L	1	8/16/2005
Methyl tert-butyl ether (MTBE)	3.2	1.0		µg/L	1	8/16/2005
1,2,4-Trimethylbenzene	22	1.0		µg/L	1	8/16/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/16/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/16/2005
Naphthalene	ND	2.0		µg/L	1	8/16/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
Acetone	ND	10		µg/L	1	8/16/2005
Bromobenzene	ND	1.0		µg/L	1	8/16/2005
Bromochloromethane	ND	1.0		µg/L	1	8/16/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/16/2005
Bromoform	ND	1.0		µg/L	1	8/16/2005
Bromomethane	ND	2.0		µg/L	1	8/16/2005
2-Butanone	ND	10		µg/L	1	8/16/2005
Carbon disulfide	ND	10		µg/L	1	8/16/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/16/2005
Chlorobenzene	ND	1.0		µg/L	1	8/16/2005
Chloroethane	ND	2.0		µg/L	1	8/16/2005
Chloroform	ND	1.0		µg/L	1	8/16/2005
Chloromethane	ND	1.0		µg/L	1	8/16/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-05

Client Sample ID: MW #36
Collection Date: 8/9/2005 2:30:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/16/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/16/2005
Dibromomethane	ND	2.0		µg/L	1	8/16/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/16/2005
2-Hexanone	ND	10		µg/L	1	8/16/2005
Isopropylbenzene	8.9	1.0		µg/L	1	8/16/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/16/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/16/2005
Methylene Chloride	ND	3.0		µg/L	1	8/16/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
n-Propylbenzene	3.8	1.0		µg/L	1	8/16/2005
sec-Butylbenzene	2.1	1.0		µg/L	1	8/16/2005
Styrene	ND	1.0		µg/L	1	8/16/2005
tert-Butylbenzene	1.5	1.0		µg/L	1	8/16/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/16/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/16/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/16/2005
Vinyl chloride	ND	1.0		µg/L	1	8/16/2005
Xylenes, Total	1.6	1.0		µg/L	1	8/16/2005
Surr: 1,2-Dichloroethane-d4	94.7	87.7-108		%REC	1	8/16/2005
Surr: 4-Bromofluorobenzene	123	88.8-113	S	%REC	1	8/16/2005
Surr: Dibromofluoromethane	104	84.1-111		%REC	1	8/16/2005
Surr: Toluene-d8	89.3	85.9-109		%REC	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-05

Client Sample ID: MW #36
Collection Date: 8/9/2005 2:30:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: IC
Total Carbon Dioxide	660	1.0		mg CO2/L	1	8/25/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	1600	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 2:02:43 PM
Barium	0.26	0.0020		mg/L	1	8/12/2005 2:02:43 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 2:02:43 PM
Calcium	110	10		mg/L	10	8/15/2005 11:25:51 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 2:02:43 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 2:02:43 PM
Iron	0.78	0.020		mg/L	1	8/12/2005 2:02:43 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 2:02:43 PM
Magnesium	23	1.0		mg/L	1	8/12/2005 2:02:43 PM
Manganese	1.7	0.0020		mg/L	1	8/12/2005 2:02:43 PM
Potassium	4.8	1.0		mg/L	1	8/12/2005 2:02:43 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 2:02:43 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 2:02:43 PM
Sodium	210	10		mg/L	10	8/15/2005 11:25:51 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 2:02:43 PM
Zinc	0.0051	0.0050		mg/L	1	8/12/2005 2:02:43 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.022	0.0060		mg/L	1	8/15/2005 2:06:06 PM
Lead	ND	0.0050		mg/L	1	8/15/2005 2:06:06 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	920	50		mg/L	1	8/12/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #37
Lab Order: 0508119
Collection Date: 8/9/2005 11:35:00 AM
Project: Annual Sampling 2005
Lab ID: 0508119-06
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.48	0.10		mg/L	1	8/11/2005
Chloride	150	0.50		mg/L	5	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/11/2005
Bromide	2.1	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	52	0.50		mg/L	1	8/11/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	960	2.0		mg/L CaCO3	1	8/15/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/15/2005
Bicarbonate	960	2.0		mg/L CaCO3	1	8/15/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	8/16/2005
Toluene	ND	1.0		µg/L	1	8/16/2005
Ethylbenzene	ND	1.0		µg/L	1	8/16/2005
Methyl tert-butyl ether (MTBE)	1.7	1.0		µg/L	1	8/16/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/16/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/16/2005
Naphthalene	ND	2.0		µg/L	1	8/16/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
Acetone	ND	10		µg/L	1	8/16/2005
Bromobenzene	ND	1.0		µg/L	1	8/16/2005
Bromochloromethane	ND	1.0		µg/L	1	8/16/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/16/2005
Bromoform	ND	1.0		µg/L	1	8/16/2005
Bromomethane	ND	2.0		µg/L	1	8/16/2005
2-Butanone	ND	10		µg/L	1	8/16/2005
Carbon disulfide	ND	10		µg/L	1	8/16/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/16/2005
Chlorobenzene	ND	1.0		µg/L	1	8/16/2005
Chloroethane	ND	2.0		µg/L	1	8/16/2005
Chloroform	ND	1.0		µg/L	1	8/16/2005
Chloromethane	ND	1.0		µg/L	1	8/16/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #37
Lab Order: 0508119
Collection Date: 8/9/2005 11:35:00 AM
Project: Annual Sampling 2005
Lab ID: 0508119-06
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/16/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/16/2005
Dibromomethane	ND	2.0		µg/L	1	8/16/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/16/2005
2-Hexanone	ND	10		µg/L	1	8/16/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/16/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/16/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/16/2005
Methylene Chloride	ND	3.0		µg/L	1	8/16/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/16/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
Styrene	ND	1.0		µg/L	1	8/16/2005
tert-Butylbenzene	1.4	1.0		µg/L	1	8/16/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/16/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/16/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/16/2005
Vinyl chloride	ND	1.0		µg/L	1	8/16/2005
Xylenes, Total	ND	1.0		µg/L	1	8/16/2005
Surr: 1,2-Dichloroethane-d4	95.2	87.7-108		%REC	1	8/16/2005
Surr: 4-Bromofluorobenzene	116	88.8-113	S	%REC	1	8/16/2005
Surr: Dibromofluoromethane	103	84.1-111		%REC	1	8/16/2005
Surr: Toluene-d8	92.8	85.9-109		%REC	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-06

Client Sample ID: MW #37
Collection Date: 8/9/2005 11:35:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: IC
Total Carbon Dioxide	850	1.0		mg CO2/L	1	8/25/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2200	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 2:06:39 PM
Barium	0.38	0.0020		mg/L	1	8/12/2005 2:06:39 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 2:06:39 PM
Calcium	120	10		mg/L	10	8/15/2005 11:28:52 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 2:06:39 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 2:06:39 PM
Iron	2.5	0.020		mg/L	1	8/12/2005 2:06:39 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 2:06:39 PM
Magnesium	20	1.0		mg/L	1	8/12/2005 2:06:39 PM
Manganese	1.4	0.0020		mg/L	1	8/12/2005 2:06:39 PM
Potassium	4.2	1.0		mg/L	1	8/12/2005 2:06:39 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 2:06:39 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 2:06:39 PM
Sodium	370	10		mg/L	10	8/15/2005 11:28:52 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 2:06:39 PM
Zinc	0.13	0.0050		mg/L	1	8/12/2005 2:06:39 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.082	0.0060		mg/L	1	8/15/2005 2:10:12 PM
Lead	0.072	0.0050		mg/L	1	8/15/2005 2:10:12 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	1400	50		mg/L	1	8/12/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508119
Project: Annual Sampling 2005
Lab ID: 0508119-07

Client Sample ID: MW #38
Collection Date: 8/9/2005 3:10:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.62	0.10		mg/L	1	8/11/2005
Chloride	100	1.0		mg/L	10	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/11/2005
Bromide	1.1	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	0.20	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	310	5.0		mg/L	10	8/12/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	720	2.0		mg/L CaCO3	1	8/15/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/15/2005
Bicarbonate	720	2.0		mg/L CaCO3	1	8/15/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	8/16/2005
Toluene	ND	1.0		µg/L	1	8/16/2005
Ethylbenzene	ND	1.0		µg/L	1	8/16/2005
Methyl tert-butyl ether (MTBE)	6.2	1.0		µg/L	1	8/16/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/16/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/16/2005
Naphthalene	ND	2.0		µg/L	1	8/16/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
Acetone	ND	10		µg/L	1	8/16/2005
Bromobenzene	ND	1.0		µg/L	1	8/16/2005
Bromochloromethane	ND	1.0		µg/L	1	8/16/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/16/2005
Bromoform	ND	1.0		µg/L	1	8/16/2005
Bromomethane	ND	2.0		µg/L	1	8/16/2005
2-Butanone	ND	10		µg/L	1	8/16/2005
Carbon disulfide	ND	10		µg/L	1	8/16/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/16/2005
Chlorobenzene	ND	1.0		µg/L	1	8/16/2005
Chloroethane	ND	2.0		µg/L	1	8/16/2005
Chloroform	ND	1.0		µg/L	1	8/16/2005
Chloromethane	ND	1.0		µg/L	1	8/16/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005

Qualifiers:
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* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #38
Lab Order: 0508119
Collection Date: 8/9/2005 3:10:00 PM
Project: Annual Sampling 2005
Lab ID: 0508119-07
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/16/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/16/2005
Dibromomethane	ND	2.0		µg/L	1	8/16/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/16/2005
2-Hexanone	ND	10		µg/L	1	8/16/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/16/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/16/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/16/2005
Methylene Chloride	ND	3.0		µg/L	1	8/16/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/16/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
Styrene	ND	1.0		µg/L	1	8/16/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/16/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/16/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/16/2005
Vinyl chloride	ND	1.0		µg/L	1	8/16/2005
Xylenes, Total	ND	1.0		µg/L	1	8/16/2005
Surr: 1,2-Dichloroethane-d4	98.2	87.7-108		%REC	1	8/16/2005
Surr: 4-Bromofluorobenzene	118	88.8-113	S	%REC	1	8/16/2005
Surr: Dibromofluoromethane	95.7	84.1-111		%REC	1	8/16/2005
Surr: Toluene-d8	97.8	85.9-109		%REC	1	8/16/2005

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R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #38
Lab Order: 0508119
Collection Date: 8/9/2005 3:10:00 PM
Project: Annual Sampling 2005
Lab ID: 0508119-07
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: IC
Total Carbon Dioxide	650	1.0		mg CO2/L	1	8/25/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2100	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 2:10:41 PM
Barium	0.18	0.0020		mg/L	1	8/12/2005 2:10:41 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 2:10:41 PM
Calcium	200	10		mg/L	10	8/15/2005 11:31:57 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 2:10:41 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 2:10:41 PM
Iron	7.1	0.10		mg/L	5	8/18/2005 9:58:15 AM
Lead	ND	0.0050		mg/L	1	8/12/2005 2:10:41 PM
Magnesium	32	1.0		mg/L	1	8/12/2005 2:10:41 PM
Manganese	3.7	0.0020		mg/L	1	8/12/2005 2:10:41 PM
Potassium	4.4	1.0		mg/L	1	8/12/2005 2:10:41 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 2:10:41 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 2:10:41 PM
Sodium	270	10		mg/L	10	8/15/2005 11:31:57 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 2:10:41 PM
Zinc	0.016	0.0050		mg/L	1	8/12/2005 2:10:41 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.34	0.030		mg/L	5	8/15/2005 3:08:51 PM
Lead	0.18	0.025		mg/L	5	8/15/2005 3:08:51 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	1500	50		mg/L	1	8/12/2005

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R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: Trip Blank
Lab Order: 0508119
Collection Date:
Project: Annual Sampling 2005
Lab ID: 0508119-08
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	8/16/2005
Toluene	ND	1.0		µg/L	1	8/16/2005
Ethylbenzene	ND	1.0		µg/L	1	8/16/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/16/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/16/2005
Naphthalene	ND	2.0		µg/L	1	8/16/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/16/2005
Acetone	ND	10		µg/L	1	8/16/2005
Bromobenzene	ND	1.0		µg/L	1	8/16/2005
Bromochloromethane	ND	1.0		µg/L	1	8/16/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/16/2005
Bromoform	ND	1.0		µg/L	1	8/16/2005
Bromomethane	ND	2.0		µg/L	1	8/16/2005
2-Butanone	ND	10		µg/L	1	8/16/2005
Carbon disulfide	ND	10		µg/L	1	8/16/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/16/2005
Chlorobenzene	ND	1.0		µg/L	1	8/16/2005
Chloroethane	ND	2.0		µg/L	1	8/16/2005
Chloroform	ND	1.0		µg/L	1	8/16/2005
Chloromethane	ND	1.0		µg/L	1	8/16/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/16/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/16/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/16/2005
Dibromomethane	ND	2.0		µg/L	1	8/16/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/16/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/16/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/16/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/16/2005

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: Trip Blank
Lab Order: 0508119
Collection Date:
Project: Annual Sampling 2005
Lab ID: 0508119-08
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Hexachlorobutadiene	ND	1.0		µg/L	1	8/16/2005
2-Hexanone	ND	10		µg/L	1	8/16/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/16/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/16/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/16/2005
Methylene Chloride	ND	3.0		µg/L	1	8/16/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/16/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
Styrene	ND	1.0		µg/L	1	8/16/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/16/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/16/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/16/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/16/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/16/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/16/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/16/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/16/2005
Vinyl chloride	ND	1.0		µg/L	1	8/16/2005
Xylenes, Total	ND	1.0		µg/L	1	8/16/2005
Surr: 1,2-Dichloroethane-d4	96.0	87.7-108		%REC	1	8/16/2005
Surr: 4-Bromofluorobenzene	98.5	88.8-113		%REC	1	8/16/2005
Surr: Dibromofluoromethane	97.2	84.1-111		%REC	1	8/16/2005
Surr: Toluene-d8	93.2	85.9-109		%REC	1	8/16/2005

Qualifiers:
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J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT

Method Blank

Sample ID MBLK	Batch ID: R16266	Test Code: E300	Units: mg/L	Analysis Date 8/10/2005	Prep Date
Client ID:		Run ID: LC_050810A		SeqNo: 387042	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MBLK	Batch ID: R16266	Test Code: E300	Units: mg/L	Analysis Date 8/10/2005	Prep Date
Client ID:		Run ID: LC_050810A		SeqNo: 387086	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Qualifiers:
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MBLK | Batch ID: R16281 | Test Code: E300 | Units: mg/L | Analysis Date 8/11/2005 | Prep Date
Client ID: | Run ID: LC_050811A | SeqNo: 387530

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MB | Batch ID: R16299 | Test Code: SW6010A | Units: mg/L | Analysis Date 8/12/2005 1:17:55 PM | Prep Date
Client ID: | Run ID: ICP_050812C | SeqNo: 388184

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	ND	1									
Selenium	ND	0.02									
Silver	ND	0.005									
Uranium	ND	0.1									
Zinc	ND	0.05									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB-8517 Batch ID: 8517 Test Code: SW6010A Units: mg/L Analysis Date 8/15/2005 12:28:52 PM Prep Date 8/11/2005
Client ID: Run ID: ICP_050815A SeqNo: 388298

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.006	0	0	0	0	0	0			
Lead	ND	0.005	0	0	0	0	0	0			

Sample ID MB-8523 Batch ID: 8523 Test Code: E160.1 Units: mg/L Analysis Date 8/12/2005 Prep Date 8/12/2005
Client ID: Run ID: WC_050812D SeqNo: 388580

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *26-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID 5ml rb | Batch ID: R16310 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/15/2005 | Prep Date
Client ID: | Run ID: VAL_050815A | SeqNo: 388486

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

cis-1,3-Dichloropropene	ND	1
1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

1,1,2-Trichloroethane	ND	1						
Trichloroethene (TCE)	ND	1						
Trichlorofluoromethane	ND	1						
1,2,3-Trichloropropane	ND	2						
Vinyl chloride	ND	1						
Xylenes, Total	ND	1						
Surr: 1,2-Dichloroethane-d4	9.538	0	10	0	95.4	87.7	108	0
Surr: 4-Bromofluorobenzene	10.41	0	10	0	104	88.8	113	0
Surr: Dibromofluoromethane	9.822	0	10	0	98.2	84.1	111	0
Surr: Toluene-d8	9.47	0	10	0	94.7	85.9	109	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID 5ml rb | Batch ID: R16318 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/16/2005 | Prep Date
Client ID: | Run ID: VAL_050816A | SeqNo: 388908

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									
cis-1,3-Dichloropropene	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2-Trichloroethane	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Trichloroethene (TCE)	ND	1						
Trichlorofluoromethane	ND	1						
1,2,3-Trichloropropane	ND	2						
Vinyl chloride	ND	1						
Xylenes, Total	ND	1						
Surr: 1,2-Dichloroethane-d4	9.626	0	10	0	96.3	87.7	108	0
Surr: 4-Bromofluorobenzene	10.57	0	10	0	106	88.8	113	0
Surr: Dibromofluoromethane	9.76	0	10	0	97.6	84.1	111	0
Surr: Toluene-d8	9.478	0	10	0	94.8	85.9	109	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID 5ml rb | Batch ID: R16334 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/17/2005 | Prep Date
Client ID: | Run ID: VAL_050817A | SeqNo: 389360

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									
cis-1,3-Dichloropropene	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2-Trichloroethane	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Trichloroethene (TCE)	ND	1						
Trichlorofluoromethane	ND	1						
1,2,3-Trichloropropane	ND	2						
Vinyl chloride	ND	1						
Xylenes, Total	ND	1						
Surr: 1,2-Dichloroethane-d4	9.556	0	10	0	95.6	87.7	108	0
Surr: 4-Bromofluorobenzene	10.19	0	10	0	102	88.8	113	0
Surr: Dibromofluoromethane	9.678	0	10	0	96.8	84.1	111	0
Surr: Toluene-d8	9.884	0	10	0	98.8	85.9	109	0

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 26-Aug-05

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT

Sample Duplicate

Sample ID 0508119-07C DUP Batch ID: 8517 Test Code: SW6010A Units: mg/L Analysis Date 8/15/2005 3:13:05 PM Prep Date 8/11/2005

Client ID: MW #38 Run ID: ICP_050815A SeqNo: 388337

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.3355	0.03	0	0	0	0	0	0.3444	2.62	30	
Lead	0.1729	0.025	0	0	0	0	0	0.1813	4.72	30	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 26-Aug-05

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID 0508119-07C MS Batch ID: 8517 Test Code: SW6010A Units: mg/L Analysis Date 8/15/2005 3:17:17 PM Prep Date 8/11/2005
Client ID: MW #38 Run ID: ICP_050815A SeqNo: 388338

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.7295	0.03	0.5	0.3444	77.0	75	125	0			
Lead	0.5793	0.025	0.5	0.1813	79.6	75	125	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 26-Aug-05

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID LCS	Batch ID: R16266	Test Code: E300	Units: mg/L	Analysis Date 8/10/2005	Prep Date
Client ID:		Run ID: LC_050810A		SeqNo: 387043	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.4754	0.1	0.5	0	95.1	90	110	0			
Chloride	4.805	0.1	5	0	96.1	90	110	0			
Nitrogen, Nitrite (As N)	0.9043	0.1	1	0	90.4	90	110	0			
Bromide	2.525	0.5	2.5	0	101	90	110	0			
Nitrogen, Nitrate (As N)	2.424	0.1	2.5	0	97.0	90	110	0			
Phosphorus, Orthophosphate (As P)	5.01	0.5	5	0	100	90	110	0			
Sulfate	9.757	0.5	10	0	97.6	90	110	0			

Sample ID LCS	Batch ID: R16266	Test Code: E300	Units: mg/L	Analysis Date 8/10/2005	Prep Date
Client ID:		Run ID: LC_050810A		SeqNo: 387087	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.495	0.1	0.5	0	99.0	90	110	0			
Chloride	4.883	0.1	5	0	97.7	90	110	0			
Nitrogen, Nitrite (As N)	0.9222	0.1	1	0	92.2	90	110	0			
Bromide	2.576	0.5	2.5	0	103	90	110	0			
Nitrogen, Nitrate (As N)	2.47	0.1	2.5	0	98.8	90	110	0			
Phosphorus, Orthophosphate (As P)	5.075	0.5	5	0	101	90	110	0			
Sulfate	9.928	0.5	10	0	99.3	90	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID LCS	Batch ID: R16281	Test Code: E300	Units: mg/L	Analysis Date 8/11/2005	Prep Date
Client ID:		Run ID: LC_050811A		SeqNo: 387531	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5179	0.1	0.5	0	104	90	110	0			
Chloride	4.933	0.1	5	0	98.7	90	110	0			
Nitrogen, Nitrite (As N)	0.9318	0.1	1	0	93.2	90	110	0			
Bromide	2.59	0.5	2.5	0	104	90	110	0			
Nitrogen, Nitrate (As N)	2.468	0.1	2.5	0	98.7	90	110	0			
Phosphorus, Orthophosphate (As P)	5.083	0.5	5	0	102	90	110	0			
Sulfate	10.07	0.5	10	0	101	90	110	0			

Sample ID 100ng lcs	Batch ID: R16310	Test Code: SW8260B	Units: µg/L	Analysis Date 8/15/2005	Prep Date
Client ID:		Run ID: VAL_050815A		SeqNo: 388487	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.1	1	20	0	106	81.4	130	0			
Toluene	23.26	1	20	0	116	90.8	128	0			
Chlorobenzene	23.85	1	20	0	119	89.6	134	0			
1,1-Dichloroethene	21.55	1	20	0	108	75.1	120	0			
Trichloroethene (TCE)	19.86	1	20	0	99.3	75.8	110	0			

Sample ID 100ng lcs	Batch ID: R16318	Test Code: SW8260B	Units: µg/L	Analysis Date 8/16/2005	Prep Date
Client ID:		Run ID: VAL_050816A		SeqNo: 388909	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.16	1	20	0	106	81.4	130	0			
Toluene	22.8	1	20	0	114	90.8	128	0			
Chlorobenzene	23.26	1	20	0	116	89.6	134	0			
1,1-Dichloroethene	20.37	1	20	0	102	75.1	120	0			
Trichloroethene (TCE)	17.95	1	20	0	89.8	75.8	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID 100ng lcs | Batch ID: R16334 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/17/2005 | Prep Date
Client ID: | Run ID: VAL_050817A | SeqNo: 389361

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.04	1	20	0	110	81.4	130	0			
Toluene	22.87	1	20	0	114	90.8	128	0			
Chlorobenzene	25.72	1	20	0	129	89.6	134	0			
1,1-Dichloroethene	20.58	1	20	0	103	75.1	120	0			
Trichloroethene (TCE)	18.9	1	20	0	94.5	75.8	110	0			

Sample ID LCS | Batch ID: R16299 | Test Code: SW6010A | Units: mg/L | Analysis Date 8/12/2005 1:20:23 PM | Prep Date
Client ID: | Run ID: ICP_050812C | SeqNo: 388185

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5499	0.02	0.5	0	110	80	120	0			
Barium	0.5182	0.02	0.5	0	104	80	120	0			
Cadmium	0.5403	0.002	0.5	0	108	80	120	0			
Calcium	51.8	1	50.5	0	103	80	120	0			
Chromium	0.526	0.006	0.5	0	105	80	120	0			
Copper	0.5317	0.006	0.5	0	106	80	120	0			
Iron	0.502	0.02	0.5	0	100	80	120	0			
Lead	0.5227	0.005	0.5	0	105	80	120	0			
Magnesium	52	1	50.5	0	103	80	120	0			
Manganese	0.4915	0.002	0.5	0	98.3	80	120	0			
Potassium	54.68	1	55	0	99.4	80	120	0			
Selenium	0.5235	0.02	0.5	0	105	80	120	0			
Silver	0.5088	0.005	0.5	0	102	80	120	0			
Sodium	55.25	1	50.5	0	109	80	120	0			
Uranium	2.673	0.1	2.5	0	107	80	120	0			
Zinc	0.53	0.05	0.5	0	106	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID LCSD	Batch ID: R16299	Test Code: SW6010A	Units: mg/L	Analysis Date 8/12/2005 1:23:39 PM	Prep Date
Client ID:		Run ID: ICP_050812C		SeqNo: 388186	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5482	0.02	0.5	0	110	80	120	0.5499	0.310	20	
Barium	0.5185	0.02	0.5	0	104	80	120	0.5182	0.0608	20	
Cadmium	0.5359	0.002	0.5	0	107	80	120	0.5403	0.803	20	
Calcium	51.06	1	50.5	0	101	80	120	51.8	1.44	20	
Chromium	0.5232	0.006	0.5	0	105	80	120	0.526	0.540	20	
Copper	0.5307	0.006	0.5	0	106	80	120	0.5317	0.188	20	
Iron	0.4933	0.02	0.5	0	98.7	80	120	0.502	1.75	20	
Lead	0.5177	0.005	0.5	0	104	80	120	0.5227	0.957	20	
Magnesium	51.25	1	50.5	0	101	80	120	52	1.45	20	
Manganese	0.4909	0.002	0.5	0	98.2	80	120	0.4915	0.138	20	
Potassium	53.82	1	55	0	97.9	80	120	54.68	1.58	20	
Selenium	0.5264	0.02	0.5	0	105	80	120	0.5235	0.539	20	
Silver	0.5406	0.005	0.5	0	108	80	120	0.5088	6.05	20	
Sodium	54.34	1	50.5	0	108	80	120	55.25	1.66	20	
Uranium	2.666	0.1	2.5	0	107	80	120	2.673	0.258	20	
Zinc	0.5279	0.05	0.5	0	106	80	120	0.53	0.400	20	

Sample ID LCS-8517	Batch ID: 8517	Test Code: SW6010A	Units: mg/L	Analysis Date 8/15/2005 12:32:07 PM	Prep Date 8/11/2005
Client ID:		Run ID: ICP_050815A		SeqNo: 388299	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.4884	0.006	0.5	0	97.7	80	120	0			
Lead	0.4996	0.005	0.5	0	99.9	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508119
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID LCSD-8517	Batch ID: 8517	Test Code: SW6010A	Units: mg/L	Analysis Date 8/15/2005 12:35:41 PM	Prep Date 8/11/2005
Client ID:		Run ID: ICP_050815A		SeqNo: 388300	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.4983	0.006	0.5	0	99.7	80	120	0.4884	2.00	20	
Lead	0.5095	0.005	0.5	0	102	80	120	0.4996	1.98	20	

Sample ID LCS-8523	Batch ID: 8523	Test Code: E160.1	Units: mg/L	Analysis Date 8/12/2005	Prep Date 8/12/2005
Client ID:		Run ID: WC_050812D		SeqNo: 388581	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1011	50	1000	0	101	80	120	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR

Date and Time Received: 8/10/2005

Work Order Number 0508119

Received by AT

Checklist completed by _____ Signature _____ Date 8/10/05

Matrix

Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 1° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 CR 4990
Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Annual Sampling - 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: /

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
8/10/05	8AM	H2O	MW #27	1-500mL			H_2SO_4	0508119-1
"	"	"	"	1-500mL				
"	"	"	"	1-250mL		X	filtered	
"	"	"	"	1-500mL		X		
"	"	"	"	2-VOA	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
8/10/05	9AM	Cindy Hurtado	8/10/05
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1625

Remarks:

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide/Alkalinity, Bala	Dissolved WQCC metals	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X				
								X				X			X	
													X			
														X		
										X						

CHAIN-OF-CUSTODY RECORD

Accreditation Applied: NELAC ☐ USACE ☐ Other: _____

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Client: San Juan Refinery
Address: #50, Rd 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Annual Sampling 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado/Angela Folk
Sample Temperature: 4°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0508119
8/04/05	4pm	H2O	Background MW #33	1-500ml			H_2SO_4	-2
			MW #33	1-500ml				
				1-250ml		X	filtered	
				1-500ml		X		
				2-VOA	X			
8/01/05	1040am	H2O	MW #34	1-500ml			H_2SO_4	-3
				1-500ml				
				1-250ml		X	filtered	
				1-500ml		X		
				2-VOA	X			

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide/Cation Ba	Dissolved Hardness meta	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X				
								X				X			X	
													X			
														X		
										X						
								X				X				
								X				X			X	
													X	X		
														X		
										X						

Date: 8/10/05 Time: 9AM Relinquished By: (Signature) Cindy Hurtado Received By: (Signature) 1625

Date: Time: Relinquished By: (Signature) Received By: (Signature) 8/10/05

Remarks:

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other:

Client: San Juan Refinery
Address: #50, Rd 4990
Bloomfield, NM
87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Annual Sampling 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: 1.7

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ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0508119-	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide/Cation Panel	Dissolved Water meta	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
8/09/05	1105AM	H2O	MW #35	1-500 ml			H_2SO_4	-4									X				X				
				1-500 ml													X				X			X	
				1-250 ml		X	filtered																		
				1-500 ml		X																			
				2-VOA	X														X						
8/09/05	230PM	H2O	MW #36	1-500 ml			H_2SO_4	-5									X				X				
				1-500 ml													X				X			X	
				1-250 ml		X	filtered															X			
				1-500 ml		X																	X		
				2-VOA	X														X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	Remarks:
8/10/05	9AM	Cindy Hurtado	8/10/05	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1625	

CHAIN-OF-CUSTODY RECORD

Accreditation Applied:
NELAC ☐ USACE ☐
Other: _____

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Client: San Juan Refinery

Project Name: Annual Sampling 2005

Address: #50, Rd 4990
Bloomfield, NM
87413

Project #:

Project Manager:

Phone #: 505-632-4161

Fax #: 505-632-3911

Sampler: Cindy Hurtado / Angela Folk

Sample Temperature: /

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0508119	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide/Cation Ba incl	Dissolved w/ Ber metals	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
8/09/05	1135A	H_2O	MW#37	1-500ml			H_2SO_4	-6									X				X				
				1-500ml													X				X			X	
				1-250ml		X	filtered															X			
				1-500ml		X																	X		
				2-VOA	X														X						
8/09/05	310pm	H_2O	MW#38	1-500ml			H_2SO_4	-7									X				X				
				1-500ml													X				X			X	
				1-250ml		X	filtered															X			
				1-500ml		X																	X		
				2-VOA	X														X						
			Trip Blank					-8																	

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
8/10/05	9AM	Cindy Hurtado	8/10/05 1625
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

August 24, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Annual Sampling 2005 Order No.: 0508092

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 3 samples on 8/9/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #12
Lab Order: 0508092
Collection Date: 8/8/2005 4:20:00 PM
Project: Annual Sampling 2005
Lab ID: 0508092-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.43	0.10		mg/L	1	8/9/2005
Chloride	100	1.0		mg/L	10	8/10/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/9/2005
Bromide	0.75	0.50		mg/L	1	8/9/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/9/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/9/2005
Sulfate	2400	25		mg/L	50	8/10/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	310	2.0		mg/L CaCO3	1	8/11/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/11/2005
Bicarbonate	310	2.0		mg/L CaCO3	1	8/11/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	8/17/2005
Toluene	ND	1.0		µg/L	1	8/17/2005
Ethylbenzene	ND	1.0		µg/L	1	8/17/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/17/2005
1,2,4-Trimethylbenzene	2.3	1.0		µg/L	1	8/17/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/17/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/17/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/17/2005
Naphthalene	ND	2.0		µg/L	1	8/17/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/17/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/17/2005
Acetone	ND	10		µg/L	1	8/17/2005
Bromobenzene	ND	1.0		µg/L	1	8/17/2005
Bromochloromethane	ND	1.0		µg/L	1	8/17/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/17/2005
Bromoform	ND	1.0		µg/L	1	8/17/2005
Bromomethane	ND	2.0		µg/L	1	8/17/2005
2-Butanone	ND	10		µg/L	1	8/17/2005
Carbon disulfide	ND	10		µg/L	1	8/17/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/17/2005
Chlorobenzene	ND	1.0		µg/L	1	8/17/2005
Chloroethane	ND	2.0		µg/L	1	8/17/2005
Chloroform	ND	1.0		µg/L	1	8/17/2005
Chloromethane	ND	1.0		µg/L	1	8/17/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/17/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/17/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/17/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/17/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508092
Project: Annual Sampling 2005
Lab ID: 0508092-01

Client Sample ID: MW #12
Collection Date: 8/8/2005 4:20:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/17/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/17/2005
Dibromomethane	ND	2.0		µg/L	1	8/17/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/17/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/17/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/17/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/17/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/17/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/17/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/17/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/17/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/17/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/17/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/17/2005
2-Hexanone	ND	10		µg/L	1	8/17/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/17/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/17/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/17/2005
Methylene Chloride	ND	3.0		µg/L	1	8/17/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/17/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/17/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/17/2005
Styrene	ND	1.0		µg/L	1	8/17/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/17/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/17/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/17/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/17/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/17/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/17/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/17/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/17/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/17/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/17/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/17/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/17/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/17/2005
Vinyl chloride	ND	1.0		µg/L	1	8/17/2005
Xylenes, Total	8.5	1.0		µg/L	1	8/17/2005
Surr: 1,2-Dichloroethane-d4	95.7	87.7-108		%REC	1	8/17/2005
Surr: 4-Bromofluorobenzene	107	88.8-113		%REC	1	8/17/2005
Surr: Dibromofluoromethane	96.1	84.1-111		%REC	1	8/17/2005
Surr: Toluene-d8	99.9	85.9-109		%REC	1	8/17/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #12
Lab Order:	0508092	**Collection Date:**	8/8/2005 4:20:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508092-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	4600	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/11/2005 10:03:35 AM
Barium	0.070	0.0020		mg/L	1	8/11/2005 10:03:35 AM
Cadmium	ND	0.0020		mg/L	1	8/11/2005 10:03:35 AM
Calcium	370	10		mg/L	10	8/11/2005 11:53:05 AM
Chromium	0.022	0.0060		mg/L	1	8/11/2005 10:03:35 AM
Copper	ND	0.0060		mg/L	1	8/11/2005 10:03:35 AM
Iron	0.55	0.020		mg/L	1	8/11/2005 10:03:35 AM
Lead	ND	0.0050		mg/L	1	8/11/2005 10:03:35 AM
Magnesium	97	10		mg/L	10	8/11/2005 11:53:05 AM
Manganese	0.64	0.0020		mg/L	1	8/11/2005 10:03:35 AM
Potassium	2.8	1.0		mg/L	1	8/11/2005 10:03:35 AM
Selenium	ND	0.050		mg/L	1	8/11/2005 10:03:35 AM
Silver	ND	0.0050		mg/L	1	8/11/2005 10:03:35 AM
Sodium	560	10		mg/L	10	8/11/2005 11:53:05 AM
Uranium	ND	0.10		mg/L	1	8/11/2005 10:03:35 AM
Zinc	0.022	0.0050		mg/L	1	8/11/2005 10:03:35 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	4.1	0.030		mg/L	5	8/15/2005 2:49:34 PM
Lead	0.21	0.0050		mg/L	1	8/15/2005 12:52:19 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	4000	250		mg/L	5	8/12/2005

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #48
Lab Order: 0508092
Collection Date: 8/9/2005 9:05:00 AM
Project: Annual Sampling 2005
Lab ID: 0508092-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.54	0.10		mg/L	1	8/9/2005
Chloride	120	1.0		mg/L	10	8/10/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/9/2005
Bromide	ND	0.50		mg/L	1	8/9/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/9/2005
Phosphorus, Orthophosphate (As P)	0.53	0.50		mg/L	1	8/9/2005
Sulfate	140	5.0		mg/L	10	8/10/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	1300	2.0		mg/L CaCO3	1	8/11/2005
Carbonate	110	2.0		mg/L CaCO3	1	8/11/2005
Bicarbonate	1200	2.0		mg/L CaCO3	1	8/11/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	620	20		µg/L	20	8/16/2005
Toluene	26	20		µg/L	20	8/16/2005
Ethylbenzene	2500	100		µg/L	100	8/17/2005
Methyl tert-butyl ether (MTBE)	ND	20		µg/L	20	8/16/2005
1,2,4-Trimethylbenzene	1600	20		µg/L	20	8/16/2005
1,3,5-Trimethylbenzene	450	20		µg/L	20	8/16/2005
1,2-Dichloroethane (EDC)	ND	20		µg/L	20	8/16/2005
1,2-Dibromoethane (EDB)	ND	20		µg/L	20	8/16/2005
Naphthalene	380	40		µg/L	20	8/16/2005
1-Methylnaphthalene	180	80		µg/L	20	8/16/2005
2-Methylnaphthalene	170	80		µg/L	20	8/16/2005
Acetone	ND	200		µg/L	20	8/16/2005
Bromobenzene	ND	20		µg/L	20	8/16/2005
Bromochloromethane	ND	20		µg/L	20	8/16/2005
Bromodichloromethane	ND	20		µg/L	20	8/16/2005
Bromoform	ND	20		µg/L	20	8/16/2005
Bromomethane	ND	40		µg/L	20	8/16/2005
2-Butanone	ND	200		µg/L	20	8/16/2005
Carbon disulfide	ND	200		µg/L	20	8/16/2005
Carbon Tetrachloride	ND	20		µg/L	20	8/16/2005
Chlorobenzene	ND	20		µg/L	20	8/16/2005
Chloroethane	ND	40		µg/L	20	8/16/2005
Chloroform	ND	20		µg/L	20	8/16/2005
Chloromethane	ND	20		µg/L	20	8/16/2005
2-Chlorotoluene	ND	20		µg/L	20	8/16/2005
4-Chlorotoluene	ND	20		µg/L	20	8/16/2005
cis-1,2-DCE	ND	20		µg/L	20	8/16/2005
cis-1,3-Dichloropropene	ND	20		µg/L	20	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #48
Lab Order: 0508092
Collection Date: 8/9/2005 9:05:00 AM
Project: Annual Sampling 2005
Lab ID: 0508092-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	40		µg/L	20	8/16/2005
Dibromochloromethane	ND	20		µg/L	20	8/16/2005
Dibromomethane	ND	40		µg/L	20	8/16/2005
1,2-Dichlorobenzene	ND	20		µg/L	20	8/16/2005
1,3-Dichlorobenzene	ND	20		µg/L	20	8/16/2005
1,4-Dichlorobenzene	ND	20		µg/L	20	8/16/2005
Dichlorodifluoromethane	ND	20		µg/L	20	8/16/2005
1,1-Dichloroethane	ND	20		µg/L	20	8/16/2005
1,1-Dichloroethene	ND	20		µg/L	20	8/16/2005
1,2-Dichloropropane	ND	20		µg/L	20	8/16/2005
1,3-Dichloropropane	ND	20		µg/L	20	8/16/2005
2,2-Dichloropropane	ND	20		µg/L	20	8/16/2005
1,1-Dichloropropene	ND	20		µg/L	20	8/16/2005
Hexachlorobutadiene	ND	20		µg/L	20	8/16/2005
2-Hexanone	ND	200		µg/L	20	8/16/2005
Isopropylbenzene	230	20		µg/L	20	8/16/2005
4-Isopropyltoluene	ND	20		µg/L	20	8/16/2005
4-Methyl-2-pentanone	ND	200		µg/L	20	8/16/2005
Methylene Chloride	ND	60		µg/L	20	8/16/2005
n-Butylbenzene	110	20		µg/L	20	8/16/2005
n-Propylbenzene	420	20		µg/L	20	8/16/2005
sec-Butylbenzene	ND	20		µg/L	20	8/16/2005
Styrene	ND	20		µg/L	20	8/16/2005
tert-Butylbenzene	ND	20		µg/L	20	8/16/2005
1,1,1,2-Tetrachloroethane	ND	20		µg/L	20	8/16/2005
1,1,2,2-Tetrachloroethane	ND	20		µg/L	20	8/16/2005
Tetrachloroethene (PCE)	ND	20		µg/L	20	8/16/2005
trans-1,2-DCE	ND	20		µg/L	20	8/16/2005
trans-1,3-Dichloropropene	ND	20		µg/L	20	8/16/2005
1,2,3-Trichlorobenzene	ND	20		µg/L	20	8/16/2005
1,2,4-Trichlorobenzene	ND	20		µg/L	20	8/16/2005
1,1,1-Trichloroethane	ND	20		µg/L	20	8/16/2005
1,1,2-Trichloroethane	ND	20		µg/L	20	8/16/2005
Trichloroethene (TCE)	ND	20		µg/L	20	8/16/2005
Trichlorofluoromethane	ND	20		µg/L	20	8/16/2005
1,2,3-Trichloropropane	ND	40		µg/L	20	8/16/2005
Vinyl chloride	ND	20		µg/L	20	8/16/2005
Xylenes, Total	9900	100		µg/L	100	8/17/2005
Surr: 1,2-Dichloroethane-d4	99.5	87.7-108		%REC	20	8/16/2005
Surr: 4-Bromofluorobenzene	104	88.8-113		%REC	20	8/16/2005
Surr: Dibromofluoromethane	104	84.1-111		%REC	20	8/16/2005
Surr: Toluene-d8	95.3	85.9-109		%REC	20	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #48
Lab Order:	0508092	**Collection Date:**	8/9/2005 9:05:00 AM
Project:	Annual Sampling 2005		
Lab ID:	0508092-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2800	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/11/2005 10:07:41 AM
Barium	0.23	0.0020		mg/L	1	8/11/2005 10:07:41 AM
Cadmium	ND	0.0020		mg/L	1	8/11/2005 10:07:41 AM
Calcium	100	10		mg/L	10	8/11/2005 11:55:35 AM
Chromium	ND	0.0060		mg/L	1	8/11/2005 10:07:41 AM
Copper	ND	0.0060		mg/L	1	8/11/2005 10:07:41 AM
Iron	ND	0.020		mg/L	1	8/11/2005 10:07:41 AM
Lead	0.012	0.0050		mg/L	1	8/11/2005 10:07:41 AM
Magnesium	20	1.0		mg/L	1	8/11/2005 10:07:41 AM
Manganese	0.12	0.0020		mg/L	1	8/11/2005 10:07:41 AM
Potassium	4.0	1.0		mg/L	1	8/11/2005 10:07:41 AM
Selenium	0.077	0.050		mg/L	1	8/11/2005 10:07:41 AM
Silver	ND	0.0050		mg/L	1	8/11/2005 10:07:41 AM
Sodium	510	10		mg/L	10	8/11/2005 11:55:35 AM
Uranium	ND	0.10		mg/L	1	8/11/2005 10:07:41 AM
Zinc	0.012	0.0050		mg/L	1	8/11/2005 10:07:41 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	ND	0.0060		mg/L	1	8/15/2005 12:56:42 PM
Lead	0.015	0.0050		mg/L	1	8/15/2005 12:56:42 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	1800	50		mg/L	1	8/12/2005

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #49
Lab Order: 0508092
Collection Date: 8/9/2005 8:45:00 AM
Project: Annual Sampling 2005
Lab ID: 0508092-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.37	0.10		mg/L	1	8/9/2005
Chloride	140	0.50		mg/L	5	8/10/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/9/2005
Bromide	ND	2.5		mg/L	5	8/10/2005
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	8/10/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/9/2005
Sulfate	280	5.0		mg/L	10	8/10/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	960	2.0		mg/L CaCO3	1	8/11/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/11/2005
Bicarbonate	960	2.0		mg/L CaCO3	1	8/11/2005
EPA METHOD 8260: VOLATILES						Analyst: HLM
Benzene	93	2.0		µg/L	2	8/17/2005
Toluene	ND	2.0		µg/L	2	8/17/2005
Ethylbenzene	15	2.0		µg/L	2	8/17/2005
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	8/17/2005
1,2,4-Trimethylbenzene	34	2.0		µg/L	2	8/17/2005
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	8/17/2005
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	8/17/2005
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	8/17/2005
Naphthalene	9.1	4.0		µg/L	2	8/17/2005
1-Methylnaphthalene	ND	8.0		µg/L	2	8/17/2005
2-Methylnaphthalene	ND	8.0		µg/L	2	8/17/2005
Acetone	ND	20		µg/L	2	8/17/2005
Bromobenzene	ND	2.0		µg/L	2	8/17/2005
Bromochloromethane	ND	2.0		µg/L	2	8/17/2005
Bromodichloromethane	ND	2.0		µg/L	2	8/17/2005
Bromoform	ND	2.0		µg/L	2	8/17/2005
Bromomethane	ND	4.0		µg/L	2	8/17/2005
2-Butanone	ND	20		µg/L	2	8/17/2005
Carbon disulfide	ND	20		µg/L	2	8/17/2005
Carbon Tetrachloride	ND	2.0		µg/L	2	8/17/2005
Chlorobenzene	ND	2.0		µg/L	2	8/17/2005
Chloroethane	ND	4.0		µg/L	2	8/17/2005
Chloroform	ND	2.0		µg/L	2	8/17/2005
Chloromethane	ND	2.0		µg/L	2	8/17/2005
2-Chlorotoluene	ND	2.0		µg/L	2	8/17/2005
4-Chlorotoluene	ND	2.0		µg/L	2	8/17/2005
cis-1,2-DCE	ND	2.0		µg/L	2	8/17/2005
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	8/17/2005

Qualifiers:
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B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508092
Project: Annual Sampling 2005
Lab ID: 0508092-03

Client Sample ID: MW #49
Collection Date: 8/9/2005 8:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	8/17/2005
Dibromochloromethane	ND	2.0		µg/L	2	8/17/2005
Dibromomethane	ND	4.0		µg/L	2	8/17/2005
1,2-Dichlorobenzene	ND	2.0		µg/L	2	8/17/2005
1,3-Dichlorobenzene	ND	2.0		µg/L	2	8/17/2005
1,4-Dichlorobenzene	ND	2.0		µg/L	2	8/17/2005
Dichlorodifluoromethane	ND	2.0		µg/L	2	8/17/2005
1,1-Dichloroethane	ND	2.0		µg/L	2	8/17/2005
1,1-Dichloroethene	ND	2.0		µg/L	2	8/17/2005
1,2-Dichloropropane	ND	2.0		µg/L	2	8/17/2005
1,3-Dichloropropane	ND	2.0		µg/L	2	8/17/2005
2,2-Dichloropropane	ND	2.0		µg/L	2	8/17/2005
1,1-Dichloropropene	ND	2.0		µg/L	2	8/17/2005
Hexachlorobutadiene	ND	2.0		µg/L	2	8/17/2005
2-Hexanone	ND	20		µg/L	2	8/17/2005
Isopropylbenzene	22	2.0		µg/L	2	8/17/2005
4-Isopropyltoluene	ND	2.0		µg/L	2	8/17/2005
4-Methyl-2-pentanone	ND	20		µg/L	2	8/17/2005
Methylene Chloride	ND	6.0		µg/L	2	8/17/2005
n-Butylbenzene	2.5	2.0		µg/L	2	8/17/2005
n-Propylbenzene	12	2.0		µg/L	2	8/17/2005
sec-Butylbenzene	ND	2.0		µg/L	2	8/17/2005
Styrene	ND	2.0		µg/L	2	8/17/2005
tert-Butylbenzene	ND	2.0		µg/L	2	8/17/2005
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	8/17/2005
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	2	8/17/2005
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	8/17/2005
trans-1,2-DCE	ND	2.0		µg/L	2	8/17/2005
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	8/17/2005
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	8/17/2005
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	8/17/2005
1,1,1-Trichloroethane	ND	2.0		µg/L	2	8/17/2005
1,1,2-Trichloroethane	ND	2.0		µg/L	2	8/17/2005
Trichloroethene (TCE)	ND	2.0		µg/L	2	8/17/2005
Trichlorofluoromethane	ND	2.0		µg/L	2	8/17/2005
1,2,3-Trichloropropane	ND	4.0		µg/L	2	8/17/2005
Vinyl chloride	ND	2.0		µg/L	2	8/17/2005
Xylenes, Total	4.1	2.0		µg/L	2	8/17/2005
Surr: 1,2-Dichloroethane-d4	97.2	87.7-108		%REC	2	8/17/2005
Surr: 4-Bromofluorobenzene	104	88.8-113		%REC	2	8/17/2005
Surr: Dibromofluoromethane	103	84.1-111		%REC	2	8/17/2005
Surr: Toluene-d8	91.7	85.9-109		%REC	2	8/17/2005

Qualifiers:
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B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #49
Lab Order:	0508092	**Collection Date:**	8/9/2005 8:45:00 AM
Project:	Annual Sampling 2005		
Lab ID:	0508092-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2500	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/11/2005 10:11:55 AM
Barium	0.24	0.0020		mg/L	1	8/11/2005 10:11:55 AM
Cadmium	ND	0.0020		mg/L	1	8/11/2005 10:11:55 AM
Calcium	120	10		mg/L	10	8/11/2005 11:58:25 AM
Chromium	ND	0.0060		mg/L	1	8/11/2005 10:11:55 AM
Copper	ND	0.0060		mg/L	1	8/11/2005 10:11:55 AM
Iron	0.72	0.020		mg/L	1	8/11/2005 10:11:55 AM
Lead	ND	0.0050		mg/L	1	8/11/2005 10:11:55 AM
Magnesium	29	1.0		mg/L	1	8/11/2005 10:11:55 AM
Manganese	1.9	0.0020		mg/L	1	8/11/2005 10:11:55 AM
Potassium	4.7	1.0		mg/L	1	8/11/2005 10:11:55 AM
Selenium	ND	0.050		mg/L	1	8/11/2005 10:11:55 AM
Silver	ND	0.0050		mg/L	1	8/11/2005 10:11:55 AM
Sodium	360	10		mg/L	10	8/11/2005 11:58:25 AM
Uranium	ND	0.10		mg/L	1	8/11/2005 10:11:55 AM
Zinc	0.0055	0.0050		mg/L	1	8/11/2005 10:11:55 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.013	0.0060		mg/L	1	8/15/2005 1:13:50 PM
Lead	0.0075	0.0050		mg/L	1	8/15/2005 1:13:50 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	1600	50		mg/L	1	8/12/2005

Qualifiers:

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- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
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- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MBLK | Batch ID: R16247 | Test Code: E300 | Units: mg/L | Analysis Date 8/9/2005 | Prep Date
Client ID: | Run ID: LC_050809A | SeqNo: 386710

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MBLK | Batch ID: R16266 | Test Code: E300 | Units: mg/L | Analysis Date 8/10/2005 | Prep Date
Client ID: | Run ID: LC_050810A | SeqNo: 387042

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MBLK | Batch ID: R16266 | Test Code: E300 | Units: mg/L | Analysis Date 8/10/2005 | Prep Date
Client ID: | Run ID: LC_050810A | SeqNo: 387086

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MB | Batch ID: R16272 | Test Code: SW6010A | Units: mg/L | Analysis Date 8/11/2005 8:57:51 AM | Prep Date
Client ID: | Run ID: ICP_050811B | SeqNo: 387315

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	ND	1									
Selenium	ND	0.02									
Silver	ND	0.005									
Sodium	ND	1									
Uranium	ND	0.1									
Zinc	ND	0.05									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB-8517 Batch ID: 8517 Test Code: SW6010A Units: mg/L Analysis Date 8/15/2005 12:28:52 PM Prep Date 8/11/2005
Client ID: Run ID: ICP_050815A SeqNo: 388298

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.006	0	0	0	0	0	0			
Lead	ND	0.005	0	0	0	0	0	0			

Sample ID MB-8519 Batch ID: 8519 Test Code: E160.1 Units: mg/L Analysis Date 8/12/2005 Prep Date 8/11/2005
Client ID: Run ID: WC_050812E SeqNo: 388615

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

12/22

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID 5ml rb | Batch ID: R16318 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/16/2005 | Prep Date
Client ID: | Run ID: VAL_050816A | SeqNo: 388908

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

cis-1,3-Dichloropropene	ND	1
1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

1,1,2-Trichloroethane	ND	1						
Trichloroethene (TCE)	ND	1						
Trichlorofluoromethane	ND	1						
1,2,3-Trichloropropane	ND	2						
Vinyl chloride	ND	1						
Xylenes, Total	ND	1						
Surr: 1,2-Dichloroethane-d4	9.626	0	10	0	96.3	87.7	108	0
Surr: 4-Bromofluorobenzene	10.57	0	10	0	106	88.8	113	0
Surr: Dibromofluoromethane	9.76	0	10	0	97.6	84.1	111	0
Surr: Toluene-d8	9.478	0	10	0	94.8	85.9	109	0

15/22

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *24-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Sample Duplicate

Sample ID **0508092-01B DUP** Batch ID: **R16283** Test Code: **E310.1** Units: **mg/L CaCO3** Analysis Date **8/11/2005** Prep Date

Client ID: **MW #12** Run ID: **WC_050811B** SeqNo: **387649**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	307	2	0	0	0	0	0	312	1.62	15	
Carbonate	ND	2	0	0	0	0	0	0	0	15	
Bicarbonate	307	2	0	0	0	0	0	312	1.62	15	

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID LCS	Batch ID: R16247	Test Code: E300	Units: mg/L	Analysis Date 8/9/2005	Prep Date
Client ID:		Run ID: LC_050809A		SeqNo: 386711	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5223	0.1	0.5	0	104	90	110	0			
Chloride	4.994	0.1	5	0	99.9	90	110	0			
Nitrogen, Nitrite (As N)	0.9494	0.1	1	0	94.9	90	110	0			
Bromide	2.637	0.5	2.5	0	105	90	110	0			
Nitrogen, Nitrate (As N)	2.525	0.1	2.5	0	101	90	110	0			
Phosphorus, Orthophosphate (As P)	5.092	0.5	5	0	102	90	110	0			
Sulfate	10.25	0.5	10	0	103	90	110	0			

Sample ID LCS	Batch ID: R16266	Test Code: E300	Units: mg/L	Analysis Date 8/10/2005	Prep Date
Client ID:		Run ID: LC_050810A		SeqNo: 387043	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.4754	0.1	0.5	0	95.1	90	110	0			
Chloride	4.805	0.1	5	0	96.1	90	110	0			
Nitrogen, Nitrite (As N)	0.9043	0.1	1	0	90.4	90	110	0			
Bromide	2.525	0.5	2.5	0	101	90	110	0			
Nitrogen, Nitrate (As N)	2.424	0.1	2.5	0	97.0	90	110	0			
Phosphorus, Orthophosphate (As P)	5.01	0.5	5	0	100	90	110	0			
Sulfate	9.757	0.5	10	0	97.6	90	110	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

/

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID LCS	Batch ID: R16266	Test Code: E300	Units: mg/L	Analysis Date 8/10/2005	Prep Date
Client ID:		Run ID: LC_050810A		SeqNo: 387087	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.495	0.1	0.5	0	99.0	90	110	0			
Chloride	4.883	0.1	5	0	97.7	90	110	0			
Nitrogen, Nitrite (As N)	0.9222	0.1	1	0	92.2	90	110	0			
Bromide	2.576	0.5	2.5	0	103	90	110	0			
Nitrogen, Nitrate (As N)	2.47	0.1	2.5	0	98.8	90	110	0			
Phosphorus, Orthophosphate (As P)	5.075	0.5	5	0	101	90	110	0			
Sulfate	9.928	0.5	10	0	99.3	90	110	0			

Sample ID 100ng lcs	Batch ID: R16318	Test Code: SW8260B	Units: µg/L	Analysis Date 8/16/2005	Prep Date
Client ID:		Run ID: VAL_050816A		SeqNo: 388909	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.16	1	20	0	106	81.4	130	0			
Toluene	22.8	1	20	0	114	90.8	128	0			
Chlorobenzene	23.26	1	20	0	116	89.6	134	0			
1,1-Dichloroethene	20.37	1	20	0	102	75.1	120	0			
Trichloroethene (TCE)	17.95	1	20	0	89.8	75.8	110	0			

Sample ID 100ng lcs	Batch ID: R16334	Test Code: SW8260B	Units: µg/L	Analysis Date 8/17/2005	Prep Date
Client ID:		Run ID: VAL_050817A		SeqNo: 389361	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.04	1	20	0	110	81.4	130	0			
Toluene	22.87	1	20	0	114	90.8	128	0			
Chlorobenzene	25.72	1	20	0	129	89.6	134	0			
1,1-Dichloroethene	20.58	1	20	0	103	75.1	120	0			
Trichloroethene (TCE)	18.9	1	20	0	94.5	75.8	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID LCS | Batch ID: R16272 | Test Code: SW6010A | Units: mg/L | Analysis Date 8/11/2005 9:01:03 AM | Prep Date
Client ID: | Run ID: ICP_050811B | SeqNo: 387316

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.533	0.02	0.5	0	107	80	120	0			
Barium	0.5048	0.02	0.5	0	101	80	120	0			
Cadmium	0.5223	0.002	0.5	0	104	80	120	0			
Calcium	51.98	1	50.5	0	103	80	120	0			
Chromium	0.5109	0.006	0.5	0	102	80	120	0			
Copper	0.5142	0.006	0.5	0	103	80	120	0			
Iron	0.498	0.02	0.5	0	99.6	80	120	0			
Lead	0.5109	0.005	0.5	0	102	80	120	0			
Magnesium	51.93	1	50.5	0	103	80	120	0			
Manganese	0.4902	0.002	0.5	0	98.0	80	120	0			
Potassium	54.41	1	55	0	98.9	80	120	0			
Selenium	0.5129	0.02	0.5	0	103	80	120	0			
Silver	0.5283	0.005	0.5	0	106	80	120	0			
Sodium	55.22	1	50.5	0	109	80	120	0			
Uranium	2.601	0.1	2.5	0	104	80	120	0			
Zinc	0.5238	0.05	0.5	0	105	80	120	0			

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Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0508092
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID LCSD | Batch ID: R16272 | Test Code: SW6010A | Units: mg/L | Analysis Date 8/11/2005 9:04:22 AM | Prep Date
Client ID: | Run ID: ICP_050811B | SeqNo: 387317

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5505	0.02	0.5	0	110	80	120	0.533	3.23	20	
Barium	0.5126	0.02	0.5	0	103	80	120	0.5048	1.53	20	
Cadmium	0.5311	0.002	0.5	0	106	80	120	0.5223	1.67	20	
Calcium	52.69	1	50.5	0	104	80	120	51.98	1.36	20	
Chromium	0.5196	0.006	0.5	0	104	80	120	0.5109	1.69	20	
Copper	0.5182	0.006	0.5	0	104	80	120	0.5142	0.774	20	
Iron	0.5	0.02	0.5	0	100	80	120	0.498	0.389	20	
Lead	0.5198	0.005	0.5	0	104	80	120	0.5109	1.74	20	
Magnesium	52.6	1	50.5	0	104	80	120	51.93	1.28	20	
Manganese	0.496	0.002	0.5	0	99.2	80	120	0.4902	1.19	20	
Potassium	55.16	1	55	0	100	80	120	54.41	1.36	20	
Selenium	0.533	0.02	0.5	0	107	80	120	0.5129	3.83	20	
Silver	0.5233	0.005	0.5	0	105	80	120	0.5283	0.954	20	
Sodium	55.88	1	50.5	0	111	80	120	55.22	1.19	20	
Uranium	2.61	0.1	2.5	0	104	80	120	2.601	0.322	20	
Zinc	0.5347	0.05	0.5	0	107	80	120	0.5238	2.06	20	

Sample ID LCS-8517 | Batch ID: 8517 | Test Code: SW6010A | Units: mg/L | Analysis Date 8/15/2005 12:32:07 PM | Prep Date 8/11/2005
Client ID: | Run ID: ICP_050815A | SeqNo: 388299

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.4884	0.006	0.5	0	97.7	80	120	0			
Lead	0.4996	0.005	0.5	0	99.9	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 8/9/2005

Work Order Number 0508092 | Received by AT

Checklist completed by _____ (Signature) 8/9/05 (Date)

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 3° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other:

Client: San Juan Refinery
Address: #50, Rd 4990
Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Annual Sampling 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: 3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
8/08/05	420pm	H2O	MW#12	1-500ml			H_2SO_4	508082-1
"	"	"	"	1-500ml				
				1-250ml		X	filtered	
				1-500ml		X		
				2-VOA	X			
	905AM							
8/09/05	845AM	H2O	MW#48	1-500ml			H_2SO_4	-2
				1-500ml				
				1-250ml		X	filtered	
				1-500ml		X		
				2-VOA	X			

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide / Carbon Bicarbonate	Dissolved Water metals	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X				
								X				X			X	
													X			
														X		
										X						
								X				X				
								X				X			X	
													X			
														X		
										X						

Remarks:

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
8/09/05	930am	Cindy Hurtado	8/9/05
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1645

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐ Other: _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining

Project Name: Annual Sampling - 2005

Address: #50 Rd 4990 Bloomfield, NM 87413

Project #:

Project Manager:

Phone #: 505-632-4161

Sampler: Cindy Hurtado / Angela Folk

Fax #: 505-632-3911

Sample Temperature: 3°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
8/09/05	845	H_2O	MW #49	1-500ml			H_2SO_4	0508812 -3
			MW #48	1-500ml				
				1-250ml		X	filtered HNO_3	
				1-500ml		X		
				2-VOA	X			

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	B310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide // Carbon Bicarb	Dissolved Water Metals	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X				
								X				X			X	
													X			
														X		
										X						

Remarks:

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	Date:
8/09/05	1245	Cindy Hurtado		8/9/05
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
				1645

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

August 23, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Annual Sampling 2005 Order No.: 0508137

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 6 samples on 8/11/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #8
Lab Order: 0508137
Collection Date: 8/10/2005 10:20:00 AM
Project: Annual Sampling 2005
Lab ID: 0508137-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.79	0.10		mg/L	1	8/11/2005
Chloride	260	1.0		mg/L	10	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/11/2005
Bromide	ND	2.5		mg/L	5	8/11/2005
Nitrogen, Nitrate (As N)	27	0.50		mg/L	5	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	740	5.0		mg/L	10	8/12/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	260	2.0		mg/L CaCO3	1	8/18/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/18/2005
Bicarbonate	260	2.0		mg/L CaCO3	1	8/18/2005
EPA METHOD 8260: VOLATILES						Analyst: KTM
Benzene	ND	1.0		µg/L	1	8/18/2005
Toluene	ND	1.0		µg/L	1	8/18/2005
Ethylbenzene	ND	1.0		µg/L	1	8/18/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/18/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/18/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/18/2005
Naphthalene	ND	2.0		µg/L	1	8/18/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2005
Acetone	ND	10		µg/L	1	8/18/2005
Bromobenzene	ND	1.0		µg/L	1	8/18/2005
Bromochloromethane	ND	1.0		µg/L	1	8/18/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/18/2005
Bromoform	ND	1.0		µg/L	1	8/18/2005
Bromomethane	ND	2.0		µg/L	1	8/18/2005
2-Butanone	ND	10		µg/L	1	8/18/2005
Carbon disulfide	ND	10		µg/L	1	8/18/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/18/2005
Chlorobenzene	ND	1.0		µg/L	1	8/18/2005
Chloroethane	ND	2.0		µg/L	1	8/18/2005
Chloroform	ND	1.0		µg/L	1	8/18/2005
Chloromethane	ND	1.0		µg/L	1	8/18/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/18/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/18/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/18/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #8
Lab Order: 0508137
Collection Date: 8/10/2005 10:20:00 AM
Project: Annual Sampling 2005
Lab ID: 0508137-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/18/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/18/2005
Dibromomethane	ND	2.0		µg/L	1	8/18/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/18/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/18/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/18/2005
2-Hexanone	ND	10		µg/L	1	8/18/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/18/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/18/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/18/2005
Methylene Chloride	ND	3.0		µg/L	1	8/18/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/18/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
Styrene	ND	1.0		µg/L	1	8/18/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/18/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/18/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/18/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/18/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/18/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/18/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/18/2005
Vinyl chloride	ND	1.0		µg/L	1	8/18/2005
Xylenes, Total	ND	1.0		µg/L	1	8/18/2005
Surr: 1,2-Dichloroethane-d4	95.2	87.7-108		%REC	1	8/18/2005
Surr: 4-Bromofluorobenzene	102	88.8-113		%REC	1	8/18/2005
Surr: Dibromofluoromethane	92.0	84.1-111		%REC	1	8/18/2005
Surr: Toluene-d8	101	85.9-109		%REC	1	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #8
Lab Order: 0508137
Collection Date: 8/10/2005 10:20:00 AM
Project: Annual Sampling 2005
Lab ID: 0508137-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2900	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 2:18:51 PM
Barium	0.021	0.0020		mg/L	1	8/12/2005 2:18:51 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 2:18:51 PM
Calcium	230	10		mg/L	10	8/15/2005 11:34:51 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 2:18:51 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 2:18:51 PM
Iron	0.078	0.020		mg/L	1	8/12/2005 2:18:51 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 2:18:51 PM
Magnesium	37	1.0		mg/L	1	8/12/2005 2:18:51 PM
Manganese	0.65	0.0020		mg/L	1	8/12/2005 2:18:51 PM
Potassium	3.1	1.0		mg/L	1	8/12/2005 2:18:51 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 2:18:51 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 2:18:51 PM
Sodium	360	10		mg/L	10	8/15/2005 11:34:51 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 2:18:51 PM
Zinc	0.014	0.0050		mg/L	1	8/12/2005 2:18:51 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.33	0.0060		mg/L	1	8/18/2005 9:24:43 AM
Lead	ND	0.0050		mg/L	1	8/18/2005 9:24:43 AM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	2000	50		mg/L	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508137
Project: Annual Sampling 2005
Lab ID: 0508137-02

Client Sample ID: MW #32
Collection Date: 8/10/2005 11:10:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.27	0.10		mg/L	1	8/11/2005
Chloride	710	2.0		mg/L	20	8/12/2005
Nitrogen, Nitrite (As N)	ND	2.0		mg/L	20	8/12/2005
Bromide	2.9	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	8.7	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	780	10		mg/L	20	8/12/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	250	2.0		mg/L CaCO3	1	8/18/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/18/2005
Bicarbonate	250	2.0		mg/L CaCO3	1	8/18/2005
EPA METHOD 8260: VOLATILES						Analyst: KTM
Benzene	ND	1.0		µg/L	1	8/18/2005
Toluene	ND	1.0		µg/L	1	8/18/2005
Ethylbenzene	ND	1.0		µg/L	1	8/18/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/18/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/18/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/18/2005
Naphthalene	ND	2.0		µg/L	1	8/18/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2005
Acetone	ND	10		µg/L	1	8/18/2005
Bromobenzene	ND	1.0		µg/L	1	8/18/2005
Bromochloromethane	ND	1.0		µg/L	1	8/18/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/18/2005
Bromoform	ND	1.0		µg/L	1	8/18/2005
Bromomethane	ND	2.0		µg/L	1	8/18/2005
2-Butanone	ND	10		µg/L	1	8/18/2005
Carbon disulfide	ND	10		µg/L	1	8/18/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/18/2005
Chlorobenzene	ND	1.0		µg/L	1	8/18/2005
Chloroethane	ND	2.0		µg/L	1	8/18/2005
Chloroform	ND	1.0		µg/L	1	8/18/2005
Chloromethane	ND	1.0		µg/L	1	8/18/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/18/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/18/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/18/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508137
Project: Annual Sampling 2005
Lab ID: 0508137-02

Client Sample ID: MW #32
Collection Date: 8/10/2005 11:10:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/18/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/18/2005
Dibromomethane	ND	2.0		µg/L	1	8/18/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/18/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/18/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/18/2005
2-Hexanone	ND	10		µg/L	1	8/18/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/18/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/18/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/18/2005
Methylene Chloride	ND	3.0		µg/L	1	8/18/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/18/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
Styrene	ND	1.0		µg/L	1	8/18/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/18/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/18/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/18/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/18/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/18/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/18/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/18/2005
Vinyl chloride	ND	1.0		µg/L	1	8/18/2005
Xylenes, Total	ND	1.0		µg/L	1	8/18/2005
Surr: 1,2-Dichloroethane-d4	98.5	87.7-108		%REC	1	8/18/2005
Surr: 4-Bromofluorobenzene	97.7	88.8-113		%REC	1	8/18/2005
Surr: Dibromofluoromethane	98.2	84.1-111		%REC	1	8/18/2005
Surr: Toluene-d8	100	85.9-109		%REC	1	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508137
Project: Annual Sampling 2005
Lab ID: 0508137-02

Client Sample ID: MW #32
Collection Date: 8/10/2005 11:10:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	4100	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 2:23:10 PM
Barium	0.026	0.0020		mg/L	1	8/12/2005 2:23:10 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 2:23:10 PM
Calcium	200	10		mg/L	10	8/15/2005 11:37:53 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 2:23:10 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 2:23:10 PM
Iron	ND	0.020		mg/L	1	8/12/2005 2:23:10 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 2:23:10 PM
Magnesium	32	1.0		mg/L	1	8/12/2005 2:23:10 PM
Manganese	ND	0.0020		mg/L	1	8/12/2005 2:23:10 PM
Potassium	3.0	1.0		mg/L	1	8/12/2005 2:23:10 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 2:23:10 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 2:23:10 PM
Sodium	580	10		mg/L	10	8/15/2005 11:37:53 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 2:23:10 PM
Zinc	0.011	0.0050		mg/L	1	8/12/2005 2:23:10 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	ND	0.0060		mg/L	1	8/18/2005 9:28:46 AM
Lead	ND	0.0050		mg/L	1	8/18/2005 9:28:46 AM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	2600	50		mg/L	1	8/16/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508137
Project: Annual Sampling 2005
Lab ID: 0508137-03

Client Sample ID: MW #26
Collection Date: 8/10/2005 2:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.42	0.10		mg/L	1	8/11/2005
Chloride	290	2.0		mg/L	20	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/12/2005
Bromide	4.5	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	ND	0.50		mg/L	1	8/11/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	1000	2.0		mg/L CaCO3	1	8/18/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/18/2005
Bicarbonate	1000	2.0		mg/L CaCO3	1	8/18/2005
EPA METHOD 8260: VOLATILES						Analyst: KTM
Benzene	890	100		µg/L	100	8/19/2005
Toluene	ND	10		µg/L	10	8/18/2005
Ethylbenzene	470	100		µg/L	100	8/19/2005
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	8/18/2005
1,2,4-Trimethylbenzene	1200	100		µg/L	100	8/19/2005
1,3,5-Trimethylbenzene	91	10		µg/L	10	8/18/2005
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	8/18/2005
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	8/18/2005
Naphthalene	470	20		µg/L	10	8/18/2005
1-Methylnaphthalene	62	40		µg/L	10	8/18/2005
2-Methylnaphthalene	97	40		µg/L	10	8/18/2005
Acetone	ND	100		µg/L	10	8/18/2005
Bromobenzene	ND	10		µg/L	10	8/18/2005
Bromochloromethane	ND	10		µg/L	10	8/18/2005
Bromodichloromethane	ND	10		µg/L	10	8/18/2005
Bromoform	ND	10		µg/L	10	8/18/2005
Bromomethane	ND	20		µg/L	10	8/18/2005
2-Butanone	ND	100		µg/L	10	8/18/2005
Carbon disulfide	ND	100		µg/L	10	8/18/2005
Carbon Tetrachloride	ND	10		µg/L	10	8/18/2005
Chlorobenzene	ND	10		µg/L	10	8/18/2005
Chloroethane	ND	20		µg/L	10	8/18/2005
Chloroform	ND	10		µg/L	10	8/18/2005
Chloromethane	ND	10		µg/L	10	8/18/2005
2-Chlorotoluene	ND	10		µg/L	10	8/18/2005
4-Chlorotoluene	ND	10		µg/L	10	8/18/2005
cis-1,2-DCE	ND	10		µg/L	10	8/18/2005
cis-1,3-Dichloropropene	ND	10		µg/L	10	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508137
Project: Annual Sampling 2005
Lab ID: 0508137-03

