

3R-1009

“Good Well Investigation”

**Work Plan for Ground
Water Investigation**

**Date
May 2012**



WORK PLAN FOR GROUNDWATER INVESTIGATION

**GOOD WELL INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO**

**Prepared For:
ConocoPhillips Company**

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**MAY 2012
REF. NO. 074922-00 (1)**



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Please find enclosed: ☐ Draft ☐ Final
☐ Originals ☐ Other
☒ Prints
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QUANTITY	DESCRIPTION
1	Hard copy of the <i>Work Plan for Groundwater Investigation</i> for the Good Well Investigation in San Juan County, New Mexico

☐ As Requested ☒ For Review and Comment
☐ For Your Use ☐
☐

COMMENTS:

Conestoga-Rovers & Associates, on behalf of Terry S. Lauck of ConocoPhillips Company, is pleased to submit a copy of the *Work Plan for Groundwater Investigation* to the New Mexico Energy, Minerals, and Natural Resources Department.

Copy to: _____
Completed by: Christopher M. Feters
[Please Print]

Signed: _____

Filing: **Correspondence File**



RCVD MAY 3 '12

OIL CONS. DIV.

DIST. 3

WORK PLAN FOR GROUNDWATER INVESTIGATION

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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA), on behalf of ConocoPhillips Company, submits herein to the New Mexico Oil Conservation Division (NMOCD) a *Work Plan for Groundwater Investigation* (Plan) for the Good domestic water well (well number 2566). The area of investigation (Site) is located east of Highway 511 and north of Road 4049 in San Juan County, New Mexico. The Site location and topographic features are shown on **Figure 1**. The Good domestic water well (Good Well) and other domestic and natural gas production wells identified within a one-half mile radius are presented on **Figure 2**.

2.0 SITE DESCRIPTION AND BACKGROUND

In December 2011, groundwater and gas samples were collected from the Good Well and the domestic wells 46, 29, and 3 (See **Figure 2**). In addition, water and gas samples were collected from the Navajo Reservoir, and San Juan 32-8 #25, #204A, and #202; gas samples were collected from meter lines for San Juan 32-8 #25, #204A, and #202. Analytical results from groundwater sampling activities indicate the presence of methane (9,200 µg/L) and hydrogen sulfide (150 ppmv) in the Good Well, and methane (1,940 µg/L) with no hydrogen sulfide in the domestic well 29. A copy of the analytical laboratory results for the groundwater and gas samples collected in December 2011 are included as **Attachment 1**.

3.0 OBJECTIVE

The primary objective of this investigation is to determine the relationship/correlation of constituents identified in the Good Well (methane and hydrogen sulfide) and natural gas development in the area and evaluate if the methane contribution is ongoing or associated with a historical event. Investigation activities conducted to accomplish the objectives will be completed using a phased approach. This phase of the investigation will include:

- Compilation and evaluation of existing data including water well driller logs and natural gas well data obtained from the electronic databases
- Field reconnaissance to document surface conditions and local geologic setting
- Installation of one multiple-unit (i.e., multiple well screens) monitor well to an approximate depth of 750 feet below ground surface (ft bgs)
- Down-hole testing of the borehole including geophysical logging and camera survey
- Groundwater sampling of eight domestic water wells and the newly installed 750 ft bgs monitor well

The proposed tasks form the initial assessment of the overall investigation and are intended to provide data to support the subsequent phases of the investigation. Specifically, the proposed methods for completing the above mentioned tasks will provide comprehensive, detailed descriptions of the lithologic and hydrogeologic characteristics at the Site since limited data are currently available. Attainment of such data will aid in the strategic placement (installation) of additional wells for continuation of this investigation. CRA will submit addenda to this Plan as necessary.

4.0 INVESTIGATION RATIONALE

Natural Gas Production Wells In Relation to the Good Well

Two primary formations are utilized for the production of natural gas in the vicinity of the Site — the Fruitland and Blanco-Mesaverde. The Fruitland Formation, a coal bed methane (CBM) production zone, is comprised mainly of a dry, sweet natural gas that does not contain hydrogen sulfide. The Blanco-Mesaverde Gas Pool is composed of three formations — the Cliff House Sandstone, Menefee Formation, and Point Lookout Sandstone. The major portion of dry gas produced comes from the Cliff House and Point Lookout Sandstones.

Currently, five Fruitland Formation natural gas production wells (32-8 No.202, 32-8 No. 202A, 32-8 No.253, 32-8 No.253A, and 32-8 No. 204A) are in operation within the vicinity of the Site as shown on Figure 2. Recent well integrity and Bradenhead pressure tests indicate the five CBM wells are not compromised. Isotope analysis completed on gas samples collected from the Good Well (DM-2566) and two Fruitland wells (32-8 No.202 and 32-8 No. 204A) in December 2011 did not correlate the methane identified in the Good Well with methane produced in the Fruitland Formation. Analytical laboratory results for isotope analysis completed on the Good Well and on two of the CBM Fruitland wells are included in **Attachment 2**. Additionally, a review of literature indicates that the Fruitland wells produce sweet natural gas (i.e., no hydrogen sulfide). Therefore, the Fruitland natural gas wells are not suspected to be the potential source of methane or hydrogen sulfide associated with the Good Well.

One Blanco-Mesaverde Gas Pool production well is still active in production for natural gas (32-8 No. 25) within the vicinity of the Site, and a second well was plugged and abandoned in 1994 (32-8 No. 30). Isotope analysis completed on gas samples collected from the Good Well (DM-2566) and the Blanco-Mesaverde production well (32-8 No. 25) showed correlation between the methane identified in the Good Well to methane produced in the Blanco-Mesaverde Formation (See **Attachment 2**). Therefore, the plugged and abandoned natural gas well (32-8 No. 30) and the active production well completed within the Blanco-Mesaverde Formation remain in consideration as a potential source (either historic or ongoing) to allow upward migration of natural gas that could impact groundwater resources

in the area (i.e., Good Well). Natural gas produced from the Blanco-Mesaverde Formation is not sour by composition. Therefore, the presence of hydrogen sulfide observed within the Good Well may be attributed to an alternative source or secondary reaction in the Site vicinity.

Baseline Sampling of the Monitor Well and Residential Wells

Prior to installation of the proposed 750-foot monitor well, baseline sampling will be completed on the surrounding eight residential wells (including the Good Well) identified during a review of the OSE Water Rights Reporting System. Laboratory analyses obtained during this investigation will aid in the evaluation of water quality in the vicinity of the Site relative to local geology and identify areas which may require further investigation and data collection. A summary of specific water quality and gas parameters are shown in Table 1.

Proposed Monitor Well Location

The regional groundwater flow at the Site is south toward the San Juan River; local groundwater flow may also be in the same direction. Regional studies of joint systems in the San Juan Basin indicate a strong north-south joint set that may have been formed after the deposition of the Uinta-Animas Aquifer. With regional, and potentially local, southward groundwater flow and assuming mostly a north-south joint/fracture orientation, CRA proposes to install a 750-foot monitor well north of the Good Well (upgradient of groundwater flow from the Good Well) and south of the plugged and abandoned well (32-8 No. 30). Figure 3 shows the approximate location of the proposed monitor well; the exact location will be determined by ConocoPhillips based on land owner agreements.

Geophysical Logging and Down-hole Testing of Borehole

Coring of the initial borehole of the 750-foot monitoring well will be performed to allow for discrete soil/rock sample collection to develop an accurate lithologic description of rock/soil type. Each lithological description will include identification of fractures/joints, bedding surfaces, interbed sequences and specific depositional, stratigraphic, or rock features which could provide a vertical conduit or pathway for gas migration from the underlying gas reservoir formations to the upper ground water bearing zones. In addition, after the borehole has been reamed to full diameter via mud or air rotary drilling, down-hole geophysical logging will be completed on the mud-filled open-hole to provide additional lithological interpretation, verify groundwater bearing zone depths and thicknesses, and facilitate cross-well lithological correlation.

Multi-Unit Groundwater Monitor Well

The proposed 750-foot, multi-unit groundwater monitor well (i.e., multiple well screen intervals) will allow for acquisition of discrete vertical groundwater samples and collection of water quality parameters from individual water bearing zones. The materials and methods

for installing the monitor well will be described in Section 6.2, *Installation, Survey, and Sampling of Monitor Well*.

5.0 REPORTING AND REGULATORY PROCEEDINGS

CRA will file an Application for *Permit to Drill a Well with No Consumptive Use of Water* (form wr-07) to the New Mexico Office of the State Engineer (OSE) for installation of the proposed monitor well, if required. Following receipt of a permit, the proposed monitor well will be constructed in accordance with the *New Mexico Environment Department Monitoring Well Construction and Abandonment Guidelines*, and the *NMED SWB Ground Water Monitoring System Plan/Ground Water Monitoring Plan Requirements* (20.9.9 NEW MEXICO ADMINISTRATIVE CODE SOLID WASTE RULES). CRA will submit *Proof of Completion of Well* (form wr-11) and a *Well Record & Log* (form wr-20) to the New Mexico Office of the State Engineer upon installation of the monitor well in order to complete the well registration requirements.

CRA will prepare and submit a report on behalf of ConocoPhillips to the New Mexico Oil Conservation Division (NMOCD) documenting the findings of the domestic water well sampling, and the monitor well installation, sampling, and down-hole testing. The report will summarize field activities, water and gas laboratory results, and chain of custody records. CRA will submit proper documentation to the NMOCD if the scope of work presented in the Plan is modified, or if additional investigation work is required.

6.0 INVESTIGATION SCOPE OF WORK

Investigation work activities will generally consist of the following:

- Site reconnaissance activities prior to commencement of field work
- Mobilization of personnel, materials, and equipment
- Groundwater and gas sampling of eight existing residential wells
- Installation (i.e., drilling) of one groundwater monitoring well to a total depth of approximately 750 ft bgs, and groundwater sampling of the newly installed well

A detailed description of listed tasks follows.

6.1 BASELINE SAMPLING OF RESIDENTIAL WELLS

CRA will conduct a Site reconnaissance prior to field activities to identify appropriate access routes to the domestic well locations and proposed monitor well location and for identification of potential logistical issues that would impact sampling and/or drilling activities.

Initial baseline groundwater sampling activities will consist of collection of one water sample set from each of the eight residential wells, plus two Quality Assurance/Quality Control samples. Gas samples will also be collected concurrent with groundwater samples for each of the eight residential wells.

Groundwater will be collected by use of in-well pumps and will be collected from a point as close to the wellhead as possible prior to any water treatment systems. Wells will be purged of a minimum of three well volumes and/or to stabilization of field parameters including temperature, specific conductivity, pH, oxidation-reduction potential (ORP) and dissolved oxygen (DO). Field parameters will be monitored using a YSI 556 multi-parameter sonde and will be recorded on a well sampling field form. Groundwater samples will be placed in laboratory prepared containers, packed on ice, and shipped under chain-of-custody documentation to Pace Analytical Services, Inc. in Lenexa, Kansas, and analyzed for the parameters listed in Table 1.

Gas samples will be collected by first placing approximately twenty feet of flexible poly-vinyl chloride (PVC) tubing into the well casing. The top of the well casing will then be sealed off to prevent ambient air from entering the well casing. The exposed tubing at the top of the well casing will be clamped shut and allowed to set while the groundwater samples are collected. Once groundwater samples have been collected, gas samples from inside the well casing will be extracted using a laboratory supplied hand pump for Cali-5 Bond bag containers and by means of negative pressure vacuum typical of one liter summa canisters. Gas samples will be sent under chain of custody documentation to Air Tech and Isotech laboratories (sub labs of Pace Analytical) and analyzed for the parameters listed in Table 1.

6.2 INSTALLATION, SURVEY, AND SAMPLING OF MONITOR WELL

CRA proposes the installation of one monitor well with a total depth of approximately 750 ft bgs. The number of screen intervals to be installed will be contingent upon the number of water bearing zones identified during coring and geophysical logging activities.

Isolation of permeable zones will be maintained to the most reasonable extent possible through mud rotary drilling techniques. The protection of water bearing zones will be

maintained by over pumping of the formation material to remove any potential of cross contamination from permeable zones and completed through installation of packers.

Specific tasks associated with installation, design specifications, and sampling of the proposed monitor wells are detailed in the following paragraphs. The proposed location of the monitoring well is shown on **Figure 3**.

Site Reconnaissance

CRA will conduct a Site reconnaissance in order to identify potential gas migration pathways from the subsurface. Site reconnaissance activities will consist of the following:

- Desktop geologic and hydrogeologic study including a joint/fracture study, review of drillers logs for local water and gas wells, and determination of the local and regional groundwater flow to develop a conceptual aquifer model and construct a potentiometric map.
- Identification of appropriate access routes to/from the proposed monitor well location and identification of potential logistical issues that would impact field activities.
- Inspection of the area surrounding well 32-8 No. 30 for distressed or dead vegetation. Stressed vegetation could indicate the existence of methane and/or hydrogen sulfide at the surface via natural fractures in the underlying interbeds of sandstone and shale. A shallow gas survey to define the extent of gas impact would follow if distressed or dead vegetation is observed.

Coring and Drilling Activities

CRA proposes mud or air rotary drilling and wireline core retrieval technology implemented by a subcontractor (possessing a drilling license issued by the state of New Mexico) to install the proposed monitor well. In order to obtain an accurate lithologic profile, the coring method will be implemented at five to ten foot intervals from surface to total depth (TD). CRA will collect 2.5 inch diameter core samples for determination of soil/rock type, identification of bedding and fractures, and potential laboratory analysis; and a driller's log will be prepared. The borehole will be subsequently completed to a final diameter of eight-inches by standard air or mud rotary drilling. Formation materials from each of the permeable intervals encountered will be collected from the drilling returns to verify the appropriate well screen slot size and filter pack material. All down-hole equipment will be maintained to prevent well contamination.

CRA will retain a subcontractor to complete an open-hole geophysical survey for acquisition of geophysical data and for guidance on placement of screen intervals during well completion. Correlation of geophysical data with the retrieved core samples will facilitate

lithological interpretation of additional wells with a high level of confidence. CRA proposes the following suite of geophysical parameters:

- Gamma Ray – lithological characterization by measuring naturally occurring radiation
- Resistivity (Deep and Shallow) – evaluation of the interaction between lithology, permeability, chloride content, and hydrocarbons
- Spontaneous Potential – delineate permeable bed boundaries, estimate permeability, and evaluate formation water salinity
- Fluid Resistivity – changes in ionic properties / TDS concentrations in the borehole fluid and delineates changes in groundwater quality

Based on coring results, acoustic borehole imaging will be completed on the borehole to identify joints and fractures.

Well Completion

The proposed monitor well casing and wire-wrapped well screen will be six inches in diameter (inside) and both will be of carbon steel material. The location of screen intervals will be placed at water bearing zones as determined by the geophysical survey results and the driller's log. Well screen slot size for each screen interval will be determined by sieve analysis of the formation material collected during drilling and by the composition of core samples collected. A filter pack will be developed around the well screen intervals with the use of a tremie pipe, and the filter pack will be set two feet above the top of the well screen. A 3-foot bentonite seal will be placed above the well screens by the tremie method. The remaining annulus will be grouted with a cement-bentonite grout up to the location of succeeding well screen interval location. A well casing installation log identifying the well screen intervals will be prepared after completion of the monitor well.

The monitor well will be completed with an above grade casing and a locking steel well shroud. The top of the casing will be fitted with a watertight removable cap. The monitor well top of casing elevations will be surveyed to an accuracy of 0.01 feet relative to the North American Vertical Datum (NAVD) of 1988 or other appropriate benchmark. A 4-foot-square concrete well pad, sloped appropriately to direct rain or runoff away from the well, will be constructed around the well shroud. Bollards will be placed around the well pad for protection.

Well Development

Well development will be completed within each screened zone via the surge-block method followed by pumping/over pumping. The well will be pumped to remove approximately three well volumes or until the water becomes clear. The development water will be collected

and stored in barrels or a frac tank and disposed of appropriately to a ConocoPhillips approved facility.

Vertical Chemical and Video Profile

CRA will evaluate the vertical variation in water quality utilizing a multi-parameter water chemistry probe. CRA will obtain a continuous vertical profile of water chemistry by lowering a direct reading probe through the water column and recording the pH, temperature, electrical conductivity, turbidity, dissolved oxygen, oxygen reduction potential, and depth below water (measured as hydrostatic pressure). The depth-integrated data will be examined for the presence of geochemical conditions that could be indicative of impact from a deeper formation.

A down-hole video survey will be completed to observe potential evolution of methane gas from the formation into the borehole. If observed, the depths will assist in the determination of lithological zones that are likely impacted, and allow targeted investigation. CRA recommends the video survey after completion of the vertical chemical profile to avoid undue mixing of the water column from the movement of the camera, which could reduce the resolution of vertical chemical profile.

Installation of Inflatable Packers

CRA proposes a multi-screen groundwater sample system that consists of a series of permanent inflatable packers as the recommended sample system for the first phase of the Good Well investigation. The multi-level packer system will provide isolation of several water bearing zones in support of the proposed groundwater sample activities, the collection of relatively undisturbed discrete water samples, and effective shut-in of water bearing zones between sample events. The packer system is practical and cost effective for recurring sampling (e.g., monthly) events. Alternative systems such as drilling of multiple monitor wells to various depths (i.e., nested wells) or placement of temporary inflatable packers, which would require the assistance of a drill rig during each sampling event, would prove impractical and cost prohibitive.

Baseline Sampling of Monitor Well

Following completion and development of the proposed monitor well as described in the previous sections, the multi-level packer system will be installed with the assistance of the drill rig. The proposed system will consist of dual packer segments (where water bearing zones will be isolated) and casing segments that will be utilized as spacers between water bearing zones. The system components (dual packer segments and casing spacers) will be laid out adjacent to the cased well in accordance with the casing installation log previously completed during completion of the monitor well. The dual packer installation intervals will correspond to well screen intervals. The packer casing string will be assembled by lowering casing-packer segments down the borehole with a wireline (cabling) and joining each

successive segment (packer-casing or spacer segment) until reaching ground surface. Upon complete installation of the packer system, each packer will be inflated by injection of deionized water with a pump and a packer inflation tool. A casing log, indicating the location/interval of packers and an as-built drawing for the system will be prepared and submitted to the NMOCD upon completion. Figure 4 shows a general diagram of the proposed packer system.

Groundwater and gas sampling of each monitor zone (i.e., water bearing zone) will be completed after pressure tests on the system verify the installed packers will maintain well integrity. A pump will be lowered to the test zone of each dual packer to collect groundwater samples from the designated monitor zones. A multi-parameter water probe will be used to measure geochemical parameters from groundwater collected. As shown on Figure 4, casing located between the dual-packer segments will consist of several openings where formation water enters. Groundwater samples will be placed in laboratory prepared containers, packed on ice, and shipped under chain-of-custody documentation to Pace Analytical Services, Inc., in Lenexa, Kansas, and analyzed for the groundwater parameters listed in Table 1.

Gas samples will be collected by lowering PVC tubing to the designated monitor zone. The exposed tubing at the top of the well casing will be clamped shut and allowed to set for a period of time. Gas samples will be subsequently extracted using a laboratory supplied hand pump for Cali-5 Bond bag containers and by means of negative pressure vacuum typical of one liter summa canisters. Gas samples will be sent under chain of custody documentation to Air Tech and Isotech laboratories (subcontractor laboratories of Pace Analytical) and analyzed for the gas parameters listed in Table 2.

7.0 INVESTIGATION-DERIVED MATERIAL (IDM) MANAGEMENT

The investigation-derived material (IDM) generated during the drilling operations and groundwater sampling activities may include soil cuttings, purge water, personal protective equipment (PPE), decontamination fluids, and disposable sampling equipment. During monitor well installation and ground water sample collection, IDM will be temporarily stored on-Site; drilling IDM will be stored in roll-off boxes and groundwater sampling IDM will be properly identified and labeled. A waste characterization sample will be collected for each IDM for laboratory analysis, then the IDM will be profiled and transported to an appropriate off-Site facility for final disposition under appropriate waste handling documentation.

8.0 HEALTH AND SAFETY

The following guidelines/tools will be implemented to ensure the health and safety of all team members during the work activities presented in the Plan.

Health and Safety Plan (HASP)

All tasks described in this work plan will be firmly executed according to the guidelines and safety expectations outlined in the Site specific Health and Safe Plan (HASP). The HASP will be reviewed by a CRA Regional Health and Safety Manager (RHSM) and will contain project essentials such as emergency contacts and procedures, Job Hazard Analysis (JHAs), the Stakeholder Engagement Plan, applicable Material Safety Data Sheets, and Risk Management and Remediation (RM&R) safety guidance documents (e.g., RM&R HSE Procedures).

Tailgate Safety Meetings

The on-Site project team will engage in a tailgate safety meeting at the beginning of each work day and prior to any new task. The field team will discuss the activities to be implemented that day, identify the safety hazards, remind employees of important safety procedures, and comment on safety issues identified the previous work day. As conditions change throughout the day, additional tailgate safety meetings will be necessary in order to identify new potential hazards. All tailgate safety meetings will be documented, and those documents will be kept with on Site documents for future review as needed.

Job Hazard Analysis

A task specific Job Hazard Analysis (JHAs) will be reviewed, in conjunction with an RM&R GO Card, prior to engaging in a specific task and as conditions change. A JHA Review form will be signed by all conducting the task, and the forms will be kept on Site for future reference as needed. Additional hazards or necessary steps identified will be hand-written (or "dirtied") on the existing JHA. If a JHA has not been prepared for a task, the field team will use a blank JHA to develop one prior to commencement of a task. At the conclusion of each work day, JHAs will be modified and recorded for future use with noted observations and changes. The following are examples of preliminary (seed) JHAs included in the HASP:

- Driving and Off-Road Driving
- Site Visits
- Mobilization-Demobilization
- Coring
- Mud Rotary Drilling
- Fluid Level Monitoring
- Groundwater Sampling

- Monitoring Well Sampling
- Well Maintenance and Inspection

Stakeholders and Visitors

The CRA Site supervisor will be notified of any visitors or stakeholders entering the Site. Visitors and stakeholders will be briefed concerning the Site-specific HASP, emergency procedures, potential Site hazards, and current Site conditions. All personnel and visitors will be required to sign-in and out on the Visitor Sign-In Sheet.

Safe Task Evaluation Process

A Safe Task Evaluation Processes (STEP) is a tool used to observe active work in order to identify potential questionable or unsafe behaviors performed by the observee. STEP observations will be completed frequently, as appropriate for each on Site task. Lessons learned during the completion of each STEP will be shared with the team at the next safety meeting. The root cause of each questionable item will be documented on the Daily Reports to recognize possible trends.

Unsafe Acts, Unsafe Conditions, and Stop Work Authorities

The safety of the work team is of highest importance. To this end, any unsafe acts (UA) or unsafe conditions (UC) will be reported promptly to the Site supervisor. Accordingly, Stop Work Authority (SWA) will be implemented at the sight of a UA or UC. The aforementioned (UAs, UCs, and SWA) will be reported to the CRA Project Manager using the appropriate ConocoPhillips reporting procedures.

Air Monitoring and Sampling

Air monitoring will be conducted during all groundwater and gas sampling activities. Equipment to be used for air monitoring during site activities will consist of a 4-gas meter and personal hydrogen sulfide monitors, which will be calibrated on a daily basis. The appropriate actions to be taken at designated action levels are listed in Table 2. All work will be initiated in Level D of personal protective equipment (PPE). An upgrade to Level C will be required if any symptoms occur, if requested by an individual performing the task, or if any irritation to eye, nose, throat, or skin occurs.

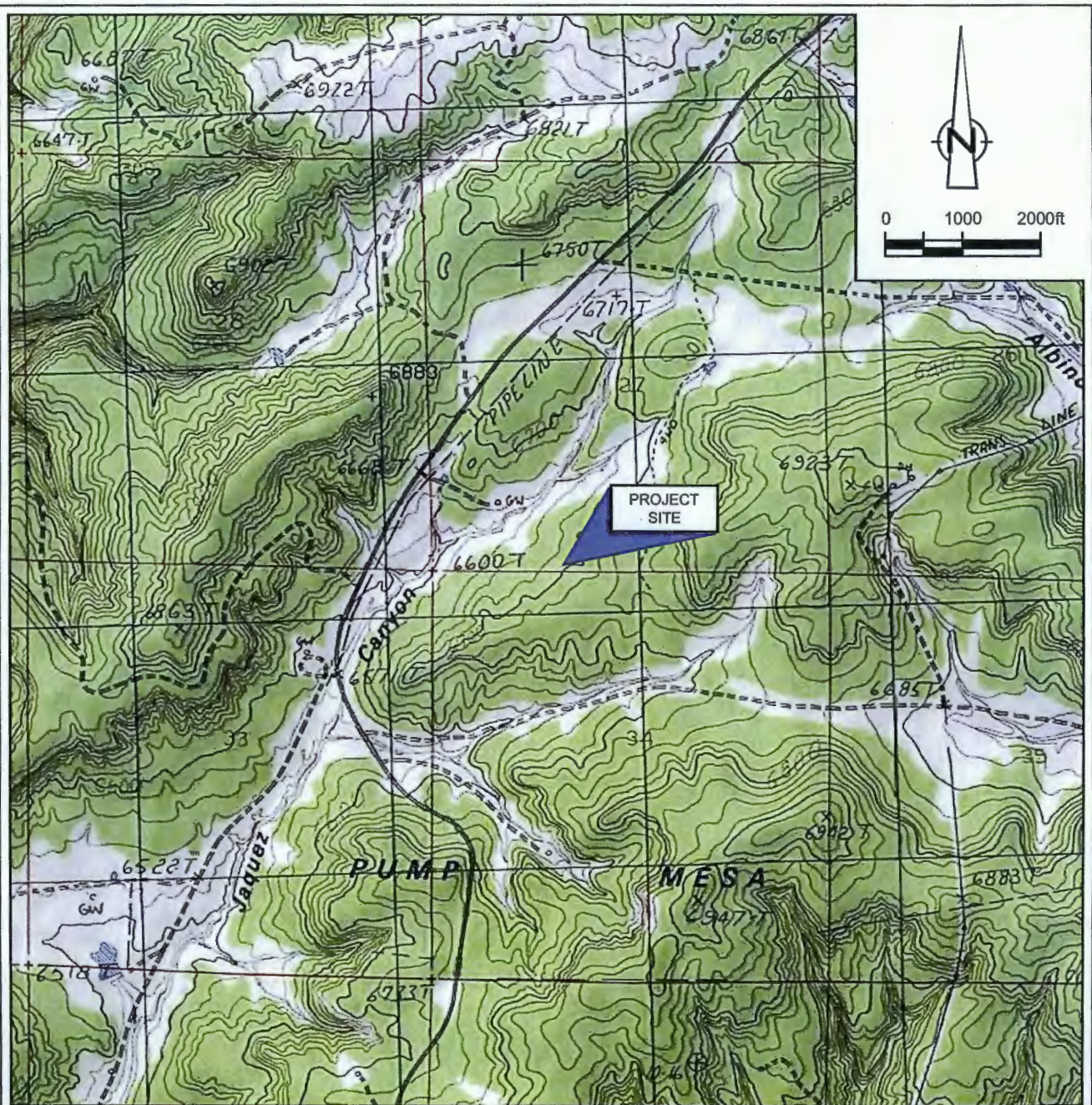
Journey Management Plan

The Journey Management Plan (JMP) will instruct project personnel on task-specific routes to be utilized in association with the Site. A copy of the JMP is included as **Attachment 3**.

9.0 SCHEDULE

The additional soil and groundwater delineation and investigation fieldwork is anticipated to commence two weeks following notification to proceed (NTP) from the New Mexico Oil Conservation Division. A proposed schedule is included in **Attachment 4**.

FIGURES



SOURCE: USGS 7.5 MINUTE QUAD
"ANASTACIO SPRING, NEW MEXICO"

LAT/LONG: 36.948° NORTH, 107.665° WEST
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO WEST



figure 1
SITE LOCATION MAP
GOOD WELL INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



LEGEND	
	Natural Gas Production Well
	Domestic Well



figure 2
 SITE MAP
 GOOD WELL INVESTIGATION
 SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



LEGEND	
	Proposed Monitoring Well
	Natural Gas Production Well
	Domestic Well



figure 3
PROPOSED MONITORING WELL LOCATION
GOOD WELL INVESTIGATION
SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company

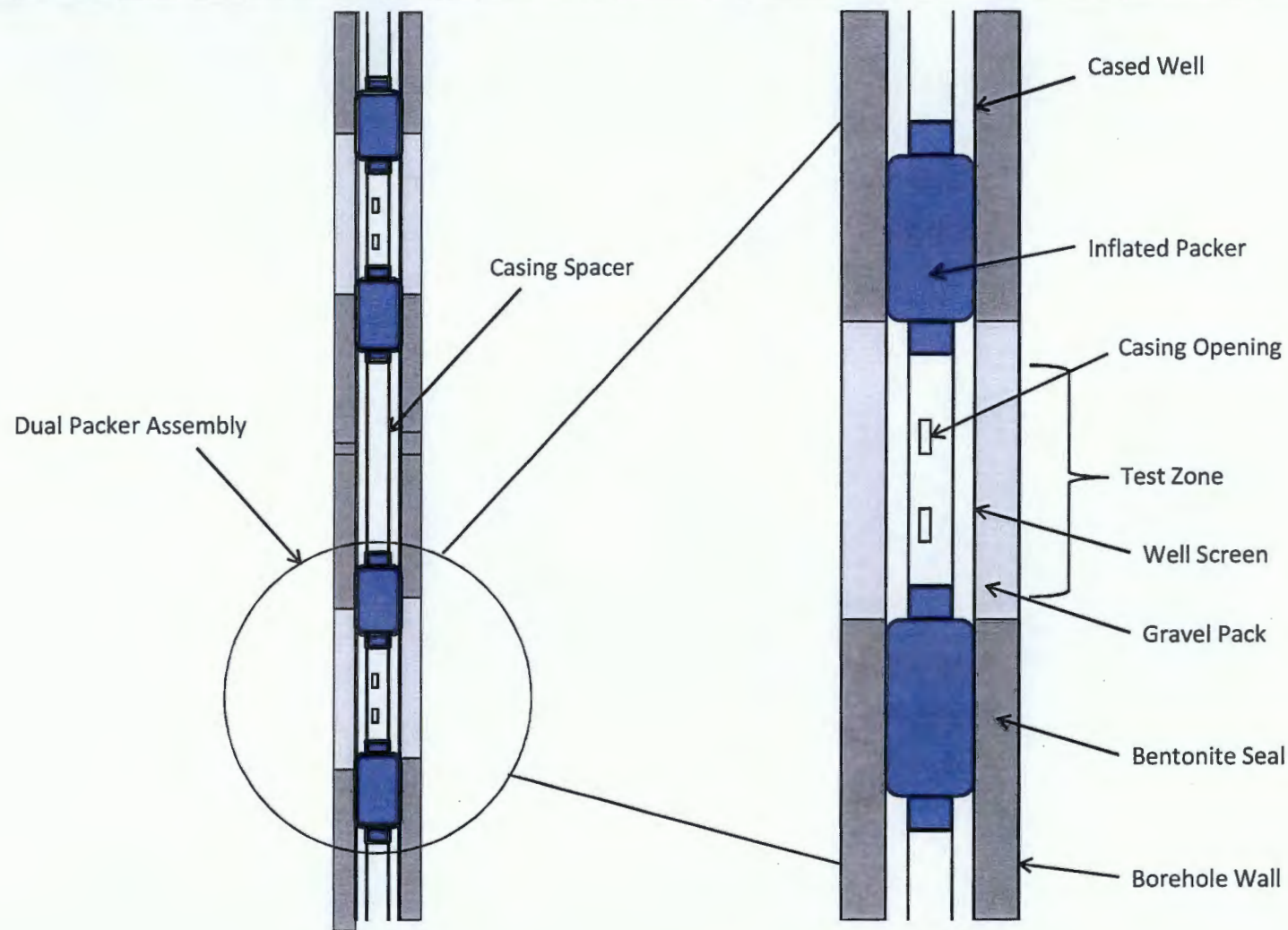


Figure 4

PROPOSED MONITOR WELL PACKER SYSTEM DIAGRAM
 GOOD WELL INVESTIGATION
 SAN JUAN COUNTY, NEW MEXICO
ConocoPhillips Company



TABLES

TABLE 1

**PROPOSED GROUNDWATER AND GAS ANALYTICAL PARAMETERS
GOOD WELL INVESTIGATION
CONOCOPHILLIPS COMPANY
SAN JUAN COUNTY, NEW MEXICO**

Phase	Parameter	Unit
Groundwater	VOCs	µg/L
	Magnesium	µg/L
	Calcium	µg/L
	Boron	µg/L
	Potassium	µg/L
	Sodium	mg/L
	Total Dissolved Solids	mg/L
	Chloride	mg/L
	Bromide	mg/L
	Sulfate	mg/L
	Sulfide	mg/L
	TPH (GRO & DRO)	mg/L
	Bicarbonate	mg/L
	Dissolved Methane	µg/L
	Carbon Dioxide, Sulfur, Oxygen, Carbon, and Hydrogen Isotopes	Isotope Percent
Gas	Hydrocarbons/Fixed Gases	ppmv
	VOCs	ppmv
	Specific Gravity	Dimensionless
	British Thermal Unit	BTU/m ³
	Acetylene	ppmv
	Hydrogen Sulfide	ppmv
	Carbon Dioxide, Sulfur, Oxygen, Carbon, and Hydrogen Isotopes	Isotope Percent

TABLE 2

**ON-SITE AIR MONITORING PROGRAM ACTION LEVELS
GOOD WELL INVESTIGATION
CONOCOPHILLIPS COMPANY
SAN JUAN COUNTY, NEW MEXICO**

<i>Monitoring Device</i>	<i>Action Level</i>	<i>Action</i>
Combustible Gas Indicator	>10 Percent LEL	Cease operations and move to a safe place. Notify SHO. Do not continue working until conditions are constantly below 10 percent LEL
Oxygen Meter	<19.5 Percent or >23.5 Percent	Cease operations and move to a safe place. Notify SHO. Do not continue working until oxygen levels are between 19.5 and 23.5 percent Note: When oxygen levels are outside this range, percent LEL readings are not reliable
Photoionization Detector (PID)	Benzene present in the Breathing Zone:	Determine via Colorimetric Sampling
10.6 or greater eV lamp	<1.0 ppm or Background	Full-Face Respirator Available
Detector Tubes	≥1.0 ppm and ≤5 ppm	Full-face air purifying respirator Level C PPE MSA GME P100 Cartridge
	>5 ppm and <500 ppm	Supplied air respirator Level B PPE. Implement additional engineering controls
	≥500 ppm	Shut down activities. Notify SHO. Implement additional engineering controls
	Benzene not present in the Breathing Zone:	Determine via Colorimetric Sampling
	<10 ppm or Background	Full-Face Respirator Available
	≥10 ppm and <50 ppm	Wear Full-Face Respirator - Level C PPE
	≥50 ppm and <1,000 ppm	Wear Supplied Air Respirator - Level B PPE, Implement Additional Engineering Controls
	≥1,000 ppm	Shut down activities. Notify SHO. Implement additional engineering controls
	Vinyl Chloride present in the Breathing Zone:	Determine via Colorimetric Sampling
	<1 ppm or Background	No Action Required - Continue Monitoring
	≥1 ppm	Level B - Continue Monitoring
Dust/Particulate - (Impacted Soils/Sludges/Sediments)	<2.0 mg/m ³ or Background	Full-Face Respirator Available
	≥2.0 mg/m ³ and <50 mg/m ³	Wear Full-Face Respirator - Level C PPE
	>50 mg/m ³	Wear Supplied Air Respirator - Level B PPE, Implement Additional Engineering Controls
Hydrogen Sulfide	>5 ppm	Shut down activities. Notify SHO. Implement additional engineering controls
Carbon Monoxide	>35 ppm	Shut down activities. Notify SHO. Implement additional engineering controls

If CRA is unable to identify/quantify the contaminants, supplied air will be required when the PID reading is greater than background, as the contaminant will be unknown and NIOSH, OSHA, and the manufacturer's use requirements for Level C (air purifying respirators) will not be met. If PID readings subside, workers can downgrade as necessary. CRA will upgrade to supplied air and attempt to obtain additional information for possible chemicals present in CRA's work area. The Owner will need to provide/obtain additional information as to the identity of the contaminant(s) in order to permit the use of Modified D and/or Level C.