Client Sample ID: MW #26
Collection Date: 8/10/2005 2:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	8/18/2005
Dibromochloromethane	ND	10		µg/L	10	8/18/2005
Dibromomethane	ND	20		µg/L	10	8/18/2005
1,2-Dichlorobenzene	ND	10		µg/L	10	8/18/2005
1,3-Dichlorobenzene	ND	10		µg/L	10	8/18/2005
1,4-Dichlorobenzene	ND	10		µg/L	10	8/18/2005
Dichlorodifluoromethane	ND	10		µg/L	10	8/18/2005
1,1-Dichloroethane	ND	10		µg/L	10	8/18/2005
1,1-Dichloroethene	ND	10		µg/L	10	8/18/2005
1,2-Dichloropropane	ND	10		µg/L	10	8/18/2005
1,3-Dichloropropane	ND	10		µg/L	10	8/18/2005
2,2-Dichloropropane	ND	10		µg/L	10	8/18/2005
1,1-Dichloropropene	ND	10		µg/L	10	8/18/2005
Hexachlorobutadiene	ND	10		µg/L	10	8/18/2005
2-Hexanone	ND	100		µg/L	10	8/18/2005
Isopropylbenzene	280	10		µg/L	10	8/18/2005
4-Isopropyltoluene	21	10		µg/L	10	8/18/2005
4-Methyl-2-pentanone	ND	100		µg/L	10	8/18/2005
Methylene Chloride	ND	30		µg/L	10	8/18/2005
n-Butylbenzene	ND	10		µg/L	10	8/18/2005
n-Propylbenzene	370	10		µg/L	10	8/18/2005
sec-Butylbenzene	19	10		µg/L	10	8/18/2005
Styrene	ND	10		µg/L	10	8/18/2005
tert-Butylbenzene	11	10		µg/L	10	8/18/2005
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	8/18/2005
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	8/18/2005
Tetrachloroethene (PCE)	ND	10		µg/L	10	8/18/2005
trans-1,2-DCE	ND	10		µg/L	10	8/18/2005
trans-1,3-Dichloropropene	ND	10		µg/L	10	8/18/2005
1,2,3-Trichlorobenzene	ND	10		µg/L	10	8/18/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	10	8/18/2005
1,1,1-Trichloroethane	ND	10		µg/L	10	8/18/2005
1,1,2-Trichloroethane	ND	10		µg/L	10	8/18/2005
Trichloroethene (TCE)	ND	10		µg/L	10	8/18/2005
Trichlorofluoromethane	ND	10		µg/L	10	8/18/2005
1,2,3-Trichloropropane	ND	20		µg/L	10	8/18/2005
Vinyl chloride	ND	10		µg/L	10	8/18/2005
Xylenes, Total	250	10		µg/L	10	8/18/2005
Surr: 1,2-Dichloroethane-d4	89.8	87.7-108		%REC	10	8/18/2005
Surr: 4-Bromofluorobenzene	88.0	88.8-113	S	%REC	10	8/18/2005
Surr: Dibromofluoromethane	89.9	84.1-111		%REC	10	8/18/2005
Surr: Toluene-d8	96.7	85.9-109		%REC	10	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508137
Project: Annual Sampling 2005
Lab ID: 0508137-03

Client Sample ID: MW #26
Collection Date: 8/10/2005 2:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2700	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 2:27:28 PM
Barium	1.9	0.0020		mg/L	1	8/12/2005 2:27:28 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 2:27:28 PM
Calcium	92	1.0		mg/L	1	8/12/2005 2:27:28 PM
Chromium	ND	0.0060		mg/L	1	8/12/2005 2:27:28 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 2:27:28 PM
Iron	6.3	0.020		mg/L	1	8/12/2005 2:27:28 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 2:27:28 PM
Magnesium	32	1.0		mg/L	1	8/12/2005 2:27:28 PM
Manganese	2.8	0.0020		mg/L	1	8/12/2005 2:27:28 PM
Potassium	2.8	1.0		mg/L	1	8/12/2005 2:27:28 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 2:27:28 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 2:27:28 PM
Sodium	430	10		mg/L	10	8/15/2005 11:40:58 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 2:27:28 PM
Zinc	0.17	0.0050		mg/L	1	8/12/2005 2:27:28 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	ND	0.0060		mg/L	1	8/18/2005 9:33:13 AM
Lead	ND	0.0050		mg/L	1	8/18/2005 9:33:13 AM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	1600	50		mg/L	1	8/16/2005

Qualifiers:
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- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #3
Lab Order: 0508137
Collection Date: 8/10/2005 2:45:00 PM
Project: Annual Sampling 2005
Lab ID: 0508137-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.33	0.10		mg/L	1	8/11/2005
Chloride	1200	5.0		mg/L	50	8/12/2005
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	8/11/2005
Bromide	4.5	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	42	0.50		mg/L	5	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	2300	25		mg/L	50	8/12/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	680	2.0		mg/L CaCO3	1	8/18/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/18/2005
Bicarbonate	680	2.0		mg/L CaCO3	1	8/18/2005
EPA METHOD 8260: VOLATILES						Analyst: KTM
Benzene	ND	1.0		µg/L	1	8/19/2005
Toluene	ND	1.0		µg/L	1	8/19/2005
Ethylbenzene	ND	1.0		µg/L	1	8/19/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/19/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/19/2005
Naphthalene	ND	2.0		µg/L	1	8/19/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
Acetone	ND	10		µg/L	1	8/19/2005
Bromobenzene	ND	1.0		µg/L	1	8/19/2005
Bromochloromethane	ND	1.0		µg/L	1	8/19/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/19/2005
Bromoform	ND	1.0		µg/L	1	8/19/2005
Bromomethane	ND	2.0		µg/L	1	8/19/2005
2-Butanone	ND	10		µg/L	1	8/19/2005
Carbon disulfide	ND	10		µg/L	1	8/19/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/19/2005
Chlorobenzene	ND	1.0		µg/L	1	8/19/2005
Chloroethane	ND	2.0		µg/L	1	8/19/2005
Chloroform	ND	1.0		µg/L	1	8/19/2005
Chloromethane	ND	1.0		µg/L	1	8/19/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #3
Lab Order: 0508137
Collection Date: 8/10/2005 2:45:00 PM
Project: Annual Sampling 2005
Lab ID: 0508137-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/19/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/19/2005
Dibromomethane	ND	2.0		µg/L	1	8/19/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/19/2005
2-Hexanone	ND	10		µg/L	1	8/19/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/19/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/19/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/19/2005
Methylene Chloride	ND	3.0		µg/L	1	8/19/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/19/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
Styrene	ND	1.0		µg/L	1	8/19/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/19/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/19/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/19/2005
Vinyl chloride	ND	1.0		µg/L	1	8/19/2005
Xylenes, Total	ND	1.0		µg/L	1	8/19/2005
Surr: 1,2-Dichloroethane-d4	98.4	87.7-108		%REC	1	8/19/2005
Surr: 4-Bromofluorobenzene	99.0	88.8-113		%REC	1	8/19/2005
Surr: Dibromofluoromethane	88.3	84.1-111		%REC	1	8/19/2005
Surr: Toluene-d8	102	85.9-109		%REC	1	8/19/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
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B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #3
Lab Order: 0508137
Collection Date: 8/10/2005 2:45:00 PM
Project: Annual Sampling 2005
Lab ID: 0508137-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	8300	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 2:31:32 PM
Barium	0.018	0.0020		mg/L	1	8/12/2005 2:31:32 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 2:31:32 PM
Calcium	480	10		mg/L	10	8/15/2005 11:43:54 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 2:31:32 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 2:31:32 PM
Iron	0.047	0.020		mg/L	1	8/12/2005 2:31:32 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 2:31:32 PM
Magnesium	130	10		mg/L	10	8/15/2005 11:43:54 AM
Manganese	0.43	0.0020		mg/L	1	8/12/2005 2:31:32 PM
Potassium	7.6	1.0		mg/L	1	8/12/2005 2:31:32 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 2:31:32 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 2:31:32 PM
Sodium	1300	20		mg/L	20	8/15/2005 12:25:44 PM
Uranium	ND	0.10		mg/L	1	8/12/2005 2:31:32 PM
Zinc	0.018	0.0050		mg/L	1	8/12/2005 2:31:32 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.016	0.0060		mg/L	1	8/18/2005 9:37:19 AM
Lead	ND	0.0050		mg/L	1	8/18/2005 9:37:19 AM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	6200	50		mg/L	1	8/16/2005

Qualifiers:
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J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #13
Lab Order: 0508137
Collection Date: 8/10/2005 3:45:00 PM
Project: Annual Sampling 2005
Lab ID: 0508137-05
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.15	0.10		mg/L	1	8/11/2005
Chloride	320	2.0		mg/L	20	8/12/2005
Nitrogen, Nitrite (As N)	0.23	0.10		mg/L	1	8/11/2005
Bromide	4.6	0.50		mg/L	1	8/11/2005
Nitrogen, Nitrate (As N)	6.1	0.10		mg/L	1	8/11/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/11/2005
Sulfate	1000	10		mg/L	20	8/12/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	1000	2.0		mg/L CaCO3	1	8/18/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/18/2005
Bicarbonate	1000	2.0		mg/L CaCO3	1	8/18/2005
EPA METHOD 8260: VOLATILES						Analyst: KTM
Benzene	ND	1.0		µg/L	1	8/18/2005
Toluene	ND	1.0		µg/L	1	8/18/2005
Ethylbenzene	ND	1.0		µg/L	1	8/18/2005
Methyl tert-butyl ether (MTBE)	15	1.0		µg/L	1	8/18/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/18/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/18/2005
Naphthalene	ND	2.0		µg/L	1	8/18/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2005
Acetone	ND	10		µg/L	1	8/18/2005
Bromobenzene	ND	1.0		µg/L	1	8/18/2005
Bromochloromethane	ND	1.0		µg/L	1	8/18/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/18/2005
Bromoform	ND	1.0		µg/L	1	8/18/2005
Bromomethane	ND	2.0		µg/L	1	8/18/2005
2-Butanone	ND	10		µg/L	1	8/18/2005
Carbon disulfide	ND	10		µg/L	1	8/18/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/18/2005
Chlorobenzene	ND	1.0		µg/L	1	8/18/2005
Chloroethane	ND	2.0		µg/L	1	8/18/2005
Chloroform	ND	1.0		µg/L	1	8/18/2005
Chloromethane	ND	1.0		µg/L	1	8/18/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/18/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/18/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/18/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508137
Project: Annual Sampling 2005
Lab ID: 0508137-05

Client Sample ID: MW #13
Collection Date: 8/10/2005 3:45:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/18/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/18/2005
Dibromomethane	ND	2.0		µg/L	1	8/18/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/18/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/18/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/18/2005
2-Hexanone	ND	10		µg/L	1	8/18/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/18/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/18/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/18/2005
Methylene Chloride	ND	3.0		µg/L	1	8/18/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/18/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
Styrene	ND	1.0		µg/L	1	8/18/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/18/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/18/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/18/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/18/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/18/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/18/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/18/2005
Vinyl chloride	ND	1.0		µg/L	1	8/18/2005
Xylenes, Total	ND	1.0		µg/L	1	8/18/2005
Surr: 1,2-Dichloroethane-d4	97.3	87.7-108		%REC	1	8/18/2005
Surr: 4-Bromofluorobenzene	100	88.8-113		%REC	1	8/18/2005
Surr: Dibromofluoromethane	94.3	84.1-111		%REC	1	8/18/2005
Surr: Toluene-d8	96.9	85.9-109		%REC	1	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: MW #13
Lab Order: 0508137
Collection Date: 8/10/2005 3:45:00 PM
Project: Annual Sampling 2005
Lab ID: 0508137-05
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	4600	0.010		µmhos/cm	1	8/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/12/2005 2:35:44 PM
Barium	0.028	0.0020		mg/L	1	8/12/2005 2:35:44 PM
Cadmium	ND	0.0020		mg/L	1	8/12/2005 2:35:44 PM
Calcium	240	10		mg/L	10	8/15/2005 11:47:10 AM
Chromium	ND	0.0060		mg/L	1	8/12/2005 2:35:44 PM
Copper	ND	0.0060		mg/L	1	8/12/2005 2:35:44 PM
Iron	ND	0.020		mg/L	1	8/12/2005 2:35:44 PM
Lead	ND	0.0050		mg/L	1	8/12/2005 2:35:44 PM
Magnesium	85	1.0		mg/L	1	8/12/2005 2:35:44 PM
Manganese	1.1	0.0020		mg/L	1	8/12/2005 2:35:44 PM
Potassium	3.8	1.0		mg/L	1	8/12/2005 2:35:44 PM
Selenium	ND	0.050		mg/L	1	8/12/2005 2:35:44 PM
Silver	ND	0.0050		mg/L	1	8/12/2005 2:35:44 PM
Sodium	570	10		mg/L	10	8/15/2005 11:47:10 AM
Uranium	ND	0.10		mg/L	1	8/12/2005 2:35:44 PM
Zinc	0.0088	0.0050		mg/L	1	8/12/2005 2:35:44 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.012	0.0060		mg/L	1	8/18/2005 9:41:23 AM
Lead	ND	0.0050		mg/L	1	8/18/2005 9:41:23 AM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	3000	50		mg/L	1	8/16/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508137
Project: Annual Sampling 2005
Lab ID: 0508137-06

Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES						Analyst: KTM
Benzene	ND	1.0		µg/L	1	8/18/2005
Toluene	ND	1.0		µg/L	1	8/18/2005
Ethylbenzene	ND	1.0		µg/L	1	8/18/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/18/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/18/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/18/2005
Naphthalene	ND	2.0		µg/L	1	8/18/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2005
Acetone	ND	10		µg/L	1	8/18/2005
Bromobenzene	ND	1.0		µg/L	1	8/18/2005
Bromochloromethane	ND	1.0		µg/L	1	8/18/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/18/2005
Bromoform	ND	1.0		µg/L	1	8/18/2005
Bromomethane	ND	2.0		µg/L	1	8/18/2005
2-Butanone	ND	10		µg/L	1	8/18/2005
Carbon disulfide	ND	10		µg/L	1	8/18/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/18/2005
Chlorobenzene	ND	1.0		µg/L	1	8/18/2005
Chloroethane	ND	2.0		µg/L	1	8/18/2005
Chloroform	ND	1.0		µg/L	1	8/18/2005
Chloromethane	ND	1.0		µg/L	1	8/18/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/18/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/18/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/18/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/18/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/18/2005
Dibromomethane	ND	2.0		µg/L	1	8/18/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/18/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: Trip Blank
Lab Order: 0508137
Collection Date:
Project: Annual Sampling 2005
Lab ID: 0508137-06
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Hexachlorobutadiene	ND	1.0		µg/L	1	8/18/2005
2-Hexanone	ND	10		µg/L	1	8/18/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/18/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/18/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/18/2005
Methylene Chloride	ND	3.0		µg/L	1	8/18/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/18/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
Styrene	ND	1.0		µg/L	1	8/18/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/18/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/18/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/18/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/18/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/18/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/18/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/18/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/18/2005
Vinyl chloride	ND	1.0		µg/L	1	8/18/2005
Xylenes, Total	ND	1.0		µg/L	1	8/18/2005
Surr: 1,2-Dichloroethane-d4	95.9	87.7-108		%REC	1	8/18/2005
Surr: 4-Bromofluorobenzene	98.4	88.8-113		%REC	1	8/18/2005
Surr: Dibromofluoromethane	95.5	84.1-111		%REC	1	8/18/2005
Surr: Toluene-d8	97.7	85.9-109		%REC	1	8/18/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MBLK	Batch ID: R16281	Test Code: E300	Units: mg/L	Analysis Date 8/11/2005	Prep Date
Client ID:		Run ID: LC_050811A		SeqNo: 387530	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MBLK	Batch ID: R16286	Test Code: E300	Units: mg/L	Analysis Date 8/12/2005	Prep Date
Client ID:		Run ID: LC_050812A		SeqNo: 387697	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MBLK	Batch ID: R16353	Test Code: E310.1	Units: mg/L CaCO3	Analysis Date 8/18/2005	Prep Date
Client ID:		Run ID: WC_050818B		SeqNo: 390009	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2									
Carbonate	ND	2									
Bicarbonate	ND	2									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB	Batch ID: R16299	Test Code: SW6010A	Units: mg/L	Analysis Date 8/12/2005 1:17:55 PM	Prep Date
Client ID:		Run ID: ICP_050812C		SeqNo: 388184	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	ND	1									
Selenium	ND	0.02									
Silver	ND	0.005									
Uranium	ND	0.1									
Zinc	ND	0.05									

Sample ID MB-8540	Batch ID: 8540	Test Code: SW6010A	Units: mg/L	Analysis Date 8/18/2005 8:47:30 AM	Prep Date 8/16/2005
Client ID:		Run ID: ICP_050818A		SeqNo: 389684	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.006									
Lead	ND	0.005									

Sample ID MB-8539	Batch ID: 8539	Test Code: E160.1	Units: mg/L	Analysis Date 8/16/2005	Prep Date 8/16/2005
Client ID:		Run ID: WC_050816C		SeqNo: 390192	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 23-Aug-05

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID 5mL rb | Batch ID: R16332 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/17/2005 | Prep Date
Client ID: | Run ID: NEPTUNE_050817A | SeqNo: 389340

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

cis-1,3-Dichloropropene	ND	1
1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

1,1,2-Trichloroethane	ND	1						
Trichloroethene (TCE)	ND	1						
Trichlorofluoromethane	ND	1						
1,2,3-Trichloropropane	ND	2						
Vinyl chloride	ND	1						
Xylenes, Total	ND	1						
Surr: 1,2-Dichloroethane-d4	9.42	0	10	0	94.2	87.7	108	0
Surr: 4-Bromofluorobenzene	9.692	0	10	0	96.9	88.8	113	0
Surr: Dibromofluoromethane	9.308	0	10	0	93.1	84.1	111	0
Surr: Toluene-d8	9.674	0	10	0	96.7	85.9	109	0

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Sample Duplicate

Sample ID 0508137-01B DUP Batch ID: R16353 Test Code: E310.1 Units: mg/L CaCO3 Analysis Date 8/18/2005 Prep Date
Client ID: MW #8 Run ID: WC_050818B SeqNo: 390014

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	257	2	0	0	0	0	0	260	1.16	15	
Carbonate	ND	2	0	0	0	0	0	0	0	15	
Bicarbonate	257	2	0	0	0	0	0	260	1.16	15	

Sample ID 0508137-02B DUP Batch ID: R16289 Test Code: E120.1 Units: µmhos/cm Analysis Date 8/13/2005 Prep Date
Client ID: MW #32 Run ID: WC_050813A SeqNo: 387828

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Specific Conductance	4180	0.01	0	0	0	0	0	4110	1.69	20	

Sample ID 0508137-05B DUP Batch ID: R16299 Test Code: SW6010A Units: mg/L Analysis Date 8/15/2005 11:50:14 AM Prep Date
Client ID: MW #13 Run ID: ICP_050812C SeqNo: 388181

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	257.9	10	0	0	0	0	0	235.8	8.96	30	
Sodium	618.1	10	0	0	0	0	0	566	8.80	30	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Sample Duplicate

Sample ID 0508137-05B DUP Batch ID: R16299 Test Code: SW6010A Units: mg/L Analysis Date 8/12/2005 2:40:09 PM Prep Date
Client ID: MW #13 Run ID: ICP_050812C SeqNo: 388205

Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02	0	0	0	0	0	0	0	30	
Barium	0.02759	0.02	0	0	0	0	0	0.02826	2.38	30	
Cadmium	ND	0.002	0	0	0	0	0	0	0	30	
Chromium	ND	0.006	0	0	0	0	0	0	0	30	
Copper	0.002972	0.006	0	0	0	0	0	0.002767	0	30	J
Iron	0.01707	0.02	0	0	0	0	0	0.01734	0	30	J
Lead	ND	0.005	0	0	0	0	0	0	0	30	
Magnesium	85.27	1	0	0	0	0	0	84.67	0.704	30	
Manganese	1.068	0.002	0	0	0	0	0	1.063	0.411	30	
Potassium	3.92	1	0	0	0	0	0	3.834	2.20	30	
Selenium	ND	0.02	0	0	0	0	0	0	0	30	
Silver	ND	0.005	0	0	0	0	0	0	0	30	
Uranium	0.01092	0.1	0	0	0	0	0	0.01192	0	30	J
Zinc	0.008394	0.05	0	0	0	0	0	0.008799	0	30	J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *23-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID 0508137-05B MS Batch ID: R16299 Test Code: SW6010A Units: mg/L Analysis Date 8/12/2005 2:57:25 PM Prep Date

Client ID: MW #13 Run ID: ICP_050812C SeqNo: 388209

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.6322	0.02	0.5	0	126	75	125	0			S
Barium	0.5376	0.02	0.5	0.02826	102	75	125	0			
Cadmium	0.5452	0.002	0.5	0	109	75	125	0			
Chromium	0.527	0.006	0.5	0	105	75	125	0			
Copper	0.5829	0.006	0.5	0.002767	116	75	125	0			
Iron	0.4933	0.02	0.5	0.01734	95.2	75	125	0			
Lead	0.493	0.005	0.5	0	98.6	75	125	0			
Magnesium	127.1	1	50.5	84.67	84.0	75	125	0			
Manganese	1.521	0.002	0.5	1.063	91.6	75	125	0			
Potassium	53.96	1	55	3.834	91.1	75	125	0			
Selenium	0.6253	0.02	0.5	0	125	75	125	0			S
Silver	0.5977	0.005	0.5	0	120	75	125	0			
Uranium	2.601	0.1	2.5	0.01192	104	75	125	0			
Zinc	0.5527	0.05	0.5	0.008799	109	75	125	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID 0508137-05B MSD Batch ID: R16299 Test Code: SW6010A Units: mg/L Analysis Date 8/12/2005 3:01:47 PM Prep Date
Client ID: MW #13 Run ID: ICP_050812C SeqNo: 388210

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.6219	0.02	0.5	0	124	75	125	0.6322	1.64	20	
Barium	0.5236	0.02	0.5	0.02826	99.1	75	125	0.5376	2.64	20	
Cadmium	0.5242	0.002	0.5	0	105	75	125	0.5452	3.93	20	
Chromium	0.5051	0.006	0.5	0	101	75	125	0.527	4.25	20	
Copper	0.5624	0.006	0.5	0.002767	112	75	125	0.5829	3.58	20	
Iron	0.4893	0.02	0.5	0.01734	94.4	75	125	0.4933	0.805	20	
Lead	0.4759	0.005	0.5	0	95.2	75	125	0.493	3.52	20	
Magnesium	124.7	1	50.5	84.67	79.3	75	125	127.1	1.90	20	
Manganese	1.506	0.002	0.5	1.063	88.6	75	125	1.521	0.998	20	
Potassium	53.39	1	55	3.834	90.1	75	125	53.96	1.07	20	
Selenium	0.5876	0.02	0.5	0	118	75	125	0.6253	6.22	20	
Silver	0.5822	0.005	0.5	0	116	75	125	0.5977	2.63	20	
Uranium	2.531	0.1	2.5	0.01192	101	75	125	2.601	2.71	20	
Zinc	0.5152	0.05	0.5	0.008799	101	75	125	0.5527	7.03	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: 23-Aug-05

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID LCS	Batch ID: R16281	Test Code: E300	Units: mg/L	Analysis Date 8/11/2005	Prep Date
Client ID:		Run ID: LC_050811A		SeqNo: 387531	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5179	0.1	0.5	0	104	90	110	0			
Chloride	4.933	0.1	5	0	98.7	90	110	0			
Nitrogen, Nitrite (As N)	0.9318	0.1	1	0	93.2	90	110	0			
Bromide	2.59	0.5	2.5	0	104	90	110	0			
Nitrogen, Nitrate (As N)	2.468	0.1	2.5	0	98.7	90	110	0			
Phosphorus, Orthophosphate (As P)	5.083	0.5	5	0	102	90	110	0			
Sulfate	10.07	0.5	10	0	101	90	110	0			

Sample ID LCS	Batch ID: R16286	Test Code: E300	Units: mg/L	Analysis Date 8/12/2005	Prep Date
Client ID:		Run ID: LC_050812A		SeqNo: 387698	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.497	0.1	0.5	0	99.4	90	110	0			
Chloride	4.81	0.1	5	0	96.2	90	110	0			
Nitrogen, Nitrite (As N)	0.9004	0.1	1	0	90.0	90	110	0			
Bromide	2.524	0.5	2.5	0	101	90	110	0			
Nitrogen, Nitrate (As N)	2.416	0.1	2.5	0	96.6	90	110	0			
Phosphorus, Orthophosphate (As P)	4.941	0.5	5	0	98.8	90	110	0			
Sulfate	9.828	0.5	10	0	98.3	90	110	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID 100ng lcs | Batch ID: R16332 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/17/2005 | Prep Date
Client ID: | Run ID: NEPTUNE_050817A | SeqNo: 389341

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.66	1	20	0	103	81.4	130	0			
Toluene	20.21	1	20	0	101	90.8	128	0			
Chlorobenzene	20.42	1	20	0	102	89.6	134	0			
1,1-Dichloroethene	20.45	1	20	0	102	75.1	120	0			
Trichloroethene (TCE)	20.18	1	20	0	101	75.8	110	0			

Sample ID 100ng lcsd | Batch ID: R16332 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/18/2005 | Prep Date
Client ID: | Run ID: NEPTUNE_050817A | SeqNo: 389663

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22	1	20	0	110	81.4	130	20.66	6.28	11	
Toluene	20	1	20	0	100	90.8	128	20.21	1.03	12.2	
Chlorobenzene	20.26	1	20	0	101	89.6	134	20.42	0.767	12	
1,1-Dichloroethene	20.02	1	20	0	100	75.1	120	20.45	2.15	19.3	
Trichloroethene (TCE)	20.78	1	20	0	104	75.8	110	20.18	2.91	15.5	

Sample ID 100ng lcs | Batch ID: R16352 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/18/2005 | Prep Date
Client ID: | Run ID: NEPTUNE_050818A | SeqNo: 390019

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.24	1	20	0	111	81.4	130	0			
Toluene	20.32	1	20	0	102	90.8	128	0			
Chlorobenzene	19.92	1	20	0	99.6	89.6	134	0			
1,1-Dichloroethene	21.22	1	20	0	106	75.1	120	0			
Trichloroethene (TCE)	20.79	1	20	0	104	75.8	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID LCS | Batch ID: R16299 | Test Code: SW6010A | Units: mg/L | Analysis Date 8/12/2005 1:20:23 PM | Prep Date
Client ID: | Run ID: ICP_050812C | SeqNo: 388185

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5499	0.02	0.5	0	110	80	120	0			
Barium	0.5182	0.02	0.5	0	104	80	120	0			
Cadmium	0.5403	0.002	0.5	0	108	80	120	0			
Calcium	51.8	1	50.5	0	103	80	120	0			
Chromium	0.526	0.006	0.5	0	105	80	120	0			
Copper	0.5317	0.006	0.5	0	106	80	120	0			
Iron	0.502	0.02	0.5	0	100	80	120	0			
Lead	0.5227	0.005	0.5	0	105	80	120	0			
Magnesium	52	1	50.5	0	103	80	120	0			
Manganese	0.4915	0.002	0.5	0	98.3	80	120	0			
Potassium	54.68	1	55	0	99.4	80	120	0			
Selenium	0.5235	0.02	0.5	0	105	80	120	0			
Silver	0.5088	0.005	0.5	0	102	80	120	0			
Sodium	55.25	1	50.5	0	109	80	120	0			
Uranium	2.673	0.1	2.5	0	107	80	120	0			
Zinc	0.53	0.05	0.5	0	106	80	120	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508137
Project: *Annual Sampling 2005*

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID LCSD	Batch ID: R16299	Test Code: SW6010A	Units: mg/L	Analysis Date 8/12/2005 1:23:39 PM	Prep Date
Client ID:		Run ID: ICP_050812C		SeqNo: 388186	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5482	0.02	0.5	0	110	80	120	0.5499	0.310	20	
Barium	0.5185	0.02	0.5	0	104	80	120	0.5182	0.0608	20	
Cadmium	0.5359	0.002	0.5	0	107	80	120	0.5403	0.803	20	
Calcium	51.06	1	50.5	0	101	80	120	51.8	1.44	20	
Chromium	0.5232	0.006	0.5	0	105	80	120	0.526	0.540	20	
Copper	0.5307	0.006	0.5	0	106	80	120	0.5317	0.188	20	
Iron	0.4933	0.02	0.5	0	98.7	80	120	0.502	1.75	20	
Lead	0.5177	0.005	0.5	0	104	80	120	0.5227	0.957	20	
Magnesium	51.25	1	50.5	0	101	80	120	52	1.45	20	
Manganese	0.4909	0.002	0.5	0	98.2	80	120	0.4915	0.138	20	
Potassium	53.82	1	55	0	97.9	80	120	54.68	1.58	20	
Selenium	0.5264	0.02	0.5	0	105	80	120	0.5235	0.539	20	
Silver	0.5406	0.005	0.5	0	108	80	120	0.5088	6.05	20	
Sodium	54.34	1	50.5	0	108	80	120	55.25	1.66	20	
Uranium	2.666	0.1	2.5	0	107	80	120	2.673	0.258	20	
Zinc	0.5279	0.05	0.5	0	106	80	120	0.53	0.400	20	

Sample ID LCS-8540	Batch ID: 8540	Test Code: SW6010A	Units: mg/L	Analysis Date 8/18/2005 8:50:44 AM	Prep Date 8/16/2005
Client ID:		Run ID: ICP_050818A		SeqNo: 389685	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.478	0.006	0.5	0	95.6	80	120	0			
Lead	0.4792	0.005	0.5	0	95.8	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508137
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID LCSD-8540	Batch ID: 8540	Test Code: SW6010A	Units: mg/L	Analysis Date 8/18/2005 8:54:02 AM	Prep Date 8/16/2005
Client ID:		Run ID: ICP_050818A		SeqNo: 389686	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.4736	0.006	0.5	0	94.7	80	120	0.478	0.911	20	
Lead	0.4772	0.005	0.5	0	95.4	80	120	0.4792	0.411	20	

Sample ID LCS-8539	Batch ID: 8539	Test Code: E160.1	Units: mg/L	Analysis Date 8/16/2005	Prep Date 8/16/2005
Client ID:		Run ID: WC_050816C		SeqNo: 390193	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1007	50	1000	0	101	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 8/11/2005

Work Order Number 0508137 | Received by AT

Checklist completed by _____ Signature | 8/11/05 Date

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 6° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50, Road 4990, Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Annual Sampling - 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: 6

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
8/10/05	1020AM	H_2O	MW #8	1-500 ml			H_2SO_4	0508137-1
				1-500ml				
				1-250 ml		X	filtered	
				1-500 ml		X		
				2-VOA	X			
8/10/05	1110AM	H_2O	MW#32	1-500ml			H_2SO_4 - 2	
				1-500ml				
				1-250 ml		X	filtered	
				1-500ml		X		
				2-VOA	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
8/1/05	9AM	Cindy Hurtado	8/11/05
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1703

Remarks:

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide/Cation Balance	Dissolved WBCC Metals	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X			X	
								X				X			X	
													X			
														X		
										X						
								X				X				
								X				X			X	
													X			
														X		
										X						

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: San Juan Refining
Address: #50 CR 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Annual Sampling - 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: 6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0508137-	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3^-, NO_2^-, PO_4^{3-}, SO_4^{2-})	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide / Carbon Balance	Dissolved WQCC metals	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
8/10/05	2pm	H_2O	MW#2L6	1-500mL			H_2SO_4	-3									X				X				
				1-500mL													X				X			X	
				1-250mL		X	filtered															X			
				1-500mL		X																	X		
				2-VOA	X														X						
8/10/05	245pm	H_2O	MW#3	1-500mL			H_2SO_4	-4									X				X				
				1-500mL													X				X			X	
				1-250mL		X	filtered															X			
				1-500mL		X																	X		
				2-VOA	X														X						

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
8/11/05	9AM	Cindy Hurtado	
		Relinquished By: (Signature)	Received By: (Signature) 8/11/05 1707

Remarks:

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other:

Client: San Juan Refining
Address: #50 CR 4990
Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Annual Sampling-2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: C°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.
8/10/05	345 pm	H2O	MW #13	1-500 ml			H2S04 05081375
				1-500ml			
				1-250 ml		X	filtered
				1-500ml		X	
				2-VOA	X		
			Trip Blank				

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_2, NO_3, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide/Alkalinity Bala	Dissolved WQCC metals	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X				
								X				X			X	
													X			
														X		
										X						

Date: 8/11/05 Time: 9AM Relinquished By: (Signature) Cindy Hurtado
Received By: (Signature) 8/11/05 1203

Date: Time: Relinquished By: (Signature)
Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

September 01, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Annual Sampling 2005 Order No.: 0508174

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 6 samples on 8/16/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #11
Lab Order:	0508174	**Collection Date:**	8/15/2005 2:00:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	0.56	0.10		mg/L	1	8/16/2005
Chloride	85	1.0		mg/L	10	8/16/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/16/2005
Bromide	1.4	0.50		mg/L	1	8/16/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/16/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/16/2005
Sulfate	20	0.50		mg/L	1	8/16/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	1100	2.0		mg/L CaCO3	1	8/26/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/26/2005
Bicarbonate	1100	2.0		mg/L CaCO3	1	8/26/2005
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	4200	50		µg/L	50	8/19/2005
Toluene	ND	50		µg/L	50	8/19/2005
Ethylbenzene	110	50		µg/L	50	8/19/2005
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	8/19/2005
1,2,4-Trimethylbenzene	1300	50		µg/L	50	8/19/2005
1,3,5-Trimethylbenzene	ND	50		µg/L	50	8/19/2005
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	8/19/2005
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	8/19/2005
Naphthalene	170	100		µg/L	50	8/19/2005
1-Methylnaphthalene	ND	200		µg/L	50	8/19/2005
2-Methylnaphthalene	ND	200		µg/L	50	8/19/2005
Acetone	ND	500		µg/L	50	8/19/2005
Bromobenzene	ND	50		µg/L	50	8/19/2005
Bromochloromethane	ND	50		µg/L	50	8/19/2005
Bromodichloromethane	ND	50		µg/L	50	8/19/2005
Bromoform	ND	50		µg/L	50	8/19/2005
Bromomethane	ND	100		µg/L	50	8/19/2005
2-Butanone	ND	500		µg/L	50	8/19/2005
Carbon disulfide	ND	500		µg/L	50	8/19/2005
Carbon Tetrachloride	ND	50		µg/L	50	8/19/2005
Chlorobenzene	ND	50		µg/L	50	8/19/2005
Chloroethane	ND	100		µg/L	50	8/19/2005
Chloroform	ND	50		µg/L	50	8/19/2005
Chloromethane	ND	50		µg/L	50	8/19/2005
2-Chlorotoluene	ND	50		µg/L	50	8/19/2005
4-Chlorotoluene	ND	50		µg/L	50	8/19/2005
cis-1,2-DCE	ND	50		µg/L	50	8/19/2005
cis-1,3-Dichloropropene	ND	50		µg/L	50	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: MW #11
Lab Order: 0508174
Collection Date: 8/15/2005 2:00:00 PM
Project: Annual Sampling 2005
Lab ID: 0508174-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	8/19/2005
Dibromochloromethane	ND	50		µg/L	50	8/19/2005
Dibromomethane	ND	100		µg/L	50	8/19/2005
1,2-Dichlorobenzene	ND	50		µg/L	50	8/19/2005
1,3-Dichlorobenzene	ND	50		µg/L	50	8/19/2005
1,4-Dichlorobenzene	ND	50		µg/L	50	8/19/2005
Dichlorodifluoromethane	ND	50		µg/L	50	8/19/2005
1,1-Dichloroethane	ND	50		µg/L	50	8/19/2005
1,1-Dichloroethene	ND	50		µg/L	50	8/19/2005
1,2-Dichloropropane	ND	50		µg/L	50	8/19/2005
1,3-Dichloropropane	ND	50		µg/L	50	8/19/2005
2,2-Dichloropropane	ND	50		µg/L	50	8/19/2005
1,1-Dichloropropene	ND	50		µg/L	50	8/19/2005
Hexachlorobutadiene	ND	50		µg/L	50	8/19/2005
2-Hexanone	ND	500		µg/L	50	8/19/2005
Isopropylbenzene	75	50		µg/L	50	8/19/2005
4-Isopropyltoluene	ND	50		µg/L	50	8/19/2005
4-Methyl-2-pentanone	ND	500		µg/L	50	8/19/2005
Methylene Chloride	ND	150		µg/L	50	8/19/2005
n-Butylbenzene	ND	50		µg/L	50	8/19/2005
n-Propylbenzene	77	50		µg/L	50	8/19/2005
sec-Butylbenzene	ND	50		µg/L	50	8/19/2005
Styrene	ND	50		µg/L	50	8/19/2005
tert-Butylbenzene	ND	50		µg/L	50	8/19/2005
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	8/19/2005
1,1,2,2-Tetrachloroethane	ND	50		µg/L	50	8/19/2005
Tetrachloroethene (PCE)	ND	50		µg/L	50	8/19/2005
trans-1,2-DCE	ND	50		µg/L	50	8/19/2005
trans-1,3-Dichloropropene	ND	50		µg/L	50	8/19/2005
1,2,3-Trichlorobenzene	ND	50		µg/L	50	8/19/2005
1,2,4-Trichlorobenzene	ND	50		µg/L	50	8/19/2005
1,1,1-Trichloroethane	ND	50		µg/L	50	8/19/2005
1,1,2-Trichloroethane	ND	50		µg/L	50	8/19/2005
Trichloroethene (TCE)	ND	50		µg/L	50	8/19/2005
Trichlorofluoromethane	ND	50		µg/L	50	8/19/2005
1,2,3-Trichloropropane	ND	100		µg/L	50	8/19/2005
Vinyl chloride	ND	50		µg/L	50	8/19/2005
Xylenes, Total	500	50		µg/L	50	8/19/2005
Surr: 1,2-Dichloroethane-d4	94.7	87.7-108		%REC	50	8/19/2005
Surr: 4-Bromofluorobenzene	94.8	88.8-113		%REC	50	8/19/2005
Surr: Dibromofluoromethane	88.7	84.1-111		%REC	50	8/19/2005
Surr: Toluene-d8	93.5	85.9-109		%REC	50	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #11
Lab Order:	0508174	**Collection Date:**	8/15/2005 2:00:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: MAP
Total Carbon Dioxide	1100	1.0		mg CO2/L	1	8/31/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	2200	0.010		µmhos/cm	1	8/19/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/23/2005 2:58:20 PM
Barium	0.73	0.0020		mg/L	1	8/23/2005 2:58:20 PM
Cadmium	ND	0.0020		mg/L	1	8/23/2005 2:58:20 PM
Calcium	96	10		mg/L	10	8/24/2005 11:37:21 AM
Chromium	ND	0.0060		mg/L	1	8/23/2005 2:58:20 PM
Copper	ND	0.0060		mg/L	1	8/23/2005 2:58:20 PM
Iron	7.6	0.20		mg/L	10	8/24/2005 11:37:21 AM
Lead	ND	0.0050		mg/L	1	8/23/2005 2:58:20 PM
Magnesium	22	1.0		mg/L	1	8/23/2005 2:58:20 PM
Manganese	1.6	0.0020		mg/L	1	8/23/2005 2:58:20 PM
Potassium	1.7	1.0		mg/L	1	8/23/2005 2:58:20 PM
Selenium	ND	0.050		mg/L	1	8/23/2005 2:58:20 PM
Silver	ND	0.0050		mg/L	1	8/29/2005 10:23:32 AM
Sodium	380	10		mg/L	10	8/24/2005 11:37:21 AM
Strontium	ND	0.0060		mg/L	1	8/29/2005 10:23:32 AM
Uranium	ND	0.10		mg/L	1	8/23/2005 2:58:20 PM
Zinc	0.014	0.0050		mg/L	1	8/23/2005 2:58:20 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	ND	0.0060		mg/L	1	8/22/2005 1:14:46 PM
Lead	0.011	0.0050		mg/L	1	8/22/2005 1:14:46 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	1500	50		mg/L	1	8/19/2005

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #1
Lab Order:	0508174	**Collection Date:**	8/15/2005 3:15:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	0.68	0.10		mg/L	1	8/16/2005
Chloride	31	0.10		mg/L	1	8/16/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/16/2005
Bromide	ND	0.50		mg/L	1	8/16/2005
Nitrogen, Nitrate (As N)	2.1	0.10		mg/L	1	8/16/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/16/2005
Sulfate	190	2.5		mg/L	5	8/17/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	300	2.0		mg/L CaCO3	1	8/26/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/26/2005
Bicarbonate	300	2.0		mg/L CaCO3	1	8/26/2005
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	1.1	1.0		µg/L	1	8/19/2005
Toluene	ND	1.0		µg/L	1	8/19/2005
Ethylbenzene	ND	1.0		µg/L	1	8/19/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trimethylbenzene	1.6	1.0		µg/L	1	8/19/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/19/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/19/2005
Naphthalene	ND	2.0		µg/L	1	8/19/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
Acetone	ND	10		µg/L	1	8/19/2005
Bromobenzene	ND	1.0		µg/L	1	8/19/2005
Bromochloromethane	ND	1.0		µg/L	1	8/19/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/19/2005
Bromoform	ND	1.0		µg/L	1	8/19/2005
Bromomethane	ND	2.0		µg/L	1	8/19/2005
2-Butanone	ND	10		µg/L	1	8/19/2005
Carbon disulfide	ND	10		µg/L	1	8/19/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/19/2005
Chlorobenzene	ND	1.0		µg/L	1	8/19/2005
Chloroethane	ND	2.0		µg/L	1	8/19/2005
Chloroform	ND	1.0		µg/L	1	8/19/2005
Chloromethane	ND	1.0		µg/L	1	8/19/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #1
Lab Order:	0508174	**Collection Date:**	8/15/2005 3:15:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/19/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/19/2005
Dibromomethane	ND	2.0		µg/L	1	8/19/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/19/2005
2-Hexanone	ND	10		µg/L	1	8/19/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/19/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/19/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/19/2005
Methylene Chloride	ND	3.0		µg/L	1	8/19/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/19/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
Styrene	ND	1.0		µg/L	1	8/19/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/19/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/19/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/19/2005
Vinyl chloride	ND	1.0		µg/L	1	8/19/2005
Xylenes, Total	ND	1.0		µg/L	1	8/19/2005
Surr: 1,2-Dichloroethane-d4	95.3	87.7-108		%REC	1	8/19/2005
Surr: 4-Bromofluorobenzene	105	88.8-113		%REC	1	8/19/2005
Surr: Dibromofluoromethane	89.1	84.1-111		%REC	1	8/19/2005
Surr: Toluene-d8	93.8	85.9-109		%REC	1	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	MW #1
Lab Order:	0508174	**Collection Date:**	8/15/2005 3:15:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: MAP
Total Carbon Dioxide	270	1.0		mg CO2/L	1	8/31/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	980	0.010		µmhos/cm	1	8/19/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/24/2005 9:40:43 AM
Barium	0.022	0.0020		mg/L	1	8/24/2005 9:40:43 AM
Cadmium	ND	0.0020		mg/L	1	8/24/2005 9:40:43 AM
Calcium	68	1.0		mg/L	1	8/24/2005 9:40:43 AM
Chromium	ND	0.0060		mg/L	1	8/24/2005 9:40:43 AM
Copper	ND	0.0060		mg/L	1	8/24/2005 9:40:43 AM
Iron	0.14	0.020		mg/L	1	8/24/2005 9:40:43 AM
Lead	ND	0.0050		mg/L	1	8/24/2005 9:40:43 AM
Magnesium	18	1.0		mg/L	1	8/24/2005 9:40:43 AM
Manganese	0.14	0.0020		mg/L	1	8/24/2005 9:40:43 AM
Potassium	2.7	1.0		mg/L	1	8/24/2005 9:40:43 AM
Selenium	ND	0.050		mg/L	1	8/24/2005 9:40:43 AM
Silver	ND	0.0050		mg/L	1	8/29/2005 10:27:19 AM
Sodium	140	10		mg/L	10	8/24/2005 11:40:18 AM
Strontium	ND	0.0060		mg/L	1	8/29/2005 10:27:19 AM
Uranium	ND	0.10		mg/L	1	8/24/2005 9:40:43 AM
Zinc	ND	0.0050		mg/L	1	8/24/2005 9:40:43 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	ND	0.0060		mg/L	1	8/22/2005 1:18:51 PM
Lead	ND	0.0050		mg/L	1	8/22/2005 1:18:51 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	650	50		mg/L	1	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	Outfall #2
Lab Order:	0508174	**Collection Date:**	8/15/2005 3:30:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	0.64	0.10		mg/L	1	8/16/2005
Chloride	18	0.10		mg/L	1	8/16/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/16/2005
Bromide	ND	0.50		mg/L	1	8/16/2005
Nitrogen, Nitrate (As N)	2.2	0.10		mg/L	1	8/16/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/16/2005
Sulfate	210	2.5		mg/L	5	8/17/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	230	2.0		mg/L CaCO3	1	8/26/2005
Carbonate	14	2.0		mg/L CaCO3	1	8/26/2005
Bicarbonate	220	2.0		mg/L CaCO3	1	8/26/2005
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	8/19/2005
Toluene	ND	1.0		µg/L	1	8/19/2005
Ethylbenzene	ND	1.0		µg/L	1	8/19/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/19/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/19/2005
Naphthalene	ND	2.0		µg/L	1	8/19/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
Acetone	ND	10		µg/L	1	8/19/2005
Bromobenzene	ND	1.0		µg/L	1	8/19/2005
Bromochloromethane	ND	1.0		µg/L	1	8/19/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/19/2005
Bromoform	ND	1.0		µg/L	1	8/19/2005
Bromomethane	ND	2.0		µg/L	1	8/19/2005
2-Butanone	ND	10		µg/L	1	8/19/2005
Carbon disulfide	ND	10		µg/L	1	8/19/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/19/2005
Chlorobenzene	ND	1.0		µg/L	1	8/19/2005
Chloroethane	ND	2.0		µg/L	1	8/19/2005
Chloroform	ND	1.0		µg/L	1	8/19/2005
Chloromethane	ND	1.0		µg/L	1	8/19/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	Outfall #2
Lab Order:	0508174	**Collection Date:**	8/15/2005 3:30:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/19/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/19/2005
Dibromomethane	ND	2.0		µg/L	1	8/19/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/19/2005
2-Hexanone	ND	10		µg/L	1	8/19/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/19/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/19/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/19/2005
Methylene Chloride	ND	3.0		µg/L	1	8/19/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/19/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
Styrene	ND	1.0		µg/L	1	8/19/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/19/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/19/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/19/2005
Vinyl chloride	ND	1.0		µg/L	1	8/19/2005
Xylenes, Total	ND	1.0		µg/L	1	8/19/2005
Surr: 1,2-Dichloroethane-d4	93.4	87.7-108		%REC	1	8/19/2005
Surr: 4-Bromofluorobenzene	103	88.8-113		%REC	1	8/19/2005
Surr: Dibromofluoromethane	88.9	84.1-111		%REC	1	8/19/2005
Surr: Toluene-d8	89.1	85.9-109		%REC	1	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	Outfall #2
Lab Order:	0508174	**Collection Date:**	8/15/2005 3:30:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: MAP
Total Carbon Dioxide	200	1.0		mg CO2/L	1	8/31/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	880	0.010		µmhos/cm	1	8/19/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/24/2005 9:43:09 AM
Barium	0.054	0.0020		mg/L	1	8/24/2005 9:43:09 AM
Cadmium	ND	0.0020		mg/L	1	8/24/2005 9:43:09 AM
Calcium	96	10		mg/L	10	8/24/2005 11:43:22 AM
Chromium	0.0076	0.0060		mg/L	1	8/24/2005 9:43:09 AM
Copper	ND	0.0060		mg/L	1	8/24/2005 9:43:09 AM
Iron	ND	0.020		mg/L	1	8/24/2005 9:43:09 AM
Lead	ND	0.0050		mg/L	1	8/24/2005 9:43:09 AM
Magnesium	22	1.0		mg/L	1	8/24/2005 9:43:09 AM
Manganese	0.0033	0.0020		mg/L	1	8/24/2005 9:43:09 AM
Potassium	2.2	1.0		mg/L	1	8/24/2005 9:43:09 AM
Selenium	ND	0.050		mg/L	1	8/24/2005 9:43:09 AM
Silver	ND	0.0050		mg/L	1	8/29/2005 10:28:48 AM
Sodium	85	1.0		mg/L	1	8/24/2005 9:43:09 AM
Strontium	ND	0.0060		mg/L	1	8/29/2005 10:28:48 AM
Uranium	ND	0.10		mg/L	1	8/24/2005 9:43:09 AM
Zinc	0.0066	0.0050		mg/L	1	8/24/2005 9:43:09 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.0066	0.0060		mg/L	1	8/22/2005 1:32:15 PM
Lead	ND	0.0050		mg/L	1	8/22/2005 1:32:15 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	620	50		mg/L	1	8/19/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
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- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: Outfall #3
Lab Order: 0508174
Collection Date: 8/15/2005 3:45:00 PM
Project: Annual Sampling 2005
Lab ID: 0508174-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	0.61	0.10		mg/L	1	8/17/2005
Chloride	37	0.10		mg/L	1	8/17/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/17/2005
Bromide	ND	0.50		mg/L	1	8/17/2005
Nitrogen, Nitrate (As N)	5.2	0.10		mg/L	1	8/17/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/17/2005
Sulfate	270	5.0		mg/L	10	8/17/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	270	2.0		mg/L CaCO3	1	8/26/2005
Carbonate	ND	2.0		mg/L CaCO3	1	8/26/2005
Bicarbonate	270	2.0		mg/L CaCO3	1	8/26/2005
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	8/19/2005
Toluene	ND	1.0		µg/L	1	8/19/2005
Ethylbenzene	ND	1.0		µg/L	1	8/19/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/19/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/19/2005
Naphthalene	ND	2.0		µg/L	1	8/19/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
Acetone	ND	10		µg/L	1	8/19/2005
Bromobenzene	ND	1.0		µg/L	1	8/19/2005
Bromochloromethane	ND	1.0		µg/L	1	8/19/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/19/2005
Bromoform	ND	1.0		µg/L	1	8/19/2005
Bromomethane	ND	2.0		µg/L	1	8/19/2005
2-Butanone	ND	10		µg/L	1	8/19/2005
Carbon disulfide	ND	10		µg/L	1	8/19/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/19/2005
Chlorobenzene	ND	1.0		µg/L	1	8/19/2005
Chloroethane	ND	2.0		µg/L	1	8/19/2005
Chloroform	ND	1.0		µg/L	1	8/19/2005
Chloromethane	ND	1.0		µg/L	1	8/19/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	Outfall #3
Lab Order:	0508174	**Collection Date:**	8/15/2005 3:45:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/19/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/19/2005
Dibromomethane	ND	2.0		µg/L	1	8/19/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/19/2005
2-Hexanone	ND	10		µg/L	1	8/19/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/19/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/19/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/19/2005
Methylene Chloride	ND	3.0		µg/L	1	8/19/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/19/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
Styrene	ND	1.0		µg/L	1	8/19/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/19/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/19/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/19/2005
Vinyl chloride	ND	1.0		µg/L	1	8/19/2005
Xylenes, Total	ND	1.0		µg/L	1	8/19/2005
Surr: 1,2-Dichloroethane-d4	95.9	87.7-108		%REC	1	8/19/2005
Surr: 4-Bromofluorobenzene	111	88.8-113		%REC	1	8/19/2005
Surr: Dibromofluoromethane	85.1	84.1-111		%REC	1	8/19/2005
Surr: Toluene-d8	92.7	85.9-109		%REC	1	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	Client Sample ID:	Outfall #3
Lab Order:	0508174	Collection Date:	8/15/2005 3:45:00 PM
Project:	Annual Sampling 2005		
Lab ID:	0508174-04	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: MAP
Total Carbon Dioxide	240	1.0		mg CO2/L	1	8/31/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	1100	0.010		µmhos/cm	1	8/19/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/24/2005 9:46:21 AM
Barium	0.033	0.0020		mg/L	1	8/24/2005 9:46:21 AM
Cadmium	ND	0.0020		mg/L	1	8/24/2005 9:46:21 AM
Calcium	110	10		mg/L	10	8/24/2005 11:46:26 AM
Chromium	ND	0.0060		mg/L	1	8/24/2005 9:46:21 AM
Copper	ND	0.0060		mg/L	1	8/24/2005 9:46:21 AM
Iron	ND	0.020		mg/L	1	8/24/2005 9:46:21 AM
Lead	ND	0.0050		mg/L	1	8/24/2005 9:46:21 AM
Magnesium	25	1.0		mg/L	1	8/24/2005 9:46:21 AM
Manganese	0.010	0.0020		mg/L	1	8/24/2005 9:46:21 AM
Potassium	1.9	1.0		mg/L	1	8/24/2005 9:46:21 AM
Selenium	ND	0.050		mg/L	1	8/24/2005 9:46:21 AM
Silver	ND	0.0050		mg/L	1	8/29/2005 10:36:04 AM
Sodium	100	10		mg/L	10	8/24/2005 11:46:26 AM
Strontium	ND	0.0060		mg/L	1	8/29/2005 10:36:04 AM
Uranium	ND	0.10		mg/L	1	8/24/2005 9:46:21 AM
Zinc	0.0066	0.0050		mg/L	1	8/24/2005 9:46:21 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	ND	0.0060		mg/L	1	8/22/2005 1:34:31 PM
Lead	ND	0.0050		mg/L	1	8/22/2005 1:34:31 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	790	50		mg/L	1	8/19/2005

Qualifiers:

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B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	RW #18
Lab Order:	0508174	**Collection Date:**	8/16/2005 8:00:00 AM
Project:	Annual Sampling 2005		
Lab ID:	0508174-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	ND	1.0		mg/L	10	8/17/2005
Chloride	110	1.0		mg/L	10	8/17/2005
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	8/17/2005
Bromide	ND	5.0		mg/L	10	8/17/2005
Nitrogen, Nitrate (As N)	ND	1.0		mg/L	10	8/17/2005
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	8/17/2005
Sulfate	940	25		mg/L	50	8/19/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	650	4.0		mg/L CaCO3	2	8/26/2005
Carbonate	ND	4.0		mg/L CaCO3	2	8/26/2005
Bicarbonate	650	4.0		mg/L CaCO3	2	8/26/2005
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	1200	100		µg/L	100	8/19/2005
Toluene	ND	100		µg/L	100	8/19/2005
Ethylbenzene	280	100		µg/L	100	8/19/2005
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	8/19/2005
1,2,4-Trimethylbenzene	1700	100		µg/L	100	8/19/2005
1,3,5-Trimethylbenzene	170	100		µg/L	100	8/19/2005
1,2-Dichloroethane (EDC)	250	100		µg/L	100	8/19/2005
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	8/19/2005
Naphthalene	850	200		µg/L	100	8/19/2005
1-Methylnaphthalene	1700	400		µg/L	100	8/19/2005
2-Methylnaphthalene	1700	400		µg/L	100	8/19/2005
Acetone	ND	1000		µg/L	100	8/19/2005
Bromobenzene	ND	100		µg/L	100	8/19/2005
Bromochloromethane	ND	100		µg/L	100	8/19/2005
Bromodichloromethane	ND	100		µg/L	100	8/19/2005
Bromoform	ND	100		µg/L	100	8/19/2005
Bromomethane	ND	200		µg/L	100	8/19/2005
2-Butanone	ND	1000		µg/L	100	8/19/2005
Carbon disulfide	ND	1000		µg/L	100	8/19/2005
Carbon Tetrachloride	ND	100		µg/L	100	8/19/2005
Chlorobenzene	ND	100		µg/L	100	8/19/2005
Chloroethane	ND	200		µg/L	100	8/19/2005
Chloroform	ND	100		µg/L	100	8/19/2005
Chloromethane	ND	100		µg/L	100	8/19/2005
2-Chlorotoluene	ND	100		µg/L	100	8/19/2005
4-Chlorotoluene	ND	100		µg/L	100	8/19/2005
cis-1,2-DCE	ND	100		µg/L	100	8/19/2005
cis-1,3-Dichloropropene	ND	100		µg/L	100	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: RW #18
Lab Order: 0508174
Collection Date: 8/16/2005 8:00:00 AM
Project: Annual Sampling 2005
Lab ID: 0508174-05
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	8/19/2005
Dibromochloromethane	ND	100		µg/L	100	8/19/2005
Dibromomethane	ND	200		µg/L	100	8/19/2005
1,2-Dichlorobenzene	ND	100		µg/L	100	8/19/2005
1,3-Dichlorobenzene	ND	100		µg/L	100	8/19/2005
1,4-Dichlorobenzene	ND	100		µg/L	100	8/19/2005
Dichlorodifluoromethane	ND	100		µg/L	100	8/19/2005
1,1-Dichloroethane	ND	100		µg/L	100	8/19/2005
1,1-Dichloroethene	ND	100		µg/L	100	8/19/2005
1,2-Dichloropropane	ND	100		µg/L	100	8/19/2005
1,3-Dichloropropane	ND	100		µg/L	100	8/19/2005
2,2-Dichloropropane	ND	100		µg/L	100	8/19/2005
1,1-Dichloropropene	ND	100		µg/L	100	8/19/2005
Hexachlorobutadiene	ND	100		µg/L	100	8/19/2005
2-Hexanone	ND	1000		µg/L	100	8/19/2005
Isopropylbenzene	110	100		µg/L	100	8/19/2005
4-Isopropyltoluene	120	100		µg/L	100	8/19/2005
4-Methyl-2-pentanone	ND	1000		µg/L	100	8/19/2005
Methylene Chloride	ND	300		µg/L	100	8/19/2005
n-Butylbenzene	410	100		µg/L	100	8/19/2005
n-Propylbenzene	280	100		µg/L	100	8/19/2005
sec-Butylbenzene	140	100		µg/L	100	8/19/2005
Styrene	ND	100		µg/L	100	8/19/2005
tert-Butylbenzene	ND	100		µg/L	100	8/19/2005
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	8/19/2005
1,1,2,2-Tetrachloroethane	ND	100		µg/L	100	8/19/2005
Tetrachloroethene (PCE)	ND	100		µg/L	100	8/19/2005
trans-1,2-DCE	ND	100		µg/L	100	8/19/2005
trans-1,3-Dichloropropene	ND	100		µg/L	100	8/19/2005
1,2,3-Trichlorobenzene	ND	100		µg/L	100	8/19/2005
1,2,4-Trichlorobenzene	ND	100		µg/L	100	8/19/2005
1,1,1-Trichloroethane	ND	100		µg/L	100	8/19/2005
1,1,2-Trichloroethane	ND	100		µg/L	100	8/19/2005
Trichloroethene (TCE)	ND	100		µg/L	100	8/19/2005
Trichlorofluoromethane	ND	100		µg/L	100	8/19/2005
1,2,3-Trichloropropane	ND	200		µg/L	100	8/19/2005
Vinyl chloride	ND	100		µg/L	100	8/19/2005
Xylenes, Total	540	100		µg/L	100	8/19/2005
Surr: 1,2-Dichloroethane-d4	103	87.7-108		%REC	100	8/19/2005
Surr: 4-Bromofluorobenzene	116	88.8-113	S	%REC	100	8/19/2005
Surr: Dibromofluoromethane	105	84.1-111		%REC	100	8/19/2005
Surr: Toluene-d8	99.2	85.9-109		%REC	100	8/19/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	RW #18
Lab Order:	0508174	**Collection Date:**	8/16/2005 8:00:00 AM
Project:	Annual Sampling 2005		
Lab ID:	0508174-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL CARBON DIOXIDE CALCULATION						Analyst: MAP
Total Carbon Dioxide	590	1.0		mg CO2/L	1	8/31/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	3400	0.010		µmhos/cm	1	8/19/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	8/24/2005 9:49:59 AM
Barium	0.038	0.0020		mg/L	1	8/24/2005 9:49:59 AM
Cadmium	ND	0.0020		mg/L	1	8/24/2005 9:49:59 AM
Calcium	220	10		mg/L	10	8/24/2005 11:48:35 AM
Chromium	ND	0.0060		mg/L	1	8/24/2005 9:49:59 AM
Copper	ND	0.0060		mg/L	1	8/24/2005 9:49:59 AM
Iron	5.0	0.20		mg/L	10	8/24/2005 11:48:35 AM
Lead	ND	0.0050		mg/L	1	8/24/2005 9:49:59 AM
Magnesium	64	1.0		mg/L	1	8/24/2005 9:49:59 AM
Manganese	4.1	0.0020		mg/L	1	8/24/2005 9:49:59 AM
Potassium	4.4	1.0		mg/L	1	8/24/2005 9:49:59 AM
Selenium	ND	0.050		mg/L	1	8/24/2005 9:49:59 AM
Silver	ND	0.0050		mg/L	1	8/29/2005 10:31:51 AM
Sodium	500	10		mg/L	10	8/24/2005 11:48:35 AM
Strontium	ND	0.0060		mg/L	1	8/29/2005 10:31:51 AM
Uranium	ND	0.10		mg/L	1	8/24/2005 9:49:59 AM
Zinc	0.021	0.0050		mg/L	1	8/24/2005 9:49:59 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Chromium	0.32	0.0060		mg/L	1	8/22/2005 1:36:51 PM
Lead	0.16	0.0050		mg/L	1	8/22/2005 1:36:51 PM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	3900	500		mg/L	10	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	Trip Blank
Lab Order:	0508174	**Collection Date:**	
Project:	Annual Sampling 2005		
Lab ID:	0508174-06	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	8/19/2005
Toluene	ND	1.0		µg/L	1	8/19/2005
Ethylbenzene	ND	1.0		µg/L	1	8/19/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/19/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/19/2005
Naphthalene	ND	2.0		µg/L	1	8/19/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/19/2005
Acetone	ND	10		µg/L	1	8/19/2005
Bromobenzene	ND	1.0		µg/L	1	8/19/2005
Bromochloromethane	ND	1.0		µg/L	1	8/19/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/19/2005
Bromoform	ND	1.0		µg/L	1	8/19/2005
Bromomethane	ND	2.0		µg/L	1	8/19/2005
2-Butanone	ND	10		µg/L	1	8/19/2005
Carbon disulfide	ND	10		µg/L	1	8/19/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/19/2005
Chlorobenzene	ND	1.0		µg/L	1	8/19/2005
Chloroethane	ND	2.0		µg/L	1	8/19/2005
Chloroform	ND	1.0		µg/L	1	8/19/2005
Chloromethane	ND	1.0		µg/L	1	8/19/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/19/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/19/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/19/2005
Dibromomethane	ND	2.0		µg/L	1	8/19/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/19/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/19/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/19/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/19/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: Trip Blank
Lab Order: 0508174
Collection Date:
Project: Annual Sampling 2005
Lab ID: 0508174-06
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Hexachlorobutadiene	ND	1.0		µg/L	1	8/19/2005
2-Hexanone	ND	10		µg/L	1	8/19/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/19/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/19/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/19/2005
Methylene Chloride	ND	3.0		µg/L	1	8/19/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/19/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
Styrene	ND	1.0		µg/L	1	8/19/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/19/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/19/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/19/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/19/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/19/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/19/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/19/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/19/2005
Vinyl chloride	ND	1.0		µg/L	1	8/19/2005
Xylenes, Total	ND	1.0		µg/L	1	8/19/2005
Surr: 1,2-Dichloroethane-d4	90.2	87.7-108		%REC	1	8/19/2005
Surr: 4-Bromofluorobenzene	104	88.8-113		%REC	1	8/19/2005
Surr: Dibromofluoromethane	86.4	84.1-111		%REC	1	8/19/2005
Surr: Toluene-d8	101	85.9-109		%REC	1	8/19/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MBLK | Batch ID: R16325 | Test Code: E300 | Units: mg/L | Analysis Date 8/16/2005 | Prep Date
Client ID: | Run ID: LC_050816A | SeqNo: 389154

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MBLK | Batch ID: R16340 | Test Code: E300 | Units: mg/L | Analysis Date 8/17/2005 | Prep Date
Client ID: | Run ID: LC_050817A | SeqNo: 389472

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MBLK | Batch ID: R16354 | Test Code: E300 | Units: mg/L | Analysis Date 8/18/2005 | Prep Date
Client ID: | Run ID: LC_050818A | SeqNo: 390049

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MBLK | Batch ID: R16461 | Test Code: E310.1 | Units: mg/L CaCO3 | Analysis Date 8/26/2005 | Prep Date
Client ID: | Run ID: WC_050826D | SeqNo: 392987

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2									
Carbonate	ND	2									
Bicarbonate	ND	2									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB | Batch ID: R16417 | Test Code: SW6010A | Units: mg/L | Analysis Date 8/23/2005 1:15:36 PM | Prep Date
Client ID: | Run ID: ICP_050823B | SeqNo: 391608

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	ND	1									
Selenium	ND	0.02									
Silver	ND	0.005									
Sodium	ND	1									
Uranium	ND	0.1									
Zinc	ND	0.05									

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Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB	Batch ID: R16463	Test Code: SW6010A	Units: mg/L	Analysis Date 8/29/2005 9:06:44 AM	Prep Date
Client ID:		Run ID: ICP_050829A		SeqNo: 393147	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	ND	1									
Selenium	ND	0.02									
Silver	ND	0.005									
Sodium	ND	1									
Uranium	ND	0.1									
Zinc	ND	0.05									

Sample ID MB-8568	Batch ID: 8568	Test Code: SW6010A	Units: mg/L	Analysis Date 8/22/2005 12:46:02 PM	Prep Date 8/19/2005
Client ID:		Run ID: ICP_050822C		SeqNo: 390769	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.006									
Lead	ND	0.005									

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: *Annual Sampling 2005*

QC SUMMARY REPORT
Method Blank

Sample ID MB-8565 Batch ID: 8565 Test Code: E160.1 Units: mg/L Analysis Date 8/19/2005 Prep Date 8/19/2005
Client ID: Run ID: WC_050819D SeqNo: 391203

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

22/36

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

Sample ID 5ml rb | Batch ID: R16349 | Test Code: SW8260B | Units: µg/L | Analysis Date 8/18/2005 | Prep Date
Client ID: | Run ID: THOR_050818A | SeqNo: 389990

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

cis-1,3-Dichloropropene	ND	1	
1,2-Dibromo-3-chloropropane	ND	2	
Dibromochloromethane	ND	1	
Dibromomethane	ND	2	
1,2-Dichlorobenzene	ND	1	
1,3-Dichlorobenzene	ND	1	
1,4-Dichlorobenzene	ND	1	
Dichlorodifluoromethane	ND	1	
1,1-Dichloroethane	ND	1	
1,1-Dichloroethene	ND	1	
1,2-Dichloropropane	ND	1	
1,3-Dichloropropane	ND	1	
2,2-Dichloropropane	ND	1	
1,1-Dichloropropene	ND	1	
Hexachlorobutadiene	ND	1	
2-Hexanone	ND	10	
Isopropylbenzene	ND	1	
4-Isopropyltoluene	ND	1	
4-Methyl-2-pentanone	ND	10	
Methylene Chloride	ND	3	
n-Butylbenzene	ND	1	
n-Propylbenzene	ND	1	
sec-Butylbenzene	ND	1	
Styrene	ND	1	
tert-Butylbenzene	ND	1	
1,1,1,2-Tetrachloroethane	ND	1	
1,1,2,2-Tetrachloroethane	ND	1	
Tetrachloroethene (PCE)	ND	1	
trans-1,2-DCE	ND	1	
trans-1,3-Dichloropropene	ND	1	
1,2,3-Trichlorobenzene	ND	1	
1,2,4-Trichlorobenzene	0.664	1	J
1,1,1-Trichloroethane	ND	1	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Method Blank

1,1,2-Trichloroethane	ND	1						
Trichloroethene (TCE)	ND	1						
Trichlorofluoromethane	ND	1						
1,2,3-Trichloropropane	ND	2						
Vinyl chloride	ND	1						
Xylenes, Total	ND	1						
Surr: 1,2-Dichloroethane-d4	10.09	0	10	0	101	87.7	108	0
Surr: 4-Bromofluorobenzene	9.71	0	10	0	97.1	88.8	113	0
Surr: Dibromofluoromethane	9.238	0	10	0	92.4	84.1	111	0
Surr: Toluene-d8	9.02	0	10	0	90.2	85.9	109	0

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT

Sample Duplicate

Sample ID 0508174-01B DUP Batch ID: R16361 Test Code: E120.1 Units: µmhos/cm Analysis Date 8/19/2005 Prep Date
Client ID: MW #11 Run ID: WC_050819A SeqNo: 390298

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Specific Conductance	2160	0.01	0	0	0	0	0	2150	0.464	20	

Sample ID 0508174-05B DUP Batch ID: R16417 Test Code: SW6010A Units: mg/L Analysis Date 8/24/2005 9:52:17 AM Prep Date
Client ID: RW #18 Run ID: ICP_050823B SeqNo: 391653

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.0228	0.02	0	0	0	0	0	0.01656	31.7	30	R
Barium	0.03871	0.02	0	0	0	0	0	0.03833	0.973	30	
Cadmium	ND	0.002	0	0	0	0	0	0	0	30	
Chromium	0.003841	0.006	0	0	0	0	0	0.003928	0	30	J
Copper	ND	0.006	0	0	0	0	0	0	0	30	
Lead	ND	0.005	0	0	0	0	0	0	0	30	
Magnesium	64.23	1	0	0	0	0	0	64.4	0.268	30	
Manganese	4.119	0.002	0	0	0	0	0	4.097	0.523	30	
Potassium	4.415	1	0	0	0	0	0	4.365	1.14	30	
Selenium	ND	0.02	0	0	0	0	0	0	0	30	
Uranium	0.05825	0.1	0	0	0	0	0	0.06121	0	30	J
Zinc	0.02167	0.05	0	0	0	0	0	0.02093	0	30	J

Sample ID 0508174-04B DUP Batch ID: R16463 Test Code: SW6010A Units: mg/L Analysis Date 8/29/2005 10:38:21 AM Prep Date
Client ID: Outfall #3 Run ID: ICP_050829A SeqNo: 393171

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	0.005	0	0	0	0	0	0	0	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *01-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0508174-05B MS** Batch ID: **R16417** Test Code: **SW6010A** Units: mg/L Analysis Date **8/24/2005 9:56:15 AM** Prep Date

Client ID: **RW #18** Run ID: **ICP_050823B** SeqNo: **391654**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.6003	0.02	0.5	0.01656	117	75	125	0			
Barium	0.5431	0.02	0.5	0.03833	101	75	125	0			
Cadmium	0.5496	0.002	0.5	0	110	75	125	0			
Chromium	0.5338	0.006	0.5	0.003928	106	75	125	0			
Copper	0.5839	0.006	0.5	0	117	75	125	0			
Lead	0.5155	0.005	0.5	0	103	75	125	0			
Magnesium	119.1	1	50.5	64.4	108	75	125	0			
Potassium	69.96	1	55	4.365	119	75	125	0			
Selenium	0.544	0.02	0.5	0	109	75	125	0			
Uranium	2.745	0.1	2.5	0.06121	107	75	125	0			
Zinc	0.5464	0.05	0.5	0.02093	105	75	125	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID 0508174-05B MSD Batch ID: R16417 Test Code: SW6010A Units: mg/L Analysis Date 8/24/2005 10:00:30 AM Prep Date
Client ID: RW #18 Run ID: ICP_050823B SeqNo: 391655

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.6212	0.02	0.5	0.01656	121	75	125	0.6003	3.42	20	
Barium	0.5458	0.02	0.5	0.03833	102	75	125	0.5431	0.500	20	
Cadmium	0.5564	0.002	0.5	0	111	75	125	0.5496	1.24	20	
Chromium	0.5397	0.006	0.5	0.003928	107	75	125	0.5338	1.11	20	
Copper	0.5947	0.006	0.5	0	119	75	125	0.5839	1.84	20	
Lead	0.5206	0.005	0.5	0	104	75	125	0.5155	0.981	20	
Magnesium	120	1	50.5	64.4	110	75	125	119.1	0.690	20	
Manganese	4.494	0.002	0.5	4.097	79.4	75	125	4.412	1.84	20	
Potassium	70.92	1	55	4.365	121	75	125	69.96	1.36	20	
Selenium	0.5436	0.02	0.5	0	109	75	125	0.544	0.0777	20	
Uranium	2.758	0.1	2.5	0.06121	108	75	125	2.745	0.502	20	
Zinc	0.5509	0.05	0.5	0.02093	106	75	125	0.5464	0.816	20	

Sample ID 0508174-04B MS Batch ID: R16463 Test Code: SW6010A Units: mg/L Analysis Date 8/29/2005 10:41:34 AM Prep Date
Client ID: Outfall #3 Run ID: ICP_050829A SeqNo: 393172

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4703	0.005	0.5	0	94.1	75	125	0			

Sample ID 0508174-04B MSD Batch ID: R16463 Test Code: SW6010A Units: mg/L Analysis Date 8/29/2005 11:03:59 AM Prep Date
Client ID: Outfall #3 Run ID: ICP_050829A SeqNo: 393175

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4908	0.005	0.5	0	98.2	75	125	0.4703	4.27	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *02-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS	Batch ID: R16325	Test Code: E300	Units: mg/L	Analysis Date: 8/16/2005	Prep Date:
Client ID:		Run ID: LC_050816A		SeqNo: 389155	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.54	0.1	0.5	0	108	90	110	0			
Chloride	4.854	0.1	5	0	97.1	90	110	0			
Nitrogen, Nitrite (As N)	0.9797	0.1	1	0	98.0	90	110	0			
Bromide	2.504	0.5	2.5	0	100	90	110	0			
Nitrogen, Nitrate (As N)	2.444	0.1	2.5	0	97.8	90	110	0			
Phosphorus, Orthophosphate (As P)	4.972	0.5	5	0	99.4	90	110	0			
Sulfate	9.831	0.5	10	0	98.3	90	110	0			

Sample ID: LCS	Batch ID: R16340	Test Code: E300	Units: mg/L	Analysis Date: 8/17/2005	Prep Date:
Client ID:		Run ID: LC_050817A		SeqNo: 389473	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.498	0.1	0.5	0	99.6	90	110	0			
Chloride	4.786	0.1	5	0	95.7	90	110	0			
Nitrogen, Nitrite (As N)	0.9562	0.1	1	0	95.6	90	110	0			
Bromide	2.489	0.5	2.5	0	99.6	90	110	0			
Nitrogen, Nitrate (As N)	2.437	0.1	2.5	0	97.5	90	110	0			
Phosphorus, Orthophosphate (As P)	4.841	0.5	5	0	96.8	90	110	0			
Sulfate	9.732	0.5	10	0	97.3	90	110	0			

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Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

J

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS | Batch ID: R16354 | Test Code: E300 | Units: mg/L | Analysis Date: 8/18/2005 | Prep Date:
Client ID: | Run ID: LC_050818A | SeqNo: 390050

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.4552	0.1	0.5	0	91.0	90	110	0			
Chloride	4.809	0.1	5	0	96.2	90	110	0			
Nitrogen, Nitrite (As N)	0.9869	0.1	1	0	98.7	90	110	0			
Bromide	2.497	0.5	2.5	0	99.9	90	110	0			
Nitrogen, Nitrate (As N)	2.455	0.1	2.5	0	98.2	90	110	0			
Phosphorus, Orthophosphate (As P)	4.876	0.5	5	0	97.5	90	110	0			
Sulfate	9.813	0.5	10	0	98.1	90	110	0			

Sample ID: 100ng lcs | Batch ID: R16349 | Test Code: SW8260B | Units: µg/L | Analysis Date: 8/18/2005 | Prep Date:
Client ID: | Run ID: THOR_050818A | SeqNo: 389991

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.37	1	20	0	96.9	81.4	130	0			
Toluene	19.78	1	20	0	98.9	90.8	128	0			
Chlorobenzene	20.78	1	20	0	104	89.6	134	0			
1,1-Dichloroethene	18.07	1	20	0	90.3	75.1	120	0			
Trichloroethene (TCE)	17.68	1	20	0	88.4	75.8	110	0			

Sample ID: 100NG LCSD | Batch ID: R16349 | Test Code: SW8260B | Units: µg/L | Analysis Date: 8/18/2005 | Prep Date:
Client ID: | Run ID: THOR_050818A | SeqNo: 389992

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.66	1	20	0	93.3	81.4	130	19.37	3.76	11	
Toluene	18.23	1	20	0	91.2	90.8	128	19.78	8.12	12.2	
Chlorobenzene	21.28	1	20	0	106	89.6	134	20.78	2.38	12	
1,1-Dichloroethene	17.8	1	20	0	89.0	75.1	120	18.07	1.48	19.3	
Trichloroethene (TCE)	16.76	1	20	0	83.8	75.8	110	17.68	5.33	15.5	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: 100ng lcs | Batch ID: R16371 | Test Code: SW8260B | Units: µg/L | Analysis Date: 8/19/2005 | Prep Date:
Client ID: | Run ID: THOR_050819A | SeqNo: 390554

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.7	1	20	0	98.5	81.4	130	0			
Toluene	20.05	1	20	0	100	90.8	128	0			
Chlorobenzene	20.56	1	20	0	103	89.6	134	0			
1,1-Dichloroethene	18.66	1	20	0	93.3	75.1	120	0			
Trichloroethene (TCE)	17.81	1	20	0	89.0	75.8	110	0			

Sample ID: LCS | Batch ID: R16417 | Test Code: SW6010A | Units: mg/L | Analysis Date: 8/23/2005 1:18:49 PM | Prep Date:
Client ID: | Run ID: ICP_050823B | SeqNo: 391609

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5145	0.02	0.5	0	103	80	120	0			
Barium	0.5082	0.02	0.5	0	102	80	120	0			
Cadmium	0.5154	0.002	0.5	0	103	80	120	0			
Calcium	52.93	1	50.5	0	105	80	120	0			
Chromium	0.5234	0.006	0.5	0	105	80	120	0			
Copper	0.5211	0.006	0.5	0	104	80	120	0			
Iron	0.4884	0.02	0.5	0	97.7	80	120	0			
Lead	0.5027	0.005	0.5	0	101	80	120	0			
Magnesium	53.53	1	50.5	0	106	80	120	0			
Manganese	0.4786	0.002	0.5	0	95.7	80	120	0			
Potassium	57.35	1	55	0	104	80	120	0			
Selenium	0.4843	0.02	0.5	0	96.9	80	120	0			
Silver	0.4957	0.005	0.5	0	99.1	80	120	0			
Sodium	56.37	1	50.5	0	112	80	120	0			
Uranium	2.707	0.1	2.5	0	108	80	120	0			
Zinc	0.5156	0.05	0.5	0	103	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: LCSD | Batch ID: R16417 | Test Code: SW6010A | Units: mg/L | Analysis Date: 8/23/2005 1:22:07 PM | Prep Date:
Client ID: | Run ID: ICP_050823B | SeqNo: 391610

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5133	0.02	0.5	0	103	80	120	0.5145	0.251	20	
Barium	0.5175	0.02	0.5	0	103	80	120	0.5082	1.81	20	
Cadmium	0.5106	0.002	0.5	0	102	80	120	0.5154	0.933	20	
Calcium	53.52	1	50.5	0	106	80	120	52.93	1.09	20	
Chromium	0.5154	0.006	0.5	0	103	80	120	0.5234	1.54	20	
Copper	0.5226	0.006	0.5	0	105	80	120	0.5211	0.275	20	
Iron	0.494	0.02	0.5	0	98.8	80	120	0.4884	1.13	20	
Lead	0.4985	0.005	0.5	0	99.7	80	120	0.5027	0.830	20	
Magnesium	53.53	1	50.5	0	106	80	120	53.53	0.000864	20	
Manganese	0.4856	0.002	0.5	0	97.1	80	120	0.4786	1.46	20	
Potassium	57.24	1	55	0	104	80	120	57.35	0.203	20	
Selenium	0.4841	0.02	0.5	0	96.8	80	120	0.4843	0.0368	20	
Silver	0.4986	0.005	0.5	0	99.7	80	120	0.4957	0.586	20	
Sodium	56.03	1	50.5	0	111	80	120	56.37	0.608	20	
Uranium	2.7	0.1	2.5	0	108	80	120	2.707	0.255	20	
Zinc	0.5045	0.05	0.5	0	101	80	120	0.5156	2.18	20	

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: LCS | Batch ID: R16463 | Test Code: SW6010A | Units: mg/L | Analysis Date: 8/29/2005 9:08:50 AM | Prep Date:
Client ID: | Run ID: ICP_050829A | SeqNo: 393148

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.573	0.02	0.5	0	115	80	120	0			
Barium	0.5298	0.02	0.5	0	106	80	120	0			
Cadmium	0.5443	0.002	0.5	0	109	80	120	0			
Calcium	51.84	1	50.5	0	103	80	120	0			
Chromium	0.5377	0.006	0.5	0	108	80	120	0			
Copper	0.5249	0.006	0.5	0	105	80	120	0			
Iron	0.4958	0.02	0.5	0	99.2	80	120	0			
Lead	0.5492	0.005	0.5	0	110	80	120	0			
Magnesium	51.48	1	50.5	0	102	80	120	0			
Manganese	0.4922	0.002	0.5	0	98.4	80	120	0			
Potassium	53.75	1	55	0	97.7	80	120	0			
Selenium	0.5291	0.02	0.5	0	106	80	120	0			
Silver	0.5176	0.005	0.5	0	104	80	120	0			
Sodium	55.07	1	50.5	0	109	80	120	0			
Uranium	2.698	0.1	2.5	0	108	80	120	0			
Zinc	0.5514	0.05	0.5	0	110	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: LCSD | Batch ID: R16463 | Test Code: SW6010A | Units: mg/L | Analysis Date: 8/29/2005 9:12:06 AM | Prep Date:
Client ID: | Run ID: ICP_050829A | SeqNo: 393149

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5744	0.02	0.5	0	115	80	120	0.573	0.246	20	
Barium	0.5284	0.02	0.5	0	106	80	120	0.5298	0.268	20	
Cadmium	0.5364	0.002	0.5	0	107	80	120	0.5443	1.47	20	
Calcium	52.37	1	50.5	0	104	80	120	51.84	1.02	20	
Chromium	0.5364	0.006	0.5	0	107	80	120	0.5377	0.257	20	
Copper	0.5219	0.006	0.5	0	104	80	120	0.5249	0.565	20	
Iron	0.4899	0.02	0.5	0	98.0	80	120	0.4958	1.20	20	
Lead	0.5426	0.005	0.5	0	109	80	120	0.5492	1.20	20	
Magnesium	51.98	1	50.5	0	103	80	120	51.48	0.965	20	
Manganese	0.4916	0.002	0.5	0	98.3	80	120	0.4922	0.116	20	
Potassium	54.3	1	55	0	98.7	80	120	53.75	1.02	20	
Selenium	0.5413	0.02	0.5	0	108	80	120	0.5291	2.28	20	
Silver	0.5199	0.005	0.5	0	104	80	120	0.5176	0.458	20	
Sodium	55.61	1	50.5	0	110	80	120	55.07	0.971	20	
Uranium	2.693	0.1	2.5	0	108	80	120	2.698	0.174	20	
Zinc	0.55	0.05	0.5	0	110	80	120	0.5514	0.266	20	

Sample ID: LCS-8568 | Batch ID: 8568 | Test Code: SW6010A | Units: mg/L | Analysis Date: 8/22/2005 12:49:17 PM | Prep Date: 8/19/2005
Client ID: | Run ID: ICP_050822C | SeqNo: 390770

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.4617	0.006	0.5	0	92.3	80	120	0			
Lead	0.4629	0.005	0.5	0	92.6	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit | J - Analyte detected below quantitation limits | S - Spike Recovery outside accepted recovery limits | R - RPD outside accepted recovery limits | B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508174
Project: Annual Sampling 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: LCSD-8568 | Batch ID: 8568 | Test Code: SW6010A | Units: mg/L | Analysis Date: 8/22/2005 12:52:42 PM | Prep Date: 8/19/2005
Client ID: | Run ID: ICP_050822C | SeqNo: 390771

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.4797	0.006	0.5	0	95.9	80	120	0.4617	3.81	20	
Lead	0.4834	0.005	0.5	0	96.7	80	120	0.4629	4.33	20	

Sample ID: LCS-8565 | Batch ID: 8565 | Test Code: E160.1 | Units: mg/L | Analysis Date: 8/19/2005 | Prep Date: 8/19/2005
Client ID: | Run ID: WC_050819D | SeqNo: 391204

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1008	50	1000	0	101	80	120	0			

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Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 8/16/2005

Work Order Number 0508174 | Received by AT

Checklist completed by _____ 8/16/05
Signature | Date

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 4° 4° C ± 2 *Acceptable*
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

_____

_____

_____

_____

Corrective Action _____

_____

_____

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Project Name: Annual Sampling - 2005
Address: #50 CR 4990 Bloomfield, NM 87413
Project #:
Project Manager:
Phone #: 505-632-4161
Fax #: 505-632-3911
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: 4°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
8/15/05	2pm	H2O	MW #1	1-500 ml			H_2SO_4	0508174-1
				1-500ml				-1
				1-250ml			X filtered	-1
				1-500ml			X	-1
				2-VOA	X			-1
8/15/05	315pm	H2O	MW #1	1-500ml			H_2SO_4	-2
				1-500ml				-2
				1-250ml			X filtered	-2
				1-500ml			X	-2
				2-VOA	X			-2

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide / Cation Balance	Dissolved w/Acct Metals	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X				
								X				X			X	
													X			
														X		
										X						
								X				X				
								X				X			X	
													X		-	
														X		
										X						

Date: 8/16/05 Time: 930AM Relinquished By: (Signature) Cindy Hurtado
Received By: (Signature) 8/16/05 1645
Date: Time: Relinquished By: (Signature)
Received By: (Signature)

Remarks:

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: San Juan Refining
#50, Rd 4990
Address: Bloomfield, NM
87413

Project Name: Annual Sampling 2005
Project #:

Project Manager:

Phone #: 505-632-4161
Fax #: 505-632-3911

Sampler: Cindy Hurtado/Angela Polk
Sample Temperature: 4a

HALL ENVIRONMENTAL
ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3	Preservative	HEAL No. 0508174
8-15-05	3:30pm	H2O	Outfall #2	1-500ml			H2SO4	-3
"	"	"	"	1-500ml				-3
"	"	"	"	1-250ml		X	filtered	-3
"	"	"	"	1-500ml		X		-3
"	"	"	"	2-VOA	X			-3
8-15-05	3:45pm	H2O	Outfall #3	1-500ml			H2SO4	-4
"	"	"	"	1-500ml				-4
"	"	"	"	1-250ml		X	filtered	-4
"	"	"	"	1-500ml		X		-4
"	"	"	"	2-VOA	X			-4

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide/Carbon	Dissolved Mercury	Total Pb, Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X				
								X				X			X	
													X			
														X		
										X						
								X				X				
								X				X			X	
													X	X		
														X		
										X						

Date: 8/16/05 Time: 930am Relinquished By: (Signature) Cindy Hurtado
Received By: (Signature) 8/16/05 1645

Date: Time: Relinquished By: (Signature)
Received By: (Signature)

Remarks:

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: San Juan Refinery
Address: #50 Rd 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Annual Sampling 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado/Angela Falk
Sample Temperature: 4°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
								0508174
8/16/05	8AM	H_2O	RW #18	1-500ml			H_2SO_4	-5
				1-500ml				-5
				1-250ml			X	Filtered-5
				1-500ml			X	-5
				2-VOA	X			-5
			Trip Blank					-6

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Carbon Dioxide/Alkalinity Bicarbonate	Dissolved Gas metane	Total Pb & Cr	TDS	Air Bubbles or Headspace (Y or N)
								X				X				
								X				X			X	
													X			
														X		
										X						
										X						

Remarks:

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
8/16/05	930AM	Cindy Hurtado	8/16/05 1645
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

February 10, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: River Sampling 1st Qtr-2005 Order No.: 0501215

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 5 samples on 1/26/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	Upstream River
Lab Order:	0501215	**Collection Date:**	1/25/2005 9:30:00 AM
Project:	River Sampling 1st Qtr-2005		
Lab ID:	0501215-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.16	0.10		mg/L	1	1/26/2005
Chloride	3.9	0.10		mg/L	1	1/26/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/26/2005
Bromide	ND	0.50		mg/L	1	1/26/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	1/26/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/26/2005
Sulfate	110	2.5		mg/L	5	2/1/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	110	4.0		mg/L CaCO3	2	2/8/2005
Carbonate	ND	4.0		mg/L CaCO3	2	2/8/2005
Bicarbonate	110	4.0		mg/L CaCO3	2	2/8/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/2/2005 1:55:14 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/2/2005 1:55:14 PM
Surr: DNOP	118	58-140		%REC	1	2/2/2005 1:55:14 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/26/2005 3:04:39 PM
Surr: BFB	102	78.3-120		%REC	1	1/26/2005 3:04:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	1/26/2005 3:04:39 PM
Benzene	ND	0.50		µg/L	1	1/26/2005 3:04:39 PM
Toluene	ND	0.50		µg/L	1	1/26/2005 3:04:39 PM
Ethylbenzene	ND	0.50		µg/L	1	1/26/2005 3:04:39 PM
Xylenes, Total	ND	0.50		µg/L	1	1/26/2005 3:04:39 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	2/2/2005
Acenaphthylene	ND	10		µg/L	1	2/2/2005
Aniline	ND	10		µg/L	1	2/2/2005
Anthracene	ND	10		µg/L	1	2/2/2005
Azobenzene	ND	10		µg/L	1	2/2/2005
Benz(a)anthracene	ND	15		µg/L	1	2/2/2005
Benzo(a)pyrene	ND	10		µg/L	1	2/2/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	2/2/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	2/2/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	2/2/2005
Benzoic acid	ND	50		µg/L	1	2/2/2005
Benzyl alcohol	ND	20		µg/L	1	2/2/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	2/2/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Client Sample ID: Upstream River
Lab Order: 0501215
Collection Date: 1/25/2005 9:30:00 AM
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	2/2/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	2/2/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	2/2/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	2/2/2005
Butyl benzyl phthalate	ND	15		µg/L	1	2/2/2005
Carbazole	ND	10		µg/L	1	2/2/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	2/2/2005
4-Chloroaniline	ND	20		µg/L	1	2/2/2005
2-Chloronaphthalene	ND	10		µg/L	1	2/2/2005
2-Chlorophenol	ND	10		µg/L	1	2/2/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	2/2/2005
Chrysene	ND	15		µg/L	1	2/2/2005
Di-n-butyl phthalate	ND	10		µg/L	1	2/2/2005
Di-n-octyl phthalate	ND	15		µg/L	1	2/2/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	2/2/2005
Dibenzofuran	ND	10		µg/L	1	2/2/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	2/2/2005
Diethyl phthalate	ND	10		µg/L	1	2/2/2005
Dimethyl phthalate	ND	10		µg/L	1	2/2/2005
2,4-Dichlorophenol	ND	10		µg/L	1	2/2/2005
2,4-Dimethylphenol	ND	10		µg/L	1	2/2/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	2/2/2005
2,4-Dinitrophenol	ND	50		µg/L	1	2/2/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	2/2/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	2/2/2005
Fluoranthene	ND	10		µg/L	1	2/2/2005
Fluorene	ND	10		µg/L	1	2/2/2005
Hexachlorobenzene	ND	10		µg/L	1	2/2/2005
Hexachlorobutadiene	ND	10		µg/L	1	2/2/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	2/2/2005
Hexachloroethane	ND	10		µg/L	1	2/2/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	2/2/2005
Isophorone	ND	10		µg/L	1	2/2/2005
2-Methylnaphthalene	ND	10		µg/L	1	2/2/2005
2-Methylphenol	ND	15		µg/L	1	2/2/2005
3+4-Methylphenol	ND	10		µg/L	1	2/2/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	2/2/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	2/2/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	2/2/2005

Qualifiers:
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* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Client Sample ID: Upstream River
Lab Order: 0501215
Collection Date: 1/25/2005 9:30:00 AM
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	2/2/2005
2-Nitroaniline	ND	50		µg/L	1	2/2/2005
3-Nitroaniline	ND	50		µg/L	1	2/2/2005
4-Nitroaniline	ND	20		µg/L	1	2/2/2005
Nitrobenzene	ND	10		µg/L	1	2/2/2005
2-Nitrophenol	ND	15		µg/L	1	2/2/2005
4-Nitrophenol	ND	50		µg/L	1	2/2/2005
Pentachlorophenol	ND	50		µg/L	1	2/2/2005
Phenanthrene	ND	10		µg/L	1	2/2/2005
Phenol	ND	10		µg/L	1	2/2/2005
Pyrene	ND	15		µg/L	1	2/2/2005
Pyridine	ND	30		µg/L	1	2/2/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	2/2/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	2/2/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	2/2/2005
Surr: 2,4,6-Tribromophenol	2.31	16.6-115	S	%REC	1	2/2/2005
Surr: 2-Fluorobiphenyl	75.8	37-95.7		%REC	1	2/2/2005
Surr: 2-Fluorophenol	12.1	9.54-89.8		%REC	1	2/2/2005
Surr: 4-Terphenyl-d14	81.3	47.9-115		%REC	1	2/2/2005
Surr: Nitrobenzene-d5	74.6	38-106		%REC	1	2/2/2005
Surr: Phenol-d6	29.9	10.7-63.4		%REC	1	2/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **MAP**
Specific Conductance	370	0.010		µmhos/cm	1	2/8/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	2/1/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/27/2005 12:20:11 PM
Barium	0.066	0.0020		mg/L	1	1/27/2005 12:20:11 PM
Cadmium	ND	0.0020		mg/L	1	1/27/2005 12:20:11 PM
Calcium	47	1.0		mg/L	1	1/27/2005 12:20:11 PM
Chromium	ND	0.0060		mg/L	1	1/27/2005 12:20:11 PM
Copper	ND	0.0060		mg/L	1	1/27/2005 12:20:11 PM
Iron	0.025	0.020		mg/L	1	1/27/2005 12:20:11 PM
Lead	ND	0.0050		mg/L	1	1/27/2005 12:20:11 PM
Magnesium	8.1	1.0		mg/L	1	1/27/2005 2:00:05 PM
Manganese	0.016	0.0020		mg/L	1	1/27/2005 12:20:11 PM
Potassium	2.3	1.0		mg/L	1	1/27/2005 12:20:11 PM
Selenium	ND	0.050		mg/L	1	1/27/2005 12:20:11 PM
Silver	ND	0.0050		mg/L	1	1/27/2005 12:20:11 PM
Sodium	37	1.0		mg/L	1	1/27/2005 12:20:11 PM
Uranium	ND	0.10		mg/L	1	1/27/2005 12:20:11 PM

Qualifiers:
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Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-01

Client Sample ID: Upstream River
Collection Date: 1/25/2005 9:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.028	0.0050		mg/L	1	1/27/2005 12:20:11 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	2/4/2005 9:05:39 AM
Barium	0.077	0.020		mg/L	1	2/4/2005 9:05:39 AM
Cadmium	ND	0.0020		mg/L	1	2/4/2005 9:05:39 AM
Chromium	ND	0.0060		mg/L	1	2/4/2005 9:05:39 AM
Lead	ND	0.0050		mg/L	1	2/4/2005 9:05:39 AM
Selenium	ND	0.050		mg/L	1	2/4/2005 9:05:39 AM
Silver	ND	0.0050		mg/L	1	2/4/2005 9:05:39 AM
EPA METHOD 160.1: TDS						Analyst: MAP
Total Dissolved Solids	290	50		mg/L	1	1/31/2005

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R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	N of MW #45
Lab Order:	0501215	**Collection Date:**	1/25/2005 10:00:00 AM
Project:	River Sampling 1st Qtr-2005		
Lab ID:	0501215-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.17	0.10		mg/L	1	1/26/2005
Chloride	4.0	0.10		mg/L	1	1/26/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/26/2005
Bromide	ND	0.50		mg/L	1	1/26/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	1/26/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/26/2005
Sulfate	110	2.5		mg/L	5	2/1/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	100	4.0		mg/L CaCO3	2	2/8/2005
Carbonate	ND	4.0		mg/L CaCO3	2	2/8/2005
Bicarbonate	100	4.0		mg/L CaCO3	2	2/8/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/2/2005 2:25:09 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/2/2005 2:25:09 PM
Surr: DNOP	122	58-140		%REC	1	2/2/2005 2:25:09 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/26/2005 3:34:40 PM
Surr: BFB	104	78.3-120		%REC	1	1/26/2005 3:34:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	1/26/2005 3:34:40 PM
Benzene	ND	0.50		µg/L	1	1/26/2005 3:34:40 PM
Toluene	ND	0.50		µg/L	1	1/26/2005 3:34:40 PM
Ethylbenzene	ND	0.50		µg/L	1	1/26/2005 3:34:40 PM
Xylenes, Total	ND	0.50		µg/L	1	1/26/2005 3:34:40 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	2/2/2005
Acenaphthylene	ND	10		µg/L	1	2/2/2005
Aniline	ND	10		µg/L	1	2/2/2005
Anthracene	ND	10		µg/L	1	2/2/2005
Azobenzene	ND	10		µg/L	1	2/2/2005
Benz(a)anthracene	ND	15		µg/L	1	2/2/2005
Benzo(a)pyrene	ND	10		µg/L	1	2/2/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	2/2/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	2/2/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	2/2/2005
Benzoic acid	ND	50		µg/L	1	2/2/2005
Benzyl alcohol	ND	20		µg/L	1	2/2/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	2/2/2005

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Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-02

Client Sample ID: N of MW #45
Collection Date: 1/25/2005 10:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	2/2/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	2/2/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	2/2/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	2/2/2005
Butyl benzyl phthalate	ND	15		µg/L	1	2/2/2005
Carbazole	ND	10		µg/L	1	2/2/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	2/2/2005
4-Chloroaniline	ND	20		µg/L	1	2/2/2005
2-Chloronaphthalene	ND	10		µg/L	1	2/2/2005
2-Chlorophenol	ND	10		µg/L	1	2/2/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	2/2/2005
Chrysene	ND	15		µg/L	1	2/2/2005
Di-n-butyl phthalate	ND	10		µg/L	1	2/2/2005
Di-n-octyl phthalate	ND	15		µg/L	1	2/2/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	2/2/2005
Dibenzofuran	ND	10		µg/L	1	2/2/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	2/2/2005
Diethyl phthalate	ND	10		µg/L	1	2/2/2005
Dimethyl phthalate	ND	10		µg/L	1	2/2/2005
2,4-Dichlorophenol	ND	10		µg/L	1	2/2/2005
2,4-Dimethylphenol	ND	10		µg/L	1	2/2/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	2/2/2005
2,4-Dinitrophenol	ND	50		µg/L	1	2/2/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	2/2/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	2/2/2005
Fluoranthene	ND	10		µg/L	1	2/2/2005
Fluorene	ND	10		µg/L	1	2/2/2005
Hexachlorobenzene	ND	10		µg/L	1	2/2/2005
Hexachlorobutadiene	ND	10		µg/L	1	2/2/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	2/2/2005
Hexachloroethane	ND	10		µg/L	1	2/2/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	2/2/2005
Isophorone	ND	10		µg/L	1	2/2/2005
2-Methylnaphthalene	ND	10		µg/L	1	2/2/2005
2-Methylphenol	ND	15		µg/L	1	2/2/2005
3+4-Methylphenol	ND	10		µg/L	1	2/2/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	2/2/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	2/2/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	2/2/2005

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Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-02

Client Sample ID: N of MW #45
Collection Date: 1/25/2005 10:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	2/2/2005
2-Nitroaniline	ND	50		µg/L	1	2/2/2005
3-Nitroaniline	ND	50		µg/L	1	2/2/2005
4-Nitroaniline	ND	20		µg/L	1	2/2/2005
Nitrobenzene	ND	10		µg/L	1	2/2/2005
2-Nitrophenol	ND	15		µg/L	1	2/2/2005
4-Nitrophenol	ND	50		µg/L	1	2/2/2005
Pentachlorophenol	ND	50		µg/L	1	2/2/2005
Phenanthrene	ND	10		µg/L	1	2/2/2005
Phenol	ND	10		µg/L	1	2/2/2005
Pyrene	ND	15		µg/L	1	2/2/2005
Pyridine	ND	30		µg/L	1	2/2/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	2/2/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	2/2/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	2/2/2005
Surr: 2,4,6-Tribromophenol	1.58	16.6-115	S	%REC	1	2/2/2005
Surr: 2-Fluorobiphenyl	70.9	37-95.7		%REC	1	2/2/2005
Surr: 2-Fluorophenol	1.44	9.54-89.8	S	%REC	1	2/2/2005
Surr: 4-Terphenyl-d14	77.9	47.9-115		%REC	1	2/2/2005
Surr: Nitrobenzene-d5	66.9	38-106		%REC	1	2/2/2005
Surr: Phenol-d6	4.94	10.7-63.4	S	%REC	1	2/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **MAP**
Specific Conductance	390	0.010		µmhos/cm	1	2/8/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	2/1/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/27/2005 12:23:23 PM
Barium	0.065	0.0020		mg/L	1	1/27/2005 12:23:23 PM
Cadmium	ND	0.0020		mg/L	1	1/27/2005 12:23:23 PM
Calcium	51	1.0		mg/L	1	1/27/2005 12:23:23 PM
Chromium	ND	0.0060		mg/L	1	1/27/2005 12:23:23 PM
Copper	ND	0.0060		mg/L	1	1/27/2005 12:23:23 PM
Iron	0.074	0.020		mg/L	1	1/27/2005 12:23:23 PM
Lead	ND	0.0050		mg/L	1	1/27/2005 12:23:23 PM
Magnesium	8.1	1.0		mg/L	1	1/27/2005 2:02:21 PM
Manganese	0.074	0.0020		mg/L	1	1/27/2005 12:23:23 PM
Potassium	2.3	1.0		mg/L	1	1/27/2005 12:23:23 PM
Selenium	ND	0.050		mg/L	1	1/27/2005 12:23:23 PM
Silver	ND	0.0050		mg/L	1	1/27/2005 12:23:23 PM
Sodium	37	1.0		mg/L	1	1/27/2005 12:23:23 PM
Uranium	ND	0.10		mg/L	1	1/27/2005 12:23:23 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-02

Client Sample ID: N of MW #45
Collection Date: 1/25/2005 10:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.013	0.0050		mg/L	1	1/27/2005 12:23:23 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	2/4/2005 9:08:52 AM
Barium	0.070	0.020		mg/L	1	2/4/2005 9:08:52 AM
Cadmium	ND	0.0020		mg/L	1	2/4/2005 9:08:52 AM
Chromium	ND	0.0060		mg/L	1	2/4/2005 9:08:52 AM
Lead	ND	0.0050		mg/L	1	2/4/2005 9:08:52 AM
Selenium	ND	0.050		mg/L	1	2/4/2005 9:08:52 AM
Silver	ND	0.0050		mg/L	1	2/4/2005 9:08:52 AM
EPA METHOD 160.1: TDS						Analyst: **MAP**
Total Dissolved Solids	300	50		mg/L	1	2/1/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	N of MW #46
Lab Order:	0501215	**Collection Date:**	1/25/2005 11:00:00 AM
Project:	River Sampling 1st Qtr-2005		
Lab ID:	0501215-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.16	0.10		mg/L	1	1/26/2005
Chloride	3.9	0.10		mg/L	1	1/26/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/26/2005
Bromide	ND	0.50		mg/L	1	1/26/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	1/26/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/26/2005
Sulfate	110	2.5		mg/L	5	2/1/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	100	4.0		mg/L CaCO3	2	2/8/2005
Carbonate	ND	4.0		mg/L CaCO3	2	2/8/2005
Bicarbonate	100	4.0		mg/L CaCO3	2	2/8/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/2/2005 2:55:34 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/2/2005 2:55:34 PM
Surr: DNOP	117	58-140		%REC	1	2/2/2005 2:55:34 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/26/2005 4:04:43 PM
Surr: BFB	95.1	78.3-120		%REC	1	1/26/2005 4:04:43 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	1/26/2005 4:04:43 PM
Benzene	ND	0.50		µg/L	1	1/26/2005 4:04:43 PM
Toluene	ND	0.50		µg/L	1	1/26/2005 4:04:43 PM
Ethylbenzene	ND	0.50		µg/L	1	1/26/2005 4:04:43 PM
Xylenes, Total	ND	0.50		µg/L	1	1/26/2005 4:04:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	2/2/2005
Acenaphthylene	ND	10		µg/L	1	2/2/2005
Aniline	ND	10		µg/L	1	2/2/2005
Anthracene	ND	10		µg/L	1	2/2/2005
Azobenzene	ND	10		µg/L	1	2/2/2005
Benz(a)anthracene	ND	15		µg/L	1	2/2/2005
Benzo(a)pyrene	ND	10		µg/L	1	2/2/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	2/2/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	2/2/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	2/2/2005
Benzoic acid	ND	50		µg/L	1	2/2/2005
Benzyl alcohol	ND	20		µg/L	1	2/2/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	2/2/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-03

Client Sample ID: N of MW #46
Collection Date: 1/25/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	2/2/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	2/2/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	2/2/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	2/2/2005
Butyl benzyl phthalate	ND	15		µg/L	1	2/2/2005
Carbazole	ND	10		µg/L	1	2/2/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	2/2/2005
4-Chloroaniline	ND	20		µg/L	1	2/2/2005
2-Chloronaphthalene	ND	10		µg/L	1	2/2/2005
2-Chlorophenol	ND	10		µg/L	1	2/2/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	2/2/2005
Chrysene	ND	15		µg/L	1	2/2/2005
Di-n-butyl phthalate	ND	10		µg/L	1	2/2/2005
Di-n-octyl phthalate	ND	15		µg/L	1	2/2/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	2/2/2005
Dibenzofuran	ND	10		µg/L	1	2/2/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	2/2/2005
Diethyl phthalate	ND	10		µg/L	1	2/2/2005
Dimethyl phthalate	ND	10		µg/L	1	2/2/2005
2,4-Dichlorophenol	ND	10		µg/L	1	2/2/2005
2,4-Dimethylphenol	ND	10		µg/L	1	2/2/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	2/2/2005
2,4-Dinitrophenol	ND	50		µg/L	1	2/2/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	2/2/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	2/2/2005
Fluoranthene	ND	10		µg/L	1	2/2/2005
Fluorene	ND	10		µg/L	1	2/2/2005
Hexachlorobenzene	ND	10		µg/L	1	2/2/2005
Hexachlorobutadiene	ND	10		µg/L	1	2/2/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	2/2/2005
Hexachloroethane	ND	10		µg/L	1	2/2/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	2/2/2005
Isophorone	ND	10		µg/L	1	2/2/2005
2-Methylnaphthalene	ND	10		µg/L	1	2/2/2005
2-Methylphenol	ND	15		µg/L	1	2/2/2005
3+4-Methylphenol	ND	10		µg/L	1	2/2/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	2/2/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	2/2/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	2/2/2005

Qualifiers:

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-03

Client Sample ID: N of MW #46
Collection Date: 1/25/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	2/2/2005
2-Nitroaniline	ND	50		µg/L	1	2/2/2005
3-Nitroaniline	ND	50		µg/L	1	2/2/2005
4-Nitroaniline	ND	20		µg/L	1	2/2/2005
Nitrobenzene	ND	10		µg/L	1	2/2/2005
2-Nitrophenol	ND	15		µg/L	1	2/2/2005
4-Nitrophenol	ND	50		µg/L	1	2/2/2005
Pentachlorophenol	ND	50		µg/L	1	2/2/2005
Phenanthrene	ND	10		µg/L	1	2/2/2005
Phenol	ND	10		µg/L	1	2/2/2005
Pyrene	ND	15		µg/L	1	2/2/2005
Pyridine	ND	30		µg/L	1	2/2/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	2/2/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	2/2/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	2/2/2005
Surr: 2,4,6-Tribromophenol	1.49	16.6-115	S	%REC	1	2/2/2005
Surr: 2-Fluorobiphenyl	80.3	37-95.7		%REC	1	2/2/2005
Surr: 2-Fluorophenol	11.6	9.54-89.8		%REC	1	2/2/2005
Surr: 4-Terphenyl-d14	75.2	47.9-115		%REC	1	2/2/2005
Surr: Nitrobenzene-d5	73.3	38-106		%REC	1	2/2/2005
Surr: Phenol-d6	27.8	10.7-63.4		%REC	1	2/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **MAP**
Specific Conductance	390	0.010		µmhos/cm	1	2/8/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	2/1/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/27/2005 12:26:35 PM
Barium	0.064	0.0020		mg/L	1	1/27/2005 12:26:35 PM
Cadmium	ND	0.0020		mg/L	1	1/27/2005 12:26:35 PM
Calcium	48	1.0		mg/L	1	1/27/2005 12:26:35 PM
Chromium	ND	0.0060		mg/L	1	1/27/2005 12:26:35 PM
Copper	ND	0.0060		mg/L	1	1/27/2005 12:26:35 PM
Iron	0.022	0.020		mg/L	1	1/27/2005 12:26:35 PM
Lead	ND	0.0050		mg/L	1	1/27/2005 12:26:35 PM
Magnesium	8.2	1.0		mg/L	1	1/27/2005 2:04:38 PM
Manganese	0.013	0.0020		mg/L	1	1/27/2005 12:26:35 PM
Potassium	2.3	1.0		mg/L	1	1/27/2005 12:26:35 PM
Selenium	ND	0.050		mg/L	1	1/27/2005 12:26:35 PM
Silver	ND	0.0050		mg/L	1	1/27/2005 12:26:35 PM
Sodium	38	1.0		mg/L	1	1/27/2005 12:26:35 PM
Uranium	ND	0.10		mg/L	1	1/27/2005 12:26:35 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-03

Client Sample ID: N of MW #46
Collection Date: 1/25/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.037	0.0050		mg/L	1	1/27/2005 12:26:35 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	2/4/2005 9:12:03 AM
Barium	0.076	0.020		mg/L	1	2/4/2005 9:12:03 AM
Cadmium	ND	0.0020		mg/L	1	2/4/2005 9:12:03 AM
Chromium	ND	0.0060		mg/L	1	2/4/2005 9:12:03 AM
Lead	ND	0.0050		mg/L	1	2/4/2005 9:12:03 AM
Selenium	ND	0.050		mg/L	1	2/4/2005 9:12:03 AM
Silver	ND	0.0050		mg/L	1	2/4/2005 9:12:03 AM
EPA METHOD 160.1: TDS						Analyst: **MAP**
Total Dissolved Solids	280	50		mg/L	1	1/31/2005

Qualifiers:

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B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-04

Client Sample ID: Downstream River
Collection Date: 1/25/2005 11:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.16	0.10		mg/L	1	1/26/2005
Chloride	4.1	0.10		mg/L	1	1/26/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/26/2005
Bromide	ND	0.50		mg/L	1	1/26/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	1/26/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/26/2005
Sulfate	120	2.5		mg/L	5	2/1/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	110	4.0		mg/L CaCO3	2	2/8/2005
Carbonate	ND	4.0		mg/L CaCO3	2	2/8/2005
Bicarbonate	110	4.0		mg/L CaCO3	2	2/8/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/2/2005 3:25:28 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/2/2005 3:25:28 PM
Surr: DNOP	120	58-140		%REC	1	2/2/2005 3:25:28 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/26/2005 4:34:40 PM
Surr: BFB	99.6	78.3-120		%REC	1	1/26/2005 4:34:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	1/26/2005 4:34:40 PM
Benzene	ND	0.50		µg/L	1	1/26/2005 4:34:40 PM
Toluene	ND	0.50		µg/L	1	1/26/2005 4:34:40 PM
Ethylbenzene	ND	0.50		µg/L	1	1/26/2005 4:34:40 PM
Xylenes, Total	ND	0.50		µg/L	1	1/26/2005 4:34:40 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	2/2/2005
Acenaphthylene	ND	10		µg/L	1	2/2/2005
Aniline	ND	10		µg/L	1	2/2/2005
Anthracene	ND	10		µg/L	1	2/2/2005
Azobenzene	ND	10		µg/L	1	2/2/2005
Benz(a)anthracene	ND	15		µg/L	1	2/2/2005
Benzo(a)pyrene	ND	10		µg/L	1	2/2/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	2/2/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	2/2/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	2/2/2005
Benzoic acid	ND	50		µg/L	1	2/2/2005
Benzyl alcohol	ND	20		µg/L	1	2/2/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	2/2/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-04

Client Sample ID: Downstream River
Collection Date: 1/25/2005 11:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	2/2/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	2/2/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	2/2/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	2/2/2005
Butyl benzyl phthalate	ND	15		µg/L	1	2/2/2005
Carbazole	ND	10		µg/L	1	2/2/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	2/2/2005
4-Chloroaniline	ND	20		µg/L	1	2/2/2005
2-Chloronaphthalene	ND	10		µg/L	1	2/2/2005
2-Chlorophenol	ND	10		µg/L	1	2/2/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	2/2/2005
Chrysene	ND	15		µg/L	1	2/2/2005
Di-n-butyl phthalate	ND	10		µg/L	1	2/2/2005
Di-n-octyl phthalate	ND	15		µg/L	1	2/2/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	2/2/2005
Dibenzofuran	ND	10		µg/L	1	2/2/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	2/2/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	2/2/2005
Diethyl phthalate	ND	10		µg/L	1	2/2/2005
Dimethyl phthalate	ND	10		µg/L	1	2/2/2005
2,4-Dichlorophenol	ND	10		µg/L	1	2/2/2005
2,4-Dimethylphenol	ND	10		µg/L	1	2/2/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	2/2/2005
2,4-Dinitrophenol	ND	50		µg/L	1	2/2/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	2/2/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	2/2/2005
Fluoranthene	ND	10		µg/L	1	2/2/2005
Fluorene	ND	10		µg/L	1	2/2/2005
Hexachlorobenzene	ND	10		µg/L	1	2/2/2005
Hexachlorobutadiene	ND	10		µg/L	1	2/2/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	2/2/2005
Hexachloroethane	ND	10		µg/L	1	2/2/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	2/2/2005
Isophorone	ND	10		µg/L	1	2/2/2005
2-Methylnaphthalene	ND	10		µg/L	1	2/2/2005
2-Methylphenol	ND	15		µg/L	1	2/2/2005
3+4-Methylphenol	ND	10		µg/L	1	2/2/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	2/2/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	2/2/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	2/2/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-04

Client Sample ID: Downstream River
Collection Date: 1/25/2005 11:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	2/2/2005
2-Nitroaniline	ND	50		µg/L	1	2/2/2005
3-Nitroaniline	ND	50		µg/L	1	2/2/2005
4-Nitroaniline	ND	20		µg/L	1	2/2/2005
Nitrobenzene	ND	10		µg/L	1	2/2/2005
2-Nitrophenol	ND	15		µg/L	1	2/2/2005
4-Nitrophenol	ND	50		µg/L	1	2/2/2005
Pentachlorophenol	ND	50		µg/L	1	2/2/2005
Phenanthrene	ND	10		µg/L	1	2/2/2005
Phenol	ND	10		µg/L	1	2/2/2005
Pyrene	ND	15		µg/L	1	2/2/2005
Pyridine	ND	30		µg/L	1	2/2/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	2/2/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	2/2/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	2/2/2005
Surr: 2,4,6-Tribromophenol	2.38	16.6-115	S	%REC	1	2/2/2005
Surr: 2-Fluorobiphenyl	67.4	37-95.7		%REC	1	2/2/2005
Surr: 2-Fluorophenol	8.05	9.54-89.8	S	%REC	1	2/2/2005
Surr: 4-Terphenyl-d14	77.5	47.9-115		%REC	1	2/2/2005
Surr: Nitrobenzene-d5	63.0	38-106		%REC	1	2/2/2005
Surr: Phenol-d6	24.2	10.7-63.4		%REC	1	2/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **MAP**
Specific Conductance	410	0.010		µmhos/cm	1	2/8/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	2/1/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/27/2005 12:29:43 PM
Barium	0.064	0.0020		mg/L	1	1/27/2005 12:29:43 PM
Cadmium	ND	0.0020		mg/L	1	1/27/2005 12:29:43 PM
Calcium	51	1.0		mg/L	1	1/27/2005 12:29:43 PM
Chromium	ND	0.0060		mg/L	1	1/27/2005 12:29:43 PM
Copper	ND	0.0060		mg/L	1	1/27/2005 12:29:43 PM
Iron	0.023	0.020		mg/L	1	1/27/2005 12:29:43 PM
Lead	ND	0.0050		mg/L	1	1/27/2005 12:29:43 PM
Magnesium	8.5	1.0		mg/L	1	1/27/2005 2:06:57 PM
Manganese	0.042	0.0020		mg/L	1	1/27/2005 12:29:43 PM
Potassium	2.3	1.0		mg/L	1	1/27/2005 12:29:43 PM
Selenium	ND	0.050		mg/L	1	1/27/2005 12:29:43 PM
Silver	ND	0.0050		mg/L	1	1/27/2005 12:29:43 PM
Sodium	41	1.0		mg/L	1	1/27/2005 12:29:43 PM
Uranium	ND	0.10		mg/L	1	1/27/2005 12:29:43 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0501215
Project: River Sampling 1st Qtr-2005
Lab ID: 0501215-04

Client Sample ID: Downstream River
Collection Date: 1/25/2005 11:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.048	0.0050		mg/L	1	1/27/2005 12:29:43 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	2/4/2005 9:31:53 AM
Barium	0.072	0.020		mg/L	1	2/4/2005 9:31:53 AM
Cadmium	ND	0.0020		mg/L	1	2/4/2005 9:31:53 AM
Chromium	ND	0.0060		mg/L	1	2/4/2005 9:31:53 AM
Lead	ND	0.0050		mg/L	1	2/4/2005 9:31:53 AM
Selenium	ND	0.050		mg/L	1	2/4/2005 9:31:53 AM
Silver	ND	0.0050		mg/L	1	2/4/2005 9:31:53 AM
EPA METHOD 160.1: TDS						Analyst: **MAP**
Total Dissolved Solids	320	50		mg/L	1	1/31/2005

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	Trip Blank
Lab Order:	0501215	**Collection Date:**	
Project:	River Sampling 1st Qtr-2005		
Lab ID:	0501215-05	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **JMP**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	2/2/2005 3:55:17 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/2/2005 3:55:17 PM
Surr: DNOP	116	58-140		%REC	1	2/2/2005 3:55:17 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/26/2005 5:04:41 PM
Surr: BFB	102	78.3-120		%REC	1	1/26/2005 5:04:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	1/26/2005 5:04:41 PM
Benzene	ND	0.50		µg/L	1	1/26/2005 5:04:41 PM
Toluene	ND	0.50		µg/L	1	1/26/2005 5:04:41 PM
Ethylbenzene	ND	0.50		µg/L	1	1/26/2005 5:04:41 PM
Xylenes, Total	ND	0.50		µg/L	1	1/26/2005 5:04:41 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID **MBLK** Batch ID: **R14408** Test Code: **E300** Units: **mg/L** Analysis Date **1/26/2005** Prep Date
Client ID: Run ID: **LC_050126B** SeqNo: **335738**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID **MBLK** Batch ID: **R14408** Test Code: **E300** Units: **mg/L** Analysis Date **1/26/2005** Prep Date
Client ID: Run ID: **LC_050126B** SeqNo: **335759**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID MBLK	Batch ID: R14445	Test Code: E300	Units: mg/L	Analysis Date 2/1/2005	Prep Date
Client ID:		Run ID: LC_050201A		SeqNo: 336655	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MBLK	Batch ID: R14524	Test Code: E310.1	Units: mg/L CaCO3	Analysis Date 2/8/2005	Prep Date
Client ID:		Run ID: WC_050208E		SeqNo: 338362	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2									
Carbonate	ND	2									
Bicarbonate	ND	2									

Sample ID MB-7325	Batch ID: 7325	Test Code: SW8015	Units: mg/L	Analysis Date 2/2/2005 12:25:59 PM	Prep Date 1/28/2005
Client ID:		Run ID: FID(17A) 2_050202A		SeqNo: 337435	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.054	0	1	0	105	58	140	0			

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Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R14397** Test Code: **SW8015** Units: **mg/L** Analysis Date **1/26/2005 7:13:18 AM** Prep Date
Client ID: Run ID: **PIDFID_050126A** SeqNo: **335476**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	20.58	0	20	0	103	78.3	120	0			

Sample ID **Reagent Blank 5m** Batch ID: **R14397** Test Code: **SW8021** Units: **µg/L** Analysis Date **1/26/2005 7:13:18 AM** Prep Date
Client ID: Run ID: **PIDFID_050126A** SeqNo: **335475**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID **MB-7316** Batch ID: **7316** Test Code: **SW8270C** Units: **µg/L** Analysis Date **2/2/2005** Prep Date **1/28/2005**
Client ID: Run ID: **ELMO_050202A** SeqNo: **337287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	10									
Acenaphthylene	ND	10									
Aniline	ND	10									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	10									
Benzo(b)fluoranthene	ND	10									
Benzo(g,h,i)perylene	ND	10									
Benzo(k)fluoranthene	ND	10									
Benzoic acid	ND	50									
Benzyl alcohol	ND	20									
Bis(2-chloroethoxy)methane	ND	10									
Bis(2-chloroethyl)ether	ND	15									
Bis(2-chloroisopropyl)ether	ND	15									
Bis(2-ethylhexyl)phthalate	ND	15									
4-Bromophenyl phenyl ether	ND	10									
Butyl benzyl phthalate	ND	15									
Carbazole	ND	10									
4-Chloro-3-methylphenol	ND	20									
4-Chloroaniline	ND	20									
2-Chloronaphthalene	ND	10									
2-Chlorophenol	ND	10									
4-Chlorophenyl phenyl ether	ND	15									
Chrysene	ND	15									
Di-n-butyl phthalate	ND	10									
Di-n-octyl phthalate	ND	15									
Dibenz(a,h)anthracene	ND	10									

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Method Blank

Dibenzofuran	ND	10
1,2-Dichlorobenzene	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
3,3'-Dichlorobenzidine	ND	15
Diethyl phthalate	ND	10
Dimethyl phthalate	ND	10
2,4-Dichlorophenol	ND	10
2,4-Dimethylphenol	ND	10
4,6-Dinitro-2-methylphenol	ND	50
2,4-Dinitrophenol	ND	50
2,4-Dinitrotoluene	ND	10
2,6-Dinitrotoluene	ND	10
Fluoranthene	ND	10
Fluorene	ND	10
Hexachlorobenzene	ND	10
Hexachlorobutadiene	ND	10
Hexachlorocyclopentadiene	ND	10
Hexachloroethane	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Isophorone	ND	10
2-Methylnaphthalene	ND	10
2-Methylphenol	ND	15
3+4-Methylphenol	ND	10
N-Nitrosodi-n-propylamine	ND	10
N-Nitrosodimethylamine	ND	10
N-Nitrosodiphenylamine	ND	10
Naphthalene	ND	10
2-Nitroaniline	ND	50
3-Nitroaniline	ND	50
4-Nitroaniline	ND	20
Nitrobenzene	ND	10
2-Nitrophenol	ND	15

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Method Blank

4-Nitrophenol	ND	50							
Pentachlorophenol	ND	50							
Phenanthrene	ND	10							
Phenol	ND	10							
Pyrene	ND	15							
Pyridine	ND	30							
1,2,4-Trichlorobenzene	ND	10							
2,4,5-Trichlorophenol	ND	10							
2,4,6-Trichlorophenol	ND	15							
Surr: 2,4,6-Tribromophenol	127.3	0	200	0	63.6	16.6	115	0	
Surr: 2-Fluorobiphenyl	73.58	0	100	0	73.6	37	95.7	0	
Surr: 2-Fluorophenol	133	0	200	0	66.5	9.54	89.8	0	
Surr: 4-Terphenyl-d14	74.32	0	100	0	74.3	51.2	125	0	
Surr: Nitrobenzene-d5	73.74	0	100	0	73.7	38	106	0	
Surr: Phenol-d6	97.18	0	200	0	48.6	10.7	63.4	0	

Sample ID **MB-7344** Batch ID: **7344** Test Code: **SW7470** Units: **mg/L** Analysis Date **2/1/2005** Prep Date **2/1/2005**
Client ID: Run ID: **MI-LA254_050201A** SeqNo: **336785**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.0000411	0.0002									J

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID **MBLK** Batch ID: **R14414** Test Code: **SW6010A** Units: **mg/L** Analysis Date **1/27/2005 10:37:12 AM** Prep Date
Client ID: Run ID: **ICP_050127A** SeqNo: **335879**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.002									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	ND	1									
Selenium	ND	0.05									
Silver	ND	0.005									
Sodium	ND	1									
Uranium	ND	0.1									
Zinc	ND	0.005									

Sample ID **MB-7358** Batch ID: **7358** Test Code: **SW6010A** Units: **mg/L** Analysis Date **2/4/2005 8:20:51 AM** Prep Date **2/3/2005**
Client ID: Run ID: **ICP_050204A** SeqNo: **337793**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.01213	0.02									J
Barium	ND	0.02									
Cadmium	ND	0.002									
Chromium	0.001572	0.006									J
Lead	ND	0.005									
Selenium	ND	0.05									
Silver	0.0007846	0.005									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID MB-7320	Batch ID: 7320	Test Code: E160.1	Units: mg/L	Analysis Date 1/31/2005	Prep Date 1/28/2005
Client ID:		Run ID: WC_050131D		SeqNo: 336450	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

Sample ID MB-7329	Batch ID: 7329	Test Code: E160.1	Units: mg/L	Analysis Date 2/1/2005	Prep Date 1/31/2005
Client ID:		Run ID: WC_050201C		SeqNo: 336663	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Sample Duplicate

Sample ID **0501215-04D DUP** Batch ID: **7358** Test Code: **SW6010A** Units: **mg/L** Analysis Date **2/4/2005 9:35:08 AM** Prep Date **2/3/2005**
Client ID: **Downstream Rive** Run ID: **ICP_050204A** SeqNo: **337815**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02	0	0	0	0	0	0	0	30	
Barium	0.07176	0.02	0	0	0	0	0	0.07248	0.996	30	
Cadmium	ND	0.002	0	0	0	0	0	0	0	30	
Chromium	ND	0.006	0	0	0	0	0	0.002257	0	30	
Lead	ND	0.005	0	0	0	0	0	0	0	30	
Selenium	ND	0.05	0	0	0	0	0	0	0	30	
Silver	ND	0.005	0	0	0	0	0	0	0	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

I

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0501215-04a ms** Batch ID: **R14397** Test Code: **SW8021** Units: **µg/L** Analysis Date **1/26/2005 5:34:36 PM** Prep Date
Client ID: **Downstream Rive** Run ID: **PIDFID_050126A** SeqNo: **335495**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	44.88	2.5	40	0	112	64.5	133	0			
Benzene	21.63	0.5	20	0	108	88.7	114	0			
Toluene	20.05	0.5	20	0	100	89.3	112	0			
Ethylbenzene	20.64	0.5	20	0	103	88.6	113	0			
Xylenes, Total	60.68	0.5	60	0	101	89.4	112	0			

Sample ID **0501215-04a msd** Batch ID: **R14397** Test Code: **SW8021** Units: **µg/L** Analysis Date **1/26/2005 6:04:33 PM** Prep Date
Client ID: **Downstream Rive** Run ID: **PIDFID_050126A** SeqNo: **335496**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	44.93	2.5	40	0	112	64.5	133	44.88	0.108	28	
Benzene	21.83	0.5	20	0	109	88.7	114	21.63	0.897	27	
Toluene	20.61	0.5	20	0	103	89.3	112	20.05	2.75	19	
Ethylbenzene	20.59	0.5	20	0	103	88.6	113	20.64	0.201	10	
Xylenes, Total	61.1	0.5	60	0	102	89.4	112	60.68	0.704	13	

Sample ID **0501215-04D MS** Batch ID: **7358** Test Code: **SW6010A** Units: **mg/L** Analysis Date **2/4/2005 9:20:53 AM** Prep Date **2/3/2005**
Client ID: **Downstream Rive** Run ID: **ICP_050204A** SeqNo: **337810**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5107	0.02	0.5	0	102	75	125	0			
Barium	0.5459	0.02	0.5	0.07248	94.7	75	125	0			
Cadmium	0.4816	0.002	0.5	0	96.3	75	125	0			
Chromium	0.481	0.006	0.5	0.002257	95.8	75	125	0			
Lead	0.4798	0.005	0.5	0	96.0	75	125	0			
Selenium	0.4833	0.05	0.5	0	96.7	75	125	0			
Silver	0.4784	0.005	0.5	0	95.7	75	125	0			

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID **0501215-04D MSD** Batch ID: **7358** Test Code: **SW6010A** Units: **mg/L** Analysis Date **2/4/2005 9:23:18 AM** Prep Date **2/3/2005**
Client ID: **Downstream Rive** Run ID: **ICP_050204A** SeqNo: **337811**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5103	0.02	0.5	0	102	75	125	0.5107	0.0755	20	
Barium	0.57	0.02	0.5	0.07248	99.5	75	125	0.5459	4.32	20	
Cadmium	0.5026	0.002	0.5	0	101	75	125	0.4816	4.26	20	
Chromium	0.504	0.006	0.5	0.002257	100	75	125	0.481	4.67	20	
Lead	0.4997	0.005	0.5	0	99.9	75	125	0.4798	4.07	20	
Selenium	0.5021	0.05	0.5	0	100	75	125	0.4833	3.82	20	
Silver	0.4971	0.005	0.5	0	99.4	75	125	0.4784	3.82	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *10-Feb-05*

CLIENT: San Juan Refining
Work Order: *0501215*
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS** Batch ID: **R14408** Test Code: **E300** Units: **mg/L** Analysis Date **1/26/2005** Prep Date

Client ID: Run ID: **LC_050126B** SeqNo: **335739**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.461	0.1	0.5	0	92.2	90	110	0			
Chloride	4.612	0.1	5	0	92.2	90	110	0			
Nitrogen, Nitrite (As N)	0.909	0.1	1	0	90.9	90	110	0			
Bromide	2.407	0.5	2.5	0	96.3	90	110	0			
Nitrogen, Nitrate (As N)	2.349	0.1	2.5	0	94.0	90	110	0			
Phosphorus, Orthophosphate (As P)	4.671	0.5	5	0	93.4	90	110	0			
Sulfate	9.348	0.5	10	0	93.5	90	110	0			

Sample ID **LCS** Batch ID: **R14408** Test Code: **E300** Units: **mg/L** Analysis Date **1/26/2005** Prep Date

Client ID: Run ID: **LC_050126B** SeqNo: **335760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.476	0.1	0.5	0	95.2	90	110	0			
Chloride	4.61	0.1	5	0	92.2	90	110	0			
Nitrogen, Nitrite (As N)	0.919	0.1	1	0	91.9	90	110	0			
Bromide	2.386	0.5	2.5	0	95.4	90	110	0			
Nitrogen, Nitrate (As N)	2.345	0.1	2.5	0	93.8	90	110	0			
Phosphorus, Orthophosphate (As P)	4.699	0.5	5	0	94.0	90	110	0			
Sulfate	9.397	0.5	10	0	94.0	90	110	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS** Batch ID: **R14445** Test Code: **E300** Units: **mg/L** Analysis Date **2/1/2005** Prep Date
Client ID: Run ID: **LC_050201A** SeqNo: **336656**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.519	0.1	0.5	0	104	90	110	0			
Chloride	4.62	0.1	5	0	92.4	90	110	0			
Nitrogen, Nitrite (As N)	0.926	0.1	1	0	92.6	90	110	0			
Bromide	2.399	0.5	2.5	0	96.0	90	110	0			
Nitrogen, Nitrate (As N)	2.341	0.1	2.5	0	93.6	90	110	0			
Phosphorus, Orthophosphate (As P)	4.702	0.5	5	0	94.0	90	110	0			
Sulfate	9.714	0.5	10	0	97.1	90	110	0			

Sample ID **LCS-7325** Batch ID: **7325** Test Code: **SW8015** Units: **mg/L** Analysis Date **2/2/2005 12:55:50 PM** Prep Date **1/28/2005**
Client ID: Run ID: **FID(17A) 2_050202A** SeqNo: **337439**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.743	1	5	0	115	81.2	149	0			

Sample ID **LCSD-7325** Batch ID: **7325** Test Code: **SW8015** Units: **mg/L** Analysis Date **2/2/2005 1:25:40 PM** Prep Date **1/28/2005**
Client ID: Run ID: **FID(17A) 2_050202A** SeqNo: **337442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.25	1	5	0	125	81.2	149	5.743	8.46	23	

Sample ID **GRO std 2.5ug** Batch ID: **R14397** Test Code: **SW8015** Units: **mg/L** Analysis Date **1/26/2005 6:34:37 PM** Prep Date
Client ID: Run ID: **PIDFID_050126A** SeqNo: **335489**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4828	0.05	0.5	0	96.6	82.6	114	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **BTEX std 75ng** Batch ID: **R14397** Test Code: **SW8021** Units: **µg/L** Analysis Date **1/26/2005 8:13:07 AM** Prep Date
Client ID: Run ID: **PIDFID_050126A** SeqNo: **335497**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	36.15	2.5	30	0	120	64.5	133	0			
Benzene	15.96	0.5	15	0	106	88.7	114	0			
Toluene	14.95	0.5	15	0	99.6	89.3	112	0			
Ethylbenzene	14.82	0.5	15	0	98.8	88.6	113	0			
Xylenes, Total	45.06	0.5	45	0	100	89.4	112	0			

Sample ID **LCS-7316** Batch ID: **7316** Test Code: **SW8270C** Units: **µg/L** Analysis Date **2/2/2005** Prep Date **1/28/2005**
Client ID: Run ID: **ELMO_050202A** SeqNo: **337294**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	80.18	10	100	0	80.2	11	123	0			
4-Chloro-3-methylphenol	155.1	20	200	0	77.6	15.4	119	0			
2-Chlorophenol	156.7	10	200	0	78.4	12.2	122	0			
1,4-Dichlorobenzene	70.56	10	100	0	70.6	16.9	100	0			
2,4-Dinitrotoluene	82.5	10	100	0	82.5	13	138	0			
N-Nitrosodi-n-propylamine	77.22	10	100	0	77.2	9.93	122	0			
4-Nitrophenol	74.9	50	200	0	37.5	-20.5	87.4	0			
Pentachlorophenol	129.9	50	200	0	64.9	-0.355	114	0			
Phenol	85.58	10	200	0	42.8	7.53	73.1	0			
Pyrene	74.58	15	100	0	74.6	12.6	140	0			
1,2,4-Trichlorobenzene	70.62	10	100	0	70.6	17.4	98.7	0			

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-7316** Batch ID: **7316** Test Code: **SW8270C** Units: **µg/L** Analysis Date **2/2/2005** Prep Date **1/28/2005**
Client ID: Run ID: **ELMO_050202A** SeqNo: **337296**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	75.68	10	100	0	75.7	11	123	80.18	5.77	30.5	
4-Chloro-3-methylphenol	159.3	20	200	0	79.6	15.4	119	155.1	2.63	28.6	
2-Chlorophenol	148.1	10	200	0	74.1	12.2	122	156.7	5.64	107	
1,4-Dichlorobenzene	66.46	10	100	0	66.5	16.9	100	70.56	5.98	62.1	
2,4-Dinitrotoluene	74.14	10	100	0	74.1	13	138	82.5	10.7	14.7	
N-Nitrosodi-n-propylamine	72.52	10	100	0	72.5	9.93	122	77.22	6.28	30.3	
4-Nitrophenol	68.58	50	200	0	34.3	12.5	87.4	74.9	8.81	36.3	
Pentachlorophenol	115.9	50	200	0	57.9	3.55	114	129.9	11.4	49	
Phenol	79.9	10	200	0	40.0	7.53	73.1	85.58	6.86	52.4	
Pyrene	76.56	15	100	0	76.6	12.6	140	74.58	2.62	16.3	
1,2,4-Trichlorobenzene	68.74	10	100	0	68.7	17.4	98.7	70.62	2.70	36.4	

Sample ID **LCS-7344** Batch ID: **7344** Test Code: **SW7470** Units: **mg/L** Analysis Date **2/1/2005** Prep Date **2/1/2005**
Client ID: Run ID: **MI-LA254_050201A** SeqNo: **336786**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004821	0.0002	0.005	0.0000411	95.6	75.2	134	0			

Sample ID **LCSD-7344** Batch ID: **7344** Test Code: **SW7470** Units: **mg/L** Analysis Date **2/1/2005** Prep Date **2/1/2005**
Client ID: Run ID: **MI-LA254_050201A** SeqNo: **336804**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005065	0.0002	0.005	0.0000411	100	75.2	134	0.004821	4.93	0	

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Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS** Batch ID: **R14414** Test Code: **SW6010A** Units: **mg/L** Analysis Date **1/27/2005 10:40:15 AM** Prep Date

Client ID: Run ID: **ICP_050127A** SeqNo: **335880**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5037	0.02	0.5	0	101	80	120	0			
Barium	0.4772	0.002	0.5	0	95.4	80	120	0			
Cadmium	0.4981	0.002	0.5	0	99.6	80	120	0			
Calcium	48.49	1	50.5	0	96.0	80	120	0			
Chromium	0.4786	0.006	0.5	0	95.7	80	120	0			
Copper	0.4762	0.006	0.5	0	95.2	80	120	0			
Iron	0.4811	0.02	0.5	0	96.2	80	120	0			
Lead	0.4782	0.005	0.5	0	95.6	80	120	0			
Magnesium	50.05	1	50.5	0	99.1	80	120	0			
Manganese	0.4883	0.002	0.5	0	97.7	80	120	0			
Potassium	51.54	1	55	0	93.7	80	120	0			
Selenium	0.5122	0.05	0.5	0	102	80	120	0			
Silver	0.4895	0.005	0.5	0	97.9	80	120	0			
Sodium	52.11	1	50.5	0	103	80	120	0			
Uranium	2.391	0.1	5	0	47.8	80	120	0			S
Zinc	0.4908	0.005	0.5	0	98.2	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD** Batch ID: **R14414** Test Code: **SW6010A** Units: **mg/L** Analysis Date **1/27/2005 10:43:25 AM** Prep Date
Client ID: Run ID: **ICP_050127A** SeqNo: **335881**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4861	0.02	0.5	0	97.2	80	120	0.5037	3.56	20	
Barium	0.4712	0.002	0.5	0	94.2	80	120	0.4772	1.26	20	
Cadmium	0.4846	0.002	0.5	0	96.9	80	120	0.4981	2.76	20	
Calcium	48.56	1	50.5	0	96.2	80	120	48.49	0.142	20	
Chromium	0.467	0.006	0.5	0	93.4	80	120	0.4786	2.46	20	
Copper	0.4755	0.006	0.5	0	95.1	80	120	0.4762	0.154	20	
Iron	0.4791	0.02	0.5	0	95.8	80	120	0.4811	0.417	20	
Lead	0.47	0.005	0.5	0	94.0	80	120	0.4782	1.73	20	
Magnesium	50.09	1	50.5	0	99.2	80	120	50.05	0.0827	20	
Manganese	0.4826	0.002	0.5	0	96.5	80	120	0.4883	1.17	20	
Potassium	51.54	1	55	0	93.7	80	120	51.54	0.0126	20	
Selenium	0.5215	0.05	0.5	0	104	80	120	0.5122	1.79	20	
Silver	0.4883	0.005	0.5	0	97.7	80	120	0.4895	0.255	20	
Sodium	52.06	1	50.5	0	103	80	120	52.11	0.0971	20	
Uranium	2.402	0.1	5	0	48.0	80	120	2.391	0.459	20	S
Zinc	0.4778	0.005	0.5	0	95.6	80	120	0.4908	2.69	20	

Sample ID **LCS-7358** Batch ID: **7358** Test Code: **SW6010A** Units: **mg/L** Analysis Date **2/4/2005 8:23:59 AM** Prep Date **2/3/2005**
Client ID: Run ID: **ICP_050204A** SeqNo: **337794**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5056	0.02	0.5	0.01213	98.7	80	120	0			
Barium	0.4873	0.02	0.5	0	97.5	80	120	0			
Cadmium	0.4956	0.002	0.5	0	99.1	80	120	0			
Chromium	0.495	0.006	0.5	0.001572	98.7	80	120	0			
Lead	0.4949	0.005	0.5	0	99.0	80	120	0			
Selenium	0.473	0.05	0.5	0	94.6	80	120	0			
Silver	0.4892	0.005	0.5	0.0007846	97.7	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0501215
Project: River Sampling 1st Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-7358** Batch ID: **7358** Test Code: **SW6010A** Units: **mg/L** Analysis Date **2/4/2005 8:26:39 AM** Prep Date **2/3/2005**
Client ID: Run ID: **ICP_050204A** SeqNo: **337795**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5162	0.02	0.5	0.01213	101	80	120	0.5056	2.08	20	
Barium	0.473	0.02	0.5	0	94.6	80	120	0.4873	2.99	20	
Cadmium	0.4793	0.002	0.5	0	95.9	80	120	0.4956	3.35	20	
Chromium	0.4794	0.006	0.5	0.001572	95.6	80	120	0.495	3.20	20	
Lead	0.4783	0.005	0.5	0	95.7	80	120	0.4949	3.40	20	
Selenium	0.4708	0.05	0.5	0	94.2	80	120	0.473	0.468	20	
Silver	0.4723	0.005	0.5	0.0007846	94.3	80	120	0.4892	3.52	20	

Sample ID **LCS-7320** Batch ID: **7320** Test Code: **E160.1** Units: **mg/L** Analysis Date **1/31/2005** Prep Date **1/28/2005**
Client ID: Run ID: **WC_050131D** SeqNo: **336451**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1034	50	1000	0	103	80	120	0			