Notes:

SHO - Safety and Health Officer

LEL - Lower Explosive Limit

PPE - Personnel Protective Equipment

ppm - parts per million

ATTACHMENT 1

ANALYTICAL LABORATORY RESULTS
FOR GROUNDWATER AND GAS SAMPLES
COLLECTED IN DECEMBER 2011

December 27, 2011

Pace Analytical
ATTN: Anna Custer
9608 Loiret Blvd.
Lenexa, KS 66219



ADE-1461
EPA Methods TO-3,
TO14A, TO15 SIM & Scan,
ASTM D1946



FL Cert E8784/LA Cert 04140
EPA Methods TO3, TO14A, TO15, 25C/3C,
RSK-175
TX Cert T104704450-09-TX
EPA Methods TO14A, TO15

LABORATORY TEST RESULTS

Project Reference: 60111459; San Juan 32-8 No 202 (074922)
Lab Number: C120502-01/07

Enclosed are results for sample(s) received 12/05/11 by Air Technology Laboratories. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Sample C120502-02 (A-074922-120211-CM-D3; 60111459016) was canceled due to insufficient sample.
- Sample analyses were performed within method performance criteria and meet all requirements of the NELAC Standards.
- All results are reported without qualifications.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.

Chain of Custody

C120502-01/0



Workorder: 60111459

Workorder Name: SAN JUAN 32-8 NO 202 (074922)

Results Requested 12/15/2011

Report / Invoice To		Subcontract To		Requested Analysis																		
Anna Custer Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Email: anna.custer@pacelabs.com		P.O. SUB-6101																				
					Preserved Containers					Hydrogen Sulfide EPA 15/16 Standard	Acetylene ASTM D1946											LAB USE ONLY
Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Tedlar	Summa																
1	A-074922-120111-CM-29	12/1/2011 11:20	60111459015	Air	1						X	X										
2	A-074922-120211-CM-D3	12/2/2011 08:35	60111459016	Air	1	1					X	X										
3	A-074922-120211-CM-2566	12/2/2011 11:00	60111459017	Air	1						X	X										
4	A-074922-120211-CM-202	12/2/2011 11:35	60111459018	Air	1						X	X										
5	A-074922-120211-CM-204A	12/2/2011 12:05	60111459019	Air	1						X	X										
6	A-074922-120211-CM-25	12/2/2011 10:10	60111459020	Air	1						X	X										
7	A-074922-120211-CM-DUP	12/2/2011 10:55	60111459021	Air	1						X	X										
												Comments										
Transfers	Released By	Date/Time	Received By	Date/Time																		
1					Sample 60111459016 Tedlar bag rcv'd in sub lab deflated. Will send remainder of sample in Summa Canister when Minn air lab finishes TO-15 analysis.																	
2	FEDEX	12/15/11 04:13	<i>[Signature]</i> (VIA email)	12/15/11 04:13																		
3																						
4																						
5																						

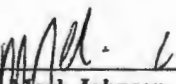
Client: Pace Analytical
Attn: Anna Custer
Project Name: San Juan 32-8 NO 202 (074922)
Project No.: 60111459
Date Received: 12/05/11
Matrix: Air
Reporting Units: ppmv

Page 2 of 7
 C120502

EPA 15/16								
Lab No.:	C120502-01		C120502-03		C120502-04		C120502-05	
Client Sample I.D.:	A-074922-120111-CM-29 / 60111459015		A-074922-120111-CM-2566 / 60111459017		A-074922-120111-CM-202 / 60111459018		A-074922-120111-CM-204A / 60111459019	
Date Sampled:	12/01/11		12/02/11		12/02/11		12/02/11	
Date Analyzed:	12/05/11		12/05/11		12/05/11		12/05/11	
QC Batch No.:	111205GC3A1		111205GC3A1		111205GC3A1		111205GC3A1	
Analyst Initials:	ZK		ZK		ZK		ZK	
Dilution Factor:	1.0		100		1.0		1.0	
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Hydrogen Sulfide	ND	0.20	150	20	ND	0.20	ND	0.20

ND = Not Detected (below RL)
 RL = Reporting Limit

Reviewed/Approved By: _____


 Mark Johnson
 Operations Manager

Date _____

12/21/11

The cover letter is an integral part of this analytical report



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

page 1 of 1

Client: Pace Analytical
Attn: Anna Custer
Project Name: San Juan 32-8 NO 202 (074922)
Project No.: 60111459
Date Received: 12/05/11
Matrix: Air
Reporting Units: ppmv

Page 3 of 7
 C120502

EPA 15/16							
Lab No.:	C120502-06		C120502-07				
Client Sample LD.:	A-074922-120111-CM-25 / 60111459020		A-074922-120111-CM-DUP / 60111459021				
Date Sampled:	12/02/11		12/02/11				
Date Analyzed:	12/05/11		12/05/11				
QC Batch No.:	111205GC3A1		111205GC3A1				
Analyst Initials:	ZK		ZK				
Dilution Factor:	1.0		100				
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv			
Hydrogen Sulfide	ND	0.20	160	20			

ND = Not Detected (below RL)
 RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
 Mark Johnson
 Operations Manager

Date 12/27/11

The cover letter is an integral part of this analytical report

QC Batch No.: 111205GC3A1
Matrix: Air
Units: ppmv

Page 4 of 7
C120502

QC for Sulfur Compounds by EPA 15/16

Lab No.:	Method Blank		LCS		LCSD			
Date Analyzed:	12/05/11		12/05/11		12/05/11			
Analyst Initials:	ZK		ZK		ZK			
Datafile:	05dec027		05dec049		05dec050			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	Results	RL	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Hydrogen Sulfide	ND	0.20	105	70-130%	106	70-130%	1.5	<30

ND = Not Detected (Below RL)

RL = Reporting Limit

Reviewed/Approved By: _____

Mark J. Johnson
Operations Manager

Date: 12/27/11

The cover letter is an integral part of this analytical report.



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Client: Pace Analytical
Attn: Anna Custer
Project Name: San Juan 32-8 NO 202 (074922)
Project No.: 60111459
Date Received: 12/05/11
Matrix: Water
Reporting Units: ppmv

ASTM D1946								
Lab No.:	C120502-01		C120502-03		C120502-04		C120502-05	
Client Sample I.D.:	A-074922-120111-CM-29 / 60111459015		A-074922-120111-CM-2566 /		A-074922-120111-CM-202 / 60111459018		A-074922-120111-CM-204A /	
Date Sampled:	12/01/11		12/02/11		12/02/11		12/02/11	
Date Analyzed:	12/05/11		12/05/11		12/05/11		12/05/11	
QC Batch No.:	111205GC8A1		111205GC8A1		111205GC8A1		111205GC8A1	
Analyst Initials:	ZK		ZK		ZK		ZK	
Dilution Factor:	1.0		1.0		1.0		1.0	
ANALYTE	Result	RL	Result	RL	Result	RL	Result	RL
	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv	ppmv
Acetylene	ND	10	ND	10	ND	10	ND	10

ND = Not Detected (below RL)
RL = Reporting Limit

Reviewed/Approved By: Mark Johnson
Mark Johnson
Operations Manager

Date 12/27/11

The cover letter is an integral part of this analytical report



Client: Pace Analytical
Attn: Anna Custer
Project Name: San Juan 32-8 NO 202 (074922)
Project No.: 60111459
Date Received: 12/05/11
Matrix: Water
Reporting Units: ppmv

Page 6 of 7
C120502

RSK175

Lab No.:	C120502-06	C120502-07		
	A-074922-	A-074922-		
Client Sample I.D.:	120111-CM-25 / 60111459020	120111-CM- DUP /		
Date Sampled:	12/02/11	12/02/11		
Date Analyzed:	12/05/11	12/05/11		
QC Batch No.:	111205GC8A1	111205GC8A1		
Analyst Initials:	ZK	ZK		
Dilution Factor:	1.0	1.0		
ANALYTE	Result ppmv	RL ppmv	Result ppmv	RL ppmv
Acetylene	ND	10	ND	10

ND = Not Detected (below RL)

RL = Reporting Limit

Reviewed/Approved By: _____


Mark Johnson
Operations Manager

Date _____

12/27/11

The cover letter is an integral part of this analytical report



QC Batch No.: 111205GC8A1
Matrix: Air

Page 7 of 7
C120502

QC for ASTM D1946

Lab No.:	Method Blank		LCS		LCSD			
Date Analyzed:	12/05/11		12/05/11		12/05/11			
Analyst Initials:	ZK		ZK		ZK			
Datafile:	05dec008		05dec005		05dec006			
Dilution Factor:	1.0		1.0		1.0			
ANALYTE	RL (ppmv)	Results (ppmv)	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Acetylene	10	ND	100	70-130%	99	70-130%	0.9	<30

PQL = Practical Quantitation Limit

ND = Not Detected (Below RL).

RL = PQL X Dilution Factor

Reviewed/Approved By: _____

Mark A. Johnson
Operations Manager

Date: 12/27/11

The cover letter is an integral part of this analytical report.



AirTECHNOLOGY Laboratories, Inc.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832



Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

December 22, 2011

Christine Matthews
CRA
6121 Indian School Rd NE
Suite 200
Albuquerque, NM 87110

RE: Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory between December 03, 2011 and December 05, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Anna Custer

anna.custer@pacelabs.com
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa
Angela Bown, COP Conestoga-Rovers & Associa



REPORT OF LABORATORY ANALYSIS

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Page 1 of 41



Pace Analytical Services, Inc.

9608 Loiret Blvd.

Lenexa, KS 66219

(913)599-5665

CERTIFICATIONS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01

Alaska Certification #: UST-078

Alaska Certification #MN00064

Arizona Certification #: AZ-0014

Arkansas Certification #: 88-0680

California Certification #: 01155CA

EPA Region 8 Certification #: Pace

Florida/NELAP Certification #: E87605

Georgia Certification #: 959

Idaho Certification #: MN00064

Illinois Certification #: 200011

Iowa Certification #: 368

Kansas Certification #: E-10167

Louisiana Certification #: 03086

Louisiana Certification #: LA080009

Maine Certification #: 2007029

Maryland Certification #: 322

Michigan DEQ Certification #: 9909

Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace

Montana Certification #: MT CERT0092

Nevada Certification #: MN_00064

Nebraska Certification #: Pace

New Jersey Certification #: MN-002

New Mexico Certification #: Pace

New York Certification #: 11647

North Carolina Certification #: 530

North Dakota Certification #: R-036

North Dakota Certification #: R-036A

Ohio VAP Certification #: CL101

Oklahoma Certification #: D9921

Oklahoma Certification #: 9507

Oregon Certification #: MN200001

Pennsylvania Certification #: 68-00563

Puerto Rico Certification

Tennessee Certification #: 02818

Texas Certification #: T104704192

Washington Certification #: C754

Wisconsin Certification #: 999407970

REPORT OF LABORATORY ANALYSIS

Page 2 of 41

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SAMPLE SUMMARY

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60111459001	DW-074922-120111-CM-46	Water	12/01/11 09:45	12/03/11 08:45
60111459002	DW-074922-120111-CM-29	Water	12/01/11 11:50	12/03/11 08:45
60111459003	DW-074922-120111-CM-D3	Water	12/01/11 12:55	12/03/11 08:45
60111459004	PW-074922-120111-CM-202	Water	12/01/11 15:40	12/03/11 08:45
60111459005	SW-074922-120211-CM-NAV	Water	12/02/11 09:00	12/03/11 08:45
60111459006	PW-074922-120211-CM-204A	Water	12/02/11 12:15	12/03/11 08:45
60111459007	PW-074922-120211-CM-25	Water	12/02/11 10:30	12/03/11 08:45
60111459008	A-074922-120211-CM-29	Air	12/01/11 11:20	12/03/11 08:45
60111459009	A-074922-120211-CM-D3	Air	12/02/11 08:35	12/03/11 08:45
60111459010	A-074922-120211-CM-202	Air	12/02/11 11:35	12/03/11 08:45
60111459011	A-074922-120211-CM-2566	Air	12/02/11 11:00	12/03/11 08:45
60111459012	A-074922-120211-CM-204A	Air	12/02/11 12:05	12/03/11 08:45
60111459013	A-074922-120211-CM-25	Air	12/02/11 10:10	12/03/11 08:45
60111459014	A-074922-120211-CM-DUP	Air	12/02/11 10:55	12/03/11 08:45
60111459015	A-074922-120111-CM-29	Air	12/01/11 11:20	12/05/11 09:13
60111459016	A-074922-120211-CM-D3	Air	12/02/11 08:35	12/05/11 09:13
60111459017	A-074922-120211-CM-2566	Air	12/02/11 11:00	12/05/11 09:13
60111459018	A-074922-120211-CM-202	Air	12/02/11 11:35	12/05/11 09:13
60111459019	A-074922-120211-CM-204A	Air	12/02/11 12:05	12/05/11 09:13
60111459020	A-074922-120211-CM-25	Air	12/02/11 10:10	12/05/11 09:13
60111459021	A-074922-120211-CM-DUP	Air	12/02/11 10:55	12/05/11 09:13

REPORT OF LABORATORY ANALYSIS

Page 3 of 41

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Pace Analytical Services, Inc.

9608 Loiret Blvd.

Lenexa, KS 66219

(913)599-5665

SAMPLE ANALYTE COUNT

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60111459001	DW-074922-120111-CM-46	RSK 175	SK4	1	PASI-M
60111459002	DW-074922-120111-CM-29	RSK 175	SK4	1	PASI-M
60111459003	DW-074922-120111-CM-D3	RSK 175	SK4	1	PASI-M
60111459004	PW-074922-120111-CM-202	RSK 175	SK4	1	PASI-M
60111459005	SW-074922-120211-CM-NAV	RSK 175	SK4	1	PASI-M
60111459006	PW-074922-120211-CM-204A	RSK 175	SK4	1	PASI-M
60111459007	PW-074922-120211-CM-25	RSK 175	SK4	1	PASI-M
60111459008	A-074922-120211-CM-29	TO-15	DR1	62	PASI-M
60111459009	A-074922-120211-CM-D3	TO-15	DR1	62	PASI-M
60111459010	A-074922-120211-CM-202	TO-15	DR1	62	PASI-M
60111459011	A-074922-120211-CM-2566	TO-15	DR1	62	PASI-M
60111459012	A-074922-120211-CM-204A	TO-15	DR1	62	PASI-M
60111459013	A-074922-120211-CM-25	TO-15	DR1	62	PASI-M
60111459014	A-074922-120211-CM-DUP	TO-15	DR1	62	PASI-M

REPORT OF LABORATORY ANALYSIS

Page 4 of 41

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Method: RSK 175

Description: RSK 175 AIR Headspace

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: December 22, 2011

General Information:

7 samples were analyzed for RSK 175. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: AIR/13778

1e: The sample was not collected in the appropriate container for headspace analysis.

- DW-074922-120111-CM-29 (Lab ID: 60111459002)
 - Methane
- DW-074922-120111-CM-46 (Lab ID: 60111459001)
 - Methane
- DW-074922-120111-CM-D3 (Lab ID: 60111459003)
 - Methane
- PW-074922-120111-CM-202 (Lab ID: 60111459004)
 - Methane

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Method: RSK 175

Description: RSK 175 AIR Headspace

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: December 22, 2011

Analyte Comments:

QC Batch: AIR/13789

1e: The sample was not collected in the appropriate container for headspace analysis.

- PW-074922-120211-CM-204A (Lab ID: 60111459006)

- Methane

- PW-074922-120211-CM-25 (Lab ID: 60111459007)

- Methane

- SW-074922-120211-CM-NAV (Lab ID: 60111459005)

- Methane

D2: Samples evaluated to 1/2 the reporting limit.

- SW-074922-120211-CM-NAV (Lab ID: 60111459005)

- Methane

REPORT OF LABORATORY ANALYSIS

Page 6 of 41

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Method: TO-15

Description: TO15 MSV AIR

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: December 22, 2011

General Information:

7 samples were analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

QC Batch: AIR/13823

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- LCS (Lab ID: 1114119)
 - Ethanol
 - Tetrahydrofuran

QC Batch: AIR/13833

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- A-074922-120211-CM-D3 (Lab ID: 60111459009)
 - Ethanol
 - Tetrahydrofuran
- DUP (Lab ID: 1115406)
 - Ethanol
- LCS (Lab ID: 1114983)
 - Ethanol
 - Tetrahydrofuran

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

QC Batch: AIR/13833

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- LCS (Lab ID: 1114983)
 - 1,2,4-Trichlorobenzene
 - 1,2-Dichlorobenzene
 - Hexachloro-1,3-butadiene
 - Naphthalene

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Method: TO-15
Description: TO15 MSV AIR
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: December 22, 2011

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: AIR/13833

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.

- LCS (Lab ID: 1114983)
- Naphthalene

L3: Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- LCS (Lab ID: 1114983)
- 1,2,4-Trichlorobenzene
- 1,2-Dichlorobenzene
- Hexachloro-1,3-butadiene

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Sample Comments:

A3: The sample was analyzed by serial dilution.

- A-074922-120211-CM-2566 (Lab ID: 60111459011)
- A-074922-120211-CM-25 (Lab ID: 60111459013)
- A-074922-120211-CM-DUP (Lab ID: 60111459014)

Analyte Comments:

QC Batch: AIR/13823

A3: The sample was analyzed by serial dilution.

- A-074922-120211-CM-29 (Lab ID: 60111459008)
- Dichlorodifluoromethane

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- A-074922-120211-CM-202 (Lab ID: 60111459010)
- Dichlorodifluoromethane

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- A-074922-120211-CM-25 (Lab ID: 60111459013)
- Benzene

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Sample: DW-074922-120111-CM-46 Lab ID: 60111459001 Collected: 12/01/11 09:45 Received: 12/03/11 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace Analytical Method: RSK 175									
Methane	ND	ug/L	10.0	5.0	1		12/07/11 12:12	74-82-8	1e

Date: 12/22/2011 05:32 PM

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Sample: DW-074922-120111-CM-29 Lab ID: 60111459002 Collected: 12/01/11 11:50 Received: 12/03/11 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace									
Analytical Method: RSK 175									
Methane	1940	ug/L	10.0	5.0	1		12/07/11 12:23	74-82-8	1e



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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Sample: DW-074922-120111-CM-D3 Lab ID: 60111459003 Collected: 12/01/11 12:55 Received: 12/03/11 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace									
Analytical Method: RSK 175									
Methane	ND	ug/L	10.0	5.0	1		12/07/11 12:34	74-82-8	1e

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: PW-074922-120111-CM-202 Lab ID: 60111459004 Collected: 12/01/11 15:40 Received: 12/03/11 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace									
Analytical Method: RSK 175									
Methane	4870	ug/L	10.0	5.0	1		12/07/11 12:45	74-82-8	1e

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: SW-074922-120211-CM-NAV Lab ID: 60111459005 Collected: 12/02/11 09:00 Received: 12/03/11 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace									
Analytical Method: RSK 175									
Methane	ND	ug/L	10.0	5.0	1		12/07/11 15:03	74-82-8	1e,D2

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: PW-074922-120211-CM-204A Lab ID: 60111459006 Collected: 12/02/11 12:15 Received: 12/03/11 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace Analytical Method: RSK 175									
Methane	3620	ug/L	10.0	5.0	1		12/07/11 15:14	74-82-8	1e

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Sample: PW-074922-120211-CM-25		Lab ID: 60111459007	Collected: 12/02/11 10:30	Received: 12/03/11 08:45	Matrix: Water				
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace		Analytical Method: RSK 175							
Methane	3800	ug/L	10.0	5.0	1		12/07/11 15:24	74-82-8	1e

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Sample: A-074922-120211-CM-29 Lab ID: 60111459008 Collected: 12/01/11 11:20 Received: 12/03/11 08:45 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15							
Acetone	ND	ug/m3	77.2	38.6	160.8		12/14/11 02:55	67-64-1	
Benzene	ND	ug/m3	52.3	25.7	160.8		12/14/11 02:55	71-43-2	
Benzyl chloride	ND	ug/m3	169	84.4	160.8		12/14/11 02:55	100-44-7	
Bromodichloromethane	ND	ug/m3	225	113	160.8		12/14/11 02:55	75-27-4	
Bromoform	ND	ug/m3	338	169	160.8		12/14/11 02:55	75-25-2	
Bromomethane	ND	ug/m3	127	63.5	160.8		12/14/11 02:55	74-83-9	
1,3-Butadiene	ND	ug/m3	72.4	36.2	160.8		12/14/11 02:55	106-99-0	
2-Butanone (MEK)	1780	ug/m3	96.5	48.2	160.8		12/14/11 02:55	78-93-3	
Carbon disulfide	ND	ug/m3	101	50.7	160.8		12/14/11 02:55	75-15-0	
Carbon tetrachloride	ND	ug/m3	103	51.5	160.8		12/14/11 02:55	56-23-5	
Chlorobenzene	ND	ug/m3	151	75.6	160.8		12/14/11 02:55	108-90-7	
Chloroethane	ND	ug/m3	86.8	43.4	160.8		12/14/11 02:55	75-00-3	
Chloroform	3710	ug/m3	159	79.6	160.8		12/14/11 02:55	67-66-3	
Chloromethane	ND	ug/m3	67.5	33.8	160.8		12/14/11 02:55	74-87-3	
Cyclohexane	ND	ug/m3	109	54.7	160.8		12/14/11 02:55	110-82-7	
Dibromochloromethane	ND	ug/m3	273	137	160.8		12/14/11 02:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	257	129	160.8		12/14/11 02:55	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	193	96.5	160.8		12/14/11 02:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	193	96.5	160.8		12/14/11 02:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	193	96.5	160.8		12/14/11 02:55	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	161	80.4	160.8		12/14/11 02:55	75-71-8	A3
1,1-Dichloroethane	ND	ug/m3	132	65.9	160.8		12/14/11 02:55	75-34-3	
1,2-Dichloroethane	ND	ug/m3	65.9	33.8	160.8		12/14/11 02:55	107-06-2	
1,1-Dichloroethene	ND	ug/m3	130	65.1	160.8		12/14/11 02:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	130	65.1	160.8		12/14/11 02:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	130	65.1	160.8		12/14/11 02:55	156-60-5	
1,2-Dichloropropane	ND	ug/m3	151	75.6	160.8		12/14/11 02:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	148	74.0	160.8		12/14/11 02:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	148	74.0	160.8		12/14/11 02:55	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	225	113	160.8		12/14/11 02:55	76-14-2	
Ethanol	ND	ug/m3	306	137	160.8		12/14/11 02:55	64-17-5	
Ethyl acetate	ND	ug/m3	117	58.7	160.8		12/14/11 02:55	141-78-6	
Ethylbenzene	ND	ug/m3	142	70.8	160.8		12/14/11 02:55	100-41-4	
4-Ethyltoluene	ND	ug/m3	402	201	160.8		12/14/11 02:55	622-96-8	
n-Heptane	ND	ug/m3	133	66.7	160.8		12/14/11 02:55	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	354	177	160.8		12/14/11 02:55	87-68-3	
n-Hexane	ND	ug/m3	116	57.9	160.8		12/14/11 02:55	110-54-3	
2-Hexanone	ND	ug/m3	133	66.7	160.8		12/14/11 02:55	591-78-6	
Methylene Chloride	ND	ug/m3	114	57.1	160.8		12/14/11 02:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	133	66.7	160.8		12/14/11 02:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	117	58.7	160.8		12/14/11 02:55	1634-04-4	
Naphthalene	ND	ug/m3	434	217	160.8		12/14/11 02:55	91-20-3	
2-Propanol	ND	ug/m3	402	201	160.8		12/14/11 02:55	67-63-0	
Propylene	ND	ug/m3	56.3	28.1	160.8		12/14/11 02:55	115-07-1	
Styrene	ND	ug/m3	140	69.9	160.8		12/14/11 02:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	112	56.3	160.8		12/14/11 02:55	79-34-5	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-29 Lab ID: 60111459008 Collected: 12/01/11 11:20 Received: 12/03/11 08:45 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Tetrachloroethene	ND	ug/m3	111	54.7	160.8		12/14/11 02:55	127-18-4	
Tetrahydrofuran	6180	ug/m3	96.5	48.2	160.8		12/14/11 02:55	109-99-9	
THC as Gas	13300	ug/m3	122	87.2	2.01		12/12/11 19:49		
Toluene	9380	ug/m3	124	61.9	160.8		12/14/11 02:55	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	159	79.6	160.8		12/14/11 02:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	177	88.4	160.8		12/14/11 02:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	88.4	45.0	160.8		12/14/11 02:55	79-00-5	
Trichloroethene	ND	ug/m3	88.4	45.0	160.8		12/14/11 02:55	79-01-6	
Trichlorofluoromethane	ND	ug/m3	177	88.4	160.8		12/14/11 02:55	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	257	129	160.8		12/14/11 02:55	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	161	80.4	160.8		12/14/11 02:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	161	80.4	160.8		12/14/11 02:55	108-67-8	
Vinyl acetate	ND	ug/m3	114	57.1	160.8		12/14/11 02:55	108-05-4	
Vinyl chloride	ND	ug/m3	41.8	20.9	160.8		12/14/11 02:55	75-01-4	
m&p-Xylene	ND	ug/m3	283	142	160.8		12/14/11 02:55	179601-23-1	
o-Xylene	ND	ug/m3	142	70.8	160.8		12/14/11 02:55	95-47-6	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-D3 Lab ID: 60111459009 Collected: 12/02/11 08:35 Received: 12/03/11 08:45 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Acetone	15.0	ug/m3	0.77	0.39	1.61		12/14/11 15:06	67-64-1	
Benzene	ND	ug/m3	0.52	0.26	1.61		12/14/11 15:06	71-43-2	
Benzyl chloride	ND	ug/m3	1.7	0.85	1.61		12/14/11 15:06	100-44-7	
Bromodichloromethane	ND	ug/m3	2.3	1.1	1.61		12/14/11 15:06	75-27-4	
Bromoform	ND	ug/m3	3.4	1.7	1.61		12/14/11 15:06	75-25-2	
Bromomethane	ND	ug/m3	1.3	0.64	1.61		12/14/11 15:06	74-83-9	
1,3-Butadiene	ND	ug/m3	0.72	0.36	1.61		12/14/11 15:06	106-99-0	
2-Butanone (MEK)	15.0	ug/m3	0.97	0.48	1.61		12/14/11 15:06	78-93-3	
Carbon disulfide	ND	ug/m3	1.0	0.51	1.61		12/14/11 15:06	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.0	0.52	1.61		12/14/11 15:06	56-23-5	
Chlorobenzene	ND	ug/m3	1.5	0.76	1.61		12/14/11 15:06	108-90-7	
Chloroethane	ND	ug/m3	0.87	0.43	1.61		12/14/11 15:06	75-00-3	
Chloroform	16.8	ug/m3	1.6	0.80	1.61		12/14/11 15:06	67-66-3	
Chloromethane	ND	ug/m3	0.68	0.34	1.61		12/14/11 15:06	74-87-3	
Cyclohexane	8.8	ug/m3	1.1	0.55	1.61		12/14/11 15:06	110-82-7	
Dibromochloromethane	ND	ug/m3	2.7	1.4	1.61		12/14/11 15:06	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	2.6	1.3	1.61		12/14/11 15:06	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.9	0.97	1.61		12/14/11 15:06	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.9	0.97	1.61		12/14/11 15:06	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.9	0.97	1.61		12/14/11 15:06	106-46-7	
Dichlorodifluoromethane	1.7	ug/m3	1.6	0.80	1.61		12/14/11 15:06	75-71-8	
1,1-Dichloroethane	ND	ug/m3	1.3	0.66	1.61		12/14/11 15:06	75-34-3	
1,2-Dichloroethane	ND	ug/m3	0.66	0.34	1.61		12/14/11 15:06	107-06-2	
1,1-Dichloroethene	ND	ug/m3	1.3	0.65	1.61		12/14/11 15:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	1.3	0.65	1.61		12/14/11 15:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.3	0.65	1.61		12/14/11 15:06	156-60-5	
1,2-Dichloropropane	ND	ug/m3	1.5	0.76	1.61		12/14/11 15:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	1.5	0.74	1.61		12/14/11 15:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	1.5	0.74	1.61		12/14/11 15:06	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	2.3	1.1	1.61		12/14/11 15:06	76-14-2	
Ethanol	2.0J	ug/m3	3.1	1.4	1.61		12/14/11 15:06	64-17-5	SS
Ethyl acetate	ND	ug/m3	1.2	0.59	1.61		12/14/11 15:06	141-78-6	
Ethylbenzene	ND	ug/m3	1.4	0.71	1.61		12/14/11 15:06	100-41-4	
4-Ethyltoluene	ND	ug/m3	4.0	2.0	1.61		12/14/11 15:06	622-96-8	
n-Heptane	ND	ug/m3	1.3	0.67	1.61		12/14/11 15:06	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	3.5	1.8	1.61		12/14/11 15:06	87-68-3	
n-Hexane	3.5	ug/m3	1.2	0.58	1.61		12/14/11 15:06	110-54-3	
2-Hexanone	ND	ug/m3	1.3	0.67	1.61		12/14/11 15:06	591-78-6	
Methylene Chloride	1.5	ug/m3	1.1	0.57	1.61		12/14/11 15:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	2.9	ug/m3	1.3	0.67	1.61		12/14/11 15:06	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	1.2	0.59	1.61		12/14/11 15:06	1634-04-4	
Naphthalene	ND	ug/m3	4.3	2.2	1.61		12/14/11 15:06	91-20-3	
2-Propanol	2.0J	ug/m3	4.0	2.0	1.61		12/14/11 15:06	67-63-0	
Propylene	ND	ug/m3	0.56	0.28	1.61		12/14/11 15:06	115-07-1	
Styrene	ND	ug/m3	1.4	0.70	1.61		12/14/11 15:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.1	0.56	1.61		12/14/11 15:06	79-34-5	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-D3 Lab ID: 60111459009 Collected: 12/02/11 08:35 Received: 12/03/11 08:45 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Tetrachloroethene	ND	ug/m3	1.1	0.55	1.61		12/14/11 15:06	127-18-4	
Tetrahydrofuran	482	ug/m3	19.3	9.7	32.2		12/14/11 04:25	109-99-9	SS
THC as Gas	2590	ug/m3	97.9	69.9	1.61		12/14/11 15:06		
Toluene	112	ug/m3	1.2	0.62	1.61		12/14/11 15:06	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	1.6	0.80	1.61		12/14/11 15:06	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.8	0.89	1.61		12/14/11 15:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	0.89	0.45	1.61		12/14/11 15:06	79-00-5	
Trichloroethene	ND	ug/m3	0.89	0.45	1.61		12/14/11 15:06	79-01-6	
Trichlorofluoromethane	1.1J	ug/m3	1.8	0.89	1.61		12/14/11 15:06	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	2.6	1.3	1.61		12/14/11 15:06	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	1.6	0.80	1.61		12/14/11 15:06	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	1.6	0.80	1.61		12/14/11 15:06	108-67-8	
Vinyl acetate	ND	ug/m3	1.1	0.57	1.61		12/14/11 15:06	108-05-4	
Vinyl chloride	ND	ug/m3	0.42	0.21	1.61		12/14/11 15:06	75-01-4	
m&p-Xylene	ND	ug/m3	2.8	1.4	1.61		12/14/11 15:06	179601-23-1	
o-Xylene	ND	ug/m3	1.4	0.71	1.61		12/14/11 15:06	95-47-6	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-202 Lab ID: 60111459010 Collected: 12/02/11 11:35 Received: 12/03/11 08:45 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Acetone	ND	ug/m3	5.8	2.9	12.1		12/14/11 01:25	67-64-1	
Benzene	ND	ug/m3	3.9	1.9	12.1		12/14/11 01:25	71-43-2	
Benzyl chloride	ND	ug/m3	12.7	6.4	12.1		12/14/11 01:25	100-44-7	
Bromodichloromethane	ND	ug/m3	16.9	8.5	12.1		12/14/11 01:25	75-27-4	
Bromoform	ND	ug/m3	25.4	12.7	12.1		12/14/11 01:25	75-25-2	
Bromomethane	ND	ug/m3	9.6	4.8	12.1		12/14/11 01:25	74-83-9	
1,3-Butadiene	ND	ug/m3	5.4	2.7	12.1		12/14/11 01:25	106-99-0	
2-Butanone (MEK)	ND	ug/m3	7.3	3.6	12.1		12/14/11 01:25	78-93-3	
Carbon disulfide	ND	ug/m3	7.6	3.8	12.1		12/14/11 01:25	75-15-0	
Carbon tetrachloride	ND	ug/m3	7.7	3.9	12.1		12/14/11 01:25	56-23-5	
Chlorobenzene	ND	ug/m3	11.4	5.7	12.1		12/14/11 01:25	108-90-7	
Chloroethane	ND	ug/m3	6.5	3.3	12.1		12/14/11 01:25	75-00-3	
Chloroform	ND	ug/m3	12.0	6.0	12.1		12/14/11 01:25	67-66-3	
Chloromethane	ND	ug/m3	5.1	2.5	12.1		12/14/11 01:25	74-87-3	
Cyclohexane	221	ug/m3	8.2	4.1	12.1		12/14/11 01:25	110-82-7	
Dibromochloromethane	ND	ug/m3	20.6	10.3	12.1		12/14/11 01:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	19.4	9.7	12.1		12/14/11 01:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	14.5	7.3	12.1		12/14/11 01:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	14.5	7.3	12.1		12/14/11 01:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	14.5	7.3	12.1		12/14/11 01:25	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	12.1	6.0	12.1		12/14/11 01:25	75-71-8	D3
1,1-Dichloroethane	ND	ug/m3	9.9	5.0	12.1		12/14/11 01:25	75-34-3	
1,2-Dichloroethane	ND	ug/m3	5.0	2.5	12.1		12/14/11 01:25	107-06-2	
1,1-Dichloroethene	ND	ug/m3	9.8	4.9	12.1		12/14/11 01:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	9.8	4.9	12.1		12/14/11 01:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	9.8	4.9	12.1		12/14/11 01:25	156-60-5	
1,2-Dichloropropane	ND	ug/m3	11.4	5.7	12.1		12/14/11 01:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	11.1	5.6	12.1		12/14/11 01:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	11.1	5.6	12.1		12/14/11 01:25	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	16.9	8.5	12.1		12/14/11 01:25	76-14-2	
Ethanol	ND	ug/m3	23.0	10.3	12.1		12/14/11 01:25	64-17-5	
Ethyl acetate	ND	ug/m3	8.8	4.4	12.1		12/14/11 01:25	141-78-6	
Ethylbenzene	ND	ug/m3	10.6	5.3	12.1		12/14/11 01:25	100-41-4	
4-Ethyltoluene	ND	ug/m3	30.2	15.1	12.1		12/14/11 01:25	622-96-8	
n-Heptane	70.5	ug/m3	10.0	5.0	12.1		12/14/11 01:25	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	26.6	13.3	12.1		12/14/11 01:25	87-68-3	
n-Hexane	106	ug/m3	8.7	4.4	12.1		12/14/11 01:25	110-54-3	
2-Hexanone	ND	ug/m3	10.0	5.0	12.1		12/14/11 01:25	591-78-6	
Methylene Chloride	ND	ug/m3	8.6	4.3	12.1		12/14/11 01:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	10.0	5.0	12.1		12/14/11 01:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	8.8	4.4	12.1		12/14/11 01:25	1634-04-4	
Naphthalene	ND	ug/m3	32.7	16.3	12.1		12/14/11 01:25	91-20-3	
2-Propanol	ND	ug/m3	30.2	15.1	12.1		12/14/11 01:25	67-63-0	
Propylene	ND	ug/m3	4.2	2.1	12.1		12/14/11 01:25	115-07-1	
Styrene	ND	ug/m3	10.5	5.3	12.1		12/14/11 01:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	8.4	4.2	12.1		12/14/11 01:25	79-34-5	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-202 Lab ID: 60111459010 Collected: 12/02/11 11:35 Received: 12/03/11 08:45 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15							
Tetrachloroethene	ND	ug/m3	8.3	4.1	12.1		12/14/11 01:25	127-18-4	
Tetrahydrofuran	ND	ug/m3	7.3	3.6	12.1		12/14/11 01:25	109-99-9	
THC as Gas	10200	ug/m3	736	525	12.1		12/14/11 01:25		
Toluene	ND	ug/m3	9.3	4.7	12.1		12/14/11 01:25	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	12.0	6.0	12.1		12/14/11 01:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	13.3	6.7	12.1		12/14/11 01:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	6.7	3.4	12.1		12/14/11 01:25	79-00-5	
Trichloroethene	ND	ug/m3	6.7	3.4	12.1		12/14/11 01:25	79-01-6	
Trichlorofluoromethane	ND	ug/m3	13.3	6.7	12.1		12/14/11 01:25	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	19.4	9.7	12.1		12/14/11 01:25	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	12.1	6.0	12.1		12/14/11 01:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	12.1	6.0	12.1		12/14/11 01:25	108-67-8	
Vinyl acetate	ND	ug/m3	8.6	4.3	12.1		12/14/11 01:25	108-05-4	
Vinyl chloride	ND	ug/m3	3.1	1.6	12.1		12/14/11 01:25	75-01-4	
m&p-Xylene	ND	ug/m3	21.3	10.6	12.1		12/14/11 01:25	179601-23-1	
o-Xylene	ND	ug/m3	10.6	5.3	12.1		12/14/11 01:25	95-47-6	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-2566 Lab ID: 60111459011 Collected: 12/02/11 11:00 Received: 12/03/11 08:45 Matrix: Air

Comments: • The sample was analyzed by serial dilution.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Acetone	ND	ug/m3	281	141	585.6		12/14/11 02:25	67-64-1	
Benzene	ND	ug/m3	190	93.7	585.6		12/14/11 02:25	71-43-2	
Benzyl chloride	ND	ug/m3	615	307	585.6		12/14/11 02:25	100-44-7	
Bromodichloromethane	ND	ug/m3	820	410	585.6		12/14/11 02:25	75-27-4	
Bromoform	ND	ug/m3	1230	615	585.6		12/14/11 02:25	75-25-2	
Bromomethane	ND	ug/m3	463	231	585.6		12/14/11 02:25	74-83-9	
1,3-Butadiene	ND	ug/m3	264	132	585.6		12/14/11 02:25	106-99-0	
2-Butanone (MEK)	336J	ug/m3	351	176	585.6		12/14/11 02:25	78-93-3	
Carbon disulfide	ND	ug/m3	369	184	585.6		12/14/11 02:25	75-15-0	
Carbon tetrachloride	ND	ug/m3	375	187	585.6		12/14/11 02:25	56-23-5	
Chlorobenzene	ND	ug/m3	550	275	585.6		12/14/11 02:25	108-90-7	
Chloroethane	ND	ug/m3	316	158	585.6		12/14/11 02:25	75-00-3	
Chloroform	ND	ug/m3	580	290	585.6		12/14/11 02:25	67-66-3	
Chloromethane	ND	ug/m3	246	123	585.6		12/14/11 02:25	74-87-3	
Cyclohexane	25900	ug/m3	398	199	585.6		12/14/11 02:25	110-82-7	
Dibromochloromethane	ND	ug/m3	996	498	585.6		12/14/11 02:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	937	468	585.6		12/14/11 02:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	703	351	585.6		12/14/11 02:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	703	351	585.6		12/14/11 02:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	703	351	585.6		12/14/11 02:25	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	586	293	585.6		12/14/11 02:25	75-71-8	
1,1-Dichloroethane	ND	ug/m3	480	240	585.6		12/14/11 02:25	75-34-3	
1,2-Dichloroethane	ND	ug/m3	240	123	585.6		12/14/11 02:25	107-06-2	
1,1-Dichloroethene	ND	ug/m3	474	237	585.6		12/14/11 02:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	474	237	585.6		12/14/11 02:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	474	237	585.6		12/14/11 02:25	156-60-5	
1,2-Dichloropropane	ND	ug/m3	550	275	585.6		12/14/11 02:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	539	269	585.6		12/14/11 02:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	539	269	585.6		12/14/11 02:25	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	820	410	585.6		12/14/11 02:25	76-14-2	
Ethanol	ND	ug/m3	1110	498	585.6		12/14/11 02:25	64-17-5	
Ethyl acetate	ND	ug/m3	427	214	585.6		12/14/11 02:25	141-78-6	
Ethylbenzene	ND	ug/m3	515	258	585.6		12/14/11 02:25	100-41-4	
4-Ethyltoluene	ND	ug/m3	1460	732	585.6		12/14/11 02:25	622-96-8	
n-Heptane	4970	ug/m3	486	243	585.6		12/14/11 02:25	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	1290	644	585.6		12/14/11 02:25	87-68-3	
n-Hexane	23300	ug/m3	422	211	585.6		12/14/11 02:25	110-54-3	
2-Hexanone	ND	ug/m3	486	243	585.6		12/14/11 02:25	591-78-6	
Methylene Chloride	ND	ug/m3	416	208	585.6		12/14/11 02:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	486	243	585.6		12/14/11 02:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	427	214	585.6		12/14/11 02:25	1634-04-4	
Naphthalene	ND	ug/m3	1580	791	585.6		12/14/11 02:25	91-20-3	
2-Propanol	ND	ug/m3	1460	732	585.6		12/14/11 02:25	67-63-0	
Propylene	ND	ug/m3	205	102	585.6		12/14/11 02:25	115-07-1	
Styrene	ND	ug/m3	509	255	585.6		12/14/11 02:25	100-42-5	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-2566 Lab ID: 60111459011 Collected: 12/02/11 11:00 Received: 12/03/11 08:45 Matrix: Air

Comments: • The sample was analyzed by serial dilution.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
1,1,2,2-Tetrachloroethane	ND	ug/m3	409	205	585.6		12/14/11 02:25	79-34-5	
Tetrachloroethene	ND	ug/m3	403	199	585.6		12/14/11 02:25	127-18-4	
Tetrahydrofuran	ND	ug/m3	351	176	585.6		12/14/11 02:25	109-99-9	
THC as Gas	837000	ug/m3	35600	25400	585.6		12/14/11 02:25		
Toluene	ND	ug/m3	451	225	585.6		12/14/11 02:25	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	580	290	585.6		12/14/11 02:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	644	322	585.6		12/14/11 02:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	322	164	585.6		12/14/11 02:25	79-00-5	
Trichloroethene	ND	ug/m3	322	164	585.6		12/14/11 02:25	79-01-6	
Trichlorofluoromethane	ND	ug/m3	644	322	585.6		12/14/11 02:25	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	937	468	585.6		12/14/11 02:25	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	585	293	585.6		12/14/11 02:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	585	293	585.6		12/14/11 02:25	108-67-8	
Vinyl acetate	ND	ug/m3	416	208	585.6		12/14/11 02:25	108-05-4	
Vinyl chloride	ND	ug/m3	152	76.1	585.6		12/14/11 02:25	75-01-4	
m&p-Xylene	ND	ug/m3	1030	515	585.6		12/14/11 02:25	179601-23-1	
o-Xylene	ND	ug/m3	515	258	585.6		12/14/11 02:25	95-47-6	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-204A Lab ID: 60111459012 Collected: 12/02/11 12:05 Received: 12/03/11 08:45 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR		Analytical Method: TO-15							
Acetone	ND	ug/m3	24.7	12.4	51.46		12/14/11 00:55	67-64-1	
Benzene	206	ug/m3	16.7	8.2	51.46		12/14/11 00:55	71-43-2	
Benzyl chloride	ND	ug/m3	54.0	27.0	51.46		12/14/11 00:55	100-44-7	
Bromodichloromethane	ND	ug/m3	72.0	36.0	51.46		12/14/11 00:55	75-27-4	
Bromoform	ND	ug/m3	108	54.0	51.46		12/14/11 00:55	75-25-2	
Bromomethane	ND	ug/m3	40.7	20.3	51.46		12/14/11 00:55	74-83-9	
1,3-Butadiene	ND	ug/m3	23.2	11.6	51.46		12/14/11 00:55	106-99-0	
2-Butanone (MEK)	ND	ug/m3	30.9	15.4	51.46		12/14/11 00:55	78-93-3	
Carbon disulfide	ND	ug/m3	32.4	16.2	51.46		12/14/11 00:55	75-15-0	
Carbon tetrachloride	ND	ug/m3	32.9	16.5	51.46		12/14/11 00:55	56-23-5	
Chlorobenzene	ND	ug/m3	48.4	24.2	51.46		12/14/11 00:55	108-90-7	
Chloroethane	ND	ug/m3	27.8	13.9	51.46		12/14/11 00:55	75-00-3	
Chloroform	ND	ug/m3	50.9	25.5	51.46		12/14/11 00:55	67-66-3	
Chloromethane	ND	ug/m3	21.6	10.8	51.46		12/14/11 00:55	74-87-3	
Cyclohexane	3940	ug/m3	35.0	17.5	51.46		12/14/11 00:55	110-82-7	
Dibromochloromethane	ND	ug/m3	87.5	43.7	51.46		12/14/11 00:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	82.3	41.2	51.46		12/14/11 00:55	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	61.8	30.9	51.46		12/14/11 00:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	61.8	30.9	51.46		12/14/11 00:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	61.8	30.9	51.46		12/14/11 00:55	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	51.5	25.7	51.46		12/14/11 00:55	75-71-8	
1,1-Dichloroethane	ND	ug/m3	42.2	21.1	51.46		12/14/11 00:55	75-34-3	
1,2-Dichloroethane	ND	ug/m3	21.1	10.8	51.46		12/14/11 00:55	107-06-2	
1,1-Dichloroethene	ND	ug/m3	41.7	20.8	51.46		12/14/11 00:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	41.7	20.8	51.46		12/14/11 00:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	41.7	20.8	51.46		12/14/11 00:55	156-60-5	
1,2-Dichloropropane	ND	ug/m3	48.4	24.2	51.46		12/14/11 00:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	47.3	23.7	51.46		12/14/11 00:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	47.3	23.7	51.46		12/14/11 00:55	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	72.0	36.0	51.46		12/14/11 00:55	76-14-2	
Ethanol	ND	ug/m3	97.8	43.7	51.46		12/14/11 00:55	64-17-5	
Ethyl acetate	ND	ug/m3	37.6	18.8	51.46		12/14/11 00:55	141-78-6	
Ethylbenzene	24.0	ug/m3	45.3	22.6	51.46		12/14/11 00:55	100-41-4	
4-Ethyltoluene	ND	ug/m3	129	64.3	51.46		12/14/11 00:55	622-96-8	
n-Heptane	2400	ug/m3	42.7	21.4	51.46		12/14/11 00:55	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	113	56.6	51.46		12/14/11 00:55	87-68-3	
n-Hexane	3440	ug/m3	37.1	18.5	51.46		12/14/11 00:55	110-54-3	
2-Hexanone	ND	ug/m3	42.7	21.4	51.46		12/14/11 00:55	591-78-6	
Methylene Chloride	314	ug/m3	36.5	18.3	51.46		12/14/11 00:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	42.7	21.4	51.46		12/14/11 00:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	37.6	18.8	51.46		12/14/11 00:55	1634-04-4	
Naphthalene	ND	ug/m3	139	69.5	51.46		12/14/11 00:55	91-20-3	
2-Propanol	ND	ug/m3	129	64.3	51.46		12/14/11 00:55	67-63-0	
Propylene	ND	ug/m3	18.0	9.0	51.46		12/14/11 00:55	115-07-1	
Styrene	ND	ug/m3	44.8	22.4	51.46		12/14/11 00:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	35.9	18.0	51.46		12/14/11 00:55	79-34-5	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Sample: A-074922-120211-CM-204A Lab ID: 60111459012 Collected: 12/02/11 12:05 Received: 12/03/11 08:45 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Tetrachloroethene	ND	ug/m3	35.5	17.5	51.46		12/14/11 00:55	127-18-4	
Tetrahydrofuran	ND	ug/m3	30.9	15.4	51.46		12/14/11 00:55	109-99-9	
THC as Gas	85800	ug/m3	3130	2230	51.46		12/14/11 00:55		
Toluene	587	ug/m3	39.6	19.8	51.46		12/14/11 00:55	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	50.9	25.5	51.46		12/14/11 00:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	56.6	28.3	51.46		12/14/11 00:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	28.3	14.4	51.46		12/14/11 00:55	79-00-5	
Trichloroethene	ND	ug/m3	28.3	14.4	51.46		12/14/11 00:55	79-01-6	
Trichlorofluoromethane	ND	ug/m3	56.6	28.3	51.46		12/14/11 00:55	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	82.3	41.2	51.46		12/14/11 00:55	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	51.4	25.7	51.46		12/14/11 00:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	51.4	25.7	51.46		12/14/11 00:55	108-67-8	
Vinyl acetate	ND	ug/m3	36.5	18.3	51.46		12/14/11 00:55	108-05-4	
Vinyl chloride	ND	ug/m3	13.4	6.7	51.46		12/14/11 00:55	75-01-4	
m&p-Xylene	151	ug/m3	90.6	45.3	51.46		12/14/11 00:55	179601-23-1	
o-Xylene	31.8J	ug/m3	45.3	22.6	51.46		12/14/11 00:55	95-47-6	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-25 Lab ID: 60111459013 Collected: 12/02/11 10:10 Received: 12/03/11 08:45 Matrix: Air

Comments: • The sample was analyzed by serial dilution.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Acetone	ND	ug/m3	147	73.7	307.2		12/14/11 01:55	67-64-1	
Benzene	33500	ug/m3	99.8	49.2	307.2		12/14/11 01:55	71-43-2	E
Benzyl chloride	ND	ug/m3	323	161	307.2		12/14/11 01:55	100-44-7	
Bromodichloromethane	ND	ug/m3	430	215	307.2		12/14/11 01:55	75-27-4	
Bromoform	ND	ug/m3	645	323	307.2		12/14/11 01:55	75-25-2	
Bromomethane	ND	ug/m3	243	121	307.2		12/14/11 01:55	74-83-9	
1,3-Butadiene	ND	ug/m3	138	69.1	307.2		12/14/11 01:55	106-99-0	
2-Butanone (MEK)	ND	ug/m3	184	92.2	307.2		12/14/11 01:55	78-93-3	
Carbon disulfide	ND	ug/m3	194	96.8	307.2		12/14/11 01:55	75-15-0	
Carbon tetrachloride	ND	ug/m3	197	98.3	307.2		12/14/11 01:55	56-23-5	
Chlorobenzene	ND	ug/m3	289	144	307.2		12/14/11 01:55	108-90-7	
Chloroethane	ND	ug/m3	166	82.9	307.2		12/14/11 01:55	75-00-3	
Chloroform	ND	ug/m3	304	152	307.2		12/14/11 01:55	67-66-3	
Chloromethane	ND	ug/m3	129	64.5	307.2		12/14/11 01:55	74-87-3	
Cyclohexane	19300	ug/m3	209	104	307.2		12/14/11 01:55	110-82-7	
Dibromochloromethane	ND	ug/m3	522	261	307.2		12/14/11 01:55	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	492	246	307.2		12/14/11 01:55	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	369	184	307.2		12/14/11 01:55	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	369	184	307.2		12/14/11 01:55	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	369	184	307.2		12/14/11 01:55	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	307	154	307.2		12/14/11 01:55	75-71-8	
1,1-Dichloroethane	ND	ug/m3	252	126	307.2		12/14/11 01:55	75-34-3	
1,2-Dichloroethane	ND	ug/m3	126	64.5	307.2		12/14/11 01:55	107-06-2	
1,1-Dichloroethene	ND	ug/m3	249	124	307.2		12/14/11 01:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	249	124	307.2		12/14/11 01:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	249	124	307.2		12/14/11 01:55	156-60-5	
1,2-Dichloropropane	ND	ug/m3	289	144	307.2		12/14/11 01:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	283	141	307.2		12/14/11 01:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	283	141	307.2		12/14/11 01:55	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	430	215	307.2		12/14/11 01:55	76-14-2	
Ethanol	ND	ug/m3	584	261	307.2		12/14/11 01:55	64-17-5	
Ethyl acetate	ND	ug/m3	224	112	307.2		12/14/11 01:55	141-78-6	
Ethylbenzene	255J	ug/m3	270	135	307.2		12/14/11 01:55	100-41-4	
4-Ethyltoluene	ND	ug/m3	768	384	307.2		12/14/11 01:55	622-96-8	
n-Heptane	8430	ug/m3	255	127	307.2		12/14/11 01:55	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	676	338	307.2		12/14/11 01:55	87-68-3	
n-Hexane	13900	ug/m3	221	111	307.2		12/14/11 01:55	110-54-3	
2-Hexanone	ND	ug/m3	255	127	307.2		12/14/11 01:55	591-78-6	
Methylene Chloride	ND	ug/m3	218	109	307.2		12/14/11 01:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	255	127	307.2		12/14/11 01:55	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	224	112	307.2		12/14/11 01:55	1634-04-4	
Naphthalene	ND	ug/m3	829	415	307.2		12/14/11 01:55	91-20-3	
2-Propanol	ND	ug/m3	768	384	307.2		12/14/11 01:55	67-63-0	
Propylene	ND	ug/m3	108	53.8	307.2		12/14/11 01:55	115-07-1	
Styrene	ND	ug/m3	267	134	307.2		12/14/11 01:55	100-42-5	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-25 Lab ID: 60111459013 Collected: 12/02/11 10:10 Received: 12/03/11 08:45 Matrix: Air

Comments: • The sample was analyzed by serial dilution.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
1,1,2,2-Tetrachloroethane	ND	ug/m3	214	108	307.2		12/14/11 01:55	79-34-5	
Tetrachloroethene	ND	ug/m3	212	104	307.2		12/14/11 01:55	127-18-4	
Tetrahydrofuran	ND	ug/m3	184	92.2	307.2		12/14/11 01:55	109-99-9	
THC as Gas	595000	ug/m3	18700	13300	307.2		12/14/11 01:55		
Toluene	22900	ug/m3	237	118	307.2		12/14/11 01:55	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	304	152	307.2		12/14/11 01:55	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	338	169	307.2		12/14/11 01:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	169	86.0	307.2		12/14/11 01:55	79-00-5	
Trichloroethene	ND	ug/m3	169	86.0	307.2		12/14/11 01:55	79-01-6	
Trichlorofluoromethane	ND	ug/m3	338	169	307.2		12/14/11 01:55	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	492	246	307.2		12/14/11 01:55	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	307	154	307.2		12/14/11 01:55	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	307	154	307.2		12/14/11 01:55	108-67-8	
Vinyl acetate	ND	ug/m3	218	109	307.2		12/14/11 01:55	108-05-4	
Vinyl chloride	ND	ug/m3	79.9	39.9	307.2		12/14/11 01:55	75-01-4	
m&p-Xylene	2390	ug/m3	541	270	307.2		12/14/11 01:55	179601-23-1	
p-Xylene	228J	ug/m3	270	135	307.2		12/14/11 01:55	95-47-6	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-DUP Lab ID: 60111459014 Collected: 12/02/11 10:55 Received: 12/03/11 08:45 Matrix: Air

Comments: • The sample was analyzed by serial dilution.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
Acetone	ND	ug/m3	147	73.7	307.2		12/14/11 03:25	67-64-1	
Benzene	ND	ug/m3	99.8	49.2	307.2		12/14/11 03:25	71-43-2	
Benzyl chloride	ND	ug/m3	323	161	307.2		12/14/11 03:25	100-44-7	
Bromodichloromethane	ND	ug/m3	430	215	307.2		12/14/11 03:25	75-27-4	
Bromoform	ND	ug/m3	645	323	307.2		12/14/11 03:25	75-25-2	
Bromomethane	ND	ug/m3	243	121	307.2		12/14/11 03:25	74-83-9	
1,3-Butadiene	ND	ug/m3	138	69.1	307.2		12/14/11 03:25	106-99-0	
2-Butanone (MEK)	ND	ug/m3	184	92.2	307.2		12/14/11 03:25	78-93-3	
Carbon disulfide	ND	ug/m3	194	96.8	307.2		12/14/11 03:25	75-15-0	
Carbon tetrachloride	ND	ug/m3	197	98.3	307.2		12/14/11 03:25	56-23-5	
Chlorobenzene	ND	ug/m3	289	144	307.2		12/14/11 03:25	108-90-7	
Chloroethane	ND	ug/m3	166	82.9	307.2		12/14/11 03:25	75-00-3	
Chloroform	ND	ug/m3	304	152	307.2		12/14/11 03:25	67-66-3	
Chloromethane	ND	ug/m3	129	64.5	307.2		12/14/11 03:25	74-87-3	
Cyclohexane	22100	ug/m3	209	104	307.2		12/14/11 03:25	110-82-7	
Dibromochloromethane	ND	ug/m3	522	261	307.2		12/14/11 03:25	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	492	246	307.2		12/14/11 03:25	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	369	184	307.2		12/14/11 03:25	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	369	184	307.2		12/14/11 03:25	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	369	184	307.2		12/14/11 03:25	106-46-7	
Dichlorodifluoromethane	ND	ug/m3	307	154	307.2		12/14/11 03:25	75-71-8	
1,1-Dichloroethane	ND	ug/m3	252	126	307.2		12/14/11 03:25	75-34-3	
1,2-Dichloroethane	ND	ug/m3	126	64.5	307.2		12/14/11 03:25	107-06-2	
1,1-Dichloroethene	ND	ug/m3	249	124	307.2		12/14/11 03:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	249	124	307.2		12/14/11 03:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	249	124	307.2		12/14/11 03:25	156-60-5	
1,2-Dichloropropane	ND	ug/m3	289	144	307.2		12/14/11 03:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	283	141	307.2		12/14/11 03:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	283	141	307.2		12/14/11 03:25	10061-02-6	
Dichlorotetrafluoroethane	ND	ug/m3	430	215	307.2		12/14/11 03:25	76-14-2	
Ethanol	ND	ug/m3	584	261	307.2		12/14/11 03:25	64-17-5	
Ethyl acetate	ND	ug/m3	224	112	307.2		12/14/11 03:25	141-78-6	
Ethylbenzene	ND	ug/m3	270	135	307.2		12/14/11 03:25	100-41-4	
4-Ethyltoluene	ND	ug/m3	768	384	307.2		12/14/11 03:25	622-96-8	
n-Heptane	4450	ug/m3	255	127	307.2		12/14/11 03:25	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	676	338	307.2		12/14/11 03:25	87-68-3	
n-Hexane	18600	ug/m3	221	111	307.2		12/14/11 03:25	110-54-3	
2-Hexanone	ND	ug/m3	255	127	307.2		12/14/11 03:25	591-78-6	
Methylene Chloride	ND	ug/m3	218	109	307.2		12/14/11 03:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	255	127	307.2		12/14/11 03:25	108-10-1	
Methyl-tert-butyl ether	ND	ug/m3	224	112	307.2		12/14/11 03:25	1634-04-4	
Naphthalene	ND	ug/m3	829	415	307.2		12/14/11 03:25	91-20-3	
2-Propanol	ND	ug/m3	768	384	307.2		12/14/11 03:25	67-63-0	
Propylene	ND	ug/m3	108	53.8	307.2		12/14/11 03:25	115-07-1	
Styrene	ND	ug/m3	267	134	307.2		12/14/11 03:25	100-42-5	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

Sample: A-074922-120211-CM-DUP Lab ID: 60111459014 Collected: 12/02/11 10:55 Received: 12/03/11 08:45 Matrix: Air

Comments: • The sample was analyzed by serial dilution.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR Analytical Method: TO-15									
1,1,2,2-Tetrachloroethane	ND	ug/m3	214	108	307.2		12/14/11 03:25	79-34-5	
Tetrachloroethene	ND	ug/m3	212	104	307.2		12/14/11 03:25	127-18-4	
Tetrahydrofuran	ND	ug/m3	184	92.2	307.2		12/14/11 03:25	109-99-9	
THC as Gas	589000	ug/m3	18700	13300	307.2		12/14/11 03:25		
Toluene	ND	ug/m3	237	118	307.2		12/14/11 03:25	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	304	152	307.2		12/14/11 03:25	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	338	169	307.2		12/14/11 03:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	169	86.0	307.2		12/14/11 03:25	79-00-5	
Trichloroethene	ND	ug/m3	169	86.0	307.2		12/14/11 03:25	79-01-6	
Trichlorofluoromethane	ND	ug/m3	338	169	307.2		12/14/11 03:25	75-69-4	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	492	246	307.2		12/14/11 03:25	76-13-1	
1,2,4-Trimethylbenzene	ND	ug/m3	307	154	307.2		12/14/11 03:25	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	307	154	307.2		12/14/11 03:25	108-67-8	
Vinyl acetate	ND	ug/m3	218	109	307.2		12/14/11 03:25	108-05-4	
Vinyl chloride	ND	ug/m3	79.9	39.9	307.2		12/14/11 03:25	75-01-4	
m&p-Xylene	ND	ug/m3	541	270	307.2		12/14/11 03:25	179601-23-1	
o-Xylene	ND	ug/m3	270	135	307.2		12/14/11 03:25	95-47-6	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

QC Batch: AIR/13778

Analysis Method: RSK 175

QC Batch Method: RSK 175

Analysis Description: RSK 175 AIR HEADSPACE

Associated Lab Samples: 60111459001, 60111459002, 60111459003, 60111459004

METHOD BLANK: 1110878

Matrix: Water

Associated Lab Samples: 60111459001, 60111459002, 60111459003, 60111459004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	ND	10.0	12/07/11 08:10	

LABORATORY CONTROL SAMPLE & LCSD: 1110879

1110880

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	60.7	62.2	63.4	102	104	70-130	2	30	

SAMPLE DUPLICATE: 1111318

Parameter	Units	20942018 Result	Dup Result	RPD	Max RPD	Qualifiers
Methane	ug/L	166	144	14	30	

SAMPLE DUPLICATE: 1111320

Parameter	Units	20941878 Result	Dup Result	RPD	Max RPD	Qualifiers
Methane	ug/L	64.2	70.3	9	30	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

QC Batch: AIR/13789

Analysis Method: RSK 175

QC Batch Method: RSK 175

Analysis Description: RSK 175 AIR HEADSPACE

Associated Lab Samples: 60111459005, 60111459006, 60111459007

METHOD BLANK: 1111239

Matrix: Water

Associated Lab Samples: 60111459005, 60111459006, 60111459007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	ND	10.0	12/07/11 14:13	

LABORATORY CONTROL SAMPLE & LCSD: 1111240

1111241

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	60.7	63.4	62.9	104	104	70-130	.8	30	

SAMPLE DUPLICATE: 1111791

Parameter	Units	5055462001 Result	Dup Result	RPD	Max RPD	Qualifiers
Methane	ug/L	ND	10.8		30	

SAMPLE DUPLICATE: 1111792

Parameter	Units	2510214006 Result	Dup Result	RPD	Max RPD	Qualifiers
Methane	ug/L	ND	ND		30	



QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

QC Batch: AIR/13823

Analysis Method: TO-15

QC Batch Method: TO-15

Analysis Description: TO15 MSV AIR Low Level

Associated Lab Samples: 60111459008, 60111459010, 60111459011, 60111459012, 60111459013, 60111459014

METHOD BLANK: 1114118

Matrix: Air

Associated Lab Samples: 60111459008, 60111459010, 60111459011, 60111459012, 60111459013, 60111459014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	12/13/11 14:52	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.70	12/13/11 14:52	
1,1,2-Trichloroethane	ug/m3	ND	0.55	12/13/11 14:52	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	12/13/11 14:52	
1,1-Dichloroethane	ug/m3	ND	0.82	12/13/11 14:52	
1,1-Dichloroethene	ug/m3	ND	0.81	12/13/11 14:52	
1,2,4-Trichlorobenzene	ug/m3	ND	0.99	12/13/11 14:52	
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	12/13/11 14:52	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	12/13/11 14:52	
1,2-Dichlorobenzene	ug/m3	ND	1.2	12/13/11 14:52	
1,2-Dichloroethane	ug/m3	ND	0.41	12/13/11 14:52	
1,2-Dichloropropane	ug/m3	ND	0.94	12/13/11 14:52	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	12/13/11 14:52	
1,3-Butadiene	ug/m3	ND	0.45	12/13/11 14:52	
1,3-Dichlorobenzene	ug/m3	ND	1.2	12/13/11 14:52	
1,4-Dichlorobenzene	ug/m3	ND	1.2	12/13/11 14:52	
2-Butanone (MEK)	ug/m3	ND	0.60	12/13/11 14:52	
2-Hexanone	ug/m3	ND	0.83	12/13/11 14:52	
2-Propanol	ug/m3	ND	2.5	12/13/11 14:52	
4-Ethyltoluene	ug/m3	ND	2.5	12/13/11 14:52	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	0.83	12/13/11 14:52	
Acetone	ug/m3	ND	0.48	12/13/11 14:52	
Benzene	ug/m3	ND	0.32	12/13/11 14:52	
Benzyl chloride	ug/m3	ND	1.0	12/13/11 14:52	
Bromodichloromethane	ug/m3	ND	1.4	12/13/11 14:52	
Bromoform	ug/m3	ND	2.1	12/13/11 14:52	
Bromomethane	ug/m3	ND	0.79	12/13/11 14:52	
Carbon disulfide	ug/m3	ND	0.63	12/13/11 14:52	
Carbon tetrachloride	ug/m3	ND	0.64	12/13/11 14:52	
Chlorobenzene	ug/m3	ND	0.94	12/13/11 14:52	
Chloroethane	ug/m3	ND	0.54	12/13/11 14:52	
Chloroform	ug/m3	ND	0.99	12/13/11 14:52	
Chloromethane	ug/m3	ND	0.42	12/13/11 14:52	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	12/13/11 14:52	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	12/13/11 14:52	
Cyclohexane	ug/m3	ND	0.68	12/13/11 14:52	
Dibromochloromethane	ug/m3	ND	1.7	12/13/11 14:52	
Dichlorodifluoromethane	ug/m3	ND	1.0	12/13/11 14:52	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	12/13/11 14:52	
Ethanol	ug/m3	ND	1.9	12/13/11 14:52	
Ethyl acetate	ug/m3	ND	0.73	12/13/11 14:52	
Ethylbenzene	ug/m3	ND	0.88	12/13/11 14:52	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	12/13/11 14:52	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

METHOD BLANK: 1114118

Matrix: Air

Associated Lab Samples: 60111459008, 60111459010, 60111459011, 60111459012, 60111459013, 60111459014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/m3	ND	1.8	12/13/11 14:52	
Methyl-tert-butyl ether	ug/m3	ND	0.73	12/13/11 14:52	
Methylene Chloride	ug/m3	ND	0.71	12/13/11 14:52	
n-Heptane	ug/m3	ND	0.83	12/13/11 14:52	
n-Hexane	ug/m3	ND	0.72	12/13/11 14:52	
Naphthalene	ug/m3	ND	2.7	12/13/11 14:52	
o-Xylene	ug/m3	ND	0.88	12/13/11 14:52	
Propylene	ug/m3	ND	0.35	12/13/11 14:52	
Styrene	ug/m3	ND	0.87	12/13/11 14:52	
Tetrachloroethene	ug/m3	ND	0.69	12/13/11 14:52	
Tetrahydrofuran	ug/m3	ND	0.60	12/13/11 14:52	
THC as Gas	ug/m3	ND	60.8	12/13/11 14:52	
Toluene	ug/m3	ND	0.77	12/13/11 14:52	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	12/13/11 14:52	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	12/13/11 14:52	
Trichloroethene	ug/m3	ND	0.55	12/13/11 14:52	
Trichlorofluoromethane	ug/m3	ND	1.1	12/13/11 14:52	
Vinyl acetate	ug/m3	ND	0.71	12/13/11 14:52	
Vinyl chloride	ug/m3	ND	0.26	12/13/11 14:52	

LABORATORY CONTROL SAMPLE: 1114119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	48.6	88	66-133	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	66.3	95	70-140	
1,1,2-Trichloroethane	ug/m3	55.5	48.9	88	68-132	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	70.8	91	60-137	
1,1-Dichloroethane	ug/m3	41.2	35.2	86	65-131	
1,1-Dichloroethene	ug/m3	40.3	35.4	88	65-132	
1,2,4-Trichlorobenzene	ug/m3	75.5	83.5	111	30-150	
1,2,4-Trimethylbenzene	ug/m3	50	49.8	100	69-140	
1,2-Dibromoethane (EDB)	ug/m3	78.1	71.5	92	71-139	
1,2-Dichlorobenzene	ug/m3	61.2	57.9	95	68-139	
1,2-Dichloroethane	ug/m3	41.2	35.6	86	66-132	
1,2-Dichloropropane	ug/m3	47	40.4	86	69-130	
1,3,5-Trimethylbenzene	ug/m3	50	48.1	96	70-141	
1,3-Butadiene	ug/m3	22.5	20.0	89	68-128	
1,3-Dichlorobenzene	ug/m3	61.2	56.8	93	66-146	
1,4-Dichlorobenzene	ug/m3	61.2	43.0	70	66-142	
2-Butanone (MEK)	ug/m3	30	28.8	96	68-134	
2-Hexanone	ug/m3	41.7	35.1	84	70-144	
2-Propanol	ug/m3	23.8	21.5	90	66-139	
4-Ethyltoluene	ug/m3	50	45.2	90	65-145	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.7	35.8	86	70-139	
Acetone	ug/m3	24.2	18.7	77	56-142	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