Sample ID **LCS-7329** Batch ID: **7329** Test Code: **E160.1** Units: **mg/L** Analysis Date **2/1/2005** Prep Date **1/31/2005**
Client ID: Run ID: **WC_050201C** SeqNo: **336664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1012	50	1000	0	101	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 1/26/2005

Work Order Number 0501215 | Received by AT

Checklist completed by _____ 1/26/05
Signature | Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
samples received within holding time?	Yes ☑	No ☐		
ater - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? **2°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refinery
Address: #50 CR 4990
Bloom field, NM
87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: River Sampling 1st QTR - 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado
Sample Temperature: 2.0

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + ~~TMB~~'s (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals - Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC - Dissolved Metals	NO_3 Backup	Gen Chem - Anion/Cation		Air Bubbles or Headspace (Y or N)
1/25/05	930am	H_2O	Upstream-River	2-VOA	X			0501215-1	X																
				2-VOA	X						X														
				1-500ml		X										X									
				1-125ml		X Filtered															X				
				1-~~500ml~~ 125ml			H_2SO_4															X			
				1-~~1000ml~~ 500ml																			X		
				1-liter			Amber													X					

Date: 1/25/05 Time: 205pm Relinquished By: (Signature) Cindy Hurtado
Received By: (Signature) 1/26/05 1315

Date: Time: Relinquished By: (Signature)
Received By: (Signature)

Remarks:

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

Client: San Juan Refinery

Project Name: River Sampling - 1st QTR - 2005

Address: #50 CR4990
Bloomfield, NM
87413

Project #:

Project Manager:

Phone #: 505-632-4161

Sampler: Cindy Hurtado

Fax #: 505-632-3911

Sample Temperature: 2.0

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
1/25/05	~~10AM~~	H_2O	N of MW #45	2-VOA	X			0501252
	10AM			2-VOA	X			
				1-500mL		X		
				1-125mL		X-filtered		
				1-125mL		# H_2SO_4		
				1-~~1000~~mL				
				1-liter			Amber	

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

BTEX + MTBE + ~~TMB~~'s (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals-Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC-Dissolved Metals	NO3 Backup	GEN Chem - Anions/Cations		Air Bubbles or Headspace (Y or N)
X																
		X														
							X									
												X				
													X			
														X		
											X					
											~~X~~					

Remarks:

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1/25/05	205pm	Cindy Hurtado	1/26/05 1315
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐

Other:

Client: San Juan Refining

Project Name: River Sampling - 1st QTR - 2005

Address: #50 CR 4990 Bloomfield, NM 87413

Project #:

Project Manager:

Phone #: 505-632-4161

Fax #: 505-632-3911

Sampler: Cindy Hurtado / RS

Sample Temperature: 20

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
1/25/05	11AM	H_2O	N of MW #46	2-VOA	X			0501253
				2-VOA	X			
				1-500ml		X		
				1-125ml		X-filtered		
				1-125ml			H_2SO_4	
				1-1000ml				
				1-liter			Amber	

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals - Total	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC-Dissolved Metals	NO_3 Backup	Gen Chem Anion/Cation		Air Bubbles or Headspace (Y or N)
X																
		X														
							X									
												X				
													X			
														X		
											X					

Date: 1/25/05 Time: 2pm Relinquished By: (Signature) Cindy Hurtado

Received By: (Signature) 1/26/05 1315

Date: Time: Relinquished By: (Signature)

Received By: (Signature)

Remarks:

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐
Other:

Client: San Juan Refining
Address: #50 CR 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: River Sampling - 1st QTR-2005
Project #:
Project Manager:
Sampler: Cindy Hurtado
Sample Temperature: 2.0

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
1/25/05	1130 Am	H_2O	Downstream-River	2-VOA	X			0501215-4
				2-VOA	X			
				1-500 ml		X		
				1-125 ml		X	Filtered	
				1-125 ml			H_2SO_4	
				1-~~plastic~~ 500 ml				
				1-liter			Amber	
			Trip Blank					-5

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	Date	Time
01/25/05	2pm	Cindy Hurtado		1/26/05	1305

Remarks:

BTEX + MTBE + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals Totals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC - Dissolved Metals	NO_3 Back up	Cation Anion Balance		Air Bubbles or Headspace (Y or N)
X																
		X														
							X									
												X				
													X			
											#4			X		
											X					

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

April 29, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: River Sampling 2nd Qtr-2005 Order No.: 0504130

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 4 samples on 4/14/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *29-Apr-05*

CLIENT: San Juan Refining
Client Sample ID: Upstream River
Lab Order: 0504130
Collection Date: 4/13/2005 8:30:00 AM
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.22	0.10		mg/L	1	4/14/2005
Chloride	4.1	0.10		mg/L	1	4/14/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	4/14/2005
Bromide	ND	0.50		mg/L	1	4/14/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	4/14/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	4/14/2005
Sulfate	88	2.5		mg/L	5	4/26/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	96	4.0		mg/L CaCO3	2	4/26/2005
Carbonate	ND	4.0		mg/L CaCO3	2	4/26/2005
Bicarbonate	96	4.0		mg/L CaCO3	2	4/26/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/22/2005 10:55:03 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/22/2005 10:55:03 AM
Surr: DNOP	103	58-140		%REC	1	4/22/2005 10:55:03 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/15/2005 10:10:24 PM
Surr: BFB	94.2	78.3-120		%REC	1	4/15/2005 10:10:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/15/2005 10:10:24 PM
Benzene	ND	0.50		µg/L	1	4/15/2005 10:10:24 PM
Toluene	ND	0.50		µg/L	1	4/15/2005 10:10:24 PM
Ethylbenzene	ND	0.50		µg/L	1	4/15/2005 10:10:24 PM
Xylenes, Total	ND	0.50		µg/L	1	4/15/2005 10:10:24 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	4/22/2005
Acenaphthylene	ND	10		µg/L	1	4/22/2005
Aniline	ND	10		µg/L	1	4/22/2005
Anthracene	ND	10		µg/L	1	4/22/2005
Azobenzene	ND	10		µg/L	1	4/22/2005
Benz(a)anthracene	ND	15		µg/L	1	4/22/2005
Benzo(a)pyrene	ND	10		µg/L	1	4/22/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	4/22/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/22/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	4/22/2005
Benzoic acid	ND	50		µg/L	1	4/22/2005
Benzyl alcohol	ND	20		µg/L	1	4/22/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/22/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-01

Client Sample ID: Upstream River
Collection Date: 4/13/2005 8:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	4/22/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	4/22/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	4/22/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/22/2005
Butyl benzyl phthalate	ND	15		µg/L	1	4/22/2005
Carbazole	ND	10		µg/L	1	4/22/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	4/22/2005
4-Chloroaniline	ND	20		µg/L	1	4/22/2005
2-Chloronaphthalene	ND	10		µg/L	1	4/22/2005
2-Chlorophenol	ND	10		µg/L	1	4/22/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	4/22/2005
Chrysene	ND	15		µg/L	1	4/22/2005
Di-n-butyl phthalate	ND	10		µg/L	1	4/22/2005
Di-n-octyl phthalate	ND	15		µg/L	1	4/22/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/22/2005
Dibenzofuran	ND	10		µg/L	1	4/22/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	4/22/2005
Diethyl phthalate	ND	10		µg/L	1	4/22/2005
Dimethyl phthalate	ND	10		µg/L	1	4/22/2005
2,4-Dichlorophenol	ND	10		µg/L	1	4/22/2005
2,4-Dimethylphenol	ND	10		µg/L	1	4/22/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	4/22/2005
2,4-Dinitrophenol	ND	50		µg/L	1	4/22/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	4/22/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	4/22/2005
Fluoranthene	ND	10		µg/L	1	4/22/2005
Fluorene	ND	10		µg/L	1	4/22/2005
Hexachlorobenzene	ND	10		µg/L	1	4/22/2005
Hexachlorobutadiene	ND	10		µg/L	1	4/22/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/22/2005
Hexachloroethane	ND	10		µg/L	1	4/22/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/22/2005
Isophorone	ND	10		µg/L	1	4/22/2005
2-Methylnaphthalene	ND	10		µg/L	1	4/22/2005
2-Methylphenol	ND	15		µg/L	1	4/22/2005
3+4-Methylphenol	ND	10		µg/L	1	4/22/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/22/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	4/22/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/22/2005

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R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-01

Client Sample ID: Upstream River
Collection Date: 4/13/2005 8:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	4/22/2005
2-Nitroaniline	ND	50		µg/L	1	4/22/2005
3-Nitroaniline	ND	50		µg/L	1	4/22/2005
4-Nitroaniline	ND	20		µg/L	1	4/22/2005
Nitrobenzene	ND	10		µg/L	1	4/22/2005
2-Nitrophenol	ND	15		µg/L	1	4/22/2005
4-Nitrophenol	ND	50		µg/L	1	4/22/2005
Pentachlorophenol	ND	50		µg/L	1	4/22/2005
Phenanthrene	ND	10		µg/L	1	4/22/2005
Phenol	ND	10		µg/L	1	4/22/2005
Pyrene	ND	15		µg/L	1	4/22/2005
Pyridine	ND	30		µg/L	1	4/22/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/22/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/22/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	4/22/2005
Surr: 2,4,6-Tribromophenol	60.3	16.6-115		%REC	1	4/22/2005
Surr: 2-Fluorobiphenyl	58.3	37-95.7		%REC	1	4/22/2005
Surr: 2-Fluorophenol	42.8	9.54-89.8		%REC	1	4/22/2005
Surr: 4-Terphenyl-d14	69.1	47.9-115		%REC	1	4/22/2005
Surr: Nitrobenzene-d5	62.3	38-106		%REC	1	4/22/2005
Surr: Phenol-d6	29.4	10.7-63.4		%REC	1	4/22/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	400	0.010		µmhos/cm	1	4/21/2005
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	ND	0.00020		mg/L	1	4/26/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	4/22/2005 11:10:49 AM
Barium	0.073	0.0020		mg/L	1	4/22/2005 11:10:49 AM
Cadmium	ND	0.0020		mg/L	1	4/22/2005 11:10:49 AM
Calcium	38	1.0		mg/L	1	4/22/2005 11:10:49 AM
Chromium	ND	0.0060		mg/L	1	4/22/2005 11:10:49 AM
Copper	ND	0.0060		mg/L	1	4/22/2005 11:10:49 AM
Iron	0.037	0.020		mg/L	1	4/22/2005 11:10:49 AM
Lead	ND	0.0050		mg/L	1	4/22/2005 11:10:49 AM
Magnesium	6.7	1.0		mg/L	1	4/22/2005 11:10:49 AM
Manganese	0.014	0.0020		mg/L	1	4/22/2005 11:10:49 AM
Potassium	2.1	1.0		mg/L	1	4/22/2005 3:06:16 PM
Selenium	ND	0.050		mg/L	1	4/22/2005 11:10:49 AM
Silver	ND	0.0050		mg/L	1	4/22/2005 3:06:16 PM
Sodium	28	1.0		mg/L	1	4/22/2005 11:10:49 AM
Uranium	ND	0.10		mg/L	1	4/22/2005 11:10:49 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Client Sample ID: Upstream River
Lab Order: 0504130
Collection Date: 4/13/2005 8:30:00 AM
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.010	0.0050		mg/L	1	4/22/2005 3:06:16 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	4/26/2005 9:21:05 AM
Barium	0.092	0.020		mg/L	1	4/28/2005 9:14:26 AM
Cadmium	ND	0.0020		mg/L	1	4/26/2005 9:21:05 AM
Chromium	ND	0.0060		mg/L	1	4/26/2005 9:21:05 AM
Lead	ND	0.0050		mg/L	1	4/26/2005 9:21:05 AM
Selenium	ND	0.050		mg/L	1	4/26/2005 9:21:05 AM
Silver	ND	0.0050		mg/L	1	4/26/2005 9:21:05 AM
EPA METHOD 160.1: TDS						Analyst: MAP
Total Dissolved Solids	260	50		mg/L	1	4/21/2005

Qualifiers:

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J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Iall Environmental Analysis Laboratory

Date: *29-Apr-05*

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-02

Client Sample ID: N of MW #45
Collection Date: 4/13/2005 10:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.16	0.10		mg/L	1	4/14/2005
Chloride	4.0	0.10		mg/L	1	4/14/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	4/14/2005
Bromide	ND	0.50		mg/L	1	4/14/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	4/14/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	4/14/2005
Sulfate	84	2.5		mg/L	5	4/26/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	100	4.0		mg/L CaCO3	2	4/26/2005
Carbonate	ND	4.0		mg/L CaCO3	2	4/26/2005
Bicarbonate	100	4.0		mg/L CaCO3	2	4/26/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/22/2005 11:24:58 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/22/2005 11:24:58 AM
Surr: DNOP	111	58-140		%REC	1	4/22/2005 11:24:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/15/2005 10:40:46 PM
Surr: BFB	93.9	78.3-120		%REC	1	4/15/2005 10:40:46 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/15/2005 10:40:46 PM
Benzene	ND	0.50		µg/L	1	4/15/2005 10:40:46 PM
Toluene	ND	0.50		µg/L	1	4/15/2005 10:40:46 PM
Ethylbenzene	ND	0.50		µg/L	1	4/15/2005 10:40:46 PM
Xylenes, Total	ND	0.50		µg/L	1	4/15/2005 10:40:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	4/22/2005
Acenaphthylene	ND	10		µg/L	1	4/22/2005
Aniline	ND	10		µg/L	1	4/22/2005
Anthracene	ND	10		µg/L	1	4/22/2005
Azobenzene	ND	10		µg/L	1	4/22/2005
Benz(a)anthracene	ND	15		µg/L	1	4/22/2005
Benzo(a)pyrene	ND	10		µg/L	1	4/22/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	4/22/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/22/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	4/22/2005
Benzoic acid	ND	50		µg/L	1	4/22/2005
Benzyl alcohol	ND	20		µg/L	1	4/22/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/22/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Client Sample ID: N of MW #45
Lab Order: 0504130
Collection Date: 4/13/2005 10:00:00 AM
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	4/22/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	4/22/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	4/22/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/22/2005
Butyl benzyl phthalate	ND	15		µg/L	1	4/22/2005
Carbazole	ND	10		µg/L	1	4/22/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	4/22/2005
4-Chloroaniline	ND	20		µg/L	1	4/22/2005
2-Chloronaphthalene	ND	10		µg/L	1	4/22/2005
2-Chlorophenol	ND	10		µg/L	1	4/22/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	4/22/2005
Chrysene	ND	15		µg/L	1	4/22/2005
Di-n-butyl phthalate	ND	10		µg/L	1	4/22/2005
Di-n-octyl phthalate	ND	15		µg/L	1	4/22/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/22/2005
Dibenzofuran	ND	10		µg/L	1	4/22/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	4/22/2005
Diethyl phthalate	ND	10		µg/L	1	4/22/2005
Dimethyl phthalate	ND	10		µg/L	1	4/22/2005
2,4-Dichlorophenol	ND	10		µg/L	1	4/22/2005
2,4-Dimethylphenol	ND	10		µg/L	1	4/22/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	4/22/2005
2,4-Dinitrophenol	ND	50		µg/L	1	4/22/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	4/22/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	4/22/2005
Fluoranthene	ND	10		µg/L	1	4/22/2005
Fluorene	ND	10		µg/L	1	4/22/2005
Hexachlorobenzene	ND	10		µg/L	1	4/22/2005
Hexachlorobutadiene	ND	10		µg/L	1	4/22/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/22/2005
Hexachloroethane	ND	10		µg/L	1	4/22/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/22/2005
Isophorone	ND	10		µg/L	1	4/22/2005
2-Methylnaphthalene	ND	10		µg/L	1	4/22/2005
2-Methylphenol	ND	15		µg/L	1	4/22/2005
3+4-Methylphenol	ND	10		µg/L	1	4/22/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/22/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	4/22/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/22/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Iall Environmental Analysis Laboratory

Date: *29-Apr-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #45
Lab Order: 0504130
Collection Date: 4/13/2005 10:00:00 AM
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	4/22/2005
2-Nitroaniline	ND	50		µg/L	1	4/22/2005
3-Nitroaniline	ND	50		µg/L	1	4/22/2005
4-Nitroaniline	ND	20		µg/L	1	4/22/2005
Nitrobenzene	ND	10		µg/L	1	4/22/2005
2-Nitrophenol	ND	15		µg/L	1	4/22/2005
4-Nitrophenol	ND	50		µg/L	1	4/22/2005
Pentachlorophenol	ND	50		µg/L	1	4/22/2005
Phenanthrene	ND	10		µg/L	1	4/22/2005
Phenol	ND	10		µg/L	1	4/22/2005
Pyrene	ND	15		µg/L	1	4/22/2005
Pyridine	ND	30		µg/L	1	4/22/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/22/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/22/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	4/22/2005
Surr: 2,4,6-Tribromophenol	68.8	16.6-115		%REC	1	4/22/2005
Surr: 2-Fluorobiphenyl	62.7	37-95.7		%REC	1	4/22/2005
Surr: 2-Fluorophenol	45.0	9.54-89.8		%REC	1	4/22/2005
Surr: 4-Terphenyl-d14	73.9	47.9-115		%REC	1	4/22/2005
Surr: Nitrobenzene-d5	61.5	38-106		%REC	1	4/22/2005
Surr: Phenol-d6	32.8	10.7-63.4		%REC	1	4/22/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMC**
Specific Conductance	390	0.010		µmhos/cm	1	4/21/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	4/26/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	4/22/2005 11:13:49 AM
Barium	0.075	0.0020		mg/L	1	4/22/2005 11:13:49 AM
Cadmium	ND	0.0020		mg/L	1	4/22/2005 11:13:49 AM
Calcium	38	1.0		mg/L	1	4/22/2005 11:13:49 AM
Chromium	ND	0.0060		mg/L	1	4/22/2005 11:13:49 AM
Copper	ND	0.0060		mg/L	1	4/22/2005 11:13:49 AM
Iron	0.038	0.020		mg/L	1	4/22/2005 11:13:49 AM
Lead	ND	0.0050		mg/L	1	4/22/2005 11:13:49 AM
Magnesium	6.6	1.0		mg/L	1	4/22/2005 11:13:49 AM
Manganese	0.0094	0.0020		mg/L	1	4/22/2005 11:13:49 AM
Potassium	2.1	1.0		mg/L	1	4/22/2005 3:08:49 PM
Selenium	ND	0.050		mg/L	1	4/22/2005 11:13:49 AM
Silver	ND	0.0050		mg/L	1	4/22/2005 3:08:49 PM
Sodium	26	1.0		mg/L	1	4/22/2005 11:13:49 AM
Uranium	ND	0.10		mg/L	1	4/22/2005 11:13:49 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *29-Apr-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #45
Lab Order: 0504130
Collection Date: 4/13/2005 10:00:00 AM
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.016	0.0050		mg/L	1	4/22/2005 3:08:49 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	4/26/2005 9:23:58 AM
Barium	0.084	0.020		mg/L	1	4/28/2005 9:16:02 AM
Cadmium	ND	0.0020		mg/L	1	4/26/2005 9:23:58 AM
Chromium	ND	0.0060		mg/L	1	4/26/2005 9:23:58 AM
Lead	ND	0.0050		mg/L	1	4/26/2005 9:23:58 AM
Selenium	ND	0.050		mg/L	1	4/26/2005 9:23:58 AM
Silver	ND	0.0050		mg/L	1	4/26/2005 9:23:58 AM
EPA METHOD 160.1: TDS						Analyst: **MAP**
Total Dissolved Solids	260	50		mg/L	1	4/21/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-03

Client Sample ID: N of MW #46
Collection Date: 4/13/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.16	0.10		mg/L	1	4/14/2005
Chloride	4.0	0.10		mg/L	1	4/14/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	4/14/2005
Bromide	ND	0.50		mg/L	1	4/14/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	4/14/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	4/14/2005
Sulfate	82	2.5		mg/L	5	4/26/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	100	4.0		mg/L CaCO3	2	4/26/2005
Carbonate	ND	4.0		mg/L CaCO3	2	4/26/2005
Bicarbonate	100	4.0		mg/L CaCO3	2	4/26/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/22/2005 11:55:39 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/22/2005 11:55:39 AM
Surr: DNOP	80.0	58-140		%REC	1	4/22/2005 11:55:39 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/15/2005 11:11:07 PM
Surr: BFB	97.6	78.3-120		%REC	1	4/15/2005 11:11:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/15/2005 11:11:07 PM
Benzene	ND	0.50		µg/L	1	4/15/2005 11:11:07 PM
Toluene	ND	0.50		µg/L	1	4/15/2005 11:11:07 PM
Ethylbenzene	ND	0.50		µg/L	1	4/15/2005 11:11:07 PM
Xylenes, Total	ND	0.50		µg/L	1	4/15/2005 11:11:07 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	4/22/2005
Acenaphthylene	ND	10		µg/L	1	4/22/2005
Aniline	ND	10		µg/L	1	4/22/2005
Anthracene	ND	10		µg/L	1	4/22/2005
Azobenzene	ND	10		µg/L	1	4/22/2005
Benz(a)anthracene	ND	15		µg/L	1	4/22/2005
Benzo(a)pyrene	ND	10		µg/L	1	4/22/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	4/22/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/22/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	4/22/2005
Benzoic acid	ND	50		µg/L	1	4/22/2005
Benzyl alcohol	ND	20		µg/L	1	4/22/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/22/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-03

Client Sample ID: N of MW #46
Collection Date: 4/13/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	4/22/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	4/22/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	4/22/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/22/2005
Butyl benzyl phthalate	ND	15		µg/L	1	4/22/2005
Carbazole	ND	10		µg/L	1	4/22/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	4/22/2005
4-Chloroaniline	ND	20		µg/L	1	4/22/2005
2-Chloronaphthalene	ND	10		µg/L	1	4/22/2005
2-Chlorophenol	ND	10		µg/L	1	4/22/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	4/22/2005
Chrysene	ND	15		µg/L	1	4/22/2005
Di-n-butyl phthalate	ND	10		µg/L	1	4/22/2005
Di-n-octyl phthalate	ND	15		µg/L	1	4/22/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/22/2005
Dibenzofuran	ND	10		µg/L	1	4/22/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	4/22/2005
Diethyl phthalate	ND	10		µg/L	1	4/22/2005
Dimethyl phthalate	ND	10		µg/L	1	4/22/2005
2,4-Dichlorophenol	ND	10		µg/L	1	4/22/2005
2,4-Dimethylphenol	ND	10		µg/L	1	4/22/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	4/22/2005
2,4-Dinitrophenol	ND	50		µg/L	1	4/22/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	4/22/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	4/22/2005
Fluoranthene	ND	10		µg/L	1	4/22/2005
Fluorene	ND	10		µg/L	1	4/22/2005
Hexachlorobenzene	ND	10		µg/L	1	4/22/2005
Hexachlorobutadiene	ND	10		µg/L	1	4/22/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/22/2005
Hexachloroethane	ND	10		µg/L	1	4/22/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/22/2005
Isophorone	ND	10		µg/L	1	4/22/2005
2-Methylnaphthalene	ND	10		µg/L	1	4/22/2005
2-Methylphenol	ND	15		µg/L	1	4/22/2005
3+4-Methylphenol	ND	10		µg/L	1	4/22/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/22/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	4/22/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/22/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-03

Client Sample ID: N of MW #46
Collection Date: 4/13/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	4/22/2005
2-Nitroaniline	ND	50		µg/L	1	4/22/2005
3-Nitroaniline	ND	50		µg/L	1	4/22/2005
4-Nitroaniline	ND	20		µg/L	1	4/22/2005
Nitrobenzene	ND	10		µg/L	1	4/22/2005
2-Nitrophenol	ND	15		µg/L	1	4/22/2005
4-Nitrophenol	ND	50		µg/L	1	4/22/2005
Pentachlorophenol	ND	50		µg/L	1	4/22/2005
Phenanthrene	ND	10		µg/L	1	4/22/2005
Phenol	ND	10		µg/L	1	4/22/2005
Pyrene	ND	15		µg/L	1	4/22/2005
Pyridine	ND	30		µg/L	1	4/22/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/22/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/22/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	4/22/2005
Surr: 2,4,6-Tribromophenol	66.0	16.6-115		%REC	1	4/22/2005
Surr: 2-Fluorobiphenyl	59.6	37-95.7		%REC	1	4/22/2005
Surr: 2-Fluorophenol	47.2	9.54-89.8		%REC	1	4/22/2005
Surr: 4-Terphenyl-d14	67.5	47.9-115		%REC	1	4/22/2005
Surr: Nitrobenzene-d5	62.4	38-106		%REC	1	4/22/2005
Surr: Phenol-d6	30.8	10.7-63.4		%REC	1	4/22/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMC**
Specific Conductance	390	0.010		µmhos/cm	1	4/21/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.00031	0.00020		mg/L	1	4/26/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	4/22/2005 11:16:46 AM
Barium	0.073	0.0020		mg/L	1	4/22/2005 11:16:46 AM
Cadmium	ND	0.0020		mg/L	1	4/22/2005 11:16:46 AM
Calcium	38	1.0		mg/L	1	4/22/2005 11:16:46 AM
Chromium	ND	0.0060		mg/L	1	4/22/2005 11:16:46 AM
Copper	ND	0.0060		mg/L	1	4/22/2005 11:16:46 AM
Iron	0.041	0.020		mg/L	1	4/22/2005 11:16:46 AM
Lead	ND	0.0050		mg/L	1	4/22/2005 11:16:46 AM
Magnesium	6.5	1.0		mg/L	1	4/22/2005 11:16:46 AM
Manganese	0.0080	0.0020		mg/L	1	4/22/2005 11:16:46 AM
Potassium	2.1	1.0		mg/L	1	4/22/2005 3:11:23 PM
Selenium	ND	0.050		mg/L	1	4/22/2005 11:16:46 AM
Silver	ND	0.0050		mg/L	1	4/22/2005 3:11:23 PM
Sodium	25	1.0		mg/L	1	4/22/2005 11:16:46 AM
Uranium	ND	0.10		mg/L	1	4/22/2005 11:16:46 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-03

Client Sample ID: N of MW #46
Collection Date: 4/13/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.028	0.0050		mg/L	1	4/22/2005 3:11:23 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	4/26/2005 9:26:50 AM
Barium	0.083	0.020		mg/L	1	4/28/2005 9:17:23 AM
Cadmium	ND	0.0020		mg/L	1	4/26/2005 9:26:50 AM
Chromium	ND	0.0060		mg/L	1	4/26/2005 9:26:50 AM
Lead	ND	0.0050		mg/L	1	4/26/2005 9:26:50 AM
Selenium	ND	0.050		mg/L	1	4/26/2005 9:26:50 AM
Silver	ND	0.0050		mg/L	1	4/26/2005 9:26:50 AM
EPA METHOD 160.1: TDS						Analyst: **MAP**
Total Dissolved Solids	260	50		mg/L	1	4/21/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-04

Client Sample ID: Downstream River
Collection Date: 4/13/2005 9:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.15	0.10		mg/L	1	4/14/2005
Chloride	4.2	0.10		mg/L	1	4/14/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	4/14/2005
Bromide	ND	0.50		mg/L	1	4/14/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	4/14/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	4/14/2005
Sulfate	89	2.5		mg/L	5	4/26/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	100	4.0		mg/L CaCO3	2	4/26/2005
Carbonate	ND	4.0		mg/L CaCO3	2	4/26/2005
Bicarbonate	100	4.0		mg/L CaCO3	2	4/26/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/22/2005 12:25:35 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/22/2005 12:25:35 PM
Surr: DNOP	113	58-140		%REC	1	4/22/2005 12:25:35 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/15/2005 11:41:38 PM
Surr: BFB	98.8	78.3-120		%REC	1	4/15/2005 11:41:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/15/2005 11:41:38 PM
Benzene	ND	0.50		µg/L	1	4/15/2005 11:41:38 PM
Toluene	ND	0.50		µg/L	1	4/15/2005 11:41:38 PM
Ethylbenzene	ND	0.50		µg/L	1	4/15/2005 11:41:38 PM
Xylenes, Total	ND	0.50		µg/L	1	4/15/2005 11:41:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	4/22/2005
Acenaphthylene	ND	10		µg/L	1	4/22/2005
Aniline	ND	10		µg/L	1	4/22/2005
Anthracene	ND	10		µg/L	1	4/22/2005
Azobenzene	ND	10		µg/L	1	4/22/2005
Benz(a)anthracene	ND	15		µg/L	1	4/22/2005
Benzo(a)pyrene	ND	10		µg/L	1	4/22/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	4/22/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	4/22/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	4/22/2005
Benzoic acid	ND	50		µg/L	1	4/22/2005
Benzyl alcohol	ND	20		µg/L	1	4/22/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	4/22/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0504130
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-04

Client Sample ID: Downstream River
Collection Date: 4/13/2005 9:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	4/22/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	4/22/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	4/22/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	4/22/2005
Butyl benzyl phthalate	ND	15		µg/L	1	4/22/2005
Carbazole	ND	10		µg/L	1	4/22/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	4/22/2005
4-Chloroaniline	ND	20		µg/L	1	4/22/2005
2-Chloronaphthalene	ND	10		µg/L	1	4/22/2005
2-Chlorophenol	ND	10		µg/L	1	4/22/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	4/22/2005
Chrysene	ND	15		µg/L	1	4/22/2005
Di-n-butyl phthalate	ND	10		µg/L	1	4/22/2005
Di-n-octyl phthalate	ND	15		µg/L	1	4/22/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	4/22/2005
Dibenzofuran	ND	10		µg/L	1	4/22/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	4/22/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	4/22/2005
Diethyl phthalate	ND	10		µg/L	1	4/22/2005
Dimethyl phthalate	ND	10		µg/L	1	4/22/2005
2,4-Dichlorophenol	ND	10		µg/L	1	4/22/2005
2,4-Dimethylphenol	ND	10		µg/L	1	4/22/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	4/22/2005
2,4-Dinitrophenol	ND	50		µg/L	1	4/22/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	4/22/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	4/22/2005
Fluoranthene	ND	10		µg/L	1	4/22/2005
Fluorene	ND	10		µg/L	1	4/22/2005
Hexachlorobenzene	ND	10		µg/L	1	4/22/2005
Hexachlorobutadiene	ND	10		µg/L	1	4/22/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	4/22/2005
Hexachloroethane	ND	10		µg/L	1	4/22/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	4/22/2005
Isophorone	ND	10		µg/L	1	4/22/2005
2-Methylnaphthalene	ND	10		µg/L	1	4/22/2005
2-Methylphenol	ND	15		µg/L	1	4/22/2005
3+4-Methylphenol	ND	10		µg/L	1	4/22/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	4/22/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	4/22/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	4/22/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Client Sample ID: Downstream River
Lab Order: 0504130
Collection Date: 4/13/2005 9:30:00 AM
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	4/22/2005
2-Nitroaniline	ND	50		µg/L	1	4/22/2005
3-Nitroaniline	ND	50		µg/L	1	4/22/2005
4-Nitroaniline	ND	20		µg/L	1	4/22/2005
Nitrobenzene	ND	10		µg/L	1	4/22/2005
2-Nitrophenol	ND	15		µg/L	1	4/22/2005
4-Nitrophenol	ND	50		µg/L	1	4/22/2005
Pentachlorophenol	ND	50		µg/L	1	4/22/2005
Phenanthrene	ND	10		µg/L	1	4/22/2005
Phenol	ND	10		µg/L	1	4/22/2005
Pyrene	ND	15		µg/L	1	4/22/2005
Pyridine	ND	30		µg/L	1	4/22/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	4/22/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	4/22/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	4/22/2005
Surr: 2,4,6-Tribromophenol	69.1	16.6-115		%REC	1	4/22/2005
Surr: 2-Fluorobiphenyl	61.4	37-95.7		%REC	1	4/22/2005
Surr: 2-Fluorophenol	52.1	9.54-89.8		%REC	1	4/22/2005
Surr: 4-Terphenyl-d14	67.7	47.9-115		%REC	1	4/22/2005
Surr: Nitrobenzene-d5	68.6	38-106		%REC	1	4/22/2005
Surr: Phenol-d6	34.6	10.7-63.4		%REC	1	4/22/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMC**
Specific Conductance	400	0.010		µmhos/cm	1	4/21/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	4/26/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	4/22/2005 11:19:44 AM
Barium	0.074	0.0020		mg/L	1	4/22/2005 11:19:44 AM
Cadmium	ND	0.0020		mg/L	1	4/22/2005 11:19:44 AM
Calcium	41	1.0		mg/L	1	4/22/2005 11:19:44 AM
Chromium	ND	0.0060		mg/L	1	4/22/2005 11:19:44 AM
Copper	ND	0.0060		mg/L	1	4/22/2005 11:19:44 AM
Iron	0.035	0.020		mg/L	1	4/22/2005 11:19:44 AM
Lead	ND	0.0050		mg/L	1	4/22/2005 11:19:44 AM
Magnesium	6.8	1.0		mg/L	1	4/22/2005 11:19:44 AM
Manganese	0.033	0.0020		mg/L	1	4/22/2005 11:19:44 AM
Potassium	2.2	1.0		mg/L	1	4/22/2005 3:13:02 PM
Selenium	ND	0.050		mg/L	1	4/22/2005 11:19:44 AM
Silver	ND	0.0050		mg/L	1	4/22/2005 3:13:02 PM
Sodium	27	1.0		mg/L	1	4/22/2005 11:19:44 AM
Uranium	ND	0.10		mg/L	1	4/22/2005 11:19:44 AM

Qualifiers:
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B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Client Sample ID: Downstream River
Lab Order: 0504130
Collection Date: 4/13/2005 9:30:00 AM
Project: River Sampling 2nd Qtr-2005
Lab ID: 0504130-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.018	0.0050		mg/L	1	4/22/2005 3:13:02 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	4/26/2005 9:29:14 AM
Barium	0.12	0.020		mg/L	1	4/28/2005 9:18:58 AM
Cadmium	ND	0.0020		mg/L	1	4/26/2005 9:29:14 AM
Chromium	ND	0.0060		mg/L	1	4/26/2005 9:29:14 AM
Lead	ND	0.0050		mg/L	1	4/26/2005 9:29:14 AM
Selenium	ND	0.050		mg/L	1	4/26/2005 9:29:14 AM
Silver	ND	0.0050		mg/L	1	4/26/2005 9:29:14 AM
EPA METHOD 160.1: TDS						Analyst: MAP
Total Dissolved Solids	270	50		mg/L	1	4/21/2005

Qualifiers:

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J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *29-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT

Method Blank

Sample ID **MBLK** Batch ID: **R15102** Test Code: **E300** Units: **mg/L** Analysis Date **4/14/2005** Prep Date

Client ID: Run ID: **LC_050414A** SeqNo: **352292**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID **MBLK** Batch ID: **R15214** Test Code: **E300** Units: **mg/Kg** Analysis Date **4/26/2005** Prep Date

Client ID: Run ID: **LC_050426A** SeqNo: **355853**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.3									
Chloride	ND	0.3									
Nitrogen, Nitrite (As N)	ND	0.3									
Bromide	ND	0.3									
Nitrogen, Nitrate (As N)	ND	0.3									
Phosphorus, Orthophosphate (As P)	ND	1.5									
Sulfate	ND	1.5									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID **MBLK** Batch ID: **R15214** Test Code: **E300** Units: **mg/L** Analysis Date **4/27/2005** Prep Date
Client ID: Run ID: **LC_050426A** SeqNo: **355954**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	0.227	0.5									J

Sample ID **MBLK** Batch ID: **R15209** Test Code: **E310.1** Units: **mg/L CaCO3** Analysis Date **4/26/2005** Prep Date
Client ID: Run ID: **WC_050426B** SeqNo: **355747**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2									
Carbonate	ND	2									
Bicarbonate	ND	2									

Sample ID **MB-7810** Batch ID: **7810** Test Code: **SW8015** Units: **mg/L** Analysis Date **4/22/2005 9:25:17 AM** Prep Date **4/20/2005**
Client ID: Run ID: **FID(17A) 2_050421A** SeqNo: **354679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.05	0	1	0	105	58	140	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: *River Sampling 2nd Qtr-2005*

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15110** Test Code: **SW8015** Units: **mg/L** Analysis Date **4/15/2005 7:48:44 AM** Prep Date
Client ID: Run ID: **PIDFID_050415A** SeqNo: **352652**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	20.13	0	20	0	101	78.3	120	0			

Sample ID **Reagent Blank 5m** Batch ID: **R15110** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/15/2005 7:48:44 AM** Prep Date
Client ID: Run ID: **PIDFID_050415A** SeqNo: **352651**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID **MB-7812** Batch ID: **7812** Test Code: **SW8270C** Units: **µg/L** Analysis Date **4/22/2005** Prep Date **4/20/2005**
Client ID: Run ID: **ELMO_050422A** SeqNo: **355209**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	10									
Acenaphthylene	ND	10									
Aniline	ND	10									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	10									
Benzo(b)fluoranthene	ND	10									
Benzo(g,h,i)perylene	ND	10									
Benzo(k)fluoranthene	ND	10									
Benzoic acid	ND	50									
Benzyl alcohol	ND	20									
Bis(2-chloroethoxy)methane	ND	10									
Bis(2-chloroethyl)ether	ND	15									
Bis(2-chloroisopropyl)ether	ND	15									
Bis(2-ethylhexyl)phthalate	ND	15									
4-Bromophenyl phenyl ether	ND	10									
Butyl benzyl phthalate	ND	15									
Carbazole	ND	10									
4-Chloro-3-methylphenol	ND	20									
4-Chloroaniline	ND	20									
2-Chloronaphthalene	ND	10									
2-Chlorophenol	ND	10									
4-Chlorophenyl phenyl ether	ND	15									
Chrysene	ND	15									
Di-n-butyl phthalate	ND	10									
Di-n-octyl phthalate	ND	15									
Dibenz(a,h)anthracene	ND	10									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Method Blank

Dibenzofuran	ND	10
1,2-Dichlorobenzene	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
3,3'-Dichlorobenzidine	ND	15
Diethyl phthalate	ND	10
Dimethyl phthalate	ND	10
2,4-Dichlorophenol	ND	10
2,4-Dimethylphenol	ND	10
4,6-Dinitro-2-methylphenol	ND	50
2,4-Dinitrophenol	ND	50
2,4-Dinitrotoluene	ND	10
2,6-Dinitrotoluene	ND	10
Fluoranthene	ND	10
Fluorene	ND	10
Hexachlorobenzene	ND	10
Hexachlorobutadiene	ND	10
Hexachlorocyclopentadiene	ND	10
Hexachloroethane	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Isophorone	ND	10
2-Methylnaphthalene	ND	10
2-Methylphenol	ND	15
3+4-Methylphenol	ND	10
N-Nitrosodi-n-propylamine	ND	10
N-Nitrosodimethylamine	ND	10
N-Nitrosodiphenylamine	ND	10
Naphthalene	ND	10
2-Nitroaniline	ND	50
3-Nitroaniline	ND	50
4-Nitroaniline	ND	20
Nitrobenzene	ND	10
2-Nitrophenol	ND	15

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Method Blank

4-Nitrophenol	ND	50						
Pentachlorophenol	ND	50						
Phenanthrene	ND	10						
Phenol	ND	10						
Pyrene	ND	15						
Pyridine	ND	30						
1,2,4-Trichlorobenzene	ND	10						
2,4,5-Trichlorophenol	ND	10						
2,4,6-Trichlorophenol	ND	15						
Surr: 2,4,6-Tribromophenol	149.8	0	200	0	74.9	16.6	115	0
Surr: 2-Fluorobiphenyl	69.22	0	100	0	69.2	37	95.7	0
Surr: 2-Fluorophenol	128.3	0	200	0	64.1	9.54	89.8	0
Surr: 4-Terphenyl-d14	79.14	0	100	0	79.1	51.2	125	0
Surr: Nitrobenzene-d5	78.3	0	100	0	78.3	38	106	0
Surr: Phenol-d6	92.62	0	200	0	46.3	10.7	63.4	0

Sample ID **MB-7857** Batch ID: **7857** Test Code: **SW7470** Units: **mg/L** Analysis Date **4/26/2005** Prep Date **4/26/2005**
Client ID: Run ID: **MI-LA254_050426A** SeqNo: **355761**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0002									

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID **MB** | Batch ID: **R15182** | Test Code: **SW6010A** | Units: **mg/L** | Analysis Date **4/22/2005 9:59:53 AM** | Prep Date
Client ID: | Run ID: **ICP_050422A** | SeqNo: **354758**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	0.0001578	0.002									J
Potassium	ND	1									
Selenium	ND	0.02									
Sodium	ND	1									
Uranium	ND	0.1									

Sample ID **MB** | Batch ID: **R15194** | Test Code: **SW6010A** | Units: **mg/L** | Analysis Date **4/22/2005 2:57:05 PM** | Prep Date
Client ID: | Run ID: **ICP_050422C** | SeqNo: **355316**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	0.3855	1									J
Silver	ND	0.005									
Zinc	ND	0.05									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Method Blank

Sample ID **MB-7825** Batch ID: **7825** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/26/2005 9:03:44 AM** Prep Date **4/22/2005**
Client ID: Run ID: **ICP_050426A** SeqNo: **355688**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Lead	ND	0.005									
Selenium	ND	0.05									
Silver	0.001093	0.005									J

Sample ID **MB-7865** Batch ID: **7865** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/26/2005 9:05:12 AM** Prep Date **4/27/2005**
Client ID: Run ID: **ICP_050428A** SeqNo: **356576**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	0.02									

Sample ID **MB-7811** Batch ID: **7811** Test Code: **E160.1** Units: **mg/L** Analysis Date **4/21/2005** Prep Date **4/20/2005**
Client ID: Run ID: **WC_050421B** SeqNo: **354283**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	33	50									J

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *29-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT

Sample Duplicate

Sample ID **0504130-01C DUP** Batch ID: **R15102** Test Code: **E300** Units: **mg/L** Analysis Date **4/14/2005** Prep Date

Client ID: **Upstream River** Run ID: **LC_050414A** SeqNo: **352295**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.218	0.1	0	0	0	0	0	0.218	0	20	
Chloride	4.059	0.1	0	0	0	0	0	4.067	0.197	20	
Nitrogen, Nitrite (As N)	ND	0.1	0	0	0	0	0	0	0	20	
Bromide	ND	0.5	0	0	0	0	0	0	0	20	
Nitrogen, Nitrate (As N)	ND	0.1	0	0	0	0	0	0	0	20	
Phosphorus, Orthophosphate (As P)	ND	0.5	0	0	0	0	0	0	0	20	

Sample ID **0504130-04D DUP** Batch ID: **7825** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/26/2005 9:31:08 AM** Prep Date **4/22/2005**

Client ID: **Downstream Rive** Run ID: **ICP_050426A** SeqNo: **355698**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02	0	0	0	0	0	0	0	30	
Cadmium	ND	0.002	0	0	0	0	0	0	0	30	
Chromium	0.001731	0.006	0	0	0	0	0	0	0	30	J
Lead	ND	0.005	0	0	0	0	0	0.00231	0	30	
Selenium	ND	0.05	0	0	0	0	0	0	0	30	
Silver	ND	0.005	0	0	0	0	0	0	0	30	

Sample ID **0504130-04D DUP** Batch ID: **7865** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/28/2005 9:21:10 AM** Prep Date **4/27/2005**

Client ID: **Downstream Rive** Run ID: **ICP_050428A** SeqNo: **356584**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.117	0.02	0	0	0	0	0	0.1158	0.958	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *29-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0504130-01C MS** Batch ID: **R15102** Test Code: **E300** Units: **mg/L** Analysis Date **4/14/2005** Prep Date

Client ID: **Upstream River** Run ID: **LC_050414A** SeqNo: **352296**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.695	0.1	0.5	0.218	95.4	80	120	0			
Chloride	9.266	0.1	5	4.067	104	80	120	0			
Nitrogen, Nitrite (As N)	0.984	0.1	1	0	98.4	80	120	0			
Bromide	2.787	0.5	2.5	0	111	80	120	0			
Nitrogen, Nitrate (As N)	2.649	0.1	2.5	0	106	80	120	0			
Phosphorus, Orthophosphate (As P)	5.357	0.5	5	0	107	80	120	0			

Sample ID **0504130-01C MSD** Batch ID: **R15102** Test Code: **E300** Units: **mg/L** Analysis Date **4/14/2005** Prep Date

Client ID: **Upstream River** Run ID: **LC_050414A** SeqNo: **352297**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.794	0.1	0.5	0.218	115	80	120	0.695	13.3	20	
Chloride	9.362	0.1	5	4.067	106	80	120	9.266	1.03	20	
Nitrogen, Nitrite (As N)	0.995	0.1	1	0	99.5	80	120	0.984	1.11	20	
Bromide	2.814	0.5	2.5	0	113	80	120	2.787	0.964	20	
Nitrogen, Nitrate (As N)	2.681	0.1	2.5	0	107	80	120	2.649	1.20	20	
Phosphorus, Orthophosphate (As P)	5.469	0.5	5	0	109	80	120	5.357	2.07	20	

Sample ID **0504130-01a ms** Batch ID: **R15110** Test Code: **SW8015** Units: **mg/L** Analysis Date **4/16/2005 12:42:03 AM** Prep Date

Client ID: **Upstream River** Run ID: **PIDFID_050415A** SeqNo: **352685**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.498	0.05	0.5	0.0118	97.2	82.6	114	0			
Surr: BFB	22.99	0	25	0	92.0	78.3	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID **0504130-01a msd** Batch ID: **R15110** Test Code: **SW8015** Units: **mg/L** Analysis Date **4/16/2005 1:12:15 AM** Prep Date
Client ID: **Upstream River** Run ID: **PIDFID_050415A** SeqNo: **352689**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.456	0.05	0.5	0.0118	88.8	82.6	114	0.498	8.81	15	
Surr: BFB	20.99	0	25	0	84.0	78.3	120	22.99	9.10	0	

Sample ID **0504130-04a ms** Batch ID: **R15110** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/16/2005 1:42:35 AM** Prep Date
Client ID: **Downstream Rive** Run ID: **PIDFID_050415A** SeqNo: **352677**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	39.75	2.5	40	0	99.4	64.5	133	0			
Benzene	19.84	0.5	20	0	99.2	88.7	114	0			
Toluene	20.08	0.5	20	0	100	89.3	112	0			
Ethylbenzene	20.43	0.5	20	0	102	88.6	113	0			
Xylenes, Total	61.06	0.5	60	0	102	89.4	112	0			

Sample ID **0504130-04a msd** Batch ID: **R15110** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/16/2005 2:12:47 AM** Prep Date
Client ID: **Downstream Rive** Run ID: **PIDFID_050415A** SeqNo: **352678**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	40.55	2.5	40	0	101	64.5	133	39.75	2.00	28	
Benzene	20.87	0.5	20	0	104	88.7	114	19.84	5.06	27	
Toluene	20.58	0.5	20	0	103	89.3	112	20.08	2.44	19	
Ethylbenzene	21.8	0.5	20	0	109	88.6	113	20.43	6.50	10	
Xylenes, Total	61.26	0.5	60	0	102	89.4	112	61.06	0.331	13	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0504130-04D MS** Batch ID: **7825** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/26/2005 9:44:57 AM** Prep Date **4/22/2005**
Client ID: **Downstream Rive** Run ID: **ICP_050426A** SeqNo: **355701**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4958	0.02	0.5	0	99.2	75	125	0			
Cadmium	0.4731	0.002	0.5	0	94.6	75	125	0			
Chromium	0.4828	0.006	0.5	0	96.6	75	125	0			
Lead	0.4615	0.005	0.5	0.00231	91.8	75	125	0			
Selenium	0.4515	0.05	0.5	0	90.3	75	125	0			
Silver	0.474	0.005	0.5	0	94.8	75	125	0			

Sample ID **0504130-04D MSD** Batch ID: **7825** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/26/2005 9:47:48 AM** Prep Date **4/22/2005**
Client ID: **Downstream Rive** Run ID: **ICP_050426A** SeqNo: **355702**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.498	0.02	0.5	0	99.6	75	125	0.4958	0.433	20	
Cadmium	0.4843	0.002	0.5	0	96.9	75	125	0.4731	2.34	20	
Chromium	0.492	0.006	0.5	0	98.4	75	125	0.4828	1.88	20	
Lead	0.4694	0.005	0.5	0.00231	93.4	75	125	0.4615	1.71	20	
Selenium	0.4598	0.05	0.5	0	92.0	75	125	0.4515	1.83	20	
Silver	0.4826	0.005	0.5	0	96.5	75	125	0.474	1.80	20	

Sample ID **0504130-04D MS** Batch ID: **7865** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/28/2005 9:23:20 AM** Prep Date **4/27/2005**
Client ID: **Downstream Rive** Run ID: **ICP_050428A** SeqNo: **356585**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.5884	0.02	0.5	0.1158	94.5	75	125	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID **0504130-04D MSD** Batch ID: **7865** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/28/2005 9:24:35 AM** Prep Date **4/27/2005**
Client ID: **Downstream Rive** Run ID: **ICP_050428A** SeqNo: **356586**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.6156	0.02	0.5	0.1158	100	75	125	0.5884	4.52	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS** Batch ID: **R15102** Test Code: **E300** Units: **mg/L** Analysis Date **4/14/2005** Prep Date

Client ID: Run ID: **LC_050414A** SeqNo: **352293**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.499	0.1	0.5	0	99.8	90	110	0			
Chloride	4.719	0.1	5	0	94.4	90	110	0			
Nitrogen, Nitrite (As N)	0.923	0.1	1	0	92.3	90	110	0			
Bromide	2.553	0.5	2.5	0	102	90	110	0			
Nitrogen, Nitrate (As N)	2.409	0.1	2.5	0	96.4	90	110	0			
Phosphorus, Orthophosphate (As P)	4.829	0.5	5	0	96.6	90	110	0			
Sulfate	9.615	0.5	10	0	96.2	90	110	0			

Sample ID **LCS** Batch ID: **R15214** Test Code: **E300** Units: **mg/L** Analysis Date **4/26/2005** Prep Date

Client ID: Run ID: **LC_050426A** SeqNo: **355854**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.534	0.1	0.5	0	107	90	110	0			
Chloride	4.683	0.1	5	0	93.7	90	110	0			
Nitrogen, Nitrite (As N)	0.91	0.1	1	0	91.0	90	110	0			
Bromide	2.535	0.5	2.5	0	101	90	110	0			
Nitrogen, Nitrate (As N)	2.416	0.1	2.5	0	96.6	90	110	0			
Phosphorus, Orthophosphate (As P)	4.834	0.5	5	0	96.7	90	110	0			
Sulfate	9.546	0.5	10	0	95.5	90	110	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS** Batch ID: **R15214** Test Code: **E300** Units: **mg/L** Analysis Date **4/27/2005** Prep Date
Client ID: Run ID: **LC_050426A** SeqNo: **355955**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.491	0.1	0.5	0	98.2	90	110	0			
Chloride	4.492	0.1	5	0	89.8	90	110	0			S
Nitrogen, Nitrite (As N)	0.881	0.1	1	0	88.1	90	110	0			S
Bromide	2.406	0.5	2.5	0	96.2	90	110	0			
Nitrogen, Nitrate (As N)	2.278	0.1	2.5	0	91.1	90	110	0			
Phosphorus, Orthophosphate (As P)	4.583	0.5	5	0	91.7	90	110	0			
Sulfate	9.302	0.5	10	0.227	90.8	90	110	0			

Sample ID **LCS-7810** Batch ID: **7810** Test Code: **SW8015** Units: **mg/L** Analysis Date **4/22/2005 9:55:12 AM** Prep Date **4/20/2005**
Client ID: Run ID: **FID(17A) 2_050421A** SeqNo: **354680**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.754	1	5	0	115	81.2	149	0			

Sample ID **LCSD-7810** Batch ID: **7810** Test Code: **SW8015** Units: **mg/L** Analysis Date **4/22/2005 10:25:09 AM** Prep Date **4/20/2005**
Client ID: Run ID: **FID(17A) 2_050421A** SeqNo: **354681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.007	1	5	0	120	81.2	149	5.754	4.30	23	

Sample ID **GRO lcs 2.5ug** Batch ID: **R15110** Test Code: **SW8015** Units: **mg/L** Analysis Date **4/15/2005 9:09:14 PM** Prep Date
Client ID: Run ID: **PIDFID_050415A** SeqNo: **352655**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4814	0.05	0.5	0	96.3	82.6	114	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15110** Test Code: **SW8021** Units: **µg/L** Analysis Date **4/16/2005 2:42:59 AM** Prep Date
Client ID: Run ID: **PIDFID_050415A** SeqNo: **352679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	35.68	2.5	40	0	89.2	64.5	133	0			
Benzene	19.05	0.5	20	0	95.2	88.7	114	0			
Toluene	19.25	0.5	20	0	96.3	89.3	112	0			
Ethylbenzene	19.66	0.5	20	0	98.3	88.6	113	0			
Xylenes, Total	57.34	0.5	60	0	95.6	89.4	112	0			

Sample ID **LCS-7812** Batch ID: **7812** Test Code: **SW8270C** Units: **µg/L** Analysis Date **4/22/2005** Prep Date **4/20/2005**
Client ID: Run ID: **ELMO_050422A** SeqNo: **355212**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	68.98	10	100	0	69.0	11	123	0			
4-Chloro-3-methylphenol	144.2	20	200	0	72.1	15.4	119	0			
2-Chlorophenol	145.8	10	200	0	72.9	12.2	122	0			
1,4-Dichlorobenzene	70.22	10	100	0	70.2	16.9	100	0			
2,4-Dinitrotoluene	75.5	10	100	0	75.5	13	138	0			
N-Nitrosodi-n-propylamine	67.58	10	100	0	67.6	9.93	122	0			
4-Nitrophenol	75.86	50	200	0	37.9	-20.5	87.4	0			
Pentachlorophenol	139	50	200	0	69.5	-0.355	114	0			
Phenol	79.34	10	200	0	39.7	7.53	73.1	0			
Pyrene	72.04	15	100	0	72.0	12.6	140	0			
1,2,4-Trichlorobenzene	68.82	10	100	0	68.8	17.4	98.7	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-7812** Batch ID: **7812** Test Code: **SW8270C** Units: **µg/L** Analysis Date **4/23/2005** Prep Date **4/20/2005**
Client ID: Run ID: **ELMO_050423A** SeqNo: **355276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	59.66	10	100	0	59.7	11	123	68.98	14.5	30.5	
4-Chloro-3-methylphenol	129.9	20	200	0	64.9	15.4	119	144.2	10.5	28.6	
2-Chlorophenol	123.7	10	200	0	61.9	12.2	122	145.8	16.4	107	
1,4-Dichlorobenzene	56.28	10	100	0	56.3	16.9	100	70.22	22.0	62.1	
2,4-Dinitrotoluene	67	10	100	0	67.0	13	138	75.5	11.9	14.7	
N-Nitrosodi-n-propylamine	62.46	10	100	0	62.5	9.93	122	67.58	7.87	30.3	
4-Nitrophenol	49.62	50	200	0	24.8	12.5	87.4	75.86	0	36.3	J
Pentachlorophenol	97.24	50	200	0	48.6	3.55	114	139	35.3	49	
Phenol	65.18	10	200	0	32.6	7.53	73.1	79.34	19.6	52.4	
Pyrene	70.34	15	100	0	70.3	12.6	140	72.04	2.39	16.3	
1,2,4-Trichlorobenzene	57.62	10	100	0	57.6	17.4	98.7	68.82	17.7	36.4	

Sample ID **LCS-7857** Batch ID: **7857** Test Code: **SW7470** Units: **mg/L** Analysis Date **4/26/2005** Prep Date **4/26/2005**
Client ID: Run ID: **MI-LA254_050426A** SeqNo: **355762**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004953	0.0002	0.005	0	99.1	75.2	134	0			

Sample ID **LCSD-7857** Batch ID: **7857** Test Code: **SW7470** Units: **mg/L** Analysis Date **4/26/2005** Prep Date **4/26/2005**
Client ID: Run ID: **MI-LA254_050426A** SeqNo: **355779**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005061	0.0002	0.005	0	101	75.2	134	0.004953	2.17	0	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS** Batch ID: **R15182** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/22/2005 10:11:58 AM** Prep Date

Client ID: Run ID: **ICP_050422A** SeqNo: **354760**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.506	0.02	0.5	0	101	80	120	0			
Barium	0.511	0.02	0.5	0	102	80	120	0			
Cadmium	0.5131	0.002	0.5	0	103	80	120	0			
Calcium	50.51	1	50.5	0	100	80	120	0			
Chromium	0.5118	0.006	0.5	0	102	80	120	0			
Copper	0.5	0.006	0.5	0	100	80	120	0			
Iron	0.5068	0.02	0.5	0	101	80	120	0			
Lead	0.5032	0.005	0.5	0	101	80	120	0			
Magnesium	49.93	1	50.5	0	98.9	80	120	0			
Manganese	0.5046	0.002	0.5	0.0001578	101	80	120	0			
Potassium	50.92	1	55	0	92.6	80	120	0			
Selenium	0.4986	0.02	0.5	0	99.7	80	120	0			
Sodium	51.81	1	50.5	0	103	80	120	0			
Uranium	2.518	0.1	5	0	50.4	80	120	0			S

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD** Batch ID: **R15182** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/22/2005 10:14:23 AM** Prep Date

Client ID: Run ID: **ICP_050422A** SeqNo: **354761**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5144	0.02	0.5	0	103	80	120	0.506	1.66	20	
Barium	0.5124	0.02	0.5	0	102	80	120	0.511	0.283	20	
Cadmium	0.5149	0.002	0.5	0	103	80	120	0.5131	0.350	20	
Calcium	50.69	1	50.5	0	100	80	120	50.51	0.362	20	
Chromium	0.5129	0.006	0.5	0	103	80	120	0.5118	0.207	20	
Copper	0.5024	0.006	0.5	0	100	80	120	0.5	0.463	20	
Iron	0.5055	0.02	0.5	0	101	80	120	0.5068	0.254	20	
Lead	0.5075	0.005	0.5	0	101	80	120	0.5032	0.844	20	
Magnesium	50.39	1	50.5	0	99.8	80	120	49.93	0.923	20	
Manganese	0.505	0.002	0.5	0.0001578	101	80	120	0.5046	0.0772	20	
Potassium	51.54	1	55	0	93.7	80	120	50.92	1.23	20	
Selenium	0.5026	0.02	0.5	0	101	80	120	0.4986	0.794	20	
Sodium	52.45	1	50.5	0	104	80	120	51.81	1.23	20	
Uranium	2.49	0.1	5	0	49.8	80	120	2.518	1.14	20	S

Sample ID **LCS** Batch ID: **R15194** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/22/2005 2:59:37 PM** Prep Date

Client ID: Run ID: **ICP_050422C** SeqNo: **355317**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	55.92	1	55	0.3855	101	80	120	0			
Silver	0.4973	0.005	0.5	0	99.5	80	120	0			
Zinc	0.4829	0.05	0.5	0	96.6	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD** Batch ID: **R15194** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/22/2005 3:02:00 PM** Prep Date
Client ID: Run ID: **ICP_050422C** SeqNo: **355318**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium	55.6	1	55	0.3855	100	80	120	55.92	0.583	20	
Silver	0.4943	0.005	0.5	0	98.9	80	120	0.4973	0.609	20	
Zinc	0.4807	0.05	0.5	0	96.1	80	120	0.4829	0.446	20	

Sample ID **LCS-7825** Batch ID: **7825** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/26/2005 9:06:52 AM** Prep Date **4/22/2005**
Client ID: Run ID: **ICP_050426A** SeqNo: **355689**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4889	0.02	0.5	0	97.8	80	120	0			
Cadmium	0.482	0.002	0.5	0	96.4	80	120	0			
Chromium	0.4891	0.006	0.5	0	97.8	80	120	0			
Lead	0.4724	0.005	0.5	0	94.5	80	120	0			
Selenium	0.4623	0.05	0.5	0	92.5	80	120	0			
Silver	0.4809	0.005	0.5	0.001093	96.0	80	120	0			

Sample ID **LCSD-7825** Batch ID: **7825** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/26/2005 9:10:02 AM** Prep Date **4/22/2005**
Client ID: Run ID: **ICP_050426A** SeqNo: **355690**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4778	0.02	0.5	0	95.6	80	120	0.4889	2.29	20	
Cadmium	0.4757	0.002	0.5	0	95.1	80	120	0.482	1.31	20	
Chromium	0.4835	0.006	0.5	0	96.7	80	120	0.4891	1.15	20	
Lead	0.4685	0.005	0.5	0	93.7	80	120	0.4724	0.834	20	
Selenium	0.4579	0.05	0.5	0	91.6	80	120	0.4623	0.939	20	
Silver	0.4759	0.005	0.5	0.001093	95.0	80	120	0.4809	1.06	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504130
Project: River Sampling 2nd Qtr-2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS-7865** Batch ID: **7865** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/28/2005 9:06:41 AM** Prep Date **4/27/2005**
Client ID: Run ID: **ICP_050428A** SeqNo: **356577**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.481	0.02	0.5	0	96.2	80	120	0			

Sample ID **LCSD-7865** Batch ID: **7865** Test Code: **SW6010A** Units: **mg/L** Analysis Date **4/28/2005 9:08:57 AM** Prep Date **4/27/2005**
Client ID: Run ID: **ICP_050428A** SeqNo: **356578**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.5018	0.02	0.5	0	100	80	120	0.481	4.24	20	

Sample ID **LCS-7811** Batch ID: **7811** Test Code: **E160.1** Units: **mg/L** Analysis Date **4/21/2005** Prep Date **4/20/2005**
Client ID: Run ID: **WC_050421B** SeqNo: **354284**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1030	50	1000	33	99.7	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 4/14/2005

Work Order Number 0504130 | Received by AT

Checklist completed by _____ 4/14/05
Signature | Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? **1°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

_____

_____

_____

_____

Corrective Action _____

_____

_____

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐ Other:

Client: San Juan Refinery

Project Name: River Sampling 2nd Qtr 2005

Address: #50 CR 4990 Bloomfield, NM 87413

Project #:

Project Manager:

Phone #: 505-632-4161

Fax #: 505-632-3911

Sampler: Cindy Hurtado/Angela FdR

Sample Temperature: 1°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
4/13/05	8:30am	H_2O	Upstream River	2-VOA	X			0504130-1
				2-VOA	X			
				1-500 ml		X		
				1-~~250~~ 125 ml		X	Filtered	
				1-125 ml			H_2SO_4	
				1-1000 ml				
				1-liter			Amber	

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC - Dissolved Metals	NO_3 Backup	Gen. Chem - Anion/Cat	Air Bubbles or Headspace (Y or N)
X															
		X													
							X								
												X			
													X		
														X	
											X				

Date: 4/13/05 Time: 3pm Relinquished By: (Signature) Cindy Hurtado

Received By: (Signature) 4/14/05 1303

Date: Time: Relinquished By: (Signature)

Received By: (Signature)

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refinery
Project Name: River Sampling 2nd Qtr 2005
Address: #50 CR #4990 Bloomfield, NM 87413
Project #:
Project Manager:
Phone #: 505-632-4161
Sampler: Cindy Hurtado / Angela Folk
Fax #: 505-632-3911
Sample Temperature: 1°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WDCC-dissolved meta	NO_3 Backup	Gen Chem - Anion/Ca		Air Bubbles or Headspace (Y or N)
4/13/05	10AM	H_2O	N. of MW #45	2-VOA	X			0504130-2	X																
				2-VOA	X						X														
				1-500ml		X										X									
				1-125ml		X	filtered														X				
				1-125ml			H_2SO_4															X			
				1-1000ml																			X		
				1-liter			Amber													X					

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	Remarks:
4/13/05	3PM	Cindy Hurtado	4/14/05	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
			1303	

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

Client: San Juan Refinery
Address: #50 CR 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: River Sampling 2nd Qtr 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado / Angela Folk
Sample Temperature: 1°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative: Other	HEAL No.
4/13/05	11AM	H_2O	N. of MW #46	2-VOA	X			0504130-3
				2-VOA	X			
				1-500ml		X		
				1-125 ml		X	Filtered	
				1-125 ml			H_2SO_4	
				1-1000 ml				
				1- liter			Amber	

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC - dissolved meta	NO_3 Backup	Gen Chem - Anion/Ca	Air Bubbles or Headspace (Y or N)
X															
		X													
							X								
												X			
													X		
														X	
											X				

Remarks:

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
4/13/05	3Pm	Cindy Hurtado		4/14/05
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
				1303

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐

Other:

Client: San Juan Refinery

Project Name: River Sampling 2nd Qtr 2005

Address: #50 CR 4990 Bloomfield, NM 87413

Project #:

Project Manager:

Phone #: 505-632-4161

Fax #: 505-632-3911

Sampler: Cindy Hurtado / Angela Folk

Sample Temperature: 1°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC-dissolved meta	NO3 Backup	Gen Chem - Anion/Cat	Air Bubbles or Headspace (Y or N)
4/13/05	930am	H2O	Downstream River	2-VOA	X			650413O-4	X															
				2-VOA	X						X													
				1-500 ml		X										X								
				1-125ml		X	filtered														X			
				1-125ml			H_2SO_4															X		
				1-1000 ml																			X	
				1-Liter			Amber													X				

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	Remarks:
4/13/05	3pm	Cindy Hurtado	4/14/05 1303	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

August 05, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: River Sampling 3rd Qtr. 2005 Order No.: 0507181

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 5 samples on 7/20/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: River Upstream
Lab Order: 0507181
Collection Date: 7/19/2005 10:40:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.20	0.10		mg/L	1	7/20/2005
Chloride	3.6	0.10		mg/L	1	7/20/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	7/20/2005
Bromide	ND	0.50		mg/L	1	7/20/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	7/20/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	7/20/2005
Sulfate	74	0.50		mg/L	1	7/20/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	99	2.0		mg/L CaCO3	1	7/28/2005
Carbonate	2.0	2.0		mg/L CaCO3	1	7/28/2005
Bicarbonate	97	2.0		mg/L CaCO3	1	7/28/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/22/2005 4:14:41 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/22/2005 4:14:41 AM
Surr: DNOP	124	58-140		%REC	1	7/22/2005 4:14:41 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/22/2005 1:36:47 AM
Surr: BFB	92.1	78.3-120		%REC	1	7/22/2005 1:36:47 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	7/22/2005 1:36:47 AM
Benzene	ND	0.50		µg/L	1	7/22/2005 1:36:47 AM
Toluene	ND	0.50		µg/L	1	7/22/2005 1:36:47 AM
Ethylbenzene	ND	0.50		µg/L	1	7/22/2005 1:36:47 AM
Xylenes, Total	ND	0.50		µg/L	1	7/22/2005 1:36:47 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	7/27/2005
Acenaphthylene	ND	10		µg/L	1	7/27/2005
Aniline	ND	10		µg/L	1	7/27/2005
Anthracene	ND	10		µg/L	1	7/27/2005
Azobenzene	ND	10		µg/L	1	7/27/2005
Benz(a)anthracene	ND	15		µg/L	1	7/27/2005
Benzo(a)pyrene	ND	10		µg/L	1	7/27/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	7/27/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/27/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	7/27/2005
Benzoic acid	ND	50		µg/L	1	7/27/2005
Benzyl alcohol	ND	20		µg/L	1	7/27/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/27/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0507181
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-01