LABORATORY CONTROL SAMPLE: 1114119

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/m3	32.5	30.8	95	69-129	
Benzyl chloride	ug/m3	52.5	36.7	70	68-138	
Bromodichloromethane	ug/m3	68.2	62.1	91	70-130	
Bromoform	ug/m3	105	111	105	67-147	
Bromomethane	ug/m3	39.5	34.5	87	67-127	
Carbon disulfide	ug/m3	31.7	27.2	86	65-131	
Carbon tetrachloride	ug/m3	64	49.9	78	62-137	
Chlorobenzene	ug/m3	46.8	41.7	89	72-133	
Chloroethane	ug/m3	26.8	22.9	85	66-127	
Chloroform	ug/m3	49.7	43.5	88	67-130	
Chloromethane	ug/m3	21	21.2	101	63-127	
cis-1,2-Dichloroethene	ug/m3	40.3	35.7	88	69-130	
cis-1,3-Dichloropropene	ug/m3	46.2	43.2	94	74-137	
Cyclohexane	ug/m3	35	33.7	96	69-137	
Dibromochloromethane	ug/m3	86.6	85.5	99	69-140	
Dichlorodifluoromethane	ug/m3	50.3	43.0	86	62-131	
Dichlorotetrafluoroethane	ug/m3	71.1	65.1	92	63-130	
Ethanol	ug/m3	19.2	17.8	93	63-135	SS
Ethyl acetate	ug/m3	36.6	31.9	87	70-135	
Ethylbenzene	ug/m3	44.2	41.4	94	71-141	
Hexachloro-1,3-butadiene	ug/m3	108	114	106	30-150	
m&p-Xylene	ug/m3	88.3	85.0	96	68-144	
Methyl-tert-butyl ether	ug/m3	36.7	30.7	84	54-136	
Methylene Chloride	ug/m3	35.3	32.1	91	56-143	
n-Heptane	ug/m3	41.7	37.8	91	72-130	
n-Hexane	ug/m3	35.8	29.9	83	68-130	
Naphthalene	ug/m3	53.3	51.3	96	30-150	
o-Xylene	ug/m3	44.2	38.4	87	70-141	
Propylene	ug/m3	17.5	16.0	91	61-139	
Styrene	ug/m3	43.3	40.0	92	68-145	
Tetrachloroethene	ug/m3	69	65.2	94	64-142	
Tetrahydrofuran	ug/m3	30	26.4	88	70-134	SS
THC as Gas	ug/m3	3030	2810	93	66-134	
Toluene	ug/m3	38.3	34.1	89	69-133	
trans-1,2-Dichloroethene	ug/m3	40.3	35.9	89	64-132	
trans-1,3-Dichloropropene	ug/m3	46.2	45.6	99	71-140	
Trichloroethene	ug/m3	54.6	51.6	94	68-132	
Trichlorofluoromethane	ug/m3	57.1	51.1	90	59-136	
Vinyl acetate	ug/m3	35.8	31.9	89	70-142	
Vinyl chloride	ug/m3	26	23.6	91	64-129	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

QC Batch: AIR/13833 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 60111459009

METHOD BLANK: 1114982 Matrix: Air
Associated Lab Samples: 60111459009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	12/14/11 10:03	
1,1,2,2-Tetrachloroethane	ug/m3	ND	0.70	12/14/11 10:03	
1,1,2-Trichloroethane	ug/m3	ND	0.55	12/14/11 10:03	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	1.6	12/14/11 10:03	
1,1-Dichloroethane	ug/m3	ND	0.82	12/14/11 10:03	
1,1-Dichloroethene	ug/m3	ND	0.81	12/14/11 10:03	
1,2,4-Trichlorobenzene	ug/m3	ND	0.99	12/14/11 10:03	
1,2,4-Trimethylbenzene	ug/m3	ND	1.0	12/14/11 10:03	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.6	12/14/11 10:03	
1,2-Dichlorobenzene	ug/m3	ND	1.2	12/14/11 10:03	
1,2-Dichloroethane	ug/m3	ND	0.41	12/14/11 10:03	
1,2-Dichloropropane	ug/m3	ND	0.94	12/14/11 10:03	
1,3,5-Trimethylbenzene	ug/m3	ND	1.0	12/14/11 10:03	
1,3-Butadiene	ug/m3	ND	0.45	12/14/11 10:03	
1,3-Dichlorobenzene	ug/m3	ND	1.2	12/14/11 10:03	
1,4-Dichlorobenzene	ug/m3	ND	1.2	12/14/11 10:03	
2-Butanone (MEK)	ug/m3	ND	0.60	12/14/11 10:03	
2-Hexanone	ug/m3	ND	0.83	12/14/11 10:03	
2-Propanol	ug/m3	ND	2.5	12/14/11 10:03	
4-Ethyltoluene	ug/m3	ND	2.5	12/14/11 10:03	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	0.83	12/14/11 10:03	
Acetone	ug/m3	ND	0.48	12/14/11 10:03	
Benzene	ug/m3	ND	0.32	12/14/11 10:03	
Benzyl chloride	ug/m3	ND	1.0	12/14/11 10:03	
Bromodichloromethane	ug/m3	ND	1.4	12/14/11 10:03	
Bromoform	ug/m3	ND	2.1	12/14/11 10:03	
Bromomethane	ug/m3	ND	0.79	12/14/11 10:03	
Carbon disulfide	ug/m3	ND	0.63	12/14/11 10:03	
Carbon tetrachloride	ug/m3	ND	0.64	12/14/11 10:03	
Chlorobenzene	ug/m3	ND	0.94	12/14/11 10:03	
Chloroethane	ug/m3	ND	0.54	12/14/11 10:03	
Chloroform	ug/m3	ND	0.99	12/14/11 10:03	
Chloromethane	ug/m3	ND	0.42	12/14/11 10:03	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	12/14/11 10:03	
cis-1,3-Dichloropropene	ug/m3	ND	0.92	12/14/11 10:03	
Cyclohexane	ug/m3	ND	0.68	12/14/11 10:03	
Dibromochloromethane	ug/m3	ND	1.7	12/14/11 10:03	
Dichlorodifluoromethane	ug/m3	ND	1.0	12/14/11 10:03	
Dichlorotetrafluoroethane	ug/m3	ND	1.4	12/14/11 10:03	
Ethanol	ug/m3	ND	1.9	12/14/11 10:03	
Ethyl acetate	ug/m3	ND	0.73	12/14/11 10:03	
Ethylbenzene	ug/m3	ND	0.88	12/14/11 10:03	
Hexachloro-1,3-butadiene	ug/m3	ND	2.2	12/14/11 10:03	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

METHOD BLANK: 1114982

Matrix: Air

Associated Lab Samples: 60111459009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
m&p-Xylene	ug/m3	ND	1.8	12/14/11 10:03	
Methyl-tert-butyl ether	ug/m3	ND	0.73	12/14/11 10:03	
Methylene Chloride	ug/m3	ND	0.71	12/14/11 10:03	
n-Heptane	ug/m3	ND	0.83	12/14/11 10:03	
n-Hexane	ug/m3	ND	0.72	12/14/11 10:03	
Naphthalene	ug/m3	ND	2.7	12/14/11 10:03	
o-Xylene	ug/m3	ND	0.88	12/14/11 10:03	
Propylene	ug/m3	ND	0.35	12/14/11 10:03	
Styrene	ug/m3	ND	0.87	12/14/11 10:03	
Tetrachloroethene	ug/m3	ND	0.69	12/14/11 10:03	
Tetrahydrofuran	ug/m3	ND	0.60	12/14/11 10:03	
THC as Gas	ug/m3	ND	60.8	12/14/11 10:03	
Toluene	ug/m3	ND	0.77	12/14/11 10:03	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	12/14/11 10:03	
trans-1,3-Dichloropropene	ug/m3	ND	0.92	12/14/11 10:03	
Trichloroethene	ug/m3	ND	0.55	12/14/11 10:03	
Trichlorofluoromethane	ug/m3	ND	1.1	12/14/11 10:03	
Vinyl acetate	ug/m3	ND	0.71	12/14/11 10:03	
Vinyl chloride	ug/m3	ND	0.26	12/14/11 10:03	

LABORATORY CONTROL SAMPLE: 1114983

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	45.9	83	66-133	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	64.9	93	70-140	
1,1,2-Trichloroethane	ug/m3	55.5	47.2	85	68-132	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	70.9	91	60-137	
1,1-Dichloroethane	ug/m3	41.2	35.3	86	65-131	
1,1-Dichloroethene	ug/m3	40.3	35.0	87	65-132	
1,2,4-Trichlorobenzene	ug/m3	75.5	208	276	30-150	CH,L3
1,2,4-Trimethylbenzene	ug/m3	50	44.7	89	69-140	
1,2-Dibromoethane (EDB)	ug/m3	78.1	68.3	87	71-139	
1,2-Dichlorobenzene	ug/m3	61.2	98.7	161	68-139	CH,L3
1,2-Dichloroethane	ug/m3	41.2	35.5	86	66-132	
1,2-Dichloropropane	ug/m3	47	37.4	80	69-130	
1,3,5-Trimethylbenzene	ug/m3	50	45.2	90	70-141	
1,3-Butadiene	ug/m3	22.5	18.6	83	68-128	
1,3-Dichlorobenzene	ug/m3	61.2	57.1	93	66-146	
1,4-Dichlorobenzene	ug/m3	61.2	57.9	95	66-142	
2-Butanone (MEK)	ug/m3	30	25.3	84	68-134	
2-Hexanone	ug/m3	41.7	33.4	80	70-144	
2-Propanol	ug/m3	23.8	18.9	80	66-139	
4-Ethyltoluene	ug/m3	50	43.5	87	65-145	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.7	34.5	83	70-139	
Acetone	ug/m3	24.2	18.2	75	56-142	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

LABORATORY CONTROL SAMPLE: 1114983

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/m3	32.5	29.0	89	69-129	
Benzyl chloride	ug/m3	52.5	46.2	88	68-138	
Bromodichloromethane	ug/m3	68.2	61.0	90	70-130	
Bromoform	ug/m3	105	112	106	67-147	
Bromomethane	ug/m3	39.5	31.8	81	67-127	
Carbon disulfide	ug/m3	31.7	26.7	84	65-131	
Carbon tetrachloride	ug/m3	64	49.7	78	62-137	
Chlorobenzene	ug/m3	46.8	39.6	85	72-133	
Chloroethane	ug/m3	26.8	21.4	80	66-127	
Chloroform	ug/m3	49.7	41.4	83	67-130	
Chloromethane	ug/m3	21	21.1	101	63-127	
cis-1,2-Dichloroethene	ug/m3	40.3	33.2	82	69-130	
cis-1,3-Dichloropropene	ug/m3	46.2	40.6	88	74-137	
Cyclohexane	ug/m3	35	32.7	93	69-137	
Dibromochloromethane	ug/m3	86.6	82.7	95	69-140	
Dichlorodifluoromethane	ug/m3	50.3	41.5	82	62-131	
Dichlorotetrafluoroethane	ug/m3	71.1	63.3	89	63-130	
Ethanol	ug/m3	19.2	15.9	83	63-135 SS	
Ethyl acetate	ug/m3	36.6	30.6	83	70-135	
Ethylbenzene	ug/m3	44.2	39.8	90	71-141	
Hexachloro-1,3-butadiene	ug/m3	108	332	306	30-150 CH,L3	
m&p-Xylene	ug/m3	88.3	84.7	96	68-144	
Methyl-tert-butyl ether	ug/m3	36.7	26.8	73	54-136	
Methylene Chloride	ug/m3	35.3	32.6	92	56-143	
n-Heptane	ug/m3	41.7	36.2	87	72-130	
n-Hexane	ug/m3	35.8	27.8	78	68-130	
Naphthalene	ug/m3	53.3	138	258	30-150 CH,L1	
o-Xylene	ug/m3	44.2	37.1	84	70-141	
Propylene	ug/m3	17.5	14.4	82	61-139	
Styrene	ug/m3	43.3	38.6	89	68-145	
Tetrachloroethene	ug/m3	69	62.3	90	64-142	
Tetrahydrofuran	ug/m3	30	22.9	76	70-134 SS	
THC as Gas	ug/m3	3030	2310	76	66-134	
Toluene	ug/m3	38.3	33.0	86	69-133	
trans-1,2-Dichloroethene	ug/m3	40.3	34.8	86	64-132	
trans-1,3-Dichloropropene	ug/m3	46.2	41.3	89	71-140	
Trichloroethene	ug/m3	54.6	49.5	91	68-132	
Trichlorofluoromethane	ug/m3	57.1	50.8	89	59-136	
Vinyl acetate	ug/m3	35.8	31.8	89	70-142	
Vinyl chloride	ug/m3	26	21.6	83	64-129	

SAMPLE DUPLICATE: 1115406

Parameter	Units	10177252001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	ND		25	
1,1,2-Trichloroethane	ug/m3	ND	ND		25	

Date: 12/22/2011 05:32 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

SAMPLE DUPLICATE: 1115406

Parameter	Units	10177252001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
1,2,4-Trichlorobenzene	ug/m3	ND	ND		25	
1,2,4-Trimethylbenzene	ug/m3	ND	ND		25	
1,2-Dibromoethane (EDB)	ug/m3	ND	ND		25	
1,2-Dichlorobenzene	ug/m3	ND	ND		25	
1,2-Dichloroethane	ug/m3	ND	ND		25	
1,2-Dichloropropane	ug/m3	ND	ND		25	
1,3,5-Trimethylbenzene	ug/m3	ND	ND		25	
1,3-Butadiene	ug/m3	ND	ND		25	
1,3-Dichlorobenzene	ug/m3	ND	ND		25	
1,4-Dichlorobenzene	ug/m3	ND	ND		25	
2-Butanone (MEK)	ug/m3	1.5	1.5	.8	25	
2-Hexanone	ug/m3	ND	ND		25	
2-Propanol	ug/m3	2.5	2.4J		25	
4-Ethyltoluene	ug/m3	ND	ND		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	ND		25	
Acetone	ug/m3	8.5	8.3	3	25	
Benzene	ug/m3	ND	ND		25	
Benzyl chloride	ug/m3	ND	ND		25	
Bromodichloromethane	ug/m3	ND	ND		25	
Bromoform	ug/m3	ND	ND		25	
Bromomethane	ug/m3	ND	ND		25	
Carbon disulfide	ug/m3	ND	ND		25	
Carbon tetrachloride	ug/m3	ND	ND		25	
Chlorobenzene	ug/m3	ND	ND		25	
Chloroethane	ug/m3	ND	ND		25	
Chloroform	ug/m3	ND	ND		25	
Chloromethane	ug/m3	0.59	0.54J		25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
cis-1,3-Dichloropropene	ug/m3	ND	ND		25	
Cyclohexane	ug/m3	ND	ND		25	
Dibromochloromethane	ug/m3	ND	ND		25	
Dichlorodifluoromethane	ug/m3	2.1	2.0	3	25	
Dichlorotetrafluoroethane	ug/m3	ND	ND		25	
Ethanol	ug/m3	5.0	5.0	.3	25	SS
Ethyl acetate	ug/m3	ND	ND		25	
Ethylbenzene	ug/m3	ND	ND		25	
Hexachloro-1,3-butadiene	ug/m3	ND	ND		25	
m&p-Xylene	ug/m3	ND	ND		25	
Methyl-tert-butyl ether	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	1.6	1.5	8	25	
n-Heptane	ug/m3	ND	ND		25	
n-Hexane	ug/m3	ND	ND		25	
Naphthalene	ug/m3	ND	ND		25	
o-Xylene	ug/m3	ND	ND		25	
Propylene	ug/m3	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.

9608 Loiret Blvd.

Lenexa, KS 66219

(913)599-5665

QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

SAMPLE DUPLICATE: 1115406

Parameter	Units	10177252001 Result	Dup Result	RPD	Max RPD	Qualifiers
Styrene	ug/m3	ND	ND		25	
Tetrachloroethene	ug/m3	ND	ND		25	
Tetrahydrofuran	ug/m3	ND	ND		25	
THC as Gas	ug/m3	ND	ND		25	
Toluene	ug/m3	0.68	0.68J		25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
trans-1,3-Dichloropropene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Trichlorofluoromethane	ug/m3	1.2	1.2J		25	
Vinyl acetate	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60111459

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

- | | |
|----|---|
| 1e | The sample was not collected in the appropriate container for headspace analysis. |
| A3 | The sample was analyzed by serial dilution. |
| CH | The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high. |
| D2 | Samples evaluated to 1/2 the reporting limit. |
| D3 | Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference. |
| E | Analyte concentration exceeded the calibration range. The reported result is estimated. |
| L1 | Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high. |
| L3 | Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias. |
| SS | This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value. |



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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60111459

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60111459001	DW-074922-120111-CM-46	RSK 175	AIR/13778		
60111459002	DW-074922-120111-CM-29	RSK 175	AIR/13778		
60111459003	DW-074922-120111-CM-D3	RSK 175	AIR/13778		
60111459004	PW-074922-120111-CM-202	RSK 175	AIR/13778		
60111459005	SW-074922-120211-CM-NAV	RSK 175	AIR/13789		
60111459006	PW-074922-120211-CM-204A	RSK 175	AIR/13789		
60111459007	PW-074922-120211-CM-25	RSK 175	AIR/13789		
60111459008	A-074922-120211-CM-29	TO-15	AIR/13823		
60111459009	A-074922-120211-CM-D3	TO-15	AIR/13833		
60111459010	A-074922-120211-CM-202	TO-15	AIR/13823		
60111459011	A-074922-120211-CM-2566	TO-15	AIR/13823		
60111459012	A-074922-120211-CM-204A	TO-15	AIR/13823		
60111459013	A-074922-120211-CM-25	TO-15	AIR/13823		
60111459014	A-074922-120211-CM-DUP	TO-15	AIR/13823		

Date: 12/22/2011 05:32 PM

REPORT OF LABORATORY ANALYSIS

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Section A

Required Client Information:

Company: CRA

Address: 6121 Indian School Rd NE, Ste 200

Albuquerque, NM 87110

Email to: cmathews@craworld.com

Phone: (505)884-0672	Fax: (505)884-4932
----------------------	--------------------

Requested Due Date/TAT: standard

Section B

Required Project Information:

Report To: Christine Mathews

Copy To: Kelly Blanchard; Angela Bown

Purchase Order No.:

Project Name: San Juan 32-8 No. 202

Project Number: 471000

Section C

Invoice Information:

Attention: ENFOS

Company Name:

Address:

Pace	Quote
1	1. The first quote is "I am not a doctor, I am a nurse."
2	2. The second quote is "I am not a doctor, I am a nurse."
3	3. The third quote is "I am not a doctor, I am a nurse."
4	4. The fourth quote is "I am not a doctor, I am a nurse."
5	5. The fifth quote is "I am not a doctor, I am a nurse."
6	6. The sixth quote is "I am not a doctor, I am a nurse."
7	7. The seventh quote is "I am not a doctor, I am a nurse."
8	8. The eighth quote is "I am not a doctor, I am a nurse."
9	9. The ninth quote is "I am not a doctor, I am a nurse."
10	10. The tenth quote is "I am not a doctor, I am a nurse."

Pace Project	Anna Custer
--------------	-------------

Pace Profile #:	5514 3
-----------------	--------

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER

UST

RCRA

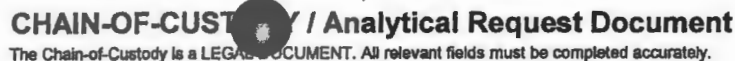
☐ OTHER

Site Location

NM

STATE:

[illegible]



Page: 2 of 2

Section C

Invoice information:

Company: CRA		Report To: Christine Mathews		Attention: ENFOS		REGULATORY AGENCY	
Address: 6121 Indian School Rd NE Ste 200		Copy To: Kelly Blanchard, Angela Brown		Company Name:			
Albuquerque, NM 87110				Address:		<input type="checkbox"/> NPDES <input checked="" type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
Email To: cmathews@craworld.com		Purchase Order No.:		Pace Quote Reference:		Site Location STATE: NM	
Phone: (505)884-0672 Fax: (505)884-4932		Project Name: San Juan 32-8 No. 202		Pace Project Manager: Anna Custer			
Requested Due Date/TAT: standard		Project Number: 074922		Pace Profile #: 5514, 3			

[illegible]

***Important Note:** By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.08, 12-Oct-2007



The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Company: CRA		Report To: Christine Mathews		Attention: ENFOS			
Address: 6121 Indian School Rd NE, Ste 200		Copy To: Kelly Blanchard, Angela Bown		Company Name:		REGULATORY AGENCY:	
Albuquerque, NM 87110				Address:		<input type="checkbox"/> NPDES <input checked="" type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER _____	
Email To: cmathews@craworld.com		Purchase Order No.:		Pace Quote Reference:		Site Location:	
Phone: (505)884-0672 Fax: (505)884-4932		Project Name: San Juan 32-8 No. 202		Pace Project Manager: Anna Custer		STATE: <u>NM</u>	
Requested Due Date/TAT: standard		Project Number: 574922		Pace Profile #: 5514, 3			

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WASTE WATER WT PRODUCT P SOIL/SOLID SL OIL OL WPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test ↓ Y/N ↑	Requested Analysis Filtered (Y/N)								Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.		
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$		Methanol	Other	EPA 8260 VOC's	EPA 8015B GRO	EPA 8015B DRO	EPA 6010 Diss. Metals**	SM 2540C TDS	EPA 300.0- Cl, Br, SO4			SM 2320B Bicarbonate	SM 4500S-2 F Sulfide
					DATE	TIME	DATE	TIME																					
1	A-074922-120211-CM-29	AR G					12.2.11	1120		1													X		015				
2	A-074922-120211-CM-D3	AR G					12.2.11	1135		1												X		016					
3	A-074922-120211-CM-2560	AR G					12.2.11	1100		1												X		017					
4	A-074922-120211-CM-202	AR G					12.2.11	1135		1												X		018					
5	A-074922-120211-CM-204A	AR G					12.2.11	1205		1												X		019					
6	A-074922-120211-CM-25	AR G					12.2.11	1010		1												X		020					
7	A-074922-120211-CM-dwp	AR G					12.2.11	1055		1												X		021					
8																													
9																													
10																													
11																													
12																													
ADDITIONAL COMMENTS					RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS												
Please report to Pace Analytical c/o Anna Custer					Cassie Brown / CRA FED EX		12.2.11 12/5/11		1445 913		DON TINGLESON		12/5/11		913														
SAMPLER NAME AND SIGNATURE										Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)													
PRINT Name of SAMPLER: Cassie Brown																													
SIGNATURE of SAMPLER: [Signature]										DATE Signed (MM/DD/YYYY): 12.2.11																			

***Important Note:** By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Please Report to Pale Analytical, Annalsider

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Page: 1 of 2	
Company: CRA		Report To: Christine Mathews		Attention: ENFOS		REGULATORY AGENCY	
Address: 6121 Indian School Rd NE, Ste 200 Albuquerque, NM 87110		Copy To: Kelly Blanchard, Angela Bown		Company Name:			
Email To: cmathews@craworld.com		Purchase Order No.:		Address:		<input type="checkbox"/> NPDES <input checked="" type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER	
Phone: (505)884-0672 Fax: (505)884-4932		Project Name: San Juan 32-8 No. 202		Price Quote Reference: Anna Custer		Site Location: NM	
Requested Due Date/TAT: standard		Project Number:		Price Profile #: 5514.3		STATE: NM	

[illegible]

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Please report to Pace Analytical Annex Custer

Page: 2 of 2[illegible]

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F-ALL-Q-020rev.08, 12-Oct-2007



Sample Condition Upon Receipt

Client Name: CRA NM Project # 6011459

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 898608913470

Pace Shipping Label Used? ☒ Yes ☐ No

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☒ Foam ☐ None ☐ Other

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None

☐ Samples on ice, cooling process has begun

Cooler Temperature: 04

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 12-3-11 BA

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. 2VOA with no label, maybe sample #3, Did not receive item #5+6 on Pg #2.
-Includes date/time/ID/analyses Matrix: <u>WT / AR</u>		
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: <u>VOA</u> coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased):		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
		17. List State: <u>h</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted:

Date/Time: 12/5/11

Comments/ Resolution: 12/5/11 - Client verified the 2 unlabeled vials are for D3 sample. No vials collected for MS/MSD or DUP on pg. 2.
12/5 - Tedlar for D3 rec'd in sub lab deflated. Per Christine - find the Summa from this sample to sub lab when finished w/ TO-15 in Minn.

Project Manager Review: ACU

Date: 12/5/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

January 06, 2012

Christine Matthews
CRA
6121 Indian School Rd NE
Suite 200
Albuquerque, NM 87110

RE: Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory between December 06, 2011 and December 28, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Amended report, Rev. #1: 01/06/2011 revised sample ID's on samples 004-009 to match client COC.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Anna Custer

anna.custer@pacelabs.com
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa
Angela Bown, COP Conestoga-Rovers & Associa



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60111560001	DW-074922-120111-CM-46	Water	12/01/11 09:45	12/06/11 09:15
60111560002	DW-074922-120111-CM-29	Water	12/01/11 11:50	12/06/11 09:15
60111560003	DW-074922-120111-CM-D3	Water	12/01/11 12:55	12/06/11 09:15
60111560004	PW-074922-120111-CM-202	Water	12/01/11 13:40	12/06/11 09:15
60111560005	PW-074922-120211-CM-DUP	Water	12/02/11 12:30	12/06/11 09:15
60111560006	SW-074922-120211-CM-NAV	Water	12/02/11 09:00	12/06/11 09:15
60111560007	PW-074922-120211-CM-204A	Water	12/02/11 12:15	12/06/11 09:15
60111560008	PW-074922-120211-CM-25	Water	12/02/11 10:30	12/06/11 09:15
60111560009	FB-074922-120211-CM-FB1	Water	12/02/11 13:00	12/06/11 09:15
60111560010	TB-074922-120511-001	Water	12/02/11 00:00	12/06/11 09:15
60111560011	LEVEL III DATA PACKAGE	Water	12/28/11 00:00	12/28/11 12:27

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SAMPLE ANALYTE COUNT

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60111560001	DW-074922-120111-CM-46	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM	70
		SM 2320B	AJM	2
		SM 2540C	BGM	1
		SM 4500-S-2 F	SRM1	1
		EPA 300.0	JML	3
60111560002	DW-074922-120111-CM-29	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM	70
		SM 2320B	AJM	2
		SM 2540C	BGM	1
		SM 4500-S-2 F	SRM1	1
		EPA 300.0	JML	3
60111560003	DW-074922-120111-CM-D3	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM	70
		SM 2320B	AJM	2
		SM 2540C	BGM	1
		SM 4500-S-2 F	SRM1	1
		EPA 300.0	JML	3
60111560004	PW-074922-120111-CM-202	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM	70
		EPA 8260	JDM	1
		SM 2320B	AJM	2
		SM 2540C	BGM	1
		SM 4500-S-2 F	SRM1	1
60111560005	PW-074922-120211-CM-DUP	EPA 300.0	JML	3
		EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM, JTS	70

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SAMPLE ANALYTE COUNT

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60111560006	SW-074922-120211-CM-NAV	EPA 8260	JDM	1
		SM 2320B	AJM	2
		SM 2540C	BGM	1
		SM 4500-S-2 F	SRM1	1
		EPA 300.0	JML	3
		EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM	70
		EPA 8260	JDM	1
		SM 2320B	AJM	2
		SM 2540C	BGM	1
		SM 4500-S-2 F	SRM1	1
		EPA 300.0	JML	3
		EPA 8015B	SDR	3
60111560007	PW-074922-120211-CM-204A	EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM, JTS	70
		EPA 8260	JDM	1
		SM 2320B	AJM	2
		SM 2540C	BGM	1
		SM 4500-S-2 F	SRM1	1
		EPA 300.0	JML	3
		EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM, JTS	70
		EPA 8260	JDM	1
		SM 2320B	AJM	2
		SM 2540C	BGM	1
60111560008	PW-074922-120211-CM-25	SM 4500-S-2 F	SRM1	1
		EPA 300.0	JML	3
		EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 6010	JGP	5
		EPA 5030B/8260	JDM, JTS	70
		EPA 8260	JDM	1
		SM 2320B	AJM	2
		SM 2540C	BGM	1
		SM 4500-S-2 F	SRM1	1
		EPA 300.0	JML	3
		EPA 5030B/8260	JDM	70
		EPA 8260	JTS	9
60111560009	FB-074922-120211-CM-FB1			
60111560010	TB-074922-120511-001			

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Method: EPA 8015B
Description: 8015B Diesel Range Organics
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

8 samples were analyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: OEXT/31413

S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

- PW-074922-120211-CM-204A (Lab ID: 60111560007)
 - n-Tetracosane (S)
 - p-Terphenyl (S)
- PW-074922-120211-CM-DUP (Lab ID: 60111560005)
 - n-Tetracosane (S)
 - p-Terphenyl (S)

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- PW-074922-120211-CM-25 (Lab ID: 60111560008)
 - n-Tetracosane (S)
 - p-Terphenyl (S)

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Method: EPA 8015B

Description: 8015B Diesel Range Organics

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: January 06, 2012

Additional Comments:

Analyte Comments:

QC Batch: OEXT/31413

D4: Sample was diluted due to the presence of high levels of target analytes.

- PW-074922-120211-CM-25 (Lab ID: 60111560008)
- p-Terphenyl (S)

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Method: EPA 5030B/8015B
Description: Gasoline Range Organics
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

8 samples were analyzed for EPA 5030B/8015B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.

- PW-074922-120111-CM-202 (Lab ID: 60111560004)
- PW-074922-120211-CM-204A (Lab ID: 60111560007)
- PW-074922-120211-CM-25 (Lab ID: 60111560008)
- PW-074922-120211-CM-DUP (Lab ID: 60111560005)
- SW-074922-120211-CM-NAV (Lab ID: 60111560006)

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: GCV/3966

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Method: EPA 5030B/8015B
Description: Gasoline Range Organics
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

Analyte Comments:

QC Batch: GCV/3971

- B: Analyte was detected in the associated method blank.
- PW-074922-120111-CM-202 (Lab ID: 60111560004)
 - TPH-GRO
 - PW-074922-120211-CM-204A (Lab ID: 60111560007)
 - TPH-GRO
 - PW-074922-120211-CM-25 (Lab ID: 60111560008)
 - TPH-GRO
 - PW-074922-120211-CM-DUP (Lab ID: 60111560005)
 - TPH-GRO
 - SW-074922-120211-CM-NAV (Lab ID: 60111560006)
 - TPH-GRO

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Method: EPA 6010
Description: 6010 MET ICP, Dissolved
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

8 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/16421

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60111560007

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 925634)
 - Sodium, Dissolved
- MSD (Lab ID: 925635)
 - Sodium, Dissolved

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Method: EPA 5030B/8260
Description: 8260 MSV
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

9 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.

- PW-074922-120111-CM-202 (Lab ID: 60111560004)
- PW-074922-120211-CM-204A (Lab ID: 60111560007)
- PW-074922-120211-CM-25 (Lab ID: 60111560008)
- PW-074922-120211-CM-DUP (Lab ID: 60111560005)

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/42327

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60111560007

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 923174)
- Toluene

QC Batch: MSV/42527

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Method: EPA 5030B/8260
Description: 8260 MSV
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

Additional Comments:

Analyte Comments:

QC Batch: MSV/42327

B: Analyte was detected in the associated method blank.

- FB-074922-120211-CM-FB1 (Lab ID: 60111560009)
 - 1,2,4-Trimethylbenzene
- PW-074922-120211-CM-204A (Lab ID: 60111560007)
 - 1,2,4-Trimethylbenzene
- PW-074922-120211-CM-DUP (Lab ID: 60111560005)
 - 1,2,4-Trimethylbenzene
- SW-074922-120211-CM-NAV (Lab ID: 60111560006)
 - 1,2,4-Trimethylbenzene

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Method: EPA 8260
Description: 8260 MSV GRO and Oxygenates
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

5 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Method: EPA 8260
Description: 8260 MSV UST, Water
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/42321

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Method: SM 2320B

Description: 2320B Alkalinity

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: January 06, 2012

General Information:

8 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Method: SM 2540C

Description: 2540C Total Dissolved Solids

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: January 06, 2012

General Information:

8 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H5: Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.

• PW-074922-120211-CM-DUP (Lab ID: 60111560005)

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WET/32477

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

• PW-074922-120211-CM-DUP (Lab ID: 60111560005)

• Total Dissolved Solids

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Method: SM 4500-S-2 F

Description: 4500S2F Sulfide, Iodometric

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: January 06, 2012

General Information:

8 samples were analyzed for SM 4500-S-2 F. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Method: EPA 300.0

Description: 300.0 IC Anions 28 Days

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: January 06, 2012

General Information:

8 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/18657

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60111334002,60111380002

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 926247)
 - Sulfate
- MS (Lab ID: 926249)
 - Sulfate

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WETA/18657

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- PW-074922-120211-CM-DUP (Lab ID: 60111560005)
 - Bromide

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: DW-074922-120111-CM-46 Lab ID: 60111560001 Collected: 12/01/11 09:45 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	ND	mg/L	0.50	0.097	1	12/08/11 00:00	12/14/11 21:42		
Surrogates									
p-Terphenyl (S)	64 %		40-118		1	12/08/11 00:00	12/14/11 21:42	92-94-4	
n-Tetracosane (S)	67 %		36-120		1	12/08/11 00:00	12/14/11 21:42	646-31-1	
Gasoline Range Organics Analytical Method: EPA 5030B/8015B									
TPH-GRO	0.039J	mg/L	0.50	0.025	1		12/10/11 01:19		
Surrogates									
4-Bromofluorobenzene (S)	94 %		63-139		1		12/10/11 01:19	460-00-4	
Preservation pH	1.0				1		12/10/11 01:19		
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	255	ug/L	200	4.6	2	12/13/11 15:20	12/15/11 18:13	7440-42-8	
Calcium, Dissolved	297000	ug/L	200	14.2	2	12/13/11 15:20	12/15/11 18:13	7440-70-2	
Magnesium, Dissolved	9410	ug/L	100	20.0	2	12/13/11 15:20	12/15/11 18:13	7439-95-4	
Potassium, Dissolved	4290	ug/L	1000	127	2	12/13/11 15:20	12/15/11 18:13	7440-09-7	
Sodium, Dissolved	1110000	ug/L	2500	71.0	5	12/13/11 15:20	12/15/11 18:10	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	ND	ug/L	10.0	2.2	1		12/08/11 11:12	67-64-1	
Benzene	ND	ug/L	1.0	0.070	1		12/08/11 11:12	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.064	1		12/08/11 11:12	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.10	1		12/08/11 11:12	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		12/08/11 11:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.15	1		12/08/11 11:12	75-25-2	
Bromomethane	ND	ug/L	1.0	0.22	1		12/08/11 11:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.41	1		12/08/11 11:12	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 11:12	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.047	1		12/08/11 11:12	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.066	1		12/08/11 11:12	98-06-6	
Carbon disulfide	0.72J	ug/L	5.0	0.053	1		12/08/11 11:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.23	1		12/08/11 11:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.093	1		12/08/11 11:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.19	1		12/08/11 11:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.087	1		12/08/11 11:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.24	1		12/08/11 11:12	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.19	1		12/08/11 11:12	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.12	1		12/08/11 11:12	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.66	1		12/08/11 11:12	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.091	1		12/08/11 11:12	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.13	1		12/08/11 11:12	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.12	1		12/08/11 11:12	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.077	1		12/08/11 11:12	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.068	1		12/08/11 11:12	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.072	1		12/08/11 11:12	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		12/08/11 11:12	75-71-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: DW-074922-120111-CM-46 Lab ID: 60111560001 Collected: 12/01/11 09:45 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		12/08/11 11:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		12/08/11 11:12	107-06-2	
1,2-Dichloroethane (Total)	ND	ug/L	1.0	0.12	1		12/08/11 11:12	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		12/08/11 11:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		12/08/11 11:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		12/08/11 11:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		12/08/11 11:12	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		12/08/11 11:12	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		12/08/11 11:12	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		12/08/11 11:12	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		12/08/11 11:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		12/08/11 11:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 11:12	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		12/08/11 11:12	87-68-3	
2-Hexanone	ND	ug/L	10.0	0.50	1		12/08/11 11:12	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.069	1		12/08/11 11:12	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.065	1		12/08/11 11:12	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		12/08/11 11:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.33	1		12/08/11 11:12	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		12/08/11 11:12	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.14	1		12/08/11 11:12	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.071	1		12/08/11 11:12	103-65-1	
Styrene	ND	ug/L	1.0	0.080	1		12/08/11 11:12	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 11:12	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 11:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.073	1		12/08/11 11:12	127-18-4	
Toluene	ND	ug/L	1.0	0.064	1		12/08/11 11:12	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		12/08/11 11:12	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		12/08/11 11:12	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		12/08/11 11:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		12/08/11 11:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		12/08/11 11:12	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		12/08/11 11:12	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		12/08/11 11:12	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.060	1		12/08/11 11:12	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.094	1		12/08/11 11:12	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		12/08/11 11:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.15	1		12/08/11 11:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95 %		87-113		1		12/08/11 11:12	460-00-4	
Dibromofluoromethane (S)	99 %		86-112		1		12/08/11 11:12	1868-53-7	
1,2-Dichloroethane-d4 (S)	89 %		82-119		1		12/08/11 11:12	17060-07-0	
Toluene-d8 (S)	103 %		90-110		1		12/08/11 11:12	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		12/08/11 11:12		

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: DW-074922-120111-CM-46 Lab ID: 60111560001 Collected: 12/01/11 09:45 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity Analytical Method: SM 2320B									
Alkalinity, Bicarbonate (CaCO ₃)	126	mg/L	20.0	3.8	1		12/15/11 14:30		
Alkalinity, Total as CaCO ₃	126	mg/L	20.0	3.8	1		12/15/11 14:30		
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	3930	mg/L	5.0	5.0	1		12/08/11 08:13		
4500S2F Sulfide, Iodometric Analytical Method: SM 4500-S-2 F									
Sulfide	ND	mg/L	0.50	0.23	1		12/08/11 16:50	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Bromide	2.6	mg/L	1.0	0.061	1		12/15/11 14:09	24959-67-9	
Chloride	4.8	mg/L	1.0	0.054	1		12/15/11 14:09	16887-00-6	
Sulfate	3310	mg/L	200	15.2	200		12/16/11 09:33	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Sample: DW-074922-120111-CM-29 Lab ID: 60111560002 Collected: 12/01/11 11:50 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	ND	mg/L	0.50	0.097	1	12/08/11 00:00	12/14/11 21:54		
Surrogates									
p-Terphenyl (S)	59 %		40-118		1	12/08/11 00:00	12/14/11 21:54	92-94-4	
n-Tetracosane (S)	60 %		36-120		1	12/08/11 00:00	12/14/11 21:54	646-31-1	
Gasoline Range Organics Analytical Method: EPA 5030B/8015B									
TPH-GRO	0.027J	mg/L	0.50	0.025	1		12/10/11 01:42		
Surrogates									
4-Bromofluorobenzene (S)	95 %		63-139		1		12/10/11 01:42	460-00-4	
Preservation pH	1.0				1		12/10/11 01:42		
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	164	ug/L	100	2.3	1	12/13/11 15:20	12/15/11 18:28	7440-42-8	
Calcium, Dissolved	414000	ug/L	100	7.1	1	12/13/11 15:20	12/15/11 18:28	7440-70-2	
Magnesium, Dissolved	9590	ug/L	50.0	10.0	1	12/13/11 15:20	12/15/11 18:28	7439-95-4	
Potassium, Dissolved	5340	ug/L	500	63.4	1	12/13/11 15:20	12/15/11 18:28	7440-09-7	
Sodium, Dissolved	684000	ug/L	2500	71.0	5	12/13/11 15:20	12/15/11 18:17	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	ND	ug/L	10.0	2.2	1		12/08/11 11:28	67-64-1	
Benzene	ND	ug/L	1.0	0.070	1		12/08/11 11:28	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.064	1		12/08/11 11:28	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.10	1		12/08/11 11:28	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		12/08/11 11:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.15	1		12/08/11 11:28	75-25-2	
Bromomethane	ND	ug/L	1.0	0.22	1		12/08/11 11:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.41	1		12/08/11 11:28	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 11:28	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.047	1		12/08/11 11:28	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.066	1		12/08/11 11:28	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.053	1		12/08/11 11:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.23	1		12/08/11 11:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.093	1		12/08/11 11:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.19	1		12/08/11 11:28	75-00-3	
Chloroform	3.1	ug/L	1.0	0.087	1		12/08/11 11:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.24	1		12/08/11 11:28	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.19	1		12/08/11 11:28	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.12	1		12/08/11 11:28	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.66	1		12/08/11 11:28	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.091	1		12/08/11 11:28	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.13	1		12/08/11 11:28	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.12	1		12/08/11 11:28	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.077	1		12/08/11 11:28	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.068	1		12/08/11 11:28	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.072	1		12/08/11 11:28	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		12/08/11 11:28	75-71-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: DW-074922-120111-CM-29 Lab ID: 60111560002 Collected: 12/01/11 11:50 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		12/08/11 11:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		12/08/11 11:28	107-06-2	
1,2-Dichloroethane (Total)	ND	ug/L	1.0	0.12	1		12/08/11 11:28	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		12/08/11 11:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		12/08/11 11:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		12/08/11 11:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		12/08/11 11:28	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		12/08/11 11:28	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		12/08/11 11:28	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		12/08/11 11:28	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		12/08/11 11:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		12/08/11 11:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 11:28	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		12/08/11 11:28	87-68-3	
2-Hexanone	ND	ug/L	10.0	0.50	1		12/08/11 11:28	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.069	1		12/08/11 11:28	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.065	1		12/08/11 11:28	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		12/08/11 11:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.33	1		12/08/11 11:28	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		12/08/11 11:28	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.14	1		12/08/11 11:28	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.071	1		12/08/11 11:28	103-65-1	
Styrene	ND	ug/L	1.0	0.080	1		12/08/11 11:28	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 11:28	630-20-6	
1,1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 11:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.073	1		12/08/11 11:28	127-18-4	
Toluene	ND	ug/L	1.0	0.064	1		12/08/11 11:28	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		12/08/11 11:28	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		12/08/11 11:28	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		12/08/11 11:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		12/08/11 11:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		12/08/11 11:28	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		12/08/11 11:28	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		12/08/11 11:28	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.060	1		12/08/11 11:28	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.094	1		12/08/11 11:28	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		12/08/11 11:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.15	1		12/08/11 11:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95 %		87-113		1		12/08/11 11:28	460-00-4	
Dibromofluoromethane (S)	100 %		86-112		1		12/08/11 11:28	1868-53-7	
1,2-Dichloroethane-d4 (S)	89 %		82-119		1		12/08/11 11:28	17060-07-0	
Toluene-d8 (S)	102 %		90-110		1		12/08/11 11:28	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		12/08/11 11:28		

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: DW-074922-120111-CM-29 Lab ID: 60111560002 Collected: 12/01/11 11:50 Received: 12/06/11 09:15 Matrix: Water									
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity Analytical Method: SM 2320B									
Alkalinity, Bicarbonate (CaCO ₃)	184	mg/L	20.0	3.8	1		12/15/11 14:30		
Alkalinity, Total as CaCO ₃	184	mg/L	20.0	3.8	1		12/15/11 14:30		
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	2620	mg/L	5.0	5.0	1		12/08/11 08:14		
4500S2F Sulfide, Iodometric Analytical Method: SM 4500-S-2 F									
Sulfide	ND	mg/L	0.50	0.23	1		12/08/11 16:50	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Bromide	0.39J	mg/L	1.0	0.061	1		12/15/11 17:02	24959-67-9	
Chloride	5.6	mg/L	1.0	0.054	1		12/15/11 17:02	16887-00-6	
Sulfate	2240	mg/L	200	15.2	200		12/16/11 09:49	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: DW-074922-120111-CM-D3 Lab ID: 60111560003 Collected: 12/01/11 12:55 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	ND	mg/L	0.50	0.097	1	12/08/11 00:00	12/14/11 22:05		
Surrogates									
p-Terphenyl (S)	60 %		40-118		1	12/08/11 00:00	12/14/11 22:05	92-94-4	
n-Tetracosane (S)	61 %		36-120		1	12/08/11 00:00	12/14/11 22:05	646-31-1	
Gasoline Range Organics Analytical Method: EPA 5030B/8015B									
TPH-GRO	0.027J	mg/L	0.50	0.025	1		12/10/11 02:04		
Surrogates									
4-Bromofluorobenzene (S)	96 %		63-139		1		12/10/11 02:04	460-00-4	
Preservation pH	1.0				1		12/10/11 02:04		
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	84.8J	ug/L	100	2.3	1	12/13/11 15:20	12/15/11 18:32	7440-42-8	
Calcium, Dissolved	106000	ug/L	100	7.1	1	12/13/11 15:20	12/15/11 18:32	7440-70-2	
Magnesium, Dissolved	3160	ug/L	50.0	10.0	1	12/13/11 15:20	12/15/11 18:32	7439-95-4	
Potassium, Dissolved	1650	ug/L	500	63.4	1	12/13/11 15:20	12/15/11 18:32	7440-09-7	
Sodium, Dissolved	169000	ug/L	500	14.2	1	12/13/11 15:20	12/15/11 18:32	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	ND	ug/L	10.0	2.2	1		12/08/11 11:43	67-64-1	
Benzene	ND	ug/L	1.0	0.070	1		12/08/11 11:43	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.064	1		12/08/11 11:43	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.10	1		12/08/11 11:43	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		12/08/11 11:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.15	1		12/08/11 11:43	75-25-2	
Bromomethane	ND	ug/L	1.0	0.22	1		12/08/11 11:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.41	1		12/08/11 11:43	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 11:43	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.047	1		12/08/11 11:43	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.066	1		12/08/11 11:43	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.053	1		12/08/11 11:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.23	1		12/08/11 11:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.093	1		12/08/11 11:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.19	1		12/08/11 11:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.087	1		12/08/11 11:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.24	1		12/08/11 11:43	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.19	1		12/08/11 11:43	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.12	1		12/08/11 11:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.66	1		12/08/11 11:43	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.091	1		12/08/11 11:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.13	1		12/08/11 11:43	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.12	1		12/08/11 11:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.077	1		12/08/11 11:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.068	1		12/08/11 11:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.072	1		12/08/11 11:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		12/08/11 11:43	75-71-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Sample: DW-074922-120111-CM-D3 Lab ID: 60111560003 Collected: 12/01/11 12:55 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
1,1-Dichloroethane	ND ug/L		1.0	0.079	1		12/08/11 11:43	75-34-3	
1,2-Dichloroethane	ND ug/L		1.0	0.080	1		12/08/11 11:43	107-06-2	
1,2-Dichloroethene (Total)	ND ug/L		1.0	0.12	1		12/08/11 11:43	540-59-0	
1,1-Dichloroethene	ND ug/L		1.0	0.13	1		12/08/11 11:43	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		1.0	0.086	1		12/08/11 11:43	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		1.0	0.085	1		12/08/11 11:43	156-60-5	
1,2-Dichloropropane	ND ug/L		1.0	0.045	1		12/08/11 11:43	78-87-5	
1,3-Dichloropropane	ND ug/L		1.0	0.097	1		12/08/11 11:43	142-28-9	
2,2-Dichloropropane	ND ug/L		1.0	0.11	1		12/08/11 11:43	594-20-7	
1,1-Dichloropropene	ND ug/L		1.0	0.088	1		12/08/11 11:43	563-58-6	
cis-1,3-Dichloropropene	ND ug/L		1.0	0.066	1		12/08/11 11:43	10061-01-5	
trans-1,3-Dichloropropene	ND ug/L		1.0	0.080	1		12/08/11 11:43	10061-02-6	
Ethylbenzene	ND ug/L		1.0	0.078	1		12/08/11 11:43	100-41-4	
Hexachloro-1,3-butadiene	ND ug/L		1.0	0.11	1		12/08/11 11:43	87-68-3	
2-Hexanone	ND ug/L		10.0	0.50	1		12/08/11 11:43	591-78-6	
Isopropylbenzene (Cumene)	ND ug/L		1.0	0.069	1		12/08/11 11:43	98-82-8	
p-Isopropyltoluene	ND ug/L		1.0	0.065	1		12/08/11 11:43	99-87-6	
Methylene chloride	ND ug/L		1.0	0.12	1		12/08/11 11:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L		10.0	0.33	1		12/08/11 11:43	108-10-1	
Methyl-tert-butyl ether	ND ug/L		1.0	0.077	1		12/08/11 11:43	1634-04-4	
Naphthalene	ND ug/L		10.0	0.14	1		12/08/11 11:43	91-20-3	
n-Propylbenzene	ND ug/L		1.0	0.071	1		12/08/11 11:43	103-65-1	
Styrene	ND ug/L		1.0	0.080	1		12/08/11 11:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND ug/L		1.0	0.12	1		12/08/11 11:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND ug/L		1.0	0.12	1		12/08/11 11:43	79-34-5	
Tetrachloroethene	ND ug/L		1.0	0.073	1		12/08/11 11:43	127-18-4	
Toluene	ND ug/L		1.0	0.064	1		12/08/11 11:43	108-88-3	
1,2,3-Trichlorobenzene	ND ug/L		1.0	0.11	1		12/08/11 11:43	87-61-6	
1,2,4-Trichlorobenzene	ND ug/L		1.0	0.10	1		12/08/11 11:43	120-82-1	
1,1,1-Trichloroethane	ND ug/L		1.0	0.13	1		12/08/11 11:43	71-55-6	
1,1,2-Trichloroethane	ND ug/L		1.0	0.15	1		12/08/11 11:43	79-00-5	
Trichloroethene	ND ug/L		1.0	0.064	1		12/08/11 11:43	79-01-6	
Trichlorofluoromethane	ND ug/L		1.0	0.064	1		12/08/11 11:43	75-69-4	
1,2,3-Trichloropropane	ND ug/L		2.5	0.36	1		12/08/11 11:43	96-18-4	
1,2,4-Trimethylbenzene	ND ug/L		1.0	0.060	1		12/08/11 11:43	95-63-6	
1,3,5-Trimethylbenzene	ND ug/L		1.0	0.094	1		12/08/11 11:43	108-67-8	
Vinyl chloride	ND ug/L		1.0	0.068	1		12/08/11 11:43	75-01-4	
Xylene (Total)	ND ug/L		3.0	0.15	1		12/08/11 11:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95 %		87-113		1		12/08/11 11:43	460-00-4	
Dibromofluoromethane (S)	99 %		86-112		1		12/08/11 11:43	1868-53-7	
1,2-Dichloroethane-d4 (S)	88 %		82-119		1		12/08/11 11:43	17060-07-0	
Toluene-d8 (S)	101 %		90-110		1		12/08/11 11:43	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		12/08/11 11:43		

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: DW-074922-120111-CM-D3 Lab ID: 60111560003 Collected: 12/01/11 12:55 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Bicarbonate (CaCO ₃)	242	mg/L	20.0	3.8	1		12/15/11 14:30		
Alkalinity, Total as CaCO ₃	242	mg/L	20.0	3.8	1		12/15/11 14:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	800	mg/L	5.0	5.0	1		12/08/11 08:15		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S-2 F								
Sulfide	ND	mg/L	0.50	0.23	1		12/08/11 16:50	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Bromide	ND	mg/L	1.0	0.061	1		12/15/11 17:35	24959-67-9	
Chloride	5.6	mg/L	1.0	0.054	1		12/15/11 17:35	16887-00-6	
Sulfate	396	mg/L	50.0	3.8	50		12/14/11 22:30	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120111-CM-202 Lab ID: 60111560004 Collected: 12/01/11 13:40 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	9.6 mg/L		0.50	0.097	1	12/08/11 00:00	12/14/11 22:16		
Surrogates									
p-Terphenyl (S)	74 %		40-118		1	12/08/11 00:00	12/14/11 22:16	92-94-4	
n-Tetracosane (S)	80 %		36-120		1	12/08/11 00:00	12/14/11 22:16	646-31-1	
Gasoline Range Organics Analytical Method: EPA 5030B/8015B									
TPH-GRO	0.030J mg/L		0.50	0.025	1		12/20/11 11:40		B,H1
Surrogates									
4-Bromofluorobenzene (S)	86 %		63-139		1		12/20/11 11:40	460-00-4	
Preservation pH	1.0				1		12/20/11 11:40		H1
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	1800 ug/L		1000	23.0	10	12/13/11 15:20	12/15/11 18:35	7440-42-8	
Calcium, Dissolved	12000 ug/L		1000	71.0	10	12/13/11 15:20	12/15/11 18:35	7440-70-2	
Magnesium, Dissolved	10800 ug/L		500	100	10	12/13/11 15:20	12/15/11 18:35	7439-95-4	
Potassium, Dissolved	13000 ug/L		5000	634	10	12/13/11 15:20	12/15/11 18:35	7440-09-7	
Sodium, Dissolved	2940000 ug/L		5000	142	10	12/13/11 15:20	12/15/11 18:35	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	ND ug/L		10.0	2.2	1		12/08/11 11:59	67-64-1	
Benzene	ND ug/L		1.0	0.070	1		12/08/11 11:59	71-43-2	
Bromobenzene	ND ug/L		1.0	0.064	1		12/08/11 11:59	108-86-1	
Bromochloromethane	ND ug/L		1.0	0.10	1		12/08/11 11:59	74-97-5	
Bromodichloromethane	ND ug/L		1.0	0.11	1		12/08/11 11:59	75-27-4	
Bromoform	ND ug/L		1.0	0.15	1		12/08/11 11:59	75-25-2	
Bromomethane	ND ug/L		1.0	0.22	1		12/08/11 11:59	74-83-9	
2-Butanone (MEK)	1.2J ug/L		10.0	0.41	1		12/08/11 11:59	78-93-3	
n-Butylbenzene	ND ug/L		1.0	0.078	1		12/08/11 11:59	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	0.047	1		12/08/11 11:59	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	0.066	1		12/08/11 11:59	98-06-6	
Carbon disulfide	ND ug/L		5.0	0.053	1		12/08/11 11:59	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	0.23	1		12/08/11 11:59	56-23-5	
Chlorobenzene	ND ug/L		1.0	0.093	1		12/08/11 11:59	108-90-7	
Chloroethane	ND ug/L		1.0	0.19	1		12/08/11 11:59	75-00-3	
Chloroform	ND ug/L		1.0	0.087	1		12/08/11 11:59	67-66-3	
Chloromethane	ND ug/L		1.0	0.24	1		12/08/11 11:59	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	0.19	1		12/08/11 11:59	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	0.12	1		12/08/11 11:59	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	0.66	1		12/08/11 11:59	96-12-8	
Dibromochloromethane	ND ug/L		1.0	0.091	1		12/08/11 11:59	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	0.13	1		12/08/11 11:59	106-93-4	
Dibromomethane	ND ug/L		1.0	0.12	1		12/08/11 11:59	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	0.077	1		12/08/11 11:59	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	0.068	1		12/08/11 11:59	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	0.072	1		12/08/11 11:59	106-46-7	
Dichlorodifluoromethane	ND ug/L		1.0	0.15	1		12/08/11 11:59	75-71-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120111-CM-202 Lab ID: 60111560004 Collected: 12/01/11 13:40 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		12/08/11 11:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		12/08/11 11:59	107-06-2	
1,2-Dichloroethane (Total)	ND	ug/L	1.0	0.12	1		12/08/11 11:59	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		12/08/11 11:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		12/08/11 11:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		12/08/11 11:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		12/08/11 11:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		12/08/11 11:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		12/08/11 11:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		12/08/11 11:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		12/08/11 11:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		12/08/11 11:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 11:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		12/08/11 11:59	87-68-3	
2-Hexanone	ND	ug/L	10.0	0.50	1		12/08/11 11:59	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.069	1		12/08/11 11:59	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.065	1		12/08/11 11:59	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		12/08/11 11:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.33	1		12/08/11 11:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		12/08/11 11:59	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.14	1		12/08/11 11:59	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.071	1		12/08/11 11:59	103-65-1	
Styrene	ND	ug/L	1.0	0.080	1		12/08/11 11:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 11:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 11:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.073	1		12/08/11 11:59	127-18-4	
Toluene	ND	ug/L	1.0	0.064	1		12/08/11 11:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		12/08/11 11:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		12/08/11 11:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		12/08/11 11:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		12/08/11 11:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		12/08/11 11:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		12/08/11 11:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		12/08/11 11:59	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.060	1		12/08/11 11:59	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.094	1		12/08/11 11:59	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		12/08/11 11:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.15	1		12/08/11 11:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98 %		87-113		1		12/08/11 11:59	460-00-4	
Dibromofluoromethane (S)	102 %		86-112		1		12/08/11 11:59	1868-53-7	
1,2-Dichloroethane-d4 (S)	97 %		82-119		1		12/08/11 11:59	17060-07-0	
Toluene-d8 (S)	101 %		90-110		1		12/08/11 11:59	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		12/08/11 11:59		pH

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120111-CM-202 Lab ID: 60111560004 Collected: 12/01/11 13:40 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates Analytical Method: EPA 8260									
TPH-GRO	ND	ug/L	500	48.0	1		12/08/11 11:59		
2320B Alkalinity Analytical Method: SM 2320B									
Alkalinity, Bicarbonate (CaCO ₃)	5400	mg/L	20.0	3.8	1		12/15/11 14:30		
Alkalinity, Total as CaCO ₃	5400	mg/L	20.0	3.8	1		12/15/11 14:30		
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	8160	mg/L	5.0	5.0	1		12/08/11 08:15		
4500S2F Sulfide, Iodometric Analytical Method: SM 4500-S-2 F									
Sulfide	ND	mg/L	0.50	0.23	1		12/08/11 16:50	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Bromide	12.3	mg/L	5.0	0.30	5		12/16/11 11:45	24959-67-9	
Chloride	1530	mg/L	100	5.4	100		12/15/11 18:08	16887-00-6	
Sulfate	0.52J	mg/L	1.0	0.076	1		12/15/11 17:51	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-DUP Lab ID: 60111560005 Collected: 12/02/11 12:30 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	16.8 mg/L		2.5	0.48	5	12/08/11 00:00	12/14/11 22:28		
Surrogates									
p-Terphenyl (S)	60 %		40-118		5	12/08/11 00:00	12/14/11 22:28	92-94-4	S2
n-Tetracosane (S)	69 %		36-120		5	12/08/11 00:00	12/14/11 22:28	646-31-1	S2
Gasoline Range Organics Analytical Method: EPA 5030B/8015B									
TPH-GRO	1.6 mg/L		0.50	0.025	1		12/20/11 12:03		B,H1
Surrogates									
4-Bromofluorobenzene (S)	72 %		63-139		1		12/20/11 12:03	460-00-4	
Preservation pH	1.0				1		12/20/11 12:03		H1
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	2090 ug/L		2000	46.0	20	12/13/11 15:20	12/15/11 18:39	7440-42-8	
Calcium, Dissolved	14100 ug/L		2000	142	20	12/13/11 15:20	12/15/11 18:39	7440-70-2	
Magnesium, Dissolved	14000 ug/L		1000	200	20	12/13/11 15:20	12/15/11 18:39	7439-95-4	
Potassium, Dissolved	41600 ug/L		10000	1270	20	12/13/11 15:20	12/15/11 18:39	7440-09-7	
Sodium, Dissolved	3270000 ug/L		10000	284	20	12/13/11 15:20	12/15/11 18:39	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	43.3 ug/L		10.0	3.4	1		12/15/11 18:21	67-64-1	
Benzene	97.8 ug/L		1.0	0.070	1		12/08/11 12:14	71-43-2	
Bromobenzene	ND ug/L		1.0	0.064	1		12/08/11 12:14	108-86-1	
Bromochloromethane	ND ug/L		1.0	0.10	1		12/08/11 12:14	74-97-5	
Bromodichloromethane	ND ug/L		1.0	0.11	1		12/08/11 12:14	75-27-4	
Bromoform	ND ug/L		1.0	0.15	1		12/08/11 12:14	75-25-2	
Bromomethane	ND ug/L		1.0	0.22	1		12/08/11 12:14	74-83-9	
2-Butanone (MEK)	ND ug/L		10.0	0.41	1		12/08/11 12:14	78-93-3	
n-Butylbenzene	1.2 ug/L		1.0	0.078	1		12/08/11 12:14	104-51-8	
sec-Butylbenzene	0.15J ug/L		1.0	0.047	1		12/08/11 12:14	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	0.066	1		12/08/11 12:14	98-06-6	
Carbon disulfide	ND ug/L		5.0	0.053	1		12/08/11 12:14	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	0.23	1		12/08/11 12:14	56-23-5	
Chlorobenzene	ND ug/L		1.0	0.093	1		12/08/11 12:14	108-90-7	
Chloroethane	ND ug/L		1.0	0.19	1		12/08/11 12:14	75-00-3	
Chloroform	ND ug/L		1.0	0.087	1		12/08/11 12:14	67-66-3	
Chloromethane	ND ug/L		1.0	0.24	1		12/08/11 12:14	74-87-3	
2-Chlorotoluene	0.73J ug/L		1.0	0.19	1		12/08/11 12:14	95-49-8	
4-Chlorotoluene	0.18J ug/L		1.0	0.12	1		12/08/11 12:14	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	0.66	1		12/08/11 12:14	96-12-8	
Dibromochloromethane	ND ug/L		1.0	0.091	1		12/08/11 12:14	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	0.13	1		12/08/11 12:14	106-93-4	
Dibromomethane	ND ug/L		1.0	0.12	1		12/08/11 12:14	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	0.077	1		12/08/11 12:14	95-50-1	
1,3-Dichlorobenzene	ND ug/L		1.0	0.068	1		12/08/11 12:14	541-73-1	
1,4-Dichlorobenzene	ND ug/L		1.0	0.072	1		12/08/11 12:14	106-46-7	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-DUP Lab ID: 60111560005 Collected: 12/02/11 12:30 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		12/08/11 12:14	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		12/08/11 12:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		12/08/11 12:14	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.12	1		12/08/11 12:14	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		12/08/11 12:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		12/08/11 12:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		12/08/11 12:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		12/08/11 12:14	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		12/08/11 12:14	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		12/08/11 12:14	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		12/08/11 12:14	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		12/08/11 12:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		12/08/11 12:14	10061-02-6	
Ethylbenzene	12.1	ug/L	1.0	0.078	1		12/08/11 12:14	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		12/08/11 12:14	87-68-3	
2-Hexanone	ND	ug/L	10.0	0.50	1		12/08/11 12:14	591-78-6	
Isopropylbenzene (Cumene)	0.86J	ug/L	1.0	0.069	1		12/08/11 12:14	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.065	1		12/08/11 12:14	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		12/08/11 12:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.33	1		12/08/11 12:14	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		12/08/11 12:14	1634-04-4	
Naphthalene	13.1	ug/L	10.0	0.14	1		12/08/11 12:14	91-20-3	
n-Propylbenzene	0.91J	ug/L	1.0	0.071	1		12/08/11 12:14	103-65-1	
Styrene	1.2	ug/L	1.0	0.080	1		12/08/11 12:14	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 12:14	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 12:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.073	1		12/08/11 12:14	127-18-4	
Toluene	182	ug/L	1.0	0.064	1		12/08/11 12:14	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		12/08/11 12:14	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		12/08/11 12:14	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		12/08/11 12:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		12/08/11 12:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		12/08/11 12:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		12/08/11 12:14	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		12/08/11 12:14	96-18-4	
1,2,4-Trimethylbenzene	9.5	ug/L	1.0	0.060	1		12/08/11 12:14	95-63-6	B
1,3,5-Trimethylbenzene	6.9	ug/L	1.0	0.094	1		12/08/11 12:14	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		12/08/11 12:14	75-01-4	
Xylene (Total)	111	ug/L	3.0	0.15	1		12/08/11 12:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	87-113		1		12/08/11 12:14	460-00-4	
Dibromofluoromethane (S)	99	%	86-112		1		12/08/11 12:14	1868-53-7	
1,2-Dichloroethane-d4 (S)	94	%	82-119		1		12/08/11 12:14	17060-07-0	
Toluene-d8 (S)	105	%	90-110		1		12/08/11 12:14	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		12/08/11 12:14		pH

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-DUP Lab ID: 60111560005 Collected: 12/02/11 12:30 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates									
Analytical Method: EPA 8260									
TPH-GRO	860	ug/L	500	48.0	1		12/08/11 12:14		
2320B Alkalinity									
Analytical Method: SM 2320B									
Alkalinity, Bicarbonate (CaCO ₃)	4600	mg/L	20.0	3.8	1		12/15/11 14:30		
Alkalinity, Total as CaCO ₃	4640	mg/L	20.0	3.8	1		12/15/11 14:30		
2540C Total Dissolved Solids									
Analytical Method: SM 2540C									
Total Dissolved Solids	8300	mg/L	5.0	5.0	1		12/09/11 09:47		E
Total Dissolved Solids	8320	mg/L	5.0	5.0	1		12/13/11 17:15		H5
4500S2F Sulfide, Iodometric									
Analytical Method: SM 4500-S-2 F									
Sulfide	1.0	mg/L	0.50	0.23	1		12/08/11 16:50	18496-25-8	
300.0 IC Anions 28 Days									
Analytical Method: EPA 300.0									
Bromide	9.1J	mg/L	10.0	0.61	10		12/16/11 10:22	24959-67-9	D3
Chloride	2190	mg/L	500	27.0	500		12/16/11 12:02	16887-00-6	
Sulfate	14.3	mg/L	1.0	0.076	1		12/15/11 18:24	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: SW-074922-120211-CM-NAV Lab ID: 60111560006 Collected: 12/02/11 09:00 Received: 12/06/11 09:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	ND	mg/L	0.50	0.097	1	12/08/11 00:00	12/14/11 22:39		
Surrogates									
p-Terphenyl (S)	65 %		40-118		1	12/08/11 00:00	12/14/11 22:39	92-94-4	
n-Tetracosane (S)	64 %		36-120		1	12/08/11 00:00	12/14/11 22:39	646-31-1	
Gasoline Range Organics Analytical Method: EPA 5030B/8015B									
TPH-GRO	0.033J	mg/L	0.50	0.025	1		12/20/11 12:26		B,H1
Surrogates									
4-Bromofluorobenzene (S)	83 %		63-139		1		12/20/11 12:26	460-00-4	
Preservation pH	1.0				1		12/20/11 12:26		H1
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	16.6J	ug/L	100	2.3	1	12/13/11 15:20	12/15/11 18:43	7440-42-8	
Calcium, Dissolved	24900	ug/L	100	7.1	1	12/13/11 15:20	12/15/11 18:43	7440-70-2	
Magnesium, Dissolved	4670	ug/L	50.0	10.0	1	12/13/11 15:20	12/15/11 18:43	7439-95-4	
Potassium, Dissolved	1950	ug/L	500	63.4	1	12/13/11 15:20	12/15/11 18:43	7440-09-7	
Sodium, Dissolved	11900	ug/L	500	14.2	1	12/13/11 15:20	12/15/11 18:43	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	ND	ug/L	10.0	2.2	1		12/08/11 12:30	67-64-1	
Benzene	ND	ug/L	1.0	0.070	1		12/08/11 12:30	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.064	1		12/08/11 12:30	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.10	1		12/08/11 12:30	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		12/08/11 12:30	75-27-4	
Bromoform	ND	ug/L	1.0	0.15	1		12/08/11 12:30	75-25-2	
Bromomethane	ND	ug/L	1.0	0.22	1		12/08/11 12:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.41	1		12/08/11 12:30	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 12:30	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.047	1		12/08/11 12:30	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.066	1		12/08/11 12:30	98-06-6	
Carbon disulfide	0.33J	ug/L	5.0	0.053	1		12/08/11 12:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.23	1		12/08/11 12:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.093	1		12/08/11 12:30	108-90-7	
Chloroethane	ND	ug/L	1.0	0.19	1		12/08/11 12:30	75-00-3	
Chloroform	ND	ug/L	1.0	0.087	1		12/08/11 12:30	67-66-3	
Chloromethane	ND	ug/L	1.0	0.24	1		12/08/11 12:30	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.19	1		12/08/11 12:30	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.12	1		12/08/11 12:30	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.66	1		12/08/11 12:30	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.091	1		12/08/11 12:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.13	1		12/08/11 12:30	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.12	1		12/08/11 12:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.077	1		12/08/11 12:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.068	1		12/08/11 12:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.072	1		12/08/11 12:30	106-46-7	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: SW-074922-120211-CM-NAV Lab ID: 60111560006 Collected: 12/02/11 09:00 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		12/08/11 12:30	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		12/08/11 12:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		12/08/11 12:30	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.12	1		12/08/11 12:30	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		12/08/11 12:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		12/08/11 12:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		12/08/11 12:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		12/08/11 12:30	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		12/08/11 12:30	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		12/08/11 12:30	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		12/08/11 12:30	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		12/08/11 12:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		12/08/11 12:30	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 12:30	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		12/08/11 12:30	87-68-3	
2-Hexanone	ND	ug/L	10.0	0.50	1		12/08/11 12:30	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.069	1		12/08/11 12:30	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.065	1		12/08/11 12:30	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		12/08/11 12:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.33	1		12/08/11 12:30	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		12/08/11 12:30	1634-04-4	
Naphthalene	2.4J	ug/L	10.0	0.14	1		12/08/11 12:30	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.071	1		12/08/11 12:30	103-65-1	
Styrene	ND	ug/L	1.0	0.080	1		12/08/11 12:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 12:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 12:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.073	1		12/08/11 12:30	127-18-4	
Toluene	ND	ug/L	1.0	0.064	1		12/08/11 12:30	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		12/08/11 12:30	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		12/08/11 12:30	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		12/08/11 12:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		12/08/11 12:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		12/08/11 12:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		12/08/11 12:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		12/08/11 12:30	96-18-4	
1,2,4-Trimethylbenzene	0.13J	ug/L	1.0	0.060	1		12/08/11 12:30	95-63-6	B
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.094	1		12/08/11 12:30	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		12/08/11 12:30	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.15	1		12/08/11 12:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98 %		87-113		1		12/08/11 12:30	460-00-4	
Dibromofluoromethane (S)	97 %		86-112		1		12/08/11 12:30	1868-53-7	
1,2-Dichloroethane-d4 (S)	87 %		82-119		1		12/08/11 12:30	17060-07-0	
Toluene-d8 (S)	101 %		90-110		1		12/08/11 12:30	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		12/08/11 12:30		