Client Sample ID: River Upstream
Collection Date: 7/19/2005 10:40:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	7/27/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	7/27/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	7/27/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/27/2005
Butyl benzyl phthalate	ND	15		µg/L	1	7/27/2005
Carbazole	ND	10		µg/L	1	7/27/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	7/27/2005
4-Chloroaniline	ND	20		µg/L	1	7/27/2005
2-Chloronaphthalene	ND	10		µg/L	1	7/27/2005
2-Chlorophenol	ND	10		µg/L	1	7/27/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	7/27/2005
Chrysene	ND	15		µg/L	1	7/27/2005
Di-n-butyl phthalate	ND	10		µg/L	1	7/27/2005
Di-n-octyl phthalate	ND	15		µg/L	1	7/27/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/27/2005
Dibenzofuran	ND	10		µg/L	1	7/27/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	7/27/2005
Diethyl phthalate	ND	10		µg/L	1	7/27/2005
Dimethyl phthalate	ND	10		µg/L	1	7/27/2005
2,4-Dichlorophenol	ND	10		µg/L	1	7/27/2005
2,4-Dimethylphenol	ND	10		µg/L	1	7/27/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	7/27/2005
2,4-Dinitrophenol	ND	50		µg/L	1	7/27/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	7/27/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	7/27/2005
Fluoranthene	ND	10		µg/L	1	7/27/2005
Fluorene	ND	10		µg/L	1	7/27/2005
Hexachlorobenzene	ND	10		µg/L	1	7/27/2005
Hexachlorobutadiene	ND	10		µg/L	1	7/27/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/27/2005
Hexachloroethane	ND	10		µg/L	1	7/27/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/27/2005
Isophorone	ND	10		µg/L	1	7/27/2005
2-Methylnaphthalene	ND	10		µg/L	1	7/27/2005
2-Methylphenol	ND	15		µg/L	1	7/27/2005
3+4-Methylphenol	ND	10		µg/L	1	7/27/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/27/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	7/27/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/27/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: River Upstream
Lab Order: 0507181
Collection Date: 7/19/2005 10:40:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	7/27/2005
2-Nitroaniline	ND	50		µg/L	1	7/27/2005
3-Nitroaniline	ND	50		µg/L	1	7/27/2005
4-Nitroaniline	ND	20		µg/L	1	7/27/2005
Nitrobenzene	ND	10		µg/L	1	7/27/2005
2-Nitrophenol	ND	15		µg/L	1	7/27/2005
4-Nitrophenol	ND	50		µg/L	1	7/27/2005
Pentachlorophenol	ND	50		µg/L	1	7/27/2005
Phenanthrene	ND	10		µg/L	1	7/27/2005
Phenol	ND	10		µg/L	1	7/27/2005
Pyrene	ND	15		µg/L	1	7/27/2005
Pyridine	ND	30		µg/L	1	7/27/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/27/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/27/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	7/27/2005
Surr: 2,4,6-Tribromophenol	21.3	16.6-150		%REC	1	7/27/2005
Surr: 2-Fluorobiphenyl	44.6	19.6-134		%REC	1	7/27/2005
Surr: 2-Fluorophenol	31.8	9.54-113		%REC	1	7/27/2005
Surr: 4-Terphenyl-d14	50.2	22.7-145		%REC	1	7/27/2005
Surr: Nitrobenzene-d5	44.0	14.6-134		%REC	1	7/27/2005
Surr: Phenol-d6	23.8	10.7-80.3		%REC	1	7/27/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **DK**
Specific Conductance	350	0.010		µmhos/cm	1	7/21/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.00022	0.00020		mg/L	1	7/28/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	7/25/2005 10:28:09 AM
Barium	0.071	0.0020		mg/L	1	7/25/2005 10:28:09 AM
Cadmium	ND	0.0020		mg/L	1	7/25/2005 10:28:09 AM
Calcium	36	1.0		mg/L	1	7/26/2005 9:38:19 AM
Chromium	ND	0.0060		mg/L	1	7/25/2005 10:28:09 AM
Copper	ND	0.0060		mg/L	1	7/25/2005 10:28:09 AM
Iron	ND	0.020		mg/L	1	7/25/2005 10:28:09 AM
Lead	ND	0.0050		mg/L	1	7/25/2005 10:28:09 AM
Magnesium	6.7	1.0		mg/L	1	7/26/2005 9:38:19 AM
Manganese	0.035	0.0020		mg/L	1	7/25/2005 10:28:09 AM
Potassium	2.0	1.0		mg/L	1	8/1/2005 1:45:21 PM
Selenium	ND	0.050		mg/L	1	7/25/2005 10:28:09 AM
Silver	ND	0.0050		mg/L	1	7/25/2005 10:28:09 AM
Sodium	22	1.0		mg/L	1	7/26/2005 9:38:19 AM
Uranium	ND	0.10		mg/L	1	7/25/2005 10:28:09 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: River Upstream
Lab Order: 0507181
Collection Date: 7/19/2005 10:40:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.029	0.0050		mg/L	1	7/26/2005 9:38:19 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	7/26/2005 11:01:19 AM
Barium	0.070	0.020		mg/L	1	7/26/2005 11:01:19 AM
Cadmium	ND	0.0020		mg/L	1	7/26/2005 11:01:19 AM
Chromium	ND	0.0060		mg/L	1	7/26/2005 11:01:19 AM
Lead	ND	0.0050		mg/L	1	7/26/2005 11:01:19 AM
Selenium	ND	0.050		mg/L	1	7/26/2005 11:01:19 AM
Silver	ND	0.0050		mg/L	1	7/26/2005 11:01:19 AM
EPA METHOD 160.1: TDS						Analyst: **DK**
Total Dissolved Solids	250	50		mg/L	1	7/22/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: River Downstream
Lab Order: 0507181
Collection Date: 7/19/2005 11:00:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	0.22	0.10		mg/L	1	7/20/2005
Chloride	3.6	0.10		mg/L	1	7/20/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	7/20/2005
Bromide	ND	0.50		mg/L	1	7/20/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	7/20/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	7/20/2005
Sulfate	80	0.50		mg/L	1	7/20/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	99	2.0		mg/L CaCO3	1	7/28/2005
Carbonate	2.0	2.0		mg/L CaCO3	1	7/28/2005
Bicarbonate	97	2.0		mg/L CaCO3	1	7/28/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/22/2005 5:20:17 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/22/2005 5:20:17 AM
Surr: DNOP	97.4	58-140		%REC	1	7/22/2005 5:20:17 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/22/2005 2:07:21 AM
Surr: BFB	99.0	78.3-120		%REC	1	7/22/2005 2:07:21 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	7/22/2005 2:07:21 AM
Benzene	ND	0.50		µg/L	1	7/22/2005 2:07:21 AM
Toluene	ND	0.50		µg/L	1	7/22/2005 2:07:21 AM
Ethylbenzene	ND	0.50		µg/L	1	7/22/2005 2:07:21 AM
Xylenes, Total	ND	0.50		µg/L	1	7/22/2005 2:07:21 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	10		µg/L	1	7/27/2005
Acenaphthylene	ND	10		µg/L	1	7/27/2005
Aniline	ND	10		µg/L	1	7/27/2005
Anthracene	ND	10		µg/L	1	7/27/2005
Azobenzene	ND	10		µg/L	1	7/27/2005
Benz(a)anthracene	ND	15		µg/L	1	7/27/2005
Benzo(a)pyrene	ND	10		µg/L	1	7/27/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	7/27/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/27/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	7/27/2005
Benzoic acid	ND	50		µg/L	1	7/27/2005
Benzyl alcohol	ND	20		µg/L	1	7/27/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/27/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: River Downstream
Lab Order: 0507181
Collection Date: 7/19/2005 11:00:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	7/27/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	7/27/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	7/27/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/27/2005
Butyl benzyl phthalate	ND	15		µg/L	1	7/27/2005
Carbazole	ND	10		µg/L	1	7/27/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	7/27/2005
4-Chloroaniline	ND	20		µg/L	1	7/27/2005
2-Chloronaphthalene	ND	10		µg/L	1	7/27/2005
2-Chlorophenol	ND	10		µg/L	1	7/27/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	7/27/2005
Chrysene	ND	15		µg/L	1	7/27/2005
Di-n-butyl phthalate	ND	10		µg/L	1	7/27/2005
Di-n-octyl phthalate	ND	15		µg/L	1	7/27/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/27/2005
Dibenzofuran	ND	10		µg/L	1	7/27/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	7/27/2005
Diethyl phthalate	ND	10		µg/L	1	7/27/2005
Dimethyl phthalate	ND	10		µg/L	1	7/27/2005
2,4-Dichlorophenol	ND	10		µg/L	1	7/27/2005
2,4-Dimethylphenol	ND	10		µg/L	1	7/27/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	7/27/2005
2,4-Dinitrophenol	ND	50		µg/L	1	7/27/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	7/27/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	7/27/2005
Fluoranthene	ND	10		µg/L	1	7/27/2005
Fluorene	ND	10		µg/L	1	7/27/2005
Hexachlorobenzene	ND	10		µg/L	1	7/27/2005
Hexachlorobutadiene	ND	10		µg/L	1	7/27/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/27/2005
Hexachloroethane	ND	10		µg/L	1	7/27/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/27/2005
Isophorone	ND	10		µg/L	1	7/27/2005
2-Methylnaphthalene	ND	10		µg/L	1	7/27/2005
2-Methylphenol	ND	15		µg/L	1	7/27/2005
3+4-Methylphenol	ND	10		µg/L	1	7/27/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/27/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	7/27/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/27/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
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B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: River Downstream
Lab Order: 0507181
Collection Date: 7/19/2005 11:00:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	7/27/2005
2-Nitroaniline	ND	50		µg/L	1	7/27/2005
3-Nitroaniline	ND	50		µg/L	1	7/27/2005
4-Nitroaniline	ND	20		µg/L	1	7/27/2005
Nitrobenzene	ND	10		µg/L	1	7/27/2005
2-Nitrophenol	ND	15		µg/L	1	7/27/2005
4-Nitrophenol	ND	50		µg/L	1	7/27/2005
Pentachlorophenol	ND	50		µg/L	1	7/27/2005
Phenanthrene	ND	10		µg/L	1	7/27/2005
Phenol	ND	10		µg/L	1	7/27/2005
Pyrene	ND	15		µg/L	1	7/27/2005
Pyridine	ND	30		µg/L	1	7/27/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/27/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/27/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	7/27/2005
Surr: 2,4,6-Tribromophenol	29.7	16.6-150		%REC	1	7/27/2005
Surr: 2-Fluorobiphenyl	60.3	19.6-134		%REC	1	7/27/2005
Surr: 2-Fluorophenol	44.0	9.54-113		%REC	1	7/27/2005
Surr: 4-Terphenyl-d14	60.2	22.7-145		%REC	1	7/27/2005
Surr: Nitrobenzene-d5	60.8	14.6-134		%REC	1	7/27/2005
Surr: Phenol-d6	31.9	10.7-80.3		%REC	1	7/27/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **DK**
Specific Conductance	380	0.010		µmhos/cm	1	7/21/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	7/28/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	7/25/2005 10:31:07 AM
Barium	0.070	0.0020		mg/L	1	7/25/2005 10:31:07 AM
Cadmium	ND	0.0020		mg/L	1	7/25/2005 10:31:07 AM
Calcium	39	1.0		mg/L	1	7/26/2005 9:40:51 AM
Chromium	ND	0.0060		mg/L	1	7/25/2005 10:31:07 AM
Copper	ND	0.0060		mg/L	1	7/25/2005 10:31:07 AM
Iron	ND	0.020		mg/L	1	7/25/2005 10:31:07 AM
Lead	ND	0.0050		mg/L	1	7/25/2005 10:31:07 AM
Magnesium	6.9	1.0		mg/L	1	7/26/2005 9:40:51 AM
Manganese	0.034	0.0020		mg/L	1	7/25/2005 10:31:07 AM
Potassium	2.1	1.0		mg/L	1	8/1/2005 1:47:34 PM
Selenium	ND	0.050		mg/L	1	7/25/2005 10:31:07 AM
Silver	ND	0.0050		mg/L	1	7/25/2005 10:31:07 AM
Sodium	23	1.0		mg/L	1	7/26/2005 9:40:51 AM
Uranium	ND	0.10		mg/L	1	7/25/2005 10:31:07 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: River Downstream
Lab Order: 0507181
Collection Date: 7/19/2005 11:00:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.015	0.0050		mg/L	1	7/26/2005 9:40:51 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	7/26/2005 11:04:19 AM
Barium	0.070	0.020		mg/L	1	7/26/2005 11:04:19 AM
Cadmium	ND	0.0020		mg/L	1	7/26/2005 11:04:19 AM
Chromium	ND	0.0060		mg/L	1	7/26/2005 11:04:19 AM
Lead	ND	0.0050		mg/L	1	7/26/2005 11:04:19 AM
Selenium	ND	0.050		mg/L	1	7/26/2005 11:04:19 AM
Silver	ND	0.0050		mg/L	1	7/26/2005 11:04:19 AM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	250	50		mg/L	1	7/22/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #45
Lab Order: 0507181
Collection Date: 7/19/2005 10:15:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	0.20	0.10		mg/L	1	7/20/2005
Chloride	3.5	0.10		mg/L	1	7/20/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	7/20/2005
Bromide	ND	0.50		mg/L	1	7/20/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	7/20/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	7/20/2005
Sulfate	74	0.50		mg/L	1	7/20/2005
EPA METHOD 310.1: ALKALINITY						Analyst: MAP
Alkalinity, Total (As CaCO3)	97	2.0		mg/L CaCO3	1	7/28/2005
Carbonate	ND	2.0		mg/L CaCO3	1	7/28/2005
Bicarbonate	97	2.0		mg/L CaCO3	1	7/28/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/22/2005 5:53:05 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/22/2005 5:53:05 AM
Surr: DNOP	104	58-140		%REC	1	7/22/2005 5:53:05 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/22/2005 2:37:42 AM
Surr: BFB	96.4	78.3-120		%REC	1	7/22/2005 2:37:42 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	7/22/2005 2:37:42 AM
Benzene	ND	0.50		µg/L	1	7/22/2005 2:37:42 AM
Toluene	ND	0.50		µg/L	1	7/22/2005 2:37:42 AM
Ethylbenzene	ND	0.50		µg/L	1	7/22/2005 2:37:42 AM
Xylenes, Total	0.61	0.50		µg/L	1	7/22/2005 2:37:42 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	10		µg/L	1	7/27/2005
Acenaphthylene	ND	10		µg/L	1	7/27/2005
Aniline	ND	10		µg/L	1	7/27/2005
Anthracene	ND	10		µg/L	1	7/27/2005
Azobenzene	ND	10		µg/L	1	7/27/2005
Benz(a)anthracene	ND	15		µg/L	1	7/27/2005
Benzo(a)pyrene	ND	10		µg/L	1	7/27/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	7/27/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/27/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	7/27/2005
Benzoic acid	ND	50		µg/L	1	7/27/2005
Benzyl alcohol	ND	20		µg/L	1	7/27/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/27/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #45
Lab Order: 0507181
Collection Date: 7/19/2005 10:15:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	7/27/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	7/27/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	7/27/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/27/2005
Butyl benzyl phthalate	ND	15		µg/L	1	7/27/2005
Carbazole	ND	10		µg/L	1	7/27/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	7/27/2005
4-Chloroaniline	ND	20		µg/L	1	7/27/2005
2-Chloronaphthalene	ND	10		µg/L	1	7/27/2005
2-Chlorophenol	ND	10		µg/L	1	7/27/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	7/27/2005
Chrysene	ND	15		µg/L	1	7/27/2005
Di-n-butyl phthalate	ND	10		µg/L	1	7/27/2005
Di-n-octyl phthalate	ND	15		µg/L	1	7/27/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/27/2005
Dibenzofuran	ND	10		µg/L	1	7/27/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	7/27/2005
Diethyl phthalate	ND	10		µg/L	1	7/27/2005
Dimethyl phthalate	ND	10		µg/L	1	7/27/2005
2,4-Dichlorophenol	ND	10		µg/L	1	7/27/2005
2,4-Dimethylphenol	ND	10		µg/L	1	7/27/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	7/27/2005
2,4-Dinitrophenol	ND	50		µg/L	1	7/27/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	7/27/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	7/27/2005
Fluoranthene	ND	10		µg/L	1	7/27/2005
Fluorene	ND	10		µg/L	1	7/27/2005
Hexachlorobenzene	ND	10		µg/L	1	7/27/2005
Hexachlorobutadiene	ND	10		µg/L	1	7/27/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/27/2005
Hexachloroethane	ND	10		µg/L	1	7/27/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/27/2005
Isophorone	ND	10		µg/L	1	7/27/2005
2-Methylnaphthalene	ND	10		µg/L	1	7/27/2005
2-Methylphenol	ND	15		µg/L	1	7/27/2005
3+4-Methylphenol	ND	10		µg/L	1	7/27/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/27/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	7/27/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/27/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #45
Lab Order: 0507181
Collection Date: 7/19/2005 10:15:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	7/27/2005
2-Nitroaniline	ND	50		µg/L	1	7/27/2005
3-Nitroaniline	ND	50		µg/L	1	7/27/2005
4-Nitroaniline	ND	20		µg/L	1	7/27/2005
Nitrobenzene	ND	10		µg/L	1	7/27/2005
2-Nitrophenol	ND	15		µg/L	1	7/27/2005
4-Nitrophenol	ND	50		µg/L	1	7/27/2005
Pentachlorophenol	ND	50		µg/L	1	7/27/2005
Phenanthrene	ND	10		µg/L	1	7/27/2005
Phenol	ND	10		µg/L	1	7/27/2005
Pyrene	ND	15		µg/L	1	7/27/2005
Pyridine	ND	30		µg/L	1	7/27/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/27/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/27/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	7/27/2005
Surr: 2,4,6-Tribromophenol	70.7	16.6-150		%REC	1	7/27/2005
Surr: 2-Fluorobiphenyl	116	19.6-134		%REC	1	7/27/2005
Surr: 2-Fluorophenol	81.6	9.54-113		%REC	1	7/27/2005
Surr: 4-Terphenyl-d14	127	22.7-145		%REC	1	7/27/2005
Surr: Nitrobenzene-d5	117	14.6-134		%REC	1	7/27/2005
Surr: Phenol-d6	61.1	10.7-80.3		%REC	1	7/27/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **DK**
Specific Conductance	340	0.010		µmhos/cm	1	7/21/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	7/28/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	7/25/2005 10:34:06 AM
Barium	0.070	0.0020		mg/L	1	7/25/2005 10:34:06 AM
Cadmium	ND	0.0020		mg/L	1	7/25/2005 10:34:06 AM
Calcium	36	1.0		mg/L	1	7/26/2005 9:42:46 AM
Chromium	ND	0.0060		mg/L	1	7/25/2005 10:34:06 AM
Copper	ND	0.0060		mg/L	1	7/25/2005 10:34:06 AM
Iron	ND	0.020		mg/L	1	7/25/2005 10:34:06 AM
Lead	ND	0.0050		mg/L	1	7/25/2005 10:34:06 AM
Magnesium	6.6	1.0		mg/L	1	7/26/2005 9:42:46 AM
Manganese	0.020	0.0020		mg/L	1	7/25/2005 10:34:06 AM
Potassium	2.0	1.0		mg/L	1	8/1/2005 1:50:40 PM
Selenium	ND	0.050		mg/L	1	7/25/2005 10:34:06 AM
Silver	ND	0.0050		mg/L	1	7/25/2005 10:34:06 AM
Sodium	21	1.0		mg/L	1	7/26/2005 9:42:46 AM
Uranium	ND	0.10		mg/L	1	7/25/2005 10:34:06 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #45
Lab Order: 0507181
Collection Date: 7/19/2005 10:15:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.014	0.0050		mg/L	1	7/26/2005 9:42:46 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	7/26/2005 11:07:18 AM
Barium	0.069	0.020		mg/L	1	7/26/2005 11:07:18 AM
Cadmium	ND	0.0020		mg/L	1	7/26/2005 11:07:18 AM
Chromium	ND	0.0060		mg/L	1	7/26/2005 11:07:18 AM
Lead	ND	0.0050		mg/L	1	7/26/2005 11:07:18 AM
Selenium	ND	0.050		mg/L	1	7/26/2005 11:07:18 AM
Silver	ND	0.0050		mg/L	1	7/26/2005 11:07:18 AM
EPA METHOD 160.1: TDS						Analyst: **DK**
Total Dissolved Solids	230	50		mg/L	1	7/22/2005

Qualifiers:

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B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #46
Lab Order: 0507181
Collection Date: 7/19/2005 9:30:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.21	0.10		mg/L	1	7/20/2005
Chloride	3.6	0.10		mg/L	1	7/20/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	7/20/2005
Bromide	ND	0.50		mg/L	1	7/20/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	7/20/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	7/20/2005
Sulfate	73	0.50		mg/L	1	7/20/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	100	2.0		mg/L CaCO3	1	7/28/2005
Carbonate	ND	2.0		mg/L CaCO3	1	7/28/2005
Bicarbonate	100	2.0		mg/L CaCO3	1	7/28/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	7/22/2005 6:25:58 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	7/22/2005 6:25:58 AM
Surr: DNOP	89.1	58-140		%REC	1	7/22/2005 6:25:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/22/2005 3:07:57 AM
Surr: BFB	94.6	78.3-120		%REC	1	7/22/2005 3:07:57 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	7/22/2005 3:07:57 AM
Benzene	ND	0.50		µg/L	1	7/22/2005 3:07:57 AM
Toluene	ND	0.50		µg/L	1	7/22/2005 3:07:57 AM
Ethylbenzene	ND	0.50		µg/L	1	7/22/2005 3:07:57 AM
Xylenes, Total	ND	0.50		µg/L	1	7/22/2005 3:07:57 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	7/27/2005
Acenaphthylene	ND	10		µg/L	1	7/27/2005
Aniline	ND	10		µg/L	1	7/27/2005
Anthracene	ND	10		µg/L	1	7/27/2005
Azobenzene	ND	10		µg/L	1	7/27/2005
Benz(a)anthracene	ND	15		µg/L	1	7/27/2005
Benzo(a)pyrene	ND	10		µg/L	1	7/27/2005
Benzo(b)fluoranthene	ND	10		µg/L	1	7/27/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/27/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	7/27/2005
Benzoic acid	ND	50		µg/L	1	7/27/2005
Benzyl alcohol	ND	20		µg/L	1	7/27/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/27/2005

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R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #46
Lab Order: 0507181
Collection Date: 7/19/2005 9:30:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	7/27/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	7/27/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	7/27/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/27/2005
Butyl benzyl phthalate	ND	15		µg/L	1	7/27/2005
Carbazole	ND	10		µg/L	1	7/27/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	7/27/2005
4-Chloroaniline	ND	20		µg/L	1	7/27/2005
2-Chloronaphthalene	ND	10		µg/L	1	7/27/2005
2-Chlorophenol	ND	10		µg/L	1	7/27/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	7/27/2005
Chrysene	ND	15		µg/L	1	7/27/2005
Di-n-butyl phthalate	ND	10		µg/L	1	7/27/2005
Di-n-octyl phthalate	ND	15		µg/L	1	7/27/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/27/2005
Dibenzofuran	ND	10		µg/L	1	7/27/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	7/27/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	7/27/2005
Diethyl phthalate	ND	10		µg/L	1	7/27/2005
Dimethyl phthalate	ND	10		µg/L	1	7/27/2005
2,4-Dichlorophenol	ND	10		µg/L	1	7/27/2005
2,4-Dimethylphenol	ND	10		µg/L	1	7/27/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	7/27/2005
2,4-Dinitrophenol	ND	50		µg/L	1	7/27/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	7/27/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	7/27/2005
Fluoranthene	ND	10		µg/L	1	7/27/2005
Fluorene	ND	10		µg/L	1	7/27/2005
Hexachlorobenzene	ND	10		µg/L	1	7/27/2005
Hexachlorobutadiene	ND	10		µg/L	1	7/27/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/27/2005
Hexachloroethane	ND	10		µg/L	1	7/27/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/27/2005
Isophorone	ND	10		µg/L	1	7/27/2005
2-Methylnaphthalene	ND	10		µg/L	1	7/27/2005
2-Methylphenol	ND	15		µg/L	1	7/27/2005
3+4-Methylphenol	ND	10		µg/L	1	7/27/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/27/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	7/27/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/27/2005

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #46
Lab Order: 0507181
Collection Date: 7/19/2005 9:30:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	7/27/2005
2-Nitroaniline	ND	50		µg/L	1	7/27/2005
3-Nitroaniline	ND	50		µg/L	1	7/27/2005
4-Nitroaniline	ND	20		µg/L	1	7/27/2005
Nitrobenzene	ND	10		µg/L	1	7/27/2005
2-Nitrophenol	ND	15		µg/L	1	7/27/2005
4-Nitrophenol	ND	50		µg/L	1	7/27/2005
Pentachlorophenol	ND	50		µg/L	1	7/27/2005
Phenanthrene	ND	10		µg/L	1	7/27/2005
Phenol	ND	10		µg/L	1	7/27/2005
Pyrene	ND	15		µg/L	1	7/27/2005
Pyridine	ND	30		µg/L	1	7/27/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/27/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/27/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	7/27/2005
Surr: 2,4,6-Tribromophenol	45.9	16.6-150		%REC	1	7/27/2005
Surr: 2-Fluorobiphenyl	54.3	19.6-134		%REC	1	7/27/2005
Surr: 2-Fluorophenol	41.8	9.54-113		%REC	1	7/27/2005
Surr: 4-Terphenyl-d14	57.3	22.7-145		%REC	1	7/27/2005
Surr: Nitrobenzene-d5	55.6	14.6-134		%REC	1	7/27/2005
Surr: Phenol-d6	28.9	10.7-80.3		%REC	1	7/27/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **DK**
Specific Conductance	340	0.010		µmhos/cm	1	7/21/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	7/28/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	7/25/2005 10:37:06 AM
Barium	0.070	0.0020		mg/L	1	7/25/2005 10:37:06 AM
Cadmium	ND	0.0020		mg/L	1	7/25/2005 10:37:06 AM
Calcium	36	1.0		mg/L	1	7/26/2005 9:45:22 AM
Chromium	ND	0.0060		mg/L	1	7/25/2005 10:37:06 AM
Copper	ND	0.0060		mg/L	1	7/25/2005 10:37:06 AM
Iron	0.037	0.020		mg/L	1	7/25/2005 10:37:06 AM
Lead	ND	0.0050		mg/L	1	7/25/2005 10:37:06 AM
Magnesium	6.7	1.0		mg/L	1	7/26/2005 9:45:22 AM
Manganese	0.021	0.0020		mg/L	1	7/25/2005 10:37:06 AM
Potassium	2.0	1.0		mg/L	1	8/1/2005 1:53:41 PM
Selenium	ND	0.050		mg/L	1	7/25/2005 10:37:06 AM
Silver	ND	0.0050		mg/L	1	7/25/2005 10:37:06 AM
Sodium	22	1.0		mg/L	1	7/26/2005 9:45:22 AM
Uranium	ND	0.10		mg/L	1	7/25/2005 10:37:06 AM

Qualifiers:

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: N of MW #46
Lab Order: 0507181
Collection Date: 7/19/2005 9:30:00 AM
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.045	0.0050		mg/L	1	7/26/2005 9:45:22 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	7/26/2005 11:10:16 AM
Barium	0.070	0.020		mg/L	1	7/26/2005 11:10:16 AM
Cadmium	ND	0.0020		mg/L	1	7/26/2005 11:10:16 AM
Chromium	ND	0.0060		mg/L	1	7/26/2005 11:10:16 AM
Lead	ND	0.0050		mg/L	1	7/26/2005 11:10:16 AM
Selenium	ND	0.050		mg/L	1	7/26/2005 11:10:16 AM
Silver	ND	0.0050		mg/L	1	7/26/2005 11:10:16 AM
EPA METHOD 160.1: TDS						Analyst: DK
Total Dissolved Solids	240	50		mg/L	1	7/22/2005

Qualifiers:

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* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: Trip Blank
Lab Order: 0507181
Collection Date:
Project: River Sampling 3rd Qtr. 2005
Lab ID: 0507181-05
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	7/22/2005 3:38:09 AM
Surr: BFB	101	78.3-120		%REC	1	7/22/2005 3:38:09 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	7/22/2005 3:38:09 AM
Benzene	ND	0.50		µg/L	1	7/22/2005 3:38:09 AM
Toluene	ND	0.50		µg/L	1	7/22/2005 3:38:09 AM
Ethylbenzene	ND	0.50		µg/L	1	7/22/2005 3:38:09 AM
Xylenes, Total	ND	0.50		µg/L	1	7/22/2005 3:38:09 AM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID **MBLK** Batch ID: **R16052** Test Code: **E300** Units: **mg/L** Analysis Date **7/20/2005** Prep Date
Client ID: Run ID: **LC_050720A** SeqNo: **381430**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID **MBLK** Batch ID: **R16132** Test Code: **E310.1** Units: **mg/L CaCO3** Analysis Date **7/28/2005** Prep Date
Client ID: Run ID: **WC_050728C** SeqNo: **383874**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2									
Carbonate	ND	2									
Bicarbonate	ND	2									

Sample ID **MB-8382** Batch ID: **8382** Test Code: **SW8015** Units: **mg/L** Analysis Date **7/22/2005 2:36:12 AM** Prep Date **7/21/2005**
Client ID: Run ID: **FID(17A) 2_050721A** SeqNo: **381978**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.129	0	1	0	113	58	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank** Batch ID: **R16066** Test Code: **SW8015** Units: **mg/L** Analysis Date **7/21/2005 9:25:29 AM** Prep Date
Client ID: Run ID: **PIDFID_050721A** SeqNo: **382110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.0168	0.05									J
Surr: BFB	19.86	0	20	0	99.3	78.3	120	0			

Sample ID **Reagent Blank** Batch ID: **R16066** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/21/2005 9:25:29 AM** Prep Date
Client ID: Run ID: **PIDFID_050721A** SeqNo: **382069**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID **MB-8383** Batch ID: **8383** Test Code: **SW8270C** Units: **µg/L** Analysis Date **7/27/2005** Prep Date **7/21/2005**
Client ID: Run ID: **ELMO_050727A** SeqNo: **384015**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	10									
Acenaphthylene	ND	10									
Aniline	ND	10									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	10									
Benzo(b)fluoranthene	ND	10									
Benzo(g,h,i)perylene	ND	10									
Benzo(k)fluoranthene	ND	10									
Benzoic acid	ND	50									
Benzyl alcohol	ND	20									
Bis(2-chloroethoxy)methane	ND	10									
Bis(2-chloroethyl)ether	ND	15									
Bis(2-chloroisopropyl)ether	ND	15									
Bis(2-ethylhexyl)phthalate	ND	15									
4-Bromophenyl phenyl ether	ND	10									
Butyl benzyl phthalate	ND	15									
Carbazole	ND	10									
4-Chloro-3-methylphenol	ND	20									
4-Chloroaniline	ND	20									
2-Chloronaphthalene	ND	10									
2-Chlorophenol	ND	10									
4-Chlorophenyl phenyl ether	ND	15									
Chrysene	ND	15									
Di-n-butyl phthalate	ND	10									
Di-n-octyl phthalate	ND	15									
Dibenz(a,h)anthracene	ND	10									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Method Blank

Dibenzofuran	ND	10
1,2-Dichlorobenzene	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
3,3'-Dichlorobenzidine	ND	15
Diethyl phthalate	ND	10
Dimethyl phthalate	ND	10
2,4-Dichlorophenol	ND	10
2,4-Dimethylphenol	ND	10
4,6-Dinitro-2-methylphenol	ND	50
2,4-Dinitrophenol	ND	50
2,4-Dinitrotoluene	ND	10
2,6-Dinitrotoluene	ND	10
Fluoranthene	ND	10
Fluorene	ND	10
Hexachlorobenzene	ND	10
Hexachlorobutadiene	ND	10
Hexachlorocyclopentadiene	ND	10
Hexachloroethane	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Isophorone	ND	10
2-Methylnaphthalene	ND	10
2-Methylphenol	ND	15
3+4-Methylphenol	ND	10
N-Nitrosodi-n-propylamine	ND	10
N-Nitrosodimethylamine	ND	10
N-Nitrosodiphenylamine	ND	10
Naphthalene	ND	10
2-Nitroaniline	ND	50
3-Nitroaniline	ND	50
4-Nitroaniline	ND	20
Nitrobenzene	ND	10
2-Nitrophenol	ND	15

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Method Blank

4-Nitrophenol	ND	50							
Pentachlorophenol	ND	50							
Phenanthrene	ND	10							
Phenol	ND	10							
Pyrene	ND	15							
Pyridine	ND	30							
1,2,4-Trichlorobenzene	ND	10							
2,4,5-Trichlorophenol	ND	10							
2,4,6-Trichlorophenol	ND	15							
Surr: 2,4,6-Tribromophenol	147.6	0	200	0	73.8	16.6	115	0	
Surr: 2-Fluorobiphenyl	70	0	100	0	70.0	37	95.7	0	
Surr: 2-Fluorophenol	119	0	200	0	59.5	9.54	89.8	0	
Surr: 4-Terphenyl-d14	63.04	0	100	0	63.0	51.2	125	0	
Surr: Nitrobenzene-d5	73.64	0	100	0	73.6	38	106	0	
Surr: Phenol-d6	86.34	0	200	0	43.2	10.7	63.4	0	

Sample ID **MB-8427** Batch ID: **8427** Test Code: **SW7470** Units: **mg/L** Analysis Date **7/28/2005** Prep Date **7/28/2005**
Client ID: Run ID: **MI-LA254_050728A** SeqNo: **383808**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0002									

Sample ID **MB** Batch ID: **R16098** Test Code: **SW6010A** Units: **mg/L** Analysis Date **7/26/2005 9:21:44 AM** Prep Date
Client ID: Run ID: **ICP_050725C** SeqNo: **383117**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	ND	1									
Magnesium	ND	1									
Zinc	ND	0.05									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID **MB** Batch ID: **R16098** Test Code: **SW6010A** Units: **mg/L** Analysis Date **7/25/2005 9:32:56 AM** Prep Date

Client ID: Run ID: **ICP_050725C** SeqNo: **383127**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Manganese	ND	0.002									
Selenium	ND	0.02									
Silver	ND	0.005									
Uranium	ND	0.1									
Zinc	ND	0.05									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID **MB** Batch ID: **R16160** Test Code: **SW6010A** Units: **mg/L** Analysis Date **8/1/2005 1:30:03 PM** Prep Date
Client ID: Run ID: **ICP_050801A** SeqNo: **384640**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	0.1625	1									J
Manganese	ND	0.002									
Potassium	0.2152	1									J
Selenium	ND	0.02									
Silver	ND	0.005									
Sodium	ND	1									
Uranium	ND	0.1									
Zinc	ND	0.05									

Sample ID **MB-8403** Batch ID: **8403** Test Code: **SW6010A** Units: **mg/L** Analysis Date **7/26/2005 10:41:51 AM** Prep Date **7/25/2005**
Client ID: Run ID: **ICP_050726A** SeqNo: **383287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Lead	ND	0.005									
Selenium	ND	0.05									
Silver	0.007622	0.005									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID **MB-8377** Batch ID: **8377** Test Code: **E160.1** Units: **mg/L** Analysis Date **7/22/2005** Prep Date **7/21/2005**
Client ID: Run ID: **WC_050622E** SeqNo: **382620**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *05-Aug-05*

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS** Batch ID: **R16052** Test Code: **E300** Units: **mg/L** Analysis Date: **7/20/2005** Prep Date:
Client ID: Run ID: **LC_050720A** SeqNo: **381431**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5137	0.1	0.5	0	103	90	110	0			
Chloride	5.014	0.1	5	0	100	90	110	0			
Nitrogen, Nitrite (As N)	0.9945	0.1	1	0	99.5	90	110	0			
Bromide	2.637	0.5	2.5	0	105	90	110	0			
Nitrogen, Nitrate (As N)	2.542	0.1	2.5	0	102	90	110	0			
Phosphorus, Orthophosphate (As P)	5.094	0.5	5	0	102	90	110	0			
Sulfate	10.58	0.5	10	0	106	90	110	0			

Sample ID: **LCS-8382** Batch ID: **8382** Test Code: **SW8015** Units: **mg/L** Analysis Date: **7/22/2005 3:09:02 AM** Prep Date: **7/21/2005**
Client ID: Run ID: **FID(17A) 2_050721A** SeqNo: **382005**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.491	1	5	0	110	81.2	149	0			
Surr: DNOP	0.5398	0	0.5	0	108	58	140	0			

Sample ID: **LCSD-8382** Batch ID: **8382** Test Code: **SW8015** Units: **mg/L** Analysis Date: **7/22/2005 3:41:55 AM** Prep Date: **7/21/2005**
Client ID: Run ID: **FID(17A) 2_050721A** SeqNo: **382006**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.229	1	5	0	125	81.2	149	5.491	12.6	23	
Surr: DNOP	0.574	0	0.5	0	115	58	140	0.5398	6.14	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **GRO lcs 2.5ug** Batch ID: **R16066** Test Code: **SW8015** Units: **mg/L** Analysis Date: **7/22/2005 1:06:12 AM** Prep Date:
Client ID: Run ID: **PIDFID_050721A** SeqNo: **382113**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4686	0.05	0.5	0.0168	90.4	82.6	114	0			
Surr: BFB	26.15	0	20	0	131	78.3	120	0			S

Sample ID: **BTEX lcs 100ng** Batch ID: **R16066** Test Code: **SW8021** Units: **µg/L** Analysis Date: **7/22/2005 12:05:09 AM** Prep Date:
Client ID: Run ID: **PIDFID_050721A** SeqNo: **382081**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	26.97	2.5	20	0	135	64.5	133	0			S
Benzene	19.67	0.5	20	0	98.3	88.7	114	0			
Toluene	19.17	0.5	20	0	95.9	89.3	112	0			
Ethylbenzene	19.21	0.5	20	0	96.1	88.6	113	0			
Xylenes, Total	38.86	0.5	40	0	97.1	89.4	112	0			

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Qualifiers:
ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-8383** Batch ID: **8383** Test Code: **SW8270C** Units: **µg/L** Analysis Date: **7/27/2005** Prep Date: **7/21/2005**
Client ID: Run ID: **ELMO_050727A** SeqNo: **384017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	63.86	10	100	0	63.9	11	123	0			
4-Chloro-3-methylphenol	143	20	200	0	71.5	15.4	119	0			
2-Chlorophenol	150.1	10	200	0	75.1	12.2	122	0			
1,4-Dichlorobenzene	64.96	10	100	0	65.0	16.9	100	0			
2,4-Dinitrotoluene	64.66	10	100	0	64.7	13	138	0			
N-Nitrosodi-n-propylamine	64.46	10	100	0	64.5	9.93	122	0			
4-Nitrophenol	62.56	50	200	0	31.3	-20.5	87.4	0			
Pentachlorophenol	118	50	200	0	59.0	-0.355	114	0			
Phenol	81.96	10	200	0	41.0	7.53	73.1	0			
Pyrene	63.18	15	100	0	63.2	12.6	140	0			
1,2,4-Trichlorobenzene	67.36	10	100	0	67.4	17.4	98.7	0			
Surr: 2,4,6-Tribromophenol	116.6	0	200	0	58.3	16.6	150	0			
Surr: 2-Fluorobiphenyl	64.44	0	100	0	64.4	19.6	134	0			
Surr: 2-Fluorophenol	113.1	0	200	0	56.6	9.54	113	0			
Surr: 4-Terphenyl-d14	60.7	0	100	0	60.7	22.7	145	0			
Surr: Nitrobenzene-d5	74.04	0	100	0	74.0	14.6	134	0			
Surr: Phenol-d6	85.12	0	200	0	42.6	10.7	80.3	0			

Sample ID: **LCS-8427** Batch ID: **8427** Test Code: **SW7470** Units: **mg/L** Analysis Date: **7/28/2005** Prep Date: **7/28/2005**
Client ID: Run ID: **MI-LA254_050728A** SeqNo: **383809**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005392	0.0002	0.005	0	108	75.2	134	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD-8427** Batch ID: **8427** Test Code: **SW7470** Units: **mg/L** Analysis Date: **7/28/2005** Prep Date: **7/28/2005**
Client ID: Run ID: **MI-LA254_050728A** SeqNo: **383820**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005386	0.0002	0.005	0	108	75.2	134	0.005392	0.103	0	

Sample ID: **LCS** Batch ID: **R16098** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **7/26/2005 9:28:14 AM** Prep Date:
Client ID: Run ID: **ICP_050725C** SeqNo: **383119**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	47.92	1	50.5	0	94.9	80	120	0			
Magnesium	48	1	50.5	0	95.1	80	120	0			
Zinc	0.5056	0.05	0.5	0	101	80	120	0			

Sample ID: **LCSD** Batch ID: **R16098** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **7/26/2005 9:30:50 AM** Prep Date:
Client ID: Run ID: **ICP_050725C** SeqNo: **383120**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	48.23	1	50.5	0	95.5	80	120	47.92	0.645	20	
Magnesium	48.26	1	50.5	0	95.6	80	120	48	0.528	20	
Zinc	0.5105	0.05	0.5	0	102	80	120	0.5056	0.973	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS** Batch ID: **R16098** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **7/25/2005 9:35:50 AM** Prep Date:
Client ID: Run ID: **ICP_050725C** SeqNo: **383128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.52	0.02	0.5	0	104	80	120	0			
Barium	0.4998	0.02	0.5	0	100	80	120	0			
Cadmium	0.5146	0.002	0.5	0	103	80	120	0			
Chromium	0.5045	0.006	0.5	0	101	80	120	0			
Copper	0.5097	0.006	0.5	0	102	80	120	0			
Iron	0.4907	0.02	0.5	0	98.1	80	120	0			
Lead	0.503	0.005	0.5	0	101	80	120	0			
Manganese	0.4825	0.002	0.5	0	96.5	80	120	0			
Selenium	0.4867	0.02	0.5	0	97.3	80	120	0			
Silver	0.5158	0.005	0.5	0	103	80	120	0			
Uranium	2.681	0.1	2.5	0	107	80	120	0			
Zinc	0.5071	0.05	0.5	0	101	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD** Batch ID: **R16098** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **7/25/2005 9:39:01 AM** Prep Date:

Client ID: Run ID: **ICP_050725C** SeqNo: **383129**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5368	0.02	0.5	0	107	80	120	0.52	3.18	20	
Barium	0.4961	0.02	0.5	0	99.2	80	120	0.4998	0.745	20	
Cadmium	0.5106	0.002	0.5	0	102	80	120	0.5146	0.779	20	
Chromium	0.5011	0.006	0.5	0	100	80	120	0.5045	0.678	20	
Copper	0.5053	0.006	0.5	0	101	80	120	0.5097	0.879	20	
Iron	0.484	0.02	0.5	0	96.8	80	120	0.4907	1.37	20	
Lead	0.5017	0.005	0.5	0	100	80	120	0.503	0.250	20	
Manganese	0.4792	0.002	0.5	0	95.8	80	120	0.4825	0.685	20	
Selenium	0.4768	0.02	0.5	0	95.4	80	120	0.4867	2.05	20	
Silver	0.5113	0.005	0.5	0	102	80	120	0.5158	0.875	20	
Uranium	2.665	0.1	2.5	0	107	80	120	2.681	0.593	20	
Zinc	0.5045	0.05	0.5	0	101	80	120	0.5071	0.509	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS** Batch ID: **R16160** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **8/1/2005 1:33:01 PM** Prep Date:

Client ID: Run ID: **ICP_050801A** SeqNo: **384641**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5354	0.02	0.5	0	107	80	120	0			
Barium	0.4903	0.02	0.5	0	98.1	80	120	0			
Cadmium	0.5104	0.002	0.5	0	102	80	120	0			
Calcium	50.2	1	50.5	0	99.4	80	120	0			
Chromium	0.497	0.006	0.5	0	99.4	80	120	0			
Copper	0.5006	0.006	0.5	0	100	80	120	0			
Iron	0.487	0.02	0.5	0	97.4	80	120	0			
Lead	0.4968	0.005	0.5	0	99.4	80	120	0			
Magnesium	50.63	1	50.5	0.1625	99.9	80	120	0			
Manganese	0.4774	0.002	0.5	0	95.5	80	120	0			
Potassium	53.53	1	55	0.2152	96.9	80	120	0			
Selenium	0.4913	0.02	0.5	0	98.3	80	120	0			
Silver	0.511	0.005	0.5	0	102	80	120	0			
Sodium	53.83	1	50.5	0	107	80	120	0			
Uranium	2.563	0.1	2.5	0	103	80	120	0			
Zinc	0.5061	0.05	0.5	0	101	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD** Batch ID: **R16160** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **8/1/2005 1:36:04 PM** Prep Date:
Client ID: Run ID: **ICP_050801A** SeqNo: **384642**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5145	0.02	0.5	0	103	80	120	0.5354	3.97	20	
Barium	0.4872	0.02	0.5	0	97.4	80	120	0.4903	0.625	20	
Cadmium	0.5015	0.002	0.5	0	100	80	120	0.5104	1.75	20	
Calcium	50.49	1	50.5	0	100	80	120	50.2	0.585	20	
Chromium	0.4906	0.006	0.5	0	98.1	80	120	0.497	1.30	20	
Copper	0.4988	0.006	0.5	0	99.8	80	120	0.5006	0.374	20	
Iron	0.4902	0.02	0.5	0	98.0	80	120	0.487	0.667	20	
Lead	0.4848	0.005	0.5	0	97.0	80	120	0.4968	2.46	20	
Magnesium	50.99	1	50.5	0.1625	101	80	120	50.63	0.710	20	
Manganese	0.4739	0.002	0.5	0	94.8	80	120	0.4774	0.733	20	
Potassium	53.74	1	55	0.2152	97.3	80	120	53.53	0.400	20	
Selenium	0.4831	0.02	0.5	0	96.6	80	120	0.4913	1.68	20	
Silver	0.5081	0.005	0.5	0	102	80	120	0.511	0.577	20	
Sodium	54.4	1	50.5	0	108	80	120	53.83	1.05	20	
Uranium	2.583	0.1	2.5	0	103	80	120	2.563	0.765	20	
Zinc	0.4981	0.05	0.5	0	99.6	80	120	0.5061	1.61	20	

Sample ID: **LCS-8403** Batch ID: **8403** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **7/26/2005 10:45:03 AM** Prep Date: **7/25/2005**
Client ID: Run ID: **ICP_050726A** SeqNo: **383288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4973	0.02	0.5	0	99.5	80	120	0			
Barium	0.4811	0.02	0.5	0	96.2	80	120	0			
Cadmium	0.486	0.002	0.5	0	97.2	80	120	0			
Chromium	0.4715	0.006	0.5	0	94.3	80	120	0			
Lead	0.4743	0.005	0.5	0	94.9	80	120	0			
Selenium	0.4658	0.05	0.5	0	93.2	80	120	0			
Silver	0.4973	0.005	0.5	0.007622	97.9	80	120	0			B

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0507181
Project: River Sampling 3rd Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD-8403** Batch ID: **8403** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **7/26/2005 10:48:12 AM** Prep Date: **7/25/2005**
Client ID: Run ID: **ICP_050726A** SeqNo: **383289**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5209	0.02	0.5	0	104	80	120	0.4973	4.64	20	
Barium	0.488	0.02	0.5	0	97.6	80	120	0.4811	1.43	20	
Cadmium	0.4972	0.002	0.5	0	99.4	80	120	0.486	2.29	20	
Chromium	0.4818	0.006	0.5	0	96.4	80	120	0.4715	2.18	20	
Lead	0.485	0.005	0.5	0	97.0	80	120	0.4743	2.23	20	
Selenium	0.4946	0.05	0.5	0	98.9	80	120	0.4658	6.01	20	
Silver	0.5044	0.005	0.5	0.007622	99.4	80	120	0.4973	1.43	20	B

Sample ID: **LCS-8377** Batch ID: **8377** Test Code: **E160.1** Units: **mg/L** Analysis Date: **7/22/2005** Prep Date: **7/21/2005**
Client ID: Run ID: **WC_050622E** SeqNo: **382621**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1016	50	1000	0	102	80	120	0			

34/35

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 7/20/2005

Work Order Number 0507181 | Received by AT

Checklist completed by _____ 7/20/05
Signature | Date

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 1° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

November 09, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: River Sampling 4th Qtr. 2005 Order No.: 0510245

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 4 samples on 10/25/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	River N of MW #46
Lab Order:	0510245	**Collection Date:**	10/24/2005 1:10:00 PM
Project:	River Sampling 4th Qtr. 2005		
Lab ID:	0510245-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.12	0.10		mg/L	1	10/25/2005
Chloride	3.3	0.10		mg/L	1	10/25/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	10/25/2005
Bromide	ND	0.50		mg/L	1	10/25/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	10/25/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	10/25/2005
Sulfate	67	0.50		mg/L	1	10/25/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	88	2.0		mg/L CaCO3	1	11/7/2005
Carbonate	ND	2.0		mg/L CaCO3	1	11/7/2005
Bicarbonate	88	2.0		mg/L CaCO3	1	11/7/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/27/2005 7:20:30 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/27/2005 7:20:30 AM
Surr: DNOP	130	58-140		%REC	1	10/27/2005 7:20:30 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/3/2005 10:49:23 AM
Surr: BFB	103	79.7-118		%REC	1	11/3/2005 10:49:23 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	11/3/2005 10:49:23 AM
Benzene	ND	0.50		µg/L	1	11/3/2005 10:49:23 AM
Toluene	ND	0.50		µg/L	1	11/3/2005 10:49:23 AM
Ethylbenzene	ND	0.50		µg/L	1	11/3/2005 10:49:23 AM
Xylenes, Total	ND	0.50		µg/L	1	11/3/2005 10:49:23 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	10		µg/L	1	11/2/2005
Acenaphthylene	ND	10		µg/L	1	11/2/2005
Aniline	ND	20		µg/L	1	11/2/2005
Anthracene	ND	10		µg/L	1	11/2/2005
Azobenzene	ND	10		µg/L	1	11/2/2005
Benz(a)anthracene	ND	15		µg/L	1	11/2/2005
Benzo(a)pyrene	ND	15		µg/L	1	11/2/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	11/2/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/2/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	11/2/2005
Benzoic acid	ND	50		µg/L	1	11/2/2005
Benzyl alcohol	ND	20		µg/L	1	11/2/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/2/2005

Qualifiers:

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B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Client Sample ID: River N of MW #46
Lab Order: 0510245
Collection Date: 10/24/2005 1:10:00 PM
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/2/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/2/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/2/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/2/2005
Butyl benzyl phthalate	ND	15		µg/L	1	11/2/2005
Carbazole	ND	10		µg/L	1	11/2/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/2/2005
4-Chloroaniline	ND	20		µg/L	1	11/2/2005
2-Chloronaphthalene	ND	10		µg/L	1	11/2/2005
2-Chlorophenol	ND	10		µg/L	1	11/2/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/2/2005
Chrysene	ND	15		µg/L	1	11/2/2005
Di-n-butyl phthalate	ND	10		µg/L	1	11/2/2005
Di-n-octyl phthalate	ND	15		µg/L	1	11/2/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/2/2005
Dibenzofuran	ND	10		µg/L	1	11/2/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/2/2005
Diethyl phthalate	ND	10		µg/L	1	11/2/2005
Dimethyl phthalate	ND	10		µg/L	1	11/2/2005
2,4-Dichlorophenol	ND	10		µg/L	1	11/2/2005
2,4-Dimethylphenol	ND	10		µg/L	1	11/2/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/2/2005
2,4-Dinitrophenol	ND	50		µg/L	1	11/2/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	11/2/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	11/2/2005
Fluoranthene	ND	10		µg/L	1	11/2/2005
Fluorene	ND	10		µg/L	1	11/2/2005
Hexachlorobenzene	ND	10		µg/L	1	11/2/2005
Hexachlorobutadiene	ND	10		µg/L	1	11/2/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/2/2005
Hexachloroethane	ND	10		µg/L	1	11/2/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/2/2005
Isophorone	ND	10		µg/L	1	11/2/2005
2-Methylnaphthalene	ND	10		µg/L	1	11/2/2005
2-Methylphenol	ND	15		µg/L	1	11/2/2005
3+4-Methylphenol	ND	20		µg/L	1	11/2/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/2/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	11/2/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/2/2005

Qualifiers:
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Client Sample ID: River N of MW #46
Lab Order: 0510245
Collection Date: 10/24/2005 1:10:00 PM
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	11/2/2005
2-Nitroaniline	ND	50		µg/L	1	11/2/2005
3-Nitroaniline	ND	50		µg/L	1	11/2/2005
4-Nitroaniline	ND	20		µg/L	1	11/2/2005
Nitrobenzene	ND	10		µg/L	1	11/2/2005
2-Nitrophenol	ND	15		µg/L	1	11/2/2005
4-Nitrophenol	ND	50		µg/L	1	11/2/2005
Pentachlorophenol	ND	50		µg/L	1	11/2/2005
Phenanthrene	ND	10		µg/L	1	11/2/2005
Phenol	ND	10		µg/L	1	11/2/2005
Pyrene	ND	15		µg/L	1	11/2/2005
Pyridine	ND	30		µg/L	1	11/2/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/2/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/2/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/2/2005
Surr: 2,4,6-Tribromophenol	67.9	16.6-150		%REC	1	11/2/2005
Surr: 2-Fluorobiphenyl	66.2	19.6-134		%REC	1	11/2/2005
Surr: 2-Fluorophenol	43.1	9.54-113		%REC	1	11/2/2005
Surr: 4-Terphenyl-d14	70.2	22.7-145		%REC	1	11/2/2005
Surr: Nitrobenzene-d5	66.2	14.6-134		%REC	1	11/2/2005
Surr: Phenol-d6	30.8	10.7-80.3		%REC	1	11/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: TES
Specific Conductance	340	0.010		µmhos/cm	1	11/1/2005
EPA METHOD 245.1: MERCURY						Analyst: CMC
Mercury	ND	0.00020		mg/L	1	10/26/2005
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	11/7/2005 2:56:44 PM
Barium	0.064	0.0020		mg/L	1	11/7/2005 2:56:44 PM
Cadmium	ND	0.0020		mg/L	1	11/7/2005 2:56:44 PM
Calcium	38	1.0		mg/L	1	11/7/2005 2:56:44 PM
Chromium	ND	0.0060		mg/L	1	11/7/2005 2:56:44 PM
Copper	ND	0.0060		mg/L	1	11/7/2005 2:56:44 PM
Iron	ND	0.020		mg/L	1	11/7/2005 2:56:44 PM
Lead	ND	0.0050		mg/L	1	11/7/2005 2:56:44 PM
Magnesium	6.5	1.0		mg/L	1	11/7/2005 2:56:44 PM
Manganese	0.014	0.0020		mg/L	1	11/7/2005 2:56:44 PM
Potassium	1.9	1.0		mg/L	1	11/7/2005 2:56:44 PM
Selenium	ND	0.050		mg/L	1	11/7/2005 2:56:44 PM
Silver	ND	0.0050		mg/L	1	11/7/2005 2:56:44 PM
Sodium	19	1.0		mg/L	1	11/7/2005 2:56:44 PM
Uranium	ND	0.10		mg/L	1	11/7/2005 2:56:44 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Lab Order: 0510245
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-01

Client Sample ID: River N of MW #46
Collection Date: 10/24/2005 1:10:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.027	0.0050		mg/L	1	11/7/2005 2:56:44 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	10/28/2005 12:55:23 PM
Barium	0.083	0.020		mg/L	1	10/28/2005 12:55:23 PM
Cadmium	ND	0.0020		mg/L	1	10/28/2005 12:55:23 PM
Chromium	ND	0.0060		mg/L	1	10/28/2005 12:55:23 PM
Lead	ND	0.0050		mg/L	1	10/28/2005 12:55:23 PM
Selenium	ND	0.050		mg/L	1	10/28/2005 12:55:23 PM
Silver	ND	0.0050		mg/L	1	10/28/2005 12:55:23 PM
EPA METHOD 160.1: TDS						Analyst: TES
Total Dissolved Solids	190	50		mg/L	1	10/27/2005

Qualifiers:
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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	River N of MW #45
Lab Order:	0510245	**Collection Date:**	10/24/2005 2:00:00 PM
Project:	River Sampling 4th Qtr. 2005		
Lab ID:	0510245-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.12	0.10		mg/L	1	10/25/2005
Chloride	3.3	0.10		mg/L	1	10/25/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	10/25/2005
Bromide	ND	0.50		mg/L	1	10/25/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	10/25/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	10/25/2005
Sulfate	67	0.50		mg/L	1	10/25/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	88	2.0		mg/L CaCO3	1	11/7/2005
Carbonate	ND	2.0		mg/L CaCO3	1	11/7/2005
Bicarbonate	88	2.0		mg/L CaCO3	1	11/7/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/27/2005 7:53:18 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/27/2005 7:53:18 AM
Surr: DNOP	127	58-140		%REC	1	10/27/2005 7:53:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/3/2005 11:20:27 AM
Surr: BFB	106	79.7-118		%REC	1	11/3/2005 11:20:27 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	11/3/2005 11:20:27 AM
Benzene	ND	0.50		µg/L	1	11/3/2005 11:20:27 AM
Toluene	ND	0.50		µg/L	1	11/3/2005 11:20:27 AM
Ethylbenzene	ND	0.50		µg/L	1	11/3/2005 11:20:27 AM
Xylenes, Total	ND	0.50		µg/L	1	11/3/2005 11:20:27 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	10		µg/L	1	11/2/2005
Acenaphthylene	ND	10		µg/L	1	11/2/2005
Aniline	ND	20		µg/L	1	11/2/2005
Anthracene	ND	10		µg/L	1	11/2/2005
Azobenzene	ND	10		µg/L	1	11/2/2005
Benz(a)anthracene	ND	15		µg/L	1	11/2/2005
Benzo(a)pyrene	ND	15		µg/L	1	11/2/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	11/2/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/2/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	11/2/2005
Benzoic acid	ND	50		µg/L	1	11/2/2005
Benzyl alcohol	ND	20		µg/L	1	11/2/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/2/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Client Sample ID: River N of MW #45
Lab Order: 0510245
Collection Date: 10/24/2005 2:00:00 PM
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/2/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/2/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/2/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/2/2005
Butyl benzyl phthalate	ND	15		µg/L	1	11/2/2005
Carbazole	ND	10		µg/L	1	11/2/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/2/2005
4-Chloroaniline	ND	20		µg/L	1	11/2/2005
2-Chloronaphthalene	ND	10		µg/L	1	11/2/2005
2-Chlorophenol	ND	10		µg/L	1	11/2/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/2/2005
Chrysene	ND	15		µg/L	1	11/2/2005
Di-n-butyl phthalate	ND	10		µg/L	1	11/2/2005
Di-n-octyl phthalate	ND	15		µg/L	1	11/2/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/2/2005
Dibenzofuran	ND	10		µg/L	1	11/2/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/2/2005
Diethyl phthalate	ND	10		µg/L	1	11/2/2005
Dimethyl phthalate	ND	10		µg/L	1	11/2/2005
2,4-Dichlorophenol	ND	10		µg/L	1	11/2/2005
2,4-Dimethylphenol	ND	10		µg/L	1	11/2/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/2/2005
2,4-Dinitrophenol	ND	50		µg/L	1	11/2/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	11/2/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	11/2/2005
Fluoranthene	ND	10		µg/L	1	11/2/2005
Fluorene	ND	10		µg/L	1	11/2/2005
Hexachlorobenzene	ND	10		µg/L	1	11/2/2005
Hexachlorobutadiene	ND	10		µg/L	1	11/2/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/2/2005
Hexachloroethane	ND	10		µg/L	1	11/2/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/2/2005
Isophorone	ND	10		µg/L	1	11/2/2005
2-Methylnaphthalene	ND	10		µg/L	1	11/2/2005
2-Methylphenol	ND	15		µg/L	1	11/2/2005
3+4-Methylphenol	ND	20		µg/L	1	11/2/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/2/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	11/2/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/2/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Lab Order: 0510245
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-02

Client Sample ID: River N of MW #45
Collection Date: 10/24/2005 2:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	11/2/2005
2-Nitroaniline	ND	50		µg/L	1	11/2/2005
3-Nitroaniline	ND	50		µg/L	1	11/2/2005
4-Nitroaniline	ND	20		µg/L	1	11/2/2005
Nitrobenzene	ND	10		µg/L	1	11/2/2005
2-Nitrophenol	ND	15		µg/L	1	11/2/2005
4-Nitrophenol	ND	50		µg/L	1	11/2/2005
Pentachlorophenol	ND	50		µg/L	1	11/2/2005
Phenanthrene	ND	10		µg/L	1	11/2/2005
Phenol	ND	10		µg/L	1	11/2/2005
Pyrene	ND	15		µg/L	1	11/2/2005
Pyridine	ND	30		µg/L	1	11/2/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/2/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/2/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/2/2005
Surr: 2,4,6-Tribromophenol	60.8	16.6-150		%REC	1	11/2/2005
Surr: 2-Fluorobiphenyl	62.6	19.6-134		%REC	1	11/2/2005
Surr: 2-Fluorophenol	52.5	9.54-113		%REC	1	11/2/2005
Surr: 4-Terphenyl-d14	74.1	22.7-145		%REC	1	11/2/2005
Surr: Nitrobenzene-d5	61.4	14.6-134		%REC	1	11/2/2005
Surr: Phenol-d6	37.1	10.7-80.3		%REC	1	11/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: TES
Specific Conductance	340	0.010		µmhos/cm	1	11/1/2005
EPA METHOD 245.1: MERCURY						Analyst: CMC
Mercury	ND	0.00020		mg/L	1	10/26/2005
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	11/7/2005 2:59:51 PM
Barium	0.065	0.0020		mg/L	1	11/7/2005 2:59:51 PM
Cadmium	ND	0.0020		mg/L	1	11/7/2005 2:59:51 PM
Calcium	38	1.0		mg/L	1	11/7/2005 2:59:51 PM
Chromium	ND	0.0060		mg/L	1	11/7/2005 2:59:51 PM
Copper	ND	0.0060		mg/L	1	11/7/2005 2:59:51 PM
Iron	ND	0.020		mg/L	1	11/7/2005 2:59:51 PM
Lead	ND	0.0050		mg/L	1	11/7/2005 2:59:51 PM
Magnesium	6.5	1.0		mg/L	1	11/7/2005 2:59:51 PM
Manganese	0.016	0.0020		mg/L	1	11/7/2005 2:59:51 PM
Potassium	1.9	1.0		mg/L	1	11/7/2005 2:59:51 PM
Selenium	ND	0.050		mg/L	1	11/7/2005 2:59:51 PM
Silver	ND	0.0050		mg/L	1	11/7/2005 2:59:51 PM
Sodium	19	1.0		mg/L	1	11/7/2005 2:59:51 PM
Uranium	ND	0.10		mg/L	1	11/7/2005 2:59:51 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Lab Order: 0510245
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-02

Client Sample ID: River N of MW #45
Collection Date: 10/24/2005 2:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.013	0.0050		mg/L	1	11/7/2005 2:59:51 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	10/28/2005 12:58:29 PM
Barium	0.079	0.020		mg/L	1	10/28/2005 12:58:29 PM
Cadmium	ND	0.0020		mg/L	1	10/28/2005 12:58:29 PM
Chromium	ND	0.0060		mg/L	1	10/28/2005 12:58:29 PM
Lead	ND	0.0050		mg/L	1	10/28/2005 12:58:29 PM
Selenium	ND	0.050		mg/L	1	10/28/2005 12:58:29 PM
Silver	ND	0.0050		mg/L	1	10/28/2005 12:58:29 PM
EPA METHOD 160.1: TDS						Analyst: TES
Total Dissolved Solids	200	50		mg/L	1	10/27/2005

Qualifiers:
- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Client Sample ID: River Upstream
Lab Order: 0510245
Collection Date: 10/24/2005 2:25:00 PM
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.10	0.10		mg/L	1	10/25/2005
Chloride	3.3	0.10		mg/L	1	10/25/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	10/25/2005
Bromide	ND	0.50		mg/L	1	10/25/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	10/25/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	10/25/2005
Sulfate	65	0.50		mg/L	1	10/25/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	88	2.0		mg/L CaCO3	1	11/7/2005
Carbonate	ND	2.0		mg/L CaCO3	1	11/7/2005
Bicarbonate	88	2.0		mg/L CaCO3	1	11/7/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/27/2005 8:26:07 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/27/2005 8:26:07 AM
Surr: DNOP	130	58-140		%REC	1	10/27/2005 8:26:07 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/3/2005 11:51:22 AM
Surr: BFB	107	79.7-118		%REC	1	11/3/2005 11:51:22 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	11/3/2005 11:51:22 AM
Benzene	ND	0.50		µg/L	1	11/3/2005 11:51:22 AM
Toluene	ND	0.50		µg/L	1	11/3/2005 11:51:22 AM
Ethylbenzene	ND	0.50		µg/L	1	11/3/2005 11:51:22 AM
Xylenes, Total	ND	0.50		µg/L	1	11/3/2005 11:51:22 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	10		µg/L	1	11/2/2005
Acenaphthylene	ND	10		µg/L	1	11/2/2005
Aniline	ND	20		µg/L	1	11/2/2005
Anthracene	ND	10		µg/L	1	11/2/2005
Azobenzene	ND	10		µg/L	1	11/2/2005
Benz(a)anthracene	ND	15		µg/L	1	11/2/2005
Benzo(a)pyrene	ND	15		µg/L	1	11/2/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	11/2/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/2/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	11/2/2005
Benzoic acid	ND	50		µg/L	1	11/2/2005
Benzyl alcohol	ND	20		µg/L	1	11/2/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/2/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Client Sample ID: River Upstream
Lab Order: 0510245
Collection Date: 10/24/2005 2:25:00 PM
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/2/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/2/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/2/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/2/2005
Butyl benzyl phthalate	ND	15		µg/L	1	11/2/2005
Carbazole	ND	10		µg/L	1	11/2/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/2/2005
4-Chloroaniline	ND	20		µg/L	1	11/2/2005
2-Chloronaphthalene	ND	10		µg/L	1	11/2/2005
2-Chlorophenol	ND	10		µg/L	1	11/2/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/2/2005
Chrysene	ND	15		µg/L	1	11/2/2005
Di-n-butyl phthalate	ND	10		µg/L	1	11/2/2005
Di-n-octyl phthalate	ND	15		µg/L	1	11/2/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/2/2005
Dibenzofuran	ND	10		µg/L	1	11/2/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/2/2005
Diethyl phthalate	11	10		µg/L	1	11/2/2005
Dimethyl phthalate	ND	10		µg/L	1	11/2/2005
2,4-Dichlorophenol	ND	10		µg/L	1	11/2/2005
2,4-Dimethylphenol	ND	10		µg/L	1	11/2/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/2/2005
2,4-Dinitrophenol	ND	50		µg/L	1	11/2/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	11/2/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	11/2/2005
Fluoranthene	ND	10		µg/L	1	11/2/2005
Fluorene	ND	10		µg/L	1	11/2/2005
Hexachlorobenzene	ND	10		µg/L	1	11/2/2005
Hexachlorobutadiene	ND	10		µg/L	1	11/2/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/2/2005
Hexachloroethane	ND	10		µg/L	1	11/2/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/2/2005
Isophorone	ND	10		µg/L	1	11/2/2005
2-Methylnaphthalene	ND	10		µg/L	1	11/2/2005
2-Methylphenol	ND	15		µg/L	1	11/2/2005
3+4-Methylphenol	ND	20		µg/L	1	11/2/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/2/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	11/2/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/2/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	River Upstream
Lab Order:	0510245	**Collection Date:**	10/24/2005 2:25:00 PM
Project:	River Sampling 4th Qtr. 2005		
Lab ID:	0510245-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	11/2/2005
2-Nitroaniline	ND	50		µg/L	1	11/2/2005
3-Nitroaniline	ND	50		µg/L	1	11/2/2005
4-Nitroaniline	ND	20		µg/L	1	11/2/2005
Nitrobenzene	ND	10		µg/L	1	11/2/2005
2-Nitrophenol	ND	15		µg/L	1	11/2/2005
4-Nitrophenol	ND	50		µg/L	1	11/2/2005
Pentachlorophenol	ND	50		µg/L	1	11/2/2005
Phenanthrene	ND	10		µg/L	1	11/2/2005
Phenol	ND	10		µg/L	1	11/2/2005
Pyrene	ND	15		µg/L	1	11/2/2005
Pyridine	ND	30		µg/L	1	11/2/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/2/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/2/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/2/2005
Surr: 2,4,6-Tribromophenol	64.0	16.6-150		%REC	1	11/2/2005
Surr: 2-Fluorobiphenyl	64.2	19.6-134		%REC	1	11/2/2005
Surr: 2-Fluorophenol	53.4	9.54-113		%REC	1	11/2/2005
Surr: 4-Terphenyl-d14	74.2	22.7-145		%REC	1	11/2/2005
Surr: Nitrobenzene-d5	64.8	14.6-134		%REC	1	11/2/2005
Surr: Phenol-d6	37.9	10.7-80.3		%REC	1	11/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: TES
Specific Conductance	330	0.010		µmhos/cm	1	11/1/2005
EPA METHOD 245.1: MERCURY						Analyst: CMC
Mercury	ND	0.00020		mg/L	1	10/26/2005
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	11/7/2005 3:02:55 PM
Barium	0.067	0.0020		mg/L	1	11/7/2005 3:02:55 PM
Cadmium	ND	0.0020		mg/L	1	11/7/2005 3:02:55 PM
Calcium	37	1.0		mg/L	1	11/7/2005 3:02:55 PM
Chromium	ND	0.0060		mg/L	1	11/7/2005 3:02:55 PM
Copper	ND	0.0060		mg/L	1	11/7/2005 3:02:55 PM
Iron	0.020	0.020		mg/L	1	11/7/2005 3:02:55 PM
Lead	ND	0.0050		mg/L	1	11/7/2005 3:02:55 PM
Magnesium	6.4	1.0		mg/L	1	11/7/2005 3:02:55 PM
Manganese	0.015	0.0020		mg/L	1	11/7/2005 3:02:55 PM
Potassium	1.8	1.0		mg/L	1	11/7/2005 3:02:55 PM
Selenium	ND	0.050		mg/L	1	11/7/2005 3:02:55 PM
Silver	ND	0.0050		mg/L	1	11/7/2005 3:02:55 PM
Sodium	18	1.0		mg/L	1	11/7/2005 3:02:55 PM
Uranium	ND	0.10		mg/L	1	11/7/2005 3:02:55 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	River Upstream
Lab Order:	0510245	**Collection Date:**	10/24/2005 2:25:00 PM
Project:	River Sampling 4th Qtr. 2005		
Lab ID:	0510245-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.029	0.0050		mg/L	1	11/7/2005 3:02:55 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	10/28/2005 1:01:31 PM
Barium	0.080	0.020		mg/L	1	10/28/2005 1:01:31 PM
Cadmium	ND	0.0020		mg/L	1	10/28/2005 1:01:31 PM
Chromium	ND	0.0060		mg/L	1	10/28/2005 1:01:31 PM
Lead	ND	0.0050		mg/L	1	10/28/2005 1:01:31 PM
Selenium	ND	0.050		mg/L	1	10/28/2005 1:01:31 PM
Silver	ND	0.0050		mg/L	1	10/28/2005 1:01:31 PM
EPA METHOD 160.1: TDS						Analyst: TES
Total Dissolved Solids	200	50		mg/L	1	10/27/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	River Downstream
Lab Order:	0510245	**Collection Date:**	10/24/2005 3:00:00 PM
Project:	River Sampling 4th Qtr. 2005		
Lab ID:	0510245-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: CMC
Fluoride	0.11	0.10		mg/L	1	10/25/2005
Chloride	3.3	0.10		mg/L	1	10/25/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	10/25/2005
Bromide	ND	0.50		mg/L	1	10/25/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	10/25/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	10/25/2005
Sulfate	68	0.50		mg/L	1	10/25/2005
EPA METHOD 310.1: ALKALINITY						Analyst: CMC
Alkalinity, Total (As CaCO3)	90	2.0		mg/L CaCO3	1	11/7/2005
Carbonate	2.0	2.0		mg/L CaCO3	1	11/7/2005
Bicarbonate	88	2.0		mg/L CaCO3	1	11/7/2005
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	10/27/2005 8:59:01 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	10/27/2005 8:59:01 AM
Surr: DNOP	123	58-140		%REC	1	10/27/2005 8:59:01 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/3/2005 12:22:29 PM
Surr: BFB	99.9	79.7-118		%REC	1	11/3/2005 12:22:29 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	11/3/2005 12:22:29 PM
Benzene	ND	0.50		µg/L	1	11/3/2005 12:22:29 PM
Toluene	ND	0.50		µg/L	1	11/3/2005 12:22:29 PM
Ethylbenzene	ND	0.50		µg/L	1	11/3/2005 12:22:29 PM
Xylenes, Total	ND	0.50		µg/L	1	11/3/2005 12:22:29 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	10		µg/L	1	11/2/2005
Acenaphthylene	ND	10		µg/L	1	11/2/2005
Aniline	ND	20		µg/L	1	11/2/2005
Anthracene	ND	10		µg/L	1	11/2/2005
Azobenzene	ND	10		µg/L	1	11/2/2005
Benz(a)anthracene	ND	15		µg/L	1	11/2/2005
Benzo(a)pyrene	ND	15		µg/L	1	11/2/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	11/2/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/2/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	11/2/2005
Benzoic acid	ND	50		µg/L	1	11/2/2005
Benzyl alcohol	ND	20		µg/L	1	11/2/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/2/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Lab Order: 0510245
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-04

Client Sample ID: River Downstream
Collection Date: 10/24/2005 3:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/2/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/2/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/2/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/2/2005
Butyl benzyl phthalate	ND	15		µg/L	1	11/2/2005
Carbazole	ND	10		µg/L	1	11/2/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/2/2005
4-Chloroaniline	ND	20		µg/L	1	11/2/2005
2-Chloronaphthalene	ND	10		µg/L	1	11/2/2005
2-Chlorophenol	ND	10		µg/L	1	11/2/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/2/2005
Chrysene	ND	15		µg/L	1	11/2/2005
Di-n-butyl phthalate	ND	10		µg/L	1	11/2/2005
Di-n-octyl phthalate	ND	15		µg/L	1	11/2/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/2/2005
Dibenzofuran	ND	10		µg/L	1	11/2/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	11/2/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/2/2005
Diethyl phthalate	ND	10		µg/L	1	11/2/2005
Dimethyl phthalate	ND	10		µg/L	1	11/2/2005
2,4-Dichlorophenol	ND	10		µg/L	1	11/2/2005
2,4-Dimethylphenol	ND	10		µg/L	1	11/2/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/2/2005
2,4-Dinitrophenol	ND	50		µg/L	1	11/2/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	11/2/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	11/2/2005
Fluoranthene	ND	10		µg/L	1	11/2/2005
Fluorene	ND	10		µg/L	1	11/2/2005
Hexachlorobenzene	ND	10		µg/L	1	11/2/2005
Hexachlorobutadiene	ND	10		µg/L	1	11/2/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/2/2005
Hexachloroethane	ND	10		µg/L	1	11/2/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/2/2005
Isophorone	ND	10		µg/L	1	11/2/2005
2-Methylnaphthalene	ND	10		µg/L	1	11/2/2005
2-Methylphenol	ND	15		µg/L	1	11/2/2005
3+4-Methylphenol	ND	20		µg/L	1	11/2/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/2/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	11/2/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/2/2005