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: SW-074922-120211-CM-NAV Lab ID: 60111560006 Collected: 12/02/11 09:00 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260								
TPH-GRO	ND	ug/L	500	48.0	1		12/08/11 12:30		
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Bicarbonate (CaCO ₃)	78.0	mg/L	20.0	3.8	1		12/15/11 14:30		
Alkalinity, Total as CaCO ₃	78.0	mg/L	20.0	3.8	1		12/15/11 14:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	177	mg/L	5.0	5.0	1		12/09/11 09:48		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S-2 F								
Sulfide	ND	mg/L	0.50	0.23	1		12/08/11 16:50	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Bromide	ND	mg/L	1.0	0.061	1		12/15/11 18:57	24959-67-9	
Chloride	2.7	mg/L	1.0	0.054	1		12/15/11 18:57	16887-00-6	
Sulfate	33.7	mg/L	5.0	0.38	5		12/16/11 15:50	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-204A Lab ID: 60111560007 Collected: 12/02/11 12:15 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	18.3	mg/L	2.5	0.48	5	12/08/11 00:00	12/14/11 22:50		
Surrogates									
p-Terphenyl (S)	63	%	40-118		5	12/08/11 00:00	12/14/11 22:50	92-94-4	S2
n-Tetracosane (S)	75	%	36-120		5	12/08/11 00:00	12/14/11 22:50	646-31-1	S2
Gasoline Range Organics Analytical Method: EPA 5030B/8015B									
TPH-GRO	1.7J	mg/L	2.5	0.12	5		12/20/11 12:49		B,H1
Surrogates									
4-Bromofluorobenzene (S)	77	%	63-139		5		12/20/11 12:49	460-00-4	F1
Preservation pH	1.0				5		12/20/11 12:49		H1
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	2040	ug/L	1000	23.0	10	12/13/11 15:20	12/15/11 19:11	7440-42-8	
Calcium, Dissolved	13500	ug/L	1000	71.0	10	12/13/11 15:20	12/15/11 19:11	7440-70-2	
Magnesium, Dissolved	13400	ug/L	500	100	10	12/13/11 15:20	12/15/11 19:11	7439-95-4	
Potassium, Dissolved	41200	ug/L	5000	634	10	12/13/11 15:20	12/15/11 19:11	7440-09-7	
Sodium, Dissolved	3030000	ug/L	5000	142	10	12/13/11 15:20	12/15/11 19:11	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	36.5	ug/L	10.0	3.4	1		12/15/11 20:22	67-64-1	
Benzene	97.8	ug/L	1.0	0.070	1		12/08/11 12:45	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.064	1		12/08/11 12:45	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.10	1		12/08/11 12:45	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		12/08/11 12:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.15	1		12/08/11 12:45	75-25-2	
Bromomethane	ND	ug/L	1.0	0.22	1		12/08/11 12:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.41	1		12/08/11 12:45	78-93-3	
n-Butylbenzene	1.2	ug/L	1.0	0.078	1		12/08/11 12:45	104-51-8	
sec-Butylbenzene	0.16J	ug/L	1.0	0.047	1		12/08/11 12:45	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.066	1		12/08/11 12:45	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.053	1		12/08/11 12:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.23	1		12/08/11 12:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.093	1		12/08/11 12:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.19	1		12/08/11 12:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.087	1		12/08/11 12:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.24	1		12/08/11 12:45	74-87-3	
2-Chlorotoluene	0.62J	ug/L	1.0	0.19	1		12/08/11 12:45	95-49-8	
4-Chlorotoluene	0.25J	ug/L	1.0	0.12	1		12/08/11 12:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.66	1		12/08/11 12:45	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.091	1		12/08/11 12:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.13	1		12/08/11 12:45	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.12	1		12/08/11 12:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.077	1		12/08/11 12:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.068	1		12/08/11 12:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.072	1		12/08/11 12:45	106-46-7	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-204A Lab ID: 60111560007 Collected: 12/02/11 12:15 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		12/08/11 12:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		12/08/11 12:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		12/08/11 12:45	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.12	1		12/08/11 12:45	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		12/08/11 12:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		12/08/11 12:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		12/08/11 12:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		12/08/11 12:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		12/08/11 12:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		12/08/11 12:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		12/08/11 12:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		12/08/11 12:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		12/08/11 12:45	10061-02-6	
Ethylbenzene	12.1	ug/L	1.0	0.078	1		12/08/11 12:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		12/08/11 12:45	87-68-3	
2-Hexanone	ND	ug/L	10.0	0.50	1		12/08/11 12:45	591-78-6	
Isopropylbenzene (Cumene)	0.92J	ug/L	1.0	0.069	1		12/08/11 12:45	98-82-8	
p-Isopropyltoluene	0.26J	ug/L	1.0	0.065	1		12/08/11 12:45	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		12/08/11 12:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.33	1		12/08/11 12:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		12/08/11 12:45	1634-04-4	
Naphthalene	13.4	ug/L	10.0	0.14	1		12/08/11 12:45	91-20-3	
n-Propylbenzene	1.0	ug/L	1.0	0.071	1		12/08/11 12:45	103-65-1	
Styrene	ND	ug/L	1.0	0.080	1		12/08/11 12:45	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 12:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 12:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.073	1		12/08/11 12:45	127-18-4	
Toluene	184	ug/L	1.0	0.064	1		12/08/11 12:45	108-88-3	M1
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		12/08/11 12:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		12/08/11 12:45	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		12/08/11 12:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		12/08/11 12:45	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		12/08/11 12:45	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		12/08/11 12:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		12/08/11 12:45	96-18-4	
1,2,4-Trimethylbenzene	9.7	ug/L	1.0	0.060	1		12/08/11 12:45	95-63-6	B
1,3,5-Trimethylbenzene	7.0	ug/L	1.0	0.094	1		12/08/11 12:45	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		12/08/11 12:45	75-01-4	
Xylene (Total)	113	ug/L	3.0	0.15	1		12/08/11 12:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99 %		87-113		1		12/08/11 12:45	460-00-4	
Dibromofluoromethane (S)	94 %		86-112		1		12/08/11 12:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	95 %		82-119		1		12/08/11 12:45	17060-07-0	
Toluene-d8 (S)	102 %		90-110		1		12/08/11 12:45	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		12/08/11 12:45		pH

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-204A Lab ID: 60111560007 Collected: 12/02/11 12:15 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EPA 8260								
TPH-GRO	833	ug/L	500	48.0	1		12/08/11 12:45		
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Bicarbonate (CaCO ₃)	4560	mg/L	20.0	3.8	1		12/15/11 14:30		
Alkalinity, Total as CaCO ₃	4560	mg/L	20.0	3.8	1		12/15/11 14:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C								
Total Dissolved Solids	8730	mg/L	5.0	5.0	1		12/09/11 09:48		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S-2 F								
Sulfide	ND	mg/L	0.50	0.23	1		12/08/11 16:50	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Bromide	10.6	mg/L	10.0	0.61	10		12/16/11 12:18	24959-67-9	
Chloride	2130	mg/L	200	10.8	200		12/15/11 19:14	16887-00-6	
Sulfate	0.72J	mg/L	1.0	0.076	1		12/15/11 20:03	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-25 Lab ID: 60111560008 Collected: 12/02/11 10:30 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	55.3	mg/L	5.0	0.97	10	12/08/11 00:00	12/14/11 23:24		
Surrogates									
p-Terphenyl (S)	0 %		40-118		10	12/08/11 00:00	12/14/11 23:24	92-94-4	D4,S4
n-Tetracosane (S)	0 %		36-120		10	12/08/11 00:00	12/14/11 23:24	646-31-1	S4
Gasoline Range Organics Analytical Method: EPA 5030B/8015B									
TPH-GRO	0.79J	mg/L	2.5	0.12	5		12/20/11 14:44		B,H1
Surrogates									
4-Bromofluorobenzene (S)	78 %		63-139		5		12/20/11 14:44	460-00-4	F1
Preservation pH	1.0				5		12/20/11 14:44		H1
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	1560	ug/L	1000	23.0	10	12/13/11 15:20	12/15/11 19:29	7440-42-8	
Calcium, Dissolved	13700	ug/L	1000	71.0	10	12/13/11 15:20	12/15/11 19:29	7440-70-2	
Magnesium, Dissolved	6460	ug/L	500	100	10	12/13/11 15:20	12/15/11 19:29	7439-95-4	
Potassium, Dissolved	22100	ug/L	5000	634	10	12/13/11 15:20	12/15/11 19:29	7440-09-7	
Sodium, Dissolved	2360000	ug/L	5000	142	10	12/13/11 15:20	12/15/11 19:29	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	160	ug/L	10.0	3.4	1		12/15/11 20:39	67-64-1	
Benzene	73.0	ug/L	1.0	0.070	1		12/08/11 14:18	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.064	1		12/08/11 14:18	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.10	1		12/08/11 14:18	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		12/08/11 14:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.15	1		12/08/11 14:18	75-25-2	
Bromomethane	ND	ug/L	1.0	0.22	1		12/08/11 14:18	74-83-9	
2-Butanone (MEK)	18.0	ug/L	10.0	3.9	1		12/15/11 20:39	78-93-3	
n-Butylbenzene	1.7	ug/L	1.0	0.078	1		12/08/11 14:18	104-51-8	
sec-Butylbenzene	0.39J	ug/L	1.0	0.047	1		12/08/11 14:18	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.066	1		12/08/11 14:18	98-06-6	
Carbon disulfide	0.21J	ug/L	5.0	0.053	1		12/08/11 14:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.23	1		12/08/11 14:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.093	1		12/08/11 14:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.19	1		12/08/11 14:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.087	1		12/08/11 14:18	67-66-3	
Chloromethane	1.6	ug/L	1.0	0.24	1		12/08/11 14:18	74-87-3	
2-Chlorotoluene	4.2	ug/L	1.0	0.19	1		12/08/11 14:18	95-49-8	
4-Chlorotoluene	2.0	ug/L	1.0	0.12	1		12/08/11 14:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.66	1		12/08/11 14:18	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.091	1		12/08/11 14:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.13	1		12/08/11 14:18	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.12	1		12/08/11 14:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.077	1		12/08/11 14:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.068	1		12/08/11 14:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.072	1		12/08/11 14:18	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		12/08/11 14:18	75-71-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-25 Lab ID: 60111560008 Collected: 12/02/11 10:30 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		12/08/11 14:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		12/08/11 14:18	107-06-2	
1,2-Dichloroethane (Total)	ND	ug/L	1.0	0.12	1		12/08/11 14:18	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		12/08/11 14:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		12/08/11 14:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		12/08/11 14:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		12/08/11 14:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		12/08/11 14:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		12/08/11 14:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		12/08/11 14:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		12/08/11 14:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		12/08/11 14:18	10061-02-6	
Ethylbenzene	6.7	ug/L	1.0	0.078	1		12/08/11 14:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		12/08/11 14:18	87-68-3	
2-Hexanone	4.0J	ug/L	10.0	0.50	1		12/08/11 14:18	591-78-6	
Isopropylbenzene (Cumene)	0.65J	ug/L	1.0	0.069	1		12/08/11 14:18	98-82-8	
p-Isopropyltoluene	0.46J	ug/L	1.0	0.065	1		12/08/11 14:18	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		12/08/11 14:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	6.9J	ug/L	10.0	0.33	1		12/08/11 14:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		12/08/11 14:18	1634-04-4	
Naphthalene	5.1J	ug/L	10.0	0.14	1		12/08/11 14:18	91-20-3	
n-Propylbenzene	2.0	ug/L	1.0	0.071	1		12/08/11 14:18	103-65-1	
Styrene	ND	ug/L	1.0	0.080	1		12/08/11 14:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 14:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 14:18	79-34-5	
Tetrachloroethene	0.58J	ug/L	1.0	0.073	1		12/08/11 14:18	127-18-4	
Toluene	40.5	ug/L	1.0	0.064	1		12/08/11 14:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		12/08/11 14:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		12/08/11 14:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		12/08/11 14:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		12/08/11 14:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		12/08/11 14:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		12/08/11 14:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		12/08/11 14:18	96-18-4	
1,2,4-Trimethylbenzene	8.6	ug/L	1.0	0.060	1		12/08/11 14:18	95-63-6	
1,3,5-Trimethylbenzene	6.4	ug/L	1.0	0.094	1		12/08/11 14:18	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		12/08/11 14:18	75-01-4	
Xylene (Total)	20.3	ug/L	3.0	0.15	1		12/08/11 14:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106 %		87-113		1		12/08/11 14:18	460-00-4	
Dibromofluoromethane (S)	100 %		86-112		1		12/08/11 14:18	1868-53-7	
1,2-Dichloroethane-d4 (S)	97 %		82-119		1		12/08/11 14:18	17060-07-0	
Toluene-d8 (S)	103 %		90-110		1		12/08/11 14:18	2037-26-5	
Preservation pH	7.0		0.10	0.10	1		12/08/11 14:18		pH

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: PW-074922-120211-CM-25 Lab ID: 60111560008 Collected: 12/02/11 10:30 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates Analytical Method: EPA 8260									
TPH-GRO	314J	ug/L	500	48.0	1		12/08/11 14:18		
2320B Alkalinity Analytical Method: SM 2320B									
Alkalinity, Bicarbonate (CaCO ₃)	3680	mg/L	20.0	3.8	1		12/15/11 14:30		
Alkalinity, Total as CaCO ₃	3680	mg/L	20.0	3.8	1		12/15/11 14:30		
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	7150	mg/L	5.0	5.0	1		12/09/11 09:48		
4500S2F Sulfide, Iodometric Analytical Method: SM 4500-S-2 F									
Sulfide	ND	mg/L	0.50	0.23	1		12/08/11 16:50	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Bromide	16.5	mg/L	1.0	0.061	1		12/15/11 20:20	24959-67-9	
Chloride	1700	mg/L	100	5.4	100		12/15/11 20:36	16887-00-6	
Sulfate	2.3	mg/L	1.0	0.076	1		12/15/11 20:20	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: FB-074922-120211-CM-FB1 Lab ID: 60111560009 Collected: 12/02/11 13:00 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	4.0J	ug/L	10.0	2.2	1		12/08/11 14:34	67-64-1	
Benzene	0.12J	ug/L	1.0	0.070	1		12/08/11 14:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.064	1		12/08/11 14:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.10	1		12/08/11 14:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.11	1		12/08/11 14:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.15	1		12/08/11 14:34	75-25-2	
Bromomethane	ND	ug/L	1.0	0.22	1		12/08/11 14:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.41	1		12/08/11 14:34	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 14:34	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.047	1		12/08/11 14:34	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.066	1		12/08/11 14:34	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.053	1		12/08/11 14:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.23	1		12/08/11 14:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.093	1		12/08/11 14:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.19	1		12/08/11 14:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.087	1		12/08/11 14:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.24	1		12/08/11 14:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.19	1		12/08/11 14:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.12	1		12/08/11 14:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.66	1		12/08/11 14:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.091	1		12/08/11 14:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.13	1		12/08/11 14:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.12	1		12/08/11 14:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.077	1		12/08/11 14:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.068	1		12/08/11 14:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.072	1		12/08/11 14:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		12/08/11 14:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		12/08/11 14:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		12/08/11 14:34	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.12	1		12/08/11 14:34	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		12/08/11 14:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		12/08/11 14:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		12/08/11 14:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		12/08/11 14:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		12/08/11 14:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		12/08/11 14:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		12/08/11 14:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		12/08/11 14:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		12/08/11 14:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.078	1		12/08/11 14:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		12/08/11 14:34	87-68-3	
2-Hexanone	ND	ug/L	10.0	0.50	1		12/08/11 14:34	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.069	1		12/08/11 14:34	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.065	1		12/08/11 14:34	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		12/08/11 14:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.33	1		12/08/11 14:34	108-10-1	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

Sample: FB-074922-120211-CM-FB1 Lab ID: 60111560009 Collected: 12/02/11 13:00 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		12/08/11 14:34	1634-04-4	
Naphthalene	2.3J	ug/L	10.0	0.14	1		12/08/11 14:34	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.071	1		12/08/11 14:34	103-65-1	
Styrene	ND	ug/L	1.0	0.080	1		12/08/11 14:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 14:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		12/08/11 14:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.073	1		12/08/11 14:34	127-18-4	
Toluene	0.29J	ug/L	1.0	0.064	1		12/08/11 14:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		12/08/11 14:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		12/08/11 14:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		12/08/11 14:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		12/08/11 14:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		12/08/11 14:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		12/08/11 14:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		12/08/11 14:34	96-18-4	
1,2,4-Trimethylbenzene	0.11J	ug/L	1.0	0.060	1		12/08/11 14:34	95-63-6	B
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.094	1		12/08/11 14:34	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		12/08/11 14:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.15	1		12/08/11 14:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100 %		87-113		1		12/08/11 14:34	460-00-4	
Dibromofluoromethane (S)	97 %		86-112		1		12/08/11 14:34	1868-53-7	
1,2-Dichloroethane-d4 (S)	92 %		82-119		1		12/08/11 14:34	17060-07-0	
Toluene-d8 (S)	101 %		90-110		1		12/08/11 14:34	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		12/08/11 14:34		



ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Sample: TB-074922-120511-001 Lab ID: 60111560010 Collected: 12/02/11 00:00 Received: 12/06/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water									
Analytical Method: EPA 8260									
Benzene	ND ug/L		1.0	0.15	1		12/08/11 05:17	71-43-2	
Ethylbenzene	ND ug/L		1.0	0.13	1		12/08/11 05:17	100-41-4	
Toluene	ND ug/L		1.0	0.13	1		12/08/11 05:17	108-88-3	
Xylene (Total)	ND ug/L		3.0	0.20	1		12/08/11 05:17	1330-20-7	
Surrogates									
Dibromofluoromethane (S)	101 %		86-112		1		12/08/11 05:17	1868-53-7	
Toluene-d8 (S)	99 %		90-110		1		12/08/11 05:17	2037-26-5	
4-Bromofluorobenzene (S)	100 %		87-113		1		12/08/11 05:17	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %		82-119		1		12/08/11 05:17	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		12/08/11 05:17		



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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

QC Batch: GCV/3966 Analysis Method: EPA 5030B/8015B
QC Batch Method: EPA 5030B/8015B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 60111560001, 60111560002, 60111560003

METHOD BLANK: 923981 Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/L	0.026J	0.50	12/09/11 23:48	
4-Bromofluorobenzene (S)	%	92	63-139	12/09/11 23:48	

LABORATORY CONTROL SAMPLE: 923982

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/L	1	0.96	96	74-127	
4-Bromofluorobenzene (S)	%			97	63-139	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

QC Batch: GCV/3971 Analysis Method: EPA 5030B/8015B
QC Batch Method: EPA 5030B/8015B Analysis Description: Gasoline Range Organics
Associated Lab Samples: 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

METHOD BLANK: 929378 Matrix: Water
Associated Lab Samples: 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	mg/L	0.031J	0.50	12/20/11 11:17	
4-Bromofluorobenzene (S)	%	89	63-139	12/20/11 11:17	

LABORATORY CONTROL SAMPLE: 929379

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	mg/L	1	0.97	97	74-127	
4-Bromofluorobenzene (S)	%			92	63-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 929380 929381

Parameter	Units	60111560007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
TPH-GRO	mg/L	1.7J	5	5	5.9	5.9	84	85	36-145	1	H1
4-Bromofluorobenzene (S)	%						78	81	63-139		F1
Preservation pH		1.0			1.0	1.0				0	H1



QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

QC Batch: MPRP/16421

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

METHOD BLANK: 925632

Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron, Dissolved	ug/L	ND	100	12/15/11 18:03	
Calcium, Dissolved	ug/L	ND	100	12/15/11 18:03	
Magnesium, Dissolved	ug/L	ND	50.0	12/15/11 18:03	
Potassium, Dissolved	ug/L	ND	500	12/15/11 18:03	
Sodium, Dissolved	ug/L	ND	500	12/15/11 18:03	

LABORATORY CONTROL SAMPLE: 925633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron, Dissolved	ug/L	1000	956	96	80-120	
Calcium, Dissolved	ug/L	10000	9880	99	80-120	
Magnesium, Dissolved	ug/L	10000	10000	100	80-120	
Potassium, Dissolved	ug/L	10000	9880	99	80-120	
Sodium, Dissolved	ug/L	10000	10100	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 925634

925635

Parameter	Units	60111560007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Boron, Dissolved	ug/L	2040	1000	1000	3030	3030	99	99	75-125	0	20	
Calcium, Dissolved	ug/L	13500	10000	10000	23000	22900	95	95	75-125	0	20	
Magnesium, Dissolved	ug/L	13400	10000	10000	22700	22900	93	95	75-125	1	20	
Potassium, Dissolved	ug/L	41200	10000	10000	51400	51600	102	104	75-125	0	20	
Sodium, Dissolved	ug/L	303000 0	10000	10000	3200000	3140000	1690	1090	75-125	2	20 M0	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

QC Batch: MSV/42327 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007,
60111560008, 60111560009

METHOD BLANK: 923172

Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007,
60111560008, 60111560009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	12/08/11 10:10	
1,1,1-Trichloroethane	ug/L	ND	1.0	12/08/11 10:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/11 10:10	
1,1,2-Trichloroethane	ug/L	ND	1.0	12/08/11 10:10	
1,1-Dichloroethane	ug/L	ND	1.0	12/08/11 10:10	
1,1-Dichloroethene	ug/L	ND	1.0	12/08/11 10:10	
1,1-Dichloropropene	ug/L	ND	1.0	12/08/11 10:10	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	12/08/11 10:10	
1,2,3-Trichloropropane	ug/L	ND	2.5	12/08/11 10:10	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	12/08/11 10:10	
1,2,4-Trimethylbenzene	ug/L	0.23J	1.0	12/08/11 10:10	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	12/08/11 10:10	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	12/08/11 10:10	
1,2-Dichlorobenzene	ug/L	ND	1.0	12/08/11 10:10	
1,2-Dichloroethane	ug/L	ND	1.0	12/08/11 10:10	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	12/08/11 10:10	
1,2-Dichloropropane	ug/L	ND	1.0	12/08/11 10:10	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	12/08/11 10:10	
1,3-Dichlorobenzene	ug/L	ND	1.0	12/08/11 10:10	
1,3-Dichloropropane	ug/L	ND	1.0	12/08/11 10:10	
1,4-Dichlorobenzene	ug/L	ND	1.0	12/08/11 10:10	
2,2-Dichloropropane	ug/L	ND	1.0	12/08/11 10:10	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/11 10:10	
2-Chlorotoluene	ug/L	ND	1.0	12/08/11 10:10	
2-Hexanone	ug/L	ND	10.0	12/08/11 10:10	
4-Chlorotoluene	ug/L	ND	1.0	12/08/11 10:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/11 10:10	
Acetone	ug/L	ND	10.0	12/08/11 10:10	
Benzene	ug/L	ND	1.0	12/08/11 10:10	
Bromobenzene	ug/L	ND	1.0	12/08/11 10:10	
Bromochloromethane	ug/L	ND	1.0	12/08/11 10:10	
Bromodichloromethane	ug/L	ND	1.0	12/08/11 10:10	
Bromoform	ug/L	ND	1.0	12/08/11 10:10	
Bromomethane	ug/L	ND	1.0	12/08/11 10:10	
Carbon disulfide	ug/L	ND	5.0	12/08/11 10:10	
Carbon tetrachloride	ug/L	ND	1.0	12/08/11 10:10	
Chlorobenzene	ug/L	ND	1.0	12/08/11 10:10	
Chloroethane	ug/L	ND	1.0	12/08/11 10:10	
Chloroform	ug/L	ND	1.0	12/08/11 10:10	
Chloromethane	ug/L	ND	1.0	12/08/11 10:10	
cis-1,2-Dichloroethene	ug/L	ND	1.0	12/08/11 10:10	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

METHOD BLANK: 923172

Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008, 60111560009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/11 10:10	
Dibromochloromethane	ug/L	ND	1.0	12/08/11 10:10	
Dibromomethane	ug/L	ND	1.0	12/08/11 10:10	
Dichlorodifluoromethane	ug/L	ND	1.0	12/08/11 10:10	
Ethylbenzene	ug/L	ND	1.0	12/08/11 10:10	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	12/08/11 10:10	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	12/08/11 10:10	
Methyl-tert-butyl ether	ug/L	ND	1.0	12/08/11 10:10	
Methylene chloride	ug/L	ND	1.0	12/08/11 10:10	
n-Butylbenzene	ug/L	ND	1.0	12/08/11 10:10	
n-Propylbenzene	ug/L	ND	1.0	12/08/11 10:10	
Naphthalene	ug/L	ND	10.0	12/08/11 10:10	
p-Isopropyltoluene	ug/L	ND	1.0	12/08/11 10:10	
sec-Butylbenzene	ug/L	ND	1.0	12/08/11 10:10	
Styrene	ug/L	ND	1.0	12/08/11 10:10	
tert-Butylbenzene	ug/L	ND	1.0	12/08/11 10:10	
Tetrachloroethene	ug/L	ND	1.0	12/08/11 10:10	
Toluene	ug/L	ND	1.0	12/08/11 10:10	
trans-1,2-Dichloroethene	ug/L	ND	1.0	12/08/11 10:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/11 10:10	
Trichloroethene	ug/L	ND	1.0	12/08/11 10:10	
Trichlorofluoromethane	ug/L	ND	1.0	12/08/11 10:10	
Vinyl chloride	ug/L	ND	1.0	12/08/11 10:10	
Xylene (Total)	ug/L	ND	3.0	12/08/11 10:10	
1,2-Dichloroethane-d4 (S)	%	85	82-119	12/08/11 10:10	
4-Bromofluorobenzene (S)	%	98	87-113	12/08/11 10:10	
Dibromofluoromethane (S)	%	98	86-112	12/08/11 10:10	
Toluene-d8 (S)	%	102	90-110	12/08/11 10:10	

LABORATORY CONTROL SAMPLE: 923173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.3	102	81-121	
1,1,1-Trichloroethane	ug/L	20	19.1	95	82-119	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	78-124	
1,1,2-Trichloroethane	ug/L	20	19.1	95	79-121	
1,1-Dichloroethane	ug/L	20	17.9	89	73-119	
1,1-Dichloroethene	ug/L	20	15.6	78	75-120	
1,1-Dichloropropene	ug/L	20	18.4	92	79-123	
1,2,3-Trichlorobenzene	ug/L	20	19.9	99	73-122	
1,2,3-Trichloropropane	ug/L	20	18.2	91	77-124	
1,2,4-Trichlorobenzene	ug/L	20	20.0	100	75-120	
1,2,4-Trimethylbenzene	ug/L	20	19.9	99	77-120	
1,2-Dibromo-3-chloropropane	ug/L	20	15.5	77	69-125	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

LABORATORY CONTROL SAMPLE: 923173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	19.4	97	85-121	
1,2-Dichlorobenzene	ug/L	20	20.3	102	82-115	
1,2-Dichloroethane	ug/L	20	17.6	88	77-125	
1,2-Dichloroethene (Total)	ug/L	40	38.2	96	79-120	
1,2-Dichloropropane	ug/L	20	18.7	94	83-119	
1,3,5-Trimethylbenzene	ug/L	20	19.5	98	79-121	
1,3-Dichlorobenzene	ug/L	20	19.6	98	79-117	
1,3-Dichloropropane	ug/L	20	17.6	88	78-116	
1,4-Dichlorobenzene	ug/L	20	19.5	98	83-115	
2,2-Dichloropropane	ug/L	20	18.2	91	66-123	
2-Butanone (MEK)	ug/L	100	83.8	84	43-165	
2-Chlorotoluene	ug/L	20	20.1	101	81-117	
2-Hexanone	ug/L	100	78.2	78	47-159	
4-Chlorotoluene	ug/L	20	20.3	101	84-116	
4-Methyl-2-pentanone (MIBK)	ug/L	100	73.8	74	71-129	
Acetone	ug/L	100	79.9	80	18-192	
Benzene	ug/L	20	19.2	96	82-117	
Bromobenzene	ug/L	20	19.5	97	83-116	
Bromochloromethane	ug/L	20	19.6	98	79-121	
Bromodichloromethane	ug/L	20	18.1	90	79-114	
Bromoform	ug/L	20	18.5	93	78-121	
Bromomethane	ug/L	20	16.7	83	36-146	
Carbon disulfide	ug/L	20	17.8	89	75-138	
Carbon tetrachloride	ug/L	20	19.8	99	80-123	
Chlorobenzene	ug/L	20	20.2	101	83-121	
Chloroethane	ug/L	20	17.4	87	42-166	
Chloroform	ug/L	20	19.0	95	82-116	
Chloromethane	ug/L	20	12.7	63	32-127	
cis-1,2-Dichloroethene	ug/L	20	19.2	96	80-119	
cis-1,3-Dichloropropene	ug/L	20	19.2	96	76-119	
Dibromochloromethane	ug/L	20	19.4	97	81-123	
Dibromomethane	ug/L	20	19.6	98	79-123	
Dichlorodifluoromethane	ug/L	20	11.0	55	10-163	
Ethylbenzene	ug/L	20	21.1	105	79-121	
Hexachloro-1,3-butadiene	ug/L	20	21.5	107	78-125	
Isopropylbenzene (Cumene)	ug/L	20	20.6	103	80-120	
Methyl-tert-butyl ether	ug/L	20	16.9	85	78-119	
Methylene chloride	ug/L	20	19.2	96	75-118	
n-Butylbenzene	ug/L	20	19.8	99	80-126	
n-Propylbenzene	ug/L	20	20.2	101	83-116	
Naphthalene	ug/L	20	19.6	98	66-133	
p-Isopropyltoluene	ug/L	20	20.3	102	77-120	
sec-Butylbenzene	ug/L	20	20.0	100	81-120	
Styrene	ug/L	20	19.5	97	84-115	
tert-Butylbenzene	ug/L	20	20.2	101	80-117	
Tetrachloroethene	ug/L	20	20.3	102	80-124	
Toluene	ug/L	20	19.8	99	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.0	95	79-120	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

LABORATORY CONTROL SAMPLE: 923173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropene	ug/L	20	18.7	93	76-118	
Trichloroethene	ug/L	20	19.8	99	76-122	
Trichlorofluoromethane	ug/L	20	16.8	84	72-120	
Vinyl chloride	ug/L	20	15.9	80	57-163	
Xylene (Total)	ug/L	60	59.8	100	75-120	
1,2-Dichloroethane-d4 (S)	%			85	82-119	
4-Bromofluorobenzene (S)	%			98	87-113	
Dibromofluoromethane (S)	%			97	86-112	
Toluene-d8 (S)	%			102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923174 923175

Parameter	Units	60111560007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	20	20	17.9	18.4	90	92	56-124	3	26
1,1,1-Trichloroethane	ug/L	ND	20	20	17.0	17.7	85	89	57-128	4	27
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	21.2	22.7	106	113	48-137	6	26
1,1,2-Trichloroethane	ug/L	ND	20	20	19.2	20.4	96	102	57-136	6	25
1,1-Dichloroethane	ug/L	ND	20	20	16.0	17.0	80	85	55-130	6	27
1,1-Dichloroethene	ug/L	ND	20	20	15.0	15.1	75	75	46-146	1	25
1,1-Dichloropropene	ug/L	ND	20	20	16.7	17.8	84	89	57-137	6	27
1,2,3-Trichlorobenzene	ug/L	ND	20	20	11.0	13.8	55	69	41-136	22	22
1,2,3-Trichloropropane	ug/L	ND	20	20	21.6	22.5	108	112	56-136	4	24
1,2,4-Trichlorobenzene	ug/L	ND	20	20	12.3	14.2	61	71	32-140	15	26
1,2,4-Trimethylbenzene	ug/L	9.7	20	20	24.8	26.3	76	83	42-133	6	23
1,2-Dibromo-3-chloropropane	ug/L	ND	20	20	18.3	21.6	91	108	36-167	17	29
1,2-Dibromoethane (EDB)	ug/L	ND	20	20	20.7	22.7	104	113	45-155	9	21
1,2-Dichlorobenzene	ug/L	ND	20	20	16.4	16.9	82	85	54-125	3	19
1,2-Dichloroethane	ug/L	ND	20	20	20.4	21.1	102	105	44-145	3	22
1,2-Dichloroethene (Total)	ug/L	ND	40	40	35.2	37.2	88	93	46-144	6	26
1,2-Dichloropropane	ug/L	ND	20	20	17.0	17.8	85	89	60-124	5	26
1,3,5-Trimethylbenzene	ug/L	7.0	20	20	21.9	22.9	75	80	38-143	4	27
1,3-Dichlorobenzene	ug/L	ND	20	20	15.8	16.4	79	82	53-123	4	24
1,3-Dichloropropane	ug/L	ND	20	20	18.4	19.4	92	97	61-130	5	27
1,4-Dichlorobenzene	ug/L	ND	20	20	16.2	17.0	81	85	53-121	5	25
2,2-Dichloropropane	ug/L	ND	20	20	16.0	16.7	80	83	21-146	4	25
2-Butanone (MEK)	ug/L	ND	100	100	82.8	86.0	83	86	29-131	4	27
2-Chlorotoluene	ug/L	0.62J	20	20	17.0	17.8	82	86	54-131	5	21
2-Hexanone	ug/L	ND	100	100	82.1	86.5	82	86	41-137	5	24
4-Chlorotoluene	ug/L	0.25J	20	20	17.0	17.2	84	85	56-130	1	22
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	85.8	89.9	86	90	38-139	5	25
Acetone	ug/L	36.5	100	100	102	104	67	69	30-147	2	30
Benzene	ug/L	97.8	20	20	113	116	77	92	58-139	3	21
Bromobenzene	ug/L	ND	20	20	17.4	18.2	87	91	57-123	5	21
Bromochloromethane	ug/L	ND	20	20	18.2	19.2	91	96	56-127	6	24
Bromodichloromethane	ug/L	ND	20	20	16.3	17.3	81	86	56-125	6	26
Bromoform	ug/L	ND	20	20	18.0	19.5	90	98	41-132	8	21

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 923174

923175

Parameter	Units	60111560007		MS	MSD	MS		MSD	% Rec		Max	Qual
		Result	Conc.	Spike	Spike	Result	Result	Result	% Rec	Limits	RPD	
Bromomethane	ug/L	ND	20	20	20	15.2	18.0	76	90	11-162	17	30
Carbon disulfide	ug/L	ND	20	20	20	16.9	17.3	85	87	28-155	2	25
Carbon tetrachloride	ug/L	ND	20	20	20	18.3	19.3	92	96	54-138	5	23
Chlorobenzene	ug/L	ND	20	20	20	17.8	18.7	89	93	56-129	5	21
Chloroethane	ug/L	ND	20	20	20	16.0	16.4	80	82	42-178	2	33
Chloroform	ug/L	ND	20	20	20	17.2	18.0	86	90	55-130	5	23
Chloromethane	ug/L	ND	20	20	20	11.4	12.0	57	60	39-141	5	29
cis-1,2-Dichloroethene	ug/L	ND	20	20	20	17.0	18.3	85	91	34-152	7	26
cis-1,3-Dichloropropene	ug/L	ND	20	20	20	17.6	18.4	88	92	49-128	4	23
Dibromochloromethane	ug/L	ND	20	20	20	18.3	19.2	92	96	57-119	4	21
Dibromomethane	ug/L	ND	20	20	20	19.3	20.8	97	104	58-123	7	26
Dichlorodifluoromethane	ug/L	ND	20	20	20	9.7	9.6	48	48	13-152	1	33
Ethylbenzene	ug/L	12.1	20	20	20	30.0	30.9	89	94	56-138	3	19
Hexachloro-1,3-butadiene	ug/L	ND	20	20	20	12.9	14.0	64	70	34-141	8	27
Isopropylbenzene (Cumene)	ug/L	0.92J	20	20	20	18.0	18.7	85	89	49-120	4	19
Methyl-tert-butyl ether	ug/L	ND	20	20	20	17.5	18.9	88	95	35-140	8	20
Methylene chloride	ug/L	ND	20	20	20	17.8	17.9	89	90	44-133	1	27
n-Butylbenzene	ug/L	1.2	20	20	20	15.2	16.1	70	75	44-138	6	27
n-Propylbenzene	ug/L	1.0	20	20	20	17.3	17.7	81	83	46-136	2	22
Naphthalene	ug/L	13.4	20	20	20	30.5	35.2	86	109	26-159	14	34
p-Isopropyltoluene	ug/L	0.26J	20	20	20	15.4	16.0	76	78	47-129	3	23
sec-Butylbenzene	ug/L	0.16J	20	20	20	15.5	16.1	77	80	51-138	4	23
Styrene	ug/L	ND	20	20	20	17.9	18.9	89	94	31-162	6	26
tert-Butylbenzene	ug/L	ND	20	20	20	15.8	16.7	79	83	54-135	5	22
Tetrachloroethene	ug/L	ND	20	20	20	18.3	18.7	91	94	47-140	3	24
Toluene	ug/L	184	20	20	20	195	198	55	72	59-140	2	19 M1
trans-1,2-Dichloroethene	ug/L	ND	20	20	20	18.2	19.0	91	95	62-130	4	25
trans-1,3-Dichloropropene	ug/L	ND	20	20	20	18.3	19.7	91	98	41-111	7	20
Trichloroethene	ug/L	ND	20	20	20	17.5	18.0	88	90	37-148	3	25
Trichlorofluoromethane	ug/L	ND	20	20	20	15.9	16.6	80	83	53-138	4	30
Vinyl chloride	ug/L	ND	20	20	20	14.5	14.8	72	74	47-133	2	32
Xylene (Total)	ug/L	113	60	60	60	159	163	77	83	52-146	2	19
1,2-Dichloroethane-d4 (S)	%							95	99	82-119		
4-Bromofluorobenzene (S)	%							100	103	87-113		
Dibromofluoromethane (S)	%							99	103	86-112		
Toluene-d8 (S)	%							101	100	90-110		
Preservation pH		7.0				7.0	7.0				0	pH

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

QC Batch: MSV/42527

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Associated Lab Samples: 60111560005, 60111560007, 60111560008

METHOD BLANK: 927095

Matrix: Water

Associated Lab Samples: 60111560005, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Butanone (MEK)	ug/L	ND	10.0	12/15/11 17:29	
Acetone	ug/L	ND	10.0	12/15/11 17:29	
1,2-Dichloroethane-d4 (S)	%	96	82-119	12/15/11 17:29	
4-Bromofluorobenzene (S)	%	98	87-113	12/15/11 17:29	
Dibromofluoromethane (S)	%	94	86-112	12/15/11 17:29	
Toluene-d8 (S)	%	101	90-110	12/15/11 17:29	

LABORATORY CONTROL SAMPLE: 927096

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Butanone (MEK)	ug/L	100	129	129	43-165	
Acetone	ug/L	100	160	160	18-192	
1,2-Dichloroethane-d4 (S)	%			103	82-119	
4-Bromofluorobenzene (S)	%			97	87-113	
Dibromofluoromethane (S)	%			97	86-112	
Toluene-d8 (S)	%			102	90-110	



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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

QC Batch: MSV/42595 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV MO GRO Oxygenates
Associated Lab Samples: 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

METHOD BLANK: 929130 Matrix: Water
Associated Lab Samples: 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-GRO	ug/L	ND	500	12/08/11 10:10	

LABORATORY CONTROL SAMPLE: 929131

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO	ug/L	4000	3490	87	58-133	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

QC Batch: MSV/42321 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60111560010

METHOD BLANK: 922957 Matrix: Water
Associated Lab Samples: 60111560010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/08/11 04:42	
Ethylbenzene	ug/L	ND	1.0	12/08/11 04:42	
Toluene	ug/L	0.23J	1.0	12/08/11 04:42	
Xylene (Total)	ug/L	ND	3.0	12/08/11 04:42	
1,2-Dichloroethane-d4 (S)	%	104	82-119	12/08/11 04:42	
4-Bromofluorobenzene (S)	%	101	87-113	12/08/11 04:42	
Dibromofluoromethane (S)	%	100	86-112	12/08/11 04:42	
Toluene-d8 (S)	%	104	90-110	12/08/11 04:42	

LABORATORY CONTROL SAMPLE: 922958

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	17.8	89	82-117	
Ethylbenzene	ug/L	20	18.1	90	79-121	
Toluene	ug/L	20	17.9	90	80-120	
Xylene (Total)	ug/L	60	54.3	90	79-120	
1,2-Dichloroethane-d4 (S)	%			104	82-119	
4-Bromofluorobenzene (S)	%			100	87-113	
Dibromofluoromethane (S)	%			102	86-112	
Toluene-d8 (S)	%			102	90-110	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

QC Batch: OEXT/31413 Analysis Method: EPA 8015B
QC Batch Method: EPA 3510C Analysis Description: EPA 8015B
Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

METHOD BLANK: 923077 Matrix: Water
Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/L	ND	0.50	12/14/11 21:20	
n-Tetracosane (S)	%	54	36-120	12/14/11 21:20	
p-Terphenyl (S)	%	56	40-118	12/14/11 21:20	

LABORATORY CONTROL SAMPLE: 923078

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/L	2.5	1.3	53	48-119	M4
n-Tetracosane (S)	%			54	36-120	
p-Terphenyl (S)	%			58	40-118	



QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

QC Batch: WET/32586 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

METHOD BLANK: 926981

Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	6.0J	20.0	12/15/11 14:30	
Alkalinity, Bicarbonate (CaCO ₃)	mg/L	6.0J	20.0	12/15/11 14:30	

LABORATORY CONTROL SAMPLE: 926982

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	500	490	98	90-110	

SAMPLE DUPLICATE: 926983

Parameter	Units	60111352001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	166	164	1	9	
Alkalinity, Bicarbonate (CaCO ₃)	mg/L	166	164	1	9	

SAMPLE DUPLICATE: 926984

Parameter	Units	60111560007 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	4560	4520	1	9	
Alkalinity, Bicarbonate (CaCO ₃)	mg/L	4560	4520	1	9	



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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

QC Batch: WET/32449 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004

METHOD BLANK: 923074 Matrix: Water
Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	12/08/11 08:09	

SAMPLE DUPLICATE: 923075

Parameter	Units	60111329001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	438	462	5	17	

SAMPLE DUPLICATE: 923076

Parameter	Units	60111335002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	374	378	1	17	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

QC Batch: WET/32477 Analysis Method: SM 2540C
QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids
Associated Lab Samples: 60111560005, 60111560006, 60111560007, 60111560008

METHOD BLANK: 923885 Matrix: Water
Associated Lab Samples: 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	12/09/11 09:47	

SAMPLE DUPLICATE: 923886

Parameter	Units	60111560007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	8730	8350	4	17	

SAMPLE DUPLICATE: 923887

Parameter	Units	60111465004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	168	157	7	17	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

QC Batch:	WET/32534	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60111560005		

METHOD BLANK:	925810	Matrix:	Water
Associated Lab Samples:	60111560005		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	12/13/11 17:15	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

QC Batch: WET/32456 Analysis Method: SM 4500-S-2 F
QC Batch Method: SM 4500-S-2 F Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

METHOD BLANK: 923195

Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	ND	0.50	12/08/11 16:50	

LABORATORY CONTROL SAMPLE: 923196

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	10	9.7	97	80-120	

MATRIX SPIKE SAMPLE: 923197

Parameter	Units	60111560007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	ND	10	8.9	89	75-125	

SAMPLE DUPLICATE: 923198

Parameter	Units	60111560008 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide	mg/L	ND	ND		15	



QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

QC Batch: WETA/18657

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

METHOD BLANK: 926245

Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	12/14/11 15:53	
Chloride	mg/L	0.36J	1.0	12/14/11 15:53	
Sulfate	mg/L	0.20J	1.0	12/14/11 15:53	

METHOD BLANK: 927684

Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	12/15/11 08:56	
Chloride	mg/L	0.37J	1.0	12/15/11 08:56	
Sulfate	mg/L	0.20J	1.0	12/15/11 08:56	

METHOD BLANK: 928135

Matrix: Water

Associated Lab Samples: 60111560001, 60111560002, 60111560003, 60111560004, 60111560005, 60111560006, 60111560007, 60111560008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	12/16/11 09:00	
Chloride	mg/L	0.35J	1.0	12/16/11 09:00	
Sulfate	mg/L	0.25J	1.0	12/16/11 09:00	

LABORATORY CONTROL SAMPLE: 926246

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	5.0	100	90-110	
Chloride	mg/L	5	5.0	101	90-110	
Sulfate	mg/L	5	5.3	105	90-110	

LABORATORY CONTROL SAMPLE: 927685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	4.9	98	90-110	
Chloride	mg/L	5	4.9	97	90-110	
Sulfate	mg/L	5	5.0	99	90-110	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

LABORATORY CONTROL SAMPLE: 928136

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	5.0	100	90-110	
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 926247 926248

Parameter	Units	60111334002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Bromide	mg/L	ND	10	10	9.8	10.0	98	100	75-119	2	10
Chloride	mg/L	10.8	10	10	20.4	20.5	97	97	64-118	0	12
Sulfate	mg/L	415	100	100	468	481	53	66	61-119	3	10 M0

MATRIX SPIKE SAMPLE: 926249

Parameter	Units	60111380002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	ND	25	25.2	101	75-119	
Chloride	mg/L	45.8	25	71.1	101	64-118	
Sulfate	mg/L	ND	100	161	160	61-119 M0	



QUALIFIERS

Project: SAN JUAN 32-8 NO. 202 (074922)
Pace Project No.: 60111560

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

BATCH QUALIFIERS

Batch: MSV/42321

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: GCV/3966

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/42527

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

- B Analyte was detected in the associated method blank.
- D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- D4 Sample was diluted due to the presence of high levels of target analytes.
- E Analyte concentration exceeded the calibration range. The reported result is estimated.
- F1 The sample was analyzed at a dilution due to foaming of the sample in the purge vessel.
- H1 Analysis conducted outside the EPA method holding time.
- H5 Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.
- M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- M4 A matrix spike/matrix spike duplicate was not performed for this batch due to sample dilution.
- S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).
- S4 Surrogate recovery not evaluated against control limits due to sample dilution.
- pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60111560001	DW-074922-120111-CM-46	EPA 3510C	OEXT/31413	EPA 8015B	GCSV/11674
60111560002	DW-074922-120111-CM-29	EPA 3510C	OEXT/31413	EPA 8015B	GCSV/11674
60111560003	DW-074922-120111-CM-D3	EPA 3510C	OEXT/31413	EPA 8015B	GCSV/11674
60111560004	PW-074922-120111-CM-202	EPA 3510C	OEXT/31413	EPA 8015B	GCSV/11674
60111560005	PW-074922-120211-CM-DUP	EPA 3510C	OEXT/31413	EPA 8015B	GCSV/11674
60111560006	SW-074922-120211-CM-NAV	EPA 3510C	OEXT/31413	EPA 8015B	GCSV/11674
60111560007	PW-074922-120211-CM-204A	EPA 3510C	OEXT/31413	EPA 8015B	GCSV/11674
60111560008	PW-074922-120211-CM-25	EPA 3510C	OEXT/31413	EPA 8015B	GCSV/11674
60111560001	DW-074922-120111-CM-46	EPA 5030B/8015B	GCV/3966		
60111560002	DW-074922-120111-CM-29	EPA 5030B/8015B	GCV/3966		
60111560003	DW-074922-120111-CM-D3	EPA 5030B/8015B	GCV/3966		
60111560004	PW-074922-120111-CM-202	EPA 5030B/8015B	GCV/3971		
60111560005	PW-074922-120211-CM-DUP	EPA 5030B/8015B	GCV/3971		
60111560006	SW-074922-120211-CM-NAV	EPA 5030B/8015B	GCV/3971		
60111560007	PW-074922-120211-CM-204A	EPA 5030B/8015B	GCV/3971		
60111560008	PW-074922-120211-CM-25	EPA 5030B/8015B	GCV/3971		
60111560001	DW-074922-120111-CM-46	EPA 3010	MPRP/16421	EPA 6010	ICP/14131
60111560002	DW-074922-120111-CM-29	EPA 3010	MPRP/16421	EPA 6010	ICP/14131
60111560003	DW-074922-120111-CM-D3	EPA 3010	MPRP/16421	EPA 6010	ICP/14131
60111560004	PW-074922-120111-CM-202	EPA 3010	MPRP/16421	EPA 6010	ICP/14131
60111560005	PW-074922-120211-CM-DUP	EPA 3010	MPRP/16421	EPA 6010	ICP/14131
60111560006	SW-074922-120211-CM-NAV	EPA 3010	MPRP/16421	EPA 6010	ICP/14131
60111560007	PW-074922-120211-CM-204A	EPA 3010	MPRP/16421	EPA 6010	ICP/14131
60111560008	PW-074922-120211-CM-25	EPA 3010	MPRP/16421	EPA 6010	ICP/14131
60111560001	DW-074922-120111-CM-46	EPA 5030B/8260	MSVI/42327		
60111560002	DW-074922-120111-CM-29	EPA 5030B/8260	MSVI/42327		
60111560003	DW-074922-120111-CM-D3	EPA 5030B/8260	MSVI/42327		
60111560004	PW-074922-120111-CM-202	EPA 5030B/8260	MSVI/42327		
60111560005	PW-074922-120211-CM-DUP	EPA 5030B/8260	MSVI/42327		
60111560005	PW-074922-120211-CM-DUP	EPA 5030B/8260	MSVI/42527		
60111560006	SW-074922-120211-CM-NAV	EPA 5030B/8260	MSVI/42327		
60111560007	PW-074922-120211-CM-204A	EPA 5030B/8260	MSVI/42327		
60111560007	PW-074922-120211-CM-204A	EPA 5030B/8260	MSVI/42527		
60111560008	PW-074922-120211-CM-25	EPA 5030B/8260	MSVI/42327		
60111560008	PW-074922-120211-CM-25	EPA 5030B/8260	MSVI/42527		
60111560009	FB-074922-120211-CM-FB1	EPA 5030B/8260	MSVI/42327		
60111560004	PW-074922-120111-CM-202	EPA 8260	MSVI/42595		
60111560005	PW-074922-120211-CM-DUP	EPA 8260	MSVI/42595		
60111560006	SW-074922-120211-CM-NAV	EPA 8260	MSVI/42595		
60111560007	PW-074922-120211-CM-204A	EPA 8260	MSVI/42595		
60111560008	PW-074922-120211-CM-25	EPA 8260	MSVI/42595		
60111560010	TB-074922-120511-001	EPA 8260	MSVI/42321		

Date: 01/06/2012 01:16 PM

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 32-8 NO. 202 (074922)

Pace Project No.: 60111560

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60111560001	DW-074922-120111-CM-46	SM 2320B	WET/32586		
60111560002	DW-074922-120111-CM-29	SM 2320B	WET/32586		
60111560003	DW-074922-120111-CM-D3	SM 2320B	WET/32586		
60111560004	PW-074922-120111-CM-202	SM 2320B	WET/32586		
60111560005	PW-074922-120211-CM-DUP	SM 2320B	WET/32586		
60111560006	SW-074922-120211-CM-NAV	SM 2320B	WET/32586		
60111560007	PW-074922-120211-CM-204A	SM 2320B	WET/32586		
60111560008	PW-074922-120211-CM-25	SM 2320B	WET/32586		
60111560001	DW-074922-120111-CM-46	SM 2540C	WET/32449		
60111560002	DW-074922-120111-CM-29	SM 2540C	WET/32449		
60111560003	DW-074922-120111-CM-D3	SM 2540C	WET/32449		
60111560004	PW-074922-120111-CM-202	SM 2540C	WET/32449		
60111560005	PW-074922-120211-CM-DUP	SM 2540C	WET/32477		
60111560005	PW-074922-120211-CM-DUP	SM 2540C	WET/32534		
60111560006	SW-074922-120211-CM-NAV	SM 2540C	WET/32477		
60111560007	PW-074922-120211-CM-204A	SM 2540C	WET/32477		
60111560008	PW-074922-120211-CM-25	SM 2540C	WET/32477		
60111560001	DW-074922-120111-CM-46	SM 4500-S-2 F	WET/32456		
60111560002	DW-074922-120111-CM-29	SM 4500-S-2 F	WET/32456		
60111560003	DW-074922-120111-CM-D3	SM 4500-S-2 F	WET/32456		
60111560004	PW-074922-120111-CM-202	SM 4500-S-2 F	WET/32456		
60111560005	PW-074922-120211-CM-DUP	SM 4500-S-2 F	WET/32456		
60111560006	SW-074922-120211-CM-NAV	SM 4500-S-2 F	WET/32456		
60111560007	PW-074922-120211-CM-204A	SM 4500-S-2 F	WET/32456		
60111560008	PW-074922-120211-CM-25	SM 4500-S-2 F	WET/32456		
60111560001	DW-074922-120111-CM-46	EPA 300.0	WETA/18657		
60111560002	DW-074922-120111-CM-29	EPA 300.0	WETA/18657		
60111560003	DW-074922-120111-CM-D3	EPA 300.0	WETA/18657		
60111560004	PW-074922-120111-CM-202	EPA 300.0	WETA/18657		
60111560005	PW-074922-120211-CM-DUP	EPA 300.0	WETA/18657		
60111560006	SW-074922-120211-CM-NAV	EPA 300.0	WETA/18657		
60111560007	PW-074922-120211-CM-204A	EPA 300.0	WETA/18657		
60111560008	PW-074922-120211-CM-25	EPA 300.0	WETA/18657		

Date: 01/06/2012 01:16 PM

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A

Required Client Information:

Company: **CRA**
Address: **6121 Indian School Rd NE, Ste 200**
Albuquerque, NM 87110
Email To: **cmathews@croworld.com**
Phone: **(505)884-0672** Fax: **(505)884-4932**
Requested Due Date/TAT: **standard**

Section B

Required Project Information:

Report To: **Christine Mathews**
Copy To: **Kelly Blanchard, Angela Bown**
Purchase Order No.:
Project Name: **San Juan 32-8 No. 202**
Project Number: **074922**

Section C

Invoice Information:

Attention: **ENFOS**
Company Name:
Address:
Pace Order Reference:
Pace Project Manager: **Anna Custer**
Pace Profile #: **5514, 3**

Page: **1** of **1**

REGULATORY AGENCY

☐ NPDES ☒ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location

NM

STATE:

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOIL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Y/N	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.									
					COMPOSITE START		COMPOSITE END/GRAB				Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	Na ₂ S ₂ O ₃	Methanol	Other	Analysis Test	EPA 8260 VOC's				EPA 8015B GRO	EPA 8015B DRO	EPA 6010 Diss. Metals**	SM 2540C TDS	EPA 300.0- Cl, Br, SO ₄	SM 2320B Bicarbonate	SM 4500S-2 F Sulfide		
					DATE	TIME	DATE	TIME																								
5069H	DW-074922-120111-CM-46		WTG		12.1.11	945	12	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	BP32120 01	
12	DW-074922-120111-CM-29		WTG		12.1.11	1150	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	002	
3	DW-074922-120111-CM-D3		WTG		12.1.11	1255	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	003	
4	PW-074922-120111-CM-202		WTG		12.1.11	1340	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	004	
5	DW-074922-120211-CM-2546		WTG		12.2.11		11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
6069H	DW-074922-120211-CM-MS/MS		WTG		12.2.11	1245	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	BP32120 -
7	DW-074922-120211-CM-D2P		WTG		12.2.11	1230	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	005
8	DW-074922-120211-CM-NAN		WTG		12.2.11	0900	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	006
5169H	PW-074922-120211-CM-204A		WTG		12.2.11	1215	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	007
6069H	PW-074922-120211-CM-25		WTG		12.2.11	1030	11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	008
3069H	EB-074922-120211-CM-FBI		WTG		12.2.11	1300	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	009
6069H	TB-074922-170511-001		WTG																													010

ADDITIONAL COMMENTS	RECEIVED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
**Mg, Ca, R, K, Na	<i>[Signature]</i>	12/5/11	1600	<i>[Signature]</i>	12-6-11	0915	2.6	Y	Y	Y
TB-074922-120511-001 = Trip Blank							3.6	Y	Y	Y
							0.1	Y	Y	Y
							4.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:					
SIGNATURE of SAMPLER:					
Christine Matthews					
DATE Signed MM/DD/YY: 12/5/11					



Sample Condition Upon Receipt

Client Name: CRA

Project # 6041560

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 797905240329 Pace Shipping Label Used? ☐ Yes ☒ No

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Optional
Proj. Due Date: 12/16/11
Proj. Name:

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ Foam ☐ None ☒ Other ZPIC

Thermometer Used: T-191 T-194

Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 2.6/3.6/0.1/4.0

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: PV 12-6-11

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. Added 2.5 ml of HNO ₃ to MS/MSB, Dec 20 2011, 25 pH Final pH is 6.0 and Final pH 1.5
-Includes date/time/ID/analyses Matrix:	<u>WT</u>	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14. ↓
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: VOA coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>PV</u> Lot # of added preservative <u>6090</u>
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased):	<u>110113</u>	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>NC</u>

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required?

Y / N

Person Contacted:

Date/Time:

Comments/ Resolution: 12/2 - Per Christine Matthews the MS/MSD sample is associated w/ PW-074922-120211-CA-2011A.

Project Manager Review:

AFT for Acc

Date:

12/16/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)



Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

January 06, 2012

Christine Matthews
CRA
6121 Indian School Rd NE
Suite 200
Albuquerque, NM 87110

RE: Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on December 22, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Anna Custer

anna.custer@pacelabs.com
Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa
Angela Bown, COP Conestoga-Rovers & Associa



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Minnesota Certification IDs

1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Idaho Certification #: MN00064
Illinois Certification #: 200011
Iowa Certification #: 368
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137

Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New Mexico Certification #: Pace
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: D9921
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Washington Certification #: C754
Wisconsin Certification #: 999407970

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268
Illinois Certification #: 100418
Indiana Certification #: C-49-06
Kansas Certification #: E-10247

Kentucky Certification #: 0042
Louisiana/NELAC Certification #: 04076
Ohio VAP: CL0065
West Virginia Certification #: 330

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219
A2LA Certification #: 2456.01
Arkansas Certification #: 05-008-0
Illinois Certification #: 001191
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407-08-TX
Utah Certification #: 9135995665

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SAMPLE SUMMARY

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60112644001	GW-074922-120211-CM-2566	Water	12/20/11 11:30	12/22/11 09:15
60112644002	TB-074922-120211-001	Water	12/20/11 00:00	12/22/11 09:15

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60112644001	GW-074922-120211-CM-2566	RSK 175	SK4	1	PASI-M
		EPA 8015B	SDR	3	PASI-K
		EPA 5030/8015 Mod.	KMP	2	PASI-I
		EPA 6010	JGP	5	PASI-K
		EPA 5030B/8260	JDM	70	PASI-K
		SM 2320B	AJM	2	PASI-K
		SM 2540C	BGM	1	PASI-K
		SM 4500-S-2 D	LAJ	1	PASI-K
		EPA 300.0	JML	3	PASI-K
60112644002	TB-074922-120211-001	EPA 8260	PRG	9	PASI-K

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: RSK 175
Description: RSK 175 AIR Headspace
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for RSK 175. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: AIR/13902

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10179168003

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1121207)
 - Methane
- MSD (Lab ID: 1121208)
 - Methane

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: RSK 175
Description: RSK 175 AIR Headspace
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

Analyte Comments:

QC Batch: AIR/13902

4e: The sample was not collected in the appropriate container for headspace analysis.

- GW-074922-120211-CM-2566 (Lab ID: 60112644001)
 - Methane

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- GW-074922-120211-CM-2566 (Lab ID: 60112644001)
 - Methane
- MS (Lab ID: 1121207)
 - Methane
- MSD (Lab ID: 1121208)
 - Methane

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: EPA 8015B
Description: 8015B Diesel Range Organics
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: GCSV/11742

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: EPA 5030/8015 Mod.
Description: Gasoline Range Organics
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for EPA 5030/8015 Mod.. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: EPA 6010
Description: 6010 MET ICP, Dissolved
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/16583

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60112644001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MSD (Lab ID: 932021)
 - Calcium, Dissolved
 - Magnesium, Dissolved
 - Sodium, Dissolved

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MPRP/16583

1e: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. Sample was greater than four times the spike value.

- MS (Lab ID: 932020)
 - Sodium, Dissolved

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: EPA 6010
Description: 6010 MET ICP, Dissolved
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

Analyte Comments:

QC Batch: MPRP/16583

2e: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. A post digestin spike was performed.

- MS (Lab ID: 932020)
 - Magnesium, Dissolved
- MSD (Lab ID: 932021)
 - Potassium, Dissolved

3e: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. Sample was greater than four times the spike value.

- MS (Lab ID: 932020)
 - Calcium, Dissolved

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: EPA 5030B/8260
Description: 8260 MSV
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/42853

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: EPA 8260
Description: 8260 MSV UST, Water
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/42747

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

Method: SM 2320B

Description: 2320B Alkalinity

Client: COP Conestoga-Rovers & Associates, Inc. NM

Date: January 06, 2012

General Information:

1 sample was analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: SM 2540C
Description: 2540C Total Dissolved Solids
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: SM 4500-S-2 D
Description: 4500S2D Sulfide, Total
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for SM 4500-S-2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Method: EPA 300.0
Description: 300.0 IC Anions 28 Days
Client: COP Conestoga-Rovers & Associates, Inc. NM
Date: January 06, 2012

General Information:

1 sample was analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

Sample: GW-074922-120211-CM-2566 Lab ID: 60112644001 Collected: 12/20/11 11:30 Received: 12/22/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
RSK 175 AIR Headspace Analytical Method: RSK 175									
Methane	9230 ug/L		10.0	5.0	1		12/23/11 12:51	74-82-8	4e,E
8015B Diesel Range Organics Analytical Method: EPA 8015B Preparation Method: EPA 3510C									
TPH-DRO	ND mg/L		0.50	0.097	1	12/23/11 00:00	12/29/11 23:05		
Surrogates									
p-Terphenyl (S)	68 %		40-118		1	12/23/11 00:00	12/29/11 23:05	92-94-4	
n-Tetracosane (S)	63 %		36-120		1	12/23/11 00:00	12/29/11 23:05	646-31-1	
Gasoline Range Organics Analytical Method: EPA 5030/8015 Mod.									
TPH (C06-C10)	ND mg/L		0.20		1		12/31/11 12:42		
Surrogates									
4-Bromofluorobenzene (S)	85 %		45-130		1		12/31/11 12:42	460-00-4	
6010 MET ICP, Dissolved Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Boron, Dissolved	127 ug/L		100	2.3	1	12/27/11 12:05	12/30/11 09:58	7440-42-8	
Calcium, Dissolved	218000 ug/L		100	7.1	1	12/27/11 12:05	12/30/11 09:58	7440-70-2	
Magnesium, Dissolved	11200 ug/L		50.0	10.0	1	12/27/11 12:05	12/30/11 09:58	7439-95-4	
Potassium, Dissolved	2910 ug/L		500	63.4	1	12/27/11 12:05	12/30/11 09:58	7440-09-7	
Sodium, Dissolved	303000 ug/L		500	14.2	1	12/27/11 12:05	12/30/11 09:58	7440-23-5	
8260 MSV Analytical Method: EPA 5030B/8260									
Acetone	167 ug/L		10.0	2.2	1		01/03/12 17:51	67-64-1	
Benzene	ND ug/L		1.0	0.070	1		01/03/12 17:51	71-43-2	
Bromobenzene	ND ug/L		1.0	0.064	1		01/03/12 17:51	108-86-1	
Bromochloromethane	ND ug/L		1.0	0.10	1		01/03/12 17:51	74-97-5	
Bromodichloromethane	ND ug/L		1.0	0.11	1		01/03/12 17:51	75-27-4	
Bromoform	ND ug/L		1.0	0.15	1		01/03/12 17:51	75-25-2	
Bromomethane	ND ug/L		1.0	0.22	1		01/03/12 17:51	74-83-9	
2-Butanone (MEK)	363 ug/L		10.0	0.41	1		01/03/12 17:51	78-93-3	
n-Butylbenzene	ND ug/L		1.0	0.078	1		01/03/12 17:51	104-51-8	
sec-Butylbenzene	ND ug/L		1.0	0.047	1		01/03/12 17:51	135-98-8	
tert-Butylbenzene	ND ug/L		1.0	0.066	1		01/03/12 17:51	98-06-6	
Carbon disulfide	0.16J ug/L		5.0	0.053	1		01/03/12 17:51	75-15-0	
Carbon tetrachloride	ND ug/L		1.0	0.23	1		01/03/12 17:51	56-23-5	
Chlorobenzene	ND ug/L		1.0	0.093	1		01/03/12 17:51	108-90-7	
Chloroethane	ND ug/L		1.0	0.19	1		01/03/12 17:51	75-00-3	
Chloroform	ND ug/L		1.0	0.087	1		01/03/12 17:51	67-66-3	
Chloromethane	ND ug/L		1.0	0.24	1		01/03/12 17:51	74-87-3	
2-Chlorotoluene	ND ug/L		1.0	0.19	1		01/03/12 17:51	95-49-8	
4-Chlorotoluene	ND ug/L		1.0	0.12	1		01/03/12 17:51	106-43-4	
1,2-Dibromo-3-chloropropane	ND ug/L		2.5	0.66	1		01/03/12 17:51	96-12-8	
Dibromochloromethane	ND ug/L		1.0	0.091	1		01/03/12 17:51	124-48-1	
1,2-Dibromoethane (EDB)	ND ug/L		1.0	0.13	1		01/03/12 17:51	106-93-4	
Dibromomethane	ND ug/L		1.0	0.12	1		01/03/12 17:51	74-95-3	
1,2-Dichlorobenzene	ND ug/L		1.0	0.077	1		01/03/12 17:51	95-50-1	

Date: 01/06/2012 12:01 PM

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

Sample: GW-074922-120211-CM-2566 Lab ID: 60112644001 Collected: 12/20/11 11:30 Received: 12/22/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
1,3-Dichlorobenzene	ND	ug/L	1.0	0.068	1		01/03/12 17:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.072	1		01/03/12 17:51	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.15	1		01/03/12 17:51	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.079	1		01/03/12 17:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.080	1		01/03/12 17:51	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.12	1		01/03/12 17:51	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.13	1		01/03/12 17:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.086	1		01/03/12 17:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.085	1		01/03/12 17:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.045	1		01/03/12 17:51	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.097	1		01/03/12 17:51	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.11	1		01/03/12 17:51	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.088	1		01/03/12 17:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.066	1		01/03/12 17:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.080	1		01/03/12 17:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.078	1		01/03/12 17:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.11	1		01/03/12 17:51	87-68-3	
2-Hexanone	ND	ug/L	10.0	0.50	1		01/03/12 17:51	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.069	1		01/03/12 17:51	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.065	1		01/03/12 17:51	99-87-6	
Methylene chloride	ND	ug/L	1.0	0.12	1		01/03/12 17:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.33	1		01/03/12 17:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.077	1		01/03/12 17:51	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.14	1		01/03/12 17:51	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.071	1		01/03/12 17:51	103-65-1	
Styrene	ND	ug/L	1.0	0.080	1		01/03/12 17:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		01/03/12 17:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.12	1		01/03/12 17:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.073	1		01/03/12 17:51	127-18-4	
Toluene	ND	ug/L	1.0	0.064	1		01/03/12 17:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.11	1		01/03/12 17:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.10	1		01/03/12 17:51	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.13	1		01/03/12 17:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.15	1		01/03/12 17:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.064	1		01/03/12 17:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.064	1		01/03/12 17:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.36	1		01/03/12 17:51	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.060	1		01/03/12 17:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.094	1		01/03/12 17:51	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.068	1		01/03/12 17:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.15	1		01/03/12 17:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98 %		87-113		1		01/03/12 17:51	460-00-4	
Dibromofluoromethane (S)	99 %		86-112		1		01/03/12 17:51	1868-53-7	
1,2-Dichloroethane-d4 (S)	101 %		82-119		1		01/03/12 17:51	17060-07-0	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

Sample: GW-074922-120211-CM-2566 Lab ID: 60112644001 Collected: 12/20/11 11:30 Received: 12/22/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Analytical Method: EPA 5030B/8260									
Surrogates									
Toluene-d8 (S)	104 %		90-110		1		01/03/12 17:51	2037-26-5	
Preservation pH	1.0		0.10	0.10	1		01/03/12 17:51		
2320B Alkalinity Analytical Method: SM 2320B									
Alkalinity, Bicarbonate (CaCO ₃)	234 mg/L		20.0	3.8	1		12/29/11 16:15		
Alkalinity, Total as CaCO ₃	234 mg/L		20.0	3.8	1		12/29/11 16:15		
2540C Total Dissolved Solids Analytical Method: SM 2540C									
Total Dissolved Solids	1810 mg/L		5.0	5.0	1		12/27/11 09:49		
4500S2D Sulfide, Total Analytical Method: SM 4500-S-2 D									
Sulfide, Total	1.7 mg/L		0.050	0.018	1		12/27/11 15:19	18496-25-8	
300.0 IC Anions 28 Days Analytical Method: EPA 300.0									
Bromide	0.12J mg/L		1.0	0.061	1		01/06/12 05:51	24959-67-9	
Chloride	8.3 mg/L		1.0	0.054	1		01/06/12 05:51	16887-00-6	
Sulfate	1170 mg/L		100	7.6	100		01/06/12 08:36	14808-79-8	

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ANALYTICAL RESULTS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

Sample: TB-074922-120211-001 Lab ID: 60112644002 Collected: 12/20/11 00:00 Received: 12/22/11 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water Analytical Method: EPA 8260									
Benzene	ND	ug/L	1.0	0.050	1		12/28/11 21:24	71-43-2	
Ethylbenzene	0.22J	ug/L	1.0	0.080	1		12/28/11 21:24	100-41-4	
Toluene	0.36J	ug/L	1.0	0.070	1		12/28/11 21:24	108-88-3	
Xylene (Total)	ND	ug/L	3.0	0.18	1		12/28/11 21:24	1330-20-7	
Surrogates									
Dibromofluoromethane (S)	99 %		86-112		1		12/28/11 21:24	1868-53-7	
Toluene-d8 (S)	100 %		90-110		1		12/28/11 21:24	2037-26-5	
4-Bromofluorobenzene (S)	99 %		87-113		1		12/28/11 21:24	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %		82-119		1		12/28/11 21:24	17060-07-0	
Preservation pH	1.0		1.0	0.10	1		12/28/11 21:24		

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

QC Batch: AIR/13902	Analysis Method: RSK 175
QC Batch Method: RSK 175	Analysis Description: RSK 175 AIR HEADSPACE
Associated Lab Samples: 60112644001	

METHOD BLANK: 1120389 Matrix: Water
Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	ND	10.0	12/23/11 08:25	

LABORATORY CONTROL SAMPLE & LCSD: 1120390			1120391							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	60.7	63.4	67.7	105	112	70-130	7	30	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1121207			1121208									
Parameter	Units	10179168003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	46.0 mg/L	50.5	52.7	63100	61800	33900	30000	30-150	2	30	E,M0, P6

SAMPLE DUPLICATE: 1121211			92108905007 Result	Dup Result	RPD	Max RPD	Qualifiers
Parameter	Units						
Methane	ug/L		ND	ND		30	



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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

QC Batch: GCV/14404

Analysis Method: EPA 5030/8015 Mod.

QC Batch Method: EPA 5030/8015 Mod.