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

CLIENT: San Juan Refining
Client Sample ID: River Downstream
Lab Order: 0510245
Collection Date: 10/24/2005 3:00:00 PM
Project: River Sampling 4th Qtr. 2005
Lab ID: 0510245-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Naphthalene	ND	10		µg/L	1	11/2/2005
2-Nitroaniline	ND	50		µg/L	1	11/2/2005
3-Nitroaniline	ND	50		µg/L	1	11/2/2005
4-Nitroaniline	ND	20		µg/L	1	11/2/2005
Nitrobenzene	ND	10		µg/L	1	11/2/2005
2-Nitrophenol	ND	15		µg/L	1	11/2/2005
4-Nitrophenol	ND	50		µg/L	1	11/2/2005
Pentachlorophenol	ND	50		µg/L	1	11/2/2005
Phenanthrene	ND	10		µg/L	1	11/2/2005
Phenol	ND	10		µg/L	1	11/2/2005
Pyrene	ND	15		µg/L	1	11/2/2005
Pyridine	ND	30		µg/L	1	11/2/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/2/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/2/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/2/2005
Surr: 2,4,6-Tribromophenol	72.0	16.6-150		%REC	1	11/2/2005
Surr: 2-Fluorobiphenyl	69.5	19.6-134		%REC	1	11/2/2005
Surr: 2-Fluorophenol	49.3	9.54-113		%REC	1	11/2/2005
Surr: 4-Terphenyl-d14	71.3	22.7-145		%REC	1	11/2/2005
Surr: Nitrobenzene-d5	66.0	14.6-134		%REC	1	11/2/2005
Surr: Phenol-d6	36.0	10.7-80.3		%REC	1	11/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: TES
Specific Conductance	340	0.010		µmhos/cm	1	11/1/2005
EPA METHOD 245.1: MERCURY						Analyst: CMC
Mercury	ND	0.00020		mg/L	1	10/26/2005
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	11/7/2005 3:05:57 PM
Barium	0.061	0.0020		mg/L	1	11/7/2005 3:05:57 PM
Cadmium	ND	0.0020		mg/L	1	11/7/2005 3:05:57 PM
Calcium	38	1.0		mg/L	1	11/7/2005 3:05:57 PM
Chromium	ND	0.0060		mg/L	1	11/7/2005 3:05:57 PM
Copper	ND	0.0060		mg/L	1	11/7/2005 3:05:57 PM
Iron	ND	0.020		mg/L	1	11/7/2005 3:05:57 PM
Lead	ND	0.0050		mg/L	1	11/7/2005 3:05:57 PM
Magnesium	6.3	1.0		mg/L	1	11/7/2005 3:05:57 PM
Manganese	0.025	0.0020		mg/L	1	11/7/2005 3:05:57 PM
Potassium	1.9	1.0		mg/L	1	11/7/2005 3:05:57 PM
Selenium	ND	0.050		mg/L	1	11/7/2005 3:05:57 PM
Silver	ND	0.0050		mg/L	1	11/7/2005 3:05:57 PM
Sodium	19	1.0		mg/L	1	11/7/2005 3:05:57 PM
Uranium	ND	0.10		mg/L	1	11/7/2005 3:05:57 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	River Downstream
Lab Order:	0510245	**Collection Date:**	10/24/2005 3:00:00 PM
Project:	River Sampling 4th Qtr. 2005		
Lab ID:	0510245-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Zinc	0.021	0.0050		mg/L	1	11/7/2005 3:05:57 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	10/28/2005 1:04:32 PM
Barium	0.089	0.020		mg/L	1	10/28/2005 1:04:32 PM
Cadmium	ND	0.0020		mg/L	1	10/28/2005 1:04:32 PM
Chromium	ND	0.0060		mg/L	1	10/28/2005 1:04:32 PM
Lead	ND	0.0050		mg/L	1	10/28/2005 1:04:32 PM
Selenium	ND	0.050		mg/L	1	10/28/2005 1:04:32 PM
Silver	ND	0.0050		mg/L	1	10/28/2005 1:04:32 PM
EPA METHOD 160.1: TDS						Analyst: TES
Total Dissolved Solids	200	50		mg/L	1	10/27/2005

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID MBLK	Batch ID: R17075	Test Code: E300	Units: mg/L	Analysis Date 10/25/2005	Prep Date
Client ID:		Run ID: LC_051025A		SeqNo: 414801	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID MBLK	Batch ID: R17203	Test Code: E310.1	Units: mg/L CaCO3	Analysis Date 11/7/2005	Prep Date
Client ID:		Run ID: WC_051107A		SeqNo: 420609	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2									
Carbonate	ND	2									
Bicarbonate	ND	2									

Sample ID MB-9054	Batch ID: 9054	Test Code: SW8015	Units: mg/L	Analysis Date 10/27/2005 3:31:02 AM	Prep Date 10/26/2005
Client ID:		Run ID: FID(17A) 2_051026A		SeqNo: 415187	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.252	0	1	0	125	58	140	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID Reagent Blank 5m Batch ID: R17181 Test Code: SW8015 Units: mg/L Analysis Date 11/3/2005 9:16:25 AM Prep Date
Client ID: Run ID: PIDFID_051103A SeqNo: 418254

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	22.56	0	20	0	113	79.7	118	0			

Sample ID Reagent Blank 5m Batch ID: R17181 Test Code: SW8021 Units: µg/L Analysis Date 11/3/2005 9:16:25 AM Prep Date
Client ID: Run ID: PIDFID_051103A SeqNo: 418230

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB-9051 Batch ID: 9051 Test Code: SW8270C Units: µg/L Analysis Date 11/2/2005 Prep Date 10/26/2005
Client ID: Run ID: ELMO_051102A SeqNo: 418017

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	10									
Acenaphthylene	ND	10									
Aniline	ND	20									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	15									
Benzo(b)fluoranthene	ND	15									
Benzo(g,h,i)perylene	ND	10									
Benzo(k)fluoranthene	ND	10									
Benzoic acid	ND	50									
Benzyl alcohol	ND	20									
Bis(2-chloroethoxy)methane	ND	10									
Bis(2-chloroethyl)ether	ND	15									
Bis(2-chloroisopropyl)ether	ND	15									
Bis(2-ethylhexyl)phthalate	ND	15									
4-Bromophenyl phenyl ether	ND	10									
Butyl benzyl phthalate	ND	15									
Carbazole	ND	10									
4-Chloro-3-methylphenol	ND	20									
4-Chloroaniline	ND	20									
2-Chloronaphthalene	ND	10									
2-Chlorophenol	ND	10									
4-Chlorophenyl phenyl ether	ND	15									
Chrysene	ND	15									
Di-n-butyl phthalate	ND	10									
Di-n-octyl phthalate	7.52	15									J
Dibenz(a,h)anthracene	8.22	10									J

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Method Blank

Dibenzofuran	ND	10
1,2-Dichlorobenzene	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
3,3'-Dichlorobenzidine	ND	15
Diethyl phthalate	ND	10
Dimethyl phthalate	ND	10
2,4-Dichlorophenol	ND	10
2,4-Dimethylphenol	ND	10
4,6-Dinitro-2-methylphenol	ND	50
2,4-Dinitrophenol	ND	50
2,4-Dinitrotoluene	ND	10
2,6-Dinitrotoluene	ND	10
Fluoranthene	ND	10
Fluorene	ND	10
Hexachlorobenzene	ND	10
Hexachlorobutadiene	ND	10
Hexachlorocyclopentadiene	ND	10
Hexachloroethane	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Isophorone	ND	10
2-Methylnaphthalene	ND	10
2-Methylphenol	ND	15
3+4-Methylphenol	ND	20
N-Nitrosodi-n-propylamine	ND	10
N-Nitrosodimethylamine	ND	10
N-Nitrosodiphenylamine	ND	10
Naphthalene	ND	10
2-Nitroaniline	ND	50
3-Nitroaniline	ND	50
4-Nitroaniline	ND	20
Nitrobenzene	ND	10
2-Nitrophenol	ND	15

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Method Blank

4-Nitrophenol	ND	50							
Pentachlorophenol	ND	50							
Phenanthrene	ND	10							
Phenol	ND	10							
Pyrene	ND	15							
Pyridine	ND	30							
1,2,4-Trichlorobenzene	ND	10							
2,4,5-Trichlorophenol	ND	10							
2,4,6-Trichlorophenol	ND	15							
Surr: 2,4,6-Tribromophenol	126.4	0	200	0	63.2	16.6	150	0	
Surr: 2-Fluorobiphenyl	64.88	0	100	0	64.9	19.6	134	0	
Surr: 2-Fluorophenol	120.1	0	200	0	60.1	9.54	113	0	
Surr: 4-Terphenyl-d14	72.42	0	100	0	72.4	22.7	145	0	
Surr: Nitrobenzene-d5	69.08	0	100	0	69.1	14.6	134	0	
Surr: Phenol-d6	85.88	0	200	0	42.9	10.7	80.3	0	

Sample ID **MB-9056** Batch ID: **9056** Test Code: **SW7470** Units: **mg/L** Analysis Date **10/26/2005** Prep Date **10/26/2005**
Client ID: Run ID: **MI-LA254_051026A** SeqNo: **415137**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0002									

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB	Batch ID: R17214	Test Code: SW6010A	Units: mg/L	Analysis Date 11/7/2005 2:42:47 PM	Prep Date
Client ID:		Run ID: ICP_051108A		SeqNo: 419786	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	0.2787	1									J
Selenium	ND	0.02									
Silver	ND	0.005									
Sodium	ND	1									
Uranium	ND	0.1									
Zinc	ND	0.05									

Sample ID MB-9066	Batch ID: 9066	Test Code: SW6010A	Units: mg/L	Analysis Date 10/28/2005 12:18:27 P	Prep Date 10/27/2005
Client ID:		Run ID: ICP_051028A		SeqNo: 416073	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Lead	ND	0.005									
Selenium	ND	0.05									
Silver	ND	0.005									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Method Blank

Sample ID MB-9053 Batch ID: 9053 Test Code: E160.1 Units: mg/L Analysis Date 10/27/2005 Prep Date 10/26/2005
Client ID: Run ID: WC_051026D SeqNo: 415548

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Sample Duplicate

Sample ID **0510245-01C DUP** Batch ID: **R17075** Test Code: **E300** Units: **mg/L** Analysis Date **10/25/2005** Prep Date

Client ID: **River N of MW #4** Run ID: **LC_051025A** SeqNo: **414817**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.1101	0.1	0	0	0	0	0	0.1194	8.10	20	
Chloride	3.261	0.1	0	0	0	0	0	3.277	0.492	20	
Nitrogen, Nitrite (As N)	ND	0.1	0	0	0	0	0	0	0	20	
Bromide	ND	0.5	0	0	0	0	0	0	0	20	
Nitrogen, Nitrate (As N)	ND	0.1	0	0	0	0	0	0	0	20	
Phosphorus, Orthophosphate (As P)	ND	0.5	0	0	0	0	0	0	0	20	
Sulfate	66.81	0.5	0	0	0	0	0	66.67	0.206	20	

Sample ID **0510245-01C DUP** Batch ID: **R17203** Test Code: **E310.1** Units: **mg/L CaCO3** Analysis Date **11/7/2005** Prep Date

Client ID: **River N of MW #4** Run ID: **WC_051107A** SeqNo: **419324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	90	2	0	0	0	0	0	88	2.25	15	
Carbonate	ND	2	0	0	0	0	0	0	0	15	
Bicarbonate	90	2	0	0	0	0	0	88	2.25	15	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID 0510245-01C MS	Batch ID: R17075	Test Code: E300	Units: mg/L	Analysis Date 10/25/2005	Prep Date
Client ID: River N of MW #4		Run ID: LC_051025A		SeqNo: 414818	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5589	0.1	0.5	0.1194	87.9	80	120	0			
Chloride	8.054	0.1	5	3.277	95.5	80	120	0			
Nitrogen, Nitrite (As N)	0.8637	0.1	1	0	86.4	80	120	0			
Bromide	2.441	0.5	2.5	0	97.6	80	120	0			
Nitrogen, Nitrate (As N)	2.393	0.1	2.5	0	95.7	80	120	0			
Phosphorus, Orthophosphate (As P)	4.974	0.5	5	0	99.5	80	120	0			

Sample ID 0510245-01C MSD	Batch ID: R17075	Test Code: E300	Units: mg/L	Analysis Date 10/25/2005	Prep Date
Client ID: River N of MW #4		Run ID: LC_051025A		SeqNo: 414819	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5632	0.1	0.5	0.1194	88.8	80	120	0.5589	0.766	20	
Chloride	8.184	0.1	5	3.277	98.1	80	120	8.054	1.59	20	
Nitrogen, Nitrite (As N)	0.8757	0.1	1	0	87.6	80	120	0.8637	1.38	20	
Bromide	2.452	0.5	2.5	0	98.1	80	120	2.441	0.462	20	
Nitrogen, Nitrate (As N)	2.439	0.1	2.5	0	97.6	80	120	2.393	1.92	20	
Phosphorus, Orthophosphate (As P)	5.014	0.5	5	0	100	80	120	4.974	0.805	20	

Sample ID 0510245-02a ms	Batch ID: R17181	Test Code: SW8015	Units: mg/L	Analysis Date 11/3/2005 2:27:16 PM	Prep Date
Client ID: River N of MW #4		Run ID: PIDFID_051103A		SeqNo: 418260	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5052	0.05	0.5	0	101	82.6	114	0			
Surr: BFB	28.47	0	25	0	114	79.7	118	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID 0510245-02a msd Batch ID: R17181 Test Code: SW8015 Units: mg/L Analysis Date 11/3/2005 2:58:19 PM Prep Date
Client ID: River N of MW #4 Run ID: PIDFID_051103A SeqNo: 418261

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4984	0.05	0.5	0	99.7	82.6	114	0.5052	1.36	8.39	
Surr: BFB	27.7	0	25	0	111	79.7	118	28.47	2.72	0	

Sample ID 0510245-01a ms Batch ID: R17181 Test Code: SW8021 Units: µg/L Analysis Date 11/3/2005 12:53:43 PM Prep Date
Client ID: River N of MW #4 Run ID: PIDFID_051103A SeqNo: 418249

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19.42	2.5	20	0	97.1	64.5	133	0			
Benzene	21.07	0.5	20	0	105	88.5	114	0			
Toluene	19.56	0.5	20	0	97.8	87.2	114	0			
Ethylbenzene	19.76	0.5	20	0	98.8	88.6	113	0			
Xylenes, Total	39.77	0.5	40	0	99.4	83.3	114	0			

Sample ID 0510245-01a msd Batch ID: R17181 Test Code: SW8021 Units: µg/L Analysis Date 11/3/2005 1:24:52 PM Prep Date
Client ID: River N of MW #4 Run ID: PIDFID_051103A SeqNo: 418250

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.33	2.5	20	0	91.6	64.5	133	19.42	5.78	28	
Benzene	21	0.5	20	0	105	88.5	114	21.07	0.350	27	
Toluene	19.13	0.5	20	0	95.7	87.2	114	19.56	2.20	19	
Ethylbenzene	19.27	0.5	20	0	96.3	88.6	113	19.76	2.56	10	
Xylenes, Total	39.5	0.5	40	0	98.8	83.3	114	39.77	0.680	13	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *09-Nov-05*

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID LCS-ST300-05022	Batch ID: R17075	Test Code: E300	Units: mg/L	Analysis Date 10/25/2005	Prep Date
Client ID:		Run ID: LC_051025A		SeqNo: 414802	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5275	0.1	0.5	0	106	90	110	0			
Chloride	4.872	0.1	5	0	97.4	90	110	0			
Nitrogen, Nitrite (As N)	0.9603	0.1	1	0	96.0	90	110	0			
Bromide	2.573	0.5	2.5	0	103	90	110	0			
Nitrogen, Nitrate (As N)	2.468	0.1	2.5	0	98.7	90	110	0			
Phosphorus, Orthophosphate (As P)	4.936	0.5	5	0	98.7	90	110	0			
Sulfate	9.862	0.5	10	0	98.6	90	110	0			

Sample ID LCS-9054	Batch ID: 9054	Test Code: SW8015	Units: mg/L	Analysis Date 10/27/2005 4:03:45 AM	Prep Date 10/26/2005
Client ID:		Run ID: FID(17A) 2_051026A		SeqNo: 415188	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.585	1	5	0	112	81.2	149	0			

Sample ID LCSD-9054	Batch ID: 9054	Test Code: SW8015	Units: mg/L	Analysis Date 10/27/2005 4:36:37 AM	Prep Date 10/26/2005
Client ID:		Run ID: FID(17A) 2_051026A		SeqNo: 415189	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.522	1	5	0	110	81.2	149	5.585	1.12	23	

Sample ID GRO lcs 2.5ug	Batch ID: R17181	Test Code: SW8015	Units: mg/L	Analysis Date 11/4/2005 3:54:48 AM	Prep Date
Client ID:		Run ID: PIDFID_051103A		SeqNo: 418255	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5062	0.05	0.5	0	101	82.6	114	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID BTEX lcs 100ng Batch ID: R17181 Test Code: SW8021 Units: µg/L Analysis Date 11/3/2005 1:56:12 PM Prep Date
Client ID: Run ID: PIDFID_051103A SeqNo: 418231

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.1	2.5	20	0	90.5	64.5	133	0			
Benzene	20.7	0.5	20	0	104	88.5	114	0			
Toluene	18.91	0.5	20	0	94.5	87.2	114	0			
Ethylbenzene	19.23	0.5	20	0	96.2	88.6	113	0			
Xylenes, Total	39.35	0.5	40	0	98.4	83.3	114	0			

Sample ID LCS-9051 Batch ID: 9051 Test Code: SW8270C Units: µg/L Analysis Date 11/2/2005 Prep Date 10/26/2005
Client ID: Run ID: ELMO_051102A SeqNo: 418018

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	79.16	10	100	0	79.2	11	123	0			
4-Chloro-3-methylphenol	158	20	200	0	79.0	15.4	119	0			
2-Chlorophenol	153.3	10	200	0	76.7	12.2	122	0			
1,4-Dichlorobenzene	67	10	100	0	67.0	16.9	100	0			
2,4-Dinitrotoluene	74.26	10	100	0	74.3	13	138	0			
N-Nitrosodi-n-propylamine	73.86	10	100	0	73.9	9.93	122	0			
4-Nitrophenol	61.86	50	200	0	30.9	-20.5	87.4	0			
Pentachlorophenol	106.2	50	200	0	53.1	-0.355	114	0			
Phenol	84.98	10	200	0	42.5	7.53	73.1	0			
Pyrene	80.64	15	100	0	80.6	12.6	140	0			
1,2,4-Trichlorobenzene	67.22	10	100	0	67.2	17.4	98.7	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-9051** Batch ID: **9051** Test Code: **SW8270C** Units: **µg/L** Analysis Date **11/2/2005** Prep Date **10/26/2005**
Client ID: Run ID: **ELMO_051102A** SeqNo: **418019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	76.02	10	100	0	76.0	11	123	79.16	4.05	30.5	
4-Chloro-3-methylphenol	133.5	20	200	0	66.8	15.4	119	158	16.8	28.6	
2-Chlorophenol	140.5	10	200	0	70.3	12.2	122	153.3	8.71	107	
1,4-Dichlorobenzene	64.54	10	100	0	64.5	16.9	100	67	3.74	62.1	
2,4-Dinitrotoluene	71.52	10	100	0	71.5	13	138	74.26	3.76	14.7	
N-Nitrosodi-n-propylamine	69.1	10	100	0	69.1	9.93	122	73.86	6.66	30.3	
4-Nitrophenol	62.3	50	200	0	31.2	12.5	87.4	61.86	0.709	36.3	
Pentachlorophenol	97.4	50	200	0	48.7	3.55	114	106.2	8.64	49	
Phenol	82.02	10	200	0	41.0	7.53	73.1	84.98	3.54	52.4	
Pyrene	73.7	15	100	0	73.7	12.6	140	80.64	8.99	16.3	
1,2,4-Trichlorobenzene	62.36	10	100	0	62.4	17.4	98.7	67.22	7.50	36.4	

Sample ID **LCS-9056** Batch ID: **9056** Test Code: **SW7470** Units: **mg/L** Analysis Date **10/26/2005** Prep Date **10/26/2005**
Client ID: Run ID: **MI-LA254_051026A** SeqNo: **415138**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004627	0.0002	0.005	0	92.5	80	120	0			

Sample ID **LCSD-9056** Batch ID: **9056** Test Code: **SW7470** Units: **mg/L** Analysis Date **10/26/2005** Prep Date **10/26/2005**
Client ID: Run ID: **MI-LA254_051026A** SeqNo: **415153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004765	0.0002	0.005	0	95.3	80	120	0.004627	2.94	0	

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID LCS | Batch ID: R17214 | Test Code: SW6010A | Units: mg/L | Analysis Date 11/7/2005 2:46:17 PM | Prep Date
Client ID: | Run ID: ICP_051108A | SeqNo: 419787

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4712	0.02	0.5	0	94.2	80	120	0			
Barium	0.4548	0.02	0.5	0	91.0	80	120	0			
Cadmium	0.4597	0.002	0.5	0	91.9	80	120	0			
Calcium	55.43	1	50.5	0	110	80	120	0			
Chromium	0.463	0.006	0.5	0	92.6	80	120	0			
Copper	0.4397	0.006	0.5	0	87.9	80	120	0			
Iron	0.4643	0.02	0.5	0	92.9	80	120	0			
Lead	0.456	0.005	0.5	0	91.2	80	120	0			
Magnesium	52.23	1	50.5	0	103	80	120	0			
Manganese	0.4859	0.002	0.5	0	97.2	80	120	0			
Potassium	54.5	1	55	0.2787	98.6	80	120	0			
Selenium	0.454	0.02	0.5	0	90.8	80	120	0			
Silver	0.4472	0.005	0.5	0	89.4	80	120	0			
Sodium	55.29	1	50.5	0	109	80	120	0			
Uranium	2.611	0.1	2.5	0	104	80	120	0			
Zinc	0.4812	0.05	0.5	0	96.2	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID LCSD | Batch ID: R17214 | Test Code: SW6010A | Units: mg/L | Analysis Date 11/7/2005 2:49:35 PM | Prep Date
Client ID: | Run ID: ICP_051108A | SeqNo: 419788

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.467	0.02	0.5	0	93.4	80	120	0.4712	0.890	20	
Barium	0.4559	0.02	0.5	0	91.2	80	120	0.4548	0.255	20	
Cadmium	0.4535	0.002	0.5	0	90.7	80	120	0.4597	1.36	20	
Calcium	54.37	1	50.5	0	108	80	120	55.43	1.92	20	
Chromium	0.464	0.006	0.5	0	92.8	80	120	0.463	0.226	20	
Copper	0.4403	0.006	0.5	0	88.1	80	120	0.4397	0.150	20	
Iron	0.4634	0.02	0.5	0	92.7	80	120	0.4643	0.176	20	
Lead	0.4495	0.005	0.5	0	89.9	80	120	0.456	1.44	20	
Magnesium	51.76	1	50.5	0	102	80	120	52.23	0.919	20	
Manganese	0.4861	0.002	0.5	0	97.2	80	120	0.4859	0.0331	20	
Potassium	53.63	1	55	0.2787	97.0	80	120	54.5	1.61	20	
Selenium	0.4562	0.02	0.5	0	91.2	80	120	0.454	0.484	20	
Silver	0.4458	0.005	0.5	0	89.2	80	120	0.4472	0.316	20	
Sodium	54.79	1	50.5	0	108	80	120	55.29	0.915	20	
Uranium	2.591	0.1	2.5	0	104	80	120	2.611	0.755	20	
Zinc	0.4803	0.05	0.5	0	96.1	80	120	0.4812	0.170	20	

Sample ID LCS-9066 | Batch ID: 9066 | Test Code: SW6010A | Units: mg/L | Analysis Date 10/28/2005 12:21:44 P | Prep Date 10/27/2005
Client ID: | Run ID: ICP_051028A | SeqNo: 416074

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5098	0.02	0.5	0	102	80	120	0			
Barium	0.4772	0.02	0.5	0	95.4	80	120	0			
Cadmium	0.4829	0.002	0.5	0	96.6	80	120	0			
Chromium	0.4836	0.006	0.5	0	96.7	80	120	0			
Lead	0.482	0.005	0.5	0	96.4	80	120	0			
Selenium	0.4779	0.05	0.5	0	95.6	80	120	0			
Silver	0.4909	0.005	0.5	0	98.2	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID LCSD-9066	Batch ID: 9066	Test Code: SW6010A	Units: mg/L	Analysis Date 10/28/2005 12:24:58 P	Prep Date 10/27/2005
Client ID:		Run ID: ICP_051028A		SeqNo: 416075	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.512	0.02	0.5	0	102	80	120	0.5098	0.433	20	
Barium	0.4704	0.02	0.5	0	94.1	80	120	0.4772	1.45	20	
Cadmium	0.4784	0.002	0.5	0	95.7	80	120	0.4829	0.940	20	
Chromium	0.4756	0.006	0.5	0	95.1	80	120	0.4836	1.67	20	
Lead	0.4809	0.005	0.5	0	96.2	80	120	0.482	0.222	20	
Selenium	0.4751	0.05	0.5	0	95.0	80	120	0.4779	0.587	20	
Silver	0.4833	0.005	0.5	0	96.7	80	120	0.4909	1.55	20	

Sample ID DOC 1	Batch ID: 9066	Test Code: SW6010A	Units: mg/L	Analysis Date 10/28/2005 1:58:44 PM	Prep Date 10/27/2005
Client ID:		Run ID: ICP_051028A		SeqNo: 416101	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5017	0.02	0.5	0	100	80	120	0			
Barium	0.4725	0.02	0.5	0	94.5	80	120	0			
Cadmium	0.4757	0.002	0.5	0	95.1	80	120	0			
Chromium	0.4752	0.006	0.5	0	95.0	80	120	0			
Lead	0.4779	0.005	0.5	0	95.6	80	120	0			
Selenium	0.462	0.05	0.5	0	92.4	80	120	0			
Silver	0.4801	0.005	0.5	0	96.0	80	120	0			

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID DOC 2 | Batch ID: 9066 | Test Code: SW6010A | Units: mg/L | Analysis Date 10/28/2005 2:02:01 PM | Prep Date 10/27/2005
Client ID: | Run ID: ICP_051028A | SeqNo: 416102

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.506	0.02	0.5	0	101	80	120	0			
Barium	0.4724	0.02	0.5	0	94.5	80	120	0			
Cadmium	0.4798	0.002	0.5	0	96.0	80	120	0			
Chromium	0.4772	0.006	0.5	0	95.4	80	120	0			
Lead	0.4804	0.005	0.5	0	96.1	80	120	0			
Selenium	0.4678	0.05	0.5	0	93.6	80	120	0			
Silver	0.4854	0.005	0.5	0	97.1	80	120	0			

Sample ID DOC 3 | Batch ID: 9066 | Test Code: SW6010A | Units: mg/L | Analysis Date 10/28/2005 2:05:14 PM | Prep Date 10/27/2005
Client ID: | Run ID: ICP_051028A | SeqNo: 416103

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5068	0.02	0.5	0	101	80	120	0			
Barium	0.4758	0.02	0.5	0	95.2	80	120	0			
Cadmium	0.4821	0.002	0.5	0	96.4	80	120	0			
Chromium	0.4789	0.006	0.5	0	95.8	80	120	0			
Lead	0.4822	0.005	0.5	0	96.4	80	120	0			
Selenium	0.4659	0.05	0.5	0	93.2	80	120	0			
Silver	0.4868	0.005	0.5	0	97.4	80	120	0			

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0510245
Project: River Sampling 4th Qtr. 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID DOC 4 | Batch ID: 9066 | Test Code: SW6010A | Units: mg/L | Analysis Date 10/28/2005 2:17:59 PM | Prep Date 10/27/2005
Client ID: | Run ID: ICP_051028A | SeqNo: 416105

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4801	0.02	0.5	0	96.0	80	120	0			
Barium	0.4769	0.02	0.5	0	95.4	80	120	0			
Cadmium	0.4802	0.002	0.5	0	96.0	80	120	0			
Chromium	0.4762	0.006	0.5	0	95.2	80	120	0			
Lead	0.4752	0.005	0.5	0	95.0	80	120	0			
Selenium	0.4522	0.05	0.5	0	90.4	80	120	0			
Silver	0.4926	0.005	0.5	0	98.5	80	120	0			

Sample ID LCS-9053 | Batch ID: 9053 | Test Code: E160.1 | Units: mg/L | Analysis Date 10/27/2005 | Prep Date 10/26/2005
Client ID: | Run ID: WC_051026D | SeqNo: 415549

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	1013	50	1000	0	101	80	120	0			

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Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 10/25/2005

Work Order Number 0510245 | Received by AT

Checklist completed by _____ 10/25/05
Signature | Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 2° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS: 2 coders 4° AT 10/25/05

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 CR 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: River Sample - 4th QTR-2005
Project #:
Project Manager:
Sampler: Cindy Hurtado
Sample Temperature: 2°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No.
10/24/05	110pm	H2O	River-N of MW#4	2-VOA	X			0510245-1
				2-VOA	X			
				1-500ml		X		
				1-125ml		X	filtered	
				1-500ml			H_2SO_4	
				1-500ml				
				1-liter			Amber	-1

ANALYSIS REQUEST

BTEX + MTBE + ~~TMB~~'s (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC Dissolved Metals	NO_3 Backup	Gen Chem Cation/Anion		Air Bubbles or Headspace (Y or N)
X												X	T	T		
		X														
							X									
												X				
													T	T		
											X					

Remarks:

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
10/24/05	340pm	Cindy Hurtado	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
			10/25/05 12:00

CHAIN-OF-CUSTODY RECORD

Client: San Juan Refining

Address: #50 CR 4990
Bloomfield, NM 87413

Phone #: 505-632-4161

Fax #: 505-632-3911

QA / QC Package:
Std ☐ Level 4 ☐
Other: _____

Project Name:
River Sample - 4th QTR - 2005

Project #:

Project Manager:

Sampler: Cindy Hurtado

Sample Temperature: 2°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
10/24/05	2pm	H2O	River-N of MW #4	2-VOA	X			0510245-2
				2-VOA	X			
				1-500ml		X		
				1-125ml		X	filtered	
				1-500ml			H2O4	
				1-500ml				
				1-liter			Amber -2	

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4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC Dissolved Metals	NO_3 Backup	Gen Chem Cation/Anion		Air Bubbles or Headspace (Y or N)
X																
		X														
							X									
												X				
													X			
														X		
											X					

Remarks:

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
10/24/05	3:40pm	Cindy Hurtado	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
			10/25/05 1200

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 Rd 4990
Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: River Sample - 4th QTR - 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado
Sample Temperature: 4°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No.
10/24/05	225pm	H_2O	River Upstream	2-VOA	X			0510245-3
				2-VOA	X			
				1-500ml		X		
				1-125ml		X	filtered	
				1-500ml		H_2SO_4		
				1-500ml				
				1-liter			Amber -3	

BTEX + MTBE + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC Dissolved Metals	NO_3 Backup	Gen Chem Cations/Anions		Air Bubbles or Headspace (Y or N)
X																
	X	X														
							X									
												X				
													X			
														X		
											X					

Date: 10/24/05 Time: 330pm Relinquished By: (Signature) Cindy Hurtado
Date: Time: Relinquished By: (Signature)

Received By: (Signature)
Received By: (Signature) 10/25/05 12:00

Remarks:

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: San Juan Refining
Address: #50 CR 4990
Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: River Sample - 4th QTR - 2005
Project #:
Project Manager:
Sampler: Cindy Hurtado
Sample Temperature: 4°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
10/24/05	3pm	H_2O	River Downstream	2-VOA	X			0510245-4
				2-VOA	X			
				1-500ml		X		
				1-125ml		X	filtered	
				1-500ml		X		
				1-500ml				
				1-liter			Amber	-4

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	WQCC Dissolved Metals	NO_3 Backup	Cation / Anion Balance		Air Bubbles or Headspace (Y or N)
X																
		X														
							X									
												X				
													X			
														X		
											X					

Remarks:

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10/24/05	3:20pm	Cindy Hurtado	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 10/25/05 12:00

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

April 19, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: River Terrace Investigation TP9-TP13 Order No.: 0504087

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 5 samples on 4/8/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT:	San Juan Refining	Client Sample ID:	TP-9
Lab Order:	0504087	Collection Date:	4/7/2005 2:00:00 PM
Project:	River Terrace Investigation TP9-TP13		
Lab ID:	0504087-01	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/13/2005 8:22:05 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/13/2005 8:22:05 AM
Surr: DNOP	113	58-140		%REC	1	4/13/2005 8:22:05 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.67	0.050		mg/L	1	4/8/2005 11:26:46 PM
Surr: BFB	103	78.3-120		%REC	1	4/8/2005 11:26:46 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/8/2005 11:26:46 PM
Benzene	3.3	0.50		µg/L	1	4/8/2005 11:26:46 PM
Toluene	5.0	0.50		µg/L	1	4/8/2005 11:26:46 PM
Ethylbenzene	7.0	0.50		µg/L	1	4/8/2005 11:26:46 PM
Xylenes, Total	22	0.50		µg/L	1	4/8/2005 11:26:46 PM
Surr: 4-Bromofluorobenzene	116	83.3-121		%REC	1	4/8/2005 11:26:46 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Client Sample ID: TP-10
Lab Order: 0504087
Collection Date: 4/7/2005 2:20:00 PM
Project: River Terrace Investigation TP9-TP13
Lab ID: 0504087-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/13/2005 9:22:37 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/13/2005 9:22:37 AM
Surr: DNOP	90.4	58-140		%REC	1	4/13/2005 9:22:37 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/8/2005 11:56:47 PM
Surr: BFB	101	78.3-120		%REC	1	4/8/2005 11:56:47 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/11/2005 1:01:27 PM
Benzene	ND	0.50		µg/L	1	4/11/2005 1:01:27 PM
Toluene	ND	0.50		µg/L	1	4/11/2005 1:01:27 PM
Ethylbenzene	ND	0.50		µg/L	1	4/11/2005 1:01:27 PM
Xylenes, Total	0.56	0.50		µg/L	1	4/11/2005 1:01:27 PM
Surr: 4-Bromofluorobenzene	98.6	83.3-121		%REC	1	4/11/2005 1:01:27 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	TP-11
Lab Order:	0504087	**Collection Date:**	4/7/2005 1:00:00 PM
Project:	River Terrace Investigation TP9-TP13		
Lab ID:	0504087-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/13/2005 9:52:33 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/13/2005 9:52:33 AM
Surr: DNOP	124	58-140		%REC	1	4/13/2005 9:52:33 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.082	0.050		mg/L	1	4/9/2005 12:26:49 AM
Surr: BFB	101	78.3-120		%REC	1	4/9/2005 12:26:49 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/9/2005 12:26:49 AM
Benzene	1.5	0.50		µg/L	1	4/9/2005 12:26:49 AM
Toluene	1.6	0.50		µg/L	1	4/9/2005 12:26:49 AM
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005 12:26:49 AM
Xylenes, Total	2.7	0.50		µg/L	1	4/9/2005 12:26:49 AM
Surr: 4-Bromofluorobenzene	103	83.3-121		%REC	1	4/9/2005 12:26:49 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Client Sample ID: TP-12
Lab Order: 0504087
Collection Date: 4/7/2005 1:20:00 PM
Project: River Terrace Investigation TP9-TP13
Lab ID: 0504087-04
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/13/2005 10:22:31 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/13/2005 10:22:31 AM
Surr: DNOP	112	58-140		%REC	1	4/13/2005 10:22:31 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/9/2005 12:56:46 AM
Surr: BFB	99.2	78.3-120		%REC	1	4/9/2005 12:56:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/9/2005 12:56:46 AM
Benzene	0.75	0.50		µg/L	1	4/9/2005 12:56:46 AM
Toluene	0.80	0.50		µg/L	1	4/9/2005 12:56:46 AM
Ethylbenzene	ND	0.50		µg/L	1	4/9/2005 12:56:46 AM
Xylenes, Total	1.0	0.50		µg/L	1	4/9/2005 12:56:46 AM
Surr: 4-Bromofluorobenzene	103	83.3-121		%REC	1	4/9/2005 12:56:46 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Client Sample ID: TP-13
Lab Order: 0504087
Collection Date: 4/7/2005 2:45:00 PM
Project: River Terrace Investigation TP9-TP13
Lab ID: 0504087-05
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	4/13/2005 10:52:24 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	4/13/2005 10:52:24 AM
Surr: DNOP	128	58-140		%REC	1	4/13/2005 10:52:24 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	4/9/2005 1:26:44 AM
Surr: BFB	102	78.3-120		%REC	1	4/9/2005 1:26:44 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	4/9/2005 1:26:44 AM
Benzene	2.3	0.50		µg/L	1	4/9/2005 1:26:44 AM
Toluene	2.2	0.50		µg/L	1	4/9/2005 1:26:44 AM
Ethylbenzene	0.55	0.50		µg/L	1	4/9/2005 1:26:44 AM
Xylenes, Total	3.6	0.50		µg/L	1	4/9/2005 1:26:44 AM
Surr: 4-Bromofluorobenzene	101	83.3-121		%REC	1	4/9/2005 1:26:44 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 19-Apr-05

CLIENT: San Juan Refining
Work Order: 0504087
Project: River Terrace Investigation TP9-TP13

QC SUMMARY REPORT
Method Blank

Sample ID MB-7741 Batch ID: 7741 Test Code: SW8015 Units: mg/L Analysis Date 4/13/2005 5:23:14 AM Prep Date 4/11/2005
Client ID: Run ID: FID(17A) 2_050412A SeqNo: 351425

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.079	0	1	0	108	58	140	0			

Sample ID Reagent Blank 5m Batch ID: R15047 Test Code: SW8015 Units: mg/L Analysis Date 4/8/2005 8:25:08 AM Prep Date
Client ID: Run ID: PIDFID_050408A SeqNo: 350502

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	19.39	0	20	0	96.9	78.3	120	0			

Sample ID Reagent Blank 5m Batch ID: R15061 Test Code: SW8015 Units: mg/L Analysis Date 4/11/2005 9:28:42 AM Prep Date
Client ID: Run ID: PIDFID_050411A SeqNo: 350886

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	18.94	0	20	0	94.7	78.3	120	0			

6 / 12

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504087
Project: River Terrace Investigation TP9-TP13

QC SUMMARY REPORT
Method Blank

Sample ID Reagent Blank 5m Batch ID: R15047 Test Code: SW8021 Units: µg/L Analysis Date 4/8/2005 8:25:08 AM Prep Date
Client ID: Run ID: PIDFID_050408A SeqNo: 350499

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.22	0	20	0	96.1	83.3	121	0			

Sample ID Reagent Blank 5m Batch ID: R15061 Test Code: SW8021 Units: µg/L Analysis Date 4/11/2005 9:28:42 AM Prep Date
Client ID: Run ID: PIDFID_050411A SeqNo: 350885

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.9	0	20	0	99.5	83.3	121	0			

7/12

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504087
Project: River Terrace Investigation TP9-TP13

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID 0504087-02a ms Batch ID: R15047 Test Code: SW8015 Units: mg/L Analysis Date 4/9/2005 2:56:36 AM Prep Date
Client ID: TP-10 Run ID: PIDFID_050408A SeqNo: 350590

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5284	0.05	0.5	0.0158	103	82.6	114	0			
Surr: BFB	24.25	0	25	0	97.0	78.3	120	0			

Sample ID 0504087-02a msd Batch ID: R15047 Test Code: SW8015 Units: mg/L Analysis Date 4/9/2005 3:26:38 AM Prep Date
Client ID: TP-10 Run ID: PIDFID_050408A SeqNo: 350593

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4692	0.05	0.5	0.0158	90.7	82.6	114	0.5284	11.9	15	
Surr: BFB	23.55	0	25	0	94.2	78.3	120	24.25	2.95	0	

Sample ID 0504087-01a ms Batch ID: R15047 Test Code: SW8021 Units: µg/L Analysis Date 4/9/2005 1:56:44 AM Prep Date
Client ID: TP-9 Run ID: PIDFID_050408A SeqNo: 350560

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	28.94	2.5	40	0	72.3	64.5	133	0			
Benzene	24.18	0.5	20	3.293	104	88.7	114	0			
Toluene	25.66	0.5	20	4.956	104	89.3	112	0			
Ethylbenzene	27.64	0.5	20	7.037	103	88.6	113	0			
Xylenes, Total	85.02	0.5	60	22.34	104	89.4	112	0			
Surr: 4-Bromofluorobenzene	25.41	0	24	0	106	83.3	121	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504087
Project: River Terrace Investigation TP9-TP13

QC SUMMARY REPORT
Sample Matrix Spike Duplicate

Sample ID 0504087-01a msd Batch ID: R15047 Test Code: SW8021 Units: µg/L Analysis Date 4/9/2005 2:26:39 AM Prep Date
Client ID: TP-9 Run ID: PIDFID_050408A SeqNo: 350570

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	28.3	2.5	40	0	70.7	64.5	133	28.94	2.25	28	
Benzene	23.47	0.5	20	3.293	101	88.7	114	24.18	3.00	27	
Toluene	25.25	0.5	20	4.956	101	89.3	112	25.66	1.61	19	
Ethylbenzene	27.72	0.5	20	7.037	103	88.6	113	27.64	0.284	10	
Xylenes, Total	82.62	0.5	60	22.34	100	89.4	112	85.02	2.86	13	
Surr: 4-Bromofluorobenzene	24.62	0	24	0	103	83.3	121	25.41	3.15	0	

9/12

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *19-Apr-05*

CLIENT: San Juan Refining
Work Order: 0504087
Project: River Terrace Investigation TP9-TP13

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID LCS-7741	Batch ID: 7741	Test Code: SW8015	Units: mg/L	Analysis Date 4/13/2005 5:53:08 AM	Prep Date 4/11/2005
Client ID:		Run ID: FID(17A) 2_050412A		SeqNo: 351426	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.687	1	5	0	134	81.2	149	0			

Sample ID LCSD-7741	Batch ID: 7741	Test Code: SW8015	Units: mg/L	Analysis Date 4/13/2005 5:12:01 PM	Prep Date 4/11/2005
Client ID:		Run ID: FID(17A) 2_050412A		SeqNo: 351565	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.592	1	5	0	112	81.2	149	6.687	17.8	23	

Sample ID GRO lcs 2.5ug	Batch ID: R15047	Test Code: SW8015	Units: mg/L	Analysis Date 4/9/2005 3:56:36 AM	Prep Date
Client ID:		Run ID: PIDFID_050408A		SeqNo: 350595	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4986	0.05	0.5	0	99.7	82.6	114	0			

Sample ID GRO lcs 2.5ug	Batch ID: R15061	Test Code: SW8015	Units: mg/L	Analysis Date 4/12/2005 1:05:11 AM	Prep Date
Client ID:		Run ID: PIDFID_050411A		SeqNo: 350892	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4896	0.05	0.5	0	97.9	82.6	114	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0504087
Project: River Terrace Investigation TP9-TP13

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID BTEX lcs 100ng | Batch ID: R15047 | Test Code: SW8021 | Units: µg/L | Analysis Date 4/8/2005 7:55:35 PM | Prep Date
Client ID: | Run ID: PIDFID_050408A | SeqNo: 350578

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	36.12	2.5	40	0	90.3	64.5	133	0			
Benzene	19.64	0.5	20	0	98.2	88.7	114	0			
Toluene	19.71	0.5	20	0	98.6	89.3	112	0			
Ethylbenzene	20.82	0.5	20	0	104	88.6	113	0			
Xylenes, Total	58.33	0.5	60	0	97.2	89.4	112	0			

Sample ID BTEX lcs 100ng | Batch ID: R15061 | Test Code: SW8021 | Units: µg/L | Analysis Date 4/11/2005 11:04:48 PM | Prep Date
Client ID: | Run ID: PIDFID_050411A | SeqNo: 350889

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	38.6	2.5	40	0	96.5	64.5	133	0			
Benzene	21.07	0.5	20	0	105	88.7	114	0			
Toluene	20.71	0.5	20	0	104	89.3	112	0			
Ethylbenzene	22.01	0.5	20	0	110	88.6	113	0			
Xylenes, Total	62.29	0.5	60	0	104	89.4	112	0			

11/12

Qualifiers: ND - Not Detected at the Reporting Limit | S - Spike Recovery outside accepted recovery limits | B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits | R - RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 4/8/2005

Work Order Number 0504087 | Received by GLS

Checklist completed by _____ 4-8-05
Signature | Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 3° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining

Project Name: River Terrace Investigation TP9 — TP-13

Address: #50 Rd 4990 Bloomfield, NM 87413

Project #:

Project Manager:

Phone #: 505-632-4161

Sampler: Cindy Hurtado / Angela Folk

Fax #: 505-632-3911

Sample Temperature: 3

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No. 0504087	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/07/05	2pm	H_2O	TP-9	4-VOA	X		-1	X		X														
	220pm		TP-10	4-VOA	X		-2	X		X														
	1pm		TP-11	4-VOA	X		-3	X		X														
	120pm		TP-12	4-VOA	X		-4	X		X														
	245pm		TP-13	4-VOA	X		-5	X		X														

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)		Remarks:
4/07/05	330pm	Cindy Hurtado		4/8/05 1255	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)		

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

August 16, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: River Terrace Baseline Order No.: 0508095

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 13 samples on 8/9/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: TP-1
Lab Order: 0508095
Collection Date: 8/8/2005 9:45:00 AM
Project: River Terrace Baseline
Lab ID: 0508095-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	1.9	1.0		mg/L	1	8/12/2005 2:55:17 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 2:55:17 AM
Surr: DNOP	135	58-140		%REC	1	8/12/2005 2:55:17 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	66	1.0		mg/L	20	8/12/2005 5:13:41 PM
Surr: BFB	113	79.7-118		%REC	20	8/12/2005 5:13:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	8/12/2005 5:13:41 PM
Benzene	1400	100		µg/L	200	8/15/2005 10:11:02 AM
Toluene	49	10		µg/L	20	8/12/2005 5:13:41 PM
Ethylbenzene	3800	100		µg/L	200	8/15/2005 10:11:02 AM
Xylenes, Total	23000	100		µg/L	200	8/15/2005 10:11:02 AM
Surr: 4-Bromofluorobenzene	104	82.2-119		%REC	200	8/15/2005 10:11:02 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: TP-2
Lab Order: 0508095
Collection Date: 8/8/2005 9:15:00 AM
Project: River Terrace Baseline
Lab ID: 0508095-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	8/12/2005 3:28:22 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 3:28:22 AM
Surr: DNOP	133	58-140		%REC	1	8/12/2005 3:28:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	84	1.0		mg/L	20	8/12/2005 5:45:11 PM
Surr: BFB	115	79.7-118		%REC	20	8/12/2005 5:45:11 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	8/12/2005 5:45:11 PM
Benzene	6100	100		µg/L	200	8/15/2005 10:41:41 AM
Toluene	8700	100		µg/L	200	8/15/2005 10:41:41 AM
Ethylbenzene	4200	100		µg/L	200	8/15/2005 10:41:41 AM
Xylenes, Total	25000	100		µg/L	200	8/15/2005 10:41:41 AM
Surr: 4-Bromofluorobenzene	101	82.2-119		%REC	200	8/15/2005 10:41:41 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: TP-3
Lab Order: 0508095
Collection Date: 8/8/2005 10:50:00 AM
Project: River Terrace Baseline
Lab ID: 0508095-03
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	8/12/2005 4:01:10 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 4:01:10 AM
Surr: DNOP	132	58-140		%REC	1	8/12/2005 4:01:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/12/2005 7:50:36 PM
Surr: BFB	96.6	79.7-118		%REC	1	8/12/2005 7:50:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	8/12/2005 7:50:36 PM
Benzene	ND	0.50		µg/L	1	8/12/2005 7:50:36 PM
Toluene	ND	0.50		µg/L	1	8/12/2005 7:50:36 PM
Ethylbenzene	ND	0.50		µg/L	1	8/12/2005 7:50:36 PM
Xylenes, Total	1.2	0.50		µg/L	1	8/12/2005 7:50:36 PM
Surr: 4-Bromofluorobenzene	93.1	82.2-119		%REC	1	8/12/2005 7:50:36 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT:	San Juan Refining	Client Sample ID:	TP-4
Lab Order:	0508095	Collection Date:	8/8/2005 10:15:00 AM
Project:	River Terrace Baseline		
Lab ID:	0508095-04	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	8/12/2005 6:12:22 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 6:12:22 AM
Surr: DNOP	133	58-140		%REC	1	8/12/2005 6:12:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	8.2	1.0		mg/L	20	8/12/2005 8:21:40 PM
Surr: BFB	109	79.7-118		%REC	20	8/12/2005 8:21:40 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	8/12/2005 8:21:40 PM
Benzene	ND	10		µg/L	20	8/12/2005 8:21:40 PM
Toluene	ND	10		µg/L	20	8/12/2005 8:21:40 PM
Ethylbenzene	420	10		µg/L	20	8/12/2005 8:21:40 PM
Xylenes, Total	220	10		µg/L	20	8/12/2005 8:21:40 PM
Surr: 4-Bromofluorobenzene	103	82.2-119		%REC	20	8/12/2005 8:21:40 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	TP-5
Lab Order:	0508095	**Collection Date:**	8/8/2005 9:30:00 AM
Project:	River Terrace Baseline		
Lab ID:	0508095-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	8/12/2005 7:17:59 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 7:17:59 AM
Surr: DNOP	136	58-140		%REC	1	8/12/2005 7:17:59 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	56	1.0		mg/L	20	8/12/2005 8:52:49 PM
Surr: BFB	108	79.7-118		%REC	20	8/12/2005 8:52:49 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	8/12/2005 8:52:49 PM
Benzene	350	10		µg/L	20	8/12/2005 8:52:49 PM
Toluene	25	10		µg/L	20	8/12/2005 8:52:49 PM
Ethylbenzene	3500	100		µg/L	200	8/15/2005 11:12:25 AM
Xylenes, Total	21000	100		µg/L	200	8/15/2005 11:12:25 AM
Surr: 4-Bromofluorobenzene	107	82.2-119		%REC	20	8/12/2005 8:52:49 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	TP-6
Lab Order:	0508095	**Collection Date:**	8/8/2005 10:45:00 AM
Project:	River Terrace Baseline		
Lab ID:	0508095-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	1.0	1.0		mg/L	1	8/12/2005 7:50:45 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 7:50:45 AM
Surr: DNOP	135	58-140		%REC	1	8/12/2005 7:50:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	26	1.0		mg/L	20	8/12/2005 9:23:52 PM
Surr: BFB	113	79.7-118		%REC	20	8/12/2005 9:23:52 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	8/12/2005 9:23:52 PM
Benzene	280	10		µg/L	20	8/12/2005 9:23:52 PM
Toluene	ND	10		µg/L	20	8/12/2005 9:23:52 PM
Ethylbenzene	2800	50		µg/L	100	8/15/2005 11:43:08 AM
Xylenes, Total	7500	50		µg/L	100	8/15/2005 11:43:08 AM
Surr: 4-Bromofluorobenzene	106	82.2-119		%REC	20	8/12/2005 9:23:52 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT:	San Juan Refining	Client Sample ID:	TP-7
Lab Order:	0508095	Collection Date:	8/8/2005 1:05:00 PM
Project:	River Terrace Baseline		
Lab ID:	0508095-07	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	8/12/2005 8:22:04 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 8:22:04 AM
Surr: DNOP	132	58-140		%REC	1	8/12/2005 8:22:04 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/12/2005 9:54:54 PM
Surr: BFB	105	79.7-118		%REC	1	8/12/2005 9:54:54 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	8/12/2005 9:54:54 PM
Benzene	ND	0.50		µg/L	1	8/12/2005 9:54:54 PM
Toluene	ND	0.50		µg/L	1	8/12/2005 9:54:54 PM
Ethylbenzene	0.65	0.50		µg/L	1	8/12/2005 9:54:54 PM
Xylenes, Total	4.9	0.50		µg/L	1	8/12/2005 9:54:54 PM
Surr: 4-Bromofluorobenzene	99.4	82.2-119		%REC	1	8/12/2005 9:54:54 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT:	San Juan Refining	Client Sample ID:	TP-8
Lab Order:	0508095	Collection Date:	8/8/2005 11:00:00 AM
Project:	River Terrace Baseline		
Lab ID:	0508095-08	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	7.8	1.0		mg/L	1	8/12/2005 8:54:49 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 8:54:49 AM
Surr: DNOP	139	58-140		%REC	1	8/12/2005 8:54:49 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	84	5.0		mg/L	100	8/12/2005 11:27:48 PM
Surr: BFB	107	79.7-118		%REC	100	8/12/2005 11:27:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	250		µg/L	100	8/12/2005 11:27:48 PM
Benzene	1100	50		µg/L	100	8/12/2005 11:27:48 PM
Toluene	ND	50		µg/L	100	8/12/2005 11:27:48 PM
Ethylbenzene	3200	50		µg/L	100	8/12/2005 11:27:48 PM
Xylenes, Total	25000	100		µg/L	200	8/15/2005 12:13:53 PM
Surr: 4-Bromofluorobenzene	105	82.2-119		%REC	100	8/12/2005 11:27:48 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: TP-9
Lab Order: 0508095
Collection Date: 8/8/2005 1:20:00 PM
Project: River Terrace Baseline
Lab ID: 0508095-09
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	8/12/2005 9:27:34 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 9:27:34 AM
Surr: DNOP	139	58-140		%REC	1	8/12/2005 9:27:34 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1.1	0.10		mg/L	2	8/12/2005 11:58:41 PM
Surr: BFB	110	79.7-118		%REC	2	8/12/2005 11:58:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	2	8/12/2005 11:58:41 PM
Benzene	ND	1.0		µg/L	2	8/12/2005 11:58:41 PM
Toluene	ND	1.0		µg/L	2	8/12/2005 11:58:41 PM
Ethylbenzene	20	1.0		µg/L	2	8/12/2005 11:58:41 PM
Xylenes, Total	27	1.0		µg/L	2	8/12/2005 11:58:41 PM
Surr: 4-Bromofluorobenzene	105	82.2-119		%REC	2	8/12/2005 11:58:41 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: TP-10
Lab Order: 0508095
Collection Date: 8/8/2005 1:35:00 PM
Project: River Terrace Baseline
Lab ID: 0508095-10
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	8/12/2005 10:00:23 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 10:00:23 AM
Surr: DNOP	139	58-140		%REC	1	8/12/2005 10:00:23 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/13/2005 12:29:37 AM
Surr: BFB	98.6	79.7-118		%REC	1	8/13/2005 12:29:37 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	8/13/2005 12:29:37 AM
Benzene	ND	0.50		µg/L	1	8/13/2005 12:29:37 AM
Toluene	ND	0.50		µg/L	1	8/13/2005 12:29:37 AM
Ethylbenzene	ND	0.50		µg/L	1	8/13/2005 12:29:37 AM
Xylenes, Total	2.5	0.50		µg/L	1	8/13/2005 12:29:37 AM
Surr: 4-Bromofluorobenzene	97.1	82.2-119		%REC	1	8/13/2005 12:29:37 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: TP-11
Lab Order: 0508095
Collection Date: 8/8/2005 2:35:00 PM
Project: River Terrace Baseline
Lab ID: 0508095-11
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	8/12/2005 10:33:11 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 10:33:11 AM
Surr: DNOP	136	58-140		%REC	1	8/12/2005 10:33:11 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/13/2005 1:00:42 AM
Surr: BFB	101	79.7-118		%REC	1	8/13/2005 1:00:42 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	8/13/2005 1:00:42 AM
Benzene	ND	0.50		µg/L	1	8/13/2005 1:00:42 AM
Toluene	ND	0.50		µg/L	1	8/13/2005 1:00:42 AM
Ethylbenzene	ND	0.50		µg/L	1	8/13/2005 1:00:42 AM
Xylenes, Total	2.8	0.50		µg/L	1	8/13/2005 1:00:42 AM
Surr: 4-Bromofluorobenzene	96.4	82.2-119		%REC	1	8/13/2005 1:00:42 AM

Qualifiers:
- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Client Sample ID: TP-12
Lab Order: 0508095
Collection Date: 8/8/2005 2:45:00 PM
Project: River Terrace Baseline
Lab ID: 0508095-12
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	8/12/2005 11:05:58 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/12/2005 11:05:58 AM
Surr: DNOP	133	58-140		%REC	1	8/12/2005 11:05:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/13/2005 1:31:32 AM
Surr: BFB	105	79.7-118		%REC	1	8/13/2005 1:31:32 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	2.8	2.5		µg/L	1	8/13/2005 1:31:32 AM
Benzene	ND	0.50		µg/L	1	8/13/2005 1:31:32 AM
Toluene	ND	0.50		µg/L	1	8/13/2005 1:31:32 AM
Ethylbenzene	0.55	0.50		µg/L	1	8/13/2005 1:31:32 AM
Xylenes, Total	4.2	0.50		µg/L	1	8/13/2005 1:31:32 AM
Surr: 4-Bromofluorobenzene	97.9	82.2-119		%REC	1	8/13/2005 1:31:32 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Lab Order: 0508095
Project: River Terrace Baseline
Lab ID: 0508095-13

Client Sample ID: TP-13
Collection Date: 8/8/2005 3:05:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	8/15/2005 9:40:21 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/15/2005 9:40:21 PM
Surr: DNOP	188	58-140	S	%REC	1	8/15/2005 9:40:21 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	8/13/2005 3:35:13 AM
Surr: BFB	98.6	79.7-118		%REC	1	8/13/2005 3:35:13 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	8/13/2005 3:35:13 AM
Benzene	ND	0.50		µg/L	1	8/13/2005 3:35:13 AM
Toluene	ND	0.50		µg/L	1	8/13/2005 3:35:13 AM
Ethylbenzene	ND	0.50		µg/L	1	8/13/2005 3:35:13 AM
Xylenes, Total	3.7	0.50		µg/L	1	8/13/2005 3:35:13 AM
Surr: 4-Bromofluorobenzene	97.0	82.2-119		%REC	1	8/13/2005 3:35:13 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508095
Project: River Terrace Baseline

QC SUMMARY REPORT
Method Blank

Sample ID MB-8515	Batch ID: 8515	Test Code: SW8015	Units: mg/L	Analysis Date 8/11/2005 8:53:07 PM	Prep Date 8/11/2005
Client ID:		Run ID: FID(17A) 2_050811A		SeqNo: 387292	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.196	0	1	0	120	58	140	0			

Sample ID MB-8520	Batch ID: 8520	Test Code: SW8015	Units: mg/L	Analysis Date 8/12/2005 4:33:57 AM	Prep Date 8/11/2005
Client ID:		Run ID: FID(17A) 2_050811A		SeqNo: 387306	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.23	0	1	0	123	58	140	0			

Sample ID Reagent Blank	Batch ID: R16277	Test Code: SW8015	Units: mg/L	Analysis Date 8/12/2005 9:04:34 AM	Prep Date
Client ID:		Run ID: PIDFID_050812A		SeqNo: 387495	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.0192	0.05									J
Surr: BFB	20.37	0	20	0	102	79.7	118	0			

Sample ID Reagent Blank	Batch ID: R16309	Test Code: SW8015	Units: mg/L	Analysis Date 8/15/2005 8:29:09 AM	Prep Date
Client ID:		Run ID: PIDFID_050815A		SeqNo: 388461	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.0118	0.05									J
Surr: BFB	20.47	0	20	0	102	79.7	118	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508095
Project: River Terrace Baseline

QC SUMMARY REPORT
Method Blank

Sample ID Reagent Blank Batch ID: R16277 Test Code: SW8021 Units: µg/L Analysis Date 8/12/2005 9:04:34 AM Prep Date
Client ID: Run ID: PIDFID_050812A SeqNo: 387493

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.08	0	20	0	95.4	82.2	119	0			

Sample ID Reagent Blank Batch ID: R16309 Test Code: SW8021 Units: µg/L Analysis Date 8/15/2005 8:29:09 AM Prep Date
Client ID: Run ID: PIDFID_050815A SeqNo: 388351

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.37	0	20	0	96.9	82.2	119	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *16-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508095
Project: River Terrace Baseline

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID LCS-8515	Batch ID: 8515	Test Code: SW8015	Units: mg/L	Analysis Date 8/11/2005 9:26:17 PM	Prep Date 8/11/2005
Client ID:		Run ID: FID(17A) 2_050811A		SeqNo: 387293	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.541	1	5	0	111	81.2	149	0			

Sample ID LCSD-8515	Batch ID: 8515	Test Code: SW8015	Units: mg/L	Analysis Date 8/11/2005 9:59:22 PM	Prep Date 8/11/2005
Client ID:		Run ID: FID(17A) 2_050811A		SeqNo: 387294	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.016	1	5	0	120	81.2	149	5.541	8.23	23	

Sample ID LCS-8520	Batch ID: 8520	Test Code: SW8015	Units: mg/L	Analysis Date 8/12/2005 5:06:46 AM	Prep Date 8/11/2005
Client ID:		Run ID: FID(17A) 2_050811A		SeqNo: 387307	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.597	1	5	0	112	81.2	149	0			

Sample ID LCSD-8520	Batch ID: 8520	Test Code: SW8015	Units: mg/L	Analysis Date 8/12/2005 5:39:38 AM	Prep Date 8/11/2005
Client ID:		Run ID: FID(17A) 2_050811A		SeqNo: 387308	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.949	1	5	0	119	81.2	149	5.597	6.11	23	

Sample ID GRO lcs 2.5ug	Batch ID: R16277	Test Code: SW8015	Units: mg/L	Analysis Date 8/13/2005 5:38:43 AM	Prep Date
Client ID:		Run ID: PIDFID_050812A		SeqNo: 388008	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4526	0.05	0.5	0.0192	86.7	82.6	114	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

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CLIENT: San Juan Refining
Work Order: 0508095
Project: River Terrace Baseline

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID GRO lcs 2.5ug Batch ID: R16309 Test Code: SW8015 Units: mg/L Analysis Date 8/15/2005 9:34:19 PM Prep Date
Client ID: Run ID: PIDFID_050815A SeqNo: 388462

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.498	0.05	0.5	0.0118	97.2	82.6	114	0			

Sample ID BTEX lcs 100ng Batch ID: R16277 Test Code: SW8021 Units: µg/L Analysis Date 8/13/2005 4:37:07 AM Prep Date
Client ID: Run ID: PIDFID_050812A SeqNo: 387869

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19.92	2.5	20	0	99.6	64.5	133	0			
Benzene	18.34	0.5	20	0	91.7	88.5	114	0			
Toluene	18.5	0.5	20	0	92.5	87.2	114	0			
Ethylbenzene	18.45	0.5	20	0	92.2	88.6	113	0			
Xylenes, Total	37	0.5	40	0	92.5	83.3	114	0			

Sample ID BTEX lcs 100ng Batch ID: R16309 Test Code: SW8021 Units: µg/L Analysis Date 8/15/2005 10:36:03 PM Prep Date
Client ID: Run ID: PIDFID_050815A SeqNo: 388448

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19.76	2.5	20	0	98.8	64.5	133	0			
Benzene	18.32	0.5	20	0	91.6	88.5	114	0			
Toluene	18	0.5	20	0	90.0	87.2	114	0			
Ethylbenzene	18.11	0.5	20	0	90.6	88.6	113	0			
Xylenes, Total	35.87	0.5	40	0	89.7	83.3	114	0			

17/18

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 8/9/2005

Work Order Number 0508095 | Received by AT

Checklist completed by [signature] Signature 8-10-05 Date

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	3°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

September 26, 2005

Hall Environmental Analysis Laboratory
4901 Hawkins NE, Suite D
Albuquerque, NM 87109

San Juan Refining
#50 CR 4990
Bloomfield, NM 87413

Dear Ms. Hurtado:

Hall Environmental Analysis Laboratory received 1 sample on 8/24/2005 for the analyses presented in the following report.