Analysis Description: Gasoline Range Organics

Associated Lab Samples: 60112644001

METHOD BLANK: 668397

Matrix: Water

Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH (C06-C10)	mg/L	ND	0.20	12/31/11 10:02	
4-Bromofluorobenzene (S)	%.	102	45-130	12/31/11 10:02	

LABORATORY CONTROL SAMPLE: 668398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH (C06-C10)	mg/L	10	10.7	107	82-118	
4-Bromofluorobenzene (S)	%.			118	45-130	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

QC Batch: MPRP/16583 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 60112644001

METHOD BLANK: 932018 Matrix: Water
Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Boron, Dissolved	ug/L	ND	100	12/30/11 09:51	
Calcium, Dissolved	ug/L	ND	100	12/30/11 09:51	
Magnesium, Dissolved	ug/L	ND	50.0	12/30/11 09:51	
Potassium, Dissolved	ug/L	ND	500	12/30/11 09:51	
Sodium, Dissolved	ug/L	ND	500	12/30/11 09:51	

LABORATORY CONTROL SAMPLE: 932019

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Boron, Dissolved	ug/L	1000	940	94	80-120	
Calcium, Dissolved	ug/L	10000	9720	97	80-120	
Magnesium, Dissolved	ug/L	10000	9420	94	80-120	
Potassium, Dissolved	ug/L	10000	9480	95	80-120	
Sodium, Dissolved	ug/L	10000	9590	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 932020 932021

Parameter	Units	60112644001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Boron, Dissolved	ug/L	127	1000	1000	996	906	87	78	75-125	9	20
Calcium, Dissolved	ug/L	218000	10000	10000	201000	184000	-165	-340	75-125	9	20 3e,M0
Magnesium, Dissolved	ug/L	11200	10000	10000	17500	16000	63	48	75-125	9	20 2e,M0
Potassium, Dissolved	ug/L	2910	10000	10000	11000	10200	81	73	75-125	8	20 2e
Sodium, Dissolved	ug/L	303000	10000	10000	277000	252000	-260	-514	75-125	10	20 1e,M0

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

QC Batch: MSV/42853 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60112644001

METHOD BLANK: 934342 Matrix: Water

Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	01/03/12 16:49	
1,1,1-Trichloroethane	ug/L	ND	1.0	01/03/12 16:49	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/03/12 16:49	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/03/12 16:49	
1,1-Dichloroethane	ug/L	ND	1.0	01/03/12 16:49	
1,1-Dichloroethene	ug/L	ND	1.0	01/03/12 16:49	
1,1-Dichloropropene	ug/L	ND	1.0	01/03/12 16:49	
1,2,3-Trichlorobenzene	ug/L	0.23J	1.0	01/03/12 16:49	
1,2,3-Trichloropropane	ug/L	ND	2.5	01/03/12 16:49	
1,2,4-Trichlorobenzene	ug/L	0.14J	1.0	01/03/12 16:49	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	01/03/12 16:49	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	01/03/12 16:49	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	01/03/12 16:49	
1,2-Dichlorobenzene	ug/L	ND	1.0	01/03/12 16:49	
1,2-Dichloroethane	ug/L	ND	1.0	01/03/12 16:49	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	01/03/12 16:49	
1,2-Dichloropropane	ug/L	ND	1.0	01/03/12 16:49	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	01/03/12 16:49	
1,3-Dichlorobenzene	ug/L	ND	1.0	01/03/12 16:49	
1,3-Dichloropropane	ug/L	ND	1.0	01/03/12 16:49	
1,4-Dichlorobenzene	ug/L	ND	1.0	01/03/12 16:49	
2,2-Dichloropropane	ug/L	ND	1.0	01/03/12 16:49	
2-Butanone (MEK)	ug/L	ND	10.0	01/03/12 16:49	
2-Chlorotoluene	ug/L	ND	1.0	01/03/12 16:49	
2-Hexanone	ug/L	ND	10.0	01/03/12 16:49	
4-Chlorotoluene	ug/L	ND	1.0	01/03/12 16:49	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/03/12 16:49	
Acetone	ug/L	ND	10.0	01/03/12 16:49	
Benzene	ug/L	ND	1.0	01/03/12 16:49	
Bromobenzene	ug/L	ND	1.0	01/03/12 16:49	
Bromochloromethane	ug/L	ND	1.0	01/03/12 16:49	
Bromodichloromethane	ug/L	ND	1.0	01/03/12 16:49	
Bromoform	ug/L	ND	1.0	01/03/12 16:49	
Bromomethane	ug/L	ND	1.0	01/03/12 16:49	
Carbon disulfide	ug/L	ND	5.0	01/03/12 16:49	
Carbon tetrachloride	ug/L	ND	1.0	01/03/12 16:49	
Chlorobenzene	ug/L	ND	1.0	01/03/12 16:49	
Chloroethane	ug/L	ND	1.0	01/03/12 16:49	
Chloroform	ug/L	ND	1.0	01/03/12 16:49	
Chloromethane	ug/L	ND	1.0	01/03/12 16:49	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/03/12 16:49	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/03/12 16:49	
Dibromochloromethane	ug/L	ND	1.0	01/03/12 16:49	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

METHOD BLANK: 934342

Matrix: Water

Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	ND	1.0	01/03/12 16:49	
Dichlorodifluoromethane	ug/L	ND	1.0	01/03/12 16:49	
Ethylbenzene	ug/L	ND	1.0	01/03/12 16:49	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	01/03/12 16:49	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	01/03/12 16:49	
Methyl-tert-butyl ether	ug/L	ND	1.0	01/03/12 16:49	
Methylene chloride	ug/L	ND	1.0	01/03/12 16:49	
n-Butylbenzene	ug/L	ND	1.0	01/03/12 16:49	
n-Propylbenzene	ug/L	ND	1.0	01/03/12 16:49	
Naphthalene	ug/L	0.21J	10.0	01/03/12 16:49	
p-Isopropyltoluene	ug/L	ND	1.0	01/03/12 16:49	
sec-Butylbenzene	ug/L	ND	1.0	01/03/12 16:49	
Styrene	ug/L	ND	1.0	01/03/12 16:49	
tert-Butylbenzene	ug/L	ND	1.0	01/03/12 16:49	
Tetrachloroethene	ug/L	ND	1.0	01/03/12 16:49	
Toluene	ug/L	ND	1.0	01/03/12 16:49	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/03/12 16:49	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/03/12 16:49	
Trichloroethene	ug/L	ND	1.0	01/03/12 16:49	
Trichlorofluoromethane	ug/L	ND	1.0	01/03/12 16:49	
Vinyl chloride	ug/L	ND	1.0	01/03/12 16:49	
Xylene (Total)	ug/L	ND	3.0	01/03/12 16:49	
1,2-Dichloroethane-d4 (S)	%	100	82-119	01/03/12 16:49	
4-Bromofluorobenzene (S)	%	95	87-113	01/03/12 16:49	
Dibromofluoromethane (S)	%	95	86-112	01/03/12 16:49	
Toluene-d8 (S)	%	105	90-110	01/03/12 16:49	

LABORATORY CONTROL SAMPLE: 934343

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.8	109	81-121	
1,1,1-Trichloroethane	ug/L	20	18.6	93	82-119	
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	78-124	
1,1,2-Trichloroethane	ug/L	20	20.6	103	79-121	
1,1-Dichloroethane	ug/L	20	17.7	89	73-119	
1,1-Dichloroethene	ug/L	20	15.3	77	75-120	
1,1-Dichloropropene	ug/L	20	17.1	86	79-123	
1,2,3-Trichlorobenzene	ug/L	20	22.2	111	73-122	
1,2,3-Trichloropropane	ug/L	20	21.4	107	77-124	
1,2,4-Trichlorobenzene	ug/L	20	21.1	106	75-120	
1,2,4-Trimethylbenzene	ug/L	20	19.6	98	77-120	
1,2-Dibromo-3-chloropropane	ug/L	20	19.5	97	69-125	
1,2-Dibromoethane (EDB)	ug/L	20	22.2	111	85-121	
1,2-Dichlorobenzene	ug/L	20	21.1	105	82-115	
1,2-Dichloroethane	ug/L	20	18.9	94	77-125	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

LABORATORY CONTROL SAMPLE: 934343

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	37.2	93	79-120	
1,2-Dichloropropane	ug/L	20	19.3	97	83-119	
1,3,5-Trimethylbenzene	ug/L	20	19.8	99	79-121	
1,3-Dichlorobenzene	ug/L	20	20.8	104	79-117	
1,3-Dichloropropane	ug/L	20	19.5	97	78-116	
1,4-Dichlorobenzene	ug/L	20	21.3	106	83-115	
2,2-Dichloropropane	ug/L	20	19.1	95	66-123	
2-Butanone (MEK)	ug/L	100	69.8	70	43-165	
2-Chlorotoluene	ug/L	20	20.6	103	81-117	
2-Hexanone	ug/L	100	77.0	77	47-159	
4-Chlorotoluene	ug/L	20	21.3	106	84-116	
4-Methyl-2-pentanone (MIBK)	ug/L	100	89.9	90	71-129	
Acetone	ug/L	100	59.8	60	18-192	
Benzene	ug/L	20	17.9	90	82-117	
Bromobenzene	ug/L	20	21.5	108	83-116	
Bromochloromethane	ug/L	20	18.3	92	79-121	
Bromodichloromethane	ug/L	20	19.0	95	79-114	
Bromoform	ug/L	20	23.0	115	78-121	
Bromomethane	ug/L	20	16.0	80	36-146	
Carbon disulfide	ug/L	20	19.9	100	75-138	
Carbon tetrachloride	ug/L	20	19.8	99	80-123	
Chlorobenzene	ug/L	20	21.2	106	83-121	
Chloroethane	ug/L	20	18.6	93	42-166	
Chloroform	ug/L	20	18.7	94	82-116	
Chloromethane	ug/L	20	14.5	72	32-127	
cis-1,2-Dichloroethene	ug/L	20	17.4	87	80-119	
cis-1,3-Dichloropropene	ug/L	20	19.4	97	76-119	
Dibromochloromethane	ug/L	20	22.1	111	81-123	
Dibromomethane	ug/L	20	19.7	98	79-123	
Dichlorodifluoromethane	ug/L	20	16.5	82	10-163	
Ethylbenzene	ug/L	20	20.8	104	79-121	
Hexachloro-1,3-butadiene	ug/L	20	21.4	107	78-125	
Isopropylbenzene (Cumene)	ug/L	20	20.4	102	80-120	
Methyl-tert-butyl ether	ug/L	20	19.0	95	78-119	
Methylene chloride	ug/L	20	18.7	93	75-118	
n-Butylbenzene	ug/L	20	20.2	101	80-126	
n-Propylbenzene	ug/L	20	19.8	99	83-116	
Naphthalene	ug/L	20	21.5	108	66-133	
p-Isopropyltoluene	ug/L	20	19.5	97	77-120	
sec-Butylbenzene	ug/L	20	19.3	97	81-120	
Styrene	ug/L	20	19.3	96	84-115	
tert-Butylbenzene	ug/L	20	19.4	97	80-117	
Tetrachloroethene	ug/L	20	22.3	111	80-124	
Toluene	ug/L	20	19.0	95	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.7	99	79-120	
trans-1,3-Dichloropropene	ug/L	20	22.4	112	76-118	
Trichloroethene	ug/L	20	17.0	85	76-122	
Trichlorofluoromethane	ug/L	20	18.1	91	72-120	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

LABORATORY CONTROL SAMPLE: 934343

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Vinyl chloride	ug/L	20	17.1	86	57-163	
Xylene (Total)	ug/L	60	59.8	100	75-120	
1,2-Dichloroethane-d4 (S)	%			109	82-119	
4-Bromofluorobenzene (S)	%			97	87-113	
Dibromofluoromethane (S)	%			104	86-112	
Toluene-d8 (S)	%			104	90-110	



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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

QC Batch: MSV/42747 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 60112644002

METHOD BLANK: 932457 Matrix: Water

Associated Lab Samples: 60112644002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/28/11 19:02	
Ethylbenzene	ug/L	ND	1.0	12/28/11 19:02	
Toluene	ug/L	ND	1.0	12/28/11 19:02	
Xylene (Total)	ug/L	ND	3.0	12/28/11 19:02	
1,2-Dichloroethane-d4 (S)	%	101	82-119	12/28/11 19:02	
4-Bromofluorobenzene (S)	%	97	87-113	12/28/11 19:02	
Dibromofluoromethane (S)	%	100	86-112	12/28/11 19:02	
Toluene-d8 (S)	%	100	90-110	12/28/11 19:02	

LABORATORY CONTROL SAMPLE: 932458

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.4	102	82-117	
Ethylbenzene	ug/L	20	20.0	100	79-121	
Toluene	ug/L	20	19.7	98	80-120	
Xylene (Total)	ug/L	60	61.2	102	79-120	
1,2-Dichloroethane-d4 (S)	%			98	82-119	
4-Bromofluorobenzene (S)	%			98	87-113	
Dibromofluoromethane (S)	%			99	86-112	
Toluene-d8 (S)	%			99	90-110	



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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

QC Batch: OEXT/31570

Analysis Method: EPA 8015B

QC Batch Method: EPA 3510C

Analysis Description: EPA 8015B

Associated Lab Samples: 60112644001

METHOD BLANK: 931274

Matrix: Water

Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/L	ND	0.50	12/29/11 22:42	
n-Tetracosane (S)	%	58	36-120	12/29/11 22:42	
p-Terphenyl (S)	%	65	40-118	12/29/11 22:42	

LABORATORY CONTROL SAMPLE: 931275

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/L	2.5	2.0	79	48-119	
n-Tetracosane (S)	%			57	36-120	
p-Terphenyl (S)	%			70	40-118	

Date: 01/06/2012 12:01 PM

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

QC Batch: WET/32829

Analysis Method: SM 2320B

QC Batch Method: SM 2320B

Analysis Description: 2320B Alkalinity

Associated Lab Samples: 60112644001

METHOD BLANK: 933011

Matrix: Water

Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	4.0J	20.0	12/29/11 16:15	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	4.0J	20.0	12/29/11 16:15	

LABORATORY CONTROL SAMPLE: 933012

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	500	500	100	90-110	

SAMPLE DUPLICATE: 933231

Parameter	Units	60112457001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	168	170	1	9	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	168	170	1	9	

SAMPLE DUPLICATE: 933232

Parameter	Units	60112457002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	168	166	1	9	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	168	166	1	9	



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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

QC Batch: WET/32758

Analysis Method: SM 2540C

QC Batch Method: SM 2540C

Analysis Description: 2540C Total Dissolved Solids

Associated Lab Samples: 60112644001

METHOD BLANK: 931924

Matrix: Water

Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	12/27/11 09:46	

SAMPLE DUPLICATE: 931925

Parameter	Units	60112532010 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	820	823	0	17	

SAMPLE DUPLICATE: 931926

Parameter	Units	60112750001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	6560	6640	1	17	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

QC Batch: WET/32778

Analysis Method: SM 4500-S-2 D

QC Batch Method: SM 4500-S-2 D

Analysis Description: 4500S2D Sulfide, Total

Associated Lab Samples: 60112644001

METHOD BLANK: 932174

Matrix: Water

Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	12/27/11 14:18	

LABORATORY CONTROL SAMPLE: 932175

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.50	100	80-120	

MATRIX SPIKE SAMPLE: 932176

Parameter	Units	60112532001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.50	97	75-125	

SAMPLE DUPLICATE: 932177

Parameter	Units	60112532002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

SAMPLE DUPLICATE: 932178

Parameter	Units	60112532011 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

QC Batch: WETA/18867

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 60112644001

METHOD BLANK: 935444

Matrix: Water

Associated Lab Samples: 60112644001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	0.12J	1.0	01/06/12 02:32	
Chloride	mg/L	0.44J	1.0	01/06/12 02:32	
Sulfate	mg/L	ND	1.0	01/06/12 02:32	

LABORATORY CONTROL SAMPLE: 935445

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	4.9	98	90-110	
Chloride	mg/L	5	4.8	97	90-110	
Sulfate	mg/L	5	5.1	102	90-110	



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QUALIFIERS

Project: SAN JUAN 32-8 NO 202 (074922)

Pace Project No.: 60112644

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-I Pace Analytical Services - Indianapolis

PASI-K Pace Analytical Services - Kansas City

PASI-M Pace Analytical Services - Minneapolis

BATCH QUALIFIERS

Batch: OEXT/31570

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/42747

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/42853

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e MMatrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. Sample was greater than four times the spike value.

2e Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. A post digestin spike was performed.

3e Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. Sample was greater than four times the spike value.

4e The sample was not collected in the appropriate container for headspace analysis.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 32-8 NO 202 (074922)
Pace Project No.: 60112644

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60112644001	GW-074922-120211-CM-2566	RSK 175	AIR/13902		
60112644001	GW-074922-120211-CM-2566	EPA 3510C	OEXT/31570	EPA 8015B	GCSV/11742
60112644001	GW-074922-120211-CM-2566	EPA 5030/8015 Mod.	GCV/14404		
60112644001	GW-074922-120211-CM-2566	EPA 3010	MPRP/16583	EPA 6010	ICP/14268
60112644001	GW-074922-120211-CM-2566	EPA 5030B/8260	MSV/42853		
60112644002	TB-074922-120211-001	EPA 8260	MSV/42747		
60112644001	GW-074922-120211-CM-2566	SM 2320B	WET/32829		
60112644001	GW-074922-120211-CM-2566	SM 2540C	WET/32758		
60112644001	GW-074922-120211-CM-2566	SM 4500-S-2 D	WET/32778		
60112644001	GW-074922-120211-CM-2566	EPA 300.0	WETA/18867		



Sample Condition Upon Receipt

Client Name: COP CRA NM

Project # 60112644

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other
Tracking #: 797975884356 Pace Shipping Label Used? ☐ Yes ☒ No

Optional
Proj. Due Date: 4/5
Proj. Name:

Custody Seal on Cooler/Box Present: ☒ Yes ☐ No Seals intact: ☒ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other

Thermometer Used: T-191 / T-194

Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 2.4

Temperature should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: PC 12-22-11

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
-Includes date/time/ID/analyses Matrix: <u>WT</u>		
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: <u>VOA</u> coliform, TOC, O&G, WI-DRO (water), Phenolics	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased): <u>110711-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>NC</u>

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required?

Y / N

Person Contacted: _____

Date/Time: 12/22/11

Comments/ Resolution: _____

Project Manager Review: Ace

Date: 12/22/11

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

ATTACHMENT 2

LABORATORY ANALYTICAL RESULTS
FOR ISOTOPE ANALYSIS COMPLETED ON GAS SAMPLES
COLLECTED IN DECEMBER 2011

ANALYSIS REPORT

Lab #: 228933 Job #: 16972
 Sample Name: A-074922-120211-CM-29 Co. Lab#:
 Company: Pace Analytical
 Date Sampled: 12/02/2011
 Container: Cali-5-Bond Bag
 Field/Site Name: San Juan 32-8 No. 202
 Location:
 Formation/Depth:
 Sampling Point:
 Date Received: 12/06/2011 Date Reported: 1/10/2012

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.935			
Oxygen -----	20.86			
Nitrogen -----	78.04			
Carbon Dioxide -----	0.075			
Methane -----	0.0916			
Ethane -----	0.0006			
Ethylene -----	nd			
Propane -----	nd			
Propylene -----	nd			
Iso-butane -----	nd			
N-butane -----	nd			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 1
 Specific gravity, calculated: 1.000

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.



ANALYSIS REPORT

Lab #: 228934
Sample Name: A-074922-120211-CM-D3
Company: Pace Analytical
Date Sampled: 12/02/2011
Container: Cali-5-Bond Bag
Field/Site Name: San Juan 32-8 No. 202
Location:
Formation/Depth:
Sampling Point:
Date Received: 12/06/2011

Job #: 16972
Co. Lab#:

Date Reported: 1/10/2012

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.946			
Oxygen -----	20.04			
Nitrogen -----	78.51			
Carbon Dioxide -----	0.50			
Methane -----	0.0031			
Ethane -----	0.0003			
Ethylene -----	nd			
Propane -----	0.0002			
Propylene -----	nd			
Iso-butane -----	0.0001			
N-butane -----	0.0002			
Iso-pentane -----	0.0001			
N-pentane -----	0.0002			
Hexanes + -----	nd			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 0
Specific gravity, calculated: 1.001

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.



ANALYSIS REPORT

Lab #: 228935
Sample Name: A-074922-120211-CM-2566
Company: Pace Analytical
Date Sampled: 12/02/2011
Container: Cali-5-Bond Bag
Field/Site Name: San Juan 32-8 No. 202

Job #: 16972
Co. Lab#:

Location:

Formation/Depth:

Sampling Point:

Date Received: 12/06/2011

Date Reported: 1/10/2012

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	0.0036			
Hydrogen -----	nd			
Argon -----	0.0312			
Oxygen -----	0.17			
Nitrogen -----	2.37			
Carbon Dioxide -----	1.46			
Methane -----	94.20	-36.44	-174.7	
Ethane -----	1.53	-23.73	-138.0	
Ethylene -----	nd			
Propane -----	0.174			
Propylene -----	0.0002			
Iso-butane -----	0.0344			
N-butane -----	0.0171			
Iso-pentane -----	0.0075			
N-pentane -----	0.0024			
Hexanes + -----	0.0031			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 989

Specific gravity, calculated: 0.589

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.



ANALYSIS REPORT

Lab #: 228936
Sample Name: A-074922-120211-CM-202
Company: Pace Analytical
Date Sampled: 12/02/2011
Container: Cali-5-Bond Bag
Field/Site Name: San Juan 32-8 No. 202

Job #: 16972
Co. Lab#:

Location:

Formation/Depth:

Sampling Point:

Date Received: 12/06/2011

Date Reported: 1/10/2012

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.0458			
Oxygen -----	1.07			
Nitrogen -----	3.90			
Carbon Dioxide -----	10.13			
Methane -----	84.57	-42.76	-207.4	
Ethane -----	0.279	-20.47		
Ethylene -----	nd			
Propane -----	0.0059			
Propylene -----	0.0001			
Iso-butane -----	0.0005			
N-butane -----	0.0003			
Iso-pentane -----	nd			
N-pentane -----	nd			
Hexanes + -----	nd			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 863

Specific gravity, calculated: 0.676

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.



ANALYSIS REPORT

Lab #: 228937
Sample Name: A-074922-120211-CM-204
Company: Pace Analytical
Date Sampled: 12/02/2011
Container: Cali-5-Bond Bag
Field/Site Name: San Juan 32-8 No. 202
Location:
Formation/Depth:
Sampling Point:
Date Received: 12/06/2011

Job #: 16972
Co. Lab#:

Date Reported: 1/10/2012

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	nd			
Hydrogen -----	nd			
Argon -----	0.126			
Oxygen -----	2.91			
Nitrogen -----	10.82			
Carbon Dioxide -----	9.71			
Methane -----	76.17	-42.86	-208.6	
Ethane -----	0.258	-20.68		
Ethylene -----	nd			
Propane -----	0.0078			
Propylene -----	0.0001			
Iso-butane -----	0.0009			
N-butane -----	0.0009			
Iso-pentane -----	0.0002			
N-pentane -----	0.0001			
Hexanes + -----	nd			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 777

Specific gravity, calculated: 0.711

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.



ANALYSIS REPORT

Lab #: 228938
Sample Name: A-074922-120211-CM-25
Company: Pace Analytical
Date Sampled: 12/02/2011
Container: Cali-5-Bond Bag
Field/Site Name: San Juan 32-8 No. 202
Location:
Formation/Depth:
Sampling Point:
Date Received: 12/06/2011

Job #: 16972
Co. Lab#:

Date Reported: 1/10/2012

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	0.0032			
Hydrogen -----	nd			
Argon -----	0.0878			
Oxygen -----	2.04			
Nitrogen -----	7.66			
Carbon Dioxide -----	1.83			
Methane -----	87.27	-35.93	-173.1	
Ethane -----	1.00	-23.31	-136.3	
Ethylene -----	nd			
Propane -----	0.0859			
Propylene -----	0.0002			
Iso-butane -----	0.0160			
N-butane -----	0.0063			
Iso-pentane -----	0.0024			
N-pentane -----	0.0007			
Hexanes + -----	0.0011			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 906
Specific gravity, calculated: 0.621

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.



ANALYSIS REPORT

Lab #: 228939
Sample Name: A-074922-120211-CM-DUP
Company: Pace Analytical
Date Sampled: 12/02/2011
Container: Cali-5-Bond Bag
Field/Site Name: San Juan 32-8 No. 202
Location:
Formation/Depth:
Sampling Point:
Date Received: 12/06/2011

Job #: 16972
Co. Lab#:

Date Reported: 1/10/2012

Component	Chemical mol. %	$\delta^{13}\text{C}$ ‰	δD ‰	$\delta^{15}\text{N}$ ‰
Carbon Monoxide -----	nd			
Hydrogen Sulfide -----	na			
Helium -----	0.0035			
Hydrogen -----	nd			
Argon -----	0.0296			
Oxygen -----	0.12			
Nitrogen -----	2.24			
Carbon Dioxide -----	1.46			
Methane -----	94.38	-36.45	-175.0	
Ethane -----	1.53	-23.67	-138.1	
Ethylene -----	nd			
Propane -----	0.174			
Propylene -----	0.0001			
Iso-butane -----	0.0346			
N-butane -----	0.0171			
Iso-pentane -----	0.0075			
N-pentane -----	0.0024			
Hexanes + -----	0.0029			

Total BTU/cu.ft. dry @ 60deg F & 14.7psia, calculated: 991

Specific gravity, calculated: 0.588

nd = not detected. na = not analyzed. Isotopic composition of hydrogen is relative to VSMOW. Isotopic composition of carbon is relative to VPDB. Calculations for BTU and specific gravity per ASTM D3588. Chemical compositions are normalized to 100%. Mol. % is approximately equal to vol. %.

ATTACHMENT 3
JOURNEY MANAGEMENT PLAN

Attachment 3
Conestoga-Rovers & Associates Journey Management Plan
San Juan County, New Mexico

Job Name: Good Well Investigation
Location: San Juan County, New Mexico
Project Number: 074922

Page 1 of 7

PURPOSE

The purpose of this Journey Management Plan (JMP) is to prevent losses associated with motor vehicle related incidents including: injuries to drivers, passengers and pedestrians, damage to motor vehicles and damage to third party property. By communicating potential safety risks before mobilizing to a site, a motor vehicle operator will be able to prepare for and avoid potential hazards.

SCOPE

This JMP applies to all vehicles assigned for the support of site operations, including company owned and personal use vehicles. This JMP includes driving directions and hazards for routes which are expected to be commonly traveled during the life of the project; an on-site driving route with traffic-flow schematic is also included.

SPECIAL NOTE

Because the site, weather and traffic conditions may change frequently the JMP shall be maintained and updated separate from the Site Health and Safety Plan (HASP).

RESPONSIBILITIES

Contract Project Manager

The contract project manager is responsible to ensure that the site has a current JMP.

Field Manager

The field manager is responsible to create and keep current a JMP that is appropriate for the site conditions. It is also the field manager's role to ensure each vehicle operator has a JMP that describes the conditions for his vehicle and equipment prior to mobilizing to the site. A common JMP may be used for several vehicles or as conditions dictate a separate JMP may be specific or unique to an individual vehicle.

Vehicle Operator

The assigned vehicle operator shall not mobilize to the site without first receiving and reviewing the JMP. It is the vehicle operator's responsibility to read and become familiar with the description and stipulations of the JMP prior to mobilizing to the site. DO NOT mobilize to the site to get clarification to the JMP. Because driving conditions may vary, vehicle operators shall also notify the field manager of any hazards not identified on the JMP so that the field manager can update the JMP. Because traffic conditions may change frequently on a project, the JMP shall be maintained and updated separate from the Site Health and Safety Plan.

Attachment 3
Conestoga-Rovers & Associates Journey Management Plan
San Juan County, New Mexico

Job Name: Good Well Investigation
Location: San Juan County, New Mexico
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Scope of this JMP

This JMP shall include the operation and use of the following vehicles and equipment: Conestoga-Rovers & Associates (CRA) and subcontractor trucks/vans and personal vehicles.

All vehicle operators shall be responsible for ensuring their vehicles are maintained and being familiar with and obeying all laws related to vehicle operation.

GENERAL HAZARDS

It is the vehicle operator's sole responsibility to read and become familiar with the description and stipulations of the JMP prior to mobilizing to the site. All drivers will avoid distractions including but not limited to using cell phones in any form.

Off-Site Hazards

Maintain awareness of heavy traffic flow at peak driving times (early morning, mid-day, and evening rush hour). The driver should anticipate hazards, maintain a safety cushion around the vehicle, and adjust their driving speed. Weather conditions will be monitored throughout the day and prior to mobilization. Rain or mist reduces visibility and wet pavement reduces traction. Turn headlights on to increase visibility regardless of weather conditions. Make sure windshield wipers are in proper working condition. Reduce speed so that stopping can be made safely and obey posted speed limits. Use turn signals appropriately.

On-Site Hazards

The following hazards may be encountered while driving on Site access roads: pedestrians and other vehicles.

The following table summarizes the directions covered in this JMP.

From:	To:	Page Number
CRA Office, Albuquerque	Site	3
Double Eagle II Airport, (Albuquerque, NM)	CRA Office, Albuquerque	4
Hotel	Site	5

Attachment 3
Conestoga-Rovers & Associates Journey Management Plan
San Juan County, New Mexico

Job Name: Good Well Investigation
Location: San Juan County, New Mexico
Project Number: 074922

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FROM: CRA office in Albuquerque, NM (A)

TO: Site (B)

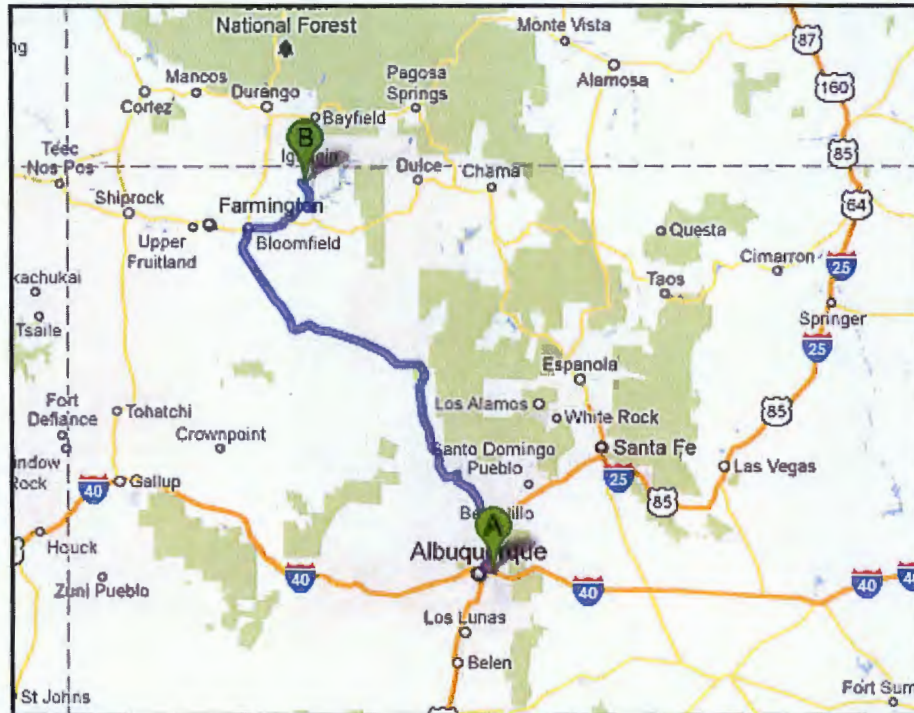
ESTIMATED DRIVE TIME: 3 hours 38 min

DIRECTIONS	DISTANCE
• Head southeast on Indian School Rd NE toward Jeannedale Dr NE	0.3 miles
• Take the 1st right onto Americas Pkwy NE	0.3 miles
• Take the 1st right onto Louisiana Blvd NE	279 feet
• Slight right to merge onto I-40 W	3.0 miles
• Take exit 159C to merge onto I-25 N toward Santa Fe	14.6 miles
• Take exit 240 toward NM-473/Bernalillo S	0.1 miles
• Merge onto E Avenida Bernalillo	0.7 miles
• Turn right onto S Camino Del Pueblo	1.4 miles
• Turn left onto US-550 N	151 miles
• Turn right onto W Main St	0.3 miles
• Turn left onto S 1st St	367 feet
• Take the 1st right onto US-64 E/E Broadway Av. Continue to follow US-64 E	11.3 miles
• Turn left to stay on NM-511 N	9.9 miles
• Arrive at mile marker 25 destination	0.4 miles

Attachment 3
Conestoga-Rovers & Associates Journey Management Plan
San Juan County, New Mexico

Job Name: Good Well Investigation
Location: San Juan County, New Mexico
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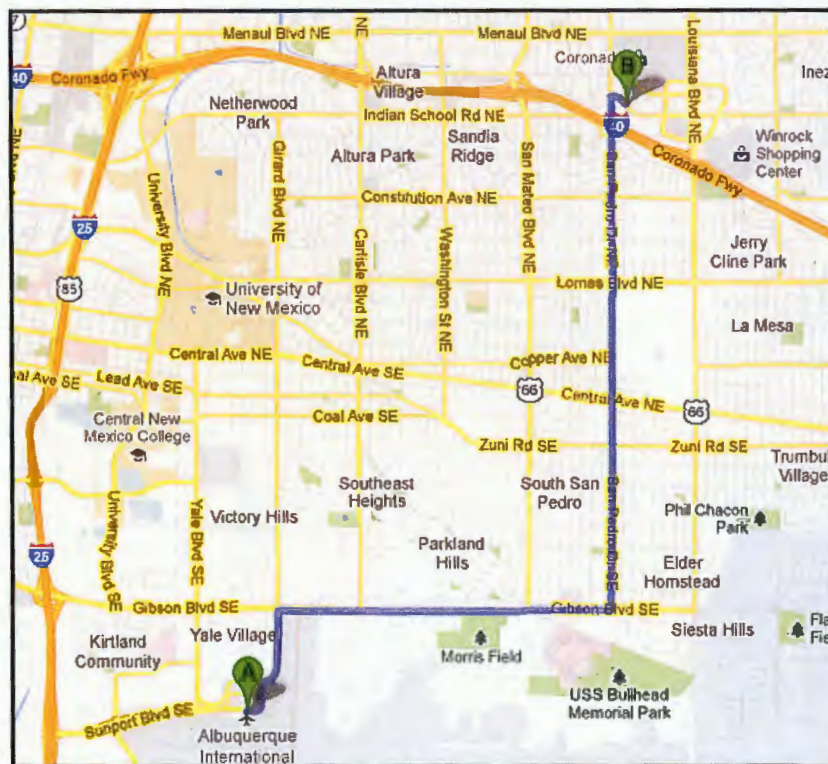
Attachment 3
Conestoga-Rovers & Associates Journey Management Plan
San Juan County, New Mexico

Job Name: Good Well Investigation
Location: San Juan County, New Mexico
Project Number: 074922

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FROM: Albuquerque International Airport (ABQ)(A)
TO: CRA office in Albuquerque, NM (B)
ESTIMATED DRIVE TIME: 33 min

DIRECTIONS	DISTANCE
• Head east on Sunport Blvd SE toward Girard Blvd SE	0.3 miles
• Continue straight onto Girard Blvd SE	0.4 miles
• Turn right onto Gibson Blvd SE	2.0 miles
• Turn left onto San Pedro Dr SE	3.1 feet
• Turn right onto Indian School Rd NE	0.1 miles
• Destination will be on the left at 6121 Indian School Rd NE #200 Albuquerque, NM 87110	0.3 miles



Attachment 3
Conestoga-Rovers & Associates Journey Management Plan
San Juan County, New Mexico

Job Name: Good Well Investigation
Location: San Juan County, New Mexico
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FROM: Hotel (Courtyard Farmington) (A)
TO: Site (B)
ESTIMATED DRIVE TIME: 1 hour 6 min

DIRECTIONS	DISTANCE
• Head northeast on Scott Ave toward Berg Park Access	0.3 miles
• Turn right onto NM-516/E Main St, Continue to follow NM-516	12.3 miles
• Continue onto N Aztec Blvd	2 miles
• Turn right onto NM-173 E/Navajo Dam Rd	18.1 miles
• Turn left onto NM-511 N	5.7 miles
• Turn left to stay on NM-511 N	12.6 miles
• Turn right Destination will be on the left	0.8 miles



Attachment 3
Conestoga-Rovers & Associates Journey Management Plan
San Juan County, New Mexico

Job Name: Good Well Investigation
Location: San Juan County, New Mexico
Project Number: 074922

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CHANGES TO THE JOURNEY MANAGEMENT PLAN

Date	Name	Change/Comment (be specific)






Manager Review and Approval

Signature: _____

Date: _____

ATTACHMENT 4
PROJECT EVENT SCHEDULE

ATTACHMENT 4
 PROJECT EVENT SCHEDULE
 GOOD WELL INVESTIGATION
 CONOCOPHILLIPS COMPANY
 SAN JUAN COUNTY, NEW MEXICO

Activity		May 2012																														
		T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T
	Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Site Tour	(3 days)																															
Baseline Sampling	(1 week)																															
Mobilization of drill crew	(1 week)																															
		June 2012																														
		F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Drilling, Downhole Testing, and Well Completion	(2 weeks)																															
Packer Installation and Sampling	(1 week)																															
Demobilization	(1 week)	