These were analyzed acccording to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely:

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

0508276-A/DW #1 - Baseline

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *26-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: DW #1
Lab Order: 0508276
Collection Date: 8/23/2005 10:45:00 AM
Project: DW #1 Baseline
Lab ID: 0508276-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.39	0.10		mg/L	1	8/24/2005
Chloride	42	0.50		mg/L	5	8/25/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/24/2005
Bromide	ND	0.50		mg/L	1	8/24/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/24/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/24/2005
Sulfate	230	2.5		mg/L	5	8/25/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	370	2.0		mg/L CaCO3	1	9/2/2005
Carbonate	ND	2.0		mg/L CaCO3	1	9/2/2005
Bicarbonate	370	2.0		mg/L CaCO3	1	9/2/2005
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Benzene	ND	1.0		µg/L	1	8/25/2005
Toluene	ND	1.0		µg/L	1	8/25/2005
Ethylbenzene	ND	1.0		µg/L	1	8/25/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/25/2005
1,2,4-Trimethylbenzene	1.3	1.0		µg/L	1	8/25/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/25/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/25/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/25/2005
Naphthalene	ND	2.0		µg/L	1	8/25/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	8/25/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	8/25/2005
Acetone	ND	10		µg/L	1	8/25/2005
Bromobenzene	ND	1.0		µg/L	1	8/25/2005
Bromochloromethane	ND	1.0		µg/L	1	8/25/2005
Bromodichloromethane	ND	1.0		µg/L	1	8/25/2005
Bromoform	ND	1.0		µg/L	1	8/25/2005
Bromomethane	ND	2.0		µg/L	1	8/25/2005
2-Butanone	ND	10		µg/L	1	8/25/2005
Carbon disulfide	ND	10		µg/L	1	8/25/2005
Carbon Tetrachloride	ND	1.0		µg/L	1	8/25/2005
Chlorobenzene	ND	1.0		µg/L	1	8/25/2005
Chloroethane	ND	2.0		µg/L	1	8/25/2005
Chloroform	ND	1.0		µg/L	1	8/25/2005
Chloromethane	ND	1.0		µg/L	1	8/25/2005
2-Chlorotoluene	ND	1.0		µg/L	1	8/25/2005
4-Chlorotoluene	ND	1.0		µg/L	1	8/25/2005
cis-1,2-DCE	ND	1.0		µg/L	1	8/25/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/25/2005

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1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/25/2005
Dibromochloromethane	ND	1.0		µg/L	1	8/25/2005
Dibromomethane	ND	2.0		µg/L	1	8/25/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/25/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/25/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/25/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/25/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	8/25/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	8/25/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	8/25/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	8/25/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	8/25/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	8/25/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	8/25/2005
2-Hexanone	ND	10		µg/L	1	8/25/2005
Isopropylbenzene	ND	1.0		µg/L	1	8/25/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	8/25/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	8/25/2005
Methylene Chloride	ND	3.0		µg/L	1	8/25/2005
n-Butylbenzene	ND	1.0		µg/L	1	8/25/2005
n-Propylbenzene	ND	1.0		µg/L	1	8/25/2005
sec-Butylbenzene	ND	1.0		µg/L	1	8/25/2005
Styrene	ND	1.0		µg/L	1	8/25/2005
tert-Butylbenzene	ND	1.0		µg/L	1	8/25/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/25/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	8/25/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/25/2005
trans-1,2-DCE	ND	1.0		µg/L	1	8/25/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/25/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/25/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/25/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/25/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/25/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/25/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	8/25/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/25/2005
Vinyl chloride	ND	1.0		µg/L	1	8/25/2005
Xylenes, Total	3.1	1.0		µg/L	1	8/25/2005
Surr: 1,2-Dichloroethane-d4	99.2	87.7-108		%REC	1	8/25/2005
Surr: 4-Bromofluorobenzene	96.6	88.8-113		%REC	1	8/25/2005
Surr: Dibromofluoromethane	98.7	84.1-111		%REC	1	8/25/2005
Surr: Toluene-d8	98.6	85.9-109		%REC	1	8/25/2005

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Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	ND	2.5		µg/L	1	9/2/2005 4:05:05 PM
1-Methylnaphthalene	ND	2.5		µg/L	1	9/2/2005 4:05:05 PM
2-Methylnaphthalene	ND	2.5		µg/L	1	9/2/2005 4:05:05 PM
Acenaphthylene	ND	2.5		µg/L	1	9/2/2005 4:05:05 PM
Acenaphthene	ND	2.5		µg/L	1	9/2/2005 4:05:05 PM
Fluorene	ND	0.80		µg/L	1	9/2/2005 4:05:05 PM
Phenanthrene	ND	0.60		µg/L	1	9/2/2005 4:05:05 PM
Anthracene	ND	0.60		µg/L	1	9/2/2005 4:05:05 PM
Fluoranthene	ND	0.30		µg/L	1	9/2/2005 4:05:05 PM
Pyrene	ND	0.30		µg/L	1	9/2/2005 4:05:05 PM
Benz(a)anthracene	ND	0.020		µg/L	1	9/2/2005 4:05:05 PM
Chrysene	ND	0.20		µg/L	1	9/2/2005 4:05:05 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	9/2/2005 4:05:05 PM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	9/2/2005 4:05:05 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	9/2/2005 4:05:05 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	9/2/2005 4:05:05 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	9/2/2005 4:05:05 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	9/2/2005 4:05:05 PM
Surr: Benzo(e)pyrene	71.5	54-102		%REC	1	9/2/2005 4:05:05 PM
TOTAL CARBON DIOXIDE CALCULATION						Analyst: **MAP**
Total Carbon Dioxide	330	1.0		mg CO2/L	1	9/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **DK**
Specific Conductance	1200	0.010		µmhos/cm	1	8/26/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	9/7/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	9/8/2005 3:21:44 PM
Barium	0.12	0.0020		mg/L	1	9/8/2005 3:21:44 PM
Cadmium	ND	0.0020		mg/L	1	9/8/2005 3:21:44 PM
Calcium	61	1.0		mg/L	1	9/8/2005 3:21:44 PM
Chromium	ND	0.0060		mg/L	1	9/8/2005 3:21:44 PM
Copper	ND	0.0060		mg/L	1	9/8/2005 3:21:44 PM
Iron	0.97	0.020		mg/L	1	9/8/2005 3:21:44 PM
Lead	ND	0.0050		mg/L	1	9/8/2005 3:21:44 PM
Magnesium	10	1.0		mg/L	1	9/8/2005 3:21:44 PM
Manganese	1.9	0.0020		mg/L	1	9/8/2005 3:21:44 PM
Potassium	3.6	1.0		mg/L	1	9/8/2005 3:21:44 PM
Selenium	ND	0.050		mg/L	1	9/8/2005 3:21:44 PM
Silver	ND	0.0050		mg/L	1	9/8/2005 3:21:44 PM

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Lab Order: 0508276
Project: DW #1 Baseline
Lab ID: 0508276-01

Client Sample ID: DW #1
Collection Date: 8/23/2005 10:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Sodium	210	10		mg/L	10	9/9/2005 10:28:08 AM
Uranium	ND	0.10		mg/L	1	9/8/2005 3:21:44 PM
Zinc	0.10	0.0050		mg/L	1	9/8/2005 3:21:44 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	9/9/2005 10:34:05 AM
Barium	0.11	0.020		mg/L	1	9/9/2005 10:34:05 AM
Cadmium	ND	0.0020		mg/L	1	9/9/2005 10:34:05 AM
Chromium	ND	0.0060		mg/L	1	9/9/2005 10:34:05 AM
Copper	ND	0.0060		mg/L	1	9/9/2005 10:34:05 AM
Iron	1.4	0.020		mg/L	1	9/9/2005 10:34:05 AM
Lead	ND	0.0050		mg/L	1	9/9/2005 10:34:05 AM
Manganese	1.8	0.0020		mg/L	1	9/9/2005 10:34:05 AM
Selenium	ND	0.050		mg/L	1	9/9/2005 10:34:05 AM
Silver	ND	0.0050		mg/L	1	9/9/2005 10:34:05 AM
Uranium	ND	0.10		mg/L	1	9/9/2005 10:34:05 AM
Zinc	ND	0.050		mg/L	1	9/9/2005 10:34:05 AM
EPA METHOD 160.1: TDS						Analyst: **DK**
Total Dissolved Solids	830	50		mg/L	1	8/26/2005

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Date: *26-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT

Method Blank

Sample ID: **MBLK** Batch ID: **R16423** Test Code: **E300** Units: **mg/L** Analysis Date: **8/24/2005** Prep Date:

Client ID: Run ID: **LC_050824A** SeqNo: **391843**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID: **MBLK** Batch ID: **R16546** Test Code: **E310.1** Units: **mg/L CaCO3** Analysis Date: **9/2/2005** Prep Date:

Client ID: Run ID: **WC_050902B** SeqNo: **395705**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2									
Carbonate	ND	2									
Bicarbonate	ND	2									

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CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID: **5ml rb** Batch ID: **R16424** Test Code: **SW8260B** Units: **µg/L** Analysis Date: **8/24/2005** Prep Date:

Client ID: Run ID: **VAL_050824A** SeqNo: **391929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									
cis-1,3-Dichloropropene	ND	1									

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QC SUMMARY REPORT
Method Blank

1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2-Trichloroethane	ND	1

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QC SUMMARY REPORT
Method Blank

Trichloroethene (TCE)	ND	1							
Trichlorofluoromethane	ND	1							
1,2,3-Trichloropropane	0.482	2							J
Vinyl chloride	ND	1							
Xylenes, Total	ND	1							
Surr: 1,2-Dichloroethane-d4	9.346	0	10	0	93.5	87.7	108	0	
Surr: 4-Bromofluorobenzene	9.56	0	10	0	95.6	88.8	113	0	
Surr: Dibromofluoromethane	10.07	0	10	0	101	84.1	111	0	
Surr: Toluene-d8	9.752	0	10	0	97.5	85.9	109	0	

8/23

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Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID: **5ml rb** Batch ID: **R16442** Test Code: **SW8260B** Units: **µg/L** Analysis Date: **8/25/2005** Prep Date:
Client ID: Run ID: **VAL_050825A** SeqNo: **392288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									
cis-1,3-Dichloropropene	ND	1									

9/23

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QC SUMMARY REPORT
Method Blank

1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2-Trichloroethane	ND	1

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QC SUMMARY REPORT
Method Blank

Trichloroethene (TCE)	ND	1							
Trichlorofluoromethane	ND	1							
1,2,3-Trichloropropane	0.48	2							J
Vinyl chloride	ND	1							
Xylenes, Total	ND	1							
Surr: 1,2-Dichloroethane-d4	9.626	0	10	0	96.3	87.7	108	0	
Surr: 4-Bromofluorobenzene	10.31	0	10	0	103	88.8	113	0	
Surr: Dibromofluoromethane	10.18	0	10	0	102	84.1	111	0	
Surr: Toluene-d8	9.714	0	10	0	97.1	85.9	109	0	

Sample ID: **MB-8618** Batch ID: **8618** Test Code: **SW8310** Units: **µg/L** Analysis Date: **9/2/2005 1:41:05 PM** Prep Date: **8/25/2005**
Client ID: Run ID: **HUGO_050901A** SeqNo: **395655**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.8									
Phenanthrene	ND	0.6									
Anthracene	ND	0.6									
Fluoranthene	ND	0.3									
Pyrene	ND	0.3									
Benz(a)anthracene	ND	0.02									
Chrysene	ND	0.2									
Benzo(b)fluoranthene	ND	0.05									
Benzo(k)fluoranthene	ND	0.02									
Benzo(a)pyrene	ND	0.02									
Dibenz(a,h)anthracene	ND	0.04									
Benzo(g,h,i)perylene	ND	0.03									
Indeno(1,2,3-cd)pyrene	ND	0.08									
Surr: Benzo(e)pyrene	7.92	0	10	0	79.2	54	102	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-8699**	Batch ID: **8699**	Test Code: **SW7470**	Units: **mg/L**	Analysis Date: **9/7/2005**	Prep Date: **9/7/2005**
Client ID:		Run ID: **MI-LA254_050907A**		SeqNo: **396456**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0002									

Sample ID: **MB**	Batch ID: **R16596**	Test Code: **SW6010A**	Units: **mg/L**	Analysis Date: **9/8/2005 1:19:39 PM**	Prep Date:
Client ID:		Run ID: **ICP_050908C**		SeqNo: **397842**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	0.0003229	0.02									J
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	ND	1									
Selenium	ND	0.02									
Silver	ND	0.005									
Sodium	ND	1									
Uranium	ND	0.1									
Zinc	ND	0.05									

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID: **MB-8694** Batch ID: **8694** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **9/9/2005 10:04:29 AM** Prep Date: **9/7/2005**
Client ID: Run ID: **ICP_050909B** SeqNo: **398132**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	0.001572	0.006									J
Iron	ND	0.05									
Lead	ND	0.005									
Manganese	ND	0.002									
Selenium	ND	0.05									
Silver	ND	0.005									
Uranium	ND	0.1									
Zinc	ND	0.05									

Sample ID: **MB-8625** Batch ID: **8625** Test Code: **E160.1** Units: **mg/L** Analysis Date: **8/26/2005** Prep Date: **8/26/2005**
Client ID: Run ID: **WC_050826F** SeqNo: **395152**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *26-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Sample Duplicate

Sample ID: **0508276-01C DUP** Batch ID: **R16423** Test Code: **E300** Units: **mg/L** Analysis Date: **8/24/2005** Prep Date:
Client ID: **DW #1** Run ID: **LC_050824A** SeqNo: **391846**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.3844	0.1	0	0	0	0	0	0.3909	1.68	20	
Nitrogen, Nitrite (As N)	ND	0.1	0	0	0	0	0	0	0	20	
Bromide	0.2215	0.5	0	0	0	0	0	0.2659	0	20	J
Nitrogen, Nitrate (As N)	ND	0.1	0	0	0	0	0	0	0	20	
Phosphorus, Orthophosphate (As P)	ND	0.5	0	0	0	0	0	0	0	20	

Sample ID: **0508276-02C DUP** Batch ID: **R16596** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **9/8/2005 3:34:56 PM** Prep Date:
Client ID: **DW #2** Run ID: **ICP_050908C** SeqNo: **397872**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02	0	0	0	0	0	0	0	30	
Barium	0.09721	0.02	0	0	0	0	0	0.09721	0.00473	30	
Cadmium	ND	0.002	0	0	0	0	0	0	0	30	
Calcium	59.1	1	0	0	0	0	0	58.92	0.311	30	
Chromium	ND	0.006	0	0	0	0	0	0	0	30	
Copper	ND	0.006	0	0	0	0	0	0	0	30	
Iron	0.02466	0.02	0	0	0	0	0	0.0252	2.16	30	
Lead	ND	0.005	0	0	0	0	0	0	0	30	
Magnesium	12.84	1	0	0	0	0	0	13.03	1.49	30	
Manganese	0.3092	0.002	0	0	0	0	0	0.3073	0.617	30	
Potassium	2.546	1	0	0	0	0	0	2.417	5.20	30	
Selenium	ND	0.02	0	0	0	0	0	0.02171	0	30	
Silver	ND	0.005	0	0	0	0	0	0	0	30	
Sodium	89.34	1	0	0	0	0	0	88.81	0.595	30	
Uranium	ND	0.1	0	0	0	0	0	0	0	30	
Zinc	0.01777	0.05	0	0	0	0	0	0.01776	0	30	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

I

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Sample Duplicate

Sample ID: **0508276-02D DUP** Batch ID: **8694** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **9/9/2005 11:46:31 AM** Prep Date: **9/7/2005**
Client ID: **DW #2** Run ID: **ICP_050909B** SeqNo: **398154**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02	0	0	0	0	0	0	0	30	
Barium	0.1281	0.02	0	0	0	0	0	0.1274	0.568	30	
Cadmium	ND	0.002	0	0	0	0	0	0	0	30	
Chromium	ND	0.006	0	0	0	0	0	0	0	30	
Copper	0.001204	0.006	0	0	0	0	0	0	0	30	J
Iron	0.9111	0.05	0	0	0	0	0	0.911	0.00717	30	
Lead	0.005425	0.005	0	0	0	0	0	0.004544	17.7	30	
Manganese	0.3875	0.002	0	0	0	0	0	0.3851	0.612	30	
Selenium	ND	0.05	0	0	0	0	0	0	0	30	
Silver	ND	0.005	0	0	0	0	0	0	0	30	
Uranium	ND	0.1	0	0	0	0	0	0	0	30	
Zinc	ND	0.05	0	0	0	0	0	0.01218	0	30	

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *26-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **LCS ST300-05021** Batch ID: **R16423** Test Code: **E300** Units: **mg/L** Analysis Date: **8/24/2005** Prep Date:
Client ID: Run ID: **LC_050824A** SeqNo: **391844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5134	0.1	0.5	0	103	90	110	0			
Chloride	4.804	0.1	5	0	96.1	90	110	0			
Nitrogen, Nitrite (As N)	0.9619	0.1	1	0	96.2	90	110	0			
Bromide	2.533	0.5	2.5	0	101	90	110	0			
Nitrogen, Nitrate (As N)	2.441	0.1	2.5	0	97.6	90	110	0			
Phosphorus, Orthophosphate (As P)	4.966	0.5	5	0	99.3	90	110	0			
Sulfate	9.911	0.5	10	0	99.1	90	110	0			

Sample ID: **100ng lcs** Batch ID: **R16424** Test Code: **SW8260B** Units: **µg/L** Analysis Date: **8/24/2005** Prep Date:
Client ID: Run ID: **VAL_050824A** SeqNo: **391931**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.6	1	20	0	98.0	81.4	130	0			
Toluene	22.17	1	20	0	111	90.8	128	0			
Chlorobenzene	21.97	1	20	0	110	89.6	134	0			
1,1-Dichloroethene	18.69	1	20	0	93.5	75.1	120	0			
Trichloroethene (TCE)	18.26	1	20	0	91.3	75.8	110	0			

Sample ID: **100ng lcs** Batch ID: **R16442** Test Code: **SW8260B** Units: **µg/L** Analysis Date: **8/25/2005** Prep Date:
Client ID: Run ID: **VAL_050825A** SeqNo: **392314**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.51	1	20	0	97.5	81.4	130	0			
Toluene	20.57	1	20	0	103	90.8	128	0			
Chlorobenzene	21.38	1	20	0	107	89.6	134	0			
1,1-Dichloroethene	18.1	1	20	0	90.5	75.1	120	0			
Trichloroethene (TCE)	17.64	1	20	0	88.2	75.8	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; J - Analyte detected below quantitation limits; S - Spike Recovery outside accepted recovery limits; R - RPD outside accepted recovery limits; B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-8618** Batch ID: **8618** Test Code: **SW8310** Units: **µg/L** Analysis Date: **9/2/2005 2:29:05 PM** Prep Date: **8/25/2005**

Client ID: Run ID: **HUGO_050901A** SeqNo: **395688**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	24.62	2.5	40	0	61.6	34.8	97.4	0			
1-Methylnaphthalene	25.82	2.5	40.1	0	64.4	34.7	100	0			
2-Methylnaphthalene	25.63	2.5	40	0	64.1	35	98.1	0			
Acenaphthylene	28.27	2.5	40.1	0	70.5	48.3	95.1	0			
Acenaphthene	27.21	2.5	40	0	68.0	45	95	0			
Fluorene	2.93	0.8	4.01	0	73.1	46.8	93.4	0			
Phenanthrene	1.52	0.6	2.01	0	75.6	48.7	104	0			
Anthracene	1.48	0.6	2.01	0	73.6	47.5	102	0			
Fluoranthene	3.01	0.3	4.01	0	75.1	46.3	108	0			
Pyrene	3	0.3	4.01	0	74.8	43.8	109	0			
Benz(a)anthracene	0.3	0.02	0.401	0	74.8	40.3	115	0			
Chrysene	1.55	0.2	2.01	0	77.1	42.6	107	0			
Benzo(b)fluoranthene	0.36	0.05	0.501	0	71.9	48.6	107	0			
Benzo(k)fluoranthene	0.19	0.02	0.25	0	76.0	23.3	136	0			
Benzo(a)pyrene	0.19	0.02	0.251	0	75.7	33.4	117	0			
Dibenz(a,h)anthracene	0.35	0.04	0.501	0	69.9	27.3	139	0			
Benzo(g,h,i)perylene	0.37	0.03	0.5	0	74.0	38.2	117	0			
Indeno(1,2,3-cd)pyrene	0.747	0.08	1.002	0	74.6	39.9	125	0			

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Qualifiers:
ND - Not Detected at the Reporting Limit
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD-8618** Batch ID: **8618** Test Code: **SW8310** Units: **µg/L** Analysis Date: **9/2/2005 3:17:05 PM** Prep Date: **8/25/2005**
Client ID: Run ID: **HUGO_050901A** SeqNo: **395689**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	22.84	2.5	40	0	57.1	34.8	97.4	24.62	7.50	32.1	
1-Methylnaphthalene	22.66	2.5	40.1	0	56.5	34.7	100	25.82	13.0	32.7	
2-Methylnaphthalene	22.88	2.5	40	0	57.2	35	98.1	25.63	11.3	34	
Acenaphthylene	24.94	2.5	40.1	0	62.2	48.3	95.1	28.27	12.5	38.8	
Acenaphthene	23.78	2.5	40	0	59.5	45	95	27.21	13.5	38.6	
Fluorene	2.61	0.8	4.01	0	65.1	46.8	93.4	2.93	11.6	39.3	
Phenanthrene	1.26	0.6	2.01	0	62.7	48.7	104	1.52	18.7	25	
Anthracene	1.33	0.6	2.01	0	66.2	47.5	102	1.48	10.7	23.9	
Fluoranthene	2.84	0.3	4.01	0	70.8	46.3	108	3.01	5.81	15.7	
Pyrene	2.81	0.3	4.01	0	70.1	43.8	109	3	6.54	15.3	
Benz(a)anthracene	0.29	0.02	0.401	0	72.3	40.3	115	0.3	3.39	119	
Chrysene	1.38	0.2	2.01	0	68.7	42.6	107	1.55	11.6	16.6	
Benzo(b)fluoranthene	0.36	0.05	0.501	0	71.9	48.6	107	0.36	0	21.7	
Benzo(k)fluoranthene	0.18	0.02	0.25	0	72.0	23.3	136	0.19	5.41	19.4	
Benzo(a)pyrene	0.18	0.02	0.251	0	71.7	33.4	117	0.19	5.41	16.7	
Dibenz(a,h)anthracene	0.35	0.04	0.501	0	69.9	27.3	139	0.35	0	17.3	
Benzo(g,h,i)perylene	0.35	0.03	0.5	0	70.0	38.2	117	0.37	5.56	118	
Indeno(1,2,3-cd)pyrene	0.677	0.08	1.002	0	67.6	39.9	125	0.747	9.83	17.7	

Sample ID: **LCS-8699** Batch ID: **8699** Test Code: **SW7470** Units: **mg/L** Analysis Date: **9/7/2005** Prep Date: **9/7/2005**
Client ID: Run ID: **MI-LA254_050907A** SeqNo: **396457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005182	0.0002	0.005	0	104	75.2	134	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD-8699** Batch ID: **8699** Test Code: **SW7470** Units: **mg/L** Analysis Date: **9/7/2005** Prep Date: **9/7/2005**
Client ID: Run ID: **MI-LA254_050907A** SeqNo: **396471**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005394	0.0002	0.005	0	108	75.2	134	0.005182	4.01	0	

Sample ID: **LCS** Batch ID: **R16596** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **9/8/2005 1:22:38 PM** Prep Date:
Client ID: Run ID: **ICP_050908C** SeqNo: **397843**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4847	0.02	0.5	0	96.9	80	120	0			
Barium	0.4728	0.02	0.5	0.0003229	94.5	80	120	0			
Cadmium	0.481	0.002	0.5	0	96.2	80	120	0			
Calcium	45.55	1	50.5	0	90.2	80	120	0			
Chromium	0.4737	0.006	0.5	0	94.7	80	120	0			
Copper	0.4854	0.006	0.5	0	97.1	80	120	0			
Iron	0.4595	0.02	0.5	0	91.9	80	120	0			
Lead	0.4768	0.005	0.5	0	95.4	80	120	0			
Magnesium	45.86	1	50.5	0	90.8	80	120	0			
Manganese	0.4497	0.002	0.5	0	89.9	80	120	0			
Potassium	48.13	1	55	0	87.5	80	120	0			
Selenium	0.4503	0.02	0.5	0	90.1	80	120	0			
Silver	0.4774	0.005	0.5	0	95.5	80	120	0			
Sodium	49.03	1	50.5	0	97.1	80	120	0			
Uranium	2.38	0.1	2.5	0	95.2	80	120	0			
Zinc	0.4678	0.05	0.5	0	93.6	80	120	0			

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD** Batch ID: **R16596** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **9/8/2005 1:25:54 PM** Prep Date:

Client ID: Run ID: **ICP_050908C** SeqNo: **397844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4688	0.02	0.5	0	93.8	80	120	0.4847	3.34	20	
Barium	0.4734	0.02	0.5	0.0003229	94.6	80	120	0.4728	0.128	20	
Cadmium	0.4784	0.002	0.5	0	95.7	80	120	0.481	0.538	20	
Calcium	45.68	1	50.5	0	90.5	80	120	45.55	0.302	20	
Chromium	0.4748	0.006	0.5	0	95.0	80	120	0.4737	0.238	20	
Copper	0.4852	0.006	0.5	0	97.0	80	120	0.4854	0.0417	20	
Iron	0.455	0.02	0.5	0	91.0	80	120	0.4595	0.979	20	
Lead	0.477	0.005	0.5	0	95.4	80	120	0.4768	0.0606	20	
Magnesium	46.07	1	50.5	0	91.2	80	120	45.86	0.451	20	
Manganese	0.451	0.002	0.5	0	90.2	80	120	0.4497	0.283	20	
Potassium	48.32	1	55	0	87.9	80	120	48.13	0.409	20	
Selenium	0.4449	0.02	0.5	0	89.0	80	120	0.4503	1.20	20	
Silver	0.4816	0.005	0.5	0	96.3	80	120	0.4774	0.868	20	
Sodium	49.22	1	50.5	0	97.5	80	120	49.03	0.398	20	
Uranium	2.399	0.1	2.5	0	96.0	80	120	2.38	0.811	20	
Zinc	0.4673	0.05	0.5	0	93.5	80	120	0.4678	0.116	20	

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID: **LCS-8694** Batch ID: **8694** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **9/9/2005 10:07:21 AM** Prep Date: **9/7/2005**
Client ID: Run ID: **ICP_050909B** SeqNo: **398133**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4949	0.02	0.5	0	99.0	80	120	0			
Barium	0.4782	0.02	0.5	0	95.6	80	120	0			
Cadmium	0.4845	0.002	0.5	0	96.9	80	120	0			
Chromium	0.4776	0.006	0.5	0	95.5	80	120	0			
Copper	0.4956	0.006	0.5	0.001572	98.8	80	120	0			
Iron	0.4615	0.05	0.5	0	92.3	80	120	0			
Lead	0.4774	0.005	0.5	0	95.5	80	120	0			
Manganese	0.455	0.002	0.5	0	91.0	80	120	0			
Selenium	0.4728	0.05	0.5	0	94.6	80	120	0			
Silver	0.4891	0.005	0.5	0	97.8	80	120	0			
Uranium	2.364	0.1	2.5	0	94.6	80	120	0			
Zinc	0.4724	0.05	0.5	0	94.5	80	120	0			

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #1 Baseline

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID: **LCSD-8694** Batch ID: **8694** Test Code: **SW6010A** Units: **mg/L** Analysis Date: **9/9/2005 10:10:27 AM** Prep Date: **9/7/2005**
Client ID: Run ID: **ICP_050909B** SeqNo: **398134**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4981	0.02	0.5	0	99.6	80	120	0.4949	0.637	20	
Barium	0.4717	0.02	0.5	0	94.3	80	120	0.4782	1.37	20	
Cadmium	0.4791	0.002	0.5	0	95.8	80	120	0.4845	1.12	20	
Chromium	0.4694	0.006	0.5	0	93.9	80	120	0.4776	1.72	20	
Copper	0.487	0.006	0.5	0.001572	97.1	80	120	0.4956	1.76	20	
Iron	0.461	0.05	0.5	0	92.2	80	120	0.4615	0.124	20	
Lead	0.477	0.005	0.5	0	95.4	80	120	0.4774	0.0730	20	
Manganese	0.4485	0.002	0.5	0	89.7	80	120	0.455	1.46	20	
Selenium	0.4723	0.05	0.5	0	94.5	80	120	0.4728	0.109	20	
Silver	0.481	0.005	0.5	0	96.2	80	120	0.4891	1.68	20	
Uranium	2.339	0.1	2.5	0	93.6	80	120	2.364	1.06	20	
Zinc	0.4676	0.05	0.5	0	93.5	80	120	0.4724	1.01	20	

Sample ID: **LCS-8625** Batch ID: **8625** Test Code: **E160.1** Units: **mg/L** Analysis Date: **8/26/2005** Prep Date: **8/26/2005**
Client ID: Run ID: **WC_050826F** SeqNo: **395153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	910	50	1000	0	91.0	80	120	0			

22/23

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR — Date and Time Received: 8/24/2005

Work Order Number 0508276 — Received by AT

Checklist completed by _____ 8/24/05
Signature — Date

Matrix — Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 5° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐
Other:

Client: San Juan Refining
Address: #50 CR4990
Bloomfield, NM
87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: DW#1 - Baseline
Project #:
Project Manager:
Sampler: Cindy Hurtado/Angela Folk
Sample Temperature: 5

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
8/23/05	1045am	H_2O	DW#1	2-VOA	X			0508276-1
				1-liter			Amber	-1
				1-500ml		X	Filtered	-1
				1-500ml		X		-1
				1-500ml			H_2SO_4	-1
				1-500ml				-1

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Dissolved WQCC Metals	Total WQCC Metals	Cation/Anion / TDS		Air Bubbles or Headspace (Y or N)
						X				X		X	X	XX		

Date: 8/23/05 Time: 332pm Relinquished By: (Signature) Cindy Hurtado
Date: Time: Relinquished By: (Signature)

Received By: (Signature)
Received By: (Signature) 8/24/05 11:5

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

September 28, 2005

Hall Environmental Analysis Laboratory
4901 Hawkins NE, Suite D
Albuquerque, NM 87109

San Juan Refining
#50 CR 4990
Bloomfield, NM 87413

Dear Ms. Hurtado:

Hall Environmental Analysis Laboratory received 1 sample on 8/24/2005 for the analyses presented in the following report.

These were analyzed acccording to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely:

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

0508276-B/DW #2 - Baseline

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Lab Order: 0508276
Project: DW #2 Baseline
Lab ID: 0508276-02

Client Sample ID: DW #2
Collection Date: 8/23/2005 3:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **MAP**
Fluoride	0.50	0.10		mg/L	1	8/24/2005
Chloride	9.0	0.10		mg/L	1	8/24/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	8/24/2005
Bromide	ND	0.50		mg/L	1	8/24/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	8/24/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	8/24/2005
Sulfate	12	0.50		mg/L	1	8/24/2005
EPA METHOD 310.1: ALKALINITY						Analyst: **MAP**
Alkalinity, Total (As CaCO3)	380	2.0		mg/L CaCO3	1	9/2/2005
Carbonate	ND	2.0		mg/L CaCO3	1	9/2/2005
Bicarbonate	380	2.0		mg/L CaCO3	1	9/2/2005
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Benzene	12	10		µg/L	10	8/25/2005
Toluene	ND	10		µg/L	10	8/25/2005
Ethylbenzene	1100	50		µg/L	50	8/25/2005
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	8/25/2005
1,2,4-Trimethylbenzene	2200	50		µg/L	50	8/25/2005
1,3,5-Trimethylbenzene	120	10		µg/L	10	8/25/2005
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	8/25/2005
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	8/25/2005
Naphthalene	210	20		µg/L	10	8/25/2005
1-Methylnaphthalene	180	40		µg/L	10	8/25/2005
2-Methylnaphthalene	66	40		µg/L	10	8/25/2005
Acetone	ND	100		µg/L	10	8/25/2005
Bromobenzene	ND	10		µg/L	10	8/25/2005
Bromochloromethane	ND	10		µg/L	10	8/25/2005
Bromodichloromethane	ND	10		µg/L	10	8/25/2005
Bromoform	ND	10		µg/L	10	8/25/2005
Bromomethane	ND	20		µg/L	10	8/25/2005
2-Butanone	ND	100		µg/L	10	8/25/2005
Carbon disulfide	ND	100		µg/L	10	8/25/2005
Carbon Tetrachloride	ND	10		µg/L	10	8/25/2005
Chlorobenzene	ND	10		µg/L	10	8/25/2005
Chloroethane	ND	20		µg/L	10	8/25/2005
Chloroform	ND	10		µg/L	10	8/25/2005
Chloromethane	ND	10		µg/L	10	8/25/2005
2-Chlorotoluene	ND	10		µg/L	10	8/25/2005
4-Chlorotoluene	ND	10		µg/L	10	8/25/2005
cis-1,2-DCE	ND	10		µg/L	10	8/25/2005
cis-1,3-Dichloropropene	ND	10		µg/L	10	8/25/2005

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: DW #2
Lab Order: 0508276
Collection Date: 8/23/2005 3:00:00 PM
Project: DW #2 Baseline
Lab ID: 0508276-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	8/25/2005
Dibromochloromethane	ND	10		µg/L	10	8/25/2005
Dibromomethane	ND	20		µg/L	10	8/25/2005
1,2-Dichlorobenzene	ND	10		µg/L	10	8/25/2005
1,3-Dichlorobenzene	ND	10		µg/L	10	8/25/2005
1,4-Dichlorobenzene	ND	10		µg/L	10	8/25/2005
Dichlorodifluoromethane	ND	10		µg/L	10	8/25/2005
1,1-Dichloroethane	ND	10		µg/L	10	8/25/2005
1,1-Dichloroethene	ND	10		µg/L	10	8/25/2005
1,2-Dichloropropane	ND	10		µg/L	10	8/25/2005
1,3-Dichloropropane	ND	10		µg/L	10	8/25/2005
2,2-Dichloropropane	ND	10		µg/L	10	8/25/2005
1,1-Dichloropropene	ND	10		µg/L	10	8/25/2005
Hexachlorobutadiene	ND	10		µg/L	10	8/25/2005
2-Hexanone	ND	100		µg/L	10	8/25/2005
Isopropylbenzene	140	10		µg/L	10	8/25/2005
4-Isopropyltoluene	21	10		µg/L	10	8/25/2005
4-Methyl-2-pentanone	ND	100		µg/L	10	8/25/2005
Methylene Chloride	ND	30		µg/L	10	8/25/2005
n-Butylbenzene	50	10		µg/L	10	8/25/2005
n-Propylbenzene	320	10		µg/L	10	8/25/2005
sec-Butylbenzene	37	10		µg/L	10	8/25/2005
Styrene	ND	10		µg/L	10	8/25/2005
tert-Butylbenzene	ND	10		µg/L	10	8/25/2005
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	8/25/2005
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	8/25/2005
Tetrachloroethene (PCE)	ND	10		µg/L	10	8/25/2005
trans-1,2-DCE	ND	10		µg/L	10	8/25/2005
trans-1,3-Dichloropropene	ND	10		µg/L	10	8/25/2005
1,2,3-Trichlorobenzene	ND	10		µg/L	10	8/25/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	10	8/25/2005
1,1,1-Trichloroethane	ND	10		µg/L	10	8/25/2005
1,1,2-Trichloroethane	ND	10		µg/L	10	8/25/2005
Trichloroethene (TCE)	ND	10		µg/L	10	8/25/2005
Trichlorofluoromethane	ND	10		µg/L	10	8/25/2005
1,2,3-Trichloropropane	ND	20		µg/L	10	8/25/2005
Vinyl chloride	ND	10		µg/L	10	8/25/2005
Xylenes, Total	2300	50		µg/L	50	8/25/2005
Surr: 1,2-Dichloroethane-d4	94.7	87.7-108		%REC	10	8/25/2005
Surr: 4-Bromofluorobenzene	100	88.8-113		%REC	10	8/25/2005
Surr: Dibromofluoromethane	102	84.1-111		%REC	10	8/25/2005
Surr: Toluene-d8	100	85.9-109		%REC	10	8/25/2005

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R - RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Lab Order: 0508276
Project: DW #2 Baseline
Lab ID: 0508276-02

Client Sample ID: DW #2
Collection Date: 8/23/2005 3:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	140	2.5		µg/L	1	9/2/2005 4:53:05 PM
1-Methylnaphthalene	95	2.5		µg/L	1	9/2/2005 4:53:05 PM
2-Methylnaphthalene	43	2.5		µg/L	1	9/2/2005 4:53:05 PM
Acenaphthylene	ND	2.5		µg/L	1	9/2/2005 4:53:05 PM
Acenaphthene	2.9	2.5		µg/L	1	9/2/2005 4:53:05 PM
Fluorene	ND	0.80		µg/L	1	9/2/2005 4:53:05 PM
Phenanthrene	4.0	0.60		µg/L	1	9/2/2005 4:53:05 PM
Anthracene	ND	0.60		µg/L	1	9/2/2005 4:53:05 PM
Fluoranthene	ND	0.30		µg/L	1	9/2/2005 4:53:05 PM
Pyrene	ND	0.30		µg/L	1	9/2/2005 4:53:05 PM
Benz(a)anthracene	ND	0.020		µg/L	1	9/2/2005 4:53:05 PM
Chrysene	ND	0.20		µg/L	1	9/2/2005 4:53:05 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	9/2/2005 4:53:05 PM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	9/2/2005 4:53:05 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	9/2/2005 4:53:05 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	9/2/2005 4:53:05 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	9/2/2005 4:53:05 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	9/2/2005 4:53:05 PM
Surr: Benzo(e)pyrene	76.6	54-102		%REC	1	9/2/2005 4:53:05 PM
TOTAL CARBON DIOXIDE CALCULATION						Analyst: **MAP**
Total Carbon Dioxide	330	1.0		mg CO2/L	1	9/2/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **DK**
Specific Conductance	750	0.010		µmhos/cm	1	8/26/2005
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	9/7/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	9/8/2005 3:32:31 PM
Barium	0.097	0.0020		mg/L	1	9/8/2005 3:32:31 PM
Cadmium	ND	0.0020		mg/L	1	9/8/2005 3:32:31 PM
Calcium	59	1.0		mg/L	1	9/8/2005 3:32:31 PM
Chromium	ND	0.0060		mg/L	1	9/8/2005 3:32:31 PM
Copper	ND	0.0060		mg/L	1	9/8/2005 3:32:31 PM
Iron	0.025	0.020		mg/L	1	9/8/2005 3:32:31 PM
Lead	ND	0.0050		mg/L	1	9/8/2005 3:32:31 PM
Magnesium	13	1.0		mg/L	1	9/8/2005 3:32:31 PM
Manganese	0.31	0.0020		mg/L	1	9/8/2005 3:32:31 PM
Potassium	2.4	1.0		mg/L	1	9/8/2005 3:32:31 PM
Selenium	ND	0.050		mg/L	1	9/8/2005 3:32:31 PM
Silver	ND	0.0050		mg/L	1	9/8/2005 3:32:31 PM

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R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Lab Order: 0508276
Project: DW #2 Baseline
Lab ID: 0508276-02

Client Sample ID: DW #2
Collection Date: 8/23/2005 3:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Sodium	89	1.0		mg/L	1	9/8/2005 3:32:31 PM
Uranium	ND	0.10		mg/L	1	9/8/2005 3:32:31 PM
Zinc	0.018	0.0050		mg/L	1	9/8/2005 3:32:31 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	9/9/2005 11:19:18 AM
Barium	0.13	0.020		mg/L	1	9/9/2005 11:19:18 AM
Cadmium	ND	0.0020		mg/L	1	9/9/2005 11:19:18 AM
Chromium	ND	0.0060		mg/L	1	9/9/2005 11:19:18 AM
Copper	ND	0.0060		mg/L	1	9/9/2005 11:19:18 AM
Iron	0.91	0.020		mg/L	1	9/9/2005 11:19:18 AM
Lead	ND	0.0050		mg/L	1	9/9/2005 11:19:18 AM
Manganese	0.39	0.0020		mg/L	1	9/9/2005 11:19:18 AM
Selenium	ND	0.050		mg/L	1	9/9/2005 11:19:18 AM
Silver	ND	0.0050		mg/L	1	9/9/2005 11:19:18 AM
Uranium	ND	0.10		mg/L	1	9/9/2005 11:19:18 AM
Zinc	ND	0.050		mg/L	1	9/9/2005 11:19:18 AM
EPA METHOD 160.1: TDS						Analyst: **DK**
Total Dissolved Solids	480	50		mg/L	1	8/26/2005

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R - RPD outside accepted recovery limits
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Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID **MBLK** Batch ID: **R16423** Test Code: **E300** Units: **mg/L** Analysis Date **8/24/2005** Prep Date

Client ID: Run ID: **LC_050824A** SeqNo: **391843**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Bromide	ND	0.5									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									

Sample ID **MBLK** Batch ID: **R16546** Test Code: **E310.1** Units: **mg/L CaCO3** Analysis Date **9/2/2005** Prep Date

Client ID: Run ID: **WC_050902B** SeqNo: **395705**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	ND	2									
Carbonate	ND	2									
Bicarbonate	ND	2									

Qualifiers:
ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

J

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID **5ml rb** Batch ID: **R16424** Test Code: **SW8260B** Units: **µg/L** Analysis Date **8/24/2005** Prep Date

Client ID: Run ID: **VAL_050824A** SeqNo: **391929**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									
cis-1,3-Dichloropropene	ND	1									

6/23

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2-Trichloroethane	ND	1

7/23

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

Trichloroethene (TCE)	ND	1							
Trichlorofluoromethane	ND	1							
1,2,3-Trichloropropane	0.482	2							J
Vinyl chloride	ND	1							
Xylenes, Total	ND	1							
Surr: 1,2-Dichloroethane-d4	9.346	0	10	0	93.5	87.7	108	0	
Surr: 4-Bromofluorobenzene	9.56	0	10	0	95.6	88.8	113	0	
Surr: Dibromofluoromethane	10.07	0	10	0	101	84.1	111	0	
Surr: Toluene-d8	9.752	0	10	0	97.5	85.9	109	0	

8/23

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID **5ml rb** Batch ID: **R16442** Test Code: **SW8260B** Units: **µg/L** Analysis Date **8/25/2005** Prep Date

Client ID: Run ID: **VAL_050825A** SeqNo: **392288**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									
cis-1,3-Dichloropropene	ND	1									

9/23

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2-Trichloroethane	ND	1

10/23

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

Trichloroethene (TCE)	ND	1							
Trichlorofluoromethane	ND	1							
1,2,3-Trichloropropane	0.48	2							J
Vinyl chloride	ND	1							
Xylenes, Total	ND	1							
Surr: 1,2-Dichloroethane-d4	9.626	0	10	0	96.3	87.7	108	0	
Surr: 4-Bromofluorobenzene	10.31	0	10	0	103	88.8	113	0	
Surr: Dibromofluoromethane	10.18	0	10	0	102	84.1	111	0	
Surr: Toluene-d8	9.714	0	10	0	97.1	85.9	109	0	

Sample ID **MB-8618** Batch ID: **8618** Test Code: **SW8310** Units: **µg/L** Analysis Date **9/2/2005 1:41:05 PM** Prep Date **8/25/2005**
Client ID: Run ID: **HUGO_050901A** SeqNo: **395655**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.8									
Phenanthrene	ND	0.6									
Anthracene	ND	0.6									
Fluoranthene	ND	0.3									
Pyrene	ND	0.3									
Benz(a)anthracene	ND	0.02									
Chrysene	ND	0.2									
Benzo(b)fluoranthene	ND	0.05									
Benzo(k)fluoranthene	ND	0.02									
Benzo(a)pyrene	ND	0.02									
Dibenz(a,h)anthracene	ND	0.04									
Benzo(g,h,i)perylene	ND	0.03									
Indeno(1,2,3-cd)pyrene	ND	0.08									
Surr: Benzo(e)pyrene	7.92	0	10	0	79.2	54	102	0			

11/23

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID **MB-8699**	Batch ID: **8699**	Test Code: **SW7470**	Units: **mg/L**	Analysis Date **9/7/2005**	Prep Date **9/7/2005**
Client ID:		Run ID: **MI-LA254_050907A**		SeqNo: **396456**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.0002									

Sample ID **MB**	Batch ID: **R16596**	Test Code: **SW6010A**	Units: **mg/L**	Analysis Date **9/8/2005 1:19:39 PM**	Prep Date
Client ID:		Run ID: **ICP_050908C**		SeqNo: **397842**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	0.0003229	0.02									J
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.02									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	ND	0.002									
Potassium	ND	1									
Selenium	ND	0.02									
Silver	ND	0.005									
Sodium	ND	1									
Uranium	ND	0.1									
Zinc	ND	0.05									

12/23

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Method Blank

Sample ID **MB-8694** Batch ID: **8694** Test Code: **SW6010A** Units: **mg/L** Analysis Date **9/9/2005 10:04:29 AM** Prep Date **9/7/2005**
Client ID: Run ID: **ICP_050909B** SeqNo: **398132**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Barium	ND	0.02									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	0.001572	0.006									J
Iron	ND	0.05									
Lead	ND	0.005									
Manganese	ND	0.002									
Selenium	ND	0.05									
Silver	ND	0.005									
Uranium	ND	0.1									
Zinc	ND	0.05									

Sample ID **MB-8625** Batch ID: **8625** Test Code: **E160.1** Units: **mg/L** Analysis Date **8/26/2005** Prep Date **8/26/2005**
Client ID: Run ID: **WC_050826F** SeqNo: **395152**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	50									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Sample Duplicate

Sample ID **0508276-01C DUP** Batch ID: **R16423** Test Code: **E300** Units: **mg/L** Analysis Date **8/24/2005** Prep Date

Client ID: **DW #1** Run ID: **LC_050824A** SeqNo: **391846**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.3844	0.1	0	0	0	0	0	0.3909	1.68	20	
Nitrogen, Nitrite (As N)	ND	0.1	0	0	0	0	0	0	0	20	
Bromide	0.2215	0.5	0	0	0	0	0	0.2659	0	20	J
Nitrogen, Nitrate (As N)	ND	0.1	0	0	0	0	0	0	0	20	
Phosphorus, Orthophosphate (As P)	ND	0.5	0	0	0	0	0	0	0	20	

Sample ID **0508276-02C DUP** Batch ID: **R16596** Test Code: **SW6010A** Units: **mg/L** Analysis Date **9/8/2005 3:34:56 PM** Prep Date

Client ID: **DW #2** Run ID: **ICP_050908C** SeqNo: **397872**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02	0	0	0	0	0	0	0	30	
Barium	0.09721	0.02	0	0	0	0	0	0.09721	0.00473	30	
Cadmium	ND	0.002	0	0	0	0	0	0	0	30	
Calcium	59.1	1	0	0	0	0	0	58.92	0.311	30	
Chromium	ND	0.006	0	0	0	0	0	0	0	30	
Copper	ND	0.006	0	0	0	0	0	0	0	30	
Iron	0.02466	0.02	0	0	0	0	0	0.0252	2.16	30	
Lead	ND	0.005	0	0	0	0	0	0	0	30	
Magnesium	12.84	1	0	0	0	0	0	13.03	1.49	30	
Manganese	0.3092	0.002	0	0	0	0	0	0.3073	0.617	30	
Potassium	2.546	1	0	0	0	0	0	2.417	5.20	30	
Selenium	ND	0.02	0	0	0	0	0	0.02171	0	30	
Silver	ND	0.005	0	0	0	0	0	0	0	30	
Sodium	89.34	1	0	0	0	0	0	88.81	0.595	30	
Uranium	ND	0.1	0	0	0	0	0	0	0	30	
Zinc	0.01777	0.05	0	0	0	0	0	0.01776	0	30	J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Sample Duplicate

Sample ID **0508276-02D DUP** Batch ID: **8694** Test Code: **SW6010A** Units: **mg/L** Analysis Date **9/9/2005 11:46:31 AM** Prep Date **9/7/2005**
Client ID: **DW #2** Run ID: **ICP_050909B** SeqNo: **398154**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02	0	0	0	0	0	0	0	30	
Barium	0.1281	0.02	0	0	0	0	0	0.1274	0.568	30	
Cadmium	ND	0.002	0	0	0	0	0	0	0	30	
Chromium	ND	0.006	0	0	0	0	0	0	0	30	
Copper	0.001204	0.006	0	0	0	0	0	0	0	30	J
Iron	0.9111	0.05	0	0	0	0	0	0.911	0.00717	30	
Lead	0.005425	0.005	0	0	0	0	0	0.004544	17.7	30	
Manganese	0.3875	0.002	0	0	0	0	0	0.3851	0.612	30	
Selenium	ND	0.05	0	0	0	0	0	0	0	30	
Silver	ND	0.005	0	0	0	0	0	0	0	30	
Uranium	ND	0.1	0	0	0	0	0	0	0	30	
Zinc	ND	0.05	0	0	0	0	0	0.01218	0	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS ST300-05021** Batch ID: **R16423** Test Code: **E300** Units: **mg/L** Analysis Date **8/24/2005** Prep Date

Client ID: Run ID: **LC_050824A** SeqNo: **391844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5134	0.1	0.5	0	103	90	110	0			
Chloride	4.804	0.1	5	0	96.1	90	110	0			
Nitrogen, Nitrite (As N)	0.9619	0.1	1	0	96.2	90	110	0			
Bromide	2.533	0.5	2.5	0	101	90	110	0			
Nitrogen, Nitrate (As N)	2.441	0.1	2.5	0	97.6	90	110	0			
Phosphorus, Orthophosphate (As P)	4.966	0.5	5	0	99.3	90	110	0			
Sulfate	9.911	0.5	10	0	99.1	90	110	0			

Sample ID **100ng lcs** Batch ID: **R16424** Test Code: **SW8260B** Units: **µg/L** Analysis Date **8/24/2005** Prep Date

Client ID: Run ID: **VAL_050824A** SeqNo: **391931**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.6	1	20	0	98.0	81.4	130	0			
Toluene	22.17	1	20	0	111	90.8	128	0			
Chlorobenzene	21.97	1	20	0	110	89.6	134	0			
1,1-Dichloroethene	18.69	1	20	0	93.5	75.1	120	0			
Trichloroethene (TCE)	18.26	1	20	0	91.3	75.8	110	0			

Sample ID **100ng lcs** Batch ID: **R16442** Test Code: **SW8260B** Units: **µg/L** Analysis Date **8/25/2005** Prep Date

Client ID: Run ID: **VAL_050825A** SeqNo: **392314**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.51	1	20	0	97.5	81.4	130	0			
Toluene	20.57	1	20	0	103	90.8	128	0			
Chlorobenzene	21.38	1	20	0	107	89.6	134	0			
1,1-Dichloroethene	18.1	1	20	0	90.5	75.1	120	0			
Trichloroethene (TCE)	17.64	1	20	0	88.2	75.8	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS-8618** Batch ID: **8618** Test Code: **SW8310** Units: **µg/L** Analysis Date **9/2/2005 2:29:05 PM** Prep Date **8/25/2005**
Client ID: Run ID: **HUGO_050901A** SeqNo: **395688**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	24.62	2.5	40	0	61.6	34.8	97.4	0			
1-Methylnaphthalene	25.82	2.5	40.1	0	64.4	34.7	100	0			
2-Methylnaphthalene	25.63	2.5	40	0	64.1	35	98.1	0			
Acenaphthylene	28.27	2.5	40.1	0	70.5	48.3	95.1	0			
Acenaphthene	27.21	2.5	40	0	68.0	45	95	0			
Fluorene	2.93	0.8	4.01	0	73.1	46.8	93.4	0			
Phenanthrene	1.52	0.6	2.01	0	75.6	48.7	104	0			
Anthracene	1.48	0.6	2.01	0	73.6	47.5	102	0			
Fluoranthene	3.01	0.3	4.01	0	75.1	46.3	108	0			
Pyrene	3	0.3	4.01	0	74.8	43.8	109	0			
Benz(a)anthracene	0.3	0.02	0.401	0	74.8	40.3	115	0			
Chrysene	1.55	0.2	2.01	0	77.1	42.6	107	0			
Benzo(b)fluoranthene	0.36	0.05	0.501	0	71.9	48.6	107	0			
Benzo(k)fluoranthene	0.19	0.02	0.25	0	76.0	23.3	136	0			
Benzo(a)pyrene	0.19	0.02	0.251	0	75.7	33.4	117	0			
Dibenz(a,h)anthracene	0.35	0.04	0.501	0	69.9	27.3	139	0			
Benzo(g,h,i)perylene	0.37	0.03	0.5	0	74.0	38.2	117	0			
Indeno(1,2,3-cd)pyrene	0.747	0.08	1.002	0	74.6	39.9	125	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-8618** Batch ID: **8618** Test Code: **SW8310** Units: **µg/L** Analysis Date **9/2/2005 3:17:05 PM** Prep Date **8/25/2005**
Client ID: Run ID: **HUGO_050901A** SeqNo: **395689**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	22.84	2.5	40	0	57.1	34.8	97.4	24.62	7.50	32.1	
1-Methylnaphthalene	22.66	2.5	40.1	0	56.5	34.7	100	25.82	13.0	32.7	
2-Methylnaphthalene	22.88	2.5	40	0	57.2	35	98.1	25.63	11.3	34	
Acenaphthylene	24.94	2.5	40.1	0	62.2	48.3	95.1	28.27	12.5	38.8	
Acenaphthene	23.78	2.5	40	0	59.5	45	95	27.21	13.5	38.6	
Fluorene	2.61	0.8	4.01	0	65.1	46.8	93.4	2.93	11.6	39.3	
Phenanthrene	1.26	0.6	2.01	0	62.7	48.7	104	1.52	18.7	25	
Anthracene	1.33	0.6	2.01	0	66.2	47.5	102	1.48	10.7	23.9	
Fluoranthene	2.84	0.3	4.01	0	70.8	46.3	108	3.01	5.81	15.7	
Pyrene	2.81	0.3	4.01	0	70.1	43.8	109	3	6.54	15.3	
Benz(a)anthracene	0.29	0.02	0.401	0	72.3	40.3	115	0.3	3.39	119	
Chrysene	1.38	0.2	2.01	0	68.7	42.6	107	1.55	11.6	16.6	
Benzo(b)fluoranthene	0.36	0.05	0.501	0	71.9	48.6	107	0.36	0	21.7	
Benzo(k)fluoranthene	0.18	0.02	0.25	0	72.0	23.3	136	0.19	5.41	19.4	
Benzo(a)pyrene	0.18	0.02	0.251	0	71.7	33.4	117	0.19	5.41	16.7	
Dibenz(a,h)anthracene	0.35	0.04	0.501	0	69.9	27.3	139	0.35	0	17.3	
Benzo(g,h,i)perylene	0.35	0.03	0.5	0	70.0	38.2	117	0.37	5.56	118	
Indeno(1,2,3-cd)pyrene	0.677	0.08	1.002	0	67.6	39.9	125	0.747	9.83	17.7	

Sample ID **LCS-8699** Batch ID: **8699** Test Code: **SW7470** Units: **mg/L** Analysis Date **9/7/2005** Prep Date **9/7/2005**
Client ID: Run ID: **MI-LA254_050907A** SeqNo: **396457**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005182	0.0002	0.005	0	104	75.2	134	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: *0508276*
Project: DW #2 Baseline

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-8699** Batch ID: **8699** Test Code: **SW7470** Units: **mg/L** Analysis Date **9/7/2005** Prep Date **9/7/2005**
Client ID: Run ID: **MI-LA254_050907A** SeqNo: **396471**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005394	0.0002	0.005	0	108	75.2	134	0.005182	4.01	0	

Sample ID **LCS** Batch ID: **R16596** Test Code: **SW6010A** Units: **mg/L** Analysis Date **9/8/2005 1:22:38 PM** Prep Date
Client ID: Run ID: ***ICP_050908C*** SeqNo: **397843**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4847	0.02	0.5	0	96.9	80	120	0			
Barium	0.4728	0.02	0.5	0.0003229	94.5	80	120	0			
Cadmium	0.481	0.002	0.5	0	96.2	80	120	0			
Calcium	45.55	1	50.5	0	90.2	80	120	0			
Chromium	0.4737	0.006	0.5	0	94.7	80	120	0			
Copper	0.4854	0.006	0.5	0	97.1	80	120	0			
Iron	0.4595	0.02	0.5	0	91.9	80	120	0			
Lead	0.4768	0.005	0.5	0	95.4	80	120	0			
Magnesium	45.86	1	50.5	0	90.8	80	120	0			
Manganese	0.4497	0.002	0.5	0	89.9	80	120	0			
Potassium	48.13	1	55	0	87.5	80	120	0			
Selenium	0.4503	0.02	0.5	0	90.1	80	120	0			
Silver	0.4774	0.005	0.5	0	95.5	80	120	0			
Sodium	49.03	1	50.5	0	97.1	80	120	0			
Uranium	2.38	0.1	2.5	0	95.2	80	120	0			
Zinc	0.4678	0.05	0.5	0	93.6	80	120	0			

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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD** Batch ID: **R16596** Test Code: **SW6010A** Units: **mg/L** Analysis Date **9/8/2005 1:25:54 PM** Prep Date

Client ID: Run ID: **ICP_050908C** SeqNo: **397844**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4688	0.02	0.5	0	93.8	80	120	0.4847	3.34	20	
Barium	0.4734	0.02	0.5	0.0003229	94.6	80	120	0.4728	0.128	20	
Cadmium	0.4784	0.002	0.5	0	95.7	80	120	0.481	0.538	20	
Calcium	45.68	1	50.5	0	90.5	80	120	45.55	0.302	20	
Chromium	0.4748	0.006	0.5	0	95.0	80	120	0.4737	0.238	20	
Copper	0.4852	0.006	0.5	0	97.0	80	120	0.4854	0.0417	20	
Iron	0.455	0.02	0.5	0	91.0	80	120	0.4595	0.979	20	
Lead	0.477	0.005	0.5	0	95.4	80	120	0.4768	0.0606	20	
Magnesium	46.07	1	50.5	0	91.2	80	120	45.86	0.451	20	
Manganese	0.451	0.002	0.5	0	90.2	80	120	0.4497	0.283	20	
Potassium	48.32	1	55	0	87.9	80	120	48.13	0.409	20	
Selenium	0.4449	0.02	0.5	0	89.0	80	120	0.4503	1.20	20	
Silver	0.4816	0.005	0.5	0	96.3	80	120	0.4774	0.868	20	
Sodium	49.22	1	50.5	0	97.5	80	120	49.03	0.398	20	
Uranium	2.399	0.1	2.5	0	96.0	80	120	2.38	0.811	20	
Zinc	0.4673	0.05	0.5	0	93.5	80	120	0.4678	0.116	20	

20/23

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS-8694** Batch ID: **8694** Test Code: **SW6010A** Units: **mg/L** Analysis Date **9/9/2005 10:07:21 AM** Prep Date **9/7/2005**

Client ID: Run ID: **ICP_050909B** SeqNo: **398133**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4949	0.02	0.5	0	99.0	80	120	0			
Barium	0.4782	0.02	0.5	0	95.6	80	120	0			
Cadmium	0.4845	0.002	0.5	0	96.9	80	120	0			
Chromium	0.4776	0.006	0.5	0	95.5	80	120	0			
Copper	0.4956	0.006	0.5	0.001572	98.8	80	120	0			
Iron	0.4615	0.05	0.5	0	92.3	80	120	0			
Lead	0.4774	0.005	0.5	0	95.5	80	120	0			
Manganese	0.455	0.002	0.5	0	91.0	80	120	0			
Selenium	0.4728	0.05	0.5	0	94.6	80	120	0			
Silver	0.4891	0.005	0.5	0	97.8	80	120	0			
Uranium	2.364	0.1	2.5	0	94.6	80	120	0			
Zinc	0.4724	0.05	0.5	0	94.5	80	120	0			

21 / 23

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508276
Project: DW #2 Baseline

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-8694** Batch ID: **8694** Test Code: **SW6010A** Units: **mg/L** Analysis Date **9/9/2005 10:10:27 AM** Prep Date **9/7/2005**
Client ID: Run ID: **ICP_050909B** SeqNo: **398134**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4981	0.02	0.5	0	99.6	80	120	0.4949	0.637	20	
Barium	0.4717	0.02	0.5	0	94.3	80	120	0.4782	1.37	20	
Cadmium	0.4791	0.002	0.5	0	95.8	80	120	0.4845	1.12	20	
Chromium	0.4694	0.006	0.5	0	93.9	80	120	0.4776	1.72	20	
Copper	0.487	0.006	0.5	0.001572	97.1	80	120	0.4956	1.76	20	
Iron	0.461	0.05	0.5	0	92.2	80	120	0.4615	0.124	20	
Lead	0.477	0.005	0.5	0	95.4	80	120	0.4774	0.0730	20	
Manganese	0.4485	0.002	0.5	0	89.7	80	120	0.455	1.46	20	
Selenium	0.4723	0.05	0.5	0	94.5	80	120	0.4728	0.109	20	
Silver	0.481	0.005	0.5	0	96.2	80	120	0.4891	1.68	20	
Uranium	2.339	0.1	2.5	0	93.6	80	120	2.364	1.06	20	
Zinc	0.4676	0.05	0.5	0	93.5	80	120	0.4724	1.01	20	

Sample ID **LCS-8625** Batch ID: **8625** Test Code: **E160.1** Units: **mg/L** Analysis Date **8/26/2005** Prep Date **8/26/2005**
Client ID: Run ID: **WC_050826F** SeqNo: **395153**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids	910	50	1000	0	91.0	80	120	0			

22/23

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 8/24/2005

Work Order Number 0508276 | Received by AT

Checklist completed by _____ Signature _____ Date 8/24/05

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 5° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level

Other:

Client: San Juan Refining

Address: #50 Rd 4990
Bloomfield, NM
87413

Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: DW #2 - Baseline

Project #:

Project Manager:

Sampler: Cindy Hurtado / Angela Folk

Sample Temperature: 5

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0508276
8/24/05	3pm	H_2O	DW #2	2-VOA	X			-2
				1-liter			Amber	-2
				1-~~250~~ 500ml		X	Filtered	-2
				1-500ml		X		-2
				1-500ml			H_2SO_4	-2
				1-500ml				-2

Date: 8/24/05 Time: 330pm Relinquished By: (Signature) Cindy Hurtado

Received By: (Signature)

Date: Time: Relinquished By: (Signature)

Received By: (Signature) 8/24/05 11:25

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Dissolved WQCC Metals	Total WQCC Metals	Cation / Anions / TDS		Air Bubbles or Headspace (Y or N)
										X						
						X										
												X				
													X			
														X		
														X		

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

August 29, 2005

Dennis Tucker
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: River Terrace Giant Refinery Order No.: 0508216

Dear Dennis Tucker:

Hall Environmental Analysis Laboratory received 22 samples on 8/18/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV2-3
Lab Order: 0508216
Collection Date: 8/15/2005 11:15:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-01
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	48	12		mg/Kg-dry	1	8/25/2005 12:22:06 AM
Motor Oil Range Organics (MRO)	ND	59		mg/Kg-dry	1	8/25/2005 12:22:06 AM
Surr: DNOP	99.9	60-124		%REC	1	8/25/2005 12:22:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1400	300		mg/Kg-dry	50	8/24/2005 7:59:48 PM
Surr: BFB	104	83.1-124		%REC	50	8/24/2005 7:59:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.5		mg/Kg-dry	50	8/24/2005 7:59:48 PM
Toluene	4.4	1.5		mg/Kg-dry	50	8/24/2005 7:59:48 PM
Ethylbenzene	12	1.5		mg/Kg-dry	50	8/24/2005 7:59:48 PM
Xylenes, Total	360	1.5		mg/Kg-dry	50	8/24/2005 7:59:48 PM
Surr: 4-Bromofluorobenzene	109	87.5-115		%REC	50	8/24/2005 7:59:48 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	16	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV2-10
Lab Order: 0508216
Collection Date: 8/15/2005 11:30:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-02
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	11		mg/Kg-dry	1	8/25/2005 12:54:57 AM
Motor Oil Range Organics (MRO)	ND	55		mg/Kg-dry	1	8/25/2005 12:54:57 AM
Surr: DNOP	97.6	60-124		%REC	1	8/25/2005 12:54:57 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	7.6	5.5		mg/Kg-dry	1	8/26/2005 5:53:06 PM
Surr: BFB	109	83.1-124		%REC	1	8/26/2005 5:53:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.027		mg/Kg-dry	1	8/26/2005 5:53:06 PM
Toluene	ND	0.027		mg/Kg-dry	1	8/26/2005 5:53:06 PM
Ethylbenzene	0.11	0.027		mg/Kg-dry	1	8/26/2005 5:53:06 PM
Xylenes, Total	0.82	0.027		mg/Kg-dry	1	8/26/2005 5:53:06 PM
Surr: 4-Bromofluorobenzene	106	87.5-115		%REC	1	8/26/2005 5:53:06 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	8.9	0.50		wt%	1	8/29/2005

Qualifiers:

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R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV4-3
Lab Order: 0508216
Collection Date: 8/15/2005 1:10:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-03
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	230	11		mg/Kg-dry	1	8/25/2005 1:27:42 AM
Motor Oil Range Organics (MRO)	ND	55		mg/Kg-dry	1	8/25/2005 1:27:42 AM
Surr: DNOP	108	60-124		%REC	1	8/25/2005 1:27:42 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3800	280		mg/Kg-dry	50	8/24/2005 9:02:27 PM
Surr: BFB	104	83.1-124		%REC	50	8/24/2005 9:02:27 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.4		mg/Kg-dry	50	8/24/2005 9:02:27 PM
Toluene	31	1.4		mg/Kg-dry	50	8/24/2005 9:02:27 PM
Ethylbenzene	49	1.4		mg/Kg-dry	50	8/24/2005 9:02:27 PM
Xylenes, Total	840	5.5		mg/Kg-dry	200	8/26/2005 6:25:00 PM
Surr: 4-Bromofluorobenzene	113	87.5-115		%REC	50	8/24/2005 9:02:27 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	9.6	0.50		wt%	1	8/29/2005

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R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV1-6
Lab Order: 0508216
Collection Date: 8/15/2005 1:45:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-04
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	12		mg/Kg-dry	1	8/25/2005 2:00:27 AM
Motor Oil Range Organics (MRO)	ND	60		mg/Kg-dry	1	8/25/2005 2:00:27 AM
Surr: DNOP	102	60-124		%REC	1	8/25/2005 2:00:27 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	6.0		mg/Kg-dry	1	8/24/2005 9:33:42 PM
Surr: BFB	94.6	83.1-124		%REC	1	8/24/2005 9:33:42 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.030		mg/Kg-dry	1	8/24/2005 9:33:42 PM
Toluene	ND	0.030		mg/Kg-dry	1	8/24/2005 9:33:42 PM
Ethylbenzene	ND	0.030		mg/Kg-dry	1	8/24/2005 9:33:42 PM
Xylenes, Total	0.086	0.030		mg/Kg-dry	1	8/24/2005 9:33:42 PM
Surr: 4-Bromofluorobenzene	103	87.5-115		%REC	1	8/24/2005 9:33:42 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	17	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV3-7
Lab Order: 0508216
Collection Date: 8/15/2005 2:40:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-05
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	12		mg/Kg-dry	1	8/25/2005 2:33:14 AM
Motor Oil Range Organics (MRO)	ND	60		mg/Kg-dry	1	8/25/2005 2:33:14 AM
Surr: DNOP	108	60-124		%REC	1	8/25/2005 2:33:14 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	6.0		mg/Kg-dry	1	8/26/2005 6:57:00 PM
Surr: BFB	106	83.1-124		%REC	1	8/26/2005 6:57:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.030		mg/Kg-dry	1	8/26/2005 6:57:00 PM
Toluene	ND	0.030		mg/Kg-dry	1	8/26/2005 6:57:00 PM
Ethylbenzene	0.11	0.030		mg/Kg-dry	1	8/26/2005 6:57:00 PM
Xylenes, Total	0.24	0.030		mg/Kg-dry	1	8/26/2005 6:57:00 PM
Surr: 4-Bromofluorobenzene	104	87.5-115		%REC	1	8/26/2005 6:57:00 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	17	0.50		wt%	1	8/29/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV5-6
Lab Order: 0508216
Collection Date: 8/15/2005 3:40:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-06
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	27	12		mg/Kg-dry	1	8/25/2005 3:06:00 AM
Motor Oil Range Organics (MRO)	ND	60		mg/Kg-dry	1	8/25/2005 3:06:00 AM
Surr: DNOP	108	60-124		%REC	1	8/25/2005 3:06:00 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	340	120		mg/Kg-dry	20	8/24/2005 10:35:41 PM
Surr: BFB	104	83.1-124		%REC	20	8/24/2005 10:35:41 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.60		mg/Kg-dry	20	8/24/2005 10:35:41 PM
Toluene	ND	0.60		mg/Kg-dry	20	8/24/2005 10:35:41 PM
Ethylbenzene	0.82	0.60		mg/Kg-dry	20	8/24/2005 10:35:41 PM
Xylenes, Total	23	0.60		mg/Kg-dry	20	8/24/2005 10:35:41 PM
Surr: 4-Bromofluorobenzene	108	87.5-115		%REC	20	8/24/2005 10:35:41 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	17	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV5-10
Lab Order: 0508216
Collection Date: 8/15/2005 3:50:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-07
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	12		mg/Kg-dry	1	8/25/2005 3:38:49 AM
Motor Oil Range Organics (MRO)	ND	58		mg/Kg-dry	1	8/25/2005 3:38:49 AM
Surr: DNOP	103	60-124		%REC	1	8/25/2005 3:38:49 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.8		mg/Kg-dry	1	8/24/2005 11:06:37 PM
Surr: BFB	95.7	83.1-124		%REC	1	8/24/2005 11:06:37 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.029		mg/Kg-dry	1	8/24/2005 11:06:37 PM
Toluene	ND	0.029		mg/Kg-dry	1	8/24/2005 11:06:37 PM
Ethylbenzene	0.034	0.029		mg/Kg-dry	1	8/24/2005 11:06:37 PM
Xylenes, Total	0.18	0.029		mg/Kg-dry	1	8/24/2005 11:06:37 PM
Surr: 4-Bromofluorobenzene	103	87.5-115		%REC	1	8/24/2005 11:06:37 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	14	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV6-3
Lab Order: 0508216
Collection Date: 8/16/2005 11:15:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-08
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	250	12		mg/Kg-dry	1	8/25/2005 4:11:35 AM
Motor Oil Range Organics (MRO)	ND	60		mg/Kg-dry	1	8/25/2005 4:11:35 AM
Surr: DNOP	109	60-124		%REC	1	8/25/2005 4:11:35 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3400	300		mg/Kg-dry	50	8/24/2005 11:37:32 PM
Surr: BFB	105	83.1-124		%REC	50	8/24/2005 11:37:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.5		mg/Kg-dry	50	8/24/2005 11:37:32 PM
Toluene	9.5	1.5		mg/Kg-dry	50	8/24/2005 11:37:32 PM
Ethylbenzene	20	1.5		mg/Kg-dry	50	8/24/2005 11:37:32 PM
Xylenes, Total	590	1.5		mg/Kg-dry	50	8/24/2005 11:37:32 PM
Surr: 4-Bromofluorobenzene	109	87.5-115		%REC	50	8/24/2005 11:37:32 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	16	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV6-9
Lab Order: 0508216
Collection Date: 8/16/2005 11:25:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-09
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	14	12		mg/Kg-dry	1	8/25/2005 4:44:20 AM
Motor Oil Range Organics (MRO)	ND	61		mg/Kg-dry	1	8/25/2005 4:44:20 AM
Surr: DNOP	104	60-124		%REC	1	8/25/2005 4:44:20 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	64	6.1		mg/Kg-dry	1	8/26/2005 7:28:35 PM
Surr: BFB	109	83.1-124		%REC	1	8/26/2005 7:28:35 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.054	0.030		mg/Kg-dry	1	8/26/2005 7:28:35 PM
Toluene	0.24	0.030		mg/Kg-dry	1	8/26/2005 7:28:35 PM
Ethylbenzene	1.1	0.030		mg/Kg-dry	1	8/26/2005 7:28:35 PM
Xylenes, Total	11	0.030		mg/Kg-dry	1	8/26/2005 7:28:35 PM
Surr: 4-Bromofluorobenzene	109	87.5-115		%REC	1	8/26/2005 7:28:35 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	18	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV11-3
Lab Order: 0508216
Collection Date: 8/16/2005 11:55:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-10
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	930	13		mg/Kg-dry	1	8/25/2005 5:17:07 AM
Motor Oil Range Organics (MRO)	82	64		mg/Kg-dry	1	8/25/2005 5:17:07 AM
Surr: DNOP	118	60-124		%REC	1	8/25/2005 5:17:07 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	7400	640		mg/Kg-dry	100	8/26/2005 8:00:19 PM
Surr: BFB	110	83.1-124		%REC	100	8/26/2005 8:00:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	3.2		mg/Kg-dry	100	8/26/2005 8:00:19 PM
Toluene	29	3.2		mg/Kg-dry	100	8/26/2005 8:00:19 PM
Ethylbenzene	190	3.2		mg/Kg-dry	100	8/26/2005 8:00:19 PM
Xylenes, Total	2200	3.2		mg/Kg-dry	100	8/26/2005 8:00:19 PM
Surr: 4-Bromofluorobenzene	109	87.5-115		%REC	100	8/26/2005 8:00:19 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	22	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV11-8
Lab Order: 0508216
Collection Date: 8/16/2005 12:05:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-11
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	20	12		mg/Kg-dry	1	8/25/2005 6:22:45 AM
Motor Oil Range Organics (MRO)	ND	62		mg/Kg-dry	1	8/25/2005 6:22:45 AM
Surr: DNOP	105	60-124		%REC	1	8/25/2005 6:22:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	310	120		mg/Kg-dry	20	8/26/2005 8:31:45 PM
Surr: BFB	108	83.1-124		%REC	20	8/26/2005 8:31:45 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.62		mg/Kg-dry	20	8/26/2005 8:31:45 PM
Toluene	ND	0.62		mg/Kg-dry	20	8/26/2005 8:31:45 PM
Ethylbenzene	6.4	0.62		mg/Kg-dry	20	8/26/2005 8:31:45 PM
Xylenes, Total	18	0.62		mg/Kg-dry	20	8/26/2005 8:31:45 PM
Surr: 4-Bromofluorobenzene	107	87.5-115		%REC	20	8/26/2005 8:31:45 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	19	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV13-7
Lab Order: 0508216
Collection Date: 8/16/2005 1:40:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-12
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	490	12		mg/Kg-dry	1	8/25/2005 6:55:30 AM
Motor Oil Range Organics (MRO)	73	59		mg/Kg-dry	1	8/25/2005 6:55:30 AM
Surr: DNOP	108	60-124		%REC	1	8/25/2005 6:55:30 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	2300	290		mg/Kg-dry	50	8/26/2005 9:03:11 PM
Surr: BFB	116	83.1-124		%REC	50	8/26/2005 9:03:11 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	5.1	1.5		mg/Kg-dry	50	8/26/2005 9:03:11 PM
Toluene	5.4	1.5		mg/Kg-dry	50	8/26/2005 9:03:11 PM
Ethylbenzene	87	1.5		mg/Kg-dry	50	8/26/2005 9:03:11 PM
Xylenes, Total	330	1.5		mg/Kg-dry	50	8/26/2005 9:03:11 PM
Surr: 4-Bromofluorobenzene	109	87.5-115		%REC	50	8/26/2005 9:03:11 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	15	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV12-3
Lab Order: 0508216
Collection Date: 8/16/2005 2:15:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-13
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	110	12		mg/Kg-dry	1	8/25/2005 7:28:16 AM
Motor Oil Range Organics (MRO)	ND	61		mg/Kg-dry	1	8/25/2005 7:28:16 AM
Surr: DNOP	105	60-124		%REC	1	8/25/2005 7:28:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	370	120		mg/Kg-dry	20	8/26/2005 9:34:48 PM
Surr: BFB	105	83.1-124		%REC	20	8/26/2005 9:34:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.61		mg/Kg-dry	20	8/26/2005 9:34:48 PM
Toluene	ND	0.61		mg/Kg-dry	20	8/26/2005 9:34:48 PM
Ethylbenzene	5.7	0.61		mg/Kg-dry	20	8/26/2005 9:34:48 PM
Xylenes, Total	28	0.61		mg/Kg-dry	20	8/26/2005 9:34:48 PM
Surr: 4-Bromofluorobenzene	106	87.5-115		%REC	20	8/26/2005 9:34:48 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	19	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV12-8
Lab Order: 0508216
Collection Date: 8/16/2005 2:25:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-14
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	550	12		mg/Kg-dry	1	8/25/2005 10:45:01 AM
Motor Oil Range Organics (MRO)	ND	59		mg/Kg-dry	1	8/25/2005 10:45:01 AM
Surr: DNOP	111	60-124		%REC	1	8/25/2005 10:45:01 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	11000	590		mg/Kg-dry	100	8/26/2005 10:06:04 PM
Surr: BFB	113	83.1-124		%REC	100	8/26/2005 10:06:04 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	45	2.9		mg/Kg-dry	100	8/26/2005 10:06:04 PM
Toluene	200	2.9		mg/Kg-dry	100	8/26/2005 10:06:04 PM
Ethylbenzene	360	2.9		mg/Kg-dry	100	8/26/2005 10:06:04 PM
Xylenes, Total	2100	2.9		mg/Kg-dry	100	8/26/2005 10:06:04 PM
Surr: 4-Bromofluorobenzene	110	87.5-115		%REC	100	8/26/2005 10:06:04 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	15	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV10-3
Lab Order: 0508216
Collection Date: 8/16/2005 2:55:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-15
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	240	11		mg/Kg-dry	1	8/25/2005 11:17:47 AM
Motor Oil Range Organics (MRO)	ND	54		mg/Kg-dry	1	8/25/2005 11:17:47 AM
Surr: DNOP	117	60-124		%REC	1	8/25/2005 11:17:47 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	5400	540		mg/Kg-dry	100	8/26/2005 11:39:24 PM
Surr: BFB	112	83.1-124		%REC	100	8/26/2005 11:39:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	2.7		mg/Kg-dry	100	8/26/2005 11:39:24 PM
Toluene	4.7	2.7		mg/Kg-dry	100	8/26/2005 11:39:24 PM
Ethylbenzene	82	2.7		mg/Kg-dry	100	8/26/2005 11:39:24 PM
Xylenes, Total	660	2.7		mg/Kg-dry	100	8/26/2005 11:39:24 PM
Surr: 4-Bromofluorobenzene	108	87.5-115		%REC	100	8/26/2005 11:39:24 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	8.0	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV10-8
Lab Order: 0508216
Collection Date: 8/16/2005 3:05:00 PM
Project: River Terrace Giant Refinery
Lab ID: 0508216-16
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	71	12		mg/Kg-dry	1	8/25/2005 11:50:38 AM
Motor Oil Range Organics (MRO)	ND	62		mg/Kg-dry	1	8/25/2005 11:50:38 AM
Surr: DNOP	99.6	60-124		%REC	1	8/25/2005 11:50:38 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1900	310		mg/Kg-dry	50	8/27/2005 12:10:27 AM
Surr: BFB	110	83.1-124		%REC	50	8/27/2005 12:10:27 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	3.0	1.6		mg/Kg-dry	50	8/27/2005 12:10:27 AM
Toluene	40	1.6		mg/Kg-dry	50	8/27/2005 12:10:27 AM
Ethylbenzene	59	1.6		mg/Kg-dry	50	8/27/2005 12:10:27 AM
Xylenes, Total	370	1.6		mg/Kg-dry	50	8/27/2005 12:10:27 AM
Surr: 4-Bromofluorobenzene	106	87.5-115		%REC	50	8/27/2005 12:10:27 AM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	20	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV9-3
Lab Order: 0508216
Collection Date: 8/17/2005 8:55:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-17
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	38	10		mg/Kg-dry	1	8/25/2005 12:23:25 PM
Motor Oil Range Organics (MRO)	ND	51		mg/Kg-dry	1	8/25/2005 12:23:25 PM
Surr: DNOP	115	60-124		%REC	1	8/25/2005 12:23:25 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	420	130		mg/Kg-dry	25	8/27/2005 12:41:25 AM
Surr: BFB	109	83.1-124		%REC	25	8/27/2005 12:41:25 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.64		mg/Kg-dry	25	8/27/2005 12:41:25 AM
Toluene	ND	0.64		mg/Kg-dry	25	8/27/2005 12:41:25 AM
Ethylbenzene	5.8	0.64		mg/Kg-dry	25	8/27/2005 12:41:25 AM
Xylenes, Total	56	0.64		mg/Kg-dry	25	8/27/2005 12:41:25 AM
Surr: 4-Bromofluorobenzene	105	87.5-115		%REC	25	8/27/2005 12:41:25 AM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	2.3	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV9-8
Lab Order: 0508216
Collection Date: 8/17/2005 9:05:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-18
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	12		mg/Kg-dry	1	8/25/2005 12:56:13 PM
Motor Oil Range Organics (MRO)	ND	62		mg/Kg-dry	1	8/25/2005 12:56:13 PM
Surr: DNOP	98.9	60-124		%REC	1	8/25/2005 12:56:13 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	16	6.2		mg/Kg-dry	1	8/27/2005 1:12:10 AM
Surr: BFB	111	83.1-124		%REC	1	8/27/2005 1:12:10 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.13	0.031		mg/Kg-dry	1	8/27/2005 1:12:10 AM
Toluene	0.036	0.031		mg/Kg-dry	1	8/27/2005 1:12:10 AM
Ethylbenzene	0.77	0.031		mg/Kg-dry	1	8/27/2005 1:12:10 AM
Xylenes, Total	2.9	0.031		mg/Kg-dry	1	8/27/2005 1:12:10 AM
Surr: 4-Bromofluorobenzene	105	87.5-115		%REC	1	8/27/2005 1:12:10 AM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	19	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV7-3
Lab Order: 0508216
Collection Date: 8/17/2005 9:55:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-19
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	250	12		mg/Kg-dry	1	8/25/2005 1:29:17 PM
Motor Oil Range Organics (MRO)	ND	61		mg/Kg-dry	1	8/25/2005 1:29:17 PM
Surr: DNOP	106	60-124		%REC	1	8/25/2005 1:29:17 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3400	610		mg/Kg-dry	100	8/27/2005 1:43:02 AM
Surr: BFB	110	83.1-124		%REC	100	8/27/2005 1:43:02 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	3.1		mg/Kg-dry	100	8/27/2005 1:43:02 AM
Toluene	4.8	3.1		mg/Kg-dry	100	8/27/2005 1:43:02 AM
Ethylbenzene	48	3.1		mg/Kg-dry	100	8/27/2005 1:43:02 AM
Xylenes, Total	650	3.1		mg/Kg-dry	100	8/27/2005 1:43:02 AM
Surr: 4-Bromofluorobenzene	107	87.5-115		%REC	100	8/27/2005 1:43:02 AM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	19	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV7-8
Lab Order: 0508216
Collection Date: 8/17/2005 10:05:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-20
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	27	12		mg/Kg-dry	1	8/25/2005 2:02:21 PM
Motor Oil Range Organics (MRO)	ND	59		mg/Kg-dry	1	8/25/2005 2:02:21 PM
Surr: DNOP	96.2	60-124		%REC	1	8/25/2005 2:02:21 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	650	120		mg/Kg-dry	20	8/27/2005 2:13:40 AM
Surr: BFB	115	83.1-124		%REC	20	8/27/2005 2:13:40 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.59		mg/Kg-dry	20	8/27/2005 2:13:40 AM
Toluene	0.76	0.59		mg/Kg-dry	20	8/27/2005 2:13:40 AM
Ethylbenzene	13	0.59		mg/Kg-dry	20	8/27/2005 2:13:40 AM
Xylenes, Total	110	0.59		mg/Kg-dry	20	8/27/2005 2:13:40 AM
Surr: 4-Bromofluorobenzene	108	87.5-115		%REC	20	8/27/2005 2:13:40 AM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	15	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT: San Juan Refining
Client Sample ID: BV8-10
Lab Order: 0508216
Collection Date: 8/17/2005 10:45:00 AM
Project: River Terrace Giant Refinery
Lab ID: 0508216-21
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	170	12		mg/Kg-dry	1	8/25/2005 2:33:58 PM
Motor Oil Range Organics (MRO)	ND	59		mg/Kg-dry	1	8/25/2005 2:33:58 PM
Surr: DNOP	107	60-124		%REC	1	8/25/2005 2:33:58 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	5200	290		mg/Kg-dry	50	8/24/2005 6:56:51 PM
Surr: BFB	110	83.1-124		%REC	50	8/24/2005 6:56:51 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	12	1.5		mg/Kg-dry	50	8/24/2005 6:56:51 PM
Toluene	180	1.5		mg/Kg-dry	50	8/24/2005 6:56:51 PM
Ethylbenzene	170	1.5		mg/Kg-dry	50	8/24/2005 6:56:51 PM
Xylenes, Total	1100	5.9		mg/Kg-dry	200	8/26/2005 5:20:47 PM
Surr: 4-Bromofluorobenzene	111	87.5-115		%REC	50	8/24/2005 6:56:51 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	15	0.50		wt%	1	8/29/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *08-Sep-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	BV8-13
Lab Order:	0508216	**Collection Date:**	8/17/2005 10:55:00 AM
Project:	River Terrace Giant Refinery		
Lab ID:	0508216-22	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	34	12		mg/Kg-dry	1	8/25/2005 3:40:08 PM
Motor Oil Range Organics (MRO)	ND	61		mg/Kg-dry	1	8/25/2005 3:40:08 PM
Surr: DNOP	101	60-124		%REC	1	8/25/2005 3:40:08 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	940	300		mg/Kg-dry	50	8/24/2005 7:28:21 PM
Surr: BFB	98.1	83.1-124		%REC	50	8/24/2005 7:28:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	1.9	1.5		mg/Kg-dry	50	8/24/2005 7:28:21 PM
Toluene	5.6	1.5		mg/Kg-dry	50	8/24/2005 7:28:21 PM
Ethylbenzene	31	1.5		mg/Kg-dry	50	8/24/2005 7:28:21 PM
Xylenes, Total	180	1.5		mg/Kg-dry	50	8/24/2005 7:28:21 PM
Surr: 4-Bromofluorobenzene	106	87.5-115		%REC	50	8/24/2005 7:28:21 PM
ASTM 2216: PERCENT MOISTURE						Analyst: **HLM**
Percent Moisture	18	0.50		wt%	1	8/29/2005

Qualifiers:

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B - Analyte detected in the associated Method Blank

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S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *29-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508216
Project: River Terrace Giant Refinery

QC SUMMARY REPORT

Method Blank

Sample ID **MB-8569** Batch ID: **8569** Test Code: **SW8015** Units: **mg/Kg** Analysis Date **8/20/2005 12:52:22 PM** Prep Date **8/19/2005**
Client ID: Run ID: **FID(17A) 2_050820A** SeqNo: **390339**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	10.67	0	10	0	107	60	124	0			

Sample ID **MB-8572** Batch ID: **8572** Test Code: **SW8015** Units: **mg/Kg** Analysis Date **8/20/2005 6:54:01 PM** Prep Date **8/19/2005**
Client ID: Run ID: **FID(17A) 2_050820A** SeqNo: **390347**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	10.35	0	10	0	103	60	124	0			

Sample ID **mb-8594** Batch ID: **8594** Test Code: **SW8015** Units: **mg/Kg** Analysis Date **8/23/2005 6:41:01 PM** Prep Date **8/22/2005**
Client ID: Run ID: **PIDFID_050823A** SeqNo: **391443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5									
Surr: BFB	943.5	0	1000	0	94.4	83.1	124	0			

Sample ID **mb-8593** Batch ID: **8593** Test Code: **SW8015** Units: **mg/Kg** Analysis Date **8/25/2005 3:43:50 AM** Prep Date **8/22/2005**
Client ID: Run ID: **PIDFID_050824A** SeqNo: **391992**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5									
Surr: BFB	916.2	0	1000	0	91.6	83.1	124	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508216
Project: River Terrace Giant Refinery

QC SUMMARY REPORT
Method Blank

Sample ID **mb-8594** Batch ID: **8594** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **8/23/2005 6:41:01 PM** Prep Date **8/22/2005**
Client ID: Run ID: **PIDFID_050823A** SeqNo: **391292**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.025									
Toluene	ND	0.025									
Ethylbenzene	ND	0.025									
Xylenes, Total	ND	0.025									
Surr: 4-Bromofluorobenzene	1.004	0	1	0	100	87.5	115	0			

Sample ID **mb-8593** Batch ID: **8593** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **8/25/2005 3:43:50 AM** Prep Date **8/22/2005**
Client ID: Run ID: **PIDFID_050824A** SeqNo: **391981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.025									
Toluene	ND	0.025									
Ethylbenzene	ND	0.025									
Xylenes, Total	ND	0.025									
Surr: 4-Bromofluorobenzene	0.9902	0	1	0	99.0	87.5	115	0			

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *29-Aug-05*

CLIENT: San Juan Refining
Work Order: 0508216
Project: River Terrace Giant Refinery

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **LCS-8569**	Batch ID: **8569**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/20/2005 1:25:07 PM**	Prep Date **8/19/2005**
Client ID:		Run ID: **FID(17A) 2_050820A**		SeqNo: **390340**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46.25	10	50	0	92.5	67.4	117	0			

Sample ID **LCSD-8569**	Batch ID: **8569**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/20/2005 1:57:51 PM**	Prep Date **8/19/2005**
Client ID:		Run ID: **FID(17A) 2_050820A**		SeqNo: **390341**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47.07	10	50	0	94.1	67.4	117	46.25	1.74	17.4	

Sample ID **LCS-8572**	Batch ID: **8572**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/20/2005 7:26:49 PM**	Prep Date **8/19/2005**
Client ID:		Run ID: **FID(17A) 2_050820A**		SeqNo: **390348**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46.27	10	50	0	92.5	67.4	117	0			

Sample ID **LCSD-8572**	Batch ID: **8572**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/20/2005 7:59:32 PM**	Prep Date **8/19/2005**
Client ID:		Run ID: **FID(17A) 2_050820A**		SeqNo: **390349**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48.26	10	50	0	96.5	67.4	117	46.27	4.21	17.4	

Sample ID **lcs-8594**	Batch ID: **8594**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/23/2005 7:12:34 PM**	Prep Date **8/22/2005**
Client ID:		Run ID: **PIDFID_050823A**		SeqNo: **391444**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23.22	5	25	0	92.9	84	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508216
Project: River Terrace Giant Refinery

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **lcs-8593**	Batch ID: **8593**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/25/2005 4:14:29 AM**	Prep Date **8/22/2005**
Client ID:		Run ID: **PIDFID_050824A**		SeqNo: **391993**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21.68	5	25	0	86.7	82	120	0			

Sample ID **lcsd-8593**	Batch ID: **8593**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/25/2005 4:45:13 AM**	Prep Date **8/22/2005**
Client ID:		Run ID: **PIDFID_050824A**		SeqNo: **391994**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20.7	5	25	0	82.8	82	120	21.68	4.62	11.6	

Sample ID **GRO lcs 2.5ug**	Batch ID: **8594**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/24/2005 4:49:06 PM**	Prep Date
Client ID:		Run ID: **PIDFID_050824A**		SeqNo: **392007**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22.35	5	25	0.0214	89.3	84	120	0			

Sample ID **GRO lcs 2.5ug**	Batch ID: **8594**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/26/2005 4:48:50 PM**	Prep Date
Client ID:		Run ID: **PIDFID_050826A**		SeqNo: **392953**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22.96	5	25	0.0126	91.8	84	120	0			

Sample ID **GRO lcs 2.5ug**	Batch ID: **8593**	Test Code: **SW8015**	Units: **mg/Kg**	Analysis Date **8/26/2005 4:48:50 PM**	Prep Date
Client ID:		Run ID: **PIDFID_050826A**		SeqNo: **392963**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22.96	5	25	0.0126	91.8	84	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508216
Project: River Terrace Giant Refinery

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **lcs-8594** Batch ID: **8594** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **8/23/2005 7:12:34 PM** Prep Date **8/22/2005**
Client ID: Run ID: **PIDFID_050823A** SeqNo: **391296**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.4416	0.025	0.42	0	105	85.6	116	0			
Toluene	2.084	0.025	2	0	104	82.4	120	0			
Ethylbenzene	0.4274	0.025	0.41	0	104	86.4	111	0			
Xylenes, Total	2.155	0.025	2	0	108	78.4	125	0			

Sample ID **BTEX lcs 100ng** Batch ID: **8594** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **8/24/2005 6:24:58 PM** Prep Date
Client ID: Run ID: **PIDFID_050824A** SeqNo: **391969**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.043	0.025	1	0	104	85.6	116	0			
Toluene	1.009	0.025	1	0	101	82.4	120	0			
Ethylbenzene	1.016	0.025	1	0	102	86.4	111	0			
Xylenes, Total	2.058	0.025	2	0	103	78.4	125	0			

Sample ID **lcs-8593** Batch ID: **8593** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **8/25/2005 4:14:29 AM** Prep Date **8/22/2005**
Client ID: Run ID: **PIDFID_050824A** SeqNo: **391982**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.4535	0.025	0.42	0	108	85.6	116	0			
Toluene	2.085	0.025	2	0	104	82.4	120	0			
Ethylbenzene	0.4272	0.025	0.41	0	104	86.4	111	0			
Xylenes, Total	2.152	0.025	2	0	108	78.4	125	0			

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Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: San Juan Refining
Work Order: 0508216
Project: River Terrace Giant Refinery

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **lcsd-8593** Batch ID: **8593** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **8/25/2005 4:45:13 AM** Prep Date **8/22/2005**
Client ID: Run ID: **PIDFID_050824A** SeqNo: **391983**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.4521	0.025	0.42	0	108	85.6	116	0.4535	0.294	27	
Toluene	2.064	0.025	2	0	103	82.4	120	2.085	0.994	19	
Ethylbenzene	0.4332	0.025	0.41	0	106	86.4	111	0.4272	1.40	10	
Xylenes, Total	2.123	0.025	2	0	106	78.4	125	2.152	1.37	13	

Sample ID **BTEX lcs 100ng** Batch ID: **8594** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **8/26/2005 3:44:06 PM** Prep Date
Client ID: Run ID: **PIDFID_050826A** SeqNo: **392876**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.047	0.025	1	0	105	85.6	116	0			
Toluene	1.013	0.025	1	0	101	82.4	120	0			
Ethylbenzene	1.005	0.025	1	0	100	86.4	111	0			
Xylenes, Total	2.049	0.025	2	0	102	78.4	125	0			

Sample ID **BTEX lcs 100ng** Batch ID: **8593** Test Code: **SW8021** Units: **mg/Kg** Analysis Date **8/26/2005 3:44:06 PM** Prep Date
Client ID: Run ID: **PIDFID_050826A** SeqNo: **392903**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	1.047	0.025	1	0	105	85.6	116	0			
Toluene	1.013	0.025	1	0	101	82.4	120	0			
Ethylbenzene	1.005	0.025	1	0	100	86.4	111	0			
Xylenes, Total	2.049	0.025	2	0	102	78.4	125	0			

28 / 29

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 8/18/2005

Work Order Number 0508216 | Received by GLS

Checklist completed by Signature 8/19/05 Date

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 3° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☒ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 Rd 4990, Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: River Terrace - Giant Refinery
Project #: 5127003
Project Manager: Dennis Tucker
Sampler: Brian Speraazza
Sample Temperature: 2°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 058016
08/15/05	1115	Soil	BV2-3	1 Brass Sleeve				-1
	1130		BV2-10	1 Brass Sleeve				-2
	1310		BV4-3					-3
	1345		BV1-6					-4
	1440		BV3-7					-5
	1540		BV5-6					-6
	1550		BV5-10					-7
08/16/05	1115	Soil	BV6-3	1 Brass Sleeve				-8
	1125		BV6-9					-9
	1155		BV11-3					-10
	1205		BV11-8					-11
	1340		BV13-7					-12

BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (~~Gas/Diesel~~)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	~~8260B (VOA)~~ (Brass Sleeve)	8270 (Semi-VOA)						Air Bubbles or Headspace (Y or N)
✓		✓															

SAMPLE BRASS SLEEVE WHERE INDICATED. THANK YOU.

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
08/18	0830	Brian Speraazza	Cindy Hurtado
8/18/05	9AM	Cindy Hurtado	Jennifer Schlegel

Remarks: Analyze BTEX (8021B) & GRO (8015B) by Dry Weights. Thank You
Call Kelly 632-341-1770 w/ Q's.

592-F2

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☒ Level 4 ☐
Other: _____

Client: SAN JUAN REFINING
Address: #50 Rd 4990
Bloom Field, NM
87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: RIVER TERRACE GIANT REFINERY
Project #: 512003
Project Manager: DENNIS TUCKER
Sampler: BRIAN SPERRAZZA
Sample Temperature: 3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No. 0508216	BTEX + ~~MTBE + TMB's~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/~~Diesel~~)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / PCB's (8082)	~~8260B (VOA)~~ (Brass Sleeve)	8270 (Semi-VOA)	Air Bubbles or Headspace (Y or N)
08/16/05	1415	Soil	BV12-3	1 Brass Sleeve			-13	✓		✓					SAMPLE BRASS					
	1425		BV12-8				-14								SLEEVE WHERE					
	1455		BV10-3				-15								INDICATED.					
↓	1505	↓	BV10-8	↓			-16	↓		↓					THANK YOU.					
08/17/05	0855	Soil	BV9-3	1 Brass Sleeve			-17	✓		✓										
	0905		BV9-8				-18													
	0955		BV7-3				-19													
	1005		BV7-8				-20													
	1045		BV8-10				-21													
↓	1055	↓	BV8-13	↓			-22	↓		↓										

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
08/18	0830	Brian Sperrazza	Cindy Hurtado
8/18/05	9AM	Cindy Hurtado	[signature] 8/18/05 @ 1650

Remarks: Analyze BTEX (~~8021B~~) & GRO (8015B) by DRY WEIGHT. Thank You!
Call Kelly 602-241-1770 w/ Q's.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

March 03, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Sample Split with OCD/NMED

Order No.: 0502236

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 3 samples on 2/24/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *03-Mar-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	Tk #33-Outlet
Lab Order:	0502236	**Collection Date:**	2/23/2005 1:15:00 PM
Project:	Sample Split with OCD/NMED		
Lab ID:	0502236-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	3/3/2005 7:08:44 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	3/3/2005 7:08:44 AM
Surr: DNOP	137	58-140		%REC	1	3/3/2005 7:08:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	3.7	0.50		mg/L	10	2/28/2005 2:53:33 PM
Surr: BFB	104	78.3-120		%REC	10	2/28/2005 2:53:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	50	5.0		µg/L	10	2/28/2005 2:53:33 PM
Toluene	ND	5.0		µg/L	10	2/28/2005 2:53:33 PM
Ethylbenzene	20	5.0		µg/L	10	2/28/2005 2:53:33 PM
Xylenes, Total	22	5.0		µg/L	10	2/28/2005 2:53:33 PM
Surr: 4-Bromofluorobenzene	115	83.3-121		%REC	10	2/28/2005 2:53:33 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *03-Mar-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	River Terrace-SJR
Lab Order:	0502236	**Collection Date:**	2/23/2005 1:25:00 PM
Project:	Sample Split with OCD/NMED		
Lab ID:	0502236-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	2/28/2005 3:23:36 PM
Toluene	ND	0.50		µg/L	1	2/28/2005 3:23:36 PM
Ethylbenzene	ND	0.50		µg/L	1	2/28/2005 3:23:36 PM
Xylenes, Total	ND	0.50		µg/L	1	2/28/2005 3:23:36 PM
Surr: 4-Bromofluorobenzene	99.6	83.3-121		%REC	1	2/28/2005 3:23:36 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *03-Mar-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	SJR-Park
Lab Order:	0502236	**Collection Date:**	2/23/2005 2:05:00 PM
Project:	Sample Split with OCD/NMED		
Lab ID:	0502236-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	2/28/2005 3:53:33 PM
Toluene	ND	0.50		µg/L	1	2/28/2005 3:53:33 PM
Ethylbenzene	ND	0.50		µg/L	1	2/28/2005 3:53:33 PM
Xylenes, Total	ND	0.50		µg/L	1	2/28/2005 3:53:33 PM
Surr: 4-Bromofluorobenzene	100	83.3-121		%REC	1	2/28/2005 3:53:33 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *03-Mar-05*

CLIENT: San Juan Refining
Work Order: 0502236
Project: Sample Split with OCD/NMED

QC SUMMARY REPORT
Method Blank

Sample ID **MB-7498** Batch ID: **7498** Test Code: **SW8015** Units: **mg/L** Analysis Date **3/3/2005 4:09:44 AM** Prep Date **3/1/2005**
Client ID: Run ID: **FID(17A) 2_050302A** SeqNo: **342365**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.261	0	1	0	126	58	140	0			

Sample ID **Reagent Blank 5m** Batch ID: **R14694** Test Code: **SW8015** Units: **mg/L** Analysis Date **2/28/2005 7:20:50 AM** Prep Date
Client ID: Run ID: **PIDFID_050228A** SeqNo: **341932**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	21.45	0	20	0	107	78.3	120	0			

Sample ID **Reagent Blank 5m** Batch ID: **R14694** Test Code: **SW8021** Units: **µg/L** Analysis Date **2/28/2005 7:20:50 AM** Prep Date
Client ID: Run ID: **PIDFID_050228A** SeqNo: **341931**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	21.49	0	20	0	107	83.3	121	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *03-Mar-05*

CLIENT: San Juan Refining
Work Order: 0502236
Project: Sample Split with OCD/NMED

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **LCS-7498**	Batch ID: **7498**	Test Code: **SW8015**	Units: **mg/L**	Analysis Date **3/3/2005 4:39:38 AM**	Prep Date **3/1/2005**
Client ID:		Run ID: **FID(17A) 2_050302A**		SeqNo: **342366**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.318	1	5	0	126	81.2	149	0			

Sample ID **LCSD-7498**	Batch ID: **7498**	Test Code: **SW8015**	Units: **mg/L**	Analysis Date **3/3/2005 5:10:21 AM**	Prep Date **3/1/2005**
Client ID:		Run ID: **FID(17A) 2_050302A**		SeqNo: **342367**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.037	1	5	0	121	81.2	149	6.318	4.56	23	

Sample ID **GRO lcs 2.5ug**	Batch ID: **R14694**	Test Code: **SW8015**	Units: **mg/L**	Analysis Date **2/28/2005 11:51:47 PM**	Prep Date
Client ID:		Run ID: **PIDFID_050228A**		SeqNo: **341960**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4676	0.05	0.5	0	93.5	82.6	114	0			

Sample ID **BTEX lcs 100ng**	Batch ID: **R14694**	Test Code: **SW8021**	Units: **µg/L**	Analysis Date **2/28/2005 7:52:51 PM**	Prep Date
Client ID:		Run ID: **PIDFID_050228A**		SeqNo: **341947**	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.65	0.5	20	0	103	88.7	114	0			
Toluene	20.68	0.5	20	0	103	89.3	112	0			
Ethylbenzene	20.74	0.5	20	0	104	88.6	113	0			
Xylenes, Total	62.59	0.5	60	0	104	89.4	112	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 2/24/2005

Work Order Number 0502236 | Received by AT

Checklist completed by _____ 2/24/05
Signature | Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? **2°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐ Other:

Client: SAN Juan Refining

Address: #50 Rd 4990 Bloomfield, NM 87413

Phone #: 505-632-4161

Fax #: 505-632-3911

Project Name: Sample Split with OCD/NMED

Project #:

Project Manager: Cindy Hurtado

Sampler: Cindy Hurtado/Randy Schmaltz

Sample Temperature: 2

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	(TPH) Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles or Headspace (Y or N)
2/23/05	115p	H_2O	TK#33-Outlet	2-VOA	X		0502236-1	X		X										
	125p		River Terrace-San Juan River	2-VOA	X		-2	X												
	—																			
	205pm		SAN Juan River - Park	2-VOA	X		-3	X												

Remarks:

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
2/23/05	315pm	Cindy Hurtado	2/24/05 1318
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

March 14, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TK #33 /Fresh Water Ponds

Order No.: 0503085

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 3/8/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *14-Mar-05*

CLIENT: San Juan Refining
Client Sample ID: Fresh Water Pond
Lab Order: 0503085
Collection Date: 3/7/2005 10:40:00 AM
Project: TK #33 /Fresh Water Ponds
Lab ID: 0503085-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	3/9/2005 9:16:41 AM
Benzene	ND	0.50		µg/L	1	3/9/2005 9:16:41 AM
Toluene	ND	0.50		µg/L	1	3/9/2005 9:16:41 AM
Ethylbenzene	ND	0.50		µg/L	1	3/9/2005 9:16:41 AM
Xylenes, Total	ND	0.50		µg/L	1	3/9/2005 9:16:41 AM
Surr: 4-Bromofluorobenzene	91.9	83.3-121		%REC	1	3/9/2005 9:16:41 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *14-Mar-05*

CLIENT:	San Juan Refining	**Client Sample ID:**	TK #33
Lab Order:	0503085	**Collection Date:**	3/7/2005 10:44:00 AM
Project:	TK #33 /Fresh Water Ponds		
Lab ID:	0503085-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	13		µg/L	5	3/10/2005 1:59:18 PM
Benzene	38	2.5		µg/L	5	3/10/2005 1:59:18 PM
Toluene	4.3	2.5		µg/L	5	3/10/2005 1:59:18 PM
Ethylbenzene	7.9	2.5		µg/L	5	3/10/2005 1:59:18 PM
Xylenes, Total	20	2.5		µg/L	5	3/10/2005 1:59:18 PM
Surr: 4-Bromofluorobenzene	105	83.3-121		%REC	5	3/10/2005 1:59:18 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- R - RPD outside accepted recovery limits
- E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *14-Mar-05*

CLIENT: San Juan Refining
Work Order: 0503085
Project: TK #33 /Fresh Water Ponds

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R14782** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/9/2005 6:35:59 AM** Prep Date

Client ID: Run ID: **PIDFID_050309A** SeqNo: **343639**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.87	0	20	0	99.3	83.3	121	0			

Sample ID **Reagent Blank 5m** Batch ID: **R14797** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/10/2005 8:13:30 AM** Prep Date

Client ID: Run ID: **PIDFID_050310A** SeqNo: **343924**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	20.06	0	20	0	100	83.3	121	0			

3/6

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *14-Mar-05*

CLIENT: San Juan Refining
Work Order: 0503085
Project: TK #33 /Fresh Water Ponds

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0503085-01a ms** Batch ID: **R14782** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/9/2005 11:17:00 AM** Prep Date

Client ID: **Fresh Water Pond** Run ID: **PIDFID_050309A** SeqNo: **343643**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	35.01	2.5	40	0	87.5	64.5	133	0			
Benzene	20.86	0.5	20	0.3908	102	88.7	114	0			
Toluene	20.78	0.5	20	0.4594	102	89.3	112	0			
Ethylbenzene	21.27	0.5	20	0	106	88.6	113	0			
Xylenes, Total	61.69	0.5	60	0	103	89.4	112	0			
Surr: 4-Bromofluorobenzene	23.72	0	24	0	98.8	83.3	121	0			

Sample ID **0503085-01a msd** Batch ID: **R14782** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/9/2005 11:46:59 AM** Prep Date

Client ID: **Fresh Water Pond** Run ID: **PIDFID_050309A** SeqNo: **343644**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	33.93	2.5	40	0	84.8	64.5	133	0			
Benzene	20.31	0.5	20	0.3908	99.6	88.7	114	0			
Toluene	20.22	0.5	20	0.4594	98.8	89.3	112	0			
Ethylbenzene	20.79	0.5	20	0	104	88.6	113	0			
Xylenes, Total	59.79	0.5	60	0	99.7	89.4	112	0			
Surr: 4-Bromofluorobenzene	23.37	0	24	0	97.4	83.3	121	0			

4 / 6

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *14-Mar-05*

CLIENT: San Juan Refining
Work Order: 0503085
Project: TK #33 /Fresh Water Ponds

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R14797** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/10/2005 12:58:42 PM** Prep Date
Client ID: Run ID: **PIDFID_050310A** SeqNo: **343958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	32.57	2.5	40	0	81.4	64.5	133	0			
Benzene	20.61	0.5	20	0	103	88.7	114	0			
Toluene	20.53	0.5	20	0	103	89.3	112	0			
Ethylbenzene	20.7	0.5	20	0	103	88.6	113	0			
Xylenes, Total	61.13	0.5	60	0	102	89.4	112	0			

Sample ID **BTEX lcsd 100ng** Batch ID: **R14797** Test Code: **SW8021** Units: **µg/L** Analysis Date **3/10/2005 1:29:00 PM** Prep Date
Client ID: Run ID: **PIDFID_050310A** SeqNo: **343959**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	29.93	2.5	40	0	74.8	64.5	133	32.57	8.45	28	
Benzene	20.75	0.5	20	0	104	88.7	114	20.61	0.695	27	
Toluene	20.51	0.5	20	0	103	89.3	112	20.53	0.0672	19	
Ethylbenzene	20.79	0.5	20	0	104	88.6	113	20.7	0.440	10	
Xylenes, Total	61.5	0.5	60	0	102	89.4	112	61.13	0.601	13	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 3/8/2005

Work Order Number 0503085 | Received by AT

Checklist completed by _____ 3/8/05
Signature | Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 3° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

Accreditation Applies
NELAC ☐ USACE ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 Rd 4990
Bloom field, NM
87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Tk #33 / Fresh Water Ponds
Project #:
Project Manager:
Sampler: Cindy Hurtado
Sample Temperature: 3

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.
3/07/05	1040A	H_2O	Fresh Water Pond	2-VOA	X			0503085-1
"	1044A	"	Tk #33	2-VOA	X			-2

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
X																
X																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
3/07/05	2:15pm	Cindy Hurtado	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

May 06, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TK #33 Effluent

Order No.: 0504281

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 4/28/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *06-May-05*

CLIENT: San Juan Refining
Project: TK #33 Effluent
Lab Order: 0504281

Lab ID: 0504281-01 **Collection Date:** 4/27/2005 1:00:00 PM
Client Sample ID: TK#33 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	4.5	0.50		µg/L	1	5/5/2005 8:18:53 PM
Toluene	ND	0.50		µg/L	1	5/5/2005 8:18:53 PM
Ethylbenzene	2.4	0.50		µg/L	1	5/5/2005 8:18:53 PM
Xylenes, Total	2.4	0.50		µg/L	1	5/5/2005 8:18:53 PM
Surr: 4-Bromofluorobenzene	107	83.3-121		%REC	1	5/5/2005 8:18:53 PM

Lab ID: 0504281-02 **Collection Date:** 4/27/2005 1:15:00 PM
Client Sample ID: Fresh Water Ponds **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	5/5/2005 8:49:26 PM
Toluene	ND	0.50		µg/L	1	5/5/2005 8:49:26 PM
Ethylbenzene	ND	0.50		µg/L	1	5/5/2005 8:49:26 PM
Xylenes, Total	ND	0.50		µg/L	1	5/5/2005 8:49:26 PM
Surr: 4-Bromofluorobenzene	102	83.3-121		%REC	1	5/5/2005 8:49:26 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *06-May-05*

CLIENT: San Juan Refining
Work Order: 0504281
Project: TK #33 Effluent

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15300** Test Code: **SW8021** Units: **µg/L** Analysis Date **5/5/2005 7:52:06 AM** Prep Date

Client ID: Run ID: **PIDFID_050505A** SeqNo: **358539**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.38	0	20	0	96.9	83.3	121	0			

2 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *06-May-05*

CLIENT: San Juan Refining
Work Order: 0504281
Project: TK #33 Effluent

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0504281-02a ms** Batch ID: **R15300** Test Code: **SW8021** Units: **µg/L** Analysis Date **5/5/2005 9:19:46 PM** Prep Date

Client ID: **Fresh Water Pond** Run ID: **PIDFID_050505A** SeqNo: **358547**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.89	0.5	20	0	99.4	88.7	114	0			
Toluene	19.72	0.5	20	0	98.6	89.3	112	0			
Ethylbenzene	20.51	0.5	20	0	103	88.6	113	0			
Xylenes, Total	59.68	0.5	60	0	99.5	89.4	112	0			
Surr: 4-Bromofluorobenzene	23.32	0	24	0	97.2	83.3	121	0			

Sample ID **0504281-02a msd** Batch ID: **R15300** Test Code: **SW8021** Units: **µg/L** Analysis Date **5/5/2005 9:50:20 PM** Prep Date

Client ID: **Fresh Water Pond** Run ID: **PIDFID_050505A** SeqNo: **358548**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.78	0.5	20	0	98.9	88.7	114	19.89	0.576	27	
Toluene	20.18	0.5	20	0	101	89.3	112	19.72	2.28	19	
Ethylbenzene	20.43	0.5	20	0	102	88.6	113	20.51	0.410	10	
Xylenes, Total	60.15	0.5	60	0	100	89.4	112	59.68	0.784	13	
Surr: 4-Bromofluorobenzene	23	0	24	0	95.8	83.3	121	23.32	1.36	0	

3 / 5

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory

Date: *06-May-05*

CLIENT: San Juan Refining
Work Order: 0504281
Project: TK #33 Effluent

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15300** Test Code: **SW8021** Units: **µg/L** Analysis Date **5/5/2005 10:50:57 PM** Prep Date

Client ID: Run ID: **PIDFID_050505A** SeqNo: **358549**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.61	0.5	20	0	98.1	88.7	114	0			
Toluene	19.92	0.5	20	0	99.6	89.3	112	0			
Ethylbenzene	20.37	0.5	20	0	102	88.6	113	0			
Xylenes, Total	58.68	0.5	60	0	97.8	89.4	112	0			

4 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

I

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 4/28/2005

Work Order Number 0504281 | Received by GLS

Checklist completed by _____ 4-29-05
Signature Date

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 9° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

Accreditation Appli
NELAC ☐ USACE ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining

Project Name: Tk #33 Effluent

Address: #50 Rd 4990
Bloomfield, NM
87413

Project #:

Project Manager:

Phone #: 505-632-4161

Sampler: Cindy Hurtado

Fax #: 505-632-3911

Sample Temperature: 9

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0504281	BTEX + ~~MTBE + TMB's (8021)~~ 8021B	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles or Headspace (Y or N)
4/27/05	1pm	H2O	Tk #33	2-VOA			HCL	-1	X															
"	115pm	H2O	Fresh Water Ponds	2-VOA			HCL	-2	X															

Date: 4/27/05 Time: 230pm Relinquished By: (Signature) Cindy Hurtado

Received By: (Signature) 4/28/05 @ 1525

Date: Time: Relinquished By: (Signature)

Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

May 12, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TK #33 Effluent

Order No.: 0505035

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 5/4/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *12-May-05*

CLIENT: San Juan Refining
Client Sample ID: TK#33
Lab Order: 0505035
Collection Date: 5/4/2005 10:35:00 AM
Project: TK #33 Effluent
Lab ID: 0505035-01
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	23	2.5		µg/L	1	5/9/2005 11:14:16 AM
Benzene	1.8	0.50		µg/L	1	5/9/2005 11:14:16 AM
Toluene	ND	0.50		µg/L	1	5/9/2005 11:14:16 AM
Ethylbenzene	1.1	0.50		µg/L	1	5/9/2005 11:14:16 AM
Xylenes, Total	1.4	0.50		µg/L	1	5/9/2005 11:14:16 AM
Surr: 4-Bromofluorobenzene	104	83.3-121		%REC	1	5/9/2005 11:14:16 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *12-May-05*

CLIENT: San Juan Refining
Client Sample ID: Fresh Water Ponds
Lab Order: 0505035
Collection Date: 5/4/2005 10:50:00 AM
Project: TK #33 Effluent
Lab ID: 0505035-02
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	5/9/2005 11:44:55 AM
Benzene	ND	0.50		µg/L	1	5/9/2005 11:44:55 AM
Toluene	ND	0.50		µg/L	1	5/9/2005 11:44:55 AM
Ethylbenzene	ND	0.50		µg/L	1	5/9/2005 11:44:55 AM
Xylenes, Total	ND	0.50		µg/L	1	5/9/2005 11:44:55 AM
Surr: 4-Bromofluorobenzene	99.4	83.3-121		%REC	1	5/9/2005 11:44:55 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *12-May-05*

CLIENT: San Juan Refining
Work Order: 0505035
Project: TK #33 Effluent

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15328** Test Code: **SW8021** Units: **µg/L** Analysis Date **5/9/2005 6:52:11 AM** Prep Date

Client ID: Run ID: **PIDFID_050509A** SeqNo: **359328**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	20.48	0	20	0	102	83.3	121	0			

3 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *12-May-05*

CLIENT: San Juan Refining
Work Order: 0505035
Project: TK #33 Effluent

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15328** Test Code: **SW8021** Units: **µg/L** Analysis Date **5/9/2005 11:28:27 PM** Prep Date

Client ID: Run ID: **PIDFID_050509A** SeqNo: **359338**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	43.54	2.5	40	0	109	64.5	133	0			
Benzene	21.07	0.5	20	0	105	88.7	114	0			
Toluene	20.74	0.5	20	0	104	89.3	112	0			
Ethylbenzene	21.84	0.5	20	0	109	88.6	113	0			
Xylenes, Total	62.36	0.5	60	0	104	89.4	112	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 5/4/2005

Work Order Number 0505035 | Received by GLS

Checklist completed by G Schleppe (Signature) 5-5-05 (Date)

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 5° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

Client: San Juan Refining

Project Name: Tk # 33 Effluent

Address: #50 Rd 4990
Bloomfield, NM 87413

Project #:

Project Manager:

Phone #: 505-632-4161

Sampler: Cindy Hurtado

Fax #: 505-632-3911

Sample Temperature: 5°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No. 0505035	BTEX + MTBE + ~~TMB's (8021)~~	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
5/04/05	1035A	H_2O	Tk # 33	2-VOA			HCL	-1	X																
1	1050A	1	Fresh Water Ponds	2-VOA			HCL	-2	X																

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
5/04/05	2pm	Cindy Hurtado	5-5-05 @ 1600
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

June 10, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TC #33 Effluent

Order No.: 0506078

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 6/8/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *10-Jun-05*

CLIENT: San Juan Refining
Project: TC #33 Effluent
Lab Order: 0506078

Lab ID: 0506078-01
Collection Date: 6/7/2005 2:10:00 PM
Client Sample ID: T/c#33
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	1.2	0.50		µg/L	1	6/10/2005 1:12:44 AM
Toluene	ND	0.50		µg/L	1	6/10/2005 1:12:44 AM
Ethylbenzene	0.63	0.50		µg/L	1	6/10/2005 1:12:44 AM
Xylenes, Total	1.3	0.50		µg/L	1	6/10/2005 1:12:44 AM
Surr: 4-Bromofluorobenzene	109	83.3-121		%REC	1	6/10/2005 1:12:44 AM

Lab ID: 0506078-02
Collection Date: 6/7/2005 2:16:00 PM
Client Sample ID: Fresh Water Ponds
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	6/10/2005 1:43:07 AM
Toluene	ND	0.50		µg/L	1	6/10/2005 1:43:07 AM
Ethylbenzene	ND	0.50		µg/L	1	6/10/2005 1:43:07 AM
Xylenes, Total	ND	0.50		µg/L	1	6/10/2005 1:43:07 AM
Surr: 4-Bromofluorobenzene	102	83.3-121		%REC	1	6/10/2005 1:43:07 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *10-Jun-05*

CLIENT: San Juan Refining
Work Order: 0506078
Project: TC #33 Effluent

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R15641** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/9/2005 9:16:17 AM** Prep Date

Client ID: Run ID: **PIDFID_050609A** SeqNo: **369704**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.39	0	20	0	96.9	83.3	121	0			

2 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Date: *10-Jun-05*

CLIENT: San Juan Refining
Work Order: 0506078
Project: TC #33 Effluent

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID **0506078-02a ms** Batch ID: **R15641** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/10/2005 2:13:27 AM** Prep Date
Client ID: **Fresh Water Pond** Run ID: **PIDFID_050609A** SeqNo: **369824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.68	0.5	20	0	103	88.7	114	0			
Toluene	21.37	0.5	20	0	107	89.3	112	0			
Ethylbenzene	21.09	0.5	20	0	105	88.6	113	0			
Xylenes, Total	63.74	0.5	60	0.4698	105	89.4	112	0			
Surr: 4-Bromofluorobenzene	24.89	0	24	0	104	83.3	121	0			

Sample ID **0506078-02a msd** Batch ID: **R15641** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/10/2005 2:43:48 AM** Prep Date
Client ID: **Fresh Water Pond** Run ID: **PIDFID_050609A** SeqNo: **369825**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.3	0.5	20	0	102	88.7	114	20.68	1.86	27	
Toluene	20.97	0.5	20	0	105	89.3	112	21.37	1.84	19	
Ethylbenzene	20.81	0.5	20	0	104	88.6	113	21.09	1.32	10	
Xylenes, Total	62.82	0.5	60	0.4698	104	89.4	112	63.74	1.46	13	
Surr: 4-Bromofluorobenzene	24.68	0	24	0	103	83.3	121	24.89	0.851	0	

3 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Date: *10-Jun-05*

CLIENT: San Juan Refining
Work Order: 0506078
Project: TC #33 Effluent

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R15641** Test Code: **SW8021** Units: **µg/L** Analysis Date **6/9/2005 12:51:23 PM** Prep Date

Client ID: Run ID: **PIDFID_050609A** SeqNo: **369826**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.81	0.5	20	0	104	88.7	114	0			
Toluene	20.97	0.5	20	0	105	89.3	112	0			
Ethylbenzene	20.6	0.5	20	0	103	88.6	113	0			
Xylenes, Total	62.78	0.5	60	0	105	89.4	112	0			

4 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR Date and Time Received:

Work Order Number 0506078 Received by AMG

Checklist completed by  6/8/05
Signature Date

Matrix Carrier name UPS

Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present	☐	
Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	Not Present	☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes	☐	No	☐	N/A	☑	
Chain of custody present?	Yes	☑	No	☐			
Chain of custody signed when relinquished and received?	Yes	☑	No	☐			
Chain of custody agrees with sample labels?	Yes	☑	No	☐			
Samples in proper container/bottle?	Yes	☑	No	☐			
Sample containers intact?	Yes	☑	No	☐			
Sufficient sample volume for indicated test?	Yes	☑	No	☐			
All samples received within holding time?	Yes	☑	No	☐			
Water - VOA vials have zero headspace?	No VOA vials submitted	☐	Yes	☑	No	☐	
Water - pH acceptable upon receipt?	Yes	☐	No	☐	N/A	☑	

Container/Temp Blank temperature? **13°** *4° C ± 2 Acceptable*
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

_____

_____

_____

_____

Corrective Action _____

_____

_____

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

July 20, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TK #33 Effluent

Order No.: 0507046

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 7/7/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Environmental Analysis Laboratory

Date: *20-Jul-05*

CLIENT: San Juan Refining
Project: TK #33 Effluent
Lab Order: 0507046

Lab ID: 0507046-01
Collection Date: 7/6/2005 11:30:00 AM
Client Sample ID: TK #33
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	7/19/2005 1:00:36 PM
Toluene	ND	0.50		µg/L	1	7/19/2005 1:00:36 PM
Ethylbenzene	ND	0.50		µg/L	1	7/19/2005 1:00:36 PM
Xylenes, Total	ND	0.50		µg/L	1	7/19/2005 1:00:36 PM
Surr: 4-Bromofluorobenzene	102	83.3-121		%REC	1	7/19/2005 1:00:36 PM

Lab ID: 0507046-02
Collection Date: 7/6/2005 11:35:00 AM
Client Sample ID: Fresh Water Pond
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	7/19/2005 1:31:41 PM
Toluene	ND	0.50		µg/L	1	7/19/2005 1:31:41 PM
Ethylbenzene	ND	0.50		µg/L	1	7/19/2005 1:31:41 PM
enes, Total	ND	0.50		µg/L	1	7/19/2005 1:31:41 PM
Surr: 4-Bromofluorobenzene	97.5	83.3-121		%REC	1	7/19/2005 1:31:41 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *20-Jul-05*

CLIENT: San Juan Refining
Work Order: 0507046
Project: TK #33 Effluent

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank** Batch ID: **R16034** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/19/2005 9:21:22 AM** Prep Date

Client ID: Run ID: **PIDFID_050719A** SeqNo: **380900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	18.86	0	20	0	94.3	83.3	121	0			

2 / 4

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

/

Hall Environmental Analysis Laboratory

Date: *20-Jul-05*

CLIENT: San Juan Refining
Work Order: 0507046
Project: TK #33 Effluent

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R16034** Test Code: **SW8021** Units: **µg/L** Analysis Date **7/20/2005 2:03:39 AM** Prep Date

Client ID: Run ID: **PIDFID_050719A** SeqNo: **380901**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.04	0.5	20	0	100	88.7	114	0			
Toluene	19.49	0.5	20	0	97.4	89.3	112	0			
Ethylbenzene	19.32	0.5	20	0	96.6	88.6	113	0			
Xylenes, Total	39.2	0.5	60	0	65.3	89.4	112	0			S

3 / 4

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR — Date and Time Received:

Work Order Number 0507046 — Received by AT

Checklist completed by [signature] Signature 7/7/05 Date

Matrix — Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
r - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? **10°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

rrective Action _____

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

September 06, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: Tank #33-8/05 Order No.: 0508292

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 3 samples on 8/25/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *06-Sep-05*

CLIENT: San Juan Refining
Project: Tank #33-8/05
Lab Order: 0508292

Lab ID: 0508292-01 **Collection Date:** 8/24/2005 1:15:00 PM
Client Sample ID: TK #33 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	9/1/2005 2:04:01 PM
Toluene	ND	0.50		µg/L	1	9/1/2005 2:04:01 PM
Ethylbenzene	ND	0.50		µg/L	1	9/1/2005 2:04:01 PM
Xylenes, Total	ND	0.50		µg/L	1	9/1/2005 2:04:01 PM
Surr: 4-Bromofluorobenzene	96.5	82.2-119		%REC	1	9/1/2005 2:04:01 PM

Lab ID: 0508292-02 **Collection Date:** 8/24/2005 1:30:00 PM
Client Sample ID: Fresh Water Pond **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	9/1/2005 2:35:28 PM
Toluene	ND	0.50		µg/L	1	9/1/2005 2:35:28 PM
Ethylbenzene	ND	0.50		µg/L	1	9/1/2005 2:35:28 PM
Xylenes, Total	ND	0.50		µg/L	1	9/1/2005 2:35:28 PM
Surr: 4-Bromofluorobenzene	96.6	82.2-119		%REC	1	9/1/2005 2:35:28 PM

Lab ID: 0508292-03 **Collection Date:**
Client Sample ID: Trip Blank **Matrix:** TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	9/1/2005 3:07:00 PM
Toluene	ND	0.50		µg/L	1	9/1/2005 3:07:00 PM
Ethylbenzene	ND	0.50		µg/L	1	9/1/2005 3:07:00 PM
Xylenes, Total	ND	0.50		µg/L	1	9/1/2005 3:07:00 PM
Surr: 4-Bromofluorobenzene	93.4	82.2-119		%REC	1	9/1/2005 3:07:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *06-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508292
Project: Tank #33-8/05

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R16519** Test Code: **SW8021** Units: **µg/L** Analysis Date **9/1/2005 9:24:37 AM** Prep Date

Client ID: Run ID: **PIDFID_050901A** SeqNo: **394723**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	18.53	0	20	0	92.6	82.2	119	0			

2 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *06-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508292
Project: Tank #33-8/05

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID **0508292-02a ms** Batch ID: **R16519** Test Code: **SW8021** Units: **µg/L** Analysis Date **9/1/2005 3:38:33 PM** Prep Date

Client ID: **Fresh Water Pond** Run ID: **PIDFID_050901A** SeqNo: **394734**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.47	0.5	20	0	107	88.5	114	0			
Toluene	20.19	0.5	20	0	101	87.2	114	0			
Ethylbenzene	20.41	0.5	20	0	102	88.6	113	0			
Xylenes, Total	42.21	0.5	40	0	106	83.3	114	0			
Surr: 4-Bromofluorobenzene	20.93	0	20	0	105	82.2	119	0			

Sample ID **0508292-02a msd** Batch ID: **R16519** Test Code: **SW8021** Units: **µg/L** Analysis Date **9/1/2005 4:10:06 PM** Prep Date

Client ID: **Fresh Water Pond** Run ID: **PIDFID_050901A** SeqNo: **394735**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.71	0.5	20	0	104	88.5	114	21.47	3.63	27	
Toluene	19.43	0.5	20	0	97.2	87.2	114	20.19	3.84	19	
Ethylbenzene	19.73	0.5	20	0	98.7	88.6	113	20.41	3.36	10	
Xylenes, Total	40.37	0.5	40	0	101	83.3	114	42.21	4.45	13	
Surr: 4-Bromofluorobenzene	20.93	0	20	0	105	82.2	119	20.93	0.0115	0	

3 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Date: *06-Sep-05*

CLIENT: San Juan Refining
Work Order: 0508292
Project: Tank #33-8/05

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R16519** Test Code: **SW8021** Units: **µg/L** Analysis Date **9/1/2005 4:41:34 PM** Prep Date

Client ID: Run ID: **PIDFID_050901A** SeqNo: **394724**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.45	0.5	20	0	107	88.5	114	0			
Toluene	20.27	0.5	20	0	101	87.2	114	0			
Ethylbenzene	20.13	0.5	20	0	101	88.6	113	0			
Xylenes, Total	41.72	0.5	40	0	104	83.3	114	0			

4 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name **SJR** Date and Time Received: **8/25/05**

Work Order Number **0508292** Received by **SSB**

Checklist completed by _____ Date 8-25-05
Signature

Matrix: Carrier name: UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? **9°** *4° C ± 2 Acceptable*
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: San Juan Refinery

Project Name: Tank #33 - 8/05

Address: #50 CR 4990
Bloomfield, NM
87413

Project #:

Project Manager: Cindy Hurtado

Phone #: 505-632-4161

Sampler: Cindy Hurtado / Angela Folk

Fax #: 505-632-3911

Sample Temperature: 6.0

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.	BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
8-24-05	1:15p	H_2O	Tk #33	2-VOA	X		0508292-1	X																
8-24-05	1:30p	1	Fresh Water Pond	2-VOA	X		-2	X																
			Trip Blank				-3																	

Date: 8/24/05 Time: 2Pm Relinquished By: (Signature) Cindy Hurtado

Received By: (Signature)

Date: Time: Relinquished By: (Signature)

Received By: (Signature) 8/25/05 11:57

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

September 28, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TANK #33 -9/05 Order No.: 0509240

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 3 samples on 9/22/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Project: TANK #33 -9/05
Lab Order: 0509240

Lab ID: 0509240-01 **Collection Date:** 9/21/2005 2:40:00 PM
Client Sample ID: TK #33 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	0.84	0.50		µg/L	1	9/23/2005 8:36:32 PM
Toluene	ND	0.50		µg/L	1	9/23/2005 8:36:32 PM
Ethylbenzene	ND	0.50		µg/L	1	9/23/2005 8:36:32 PM
Xylenes, Total	ND	0.50		µg/L	1	9/23/2005 8:36:32 PM
Surr: 4-Bromofluorobenzene	99.9	82.2-119		%REC	1	9/23/2005 8:36:32 PM

Lab ID: 0509240-02 **Collection Date:** 9/21/2005 2:44:00 PM
Client Sample ID: Fresh Water Ponds **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	9/23/2005 11:10:21 PM
Toluene	ND	0.50		µg/L	1	9/23/2005 11:10:21 PM
Ethylbenzene	ND	0.50		µg/L	1	9/23/2005 11:10:21 PM
Xylenes, Total	ND	0.50		µg/L	1	9/23/2005 11:10:21 PM
Surr: 4-Bromofluorobenzene	97.5	82.2-119		%REC	1	9/23/2005 11:10:21 PM

Lab ID: 0509240-03 **Collection Date:**
Client Sample ID: Trip Blank **Matrix:** TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		µg/L	1	9/23/2005 11:40:58 PM
Toluene	ND	0.50		µg/L	1	9/23/2005 11:40:58 PM
Ethylbenzene	ND	0.50		µg/L	1	9/23/2005 11:40:58 PM
Xylenes, Total	ND	0.50		µg/L	1	9/23/2005 11:40:58 PM
Surr: 4-Bromofluorobenzene	95.3	82.2-119		%REC	1	9/23/2005 11:40:58 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Work Order: 0509240
Project: TANK #33 -9/05

QC SUMMARY REPORT
Method Blank

Sample ID Reagent Blank 5m Batch ID: R16759 Test Code: SW8021 Units: µg/L Analysis Date 9/23/2005 9:37:19 AM Prep Date

Client ID: Run ID: PIDFID_050923A SeqNo: 403397

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	18.66	0	20	0	93.3	82.2	119	0			

2 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Work Order: 0509240
Project: TANK #33 -9/05

QC SUMMARY REPORT
Sample Matrix Spike

Sample ID 0509240-01a ms	Batch ID: R16759	Test Code: SW8021	Units: µg/L	Analysis Date 9/23/2005 9:07:23 PM	Prep Date
Client ID: TK #33		Run ID: PIDFID_050923A		SeqNo: 403420	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.65	0.5	20	0.8358	94.1	88.5	114	0			
Toluene	19.3	0.5	20	0	96.5	87.2	114	0			
Ethylbenzene	19.59	0.5	20	0.2464	96.7	88.6	113	0			
Xylenes, Total	39.9	0.5	40	0.3296	98.9	83.3	114	0			
Surr: 4-Bromofluorobenzene	21.02	0	20	0	105	82.2	119	0			

Sample ID 0509240-01a msd	Batch ID: R16759	Test Code: SW8021	Units: µg/L	Analysis Date 9/23/2005 9:38:16 PM	Prep Date
Client ID: TK #33		Run ID: PIDFID_050923A		SeqNo: 403421	

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.86	0.5	20	0.8358	95.1	88.5	114	19.65	1.05	27	
Toluene	19.35	0.5	20	0	96.7	87.2	114	19.3	0.258	19	
Ethylbenzene	19.61	0.5	20	0.2464	96.8	88.6	113	19.59	0.103	10	
Xylenes, Total	39.98	0.5	40	0.3296	99.1	83.3	114	39.9	0.206	13	
Surr: 4-Bromofluorobenzene	20.95	0	20	0	105	82.2	119	21.02	0.359	0	

3 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *28-Sep-05*

CLIENT: San Juan Refining
Work Order: 0509240
Project: TANK #33 -9/05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID BTEX lcs 100ng | Batch ID: R16759 | Test Code: SW8021 | Units: µg/L | Analysis Date 9/23/2005 10:09:01 PM | Prep Date

Client ID: | Run ID: PIDFID_050923A | SeqNo: 403402

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.83	0.5	20	0	94.1	88.5	114	0			
Toluene	19.17	0.5	20	0	95.9	87.2	114	0			
Ethylbenzene	19.35	0.5	20	0	96.7	88.6	113	0			
Xylenes, Total	39.79	0.5	40	0	99.5	83.3	114	0			

4 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 9/22/2005

Work Order Number 0509240 | Received by SSB

Checklist completed by _____ Signature _____ Date 9/22/05

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 6° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other: _____

Client: San Juan Refining

Project Name: TANK #33 - 9/05

Address: #50 Rd 4990
Bloomfield, NM 87413

Project #:

Project Manager:

Phone #: 505-632-4161

Sampler: Cindy Hurtado/Angela Folk

Fax #: 505-632-3911

Sample Temperature: 6°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0509230
9/21/05	2:40pm	H2O	TK #33	2-VOA	X			1
	2:44pm		Fresh Water Ponds	2-VOA	X			2
			Trip Blank					3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

BTEX + ~~MTBE~~ + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
X																
X																
X																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
9/21/05	3:25pm	Cindy Hurtado	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 9/22/05 13:10

Remarks: UPS

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

November 01, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TK #33 - Effluent-10/05 Order No.: 0510199

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 10/20/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory

Date: *01-Nov-05*

CLIENT: San Juan Refining
Project: TK #33 - Effluent-10/05
Lab Order: 0510199

Lab ID: 0510199-01 **Collection Date:** 10/19/2005 1:15:00 PM
Client Sample ID: TK#33 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.93	0.50		µg/L	1	10/31/2005 10:04:37 AM
Toluene	ND	0.50		µg/L	1	10/31/2005 10:04:37 AM
Ethylbenzene	ND	0.50		µg/L	1	10/31/2005 10:04:37 AM
Xylenes, Total	ND	0.50		µg/L	1	10/31/2005 10:04:37 AM
Surr: 4-Bromofluorobenzene	98.4	82.2-119		%REC	1	10/31/2005 10:04:37 AM

Lab ID: 0510199-02 **Collection Date:** 10/19/2005 1:20:00 PM
Client Sample ID: Fresh Water Ponds **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	10/31/2005 10:35:31 AM
Toluene	ND	0.50		µg/L	1	10/31/2005 10:35:31 AM
Ethylbenzene	ND	0.50		µg/L	1	10/31/2005 10:35:31 AM
Xylenes, Total	ND	0.50		µg/L	1	10/31/2005 10:35:31 AM
Surr: 4-Bromofluorobenzene	104	82.2-119		%REC	1	10/31/2005 10:35:31 AM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *01-Nov-05*

CLIENT: San Juan Refining
Work Order: 0510199
Project: TK #33 - Effluent-10/05

QC SUMMARY REPORT

Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R17139** Test Code: **SW8021** Units: **µg/L** Analysis Date **10/31/2005 8:13:11 AM** Prep Date

Client ID: Run ID: **PIDFID_051031A** SeqNo: **416877**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	21.06	0	20	0	105	82.2	119	0			

2 / 5

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Date: *01-Nov-05*

CLIENT: San Juan Refining
Work Order: 0510199
Project: TK #33 - Effluent-10/05

QC SUMMARY REPORT

. Sample Matrix Spike

Sample ID **0510199-02a ms** Batch ID: **R17139** Test Code: **SW8021** Units: **µg/L** Analysis Date **10/31/2005 11:06:18 A** Prep Date

Client ID: **Fresh Water Pond** Run ID: **PIDFID_051031A** SeqNo: **416884**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.63	0.5	20	0	103	88.5	114	0			
Toluene	19.6	0.5	20	0	98.0	87.2	114	0			
Ethylbenzene	19.64	0.5	20	0	98.2	88.6	113	0			
Xylenes, Total	58.82	0.5	60	0	98.0	83.3	114	0			
Surr: 4-Bromofluorobenzene	24.59	0	24	0	102	82.2	119	0			

Sample ID **0510199-02a msd** Batch ID: **R17139** Test Code: **SW8021** Units: **µg/L** Analysis Date **10/31/2005 11:37:09 A** Prep Date

Client ID: **Fresh Water Pond** Run ID: **PIDFID_051031A** SeqNo: **417021**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.3	0.5	20	0	107	88.5	114	20.63	3.20	27	
Toluene	19.99	0.5	20	0	100	87.2	114	19.6	2.01	19	
Ethylbenzene	19.92	0.5	20	0	99.6	88.6	113	19.64	1.39	10	
Xylenes, Total	60.42	0.5	60	0	101	83.3	114	58.82	2.69	13	
Surr: 4-Bromofluorobenzene	24.82	0	24	0	103	82.2	119	24.59	0.927	0	

3 / 5

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

/

Hall Environmental Analysis Laboratory

Date: *01-Nov-05*

CLIENT: San Juan Refining
Work Order: 0510199
Project: TK #33 - Effluent-10/05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R17139** Test Code: **SW8021** Units: **µg/L** Analysis Date **10/31/2005 12:07:58 P** Prep Date

Client ID: Run ID: **PIDFID_051031A** SeqNo: **416878**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.26	0.5	20	0	106	88.5	114	0			
Toluene	19.79	0.5	20	0	99.0	87.2	114	0			
Ethylbenzene	20.01	0.5	20	0	100	88.6	113	0			
Xylenes, Total	40.71	0.5	40	0	102	83.3	114	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 10/20/2005

Work Order Number 0510199 | Received by SSB

Checklist completed by Signature [signature] Date 10/20/05

Matrix | Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
ter - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 4° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Project Name: Tk #33 Effluent - 10/05
Address: #50 CR4990 Bloom field, NM 87413
Project #:
Project Manager:
Phone #: 505-632-4161
Sampler: Cindy Hurtado
Fax #: 505-632-3911
Sample Temperature: 4°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0510199	BTEX + ~~MTBE~~ + ~~TMB's~~ (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
10/19/05	115p-	H_2O	Tk #33	2-VOA	X			1	X																
10/19/05	120pm	1	Fresh Water Ponds	2-~~VOA~~	X			2	X																

Remarks:

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10/19/05	315pm	Cindy Hurtado	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 10/20/05 15:25

ANALYSIS REQUEST

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

November 15, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TK #33 - Effluent-11/05 Order No.: 0511102

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 11/10/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *15-Nov-05*

CLIENT: San Juan Refining
Project: TK #33 - Effluent-11/05

Lab Order: 0511102

Lab ID: 0511102-01
Client Sample ID: Tk #33 Effluent

Collection Date: 11/9/2005 2:10:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	0.61	0.50		µg/L	1	11/14/2005 9:39:08 PM
Toluene	ND	0.50		µg/L	1	11/14/2005 9:39:08 PM
Ethylbenzene	ND	0.50		µg/L	1	11/14/2005 9:39:08 PM
Xylenes, Total	ND	0.50		µg/L	1	11/14/2005 9:39:08 PM
Surr: 4-Bromofluorobenzene	103	82.2-119		%REC	1	11/14/2005 9:39:08 PM

Lab ID: 0511102-02
Client Sample ID: Fresh Waterpond

Collection Date: 11/9/2005 2:30:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	11/14/2005 10:10:12 PM
Toluene	ND	0.50		µg/L	1	11/14/2005 10:10:12 PM
Ethylbenzene	ND	0.50		µg/L	1	11/14/2005 10:10:12 PM
Xylenes, Total	ND	0.50		µg/L	1	11/14/2005 10:10:12 PM
Surr: 4-Bromofluorobenzene	98.9	82.2-119		%REC	1	11/14/2005 10:10:12 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *15-Nov-05*

CLIENT: San Juan Refining
Work Order: 0511102
Project: TK #33 - Effluent-11/05

QC SUMMARY REPORT
Method Blank

Sample ID **Reagent Blank 5m** Batch ID: **R17290** Test Code: **SW8021** Units: **µg/L** Analysis Date **11/14/2005 7:37:31 AM** Prep Date

Client ID: Run ID: **PIDFID_051114B** SeqNo: **422075**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	21.77	0	20	0	109	82.2	119	0			

2 / 4

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *15-Nov-05*

CLIENT: San Juan Refining
Work Order: 0511102
Project: TK #33 - Effluent-11/05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID **BTEX lcs 100ng** Batch ID: **R17290** Test Code: **SW8021** Units: **µg/L** Analysis Date **11/14/2005 8:05:39 PM** Prep Date

Client ID: Run ID: **PIDFID_051114B** SeqNo: **422077**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.91	0.5	20	0	105	88.5	114	0			
Toluene	18.83	0.5	20	0	94.2	87.2	114	0			
Ethylbenzene	19.49	0.5	20	0	97.5	88.6	113	0			
Xylenes, Total	57.38	0.5	60	0	95.6	83.3	114	0			

3 / 4

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

I

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR | Date and Time Received: 11/10/2005

Work Order Number 0511102 | Received by AT

Checklist completed by _____ Signature _____ Date 11/10/05

Matrix | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? **4°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 Rd 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Tk #33 Effluent - 11/05
Project #:
Project Manager:
Sampler: Cindy Hurtado
Sample Temperature: 4°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + ~~MTBE + TMB's (8021)~~	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)				Air Bubbles or Headspace (Y or N)
11/09/05	2:10pm	H_2O	Tk #33 Effluent	2-VOA	X			051102-1	X															
11/09/05	2:30pm	H_2O	Fresh Water Pond	2-VOA	X			-2	X															

Remarks:

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	
11/09/05	2:30pm	Cindy Hurtado		
				11/10/05 @ 1205
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

December 15, 2005

Cindy Hurtado
San Juan Refining
#50 CR 4990
Bloomfield, NM 87413
TEL: (505) 632-4161
FAX (505) 632-3911

RE: TK #33 Effluent - 12/05 Order No.: 0512076

Dear Cindy Hurtado:

Hall Environmental Analysis Laboratory received 2 samples on 12/6/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory

Date: *15-Dec-05*

CLIENT: San Juan Refining
Project: TK #33 Effluent - 12/05
Lab Order: 0512076

Lab ID: 0512076-01
Collection Date: 12/5/2005 11:00:00 AM
Client Sample ID: TK #33 Effluent
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	12/14/2005 10:55:19 PM
Toluene	ND	0.50		µg/L	1	12/14/2005 10:55:19 PM
Ethylbenzene	ND	0.50		µg/L	1	12/14/2005 10:55:19 PM
Xylenes, Total	ND	0.50		µg/L	1	12/14/2005 10:55:19 PM
Surr: 4-Bromofluorobenzene	104	82.2-119		%REC	1	12/14/2005 10:55:19 PM

Lab ID: 0512076-02
Collection Date: 12/5/2005 11:10:00 AM
Client Sample ID: Fresh Water Pond
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		µg/L	1	12/14/2005 11:25:37 PM
Toluene	ND	0.50		µg/L	1	12/14/2005 11:25:37 PM
Ethylbenzene	ND	0.50		µg/L	1	12/14/2005 11:25:37 PM
Xylenes, Total	ND	0.50		µg/L	1	12/14/2005 11:25:37 PM
Surr: 4-Bromofluorobenzene	99.7	82.2-119		%REC	1	12/14/2005 11:25:37 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: *15-Dec-05*

CLIENT: San Juan Refining
Work Order: 0512076
Project: TK #33 Effluent - 12/05

QC SUMMARY REPORT

Method Blank

Sample ID: **Reagent Blank 5m** Batch ID: **R17607** Test Code: **SW8021** Units: **µg/L** Analysis Date: **12/14/2005 9:37:13 AM** Prep Date:

Client ID: Run ID: **PIDFID_051214A** SeqNo: **432140**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	21.29	0	20	0	106	82.2	119	0			

2 / 4

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Date: *15-Dec-05*

CLIENT: San Juan Refining
Work Order: 0512076
Project: TK #33 Effluent - 12/05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: **BTEX lcs 100ng** Batch ID: **R17607** Test Code: **SW8021** Units: **µg/L** Analysis Date: **12/14/2005 12:11:05 P** Prep Date:

Client ID: Run ID: **PIDFID_051214A** SeqNo: **432141**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.14	0.5	20	0	95.7	88.5	114	0			
Toluene	19.4	0.5	20	0	97.0	87.2	114	0			
Ethylbenzene	20.12	0.5	20	0	101	88.6	113	0			
Xylenes, Total	40.25	0.5	40	0	101	83.3	114	0			

3 / 4

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

1

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR — Date and Time Received: 12/6/2005

Work Order Number 0512076 — Received by GLS

Checklist completed by _____ Signature — Date 12/6/05

Matrix — Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
ter - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
ater - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 2° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: San Juan Refining
Address: #50 Rd 4990 Bloomfield, NM 87413
Phone #: 505-632-4161
Fax #: 505-632-3911

Project Name: Tk #33 Effluent - 12/05
Project #:
Project Manager:
Sampler: Cindy Hurtado
Sample Temperature: °C

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 512076	BTEX + ~~MTBE + TMB's (8021)~~
12-05-05	11AM	H_2O	Tk #33 Effluent	2-VOA	X			1	X
1	1110Am	1	Fresh Water Pond	2-VOA	X			2	X

ANALYSIS REQUEST

BTEX + ~~MTBE + TMB's (8021)~~	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3^-, NO_2^-, PO_4^{3-}, SO_4^{2-})	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
X																
X																

Date: 12-05-05 Time: 105pm Relinquished By: (Signature) Cindy Hurtado
Received By: (Signature) D. Chapa @1300 12/6/05

Date: Time: Relinquished By: (Signature)
Received By: (Signature)

Remarks: