# 3R - 425

# REPORT

11/28/2011

3R425



# SITE CHARACTERIZATION REPORT SAN JUAN 29-7 UNIT 37 RIO ARRIBA COUNTY, NEW MEXICO

Prepared For: ConocoPhillips Company Risk Management and Remediation 420 South Keeler Avenue Bartlesville, Oklahoma 74004

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**CONESTOGA-ROVERS & ASSOCIATES** 

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ConocoPhillips Company (ConocoPhillips) retained Conestoga-Rovers & Associates (CRA) to conduct site characterization activities at the San Juan 29-7 Unit 37 natural gas well (Site). The Site is located within Unit Letter N, Section 12, Township 29N, Range 7W, Rio Arriba County, New Mexico (Latitude: 36.73552° N; Longitude: -107.52488° W) (Figure 1).

Site characterization activities were conducted at the Site to delineate soil and groundwater impacted by a release that occurred from an above-ground condensate tank during August 2010 (Figure 2). Hydrocarbon impacts from the release that exceeded state standards included benzene, toluene and total xylenes in groundwater and total benzene, toluene, ethylbenzene, and xylenes (BTEX), total petroleum hydrocarbons gasoline range organics (TPH-GRO), and total petroleum hydrocarbons diesel range organics (TPH-DRO) in the vadose zone soil. Soil impacts were delineated to a maximum depth of approximately 110 feet-below ground surface (ft-bgs). Groundwater was impacted in the immediate area of the release and extended to approximately 60 feet down-gradient from the release.

# 1.1 <u>SITE HISTORY</u>

The surface of the Site is owned by Mr. Richard Hodgson and is leased by ConocoPhillips. The San Juan 29-7 Unit 37 natural gas well was spudded in October 1955 by El Paso Natural Gas Company. Meridian Oil, Inc., a subsidiary of Burlington Resources, Inc. (Burlington), took over the operation of the well on November 1, 1986. ConocoPhillips acquired Burlington on March 31, 2006. The well is currently operated by ConocoPhillips. A Site detail map is included as Figure 2.

ConocoPhillips discovered a leaking inspection plate gasket on the above-ground condensate tank on August 26, 2010 (Figure 2). Approximately 23 barrels (bbls) of condensate were released and fully contained within the berm; however, no liquids were recovered. The release was immediately reported to the New Mexico Oil Conservation Division (NMOCD) with a C-141 Release Notification and Corrective Action form filed by ConocoPhillips on September 16, 2010.

# 1.2 <u>SITE SETTING</u>

The Site is located in Rio Arriba County, New Mexico, on privately-owned ranch land. The elevation at the Site is approximately 6,292 feet above mean sea level (amsl). The Tertiary-aged San Jose Formation crops out as sandstone bluffs visible to the north and south of the Site and locally reaching an elevation of approximately 6,652 feet amsl.

Soils at the Site consist primarily of silts, sands and clays. Groundwater is located at approximately 110 feet below ground surface (ft-bgs) and locally flows towards the south. Regional groundwater flow is not known, but according to the United States Geological Survey Delgadita Mesa, NM topographic map, if groundwater flow mimics topography, it likely trends toward the south/southeast.

An Environmental Data Resources (EDR) report on the subject property identified the Gould Pass National Wetland Inventory within a one mile radius of the Site. According to the EDR radius map included in the report, the largest section of the Wetland Inventory is located upgradient of the Site.

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#### 2.0

# SITE CHARACTERIZATION

The release from the above-ground storage tank was initially addressed by excavating impacted soil, followed by subsurface soil sampling and groundwater monitoring and sampling.

# 2.1 SOIL INVESTIGATION RESULTS

Following the discovery of the release of condensate from the above-ground tank at the site; Envirotech, Inc. (Envirotech) of Farmington, New Mexico excavated soil from the area below the tank location. Between September 24, 2010 and January 3, 2011, Envirotech excavated approximately 5,100 cubic yards (yd<sup>3</sup>) of soil. The excavation measured approximately 70 ft by 120 ft by 30 ft deep (Figure 2). The horizontal extent of the hydrocarbon-impacted area was not determined and the vertical delineation of the impacted area was not achieved at that time. For practical and safety reasons and due to limitations posed by surface structures, the vertical extent of the excavation was halted at approximately 30 ft-bgs. The excavation was subsequently back filled with clean soil. Excavated soil was hauled to a ConocoPhillips approved landfarm for treatment.

To further delineate vertical impact of the release, Tetra Tech Inc. sampled subsurface conditions in the impacted area and in close proximity to the release point (soil boring B-1) between January 12 and 14, 2011 (Figure 2). Impacts were noted in the soil above the NMOCD recommended field screening level for organic vapors (100 ppm) from 30 ftbgs to the total depth of the soil boring at 129.5 ft-bgs. A dry shale layer and auger refusal were encountered and a photoionization detector (PID) reading of 0.5 ppm was observed at this depth. Groundwater was encountered at approximately 111 ft-bgs in the boring. From this soil boring, seven soil samples and one groundwater sample were collected for laboratory analysis. Laboratory analytical results of the soil from this boring indicated the sample from a depth of 30 to 32 feet-bgs exceeded the NMOCD Recommended Remediation Action Levels for BTEX and TPH. The Total BTEX concentration was 433.25 mg/kg and the TPH concentration was 5680 mg/kg.

Between February 28 and March 4, 2011, Tetra Tech advanced two additional soil borings in the area of the release and installed four soil borings/monitoring wells (MW-1 through MW-4) at the Site. Soil samples were collected from all the borings for field screening and laboratory analyses. Two soil borings were advanced in or near the center of the previously excavated area.

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Boring B-2 (Figure 3) was located approximately 20 ft north of MW-1 and was advanced to a depth of 120 ft-bgs. Field screening of soil samples indicated soil impacts above the NMOCD field screening action level (100 ppm) from a depth of 102 to 104 ft-bgs (222.9 ppm). The highest organic vapors in B-2 were recorded at a depth of 45 to 47 ft-bgs (6190 ppm).

Boring B-3 was advanced to a total depth of 57 ft-bgs. Field screened soil samples collected from boring B-3 were below 20 ppm to the total depth of 57 ft-bgs. This boring was called "North Boring" in early field data records.

Soil samples were collected for laboratory analysis from the soil borings for all four monitoring wells and B-2 (Table 1 and Figure 3). No samples were collected for laboratory analysis from B-3 since no hydrocarbon impacts were observed and groundwater was not encountered. Soil sample analytical results that were above the regulatory levels for this phase of the Site characterization were found at the following locations and depths:

- B-2 at a depth of 45 to 47 ft-bgs; and
- MW-1 at a depth of 50 to 52 ft-bgs.

Monitoring Well MW-1 was installed approximately 20 ft south of B-2, where elevated organic vapors were encountered. Three additional monitoring wells (MW-2, MW-3, and MW-4) were installed at the Site (Figure 2). Monitoring Well MW-4 was installed as a background water quality well in a location upgradient of the release area. Monitoring wells MW-3 and MW-4 were installed in locations downgradient of the release area. Groundwater was encountered in these wells at approximately 110 ft-bgs. The analytical results for these wells from the March 2011 groundwater sampling event indicated that only benzene was detected above the NMWQCC standard in one well (MW-1) at a concentration of 0.066 mg/L (Table 2 and Figure 4). Hydrocarbons were not detected above the NMWQCC groundwater quality standards in Monitoring Wells MW-2 through MW-4.

To further evaluate Site conditions and delineate impacts, 11 borings were advanced and four monitoring wells (MW-5 through MW-8) were installed at the Site during September and October 2011 (Figure 2). Soil borings were advanced in the area of the excavation. One monitoring well was installed upgradient of the release and three monitoring wells were installed downgradient of the release.

Field screening of soil samples and laboratory results indicated impacts (organic vapors > 100 ppm) in the immediate area of the release to depths ranging from 40 ft-bgs to 110 ft-bgs. The laboratory analysis of soil samples (Figure 3) indicated the following sample locations were above the NMOCD Recommended Remediation Action Levels of 50 mg/kg for BTEX and 100 mg/kg for TPH:

- B-4 at a depth of 58 to 60 ft-bgs with a Total BTEX concentration of 365 mg/kg and a TPH concentration of 5,010 mg/kg;
- B-5 at a depth of 51 to 53 ft-bgs with a Total BTEX concentration of 133 mg/kg and a TPH concentration of 1,566 mg/kg;
- B-6 at a depth of 107 to 108 ft-bgs with a TPH concentration of 121 mg/kg;
- B-7 at a depth of 20 to 22 ft-bgs with a TPH concentration of 2,726 mg/kg; and
- B-10 at a depth of 46 to 48 ft-bgs with a Total BTEX concentration of 1,515.5 mg/kg and a TPH concentration of 21,033 mg/kg;

The soil sample laboratory analytical results are summarized and presented in Table 1 and Figure 3. Soil samples were collected for laboratory analyses as outlined in the work plan (August 2011). Laboratory reports are contained in Appendix A. Boring logs are contained in Appendix B. Generalized geologic cross sections are included as Figures 5a and 5b. The soil boring locations used to compile the cross sections are referenced on Figure 2.

# 2.2 <u>GROUNDWATER INVESTIGATION RESULTS</u>

The subsurface geology at the Site consists of alternating fine sands, silt and clay overlying shale. In general, groundwater occurs in a fine to medium grained sand just above the shale layer. A total of eight monitoring wells have been installed to characterize groundwater conditions at the Site. Two monitoring wells were installed upgradient of the release with one located upgradient of the entire site (MW-4) and one monitoring well located immediately upgradient of the release (MW-7). Two monitoring wells (MW-1 and MW-8) were installed within the area of the release and four monitoring wells (MW-2, MW-3, MW-5 and MW-6) were installed at various distances downgradient of the release. Monitoring well completion diagrams for wells installed during the September and October 2011 subsurface investigation (MW-5 through MW-8) are included in Appendix B.

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Monitoring Wells MW-1, MW-2, MW-3 and MW-4 were surveyed by Tetra Tech, Inc. in March 2011, following their installation, and have been used to compile groundwater potentiometric surface maps for the August and October 2011 groundwater sampling events, which are presented as Figures 6 and 7, respectively. The direction of groundwater flow is toward the south and the calculated groundwater gradient for the most recent groundwater sampling event in October 2011 is 0.019 ft/ft.

# 2.2.1 <u>GROUNDWATER ANALYTICAL RESULTS</u>

Groundwater samples from Monitoring Wells MW-1, MW-2, MW-3, and MW-4 were submitted for laboratory analyses in March, August and October 2011. During the March event, samples were analyzed for a baseline list of analytes including major ions by EPA Method 300.0; semi volatile organics (SVOCs) by EPA Method 8270C; volatile organics (VOCs) by EPA Method 8260B; general chemistry (alkalinity, hardness, total dissolved solids, and pH by various methods); New Mexico Water Quality Control Commission (NMWQCC) dissolved metals by EPA Method 6010B; and TPH GRO and DRO by EPA Method 8015B. All groundwater analytical results are summarized and presented in Table 2 and on Figure 4. Laboratory reports are contained in Appendix A. Appendix C contains the groundwater sampling field forms.

During the August 2011 event, samples were analyzed for constituents that exceeded the NMWQCC standards during the baseline analysis, which included BTEX by EPA Method 8260B, manganese and selenium by EPA Method 6010, nitrate and sulfate by EPA Method 300.0, and TDS by Method SM 2540C. Samples were also analyzed for TPH-DRO by EPA Method 8015B, TPH-GRO by EPA Method 5030B/8015B and heterotrophic plate count (HPC) by Method SM 9215B.

Groundwater samples were collected from open borings and newly installed monitoring wells (MW-5 through MW-8) during September 2011 and October 2011. During these events, samples were analyzed for BTEX by EPA Method 8260B, TPH-DRO by EPA Method 8015B, TPH-GRO by EPA Method 5030B/8015B. All site monitoring wells were sampled for HPC by Method 9215B during this event. All groundwater samples were collected for laboratory analyses from open borings and monitoring wells using a disposable, polyethylene bailer.

Laboratory analytical results of a groundwater sample collected on January 14, 2011 from the open boring, B-1, indicated that hydrocarbon impacts to groundwater were detected above the NMWQCC standards (Table 2). The following concentrations for this location were:

- Benzene 0.930 milligrams per liter (mg/L) (NMWQCC standard of 0.01 mg/L);
- Toluene 15 mg/L (NMWQCC standard of 0.75 mg/L);
- Ethylbenzene 1.4 mg/L (NMWQCC standard of 0.75 mg/L); and
- Total xylenes 18.8 mg/L (NMWQCC standard of 0.62 mg/L).

The laboratory analytical results for hydrocarbon constituents in groundwater samples collected from monitoring wells, and open borings where water accumulated, revealed the following locations (Figure 4) were above the NMWQCC standards:

- MW-1 indicated a benzene concentration of 0.066 mg/L in March 2011 and 0.0189 mg/L in August 2011;
- B-4 indicated a benzene concentration of 0.133 mg/L in September 2011;
- B-5/MW-8 indicated a benzene concentration of 0.297 mg/L, a toluene concentration of 0.954 mg/L, and a total xylenes concentration of 1.45 mg/L in September 2011;
- B-8 indicated a benzene concentration of 0.307 mg/L in October 2011 and a total xylenes concentration of 0.758 mg/L in October 2011;
- MW-6 indicated a benzene concentration of 0.0333 mg/L;
- MW-8 indicated a benzene concentration of 0.15 mg/L, a toluene concentration of 1.24 mg/L and a total xylenes concentration of 1.43 mg/L in October 2011.

In addition, groundwater samples from MW-1, MW-2, MW-3, and MW-4 were analyzed for dissolved manganese and selenium, sulfate, nitrate, and total dissolved solids (TDS) in March and August 2011. Manganese was detected above the NMWQCC standard (0.2 mg/L) in Monitoring Wells MW-1, MW-2 and MW-3. Selenium was detected above the NMWQCC standard (0.05 mg/L) in Monitoring Wells MW-2 and MW-3. Nitrates were detected above the NMWQCC standard (0.2 mg/L) in Monitoring Wells MW-2, MW-3 and MW-4. Sulfate and Total dissolved solids (TDS) were detected above the NMWQCC standards (600 mg/L and 1000 mg/L, respectively) in Monitoring Wells MW-1, MW-2, MW-3 and MW-4. The inorganic analytical results in groundwater are summarized in Table 2.

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# 2.3 <u>QA/QC RESULTS</u>

Quality assurance/Quality Control (QA/QC) measures were followed according to the subsurface investigation work plan that was submitted to the NMOCD on August 31, 2011. The field PID was calibrated daily using 100 ppm isobutylene. An equipment blank and a field blank were collected on September 22, 2011. A duplicate groundwater sample was collected during the August and October 2011 groundwater sampling events. Each cooler that was shipped to the laboratory contained a temperature blank, laboratory prepared groundwater blank and laboratory prepared soil blank. The groundwater duplicate samples and all soil and groundwater blanks were analyzed for BTEX.

The soil blank packed in a cooler with samples from boring B-10 contained concentrations of BTEX. A laboratory prepared letter attributing these concentrations to the level of concentrations in the associated soil samples is available in Appendix A.

# 2.4 INVESTIGATIVE DERIVED WASTE

Soil cuttings were placed in 55 gallon drums and staged on site until transported for treatment at the Envirotech landfarm on October 20, 2011. Purged water collected during well development was placed in the produced water tank located on site.

# 3.0 **RECOMMENDATIONS**

Based on site characterization activities, CRA recommends remediation of soil and groundwater in the area of the release. A work plan detailing the proposed method, in situ chemical oxidation, was submitted to the NMOCD on November 28, 2011.

CRA will continue to monitor groundwater at the Site on a quarterly basis. The next groundwater sampling event is scheduled to occur after the completion of in situ chemical oxidation treatment, currently scheduled for mid-December 2011 through early January 2012. Groundwater samples will be collected from all Site monitoring wells and analyzed for BTEX, dissolved manganese and selenium, sulfate, nitrate, TDS, and HPC.

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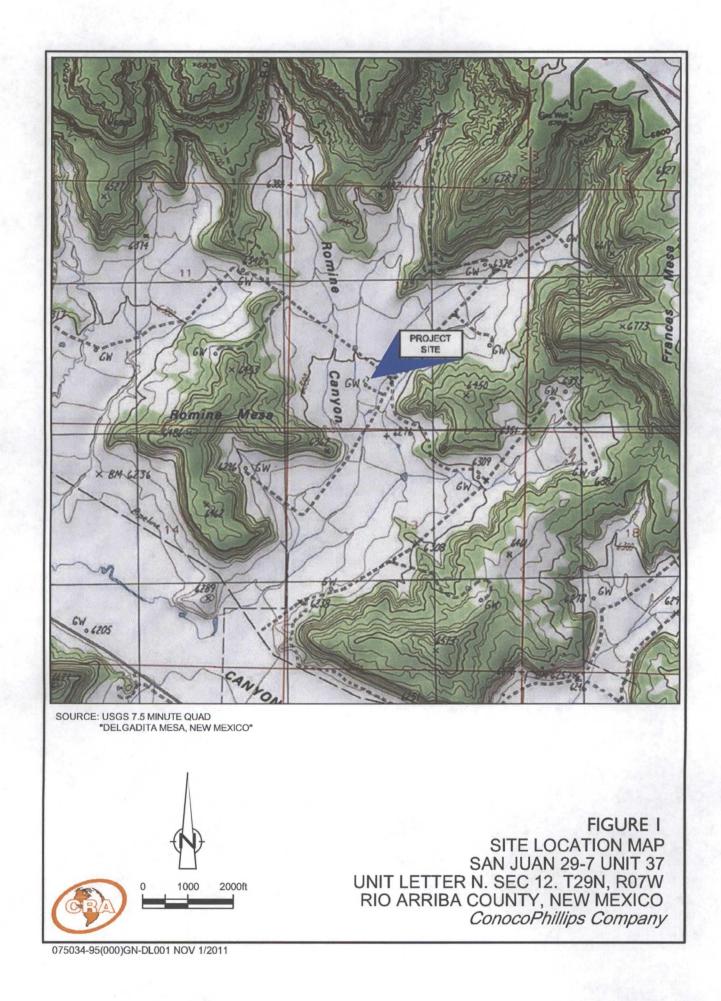
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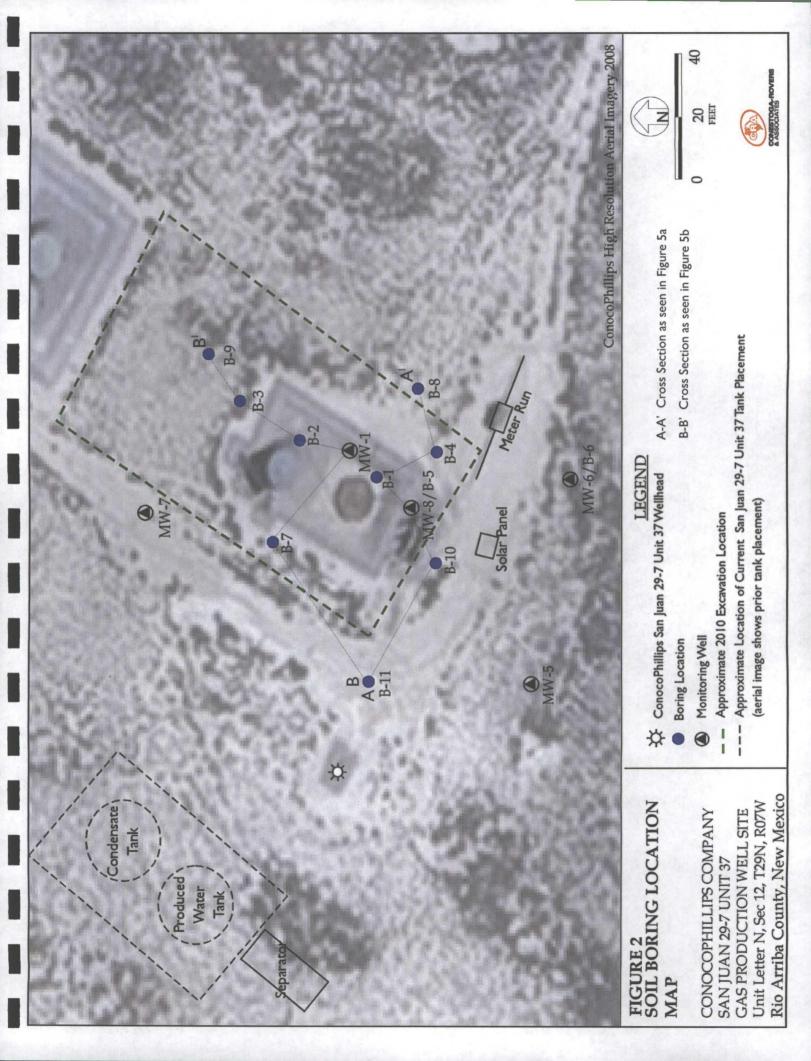
FIGURES

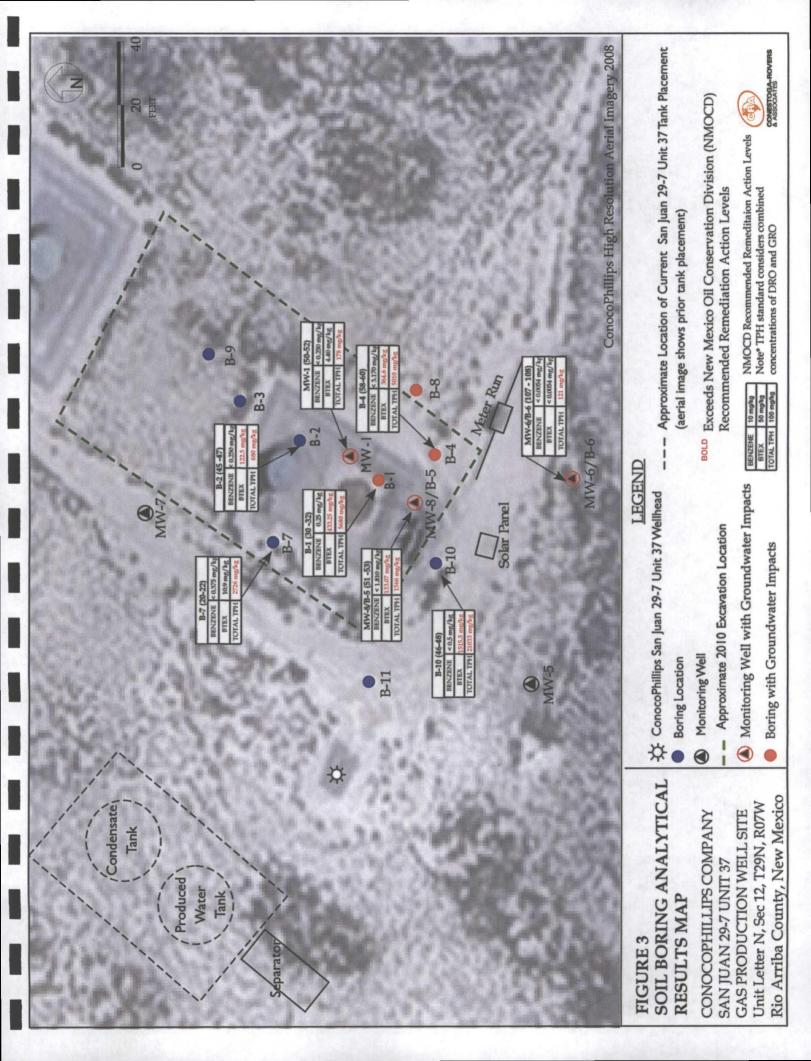
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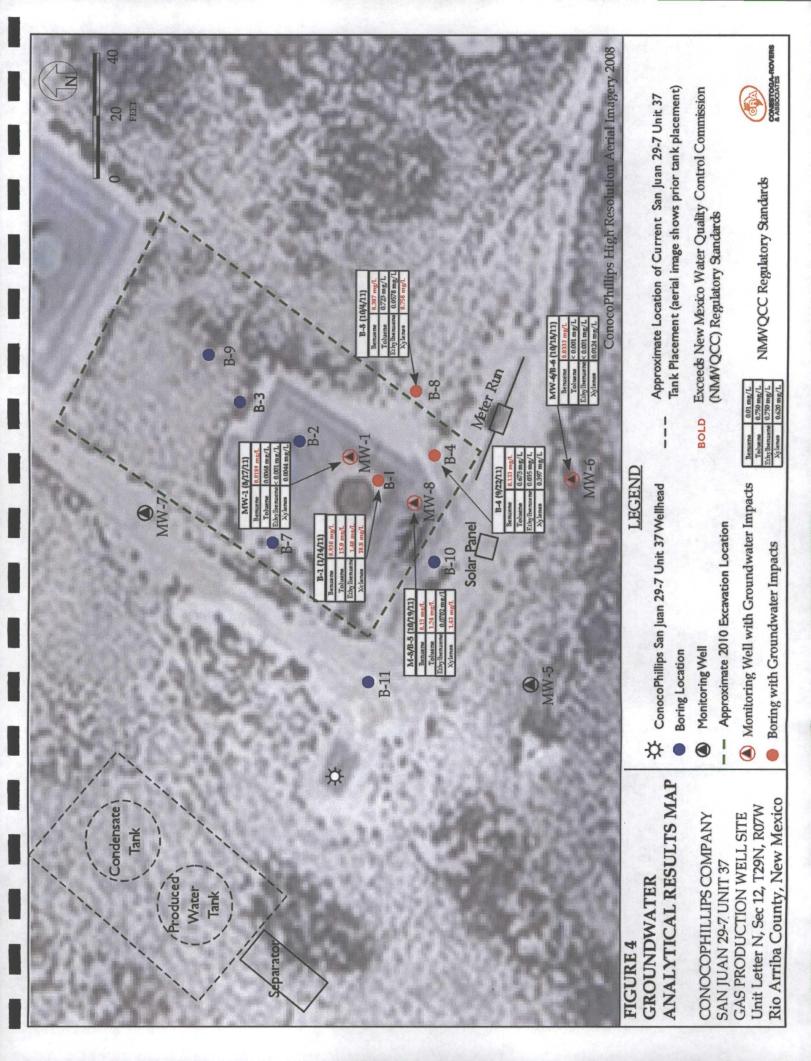
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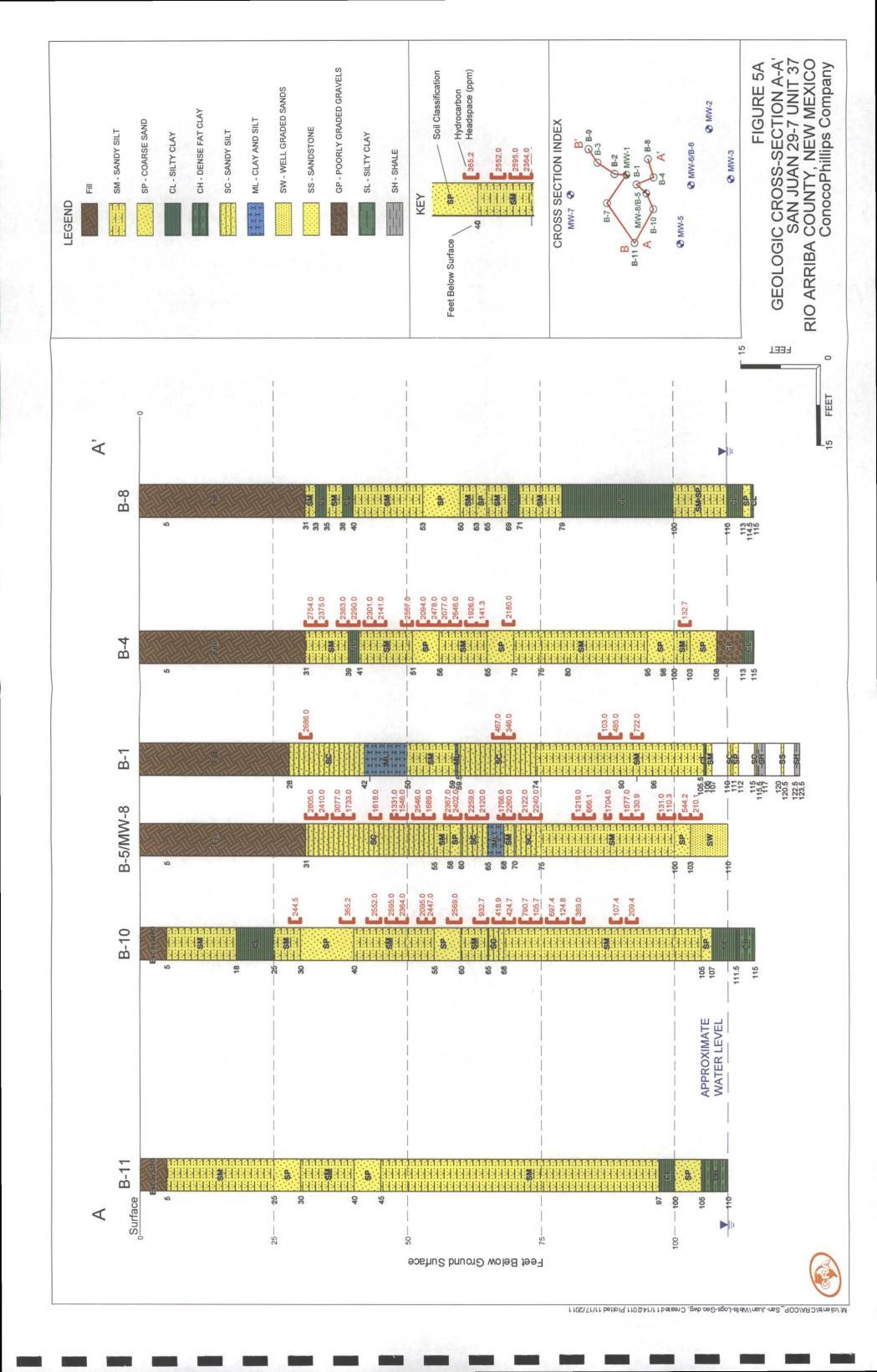
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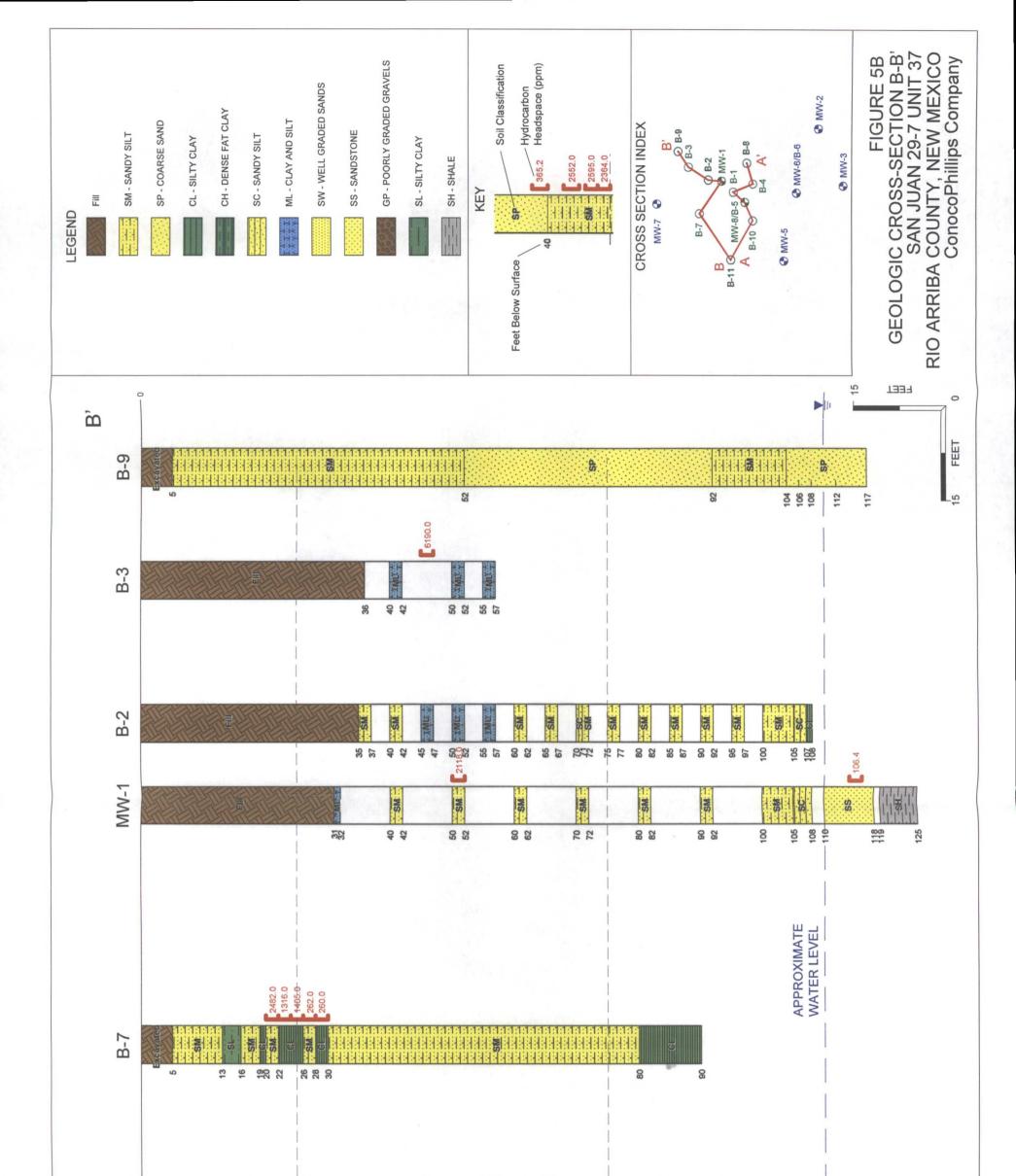


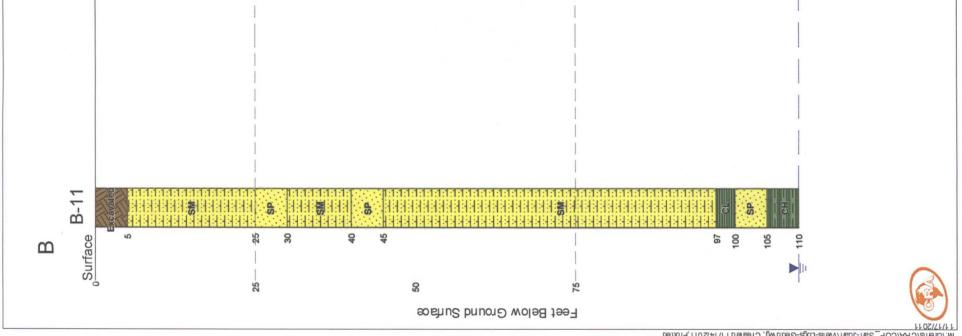








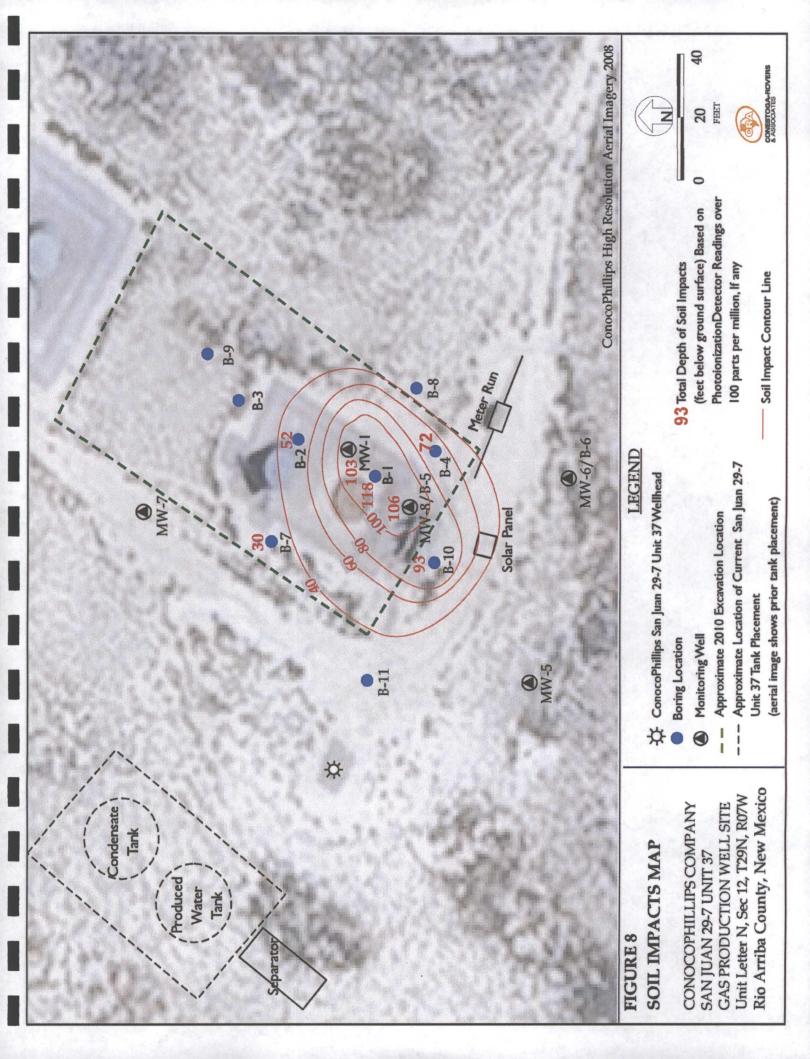




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TABLES

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TABLE 1	Laboratory Soil Analytical Results Summary	ConocoPhillips Company San Juan 29-7 Unit 37
	_	U

Total TPH (mg/kg)	5680	25	12.38	1	I	0.14	0.11	680	0.13	5010		1566	1	121	2726		-	21033	17.6	1	178	0.73	1	I	92.5	0.1	-		1		Total TPH = 100 mg/kg
TPH GRO (mg/kg)	5300	14	0.38	< 0.1	< 0.1	0.14	0.11	630	0.13	3,860	< 14.7	1,200	< 13.4	< 11.7	286	< 16.2	< 20.2	20100	17.6	< 0.0167	68	0.73	< 0.1	< 0.1	1.5	< 5.0	< 11.6		< 20.3		NE
TPH DRO (mg/kg)	380	11	12	< 5.0	< 5.0	< 5.0	< 5.0	50	< 5.0	1,150	< 10.2	366	< 10.2	121	2,440	< 10.3	< 10.6	933	< 10.5	< 0.0102	110	< 5.0	< 5.0	< 5.0	91	0.1	< 10		<11.1		NE
Total BTEX	433.25	2.072	0.103	I	0.017	0.023	0.465	122.5	0.0463	364.60	0.0545	133.07	0.0546	1	10.9	` I	-	1515.5	0.2272	1	4.4	1	1	I	1	-	1	-6	1	5	50 mg/kg
Total Xylenes (mg/kg)	374	1.88	0.089	< .0054	0.017	0.017	0.347	111.0	0.0343	298.0	0.0364	76.8	0.026	< 0.0107	10.9	< 0.0057	< 0.0056	1120	0.162	< 0.0064	4.4	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0108	See Results for B-6	< 0.0059	See Results for B-5	NE
Ethylbenzene (mg/kg)	11	0.082	< .0058	< .0054	< .0051	< .0056	0.022	4.9	< .005	13.0	<0.006	5.47	< 0.0054	< 0.0054	< 0.375	< .0057	< 0.0056	62.5	0.01	< 0.0064	< 0.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0054		< 0.0059		NE
Toluene (mg/kg)	48	0.11	0.014	< 0.0054	< 0.0051	0.006	0.096	6.6	0.012	53.6	0.0181	50.8	0.0286	< 0.0054	< 0.375	< .0057	< 0.0056	333	0.0552	< 0.0064	< 0.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0054		< 0.0059		NE
Benzene (mg/kg)	0.25	< 0.0064	< 0.0058	< 0.0054	< 0.0051	< 0.0056	< 0.005	< 0.25	< 0.005	< 3.17	< 0.006	< 1.810	< 0.0054	< 0.0054	< 0.375	< .0057	< 0.0056	< 5.0	< .0055	< 0.0064	< 0.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< .0.0054		< 0.0059		10 mg/kg
Headspace (ppm)	2686	467	346	103	485	722	0.5	6190	50.7	2077	7.1	2546	210.1	6.4	2482	0.4	0.9	2595	27.6	0.3	2118	106.4	5.9	4.4	30.2	2.2	144.0		8.4		100
Date	1/14/2011	1/14/2011	1/14/2011	1/14/2011	1/14/2011	1/14/2011	1/14/2011	3/1/2011	3/1/2011	9/22/211	9/22/2011	9/22/2011	9/23/2011	9/26/2011	9/27/2011	10/3/2011	10/13/2011	10/18/2011	10/18/2011	10/20/2011	3/3/2011	3/3/2011	3/2/2011	3/2/2011	2/28/2011	2/28/2011	9/24/2011	9/26/2011	10/12/2011	9/22/2011	Limits
Sample Name	B-1 (30-32)	B-1 (66-68)	B-1 (68-70)	B-1 (86-88)	B-1 (88-90)	B-1 (92-94)	B-1 (122.5-123.5)	B-2 (45-47)	B-2 (106-108)	B-4 (58-60)	B-4 (106-108)	B-5 (51-53)	B-5 (103-105)	B-6 (107-108)	B-7 (20-22)	B-8 (108-110)	B-9 (100-102)	B-10 (46-48)	B-10 (105-107)*	B-11 (100-102.5)	MW-1 (50-52)	MW-1 (114-116)	MW-2 (106-108)	MW-3 (106-108)	MW-4 (102-104)	MW-4 (111-113)	MW-5 (107-108.5)	MW-6	MW-7 (105-107.5)	MW-8	NMOCD Action Limits

Not Established	
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<u>Notes:</u> MW = monitoring well B = Soil Boring NMOCD = New Mexico Oil Conservation Division NMOCD = Exceeds NMWQCC Action Limits mg/kg = milligrams per kilogramliter (parts per million) < 0.005 = below laboratory detection limit NE = Not Established

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Depth t	Depth to Groundwater	Groundwater Elevation				Xylenes			Manganese	Selenium	167	a . 19	Total dissolved	Heterotrophic
	(ft-TOC)	(ft-TOC)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	(total) (mg/L)	TPH-DRO (mg/L)	TPH-GRO (mg/L)	(dissolved) (mg/L)	(dissolved) (mg/L)	Nitrate (as N) (mg/L)	Sulfate (mg/L)	solids (TDS) (mg/L)	Plate Count (CFU/mL)
	108.91	80.95	0.066	0.39	0.011	0.084	0.28	1.5	2.77	<0.01	<0.500	1610	2730	1
	108.81	81.05	0.0189	0.0068	<0.001	0.0044	<0.50	<0.50	0.318	<0.015	0.25	1500	2480	180,000
	108.87	80.99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	300,000
	109.20	79.74	<0.001	<0.001	<0.001	<0.001	< 0.11	< 0.1	0.334	0.0664	55.8	1000	2950	NA
	109.10	79.84	<0.001	<0.001	<0.001	<0.003	<0.50	<0.50	0.179	0.0726	71.9 E / 54.1	1040	2110	61,000
	109.13	79.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	124,000
	109.42	78.93	<0.001	0.013	<0.001	0.0042	< 0.1	< 0.1	1.79	0.0316	29.7	857	2360	NA
	109.35	79.00	<0.001	<0.001	<0.001	<0.003	<0.50	<0.50	1.42	0.0524	33.0	972	1960	18,000
	109.37	78.98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	230,000
	111.11	87.05	<0.001	<0.001	<0.001	<0.001	0.14	< 0.1	0.0215	0.042	10.4	1290	2650	NA
	111.10	87.06	<0.001	<0.001	<0.001	<0.003	<0.50	<0.50	0.0062	0.0402	9.4	1240	2000	9800
	111.16	87.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	90,000
	118.05**	1	< 0.0010	< 0.0010	< 0.0010	< 0.0030	< 0.5	< 0.5	NA	NA	NA	NA	NA	970,000
	109.55**	1	0.0333	< 0.0010	< 0.0010	0.0124	< 0.5	< 0.5	NA	NA	NA	NA	NA	720,000
	119.7**	1	< 0.0010	< 0.0010	< 0.0010	< 0.003	< 0.5	< 0.5	NA	NA	NA	NA	NA	2,000,000
	1	1	0.15	1.24	0.0702	1.43	< 0.5	7.1	NA	NA	NA	NA	NA	2,300,000
	1	1	0:930	15.0	1.40	18.80	1.4	73	NA	NA	NA	NA	NA	NA
	1	-	0.133	0.673	0.035	0.397	0.57	3.2	NA	NA	NA	NA	NA	NA
	1	1	0.297	0.954	0.109	1.450	NA	NA	NA	NA	NA	NA	NA	NA
	1	1					No Sam	ple Obtained,	No Sample Obtained; sediment accumulation in boring	umulation in	boring			
	1	1					NoS	ample Obtain	No Sample Obtained; did not reach groundwater	ach groundwa	ater	To the second		
	1	-	0.307	0.723	0.0578	0.758	< 0.61	6.8	NA	NA	NA	NA	NA	NA
	The second se	1	< 0.001	< 0.001	< 0.001	< 0.003	< 1.6	< 0.5	NA	NA	NA	NA	NA	NA
	1	1		1.2.2.3				No Sampl	No Sample Obtained, dry boring	ry boring				
	1	1				1.1.1.1		No Sampl	No Sample Obtained, dry boring	ry boring				
10	NIMMOCC Standarde		0.01	0 75	0.75	067	NF	NF	00	0.05	10	600	1000	NE

TABLE 2 GROUNDWATER ELEVATIONS AND ANALYTICAL SUMMARY

mg/L = milligrams per liter (parts per million) '< ' = Analyte not detected above set laboratory detection limit E = Analyte concentration exceeded the calibration range ft = Feet NA = Not analyzed TPH DRO = total petroleum hydrocarbons diesel range organics TPH GRO = total petroleum hydrocarbons gasoline range organics

Page 1 of 1

075034
Associates
and
Conestoga-Rovers

Notes:

MW = Monitoring Well

B = Soil Boring NMWQCC = New Mexico Water Quality Control Commission BOLD/Red = Exceeds NMWQCC Groundwater Quality Standard

TOC = below top of casing \* = Elevation relative to an arbitrary 200 feet \*\* = Wells not surveyed. NE = Not Established

# APPENDIX A

# LABORATORY REPORTS

075034 (3)

ce Analytica

October 04, 2011

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

RE: Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60106844

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 24, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Cel To

Colleen Koporc for Dianna Meier dianna.meier@pacelabs.com Project Manager

Enclosures

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



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# CERTIFICATIONS

SAN JUAN 29-7 UNIT 37 Project: Pace Project No.: 60106844

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: Pace Project No	SAN JUAN 29-7 UNIT 37 0.: 60106844			
Lab ID	Sample ID	Matrix	Date Collected	Date Received
60106844001	S-075034-92211-CB-B5(51-53)	Solid	09/22/11 15:52	09/24/11 08:15
60106844002	S-075034-92211-CB-B5(103-105)	Solid	09/22/11 11:27	09/24/11 08:15
60106844003	S-075034-92211-CB-B5	Water	09/22/11 13:30	09/24/11 08:15
60106844004		Solid	09/22/11 14:45	09/24/11 08:15
60106844005	S-075034-92111-CB-B4(58-60)	Solid	09/21/11 13:00	09/24/11 08:15
60106844006	S-075034-92211-CB-B4(106-108)	Solid	09/22/11 10:55	09/24/11 08:15
60106844007	GW-075034-92211-CB-B4	. Water	09/22/11 12:00	09/24/11 08:15
60106844008	EB-075034-92211-CB-EB1	Water	09/22/11 14:00	09/24/11 08:15
60106844009	FB-075034-92211-CB-FB1	Water	09/22/11 14:15	09/24/11 08:15
60106844010		Solid	09/22/11 00:00	09/24/11 08:15

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# SAMPLE ANALYTE COUNT

Project: SAN Pace Project No.: 6010

SAN JUAN 29-7 UNIT 37 60106844

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60106844001	S-075034-92211-CB-B5(51-53)	EPA 8015B	. SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	RAB	7
		ASTM D2974-87	DWC	1
60106844002	S-075034-92211-CB-B5(103-105)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	RAB	7
		ASTM D2974-87	DWC	1
60106844003	S-075034-92211-CB-B5	EPA 5030B/8260	PRG	9
60106844004		EPA 5035A/8260	RAB	7
	· · ·	ASTM D2974-87	DWC	1
60106844005	S-075034-92111-CB-B4(58-60)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	RAB	7
		ASTM D2974-87	DWC	1
60106844006	S-075034-92211-CB-B4(106-108)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	RAB	7
		ASTM D2974-87	DWC	1
60106844007	GW-075034-92211-CB-B4	EPA 8015B	SDR	. 3
		EPA 5030B/8015B	PRG	3
		EPA 5030B/8260	PRG	· 9
60106844008	EB-075034-92211-CB-EB1	EPA 5030B/8260	PRG	9
60106844009	FB-075034-92211-CB-FB1	EPA 5030B/8260	PRG	9
60106844010	TRIP BLANK	EPA 5035A/8260	RAB	7

# **REPORT OF LABORATORY ANALYSIS**

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#### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60106844

# Method: EPA 8015B

Description:8015B Diesel Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 04, 2011

#### General Information:

5 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. The samples were prepared in accordance with EPA 3546 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: OEXT/30381

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60106844001

M3: Matrix spike recovery was outside laboratory control limits due to matrix interferences.

- MS (Lab ID: 881918)
  - TPH-DRO
- MSD (Lab ID: 881919)
  - TPH-DRO
- R1: RPD value was outside control limits.
  - MSD (Lab ID: 881919)
    - TPH-DRO

#### **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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#### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60106844

## Method: EPA 8015B

 Description:
 Gasoline Range Organics

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

 Date:
 October 04, 2011

#### **General Information:**

4 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 5035A/5030B 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.

#### QC Batch: GCV/3856

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

analysis).

- S-075034-92111-CB-B4(58-60) (Lab ID: 60106844005)
  - 4-Bromofluorobenzene (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.

#### **Additional Comments:**

#### **REPORT OF LABORATORY ANALYSIS**

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#### **PROJECT NARRATIVE**

Project:	SAN JUAN 29-7 UNIT 37
Pace Project No.:	60106844

# Method: EPA 5030B/8015B

 Description:
 Gasoline Range Organics

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

 Date:
 October 04, 2011

#### General Information:

1 sample was 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.

#### 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/3862

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:

REPORT OF LABORATORY ANALYSIS

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#### **PROJECT NARRATIVE**

### Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60106844

#### Method: EPA 5035A/8260

 Description:
 8260 MSV GRO and Oxygenates

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

 Date:
 October 04, 2011

#### General Information:

6 samples were analyzed for EPA 5035A/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/40377

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

#### QC Batch: MSV/40488

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 29-7 UNIT 37 Pace Project No.: 60106844

# Method: EPA 5030B/8260

 Description:
 8260 MSV

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

 Date:
 October 04, 2011

#### General Information:

4 samples were 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/40470

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

#### QC Batch: MSV/40511

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:

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

#### **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60106844

Sample: S-075034-92211-CB-B5(51- 53)	Lab ID: 601068440	01 Collected: 09/22/	11 15:52	Received: 09	0/24/11 08:15 N	Matrix: Solid	
Results reported on a "dry-weight" ba	asis				•		
Parameters	Results Uni	ts Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EP	A 8015B Preparation Me	ethod: E	PA 3546			
TPH-DRO	<b>366</b> mg/kg	11.1	1	09/27/11 00:00	09/29/11 17:18		
n-Tetracosane (S)	87 %	41-130	1	09/27/11 00:00	09/29/11 17:18	646-31-1	
p-Terphenyl (S)	83 %	39-130	1	09/27/11 00:00	09/29/11 17:18	92-94-4	
Gasoline Range Organics	Analytical Method: EP	A 8015B Preparation Me	ethod: E	PA 5035A/5030B			
TPH-GRO	1200 mg/kg	145	10	09/28/11 00:00	09/28/11 16:24		
4-Bromofluorobenzene (S)	111 %	. 68-134	10	09/28/11 00:00	09/28/11 16:24	460-00-4	
8260 MSV GRO and Oxygenates	Analytical Method: EP	A 5035A/8260					
Benzene	ND ug/kg	1810	250		09/29/11 18:23	71-43-2	
Ethylbenzene	5470 ug/kg	1810	250		09/29/11 18:23	100-41-4	
Toluene	<b>50800</b> ug/kg	1810	250		09/29/11 18:23	108-88-3	
Xylene (Total)	<b>76800</b> ug/kg	3620	250		09/29/11 18:23	1330-20-7	
Toluene-d8 (S)	112 %	81-121	250		09/29/11 18:23	2037-26-5	
4-Bromofluorobenzene (S)	103 %	75-131	250		09/29/11 18:23	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %	77-131	250		09/29/11 18:23	17060-07-0	
Percent Moisture	Analytical Method: AS	ľM D2974-87					
Percent Moisture	10.3 %	0.50	1		09/29/11 00:00		

Date: 10/04/2011 04:58 PM

## **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 Pace Project No.: 60106844	UNIT 37						
Sample: S-075034-92211-CB- B5(103-105)	Lab ID: 60106844002	Collected: 09/22/1	11:2	7 Received: 09	9/24/11 08:15 N	fatrix: Solid	
Results reported on a "dry-weight"	basis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 80	15B Preparation Met	hod: E	EPA 3546			
TPH-DRO	ND mg/kg	10.2	1	09/27/11 00:00	09/29/11 17:29		
n-Tetracosane (S)	87 %	41-130	1	09/27/11 00:00	09/29/11 17:29	646-31-1	
p-Terphenyl (S)	81 %	39-130	1	09/27/11 00:00	09/29/11 17:29	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 80	15B Preparation Met	hod: E	EPA 5035A/5030B	i		
TPH-GRO	ND mg/kg	13.4	1	09/28/11 00:00	09/28/11 16:47		
4-Bromofluorobenzene (S)	92 %	68-134	1	09/28/11 00:00	09/28/11 16:47	460-00-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 50	35A/8260					
Benzene	ND ug/kg	5.4	1		09/28/11 17:19	71-43-2	
Ethylbenzene	ND ug/kg	5.4	1		09/28/11 17:19	100-41-4	
Toluene	28.6 ug/kg	5.4	1		09/28/11 17:19	108-88-3	
Xylene (Total)	26.0 ug/kg	10.8	1		09/28/11 17:19	1330-20-7	
Toluene-d8 (S)	101 %	81-121	1		09/28/11 17:19	2037-26-5	
4-Bromofluorobenzene (S)	97 %	75-131	1		09/28/11 17:19	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %	77-131	1		09/28/11 17:19	17060-07-0	
Percent Moisture	Analytical Method: ASTM [	D2974-87					
Percent Moisture	5.0 %	0.50	1		09/29/11 00:00		

Date: 10/04/2011 04:58 PM

## **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60106844

Sample: S-075034-92211-CB-B5	Lab ID: 60106	5844003 Co	ollected: 09/22/1	1 13:30	Received: 09/24/11 08:15	Matrix: Water	ater	
Parameters	Results	Units	Report Limit	DF	Prepared Analyzed	CAS No.	Qual	
8260 MSV	Analytical Metho	d: EPA 5030B	8/8260					
Benzene	<b>297</b> ug/L		10.0	10	09/30/11 17:50	71-43-2		
Ethylbenzene	109 ug/L		10.0	10	09/30/11 17:50	100-41-4		
Toluene	<b>954</b> ug/L		10.0	10	09/30/11 17:50	108-88-3		
Xylene (Total)	1450 ug/L		30.0	10	09/30/11 17:50	1330-20-7		
4-Bromofluorobenzene (S)	101 %		87-113	10	09/30/11 17:50	460-00-4		
Dibromofluoromethane (S)	100 %		86-112	10	09/30/11 17:50	1868-53-7		
1,2-Dichloroethane-d4 (S)	101 %		82-119	10	09/30/11 17:50	17060-07-0		
Toluene-d8 (S)	102 %		90-110	10	09/30/11 17:50	2037-26-5		
Preservation pH	1.0		0.10	10	09/30/11 17:50	1		

Date: 10/04/2011 04:58 PM

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60106844

Sample: TRIP BLANK	Lab ID: 601068440	04 Collected: 09/22/1	1 14:45	Received: 0	9/24/11 08:15	Aatrix: Solid	
Results reported on a "dry-weight"	basis						
Parameters	ResultsUn	its Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: EP	PA 5035A/8260					
Benzene	ND ug/kg	5.0	1		09/28/11 16:49	71-43-2	
Ethylbenzene	ND ug/kg	5.0	1		09/28/11 16:49	100-41-4	
Toluene	7.3 ug/kg	5.0	1		09/28/11 16:49	108-88-3	
Xylene (Total)	ND ug/kg	· 10.0	1		09/28/11 16:49	1330-20-7	
Toluene-d8 (S)	99 %	81-121	1		09/28/11 16:49	2037-26-5	
4-Bromofluorobenzene (S)	98 %	75-131	1		09/28/11 16:49	460-00-4	
1,2-Dichloroethane-d4 (S)	116 %	77-131	1		09/28/11 16:49	17060-07-0	•
Percent Moisture	Analytical Method: AS	TM D2974-87					U
Percent Moisture	ND.%	0.50	1		09/29/11 00:00		

Date: 10/04/2011 04:58 PM

### **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 U Pace Project No.: 60106844	JNIT 37				
Sample: S-075034-92111-CB-B4(58- 60)	Lab ID: 60106844005	Collected: 09/21/11	13:00 Received:	09/24/11 08:15	Matrix: Solid
Results reported on a "dry-weight" b	asis				
Parameters	Results Units	Report Limit	DF Prepared	Analyzed	CAS No. Qual
8015B Diesel Range Organics	Analytical Method: EPA 8015	5B Preparation Meth	od: EPA 3546		
TPH-DRO	<b>1150</b> mg/kg	20.5	2 09/27/11 00:	00 09/30/11 10:49	
n-Tetracosane (S)	78 %	41-130	2 09/27/11 00:	00 09/30/11 10:49	646-31-1
p-Terphenyl (S)	76 %	39-130	2 09/27/11 00:	00 09/30/11 10:49	92-94-4
Gasoline Range Organics	Analytical Method: EPA 8015	5B Preparation Meth	od: EPA 5035A/503	OB	
TPH-GRO	3860 mg/kg	253	20 09/28/11 00:	00 09/28/11 17:10	
4-Bromofluorobenzene (S)	168 %	68-134	20 09/28/11 00:	00 09/28/11 17:10	460-00-4 S2
8260 MSV GRO and Oxygenates	Analytical Method: EPA 5035	5A/8260			
Benzene	ND ug/kg	3170	500	09/28/11 18:04	71-43-2
Ethylbenzene	13000 ug/kg	3170	500	09/28/11 18:04	100-41-4
Toluene	53600 ug/kg	3170	500	09/28/11 18:04	108-88-3
Xylene (Total)	298000 ug/kg	6330	500	09/28/11 18:04	1330-20-7
Toluene-d8 (S)	116 %	81-121	500	09/28/11 18:04	2037-26-5
4-Bromofluorobenzene (S)	118 %	75-131	500	09/28/11 18:04	460-00-4
1,2-Dichloroethane-d4 (S)	101 %	77-131	500	09/28/11 18:04	17060-07-0
Percent Moisture	Analytical Method: ASTM D2	974-87			
Percent Moisture	<b>2.8</b> %	0.50	1	09/29/11 00:00	

Date: 10/04/2011 04:58 PM

# **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 Pace Project No.: 60106844	UNIT 37						
Sample: S-075034-92211-CB- B4(106-108)	Lab ID: 60106844006	Collected: 09/22/1	1 10:5	5 Received: 09	9/24/11 08:15 N	Aatrix: Solid	
Results reported on a "dry-weight"	basis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 80	15B Preparation Me	thod: E	EPA 3546			
TPH-DRO	ND mg/kg	10.2	1	09/27/11 00:00	09/29/11 17:51		
n-Tetracosane (S)	84 %	41-130	1	09/27/11 00:00	09/29/11 17:51	646-31-1	
p-Terphenyl (S)	81 %	39-130	1	09/27/11 00:00	09/29/11 17:51	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 80	15B Preparation Me	thod: E	EPA 5035A/5030B			
TPH-GRO	ND mg/kg	14.7	1	09/28/11 00:00	09/28/11 17:32		
I-Bromofluorobenzene (S)	96 %	. 68-134	1	09/28/11 00:00	09/28/11 17:32	460-00-4	
260 MSV GRO and Oxygenates	Analytical Method: EPA 503	35A/8260					
Benzene	ND ug/kg	6.0	1		09/28/11 17:34	71-43-2	
Ethylbenzene	ND ug/kg	6.0	1		09/28/11 17:34	100-41-4	
Toluene	18.1 ug/kg	6.0	1		09/28/11 17:34	108-88-3	
(ylene (Total)	<b>36.4</b> ug/kg	11.9	1		09/28/11 17:34	1330-20-7	
Foluene-d8 (S)	100 %	81-121	1		09/28/11 17:34	2037-26-5	
4-Bromofluorobenzene (S)	98 %	75-131	1		09/28/11 17:34	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %	77-131	1		09/28/11 17:34	17060-07-0	
Percent Moisture	Analytical Method: ASTM D	2974-87					
Percent Moisture	<b>4.2</b> %	0.50	1		09/29/11 00:00		

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60106844

Sample: GW-075034-92211-CB-B4	Lab ID: 6010	6844007	Collected: 09/22/1	1 12:00	Received: 09	)/24/11 08:15	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Meth	od: EPA 801	5B Preparation Me	thod: E	PA 3510C			
TPH-DRO	0.57 mg/	/L	0.50	1	09/28/11 00:00	09/29/11 16:00	) .	
p-Terphenyl (S)	78 %		40-118	Í	09/28/11 00:00	09/29/11 16:00	92-94-4	
n-Tetracosane (S)	79 %		36-120	1	09/28/11 00:00	09/29/11 16:00	646-31-1	
Gasoline Range Organics	Analytical Methe	od: EPA 503	0B/8015B					
TPH-GRO	<b>3.2</b> mg/	/L	0.50	1		10/03/11 12:46		
4-Bromofluorobenzene (S)	99 %		63-139	1		10/03/11 12:46	460-00-4	
Preservation pH	1.0			1		10/03/11 12:46	i	
8260 MSV	Analytical Mether	od: EPA 503	0B/8260					
Benzene	<b>133</b> ug/l	L	1.0	1		09/29/11 13:23	71-43-2	
Ethylbenzene	35.0 ug/	L	1.0	1		09/29/11 13:23	100-41-4	
Toluene	673 ug/	L	5.0	5		09/30/11 18:04	108-88-3	
Xylene (Total)	397 ug/	L	3.0	1		09/29/11 13:23	1330-20-7	
4-Bromofluorobenzene (S)	102 %		87-113	1		09/29/11 13:23	460-00-4	
Dibromofluoromethane (S)	99 %		86-112	1		09/29/11 13:23	1868-53-7	
1,2-Dichloroethane-d4 (S)	99 %		82-119	1		09/29/11 13:23	17060-07-0	
Toluene-d8 (S)	108 %		90- <u>1</u> 10	1		09/29/11 13:23	2037-26-5	
Preservation pH	1.0		0.10	1		09/29/11 13:23		

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SAN JUAN 29-7 UNIT 37.

Pace Project No.: 60106844

Project:

Sample: EB-075034-92211-CB-EB1	Lab ID: 60106844008	Collected: 09/22/11	14:00	Received: 09/24/11	08:15 N	latrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared A	nalyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 503	30B/8260			•		
Benzene	ND ug/L	,1.0	1	09/29	9/11 13:38	71-43-2	
Ethylbenzene	ND ug/L	1.0 ໍ	1	09/29	9/11 13:38	100-41-4	
Toluene	ND ug/L	1.0	1	09/30	0/11 18:19	108-88-3	
Xylene (Total)	ND ug/L	3.0	1	09/29	9/11 13:38	1330-20-7	
4-Bromofluorobenzene (S)	102 %	87-113	1	09/29	9/11 13:38	460-00-4	
Dibromofluoromethane (S)	100 %	86-112	1	09/29	9/11 13:38	1868-53-7	
1,2-Dichloroethane-d4 (S)	96 %	82-119	1	09/29	9/11 13:38	17060-07-0	
Toluene-d8 (S)	95 %	90-110	1	09/29	9/11 13:38	2037-26-5	
Preservation pH	1.0	0.10	1	09/29	9/11 13:38		

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No .: 60106844

Sample: FB-075034-92211-CB-FB1	Lab ID: 60106844009	Collected: 09/22/11	14:15	Received: 09/24/11 08:15	Matrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA	5030B/8260				
Benzene	ND ug/L	· 1.0	1	09/29/11 13:5	2 71-43-2	
Ethylbenzene	ND ug/L	1.0	1	09/29/11 13:5	2 100-41-4	
Toluene	ND ug/L	1.0	1	09/29/11 13:5	2 108-88-3	
Xylene (Total)	ND ug/L	3.0	1	09/29/11 13:5	2 1330-20-7	
4-Bromofluorobenzene (S)	99 %	87-113	1	09/29/11 13:5	2 460-00-4	
Dibromofluoromethane (S)	100 %	86-112	1	09/29/11 13:5	2 1868-53-7	
1,2-Dichloroethane-d4 (S)	96 %	82-119	1	09/29/11 13:5	2 17060-07-0	
Toluene-d8 (S)	95 %	90-110	1	09/29/11 13:5	2 2037-26-5	
Preservation pH	1.0	0.10	1	09/29/11 13:5	2	

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Project:SAN JUAN 29-7 UNIT 37Pace Project No.:60106844

Sample: TRIP BLANK	Lab ID: 601	106844010	Collected: 09/22/1	1 00:00	Received: 0	9/24/11 08:15 N	/latrix: Solid	
Results reported on a "wet-weight"	basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Met	thod: EPA 503	5A/8260					
Benzene	ND ug	g/kg	5.0	1		09/28/11 17:04	71-43-2	
Ethylbenzene	ND ug	g/kg	5.0	1		09/28/11 17:04	100-41-4	
Toluene	ND ug	g/kg	5.0	1		09/28/11 17:04	108-88-3	
Xylene (Total)	ND ug	g/kg	10.0	1		09/28/11 17:04	1330-20-7	•
Toluene-d8 (S)	101 %	)	81-121	1 ·		09/28/11 17:04	2037-26-5	
4-Bromofluorobenzene (S)	96 %	5	75-131	1		09/28/11 17:04	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %	)	77-131	1		09/28/11 17:04	17060-07-0	

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Project:	SAN JUAN	29-7 UNIT 37								•			
Pace Project No.:	60106844												
QC Batch:	OEXT/303	381		Analys	is Method	: E	PA 8015B		•••••	<u> </u>			
QC Batch Method:	EPA 3546			Analys	is Descrip	tion: E	PA 8015B						
Associated Lab San	nples: 601	06844001, 60	106844002	, 60106844	005, 6010	6844006							
METHOD BLANK:	881916			N	Aatrix: Sol	id	•			· · ·			
Associated Lab San	nples: 601	06844001, 60	106844002	. 60106844	005, 6010	6844006							
				Blank	( R	eporting							
Paran	neter		Units	Resul	t	Limit	Analyz	ed	Qualifiers				
TPH-DRO		mg/kg			ND	10	09/29/11	16:33					
n-Tetracosane (S)		%			84	41-130	09/29/11	16:33					
p-Terphenyl (S)		%			84	39-130	09/29/11	16:33					
LABORATORY CON		PLE: 88191	7										
		ILL. 00191	1	Spike	LCS	2	LCS	% Rec					
Paran	neter		Units	Conc.	Resu		% Rec	Limits		ualifiers			
TPH-DRO		mg/kg		80.7		75.5	93	57	-120		-		
n-Tetracosane (S)		%					85	41	-130				
p-Terphenyl (S)		%					85	39	-130				
MATRIX SPIKE & M			E: 88191	8		881919						<b>.</b>	
				MS	MSD	001010							
		601	06844001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Paramet	er	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
TPH-DRO		mg/kg	366	91.2	91.7	966	581	658	234	36-125	50	28	 M3,R1
n-Tetracosane (S)		%						80	84	41-130			·
p-Terphenyl (S)		%						74	80	39-130			

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## **REPORT OF LABORATORY ANALYSIS**

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n-Tetracosane (S)

p-Terphenyl (S)

%

%

## QUALITY CONTROL DATA

Project: Pace Project No.:	SAN JUAN 29-7 60106844	UNIT 37								
QC Batch:	OEXT/30409	·····	Analysis	Method:	EF	A 8015B				
QC Batch Method:	EPA 3510C		Analysis	Description	: EF	PA 8015B				
Associated Lab San	nples: 6010684	4007	1							
METHOD BLANK:	882684		Ma	atrix: Water					·····	
Associated Lab San	nples: 6010684	4007								
			Blank	Repo	orting					
Paran	neter	Units	Result	Lir	nit	Analyze	d Quali	fiers		
TPH-DRO	· · ·	mg/L		ND	0.50	09/29/11 1	5:37			
n-Tetracosane (S)		%		60	36-120	09/29/11 1	5:37			
p-Terphenyl (S)		%		75	40-118	09/29/11 1	5:37			
LABORATORY CON		882685							· ,	
	THOE OAMITEL.	002000	Spike	LCS		LCS	% Rec			
Paran	neter	Units	Conc.	Result	ç	% Rec	Limits	Qualifiers		
TPH-DRO		mg/L	. 2.5	2	2.0	80	48-119			

63

71

36-120 40-118

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Project: SAN JUAN	I 29-7 UNIT 37	,									
Pace Project No.: 60106844											
QC Batch: GCV/385	6		Analys	is Meth	od:	EPA 8015B			i.		······
QC Batch Method: EPA 5035	5A/5030B		Analys	is Desc	ription:	Gasoline Rar	ige Organi	ics			
Associated Lab Samples: 60	106844001, 60	0106844002	, 601068 <b>44</b>	005, 60	106844006						
METHOD BLANK: 881984			M	Matrix: S	Solid			····			
Associated Lab Samples: 60	106844001, 60	106844002	, 60106844	005, 60	106844006						
			Blank	(	Reporting						
Parameter		Units	Resu	t	Limit	Analyz	ed	Qualifie	rs		
TPH-GRO	mg/kg			ND	10.	0 09/28/11	11:52				
4-Bromofluorobenzene (S)	%			96	68-13	4 09/28/11	11:52				
LABORATORY CONTROL SAM	IPLE: 88198	5									
			Spike	L	CS	LCS	% Re	с			
Parameter		Units	Conc.	Re	esult	% Rec	Limits	S	Qualifiers		
TPH-GRO	mg/kg		50		57.6	115	77	7-122		_	
4-Bromofluorobenzene (S)	%					95	68	8-134			
MATRIX SPIKE & MATRIX SPIK		E: 88198	6		881987					<u> </u>	
	-		MS	MSD							
	601	06527001	Spike	Spike	MS	MSD	MS	MSD	% Rec	N	lax
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	: Limits	RPD R	PD Qua

2370

8270

8440

89

97

51-130

68-134

82

103

2 27

6330

mg/kg

%

2370

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TPH-GRO

4-Bromofluorobenzene (S)

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Project: SAN JUAN 2 Pace Project No.: 60106844	9-7 UNIT 37						-	
QC Batch: GCV/3862		Analysis	Method:	EF	PA 5030B/80	15B		
QC Batch Method: EPA 5030B	/8015B	Analysis	Description	: Ga	asoline Rang	e Organics		
Associated Lab Samples: 6010	6844007							
METHOD BLANK: 884155		Ma	trix: Water			•		
Associated Lab Samples: 6010	6844007							
		Blank	Repo	orting		•		
Parameter	Units	Result	Lir	nit	Analyze	d Qual	ifiers	
TPH-GRO	mg/L		ND	0.50	10/03/11 12	2:23		
4-Bromofluorobenzene (S)	%		94	63-139	10/03/11 12	2:23	· •	
LABORATORY CONTROL SAMP	-E: 884156							
		Spike	LCS		LCS	% Rec		
Parameter	Units	Conc.	Result	ç	% Rec	Limits	Qualifiers	
TPH-GRO	mg/L	1	0.	91	91	74-127		
4-Bromofluorobenzene (S)	%				98	63-139		

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Qualifiers

## QUALITY CONTROL DATA

Project:SAN JUAN 29-7 UNIT 37Pace Project No.:60106844

QC Batch:	MSV/40377	Analysis Method:	EPA 5035A/8260
QC Batch Method:	EPA 5035A/8260	Analysis Description:	8260 MSV GRO and Oxygenates
Associated Lab Sam	ples: 60106844002, 60106844004	, 60106844005, 6010684400	06, 60106844010

METHOD BLANK: 881559

Toluene-d8 (S)

### Matrix: Solid

101

81-121 09/28/11 14:48

Associated Lab Samples:	60106844002, 60106844004	, 60106844005, 6	0106844006, 60	106844010
		Blank	5.0 09/28/11 14:4 5.0 09/28/11 14:4	
Parameter	Units	Result	Limit	Analyzed
Benzene	ug/kg	ND	5.0	09/28/11 14:48
Ethylbenzene	ug/kg	ND	5.0	09/28/11 14:48
Toluene	ug/kg	ND	5.0	09/28/11 14:48
Xylene (Total)	ug/kg	ND	10.0	09/28/11 14:48
1,2-Dichloroethane-d4 (S)	%	99	77-131	09/28/11 14:48
4-Bromofluorobenzene (S)	%	96	75-131	09/28/11 14:48

%

## LABORATORY CONTROL SAMPLE: 881560

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	87.3	87	84-119	
Ethylbenzene	ug/kg	100	90.4	90	80-120	
Toluene	ug/kg	100	91.2	91	83-117	
Xylene (Total)	ug/kg	300	272	91	80-120	
1,2-Dichloroethane-d4 (S)	%			98	77-131	
4-Bromofluorobenzene (S)	%			106	75-131	
Toluene-d8 (S)	%			100	81-121	

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Project:	SAN JUAN 29-7 UNIT 37				
Pace Project No.: 6	60106844				
QC Batch:	MSV/40488	Analysis Me	thod: El	PA 5035A/8260	· · ·
QC Batch Method:	EPA 5035A/8260	Analysis De	scription: 82	260 MSV GRO and	Oxygenates
Associated Lab Samp	bles: 60106844001				
METHOD BLANK: 8	383614	Matrix	: Solid	· · · · · · · · · · · · · · · · · · ·	
Associated Lab Samp	oles: 60106844001				
		Blank	Reporting		
Parame	eter U	nits Result	Limit	Analyzed	Qualifiers
Benzene	ug/kg	• ND	5.0	09/29/11 16:23	
Ethylbenzene	. ug/kg	ND	5.0	09/29/11 16:23	
Toluene	ug/kg	ND	5.0	09/29/11 16:23	
Xylene (Total)	ug/kg	ND	10.0	09/29/11 16:23	•
1,2-Dichloroethane-d4	4 (S) %	103	77-131	09/29/11 16:23	

## LABORATORY CONTROL SAMPLE: 883615

%

%

4-Bromofluorobenzene (S)

Toluene-d8 (S)

Parameter	<sup>,</sup> Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	88.8	89	84-119	
Ethylbenzene	ug/kg	100	94.2	94	80-120	
oluene	ug/kg	100	90.5	91	83-117	
/lene (Total)	ug/kg	300	289	96	80-120	
-Dichloroethane-d4 (S)	%			100	77-131	
Bromofluorobenzene (S)	%			106	75-131	
luene-d8 (S)	%			100	81-121	

97

101

75-131 09/29/11 16:23

81-121 09/29/11 16:23

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Project: Pace Project No.:	SAN JUAN 29-7 UNIT 37 60106844			,	
QC Batch:	MSV/40470	Analysis Method:	EPA 5030B/8260		
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge		
Associated Lab Sa	mples: 60106844007, 60106844008, 6	60106844009			

	Matrix:	Water		
007, 60106844008, 6	0106844009			
	Blank	Reporting		
Units	Result	Limit	Analyzed	Qualifiers
ug/L	ND	1.0	09/29/11 09:48	
ug/L	ND	1.0	09/29/11 09:48	
ug/L	ND	1.0	09/29/11 09:48	
ug/L	ND	3.0	09/29/11 09:48	
%	100	82-119	09/29/11 09:48	
%	100	87-113	09/29/11 09:48	
%	100	86-112	09/29/11 09:48	
%	96	90-110	09/29/11 09:48	
	Units ug/L ug/L ug/L ug/L % % %	007, 60106844008, 60106844009 Blank Units Result ug/L ND ug/L ND ug/L ND g/L ND % 100 % 100 % 100	Blank Result         Reporting Limit           ug/L         ND         1.0           ug/L         ND         1.0           ug/L         ND         1.0           ug/L         ND         3.0           %         100         82-119           %         100         87-113           %         100         86-112	Blank         Reporting           Units         Result         Limit         Analyzed           ug/L         ND         1.0         09/29/11 09:48           ug/L         ND         3.0         09/29/11 09:48           ug/L         ND         3.0         09/29/11 09:48           wg/L         ND         3.0         09/29/11 09:48           %         100         82-119         09/29/11 09:48           %         100         87-113         09/29/11 09:48           %         100         86-112         09/29/11 09:48

### LABORATORY CONTROL SAMPLE: 883419

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	22.2	111	82-117	
Ethylbenzene	ug/L	20	21.1	105	79-121	
Toluene	ug/L	20	20.6	103	80-120	
Xylene (Total)	ug/L	60	61.8	103	75-120	
1,2-Dichloroethane-d4 (S)	%			100	82-119	
4-Bromofluorobenzene (S)	%			98	87-113	
Dibromofluoromethane (S)	%			102	86-112	
Toluene-d8 (S)	%			96	90-110	

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Project:

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Pace Project No.: 60106844

SAN JUAN 29-7 UNIT 37

QC Batch:	MSV/40511	Analysis Method:	EPA 5030B/8260	1
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge	
Associated Lab Sam	ples: 60106844003, 60106844007, 6	60106844008		

Matrix: Water

. . . . . .

## METHOD BLANK: 884175

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Benzene	ug/L		1.0	09/30/11 17:36	
Ethylbenzene	ug/L	ND	1.0	09/30/11 17:36	
Toluene	ug/L	ND	1.0	09/30/11 17:36	
Xylene (Total)	ug/L	ND	3.0	09/30/11 17:36	
1,2-Dichloroethane-d4 (S)	%	102	82-119	09/30/11 17:36	
4-Bromofluorobenzene (S)	%	101	87-113	09/30/11 17:36	
Dibromofluoromethane (S)	%	98	86-112	09/30/11 17:36	
Toluene-d8 (S)	%	. 98	90-110	09/30/11 17:36	

### LABORATORY CONTROL SAMPLE: 884176

Parameter	Units	Spike Conc	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L		21.0	105	82-117	
Ethylbenzene	ug/L	20	21.8	109	79-121	
Toluene	ug/L	20	21.0	105	80-120	
Xylene (Total)	ug/L	60	64.0	107	75-120	
1,2-Dichloroethane-d4 (S)	%			101	82-119	
4-Bromofluorobenzene (S)	%			99	87-113	
Dibromofluoromethane (S)	%			100	86-112	
Toluene-d8 (S)	%			99	90-110	

#### Date: 10/04/2011 04:58 PM

## **REPORT OF LABORATORY ANALYSIS**

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Project:	SAN JUAN 29-7	UNIT 37						
Pace Project No.:	60106844							
QC Batch:	PMST/6553		Analysis Met	nod: AS	STM D2974-87			
QC Batch Method:	ASTM D2974-	87	Analysis Des	cription: Dr	y Weight/Percent	Moisture		
Associated Lab San	nples: 6010684	44001, 601068440	02, 60106844004, 6	0106844005, 60	106844006			
METHOD BLANK:	883156		Matrix:	Solid		,,		
Associated Lab San	nples: 6010684	44001, 601068440	02, 60106844004, 6	0106844005, 60	)106844006			
		•	Blank	Reporting				
Paran	neter	Units	Result	Limit	Analyzed	Qualifiers		
Percent Moisture		%	ND	0.50	09/29/11 00:00		-	
SAMPLE DUPLICA	TE: 883157							
			60106980002	Dup		Max		
Paran	neter	Units	Result	Result	RPD	RPD	Qualifiers	
Percent Moisture		%	19.0	18.2	4	20		_

Date: 10/04/2011 04:58 PM

## **REPORT OF LABORATORY ANALYSIS**

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### QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60106844

#### 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/40377

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/40470

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/40488

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: GCV/3862

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

Batch: MSV/40511

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

#### ANALYTE QUALIFIERS

- M3 Matrix spike recovery was outside laboratory control limits due to matrix interferences.
- R1 RPD value was outside control limits.
- S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).

Date: 10/04/2011 04:58 PM

### **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	SAN JUAN 29-7 UNIT 37
Pace Project No.:	60106844

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60106844001	S-075034-92211-CB-B5(51-53)	EPA 3546	OEXT/30381	EPA 8015B	GCSV/11252
60106844002	S-075034-92211-CB-B5(103-105)	EPA 3546	OEXT/30381	EPA 8015B	GCSV/11252
60106844005	S-075034-92111-CB-B4(58-60)	EPA 3546	OEXT/30381	EPA 8015B	GCSV/11252
60106844006	S-075034-92211-CB-B4(106-108)	EPA 3546	OEXT/30381	EPA 8015B	GCSV/11252
60106844007	GW-075034-92211-CB-B4	EPA 3510C	OEXT/30409	EPA 8015B	GCSV/11251
60106844001	S-075034-92211-CB-B5(51-53)	EPA 5035A/5030B	GCV/3856	EPA 8015B	. GCV/3858
60106844002	S-075034-92211-CB-B5(103-105)	EPA 5035A/5030B	GCV/3856	EPA 8015B	GCV/3858
60106844005	S-075034-92111-CB-B4(58-60)	EPA 5035A/5030B	GCV/3856	EPA 8015B	GCV/3858
60106844006	S-075034-92211-CB-B4(106-108)	EPA 5035A/5030B	GCV/3856	EPA 8015B	GCV/3858
60106844007	GW-075034-92211-CB-B4	EPA 5030B/8015B	GCV/3862		
60106844001	S-075034-92211-CB-B5(51-53)	EPA 5035A/8260	MSV/40488		
60106844002	S-075034-92211-CB-B5(103-105)	EPA 5035A/8260	MSV/40377		
60106844004	TRIP BLANK	EPA 5035A/8260	MSV/40377		
60106844005	S-075034-92111-CB-B4(58-60)	EPA 5035A/8260	MSV/40377		
60106844006	S-075034-92211-CB-B4(106-108)	EPA 5035A/8260	MSV/40377		
60106844010	TRIP BLANK	EPA 5035A/8260	MSV/40377		
60106844003	S-075034-92211-CB-B5	EPA 5030B/8260	MSV/40511		
60106844007	GW-075034-92211-CB-B4	EPA 5030B/8260	MSV/40470		
60106844007	GW-075034-92211-CB-B4	EPA 5030B/8260	MSV/40511		
60106844008	EB-075034-92211-CB-EB1	EPA 5030B/8260	MSV/40470		
60106844008	EB-075034-92211-CB-EB1	EPA 5030B/8260	MSV/40511		
60106844009	FB-075034-92211-CB-FB1	EPA 5030B/8260	MSV/40470		
60106844001	S-075034-92211-CB-B5(51-53)	ASTM D2974-87	PMST/6553		
60106844002	S-075034-92211-CB-B5(103-105)	ASTM D2974-87	PMST/6553		
60106844004	TRIP BLANK	ASTM D2974-87	PMST/6553		
60106844005	S-075034-92111-CB-B4(58-60)	ASTM D2974-87	PMST/6553		
60106844006	S-075034-92211-CB-B4(106-108)	ASTM D2974-87	PMST/6553		

Date: 10/04/2011 04:58 PM

## **REPORT OF LABORATORY ANALYSIS**

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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.

Pace Analytical"	CHAIN-OF The Chain-of-Cust	CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.	cument accurately.
Section A Required Client Information:	•	Section C Involes Information	Page: \ of \
	Report To: Christine Mathews (10,0540 - HUY	DM Attention: ENFOS	
Address: 6121 Indian School Rd NE, Ste 200	Copy To: Kelly Blanchard, Angela Bown	Company Name:	REGULATORY AGENCY
Atbequerque, NM 87110	Condraword rawitch com	Address:	📘 NPDES 🗐 GROUND WATER 🗍 DRINKING WATER
o: <u>cmathews@er</u>	Purchase Order No.:	Pace Quote Reference:	C UST F RCRA F OTHER
	Project Name: San Juan 29-7 Unit 37	Pace Project Colleen Koporc	Site Location
Requested Due Date/TAT: standard	Project Number	Pace Profile #:	STATE:
			Requested Analysis Filtered (VIN) V////////////////////////////////////
Section D Valid Matrix Co Required Client Information MATRIX	(fiel of		
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1.92311.(2-23	103-103 BUG 91 BI 112		
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ADDITIONAL COMMENTS			DATE TIME SAMPLE CONDITIONS
Return HPC directly to Frontenac Lab:	1 Chesh Man 45	12311100 F Brockett	4 1 1 1 6.0 SNO 40/6
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Fromenac, KS 06/03			
5-0158492211. (R-B5(51-53)			
etterrised when huiking goil	SAMPLER NAME AND SIGNATURE	NATURE	118C( 93(99 7) 7)
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ge 3	SIGNATURE of SAMPLER:	APLER: OR MADIAN (MMIDDAY)	o) Cost Cost
1 "Important Note: By signing this form you are accepting F	"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.	month for any invoices not paid within 30 days.	F-ALL-Q-020rev.08, 12-Oct-2007

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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.

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Required Fill To Requise Fill To Return H	Section A     Company. Information.     Section A       Regulated Clent Information.     Regulated Clent Information.     Regulated Clent Information.       Regulated Clent Information.     Address:     6121 Indian School Rd NE, Ste 200       Address:     6121 Indian School Rd NE, Ste 200     Apple       Final To:	Section B Required Project Information. Repert To: Christine Mathews Copy To: Keily Blanchard, Angela Bown Purchase Order No Project Name: San Juan 29-7 Unit 37 Project Name: San Juan 29-		Section C Invoice information: Attention: Attention: Attention: Preve Outor Hunos Huos Huos Huos Huos Huos Huos Huos Hu			BOIS GRO COMOLANT S	In the Location Repeation Internation Internatio Internation Internation Internation Inter			Pace Project No.1	F. DRINKING WATER R. OTHER NAMER R. OTHER NAME R. OTHER NAME R. OTHER NAME R. OTHER NO. Lab ID. Pace Project No. Lab ID. AB Pace Project No. Lab ID. AB AB AB AB AB AB AB AB AB AB
Page	-CB-B4 68-60	1 SAMPLER NAME AND SIGNATURE PRINT NAME OF SAMPLER: 1 SIGNATURE OF SAMPLER: 7	ER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE OF SAMPLER:		10001	N DAT	DATE Signed	<i>d</i> ,22,1	2. ri amaT	Temp in *C	Cooler (Y/N) stody Sealed	איזארא) אראא) (אוא)

Sam	ple Condition	Upon Receipt		
Pace Analytical <sup>®</sup> Client Name:	CRA	I	Project # 6000	2844
Courier: PFed Ex UPS USPS Client Tracking #: <u>876803375655</u> 666 Pace S Custody Seal on Cooler/Box Present: PYes	Shipping Label Used	Pace Other Yes intact: Yes	Optional Proj. Due Date: V Proj. Name: No	olution
Packing Material: Bubble Wrap Bubble Ba	ags Doam	None Dther		
	Type of Ice: Wet	Blue None	Samples on ice, cooling process h	as begun
Cooler Temperature: 0.9, 3.4 Temperature should be above freezing to 6°C		Comments:	Date and Initials of person exam contents: 9 24 1/	
Chain of Custody present:	PYes DNO DNA	1.		
Chain of Custody filled out:		2		
Chain of Custody relinquished:		3.		
Sampler name & signature on COC:		4.		
Samples arrived within holding time:	Pres Ino In/A	5.		
Short Hold Time analyses (<72hr):	QHes □No □N/A	6 Kits		
Rush Turn Around Time requested:		7.		
Sufficient volume:	Yes INO IN/A	8.		
Correct containers used:	Yes INO IN/A	9.		
-Pace containers used:	Nes ONO ON/A			
Containers intact:	Hes No N/A	10.		
Unpreserved 5035A soils frozen w/in 48hrs?	Pres INO IN/A	11.	· · · · · · · · · · · · · · · · · · ·	
Filtered volume received for dissolved tests		12.		
Sample labels match COC:		13.		
-Includes date/time/ID/analyses Matrix:	Liwi		· · · · · · · · · · · · · · · · · · ·	
All containers needing preservation have been checked.		14.		
All containers needing preservation are found to be in compliance with ZPA recommendation.			1	
Exceptions: YOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	Yes DNo	Initial when completed	Lot # of added preservative	
Trip Blank present:		15.	1;	
Pace Trip Blank lot # (if purchased): 0 80 811-3	(4)			
Headspace in VOA vials ( >6mm):		16.		
Project sampled in USDA Regulated Area:		17. List State:		h
Client Notification/ Resolution: Copy C	OC to Client?	r (N)	Field Data Required? Y	' N (3)
Person Contacted:	Date/			00
Comments/Resolution: Brailed to ch	eckon TAT	Mot 9/20/11.		
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Project Manager Review: COLLODFM	. 9 (210/11)		Date:	<u> </u>
Finjen Wallager Neview. Chipping				_
Note: Whenever there is a discrepancy affecting North Car			I be sent to the North Carolina DEF	INR

F-KS-C-003-Rev.05, 19February2010

ce Analytica

October 03, 2011

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

RE: Project: San Juan 29-7 Unit 37 Pace Project No.: 60107038

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 28, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Coll -Tro

Colleen Koporc for Dianna Meier dianna.meier@pacelabs.com Project Manager

Enclosures

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



## **REPORT OF LABORATORY ANALYSIS**

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### CERTIFICATIONS

Project:San Juan 29-7 Unit 37Pace Project No.:60107038

### 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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60107038002

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

## SAMPLE SUMMARY

09/27/11 06:00

Solid

**Date Received** 

09/28/11 09:00

09/28/11 09:00

60107038001	S-075034-92611-CB-B-6(107-108)	Solid	09/26/11 15:15
Lab ID	Sample ID	Matrix	Date Collected
Pace Project No	b.: 60107038		
Project:	San Juan 29-7 Unit 37		

**REPORT OF LABORATORY ANALYSIS** 

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# SAMPLE ANALYTE COUNT

Project:San Juan 29-7 Unit 37Pace Project No.:60107038

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60107038001	S-075034-92611-CB-B-6(107-108)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	RAB	7
		ASTM D2974-87	DWC	1
60107038002	TRIP BLANK	EPA 5035A/8260	RAB	7

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### PROJECT NARRATIVE

Project: Pace Project No.:	San Juan 29-7 Unit 37 60107038
Description: 8015 Client: COP	<b>8015B</b> B Diesel Range Organics Conestoga-Rovers & Associates, Inc. NM ber 03, 2011
General Information	on: yzed 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	on: prepared in accordance with EPA 3546 with any exceptions noted below.
	(including MS Tune as applicable): hin method requirements with any exceptions noted below.
Continuing Calibra All criteria were with	ation: hin method requirements with any exceptions noted below.
Surrogates: All surrogates were	within QC limits with any exceptions noted below.
Method Blank: All analytes were be	elow the report limit in the method blank with any exceptions noted below.
Laboratory Contro All laboratory contro	ol Spike: ol 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:** 

## **REPORT OF LABORATORY ANALYSIS**

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### **PROJECT NARRATIVE**

Project:San Juan 29-7 Unit 37Pace Project No.:60107038

### Method: EPA 8015B

Description:Gasoline Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 03, 2011

### **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 5035A/5030B 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: GCV/3864

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:

### REPORT OF LABORATORY ANALYSIS

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### PROJECT NARRATIVE

Project: San Juan 29-7 Unit 37 Pace Project No.: 60107038

### Method: EPA 5035A/8260

 Description:
 8260 MSV GRO and Oxygenates

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

 Date:
 October 03, 2011

#### General Information:

2 samples were analyzed for EPA 5035A/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/40488

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:

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

## REPORT OF LABORATORY ANALYSIS

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Project: San Juan 29-7 Unit 37

Pace Project No.: 60107038

Sample: S-075034-92611-CB-B- 6(107-108)	Lab ID: 601070380	001 Collected: 09/26/1	1 15:1	5 Received: 09	)/28/11 09:00 N	Aatrix: Solid	
Results reported on a "dry-weight"	basis						
Parameters	Results Ur	its Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EF	PA 8015B Preparation Me	thod: E	EPA 3546	-		
TPH-DRO	121 mg/kg	11.4	1	09/29/11 00:00	09/30/11 11:56		
n-Tetracosane (S)	93 %	41-130	1	09/29/11 00:00	09/30/11 11:56	646-31-1	
p-Terphenyl (S)	71 %	39-130	1	09/29/11 00:00	09/30/11 11:56	92-94-4	
Gasoline Range Organics	Analytical Method: Ef	PA 8015B Preparation Me	thod: E	EPA 5035A/5030B			
TPH-GRO	ND mg/kg	11.7	1	09/30/11 00:00	09/30/11 11:59		
4-Bromofluorobenzene (S)	91 %	68-13 <del>4</del>	1	09/30/11 00:00	09/30/11 11:59	460-00-4	
8260 MSV GRO and Oxygenates	Analytical Method: EF	PA 5035A/8260					
Benzene	ND ug/kg	5.4	1		09/29/11 17:53	71-43-2	
Ethylbenzene	ND ug/kg	5.4	1		09/29/11 17:53	100-41-4	
Toluene	ND ug/kg	5.4	1		09/29/11 17:53	108-88-3	
Xylene (Total)	ND ug/kg	. 10.7	1		09/29/11 17:53	1330-20-7	
Toluene-d8 (S)	102 %	81-121	1		09/29/11 17:53	2037-26-5	
4-Bromofluorobenzene (S)	101 %	75-131	1		09/29/11 17:53	460-00-4	
1,2-Dichloroethane-d4 (S)	118 %	77-131	1		09/29/11 17:53	17060-07-0	
Percent Moisture	Analytical Method: AS	STM D2974-87					
Percent Moisture	<b>12.8</b> %	0.50	1		09/30/11 00:00		

Date: 10/03/2011 05:27 PM

.

## **REPORT OF LABORATORY ANALYSIS**

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Project: San Juan 29-7 Unit 37

Pace Project No.: 60107038

Sample: TRIP BLANK	Lab ID: 601	07038002	Collected: 09/27/1	1 06:00	Received: 0	9/28/11 09:00	Aatrix: Solid	
Results reported on a "wet-weight"	basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Met	hod: EPA 503	5A/8260					
Benzene	ND ug	j/kg	5.0	1		09/29/11 17:23	71-43-2	
Ethylbenzene	. ND ug	j/kg	5.0	1		09/29/11 17:23	100-41-4	
Toluene	ND ug	y/kg .	5.0	1		09/29/11 17:23	108-88-3	
Xylene (Total)	ND ug	;/kg	10.0	1		09/29/11 17:23	1330-20-7	
Toluene-d8 (S)	101 %	•	81-121	1		09/29/11 17:23	2037-26-5	
4-Bromofluorobenzene (S)	96 %		75-131	1		09/29/11 17:23	460-00-4	
1,2-Dichloroethane-d4 (S)	100 %		77-131	1		09/29/11 17:23	17060-07-0	

Date: 10/03/2011 05:27 PM

## **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA

Project: S	an Juan 29-7 Ui	nit 37											
Pace Project No.: 60	0107038												
QC Batch:	OEXT/30429			Analysi	s Method	l: E	PA 8015B						
QC Batch Method: EPA 3546			Analysis Description:			PA 8015B							
Associated Lab Sampl	les: 6010703	3001											
METHOD BLANK: 88	83587			N	atrix: So	lid							
Associated Lab Sampl	les: 6010703	3001											
				Blank	1	Reporting							
Paramet	ter		Units	Result		Limit	Analyz	ed	Qualifier	s			
TPH-DRO		mg/kg			ND	9.9	09/30/11	11:00					
n-Tetracosane (S)		%			74	41-130	09/30/11	11:00					
p-Terphenyl (S)		%			69	39-130	09/30/11	11:00					
LABORATORY CONT	ROL SAMPLE:	88358	38										
				Spike	LC	s	LCS	% Re	С				
Paramet	ter		Units	Conc.	Res	ult	% Rec	Limit	s (	Qualifiers			
TPH-DRO		mg/kg		81.3	-	74.4	92	5	7-120		_		
n-Tetracosane (S)		%					84	4	1-130				
n-Tetracosane (S) p-Terphenyl (S)					·		84 77		1-130 9-130				
p-Terphenyl (S)		% . %		0		883590							
		% . %			MSD	883590							
p-Terphenyl (S)		% % PLICATI		9 MS Spike	MSD Spike	883590 MS				% Rec		Max	

Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
TPH-DRO	mg/kg	ND	84.5	84.6	78.3	72.2	88	81	36-125	8	28	
n-Tetracosane (S)	%		•				83	73	41-130			
p-Terphenyl (S)	%						75	68	39-130			

Date: 10/03/2011 05:27 PM

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## **REPORT OF LABORATORY ANALYSIS**

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Project: San Juan 2 Pace Project No.: 60107038	9-7 Unit 37							
QC Batch: GCV/3860	)	Analysis	Method:	EPA 8015	3			
QC Batch Method: EPA 5035	Analysis Description:		Gasoline F	Range Org				
Associated Lab Samples: 601	107038001							
METHOD BLANK: 884012		Mat	trix: Solid					
Associated Lab Samples: 601	07038001							
		Blank	Reporting	)				
Parameter	Units	Result	Limit	Ana	lyzed	Quali	fiers	
TPH-GRO	mg/kg	<u>ا</u>	ND 1	0.0 09/30/	11 11:14			
4-Bromofluorobenzene (S)	%		84 68-	134 09/30/	11 11:14			
LABORATORY CONTROL SAM	PLE: 884013							
		Spike	LCS	LCS	%	Rec		
Parameter	Units	Conc.	Result	% Rec	Lir	nits	Qualifiers	
TPH-GRO	mg/kg	50	46.5	. !	<del></del>	77-122		
4-Bromofluorobenzene (S)	%			:	37	68-134		

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### **REPORT OF LABORATORY ANALYSIS**

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Project: San Juan 29-7 Unit 37 Pace Project No.: 60107038 QC Batch: MSV/40488 Analysis Method: EPA 5035A/8260 QC Batch Method: 8260 MSV GRO and Oxygenates EPA 5035A/8260 Analysis Description: Associated Lab Samples: 60107038001, 60107038002 METHOD BLANK: 883614 Matrix: Solid Associated Lab Samples: 60107038001, 60107038002 Blank Reporting Limit Parameter Units Result Analyzed Qualifiers Benzene ug/kg ND 5.0 09/29/11 16:23 Ethylbenzene ug/kg ND 5.0 09/29/11 16:23 Toluene 09/29/11 16:23 ug/kg ND 5.0 Xylene (Total) ug/kg ND 10.0 09/29/11 16:23

103

97

101

09/29/11 16:23

09/29/11 16:23

81-121 09/29/11 16:23

77-131

75-131

## LABORATORY CONTROL SAMPLE: 883615

%

%

%

1,2-Dichloroethane-d4 (S)

4-Bromofluorobenzene (S)

Toluene-d8 (S)

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	88.8	89	84-119	<u> </u>
Ethylbenzene	ug/kg	100	94.2	94	80-120	
Toluene	ug/kg	100	90.5	91	83-117	
Xylene (Total)	ug/kg	300	289	96	80-120	
1,2-Dichloroethane-d4 (S)	%			100	77-131	
4-Bromofluorobenzene (S)	%			106	75-131	
Toluene-d8 (S)	%	·		100	81-121	

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## QUALITY CONTROL DATA

Project: San Juan 29-7 Unit 37 Pace Project No .: 60107038 PMST/6556 QC Batch: Analysis Method: ASTM D2974-87 QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture Associated Lab Samples: 60107038001 METHOD BLANK: 884000 Matrix: Solid Associated Lab Samples: 60107038001 Blank Reporting Parameter Units Result Limit Analyzed Qualifiers Percent Moisture 09/30/11 00:00 % ND 0.50

### SAMPLE DUPLICATE: 884001

		60107029001	Dup		Max		
Parameter	Units	Result	Result	RPD	RPD	Qualifiers	
Percent Moisture	%	2.1	1.8	16	20		

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## **REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: San Juan 29-7 Unit 37 Pace Project No.: 60107038

### 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/40488

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: GCV/3864

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

Date: 10/03/2011 05:27 PM

### **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Pace Project No.:

San Juan 29-7 Unit 37 60107038

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60107038001	S-075034-92611-CB-B-6(107-108)	EPA 3546	OEXT/30429	EPA 8015B	GCSV/11256
60107038001	S-075034-92611-CB-B-6(107-108)	EPA 5035A/5030B	GCV/3860	EPA 8015B	GCV/3864
60107038001 60107038002	S-075034-92611-CB-B-6(107-108) TRIP BLANK	EPA 5035A/8260 EPA 5035A/8260	MSV/40488 MSV/40488		
60107038001	S-075034-92611-CB-B-6(107-108)	ASTM D2974-87	PMST/6556		

## Date: 10/03/2011 05:27 PM

## **REPORT OF LABORATORY ANALYSIS**

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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.

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Pace Analytical

All         All <th>Section A Required Client Information: Company: CRA Address: 6121 Inclian School Pd NF Sta 200</th> <th>Section B Required Project Information: Report To: <u>Christine Matterns</u> ACCONTO: Kality Planchard Annors Bound</th> <th>Section C Invoice Information: Attention: ENFOS Commenter Name</th> <th>Lage</th> <th>e: l of l</th>	Section A Required Client Information: Company: CRA Address: 6121 Inclian School Pd NF Sta 200	Section B Required Project Information: Report To: <u>Christine Matterns</u> ACCONTO: Kality Planchard Annors Bound	Section C Invoice Information: Attention: ENFOS Commenter Name	Lage	e: l of l
Факенение им 0710         Даленение им 0710         Даленение им 0710         Полна и и и и и и и и и и и и и и и и и и и			Company Name:	REGULATORY AGENCY	
Полование и полова			A cdress:		DRINKING WAT
	o: <u>crnathewe@en</u>	Purchase Order No.	Pace Quote Rotarence:	L	Z
Durforti, Listendi         Tendiditi, Listendi         Contrati         Status         Sta		•			
Общение         <			Pace Profile #:		
Основника инителника				ed Analysis Filtered (Y/N)	
Зулите         Соности во соности	-	COLLECTED			
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P.M.P.DAXK     B.M.P.DAXK       Condert M.     P.M.P.DAXK       Samples Final     P.M.P.DAXK       Condert M.     P.M.P.DAXK       Samples Final     P.M.P.L.DAXK       Samples Final     P.M.L.LAXK       Samples Final     P.M.L.LAXK       Samples Final     P		DI12/11		WGAU I	
Samples Inact     Samples Inact     Samples Inact       Goder (1M)     ADDTOMAL COMMENTS     RELINCURSHED BY I AFTILATION       ADDA     ADDA       ADDA     ADDA       ADDA     ADDA       ADDA     ADDA       ADDA     ADDA       ADDA     ADDA       ADDA     A	PNID DANK	1			
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Samples (MM)	ac, KS 66763				
CONTRACT Con					
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Project #       Client Name:       CRA       Project #       Got of         Courier:       Fred Ex       UPS       UPS       Pace Shipping Label Used?       Yes       No         Custody Seal on Cooler/Box Present:       Presc       No       Seals intact:       Yes       No         Packing Material:       Bubble Wrap       Bubble Bags       Coam       One       Dritonel       Frid, Name: Sea         Cocier Temperature:       Signification       Type of Ice:       Wes       No       Estimate and intigits of pergene         Cocier Temperature:       Signification       Type of Ice:       No       Estimate and intigits of pergene         Chain of Custody releginguished:       Type       No       No       No       Estimate and intigits of pergene         Sampler name & signature on COC:       Pres       No       No       No       Significant volume:       Signature on COC:       Pres       No       No       Signature on COC:       Pres       No	
Tracking #       92690330564       Pace Shipping Label Used?       Yes       No       Proj. Due Date:         Custody Seal on Cooler/Box Present:       Yes       No       Seals intact:       Yes       No         Packing Material:       Bubble Wrap       Bubble Bags       Foam       None       Dther         Thermometer Used       1191       T194       Type of ice: We       Blue       None       Date and initials of person excitons:         Cooler Temperature:       ?	038
Thermometer Used:       1.191       T.194       Type of Ice:       We       Blue       None       Samples on ice, cooling processon of contents:         Cooler Temperature should be above freezing to 6*C       Comments:       Date and Initiate of person of contents:       Date and Initiate of person of contents:       Date and Initiate of person of contents:         Chain of Custody present:       DYes       INo       Init       Comments:       Date and Initiate of person of contents:         Chain of Custody relinquished:       DYes       INo       INit 2.       Chain of Custody relinquished:       Dive       INo       Init         Sampler name & signature on COC:       Dyes       INo       INit 4.       Samples arrived within holding time:       Dive       INo       Init 4.         Sampler analyses (<12hr):	10/10. Juan 201
Cooler Temperature:       5.7         Temperature should be above freezing to 6°C       Comments:         Chain of Custody present:       Bytes         Chain of Custody present:       Bytes         Chain of Custody filled out:       Bytes         Chain of Custody relinquished:       Bytes         Sampler name & signature on COC:       Bytes         Sampler arme & signature on COC:       Bytes         Sufficient volume:       Bytes         Correct containers used:       Bytes         Pres       Byte         Sample labels match COC:       Bytes         Sample labels match COC:       Bytes         Includers date/time/ID/analyses       Matrix:         All containers needing preservation are found to be in compliance with PA recommendation.         Exception:       Bytes	
Contents:	ss has begun
Status 0 busines       Pres       No       ENA       2.         Chain of Custody relinquished:       Pres       ENA       ENA       3.         Sampler name & signature on COC:       Pres       ENA       ENA       4.         Sampler name & signature on COC:       Pres       ENA       ENA       4.         Samples arrived within holding time:       Pres       ENA       ENA       5.         Short Hold Time analyses (<72hr):	camining
Chain of Custody relinquished:       Yes       No       N/A       3.         Sampler name & signature on COC:       Yes       No       N/A       4.         Sampler name & signature on COC:       Yes       No       N/A       4.         Samples arrived within holding time:       Yes       No       N/A       5.         Short Hold Time analyses (<72hr):	
Sampler name & signature on COC:       Image:	
Samples arrived within holding time:       Ives       No       N/A       5.         Short Hold Time analyses (<72hr):	
Short Hold Time analyses (<72hr):	
Rush Turn Around Time requested:       IVes       IN/A       7.         Sufficient volume:       IVes       IN/A       8.         Correct containers used:       IVes       IN/A       9.         -Pace containers used:       IVes       IN/A       9.         Containers intact:       IVes       IN/A       10.         Unpreserved 5035A soils frozen w/in 48hrs?       IVes       IN/A       11.         Filtered volume received for dissolved tests       IVes       IN/A       12.         Sample labels match COC:       IVes       IN/A       13.         -Includes date/time/ID/analyses       Matrix:       IN/A       14.         All containers needing preservation have been checked.       IVes       IN/A       14.         All containers needing preservation have been checked.       IVes       IN/A       Initial when completed preservation.         Exception:       IVA       res       IN/A       Initial when completed preservative       Initial when completed preservative         Trip Blank present:       IVes       IN/A       Is.       Is.         Pace Trip Blank lot # (if purchased):       IVes       IN/A       Is.       Is.         Project sampled in USDA Regulated Area:       IVes       IN/A       If.<	
Sufficient volume:       Yes       No       N/A       8.         Correct containers used:       Yes       No       N/A       9.         -Pace containers used:       Yes       No       N/A       9.         Containers intact:       Yes       No       N/A       9.         Unpreserved 5035A soils frozen w/in 48hrs?       Yes       No       N/A       10.         Unpreserved 5035A soils frozen w/in 48hrs?       Yes       No       N/A       11.         Filtered volume received for dissolved tests       Yes       No       N/A       12.         Sample labels match COC:       Yes       No       N/A       13.         -Includes date/time/ID/analyses       Matrix:       Yes       No       N/A         All containers needing preservation have been checked.       Yes       No       M/A         All containers needing preservation have been checked.       Yes       No       M/A         Exception:       VOA colform, TOC, 0&G, Wi-DRO (water).       Yes       No       M/A         Exception:       VOA colform, TOC, 0&G, Wi-DRO (water).       Yes       No       Initial when completed preservative         Trip Blank lot # (if purchased):       Set 11 - 2       Yes       No       N/A <t< td=""><td></td></t<>	
Correct containers used: Pace containers needing preservation have been checked. Pace compliance with EPA recommendation. Exception: Pace Trip Blank lot # (if purchased): Pace Trip Blank lot # (if purchase	
-Pace containers used:       Yes       No       INVA         Containers intact:       Øres       INo       INVA       10.         Unpreserved 5035A soils frozen w/in 48hrs?       Øres       INo       INVA       11.         Filtered volume received for dissolved tests       Inva       Inva       11.         Filtered volume received for dissolved tests       Inva       Inva       12.         Sample labels match COC:       Yes       INo       Inva       13.         -Includes date/time/ID/analyses       Matrix:       Inva       14.         All containers needing preservation have been checked.       Ives       INo       Inva         Exception:       VOA coliform, TOC, 0&G, WI-DRO (water).       Ives       INo       Invia         Phenolics       Inva       Is.       Initial when completed       Ives       Inva         Trip Blank lot # (if purchased):       Ives       INo       Inva       15.         Pace Trip Blank lot # (if purchased):       Ives       INo       Inva       16.         Project sampled in USDA Regulated Area:       Ives       INo       Inva       17. List State:         Client Notification/ Resolution:       Copy COC to Client?       Y       N       Field Data Required?	
Containers intact:       Yes       No       IN/A       10.         Unpreserved 5035A soils frozen w/in 48hrs?       Yes       No       IN/A       11.         Filtered volume received for dissolved tests       Yes       No       N/A       12.         Sample labels match COC:       Yes       No       IN/A       13.         -Includes date/time/ID/analyses       Matrix:       Invia       14.         All containers needing preservation have been checked.       Invia       14.         All containers needing preservation are found to be in compliance with EPA recommendation.       Invia       Invia         Exception:       VOA coliform, TOC, 0.8G, WI-DRO (water),       Invia       Intil when completed       Invia         Prenolics       If the solution:       Invia       Invia       Invia       Invia         Prenolics       If the solution:       Invia       Invia       Invia       Invia         Prenolics       If the solution:       If the solution:       Invia       Invia       Invia         Project sampled in USDA Regulated Area:       If the solution:       If the solution:       Invia       If the solution:       If the solution:         Project sampled in USDA Regulated Area:       If the solution:       If the solution:       If the	
Unpreserved 5035A soils frozen w/in 48hrs? Filtered volume received for dissolved tests Filtered volume received for dissolved tests Sample labels match COC: -Includes date/time/ID/analyses Matrix: -Includes date/time/ID/analyses -Includes	
Filtered volume received for dissolved tests       Image: Second Se	
Sample labels match COC:       Image: Symple labels match CO:       Im	
Includes date/time/ID/analyses       Matrix:       SL         All containers needing preservation have been checked.       Ives       INo       DN/A       14.         All containers needing preservation are found to be in compliance with EPA recommendation.       Ives       INo       DN/A       14.         Exception:       VOA coliform, TOC, 0&G, WI-DRO (water).       Ives       INo       DN/A       Initial when completed preservative         Trip Blank present:       Ives       INo       IN/A       15.         Pace Trip Blank lot # (if purchased):       Ives       INo       IN/A       16.         Project sampled in USDA Regulated Area:       Ives       INo       IN/A       17. List State:	
-Includes date/time/ID/analyses Matrix:   All containers needing preservation have been checked.   Ives IN0   All containers needing preservation are found to be in compliance with EPA recommendation.   Exceptions: VOA   Coliform, TOC, 0&G, WI-DRO (water),   Phenolics Ives   Trip Blank present:   Pace Trip Blank lot # (if purchased):   Project sampled in USDA Regulated Area:   Ives   Client Notification/ Resolution:   Copy COC to Client?   Project contacted:   Person Contacted:   Project sampled in USDA Regulated Area:   Copy COC to Client?   Part Contacted:   Project sampled in USDA Regulated Area:   Copy COC to Client?   Y   Part Contacted:   Part Contacted:   Part Contacted:   Y	
All containers needing preservation are found to be in compliance with EPA recommendation. Exceptions: VOA coliform, TOC, O&G, WI-DRO (water), Uyes DNo Initial when completed preservative	
compliance with EPA recommendation.       I yes INo ONA         Exceptions:       VOA coliform, TOC, 0&G, WI-DRO (water).       Initial when completed preservative         Phenolics       Initial when completed preservative       Initial when completed preservative         Trip Blank present:       Image: Preservative preservative       Image: Preservative preservative         Pace Trip Blank lot # (if purchased):       Image: Preservative preservative       Image: Preservative preservative         Headspace in VOA vials (>6mm):       Image: Preservative preservative       Image: Preservative preservative         Project sampled in USDA Regulated Area:       Image: Preservative preservative       Image: Preservative preservative         Client Notification/ Resolution:       Copy COC to Client?       Yes       N       Field Data Required?         Person Contacted:       Preservative       Image: Preservative       Image: Preservative       Image: Preservative         Project sampled in USDA Regulated Area:       Image: Preservative       Image: Preservative       Image: Preservative       Image: Preservative         Project sampled in USDA Regulated Area:       Image: Preservative       Image: Preservative       Image: Preservative         Project sampled in USDA Regulated Area:       Image: Preservative       Image: Preservative       Image: Preservative         Project sampled in USDA Regulated Area	
Phenolics       Order (Mathin, 100,000,000,000,000,000,000,000,000,00	
Trip Blank present:       Pres       No       N/A       15.         Pace Trip Blank lot # (if purchased):          SOUTI-3           Pres       No          N/A           15.          Headspace in VOA vials ( >6mm):          Pres          No          IN/A           16.          Project sampled in USDA Regulated Area:          Pres          No          IN/A           17. List State:          Client Notification/ Resolution:          Copy COC to Client?          Y           N           Field Data Required?          Person Contacted:          Date/Time:           Date/Time:           Date/Time:	
Headspace in VOA vials ( >6mm):       Image: Project sampled in USDA Regulated Area:       Image: Project sampled Area: <td></td>	
Headspace in VOA vials ( >6mm):       Image: Project sampled in USDA Regulated Area:       Image: Project sampled Area: <td></td>	
Client Notification/ Resolution: Copy COC to Client? Y N Field Data Required? Person Contacted: Date/Time:	
Person Contacted: Date/Time:	
	Y / N <sup>·</sup>
	·
- (Din II D Dring glash)	
Project Manager Review: (('bk f. DK in 9/29/iu)) Date:	

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

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October 11, 2011

Angela Bown COP Conestoga-Rovers & Associa 6121 Indian School Rd #200 Albuquerque, NM 87110

RE: Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107128

Dear Angela Bown:

Enclosed are the analytical results for sample(s) received by the laboratory on September 29, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Colleen Koporc for Dianna Meier dianna.meier@pacelabs.com Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa Cassie Brown, COP Conestoga-Rovers & Associa



### **REPORT OF LABORATORY ANALYSIS**

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## CERTIFICATIONS

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107128

Kansas Certification IDs 9608 Loiret Boulevard, Lenexa, KS 66219 A2LA Certification #: 2456.01 Arkansas Certification #: 2430.01 Illinois Certification #: 001191 Iowa Certification #: 118 Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055 Nevada Certification #: KS000212008A Oklahoma Certification #: 9205/9935 Texas Certification #: 01070407-08-TX Utah Certification #: 9135995665

## **REPORT OF LABORATORY ANALYSIS**

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## SAMPLE SUMMARY

Project: Pace Project No	SAN JUAN 29-7 UNIT 37 5.: 60107128				,
Lab ID	Sample ID	Matrix	Date Collected	Date Received	
60107128001	S-075034-92711-CB-B-7(20-22)	Solid	09/27/11 12:50	09/29/11 09:00	
60107128002	TRIP BLANK	Solid	09/28/11 06:30	09/29/11 09:00	

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## SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107128

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60107128001	S-075034-92711-CB-B-7(20-22)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 8260	RAB	8
		ASTM D2974-87	DWC	1
60107128002	TRIP BLANK	EPA 8260	RAB	8
		ASTM D2974-87	DWC	1

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## **PROJECT NARRATIVE**

Project: Pace Project No.:	SAN JUAN 29-7 UNIT 37 60107128	۰.
Description: 801 Client: CO	A 8015B 5B Diesel Range Organics P Conestoga-Rovers & Associates, Inc. NM ober 11, 2011	
<b>General Informa</b> 1 sample was ana	ion: lyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.	
Hold Time: The samples were	e analyzed within the method required hold times with any exceptions noted below.	
Sample Preparat The samples were	ion: prepared in accordance with EPA 3546 with any exceptions noted below.	
	s (including MS Tune as applicable): thin method requirements with any exceptions noted below.	
Continuing Calib All criteria were w	ration: thin method requirements with any exceptions noted below.	
Surrogates: All surrogates we	e within QC limits with any exceptions noted below.	
Method Blank: All analytes were	pelow the report limit in the method blank with any exceptions noted below.	•
aboratory Cont	ol Spike: rol spike compounds were within QC limits with any exceptions noted below.	
Matrix Spikes: All percent recove	ries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.	
Duplicate Sampl	e: le results were within method acceptance criteria with any exceptions noted below.	
Additional Comm	ients:	

## **REPORT OF LABORATORY ANALYSIS**

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### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107128

## Method: EPA 8015B

 Description:
 Gasoline Range Organics

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

 Date:
 October 11, 2011

### **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 5035A/5030B 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.

### QC Batch: GCV/3868

- S2: Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample reanalysis).
  - S-075034-92711-CB-B-7(20-22) (Lab ID: 60107128001)
    - 4-Bromofluorobenzene (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.

### Additional Comments:

## REPORT OF LABORATORY ANALYSIS

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### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107128

## Method: EPA 8260

 Description:
 8260 MSV 5035A VOA

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

 Date:
 October 11, 2011

#### General Information:

2 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.

### QC Batch: MSV/40528

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:

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 29-7 UNIT 37

Pace Project No.: 60107128

Sample: S-075034-92711-CB-B-7(20- 22)	Lab ID: 60107128001	Collected:	09/27/11 12:50	Received:	09/29/11 09:00	Matrix: Solid	
Results reported on a "dry-weight" bas	sis						
		Report					

Parameters	Results	Units	Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical	I Method: EP	A 8015B Prep	aration Met	hod: E	PA 3546			
TPH-DRO	<b>2440</b> n	ng/kg	56.4	10.7	5	10/03/11 00:00	10/09/11 23:15		
n-Tetracosane (S)	85 %		41-130		5	10/03/11 00:00	10/09/11 23:15	646-31-1	
p-Terphenyl (S)	85 %	6	39-130		5	10/03/11 00:00	10/09/11 23:15	92-94-4	
Gasoline Range Organics	Analytical	Method: EP	A 8015B Prep	aration Met	hod: E	PA 5035A/5030B			
TPH-GRO	286 n	ng/kg	23.0	8.3	2	10/06/11 00:00	10/07/11 00:42		
4-Bromofluorobenzene (S)	240 %	6	68-134		2	10/06/11 00:00	10/07/11 00:42	460-00-4	S2
8260 MSV 5035A VOA	Analytical	Method: EP	A 8260						
Benzene	ND u	ıg/kg	375	28.5	50		09/30/11 19:12	71-43-2	
Ethylbenzene	ND u	ıg/kg	375	34.5	50		09/30/11 19:12	100-41-4	
Toluene	ND u	ıg/kg	375	28.5	50		09/30/11 19:12	108-88-3	
Xylene (Total)	10900 u	ıg/kg	375	87.6	50		09/30/11 19:12	1330-20-7	
Dibromofluoromethane (S)	95 %	6	68-129		50		09/30/11 19:12	1868-53-7	
Toluene-d8 (S)	104 %	6	81-121		50		09/30/11 19:12	2037-26-5	
4-Bromofluorobenzene (S)	127 %	6	75-131		50		09/30/11 19:12	460-00-4	
1,2-Dichloroethane-d4 (S)	106 %	6	77-131		50		09/30/11 19:12	17060-07-0	
Percent Moisture	Analytical	Method: AS	FM D2974-87						
Percent Moisture	12.6 %	6	0.50	0.50	1		10/03/11 00:00		

Date: 10/11/2011 05:20 PM

## **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60107128

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytica	I Method: EP/		·					
Benzene	ND L	ıg/kg	5.0	0.38	1		09/30/11 17:27	71-43-2	
Ethylbenzene	ND u	ıg/kg	5.0	0.46	1		09/30/11 17:27	100-41-4	
Toluene	ND L	ıg/kg	5.0	0.38	1		09/30/11 17:27	108-88-3	
Xylene (Total)	ND u	Jg/kg	5.0	1.2	1		09/30/11 17:27	1330-20-7	
Dibromofluoromethane (S)	98 9	%	68-129		1		09/30/11 17:27	1868-53-7	
Toluene-d8 (S)	101 9	6	81- <b>12</b> 1		1		09/30/11 17:27	2037-26-5	
4-Bromofluorobenzene (S)	102 9	6	75-131		1		09/30/11 17:27	460-00-4	
1,2-Dichloroethane-d4 (S)	110 9	%	77-131		1		09/30/11 17:27	17060-07-0	
Percent Moisture	Analytica	Method: AS	FM D2974-87						
Percent Moisture	ND 9	6	0.50	0.50	1		10/03/11 00:00		

Date: 10/11/2011 05:20 PM

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n-Tetracosane (S)

p-Terphenyl (S)

%

%

## QUALITY CONTROL DATA

Project: SAN JUAN Pace Project No.: 60107128	I 29-7 UNIT 37						
QC Batch: OEXT/30	483	Analysis Me	thod: E	PA 8015B			
QC Batch Method: EPA 3546	3	Analysis Des	scription: El	PA 8015B			
Associated Lab Samples: 60	107128001						
METHOD BLANK: 885357		Matrix:	Solid				
Associated Lab Samples: 60	107128001						
		Blank	Reporting				
Parameter	Units	Result	Limit	Analyzed	l Qua	alifiers	
TPH-DRO	mg/kg	ND	9.9	10/09/11 22	:53		
n-Tetracosane (S)	%	95	41-130	10/09/11 22	:53		
p-Terphenyl (S)	%	94	39-130	10/09/11 22	:53		
LABORATORY CONTROL SAM	IPLE: 885358					•	
		Spike	LCS	LCS	% Rec		
Parameter	Units	•	Result	% Rec	Limits	Qualifiers	
TPH-DRO	mg/kg	82.5	80.9	98	57-120	D M4	
						-	

99

97

41-130

39-130

Date: 10/11/2011 05:20 PM

## **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: SAN Pace Project No.: 60107	JUAN 29-7 UNIT 37 7128	· ·										
	//3868		Analys	sis Method:		EPA 8015B						
	5035A/5030B			sis Descript		Gasoline Ran		<b>`</b> C				
Associated Lab Samples:	60107128001		Analys	sis Descrip	uon. (		ige Organic	~				
	00107120001											
METHOD BLANK: 88659	97		N	Matrix: Sol	id							
Associated Lab Samples:	60107128001											
			Blank	¢ R	eporting							
Parameter		Units	Resu	lt	Limit	Analyz	ed	Qualifiers		•		
TPH-GRO	mg/kg			ND	10.0	) 10/06/11	20:09					
4-Bromofluorobenzene (S)	%			98	68-134	10/06/11	20:09					
LABORATORY CONTROL	.SAMPLE: 88659	98										
			Spike	LCS	3	LCS	% Rec	:				
Parameter		Units	Conc.	Resu	lit	% Rec	Limits	Qı	ualifiers			
TPH-GRO	mg/kg		50	)	53.3	107	77	-122		•		
4-Bromofluorobenzene (S)	%					98	. 68	-134				
MATRIX SPIKE & MATRIX	SPIKE DUPLICAT	E: 88774	0		887741							
			MS	MSD	•						•	
	· 601	07280002	Spike	Spike	MŚ	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
TPH-GRO	mg/kg	ND	57.8	57.8	55.4	58.5	96	101	51-130	5	27	_
4-Bromofluorobenzene (S)	%						96	98	68-134			

Date: 10/11/2011 05:20 PM

## **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107128

Analysis Description:	8260 MSV 5035A Volatile Organics	
Matrix: Solid		
	Matrix: Solid	Matrix: Solid

Associated Lab Samples: 60107128001, 60107128002

		Blank	Reporting				
Parameter	Units	Result	Limit	Analyzed	Qualifiers		
Benzene	ug/kg	ND	5.0	09/30/11 17:12			
Ethylbenzene	ug/kg	ND	5.0	09/30/11 17:12			
Toluene	ug/kg	ND	5.0	09/30/11 17:12			
Xylene (Total)	ug/kg	ND	5.0	09/30/11 17:12			
1,2-Dichloroethane-d4 (S)	%	111	77-131	09/30/11 17:12			
4-Bromofluorobenzene (S)	%	100	75-131	09/30/11 17:12			
Dibromofluoromethane (S)	%	99	68-129	09/30/11 17:12			
Toluene-d8 (S)	%	.100	81-121	09/30/11 17:12			

## LABORATORY CONTROL SAMPLE: 884311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	96.7	97	84-119	
Ethylbenzene	ug/kg	100	99.0	99	80-120	
Toluene	ug/kg	100	94.9	95	83-117	
Xylene (Total)	ug/kg	300	294	98	80-120	
1,2-Dichloroethane-d4 (S)	%			104	77-131	
4-Bromofluorobenzene (S)	%			104	75-131	
Dibromofluoromethane (S)	%			. 96	68-129	
Toluene-d8 (S)	%			97	81-121	

### Date: 10/11/2011 05:20 PM

## **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: **SAN JUAN 29-7 UNIT 37** Pace Project No.: 60107128 QC Batch: PMST/6562 Analysis Method: ASTM D2974-87 QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture Associated Lab Samples: 60107128001, 60107128002 METHOD BLANK: 885180 Matrix: Solid Associated Lab Samples: 60107128001, 60107128002 Blank Reporting Parameter Units Result Limit Analyzed Qualifiers Percent Moisture % ND 10/03/11 00:00 0.50 SAMPLE DUPLICATE: 885181

Deveryor	1 1 14	60107280008	Dup	888	Max	0
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Percent Moisture	%	22.0	22.0	0	20	)

## Date: 10/11/2011 05:20 PM

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## QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107128

### 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/40528

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

### ANALYTE QUALIFIERS

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).

### Date: 10/11/2011 05:20 PM

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Pace Project No.:

SAN JUAN 29-7 UNIT 37 60107128

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60107128001	S-075034-92711-CB-B-7(20-22)	EPA 3546	OEXT/30483	.EPA 8015B	GCSV/11304
60107128001	S-075034-92711-CB-B-7(20-22)	EPA 5035A/5030B	GCV/3868	EPA 8015B	GCV/3870
60107128001 60107128002	S-075034-92711-CB-B-7(20-22) TRIP BLANK	EPA 8260 EPA 8260	MSV/40528 MSV/40528		·
60107128001 60107128002	S-075034-92711-CB-B-7(20-22) TRIP BLANK	ASTM D2974-87 ASTM D2974-87	PMST/6562 PMST/6562		

Date: 10/11/2011 05:20 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.

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oť				DRINKING WATER	OTHER					82(F0100)	Pace Project No./ Lab I.D. 7 V/Lau 20646										SAMPLE CONDITIONS	- >				-	aled . U)	y Sealed	dier (1/N)
-     ;;;		10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		ATER	Ŕ					esidual Chlorine (Y/V)											SAMP						( uo	(KVA) ived on	deived on seived on
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Section C	Attention: FN	MaM		Address:	Pace Quote Reference:	Ι.	Pace Profile #:		Pre	NO <sup>2</sup> SO <sup>4</sup> Dieserved OF CONTRINERS	H n X										TIME	3.20 1						1 mar	10554
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B Daricet Informati	Report Ter-Cimistine Mathewe	Kally Rianch		MCiald	Order No.:		$\left \right $		┣───	AMPLE TYPE (G=GRAB C=CO	s V	H	15									1000	the second		<i>'</i> .	:			
Section B	Report To:	Т		MJA	5	2 Project Name:	Project Number		Valid Matrix Codes MATRIX CODE		1(20-22)	ł											⊅ 	-			_		
		2d NF Sta 20	11 M M M M	7110		Fax: (505)884-4932	P		Valid Ma <u>MATRIX</u>		11.68.8-	7	rk.								ENTS								
		6121 Indian School Bd NF Sta 200		Albequerque, NM 87110	E C	Γ	AT: standard		Information	SAMPLE ID (A-Z, 0-91, -) Sample IDs MUST BE UNIQUE.	112045621	10 10 1	Ap blak	-							ADDITIONAL COMMENTS	-rontenac Lab:							
Section A Beruited Client Information	ny: CRA			ļ		(505)884-0672	Requested Due Date/TAT:		Section D Required Client Information	Sample IO	8-076	4	1	-							ADE	Return HPC directly to Frontenac Lab:	808 West Mckay	Frontenac, KS 66763					
Sectio	Company:	Address.			Email To;	Phone:	Reque			1EW #	.I – I.	7	~	4	N	9 1	8	6	9	=	2	Return	808 We	Fronten					P

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Sa	mple Condition L	pon Receipt	
Pace Analytical <sup>*</sup> Client Name	CRA	Project a	# 60107128
Custody Seal on Cooler/Box Present:	e Shipping Label Used?	Yes No	Dotional Proj. Due Date: Proj. Name: 10/11/14
Packing Material: Bubble Wrap Bubble Thermometer Used: 1-19 / T-194		None Dther	
Cooler Temperature: 3, 4°C			ice, cooling process has begun tials of person examining
Chain of Custody present:	PYes DNO DN/A 1.		
Chain of Custody filled out:		<u>. <u></u></u>	
Chain of Custody relinquished:	Yes No N/A 3.		
Sampler name & signature on COC:	Dies DNo DN/A 4.		
Samples arrived within holding time:	Dires DNo DN/A 5.	· · · · · · · · · · · · · · · · · · ·	
Short Hold Time analyses (<72hr):			
Rush Turn Around Time requested:	□Yes No □N/A 7.	· · · · · · · · · · · · · · · · · · ·	
Sufficient volume:	Yes INO IN/A 8.		
Correct containers used:	Tes INO IN/A 9.	<u> </u>	
-Pace containers used:			
Containers intact:	Tes INO IN/A 10	).	
Unpreserved 5035A soils frozen w/in 48hrs?	Yes DNO DN/A 1	•	
Filtered volume received for dissolved tests	Yes No DINA 12	)	
Sample labels match COC:	Yes No NA 1	· ·	
-Includes date/time/ID/analyses Matrix:	LWT		
All containers needing preservation have been checked.		i.	,
All containers needing preservation are found to be in compliance with EPA recommendation.			
Exceptions: VOA, coliform, TOC, O&G, WHDRO (water), Phenolics		tial when Lot # of adde	
Trip Blank present:	ØYes □No □N/A 15		
Pace Trip Blank lot # (if purchased):			
Headspace in VOA vials ( >6mm):	TYes INO NIA 16		
Project sampled in USDA Regulated Area:	□Yes 20No □N/A 17	7. List State: NA	b
Client Notification/ Resolution: Copy	COC to Client? Y	/ N Field Data R	lequired? Y / N
Person Contacted:	Date/Tin	ne:	
Comments/ Resolution.			
	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
·			
			9 30 / 11
Project Manager Review:		Date	

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)

ce Analytica

October 11, 2011

Angela Bown COP Conestoga-Rovers & Associa 6121 Indian School Rd #200 Albuquerque, NM 87110

RE: Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107468

Dear Angela Bown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 05, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Colleen Koporc for Dianna Meier dianna.meier@pacelabs.com Project Manager

Enclosures

cc: Kelly Blanchard, COP Conestoga-Rovers & Associa Cassie Brown, COP Conestoga-Rovers & Associa



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## CERTIFICATIONS

Project:SAN JUAN 29-7 UNIT 37Pace Project No.:60107468

### 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 29-7 UNIT 37Pace Project No.:60107468

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60107468001	S-07503A-10311-CB-B8(108-110)	Solid	10/03/11 16:50	10/05/11 09:10
60107468002	TRIP BLANK	Water	10/04/11 06:00	10/05/11 09:10
60107468003	GW-075034-10411-CB-B-8	Water	10/04/11 09:15	10/05/11 09:10

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## SAMPLE ANALYTE COUNT

Project:SAN JUAN 29-7 UNIT 37Pace Project No.:60107468

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60107468001	S-07503A-10311-CB-B8(108-110)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 8260	RAB	8
		ASTM D2974-87	JAH	1
60107468002	TRIP BLANK	EPA 8260	BRM	9
60107468003	GW-075034-10411-CB-B-8	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 8260	BRM	9

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## PROJECT NARRATIVE

Project: Pace Project No.:	SAN JUAN 29-7 UNIT 37 60107468
Description: 8015 Client: COF	8015B 5B Diesel Range Organics 9 Conestoga-Rovers & Associates, Inc. NM 9 ber 11, 2011
General Informati 2 samples were an	on: alyzed 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.
•	prepared in accordance with EPA 3510C with any exceptions noted below.
Initial Calibration	prepared in accordance with EPA 3546 with any exceptions noted below. s (including MS Tune as applicable): hin method requirements with any exceptions noted below.
Continuing Calibr All criteria were wit	ation: hin method requirements with any exceptions noted below.
Surrogates: All surrogates were	within QC limits with any exceptions noted below.
Method Blank: All analytes were b	elow the report limit in the method blank with any exceptions noted below.
Laboratory Contro All laboratory contr	ol Spike: ol spike compounds were within QC limits with any exceptions noted below.
Matrix Spikes: All percent recover	ies and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.
QC Batch: GCSV/1 A matrix spike/r	1297 natrix spike duplicate was not performed due to insufficient sample volume.
Duplicate Sample All duplicate sampl	e results were within method acceptance criteria with any exceptions noted below.
Additional Comm	ents:

## REPORT OF LABORATORY ANALYSIS

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e Analvtic

### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107468

## Method: EPA 8015B

 Description:
 Gasoline Range Organics

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

 Date:
 October 11, 2011

### **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 5035A/5030B 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:

REPORT OF LABORATORY ANALYSIS

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## **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107468
Method:EPA 5030B/8015BDescription:Gasoline Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 11, 2011
General Information: 1 sample was 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.
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/3872 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:

## **REPORT OF LABORATORY ANALYSIS**

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### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107468

### Method: EPA 8260

 Description:
 8260 MSV 5035A VOA

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

 Date:
 October 11, 2011

### **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/40612

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:

## REPORT OF LABORATORY ANALYSIS

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### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107468

## Method: EPA 8260

 Description:
 8260 MSV UST, Water

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

 Date:
 October 11, 2011

### General Information:

2 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.

### QC Batch: MSV/40679

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

#### QC Batch: MSV/40730

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:

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

## **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60107468

Sample: S-07503A-10311-CB- B8(108-110)	Lab ID: 601	07468001	Collected: 10/03/1	1 16:50	Received: 10	0/05/11 09:10 N	/atrix: Solid	
Results reported on a "dry-weight"	" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8015B Diesel Range Organics	Analytical Met	hod: EPA 801	5B Preparation Me	thod: E	PA 3546			
TPH-DRO	ND m	g/kg	10.3	1	10/05/11 00:00	10/07/11 22:22		
n-Tetracosane (S)	86 %		41-130	1	10/05/11 00:00	10/07/11 22:22	646 <sup>`</sup> 31-1	
p-Terphenyl (S)	81 %		39-130	1	10/05/11 00:00	10/07/11 22:22	92-94-4	
Gasoline Range Organics	Analytical Met	hod: EPA 801	5B Preparation Me	thod: E	PA 5035A/5030B	•		
TPH-GRO	ND m	g/kg	16.2	1	10/06/11 00:00	10/07/11 01:05		
4-Bromofluorobenzene (S)	108 %		68-134	1	10/06/11 00:00	10/07/11 01:05	460-00-4	
8260 MSV 5035A VOA	Analytical Met	hod: EPA 826	60					
Benzene	ND ug	j/kg	5.7	1		10/05/11 21:28	71-43-2	
Ethylbenzene	ND ug	j/kg	5.7	1		10/05/11 21:28	100-41-4	
Toluene	<ul> <li>ND ug</li> </ul>	j/kg	5.7	1		10/05/11 21:28	108-88-3	
Xylene (Total)	ND ug	j/kg	5.7	1		10/05/11 21:28	1330-20-7	
Dibromofluoromethane (S)	104 %		68-129	1		10/05/11 21:28	1868-53-7	
Toluene-d8 (S)	100 %		81-121	1		10/05/11 21:28	2037-26-5	
4-Bromofluorobenzene (S)	100 %		75-131	1		10/05/11 21:28	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %		77-131	1		10/05/11 21:28	17060-07-0	
Percent Moisture	Analytical Met	hod: ASTM D	2974-87					
Percent Moisture	3.9 %		0.50	1		10/05/11 00:00		

Date: 10/11/2011 04:45 PM

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60107468

Sample: TRIP BLANK	Lab ID: 60107468002	Collected: 10/04/1	1 06:00	Received: 1	0/05/11 09:10 N	latrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 826	0					
Benzene	ND ug/L	1.0	1	· .	10/07/11 15:17	71-43-2	
Ethylbenzene	ND ug/L	1.0	1		10/07/11 15:17	100-41-4	
Toluene	ND ug/L	1.0	1		10/07/11 15:17	108-88-3	
Xylene (Total)	ND ug/L	3.0	1		10/07/11 15:17	1330-20-7	
Dibromofluoromethane (S)	102 %	86-112	1		10/07/11 15:17	1868-53-7	
Toluene-d8 (S)	98 %	90-110	1		10/07/11 15:17	2037-26-5	
4-Bromofluorobenzene (S)	102 %	87-113	1		10/07/11 15:17	460-00-4	
1,2-Dichloroethane-d4 (S)	109 %	82-119	1		10/07/11 15:17	17060-07-0	
Preservation pH	1.0	1.0	1		10/07/11 15:17		

# Date: 10/11/2011 04:45 PM

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Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60107468

Sample: GW-075034-10411-CB-B-8	Lab ID: 601	07468003	Collected:	10/04/1	1 09:15	Received: 1	0/05/11 09:10	Matrix: Water	
Parameters	Results	Units	Report	Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Met	nod: EPA 80 <sup>-</sup>	15B Preparat	tion Me	thod: Ef	PA 3510C			
TPH-DRO	ND mg	g/L		0.61	1	10/05/11 00:00	) 10/07/11 21:04	1	
p-Terphenyl (S)	77 %		4	0-118	1	10/05/11 00:00	) 10/07/11 21:04	92-94-4	
n-Tetracosane (S)	77 %		30	6-120	1	10/05/11 00:00	0 10/07/11 21:04	646-31-1	
Gasoline Range Organics	Analytical Metl	nod: EPA 50	30B/8015B						
TPH-GRO	6.8 mg	g/L		0.50	1		10/07/11 20:57	7	
4-Bromofluorobenzene (S)	104 %		63	3-139	1		10/07/11 20:57	460-00-4	
Preservation pH	1.0				1		10/07/11 20:57	7	
8260 MSV UST, Water	Analytical Metl	nod: EPA 826	60						
Benzene	<b>307</b> ug	/L		10.0	10		10/09/11 15:08	3 71-43-2	
Ethylbenzene	57.8 ug	/L		1.0	1		10/07/11 15:34	100-41-4	
Toluene	. 723 ug	/L		10.0	10		10/09/11 15:08	3 108-88-3	
Xylene (Total)	<b>758</b> ug	/L		30.0	10		10/09/11 15:08	3 1330-20-7	
Dibromofluoromethane (S)	95 %		. 8	6-112	1		10/07/11 15:34	1868-53-7	
Toluene-d8 (S)	99 %		90	0-110	1		10/07/11 15:34	2037-26-5	
4-Bromofluorobenzene (S)	101 %		8	7-113	1		10/07/11 15:34	460-00-4	
1,2-Dichloroethane-d4 (S)	95 %		83	2-119	1		10/07/11 15:34	17060-07-0	
Preservation pH	1.0			1.0	1		10/07/11 15:34	۰ ·	

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## QUALITY CONTROL DATA

Project:	SAN JUAN 29-7	UNIT 37											
Pace Project No.:	60107468												
QC Batch:	OEXT/30530			Analys	sis Method	: E	PA 8015B						
QC Batch Method:	EPA 3546			Analys	sis Descrip	tion: E	PA 8015B						
Associated Lab Sar	nples: 6010746	8001					·		-				
METHOD BLANK:	886492			ſ	Matrix: Sol	id							
Associated Lab San	nples: 6010746	8001											
				Blank	C R	eporting							
Paran	neter		Units	Resu	lt	Limit	Analyz	ed	Qualifiers				
TPH-DRO		mg/kg			ND	9.8	10/07/11	21:37					
n-Tetracosane (S)		%			81	41-130	10/07/11	21:37					
p-Terphenyl (S)		%			77	39-130	10/07/11	21:37					
LABORATORY COI	NTROL SAMPLE:	88649	)3										
				Spike	LCS	s .	LCS	% Rec	;				
			Linka	Conc.	Resu	ult	% Rec	Limits	Q	ualifiers			
· Paran	neter		Units	CONC.	1,000		/01100	1		admicio			
Paran TPH-DRO	neter		Units	81.2	•	74.9	92	<u> </u>	-120		-		
	neter	mg/kg %			•			57			-		
TPH-DRO	neter	mg/kg	Units		•		92	57	-120		<u>.</u>		
TPH-DRO n-Tetracosane (S)		mg/kg % %	· ·	81.2	•		92 90	57	-120 -130		-		
TPH-DRO n-Tetracosane (S) p-Terphenyl (S)		mg/kg % %	· ·	81.2	•	74.9	92 90	57	-120 -130		-		
TPH-DRO n-Tetracosane (S) p-Terphenyl (S)		mg/kg % % PLICATI	· ·	81.2		74.9	92 90	57	-120 -130	% Rec		Мах	
TPH-DRO n-Tetracosane (S) p-Terphenyl (S)	MATRIX SPIKE DU	mg/kg % % PLICATI	E: 886494	81.2 81.2	MSD	74.9 886495	92 90 87	57 41 39	-120 -130 -130		RPD		Qual
TPH-DRO n-Tetracosane (S) p-Terphenyl (S) MATRIX SPIKE & N	MATRIX SPIKE DU	mg/kg % % PLICATI 601 Units	E: 886494 07468001	81.2 4 MS Spike	MSD Spike	74.9 	92 90 87 MSD	57 41 39 MS	-120 -130 -130 MSD	% Rec	RPD 1		Qual
TPH-DRO n-Tetracosane (S) p-Terphenyl (S) MATRIX SPIKE & M Paramet	IATRIX SPIKE DU ter	mg/kg % % PLICATI 601 Units	E: 88649 07468001 Result	81.2 4 MS Spike Conc.	MSD Spike Conc.	74.9 886495 MS Result	92 90 87 MSD Result	57 41 39 MS % Rec	-120 -130 -130 MSD % Rec	% Rec Limits		RPD	Qual

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## **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: Pace Project No.:	SAN JUAN 29-7 I 60107468	JNIT 37							
QC Batch:	OEXT/30528		Analysis	Method:	E	PA 8015B			
QC Batch Method: EPA 3510C		Analysis Description:		n: E	PA 8015B				
Associated Lab Sar	mples: 60107468	3003							
METHOD BLANK:	886472	······	Ma	trix: Water					
Associated Lab Sar	mples: 60107468	3003							
			Blank	Rep	orting				•
Parar	neter	Units	Result	L	imit	Analyze	d Qualif	iers	,
TPH-DRO		mg/L		ND	0.50	10/07/11 20	):42		
n-Tetracosane (S)		%		76	36-120	10/07/11 20	):42		
p-Terphenyl (S)		%		79	40-118	10/07/11 20	):42		
LABORATORY CO	NTROL SAMPLE:	886473							
			Spike	LCS		LCS	% Rec		
Parar	meter	Units	Conc.	Result		% Rec	Limits	Qualifiers	
TPH-DRO		mg/L	2.5		2.1	84	48-119		
n-Tetracosane (S)		%				82	36-120		
p-Terphenyl (S)		%				82	40-118		

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# **REPORT OF LABORATORY ANALYSIS**

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### **QUALITY CONTROL DATA**

Project: SAN J Pace Project No.: 601074	UAN 29-7 UNIT 3 468	37										
QC Batch: GCV	/3868		Analys	sis Method	: 6	EPA 8015B						
QC Batch Method: EPA	5035A/5030B		Analys	sis Descrip	tion: 0	Gasoline Rar	nge Organio	cs				
Associated Lab Samples:	60107468001											
METHOD BLANK: 88659	7			Matrix: Sol	lid							
Associated Lab Samples:	60107468001											
			Blan	k R	Reporting							
Parameter		Units	Resu	It	Limit	Analyz	ed	Qualifiers				
TPH-GRO	mg/k	g		ND	10.0	10/06/11	20:09					
4-Bromofluorobenzene (S)	%			98	68-134	4 10/06/11	20:09					
LABORATORY CONTROL	SAMPLE: 8865	598		,								
			Spike	LCS	6	LCS	% Rec	;				
Parameter		Units	Conc.	Resu	ult	% Rec	Limits	Q	ualifiers			
TPH-GRO	mg/k	g	50	)	53.3	107	77	-122		-		
4-Bromofluorobenzene (S)	%					98	68	-134				
MATRIX SPIKE & MATRIX	SPIKE DUPLICA	TE: 88774	0		887741							
			MS	MSD								
	60	107280002	Spike	Spike	MS	MSD	MS	. MSD	% Rec		Max	•
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
TPH-GRO	mg/kg	ND	57.8	57.8	55.4	58.5	96	101	51-130	5	27	
4-Bromofluorobenzene (S)	%						96	98	68-134			

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# QUALITY CONTROL DATA

Project: SAN JUAN : Pace Project No.: 60107468	29-7 UNIT 37					
QC Batch: GCV/3872		Analysis Me	ethod:	EPA 5030B/807	15B	
QC Batch Method: EPA 50308	3/8015B	Analysis De	escription:	Gasoline Rang	e Organics	
Associated Lab Samples: 601	07468003	,				
METHOD BLANK: 887758		Matrix	: Water			
Associated Lab Samples: 601	07468003					
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyze	d Qualit	fiers
TPH-GRO	mg/L	ND	0.	50 10/07/11 20	0:35	
4-Bromofluorobenzene (S)	%	94	63-1	39 10/07/11 20	0:35	
LABORATORY CONTROL SAME	PLE: 887759					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
TPH-GRO	mg/L	1	1.1	106	74-127	<u> </u>
4-Bromofluorobenzene (S)	%			96	63-139	

Date: 10/11/2011 04:45 PM

# **REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project:	SAN JUAN 29-7 UNIT 37		1	
Pace Project No.:	60107468	•		
QC Batch:	MSV/40612	Analysis Method:	EPA 8260	
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics	
Associated Lab Sa	mples: 60107468001			

Matrix: Solid

### METHOD BLANK: 886442

Associated Lab Samples: 60107468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg		5.0	10/05/11 19:42	
Ethylbenzene	ug/kg	ND	5.0	10/05/11 19:42	
Toluene	ug/kg	ND	5.0	10/05/11 19:42	
Xylene (Total)	ug/kg	ND	5.0	10/05/11 19:42	
1,2-Dichloroethane-d4 (S)	%	99	77-131	10/05/11 19:42	
4-Bromofluorobenzene (S)	%	98	75-131	10/05/11 19:42	
Dibromofluoromethane (S)	%	99	68-129	10/05/11 19:42	
Toluene-d8 (S)	%	101	81-121	10/05/11 19:42	

### LABORATORY CONTROL SAMPLE: 886443

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg		92.7	93	84-119	
Ethylbenzene	ug/kg	100	92.0	92	80-120	
Toluene	ug/kg	100	. 90.0	90	83-117	
Xylene (Total)	ug/kg	300	268	N. 89	80-120	
1,2-Dichloroethane-d4 (S)	%			98	77-131	
4-Bromofluorobenzene (S)	%			100	75-131	
Dibromofluoromethane (S)	%			98	68-129	
Toluene-d8 (S)	%			100	81-121	

### Date: 10/11/2011 04:45 PM

### **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 Pace Project No .: 60107468 QC Batch: MSV/40679 Analysis Method: EPA 8260 QC Batch Method: Analysis Description: 8260 MSV UST-WATER EPA 8260 Associated Lab Samples: 60107468002, 60107468003 METHOD BLANK: 887904 Matrix: Water Associated Lab Samples: 60107468002, 60107468003 Reporting Blank Units Result Limit Qualifiers Parameter Analyzed Benzene ug/L ND 1.0 10/07/11 13:03 Ethylbenzene ug/L ND 1.0 10/07/11 13:03 ND 10/07/11 13:03 Toluene ug/L 1.0 Xylene (Total) ug/L ND 10/07/11 13:03 3.0 1,2-Dichloroethane-d4 (S) % 97 82-119 10/07/11 13:03 4-Bromofluorobenzene (S) % 102 87-113 10/07/11 13:03 Dibromofluoromethane (S) % 99 86-112 10/07/11 13:03 10/07/11 13:03 Toluene-d8 (S) % 99 90-110

### LABORATORY CONTROL SAMPLE: 887905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.7	103	82-117	
Ethylbenzene	ug/L	20	21.3	106	79-121	
Toluene	ug/L	20	21.5	108	80-120	
Xylene (Total)	ug/L	60	63.7	106	79-120	
1,2-Dichloroethane-d4 (S)	%			99	82-119	
4-Bromofluorobenzene (S)	%			98	87-113	
Dibromofluoromethane (S)	%			97	86-112	
Toluene-d8 (S)	%			· 101	90-110	

Date: 10/11/2011 04:45 PM

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## QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107468

QC Batch: MSV/40730		Analysis Meth	od: Ef	PA 8260		
QC Batch Method: EPA 8260		Analysis Desc	ription: 82	260 MSV UST-WAT	ER	•
Associated Lab Samples: 601074680	003					
METHOD BLANK: 888881		Matrix: V	Vater			
Associated Lab Samples: 601074680	003					
		Blank	Reporting			
Parameter	Units ,	Result	Limit	Analyzed	Qualifiers	
Benzene	ua/L	· · · · ND	1.0	10/09/11 11:15		

Benzene	ug/L	· ND	1.0	10/09/11 11:15	
Toluene	ug/L	ND	1.0	10/09/11 11:15	
Xylene (Total)	ug/L	ND	3.0	10/09/11 11:15	
1,2-Dichloroethane-d4 (S)	%	106	82-119	10/09/11 11:15	
4-Bromofluorobenzene (S)	%	99	87-113	10/09/11 11:15	
Dibromofluoromethane (S)	%	108	86-112	10/09/11 11:15	
Toluene-d8 (S)	%	99	90-110	10/09/11 11:15	•

# LABORATORY CONTROL SAMPLE: 888882

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.3	92	82-117	
Toluene	ug/L	20	19.1	· 95	80-120	
Xylene (Total)	ug/L	60	57.0	95	79-120	
1,2-Dichloroethane-d4 (S)	%			104	82-119	
4-Bromofluorobenzene (S)	%			98	87-113	
Dibromofluoromethane (S)	%			108	86-112	
Toluene-d8 (S)	%			99	90-110	

## Date: 10/11/2011 04:45 PM

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# QUALITY CONTROL DATA

Project:	SAN JUAN 29-7 UNI	T 37						
Pace Project No.:	60107468							
QC Batch:	PMST/6573		Analysis Met	hod: As	STM D2974-87			
QC Batch Method:	ASTM D2974-87		Analysis Des	cription: Dr	y Weight/Percent N	Moisture		
Associated Lab Sar	mples: 6010746800	1						
METHOD BLANK:	886847		Matrix:	Solid				
Associated Lab Sar	mples: 6010746800	1						
			Blank	Reporting				
Parar	neter	Units	Result	Limit	Analyzed	Qualifiers		
Percent Moisture	%		ND	0.50	10/05/11 00:00		_	
		· · ·						
SAMPLE DUPLICA	TE: 886848		,					
			60107468001	Dup		Max		
Parar	neter	Units	Result	Result	RPD	RPD	Qualifiers	_
Percent Moisture	%		3.9	4.5	13	20		•

Date: 10/11/2011 04:45 PM

## **REPORT OF LABORATORY ANALYSIS**

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### QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107468

### 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/40612

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: OEXT/30528

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: GCV/3872

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/40679

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/40730

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

Date: 10/11/2011 04:45 PM

### **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107468

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60107468001	S-07503A-10311-CB-B8(108-110)	EPA 3546	OEXT/30530	EPA 8015B	GCSV/11298
60107468003	GW-075034-10411-CB-B-8	EPA 3510C	OEXT/30528	EPA 8015B	GCSV/11297
60107468001	S-07503A-10311-CB-B8(108-110)	EPA 5035A/5030B	GCV/3868	EPA 8015B	GCV/3870
60107468003	GW-075034-10411-CB-B-8	EPA 5030B/8015B	GCV/3872		
60107468001	S-07503A-10311-CB-B8(108-110)	EPA 8260	MSV/40612		
60107468002 60107468003	TRIP BLANK GW-075034-10411-CB-B-8	EPA 8260 EPA 8260	MSV/40679 MSV/40679		
60107468003	GW-075034-10411-CB-B-8	EPA 8260	MSV/40730		
60107468001	S-07503A-10311-CB-B8(108-110)	ASTM D2974-87	PMST/6573		

Date: 10/11/2011 04:45 PM

## **REPORT OF LABORATORY ANALYSIS**

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Pace Analytical" www.gaedas.com	•	CHAIN-OF-C The Chain-of-Custody i	CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.	ocument ad accurately.	<i>,</i>
<ul> <li>Section A Required Client Information:</li> </ul>	Section B Reauted Protect Information:	· · ·	Section C Invision Information	Pago: of of	
company://2/A	REPORT TO: KOIL ALM ILAS	art - Keblaw with AChau	1 2 2	1 1373060	
Matter indian Brunked	- number of the	-A W BRIMA CANDAND LONA	Compa	REGULATORY AGENCY	<b>.</b> .
MDUSHER NIN MARINA	10 high on a number of	P. Maunor Com		L NPDES F GROUND WATER T DRINKING WATER	
EPAN DOWNO FRANING HIROM			Pace Quote Reference:	L UST F RCRA	2
Prove-084-70-7 Fax	Project Name No. TUA M	29-7 WH37	Pace Project Manager:	Site Location ( M	
Requested Due Date/TAT: 2. DAV	Project Number: 075334		Pace Profile #:	STATE: NIV	•
			Requested	Requested Analysis Filtered (Y/N)	
Section D Required Client Information MATR		COLLECTED			
	-	COMPOSITE ENDIGRAB		(N/.	
SallSold SAMPLE ID Oll (A-Z, 0-9/) Ar Samula IDs MLST BE UNIQUE Tresue	의 의 중 중 당 ase) 크미C		рө С		5
	5 Р Сорания С	TIME	аменсе те 4204 масчи		
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12 ADDITIONAL COMMENTS		AFFILIATION DATE	-0		
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	Imply negal	CLA 10411		;	
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Pa	ORIGINAL	SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: /	er://///245/D/////	۲ (۲/۱۷) ۲ (۲/۱۸) ۲ (۲/۱۸) ۲ (۲/۱۸)	·····
ge 23		SIGNATURE of SAMPLER	B	Sample	
<ul> <li>Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late ct</li> <li>C</li> </ul>	accepting Pace's NET 30 day payment terms (	ind agreeing to late charges of 1.5% per month for	touth for any invoices not paid within 30 days.	F-ALL-Q-020rev.07, 15-May-2007	

Sa	nple Condition	Upon Receipt		
Pace Analytical <sup>®</sup> Client Name	CRA		Project #( <i>)006</i>	7468
	e Shipping Label Use		Optional No Proj. Due Date: Proj. Name:	10/10/11
Custody Seal on Cooler/Box Present:	No Seals	intact: Yes	_	]
Packing Material: Bubble Wrap Bubble	Bags ZFoam	None Dther	ZPIC	
Thermometer Used: (1-191)/ T-194	Type of Ice: (Wet	)Blue None [	Samples on ice, cooling proces	s has begun
Cooler Temperature: <u>2.4</u> Temperature should be above freezing to 6°C	• ·	Comments:	Date and Initials of person excontents:	T_PV10-S-11
Chain of Custody present:		1.	PU10-5-11	
Chain of Custody filled out:		2.	· · ·	
Chain of Custody relinquished:		3.		
Sampler name & signature on COC:	ZIYes No N/A	4.	- <u></u>	
Samples arrived within holding time:		5.		
Short Hold Time analyses (<72hr):		6. Kits		
Rush Turn Around Time requested:	□Yes ØNO □N/A	1	· · · · · · · · · · · · · · · · · · ·	
Sufficient volume:	Yes INO IN/A	8.		
Correct containers used:	Yes INO IN/A	9.		
-Pace containers used:				
Containers intact:	ZYes DNo DN/A	10.		
Unpreserved 5035A soils frozen w/in 48hrs?				
Filtered volume received for dissolved tests	Dyes DNo ZN/A			
Sample labels match COC:				
	UT/CI	13.		
-Includes date/time/ID/analyses Matrix: 4			· · · · · · · · · · · · · · · · · · ·	
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No □N/A □Yes □No □N/A	14.		
Exceptions VOA coliform, TOC, O&G, WI-DRO (water), Phenolics		Initial when completed	Lot # of added preservative	
Trip Blank present:		15.		
Pace Trip Blank lot # (if purchased): 0905//	3'			
Headspace in VOA vials ( >6mm):	⊡Yes ØNo □N/A	16.		
Project sampled in USDA Regulated Area:		17. List State:		M
Client Notification/ Resolution: Copy	COC to Client?	Y / (N)	Field Data Required?	Y / N .
Person Contacted:	_ Date	Time:		BIC
Comments/ Resolution:	···, <u>-</u> ·			
		•	·	
		·····		
Project Manager Review: (1)( 1-DCM )	0/1-11			
Project Manager Review: (1) 1 DEM 1	<u>1761</u>		Date:	
Note: Whenever there is a discrepancy affecting North (	Carolina compliance sar	nples, a copy of this form	will be sent to the North Carolina I	DEHNR
Certification Office ( i.e out of hold, incorrect preservativ				
			F-KS-C-003-Rev.05, 19	February2010

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Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone: 913.599.5665 Fax: 913.599.1759

11/02/11

### Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project 60108485

Two soil samples and a trip blank were received for BTEX analysis by EPA Methods 5035A/8260. Sample S-075034-101811-CM-B-10(46-48) presented with an extremely high concentration in the aromatic region. This elevated concentration necessitated a 5000-fold dilution to achieve reportable results. The high level of volatile analytes in this sample likely contributed to the detectable results in the associated Trip Blank and possibly the results reported in the second soil sample-specifically S-075034-101811-CMB10(105-107.) The Trip Blank was reanalyzed from a different vial two days later and the results confirmed. This was likely due to the elevated concentrations in the first sample or the level of contamination at the site, in general.

Thanks,

Charles Morrow

CHARLES MORROW

Quality Assurance Manager Direct number: (913) 563-1444

Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Main # (913)599-5665 Fax # (913)599-1759

Charles.Morrow@pacelabs.com

ice Analvtica

October 25, 2011

Cassie Brown COP Conestoga-Rovers & Associa

RE: Project: SAN JUAN 29-7 UNIT 37 (075034) Pace Project No.: 60108135

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 15, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

SWACE Cust

Anna Custer

anna.custer@pacelabs.com Project Manager

Enclosures

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



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## CERTIFICATIONS

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108135

### 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 #: 7104704407-08-TX Utah Certification #: 9135995665

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Project:

### SAMPLE SUMMARY

Pace Project No	.: 60108135			
Lab ID	Sample ID	Matrix	Date Collected	Date Received
60108135001	S-075034-101311-CB-B9(100-102)	Solid	10/13/11 16:55	10/15/11 08:20
60108135002	GW-075034-101411-CB-B-9	Water	10/14/11 10:40	10/15/11 08:20
60108135003	TRIP BLANK 1 (WATER)	Water	10/14/11 15:00	10/15/11 08:20
60108135004	TRIP BLANK 2 (SOIL)	Solid	10/14/11 15:00	10/15/11 08:20

SAN JUAN 29-7 UNIT 37 (075034)

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## SAMPLE ANALYTE COUNT

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108135

Lab iD	Sample ID	Method	Analysts	Analytes Reported
60108135001	S-075034-101311-CB-B9(100-102)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 8260	RAB	. 8
		ASTM D2974-87	DWC	1
60108135002	GW-075034-101411-CB-B-9	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 8260	PRG	9
60108135003	TRIP BLANK 1 (WATER)	EPA 8260	PRG	9
60108135004	TRIP BLANK 2 (SOIL)	EPA 8260	RAB	8

# **REPORT OF LABORATORY ANALYSIS**

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### **PROJECT NARRATIVE**

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108135

## Method: EPA 8015B

Description:8015B Diesel Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 25, 2011

#### General Information:

2 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. The samples were prepared in accordance with EPA 3546 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/11380

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:

## REPORT OF LABORATORY ANALYSIS

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### PROJECT NARRATIVE

### Project: SAN JUAN 29-7 UNIT 37 (075034)

#### Pace Project No.: 60108135

# Method: EPA 8015B

 Description:
 Gasoline Range Organics

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

 Date:
 October 25, 2011

### **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 5035A/5030B 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:

REPORT OF LABORATORY ANALYSIS

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### **PROJECT NARRATIVE**

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108135

# Method: EPA 5030B/8015B

Description:Gasoline Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 25, 2011

#### **General Information:**

1 sample was 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.

### 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.

#### QC Batch: GCV/3899

S3: Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- GW-075034-101411-CB-B-9 (Lab ID: 60108135002)
  - 4-Bromofluorobenzene (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.

QC Batch: GCV/3899<sup>j</sup>

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:

# REPORT OF LABORATORY ANALYSIS

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### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108135

## Method: EPA 8260

Description:8260 MSV 5035A VOAClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 25, 2011

### General Information:

2 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.

### QC Batch: MSV/40976

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:

# REPORT OF LABORATORY ANALYSIS

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### **PROJECT NARRATIVE**

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108135

## Method: EPA 8260

 Description:
 8260 MSV UST, Water

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

 Date:
 October 25, 2011

### General Information:

2 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.

### QC Batch: MSV/40936

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:**

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

# REPORT OF LABORATORY ANALYSIS

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Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108135

Sample: S-075034-101311-CB- B9(100-102)	Lab ID: 601	08135001	Collected: 10/13/1	1 16:55	Received: 10	/15/11 08:20	Aatrix: Solid	
Results reported on a "dry-weight"	' basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Met	hod: EPA 801	5B Preparation Me	ethod: E	PA 3546			
TPH-DRO	ND m	g/kg	10.6	1	10/17/11 00:00	10/18/11 19:29		
n-Tetracosane (S)	89 %		41-130	1	10/17/11 00:00	10/18/11 19:29	646-31-1	
p-Terphenyl (S)	84 %		39-130	1	10/17/11 00:00	10/18/11 19:29	92-94-4	
Gasoline Range Organics	Analytical Met	hod: EPA 801	5B Preparation Me	ethod: E	PA 5035A/5030B			
TPH-GRO	ND m	g/kg	20.2	1	10/20/11 00:00	10/25/11 05:05		
4-Bromofluorobenzene (S)	101 %		68-134	1	10/20/11 00:00	10/25/11 05:05	460-00-4	
8260 MSV 5035A VOA	Analytical Met	hod: EPA 826	0					
Benzene	ND ug	j/kg	5.6	1		10/18/11 18:45	71-43-2	
Ethylbenzene	ND ug	/kg	5.6	1		10/18/11 18:45	100-41-4	
Toluene	ND ug	/kg	5.6	1		10/18/11 18:45	108-88-3	
Xylene (Total)	ND ug	/kg	5.6	1		10/18/11 18:45	1330-20-7	
Dibromofluoromethane (S)	95 %		68-129	1		10/18/11 18:45	1868-53-7	
Toluene-d8 (S)	· 100 %		81-121	1		10/18/11 18:45	2037-26-5	
4-Bromofluorobenzene (S)	101 %		75-131	1		10/18/11 18:45	460-00-4	
1,2-Dichloroethane-d4 (S)	110 %		77-131	1		10/18/11 18:45	17060-07-0	
Percent Moisture	Analytical Met	hod: ASTM D	2974-87			·		
Percent Moisture	6.2 %		0.50	1		10/17/11 00:00		

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# **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108135

Sample: GW-075034-101411-CB-B-9	Lab ID: 60108135002	Collected: 10/14/1	1 10:40	Received: 10	0/15/11 08:20 <sup>.</sup>	Matrix: Water	
Parameters	Results Units	Report Limit	<b>D</b> F	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA	8015B Preparation Me	ethod: E	PA 3510C			
TPH-DRO	ND mg/L	1.6	1	10/18/11 00:00	10/20/11 03:44	ł	
p-Terphenyl (S)	83 %	40-118	1	10/18/11 00:00	10/20/11 03:44	92-94-4	
n-Tetracosane (S)	83 %	36-120	1	10/18/11 00:00	10/20/11 03:44	646-31-1	
Gasoline Range Organics	Analytical Method: EPA	5030B/8015B					
TPH-GRO	ND mg/L	0.50	1		10/24/11 13:35	5	
4-Bromofluorobenzene (S)	147 %	63-139	1		10/24/11 13:35	5 460-00-4	S3
Preservation pH	1.0		1		10/24/11 13:38	5	,
8260 MSV UST, Water	Analytical Method: EPA	3260					
Benzene	ND ug/L	1.0	1		10/17/11 22:18	3 71-43-2	
Ethylbenzene	ND ug/L	1.0	1		10/17/11 22:18	3 100-41-4	
Toluene	ND ug/L	1.0	1		10/17/11 22:18	3 108-88-3	
Xylene (Total)	ND ug/L	3.0	1		10/17/11 22:18	3 1330-20-7	
Dibromofluoromethane (S)	103 %	86-112	1		10/17/11 22:18	1868-53-7	
Toluene-d8 (S)	97 %	90-110	1		10/17/11 22:18	3 2037-26-5	
4-Bromofluorobenzene (S)	103 %	87-113	1		10/17/11 22:18	3 460-00-4	
1,2-Dichloroethane-d4 (S)	112 %	82-119	1		10/17/11 22:18	17060-07-0	
Preservation pH	1.0	1.0	1		10/17/11 22:18	3	

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Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108135

Sample: TRIP BLANK 1 (WATER)	Lab ID: 6010813500	3 Collected: 10/14/1	1 15:00	Received: 10/15/11 (	08:20 Matrix: Water	
Parameters	Results Unit	s Report Limit	DF	Prepared Ana	alyzed CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA	8260				
Benzene	ND ug/L	1.0	1	10/17/	11 22:32 71-43-2	
Ethylbenzene	ND ug/L	1.0	1	10/17/	11 22:32 100-41-4	
Toluene	ND ug/L	1.0	1	10/17/	11 22:32 108-88-3	
Xylene (Total)	ND ug/L	3.0	1	10/17/	11 22:32 1330-20-7	
Dibromofluoromethane (S)	100 %	86-112	1	10/17/	11 22:32 1868-53-7	
Toluene-d8 (S)	100 %	90-110	1	10/17/	11 22:32 2037-26-5	
4-Bromofluorobenzene (S)	101 %	87-113	1	10/17/	11 22:32 460-00-4	
1,2-Dichloroethane-d4 (S)	97 %	82-119	1	10/17/	11 22:32 17060-07-0	)
Preservation pH	1.0	1.0	1	10/17/	11 22:32	

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## Project: SAN JUAN 29-7 UNIT 37 (075034)

60108135

Pace Project No.:

Sample: TRIP BLANK 2 (SOIL)	Lab ID: 60108135004	Collected: 10/14/11 15:00	Received: 10/15/11 08:20	Matrix: Solid	
Results reported on a "wet-weight" ba	isis				

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Met	thod: EPA 8260						
Benzene	ND ug	g/kg	5.0	1		10/18/11 18:14	71-43-2	
Ethylbenzene	ND ug	g/kg	5.0	1		10/18/11 18:14	100-41-4	
Toluene	ND ug	g/kg	5.0	1		10/18/11 18:14	108-88-3	
Xylene (Total)	ND ug	g/kg	5.0	1		10/18/11 18:14	1330-20-7	
Dibromofluoromethane (S)	97 %	þ	68-129	1		10/18/11 18:14	1868-53-7	
Toluene-d8 (S)	101 %	5	81-121	1		10/18/11 18:14	2037-26-5	
4-Bromofluorobenzene (S)	100 %	)	75-131	1		10/18/11 18:14	460-00-4	
1,2-Dichloroethane-d4 (S)	· 111 %	5	77-131	1		10/18/11 18:14	17060-07-0	
• • •				1				

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## QUALITY CONTROL DATA

Project: SAN JUA	N 29-7 UNIT 37	(075034)									
Pace Project No.: 6010813	5										
QC Batch: OEXT/3	0698		Analys	is Method	: E	PA 8015B					
QC Batch Method: EPA 35	46		Analys	is Descrip	tion: E	PA 8015B					
Associated Lab Samples: 6	0108135001	•									
METHOD BLANK: 892568		• *	N	Aatrix: So	lid						
Associated Lab Samples: 6	0108135001					•					
			Blank	; F	Reporting						
Parameter		Units	Resul	t	Limit	Analyz	ed	Qualifiers			
TPH-DRO	mg/kg			ND	9.8	10/19/11	11:15		_		
n-Tetracosane (S)	%			91 <sup>°</sup>	41-130	10/19/11	11:15				
p-Terphenyl (S)	%			86	39-130	10/19/11	11:15				
LABORATORY CONTROL SA	MPLE: 89256	9				<b>.</b>					
		•	Spike	LCS	6	LCS	% Red	;			
Parameter		Jnits	Conc.	Resu	ult	% Rec	Limits	Qı	ualifiers		
TPH-DRO	mg/kg		82.2		56.2	68	57	-120		-	
n-Tetracosane (S)	%					84	41	-130			
p-Terphenyl (S)	%					81	39	-130			
MATRIX SPIKE & MATRIX SP		89257	n		892571						
			MS	MSD	002011						
	601	08069001	Spike	Spike	MS	MSD	MS	MSD	% Rec	Мах	
			Conc.	Conc.	Result	Result	% Rec	% Rec	Limits		Qual
Parameter	Units	Result	Cono.								
Parameter TPH-DRO	Units mg/kg	ND	92.3	92.5	68.1	68.6	70	71	36-125	1 28	
					68.1	68.6	70 89	71 86	36-125 41-130		

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### **REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: Pace Project No.:	SAN JUAN 29-7 60108135	JNIT 37 (075034)								
QC Batch:	OEXT/30712		Analysis	Method:	E	PA 8015B				
QC Batch Method:	EPA 3510C		Analysis	Description	n: E	PA 8015B				
Associated Lab Sar	mples: 6010813	5002								
METHOD BLANK:	893093		Ma	atrix: Water						
Associated Lab Sar	mples: 6010813	5002								
	,		Blank	Rep	orting					
Parar	neter	Units	Result	Ĺ	mit	Analyze	d	Qualifier	s	
TPH-DRO		mg/L	· · ·	ND	0.50	10/20/11 02	2:56			
n-Tetracosane (S)		%		65	36-120	10/20/11 02	2:56			
p-Terphenyl (S)		%		78	40-118	10/20/11 02	2:56			
LABORATORY CO	NTROL SAMPLE:	893094						•		
			Spike	LCS		LCS	% Red	5		
Parar	neter	Units	Conc.	Result		% Rec	Limits	; (	Qualifiers	

Parameter	Units	Conc.	Result	% Rec	Limits	Quaimers
TPH-DRO	mg/L	2.5	1.8	' 72	48-119	
n-Tetracosane (S)	%			<sup>.</sup> 79	36-120	
p-Terphenyl (S)	%			86	40-118	
p-terprienyi (S)	70			00	40-110	

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# QUALITY CONTROL DATA

Project: SAN J Pace Project No.: 60108	UAN 29-7 UNIT 3 135	7 (075034)								•		
QC Batch: GCV	//3897		•	,		PA 8015B				•		
QC Batch Method: EPA Associated Lab Samples:	5035A/5030B 60108135001		Analys	is Descrip	tion: G	Basoline Ran	ige Organic	S				
METHOD BLANK: 89478	9		N	Aatrix: Sol	lid							
Associated Lab Samples:	60108135001											
Parameter		Units	Blank Resul		Reporting Limit	Analyz	ed	Qualifiers				
TPH-GRO 4-Bromofluorobenzene (S)	mg/k %	g		ND 99	10.0 68-134							
LABORATORY CONTROL	SAMPLE: 894	790										
Parameter		Units	Spike Conc.	LCS Resi		LCS % Rec	% Rec Limits		ualifiers			
TPH-GRO 4-Bromofluorobenzene (S)	mg/k %	g 	50		50.9	102 99		-122 -13 <b>4</b>		-		
MATRIX SPIKE & MATRIX	SPIKE DUPLICA	TE: 89555	0		895551							
Parameter	60 Units	0108251004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
TPH-GRO	mg/kg	ND	60	60	66.3	65.5	101 101	100 102	51-130 68-134		27	

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## QUALITY CONTROL DATA

Project:	SAN JUAN 29-7 UN	IIT 37 (075034)					
Pace Project No.:	60108135						
QC Batch:	GCV/3899		Analysis Meth	nod: E	PA 5030B/8015B		
QC Batch Method:	EPA 5030B/8015B	1	Analysis Desc	cription: G	asoline Range Orga	anics	
Associated Lab Sam	nples: 601081350	02					
METHOD BLANK:	895535		Matrix:	Water	· .		
Associated Lab Sam	nples: 601081350	02					
Associated Lab Sam	nples: 6010813500	02	Blank	Reporting			·
Associated Lab Sam Param		02 Units	Blank Result	Reporting Limit	Analyzed	Qualifiers	
Associated Lab Sam Param TPH-GRO	neter					Qualifiers	

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-GRO 4-Bromofluorobenzene (S)	mg/L %	1	0.93	93 93	74-127 63-139	

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### QUALITY CONTROL DATA

Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108135

QC Batch:	MSV/40976	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Sam	ples: 60108135001, 60108135004		

METHOD BLANK: 893434

Matrix: Solid

Associated Lab Samples: 60108135001, 60108135004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	10/18/11 13:09	
Ethylbenzene	ug/kg	ND	5.0	10/18/11 13:09	
Toluene	ug/kg	ND	5.0	10/18/11 13:09	
Kylene (Total)	ug/kg	ND	5.0	10/18/11 13:09	
,2-Dichloroethane-d4 (S)	· %	110	77-131	10/18/11 13:09	
-Bromofluorobenzene (S)	%	102	75-131	10/18/11 13:09	
ibromofluoromethane (S)	%	96	68-129	10/18/11 13:09	
oluene-d8 (S)	%	100	81- <b>1</b> 21	10/18/11 13:09	

### LABORATORY CONTROL SAMPLE: 893435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec	Qualifiers
Benzene	ug/kg		103	103	84-119	
Ethylbenzene	ug/kg	100	99.6	100	80-120	
Toluene	ug/kg	100	96.0	96	83-117	
Xylene (Total)	ug/kg	300	296	99	80-120	
1,2-Dichloroethane-d4 (S)	%			110	77-131	
4-Bromofluorobenzene (S)	%			102	. 75-131	
Dibromofluoromethane (S)	%			98	68-129	
Toluene-d8 (S)	%			99	81-121	

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### QUALITY CONTROL DATA

Project:	SAN J	UAN 29-7 UNIT 37 (075034)					
Pace Project No.:	60108 <sup>.</sup>	135					
QC Batch:	MSV	40936	Analysis Met	hod: I	ËP/	A 8260	
QC Batch Method:	EPA a	3260	Analysis Des	cription: 8	826	0 MSV UST-WATI	ER .
Associated Lab Sam	ples:	60108135002, 60108135003					
METHOD BLANK:	89296	)	Matrix:	Water			
Associated Lab Sam	ples:	60108135002, 60108135003					
			Blank	Reporting			
Paramo	eter	Units	Result	Limit		Analyzed	Qualifiers
Benzene		ug/L	ND	1.	0	10/17/11 19:41	
Ethylbenzene		ug/L	ND	1.0	0	10/17/11 19:41	
Toluene		ug/L	ND	1.	0	10/17/11 19:41	
Xylene (Total)		ug/L	ND	3.	0	10/17/11 19:41	
1,2-Dichloroethane-d	4 (S)	%	101	82-11	9	10/17/11 19:41	
4-Bromofluorobenzer	ne (S)	%	100	87-11	3	10/17/11 19:41	
Dibromofluoromethar	ne (S)	%	100	86-11	2	10/17/11 19:41	

98 '

90-110 10/17/11 19:41

### LABORATORY CONTROL SAMPLE: 892961

%

Toluene-d8 (S)

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L		19.9	100	82-117	
Ethylbenzene	ug/L	20	21.1	106	79-121	
Toluene	ug/L	20	20.4	102	80-120	
Xylene (Total)	ug/L	60	61.3	102	79-120	
1,2-Dichloroethane-d4 (S)	%			97	82-119	
4-Bromofluorobenzene (S)	%			102	87-113	
Dibromofluoromethane (S)	%			101	86-112	
Toluene-d8 (S)	%			100	90-110	

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# QUALITY CONTROL DATA

Project:	SAN JUAN 29-7	JNIT 37 (075034)	ł				
Pace Project No.:	60108135						
QC Batch:	PMST/6597		Analysis Metl	hod: A	STM D2974-87		
QC Batch Method:	ASTM D2974-8	7	Analysis Des	cription: Di	ry Weight/Percent M	Moisture	
Associated Lab Sar	nples: 60108138	5001					
METHOD BLANK:	892408		Matrix:	Solid			
Associated Lab Sar	nples: 6010813	5001	• •				
			Blank	Reporting			
Parar	neter	Units	Result	Limit	Analyzed	Qualifiers	_
Percent Moisture		%	ND	0.50	10/17/11 00:00		
SAMPLE DUPLICA	TE: 892409						
			60108041001	Dup		Max	
Parar	neter	Units	Result	Result	RPD	RPD	Qualifiers
Percent Moisture		%	9.5	8.6	10	20	

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### QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 (075034)

60108135

Pace Project No.:

### 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/40936

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

Batch: OEXT/30712

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/40976

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: GCV/3899

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

### ANALYTE QUALIFIERS

S3

Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108135

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60108135001	S-075034-101311-CB-B9(100-102)	EPA 3546	OEXT/30698	EPA 8015B	GCSV/11366
60108135002	GW-075034-101411-CB-B-9	EPA 3510C	OEXT/30712	EPA 8015B	GCSV/11380
60108135001	S-075034-101311-CB-B9(100-102)	EPA 5035A/5030B	GCV/3897	EPA 8015B	GCV/3900
60108135002	GW-075034-101411-CB-B-9	EPA 5030B/8015B	GCV/3899		
60108135001 60108135004	S-075034-101311-CB-B9(100-102) TRIP BLANK 2 (SOIL)	EPA 8260 EPA 8260	MSV/40976 MSV/40976		
60108135002 60108135003	GW-075034-101411-CB-B-9 TRIP BLANK 1 (WATER)	EPA 8260 EPA 8260	MSV/40936 MSV/40936		
60108135001	S-075034-101311-CB-B9(100-102)	ASTM D2974-87	PMST/6597		

Date: 10/25/2011 11:46 AM

### **REPORT OF LABORATORY ANALYSIS**

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Document pleted accurately.	Page: of		REGULATORYAGENCY	T NPDES F GROUND WATER F DRINKING WATER	I'L UST F RCRA A OTHER NUCLO	Site Location		Requested Analysis Filtered (YIN)		(N/A)	30	ньс 8015 GF	6 43 4 1UU 424 2006	Za	1269H 11 1394 11 1233111								No OBJE TIME SAMPLE CONDITIONS	1/4/4/ 08 20 0.5 Y N X	r		(1) (N) (N) (N)	Teed D. (Y/N)	E-ALL-Q-2016v.08, 12-Oct-2007	
CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.	Section C Invoice Information:		Bown	Address.	Pace Ouole Reference	37	Pace Profile #:	- Keques			Pevre bevre ic fest rest	Reinance Meinanc Meinanc Meinanc Meinanc Meinanc Meinanc Meinanc Meinanc	1 Consul 1/ 1055 3 X 1 Weeking X 1 1050 B X X		- 10-14-11	1							ATION ACCEPTED BY AFFILIATION	12 1 10.14.11 1000 When lon				PRINT Name of SAMPLER: (1979) DILUM SIGNATIBE of SAMPLED: 1011-00 DATE Signed	g to take charges of 1.5% per month for any involves not paid within 30 days.	
al filoal" secondored		Report To: Cassie Brown	E, Ste 200 Copy To: Kelly Blanchard, Angela	Albuquerque, NM 87110	cmbrown@craworld.com Purchase Order No.:	Fax: (505)884-4932 Project Name: San Juan 29-7 Unit	T: Jundard 2 Aud Project Number: 75034		Valid Matrix Codes 은 요 MATRIX CODE 응 값	ORINKING WATER WATER WASTE WATER WASTE WATER PRODUCT SCIUSOUD	%%552 )) ∃000	ХІЯТАМ Элямаг Пля	(B. B. J (100-102) [	024-101411. (B-B-9 1 WTG - 1-	<del>.</del> .	M - M	V V M C						ADDITIONAL COMMENTS	contenac Lat: (10/54/0 / 10/04/10			SAMF		"Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeling to tate charges of 1.5% per month for any involces not paid within 30 days.	
Face Analytical"	/ Section A Required Client Information:	Company: CRA	Address: 6121 Inc	Albuque	Email To: Cmbrow	Phone: (505)884-0672	Requested Due Date/TAT:		Section D Required Client Information		SAN (A- Sample (Ds	11EM #	S10-5 1	2 GW-05	a dut :	5	h tem	0.	œ	6	10	<del>1</del>		Return HPC directly to Frontenac Lab	808 West Mckay	Frontenac, KS 66763			- Important N	

Pace Pkg. Page 23 of 24

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San	nple Condition	n Upon Receipt	
Pace Analytical <sup>*</sup> Client Name	PCRA		Project # 600 3135
Courier:       Fed Ex       UPS       USPS       Clien         Tracking #:       \$\frac{36639649158}{28}\$       Pace         Custody Seal on Cooler/Box Present:       Yes	Shipping Label Use	Pace Other ed? Yes Z s intact: ZYes Z	No No No
Packing Material: Bubble Wrap Bubble B			2-15-11
Thermometer Used: (T-191)/ T-194	Type of Ice; We	۰	Samples on ice, cooling process has begun
Cooler Temperature:O Temperature should be above freezing to 6°C		Comments:	Date and Initials of person examining contents: $\rho (0 - 15 - 11)$
Chain of Custody present:	Yes No ONA	1.	
Chain of Custody filled out:		2.	· · · · · · · · · · · · · · · · · · ·
Chain of Custody relinquished:		3.	
Sampler name & signature on COC:		4.	
Samples arrived within holding time:		5.	
Short Hold Time analyses (<72hr):	□Yes ØNo □N/A	6.	
Rush Turn Around Time requested: pulo-15-1/		7.	
Sufficient volume:		8.	
Correct containers used:	Yes DNo DN/A	9.	
-Pace containers used:			
Containers intact:		10.	
Unpreserved 5035A soils frozen w/in 48hrs?		11.	
Filtered volume received for dissolved tests		12.	
Sample labels match COC:		13.	
-Includes date/time/ID/analyses Matrix:	LT/SL		
All containers needing preservation have been checked.		14.	
All containers needing preservation are found to be in compliance with EPA recommendation.			
Exceptions: VOA) coliform, TOC, O&G, WI-DRO (water), Phenolics	ØYes □No	Initial when completed	Lot # of added
Trip Blank present:	ZYes INO IN/A		
	090511-3		
Headspace in VOA vials ( >6mm):		16.	
Project sampled in USDA Regulated Area:		17. List-State:	h
Client Notification/ Resolution: Copy C	COC to Client?	Y / (N )	Field Data Required? Y / N
Person Contacted:	Date/	Time:	
Comments/ Resolution:			
••	· · · · · · · · · · · · · · · · · · ·		
Project Manager Review:	an		Date: U/16/1/
r roject manager review.			Daic

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)

F-KS-C-003-Rev.05, 19February2010

ace Analytica www.nacelahs.com

November 02, 2011

Cassie Brown COP Conestoga-Rovers & Associa

# RE: Project: SAN JUAN 29-7 UNIT 37 (075034) Pace Project No.: 60108485

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

SWA (ECUSE

Anna Custer

anna.custer@pacelabs.com Project Manager

Enclosures

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



### **REPORT OF LABORATORY ANALYSIS**

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# CERTIFICATIONS

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108485

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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Project:

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

# SAMPLE SUMMARY

Pace Project No	.: 60108485				
Lab ID	Sample ID	Matrix	Date Collected	Date Received	_
60108485001	S-075034-101811-CM-B-10(46-48)	Solid	10/18/11 12:45	10/20/11 08:50	-
60108485002	S-075034-101811-CMB10(105-107)	Solid	10/18/11 16:30	10/20/11 08:50	
60108485003	TB-101911-001	Solid	10/18/11 00:00	10/20/11 08:50	•

SAN JUAN 29-7 UNIT 37 (075034)

# **REPORT OF LABORATORY ANALYSIS**

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# SAMPLE ANALYTE COUNT

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108485

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60108485001	S-075034-101811-CM-B-10(46-48)	EPA 8015B	SDR	3
	•	EPA 8015B	PRG	2
		EPA 5035A/8260	RAB	7
		ASTM D2974-87	DWC	1
60108485002	S-075034-101811-CMB10(105-107)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	RAB	7
		ASTM D2974-87	DWC	1
60108485003	TB-101911-001	EPA 5035A/8260	RAB	7

# **REPORT OF LABORATORY ANALYSIS**

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# **PROJECT NARRATIVE**

Project: Pace Project	No.:	SAN JUAN 29-7 UNIT 37 (075034) 60108485
Method: Description: Client: Date:	8015 COP	<b>3015B</b> 3 Diesel Range Organics Conestoga-Rovers & Associates, Inc. NM mber 02, 2011
General Info 2 samples we		n: Ilyzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.
Hold Time: The samples	were a	analyzed within the method required hold times with any exceptions noted below.
Sample Prep The samples		n: prepared in accordance with EPA 3546 with any exceptions noted below.
		(including MS Tune as applicable): in method requirements with any exceptions noted below.
<b>Continuing C</b> All criteria we		tion: in method requirements with any exceptions noted below.
Surrogates: All surrogates	were	within QC limits with any exceptions noted below.
<b>Method Blan</b> All analytes w		low the report limit in the method blank with any exceptions noted below.
Laboratory C All laboratory		I Spike: I spike compounds were within QC limits with any exceptions noted below.
Matrix Spikes All percent rec		es and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.
Duplicate Sa All duplicate s		results were within method acceptance criteria with any exceptions noted below.
Additional Co	omme	nts:
Batch Comme	ents:	
		ke/matrix spike duplicate is not available for this batch due to a preparation error. h: OEXT / 30782

# **REPORT OF LABORATORY ANALYSIS**

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# **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108485

# Method: EPA 8015B

 Description:
 Gasoline Range Organics

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

 Date:
 November 02, 2011

## **General Information:**

2 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 5035A/5030B 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.

## QC Batch: GCV/3904

- CU: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
  - LCS (Lab ID: 897373)
    - TPH-GRO

## .....

## 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.

## QC Batch: GCV/3904

- S0: Surrogate recovery outside laboratory control limits.
- S-075034-101811-CM-B-10(46-48) (Lab ID: 60108485001)
  - 4-Bromofluorobenzene (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.

## QC Batch: GCV/3917

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

## **REPORT OF LABORATORY ANALYSIS**

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# **PROJECT NARRATIVE**

Project: Pace Project No.:	SAN JUAN 29-7 UNIT 37 (075034) 60108485		
	8015B Dine Range Organics		

Description:	Gasoline Range Organics
Client:	COP Conestoga-Rovers & Associates, Inc. NM
Date:	November 02, 2011

## **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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## PROJECT NARRATIVE

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108485

# Method: EPA 5035A/8260

 Description:
 8260 MSV GRO and Oxygenates

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

 Date:
 November 02, 2011

## **General Information:**

3 samples were analyzed for EPA 5035A/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 hele

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:

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

# REPORT OF LABORATORY ANALYSIS

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Project: SAN JUAN 29-7 Pace Project No.: 60108485	UNIT 37 (075034)				,		
Sample: S-075034-101811-CM-B- 10(46-48)	Lab ID: 60108485001	Collected: 10/18/1	1 12:45	Received: 10	)/20/11 08:50	Matrix: Solid	
Results reported on a "dry-weight"	basis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 80	15B Preparation Me	thod: E	PA 3546			
TPH-DRO	933 mg/kg	25.8	2	10/21/11 00:00	10/25/11 20:30		
n-Tetracosane (S)	60 %	41-130	2	10/21/11 00:00	10/25/11 20:30	646-31-1	
p-Terphenyl (S)	52 %	39-130	2	10/21/11 00:00	10/25/11 20:30	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 80	15B Preparation Me	thod: E	PA 5035A/5030B			
TPH-GRO	<b>20100</b> mg/kg	1680	100	10/24/11 09:08	10/28/11 15:34		
4-Bromofluorobenzene (S)	144 %	68-134	100	10/24/11 09:08	10/28/11 15:3 <b>4</b>	460-00-4	S0
8260 MSV GRO and Oxygenates	Analytical Method: EPA 50	35A/8260					
Benzene	ND ug/kg	42100	5000		10/28/11 11:14	71-43-2	
Ethylbenzene	62500 ug/kg	42100	5000		10/28/11 11:14	100-41-4	
Toluene	333000 ug/kg	42100	5000		10/28/11 11:14	108-88-3	
Xylene (Total)	1120000 ug/kg	84200	5000		10/28/11 11:14	1330-20-7	
Toluene-d8 (S)	98 %	81-121	5000		10/28/11 11:14	2037-26-5	
4-Bromofluorobenzene (S)	90 %	75-131	5000		10/28/11 11:14	460-00-4	
1,2-Dichloroethane-d4 (S)	101 %	77-131	5000		10/28/11 11:14	17060-07-0	
Percent Moisture	Analytical Method: ASTM	02974-87					
Percent Moisture	23.3 %	0.50	1		10/25/11 00:00	I	

Date: 11/02/2011 03:01 PM

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## Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108485

Sample: S-075034-101811- CMB10(105-107)	Lab ID: 60108485002	Collected: 10/18/1	1 16:30	Received: 10	/20/11 08:50 N	Aatrix: Solid	
Results reported on a "dry-weight"	basis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 801	5B Preparation Me	thod: Ef	PA 3546			
TPH-DRO	ND mg/kg	10.5	1	10/21/11 00:00	10/24/11 20:03		
n-Tetracosane (S)	79 %	41-130	1	10/21/11 00:00	10/24/11 20:03	646-31-1	
p-Terphenyl (S)	80 %	39-130	1	10/21/11 00:00	10/24/11 20:03	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 801	5B Preparation Me	thod: El	PA 5035A/5030B			
TPH-GRO	17.6 mg/kg	13.5	1	10/24/11 09:08	10/28/11 03:41		
4-Bromofluorobenzene (S)	101 %	68-134	1	10/24/11 09:08	10/28/11 03:41	460-00-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 503	5A/8260					
Benzene	ND ug/kg	5.5	1		10/28/11 10:44	71-43-2	
Ethylbenzene	10 ug/kg	5.5	1		10/28/11 10:44	100-41-4	
Toluene	55.2 ug/kg	5.5	1		10/28/11 10:44	108-88-3	
Xylene (Total)	162 ug/kg	11.0	1		10/28/11 10:44	1330-20-7	
Toluene-d8 (S)	92 %	81-121	1		10/28/11 10:44	2037-26-5	
4-Bromofluorobenzene (S)	91 %	75-131	1		10/28/11 10:44	460-00-4	
1,2-Dichloroethane-d4 (S)	96 %	77-131	1		10/28/11 10:44	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2	974-87					
Percent Moisture	<b>5.2</b> %	0.50	1		10/25/11 00:00		

Date: 11/02/2011 03:01 PM

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# Project: SAN JUAN 29-7 UNIT 37 (075034)

60108485

Pace Project No .:

Sample: TB-101911-001	Lab ID: 6010848	5003 Collected: 10/18/	11 00:00	Received:	10/20/11 08:50	Matrix: Solid	
Results reported on a "wet-weight"	basis						
Parameters	ResultsL	Inits Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Method: E	PA 5035A/8260					
Benzene	12.2 ug/kg	5.0	1		10/28/11 10:29	9 71-43-2	
Benzene	13.0 ug/kg	5.0	1		10/31/11 20:53	3 71-43-2	
Ethylbenzene	12.8 ug/kg	5.0	1		10/28/11 10:29	9 100-41-4	
Ethylbenzene	9.4 ug/kg	5.0	1		10/31/11 20:53	3 100-41-4	
Toluene	208 ug/kg	5.0	1		10/28/11 10:29	9 108-88-3	
Toluene	249 ug/kg	5.0	1		10/31/11 20:53	3 108-88-3	
Xylene (Total)	187 ug/kg	10.0	1		10/28/11 10:29	9 1330-20-7	
Xylene (Total)	141 ug/kg	10.0	1		10/31/11 20:53	3 1330-20-7	
Toluene-d8 (S)	113 %	81-121	1		10/31/11 20:53	3 2037-26-5	
Toluene-d8 (S)	98 %	81-121	1		10/28/11 10:29	9 2037-26-5	
4-Bromofluorobenzene (S)	101 %	75-131	1		10/31/11 20:53	3 460-00-4	
4-Bromofluorobenzene (S)	91 %	75-131	1		10/28/11 10:29	9 460-00-4	
1,2-Dichloroethane-d4 (S)	92 %	77-131	1		10/28/11 10:29	9 17060-07-0	
1,2-Dichloroethane-d4 (S)	106 %	77-131	1		10/31/11 20:53	3 17060-07-0	

# Date: 11/02/2011 03:01 PM

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Project: SAN JUAN 29-7 Pace Project No.: 60108485	UNIT 37 (075034)							
QC Batch: OEXT/30782		Analysis	Method:	El	PA 8015B			
QC Batch Method: EPA 3546		Analysis	Descriptio	n: El	PA 8015B			
Associated Lab Samples: 6010848	5001, 60108485002							
METHOD BLANK: 895610		Ma	atrix: Solid					
Associated Lab Samples: 6010848	5001, 60108485002		·					
		Blank	Rep	orting				
Parameter	Units	Result	L	imit	Analyze	d Qualif	fiers	
TPH-DRO	. mg/kg		ND	9.8	10/24/11 18	3:45		
n-Tetracosane (S)	%		76	41-130	10/24/11 18	3:45		
p-Terphenyl (S)	%		82	39-130	10/24/11 18	3:45		
LABORATORY CONTROL SAMPLE:	895611							
		Spike	LCS		LCS	% Rec		
Parameter	Units	Conc.	Result		% Rec	Limits	Qualifiers	
TPH-DRO	mg/kg	82.6		57.2	81	57-120		
n-Tetracosane (S)	%				76	. 41-130		
p-Terphenyl (S)	%				82	39-130		

Date: 11/02/2011 03:01 PM

# **REPORT OF LABORATORY ANALYSIS**

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QC Batch: GCV/3904		Analysis N	lethod:	EPA 8015B			
QC Batch Method: EPA 5035A/50	30B	Analysis D	escription:	Gasoline Range	e Organics		
Associated Lab Samples: 601084	85001, 60108485002						
METHOD BLANK: 897372		Matr	ix: Solid				
Associated Lab Samples: 601084	85001, 60108485002						
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qual	ifiers	
TPH-GRO 4-Bromofluorobenzene (S)	mg/kg %	N 9	D 10. 5 68-13				
METHOD BLANK: 899343		Matr	ix: Solid				
Associated Lab Samples: 601084	85001, 60108485002						
Parameter	Units	Blank Result	Reporting Limit	Analyzed	l Qual	ifiers	
TPH-GRO	mg/kg	Nesuit					
4-Bromofluorobenzene (S)	. %		4 68-13			,	
METHOD BLANK: 900720		Matr	ix: Solid				· · · ·
Associated Lab Samples: 601084	85001, 60108485002						
Paramete-	Linite	Blank	Reporting	Ancher	01	ifiors	
Parameter	Units mg/kg	Result N	<u>Limit</u> D10.	Analyzed			
4-Bromofluorobenzene (S)	тулку %		4 68-13				
ABORATORY CONTROL SAMPLE	897373						
			1.00	LCS	% Rec		
		Spike	LCS				
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers	
Parameter IPH-GRO	mg/kg	•		% Rec	Limits 77-122		
Parameter IPH-GRO		Conc.	Result	% Rec	Limits		
	mg/kg %	Conc.	Result	% Rec	Limits 77-122		
Parameter TPH-GRO 4-Bromofluorobenzene (S) ABORATORY CONTROL SAMPLE:	mg/kg % 899344	Conc. 50 Spike	Result 47.6 LCS	<u>% Rec</u> 95 93 LCS	Limits 77-122 68-134 % Rec	CU	
Parameter TPH-GRO 4-Bromofluorobenzene (S) LABORATORY CONTROL SAMPLE Parameter	mg/kg % 899344 Units	Conc. 50 Spike Conc.	Result 47.6 LCS Result	% Rec 95 93 LCS % Rec	Limits 77-122 68-134 % Rec Limits		
Parameter TPH-GRO 4-Bromofluorobenzene (S) ABORATORY CONTROL SAMPLE: Parameter TPH-GRO	mg/kg % 899344 Units  mg/kg	Conc. 50 Spike	Result 47.6 LCS	% Rec         95           93         93           LCS         % Rec           % Rec         97	Limits 77-122 68-134 % Rec Limits 77-122	CU	
Parameter TPH-GRO 4-Bromofluorobenzene (S) LABORATORY CONTROL SAMPLE Parameter	mg/kg % 899344 Units	Conc. 50 Spike Conc.	Result 47.6 LCS Result	% Rec 95 93 LCS % Rec	Limits 77-122 68-134 % Rec Limits	CU	
Parameter TPH-GRO 4-Bromofluorobenzene (S) ABORATORY CONTROL SAMPLE: Parameter TPH-GRO	mg/kg % 899344 Units mg/kg %	Conc. 50 Spike Conc.	Result 47.6 LCS Result	% Rec         95           93         93           LCS         % Rec           % Rec         97	Limits 77-122 68-134 % Rec Limits 77-122	CU	
Parameter TPH-GRO 4-Bromofluorobenzene (S) ABORATORY CONTROL SAMPLE: Parameter TPH-GRO 4-Bromofluorobenzene (S) ABORATORY CONTROL SAMPLE:	mg/kg % 899344 Units mg/kg % 900721	Conc. 50 Spike Conc. 50 Spike	Result 47.6 LCS Result 48.5 LCS	% Rec 95 93 LCS % Rec 97 97 97 LCS	Limits 77-122 68-134 % Rec Limits 77-122 68-134 % Rec	CU Qualifiers	
Parameter TPH-GRO 4-Bromofluorobenzene (S) ABORATORY CONTROL SAMPLE Parameter TPH-GRO 4-Bromofluorobenzene (S)	mg/kg % 899344 Units mg/kg %	Conc. 50 Spike Conc. 50	Result 47.6 LCS Result 48.5	% Rec         95           93         93           LCS         97           97         97	Limits 77-122 68-134 % Rec Limits 77-122 68-134	CU	

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Project: Pace Project No.:	SAN JUAN 29-7 UN 60108485	IIT 37 (075034)										
MATRIX SPIKE & M	ATRIX SPIKE DUPL	ICATE: 89737	74		897375							
		60108495001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Мах	
Paramet	er Un	its Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
TPH-GRO 4-Bromofluorobenze	mg/kg ene (S) %	ND	83.6	83.6	73.6	74.9	88 95	90 96	51-130 68-134	2	27	

Date: 11/02/2011 03:01 PM

# **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108485

 QC Batch:
 MSV/41217
 Analysis Method:

 QC Batch Method:
 EPA 5035A/8260
 Analysis Description:

EPA 5035A/8260 n: 8260 MSV GRO and Oxygenates

Associated Lab Samples: 60108485001, 60108485002, 60108485003

METHOD BLANK: 9003	327	Matrix:	Solid		
Associated Lab Samples:	60108485001, 60108485002	, 60108485003			
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	10/28/11 10:13	
Ethylbenzene	ug/kg	ND	5.0	10/28/11 10:13	
Toluene	ug/kg	ND	5.0	10/28/11 10:13	
Xylene (Total)	ug/kg	ND	10.0	10/28/11 10:13	
1,2-Dichloroethane-d4 (S	) %	90	77-131	10/28/11 10:13	
4-Bromofluorobenzene (S	s) %	90	75-131	10/28/11 10:13	
Toluene-d8 (S)	. %	89	81-121	10/28/11 10:13	

# METHOD BLANK: 902874

Matrix: Solid

Associated Lab Samples: 60108485001, 60108485002, 60108485003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/kg		5.0	10/31/11 17:07	
thylbenzene	ug/kg	ND	5.0	10/31/11 17:07	
luene	ug/kg	ND	5.0	10/31/11 17:07	
/lene (Total)	ug/kg	ND	10.0	10/31/11 17:07	
-Dichloroethane-d4 (S)	%	105	77-131	10/31/11 17:07	
Bromofluorobenzene (S)	%	101	75-131	10/31/11 17:07	
oluene-d8 (S)	%	106	81-121	10/31/11 17:07	

## LABORATORY CONTROL SAMPLE: 900328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg		96.6	97	84-119	
Ethylbenzene	ug/kg	100	99.1	99	80-120	
Toluene	ug/kg	100	87.2	87	83-117	
Xylene (Total)	ug/kg	300	298	99	80-120	
1,2-Dichloroethane-d4 (S)	%			94	77-131	
4-Bromofluorobenzene (S)	%			90	75-131	
Toluene-d8 (S)	%			89	81-121	

## LABORATORY CONTROL SAMPLE: 902875

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	97.3	97	84-119	
Ethylbenzene	ug/kg	100	102	102	80-120	
Toluene	ug/kg	100	97.9	98	83-117	
Xylene (Total)	ug/kg	300	300	100	80-120	

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# **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN 29-7 UNIT 37 (075034) Pace Project No · 60108485

Г	ace	L I	ojeci	INU	001

LABORATORY CONTROL SAMPLE:	902875 .					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%		·	95	77-131	
Bromofluorobenzene (S)	%			. 99	75-131	
Foluene-d8 (S)	%			101	81-121	
1						

	60	108407001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Benzene	ug/kg	ND	107	101	71.6	51.4	67	51	28-145	33	35	
Ethylbenzene	ug/kg	ND	107	101	62.7	45.1	59	45	20-141	33	39	
Toluene	ug/kg	ND	107	101	62.2	44.1	58	44	19-148	34	37	
Xylene (Total)	ug/kg	ND	321	301	181	131	56	43	10-140	32	39	
1,2-Dichloroethane-d4 (S)	%						107	107	77-131			
4-Bromofluorobenzene (S)	%	•					94	92	75-131			
Toluene-d8 (S)	%						91	91	81-121			

Date: 11/02/2011 03:01 PM

# **REPORT OF LABORATORY ANALYSIS**

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ace Analytical

	T/6623 M D2974-87 60108485001, 60108	Analysis Met Analysis Des 485002		STM D2974-87 y Weight/Percent I	Moisture		
METHOD BLANK: 89765	6	Matrix:	Solid		· ·		
Associated Lab Samples:	60108485001, 60108						
Parameter	Unit	Blank s Result	Reporting Limit	Analyzed	Qualifiers		
Percent Moisture			0.50	10/25/11 00:00		_	
SAMPLE DUPLICATE: 89	97657						
		60108485001	Dup		Max		
Parameter			Result		RPD	Qualifiers	
Percent Moisture	%	/23.3	23.1	1	20		
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# QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108485

## 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: OEXT/30782

[1] A matrix spike/matrix spike duplicate is not available for this batch due to a preparation error.

Batch: GCV/3917

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

## ANALYTE QUALIFIERS

CU The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

S0 Surrogate recovery outside laboratory control limits.

# Date: 11/02/2011 03:01 PM

# **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	SAN JUAN 29-7 UNIT 37 (075034)
Pace Project No .:	60108485

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60108485001	S-075034-101811-CM-B-10(46-48)	EPA 3546	OEXT/30782	EPA 8015B	GCSV/11400
60108485002	S-075034-101811-CMB10(105-107)	EPA 3546	OEXT/30782	EPA 8015B	GCSV/11400
60108485001	S-075034-101811-CM-B-10(46-48)	EPA 5035A/5030B	GCV/3904	EPA 8015B	GCV/3917
60108485002	S-075034-101811-CMB10(105-107)	EPA 5035A/5030B	GCV/3904	EPA 8015B	GCV/3914
60108485001	S-075034-101811-CM-B-10(46-48)	EPA 5035A/8260	MSV/41217		
60108485002	S-075034-101811-CMB10(105-107)	EPA 5035A/8260	MSV/41217		
60108485003	TB-101911-001	EPA 5035A/8260	MSV/41217		
60108485001	S-075034-101811-CM-B-10(46-48)	ASTM D2974-87	PMST/6623		
60108485002	S-075034-101811-CMB10(105-107)	ASTM D2974-87	PMST/6623		

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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.

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Section C Invoice Information:	Attention: ENFOS	Company Name:	Address:	Pace Quote Reference:	Pace Project Colleen Koporc Manager:	Pace Profile #:	Requested A	t ≥
Section B Required Project Information:	Report To: Cassie Brown	Copy To: Kelly Blanchard, Angela Bown		Purchase Order No.:	Project Name: San Juan 29-7 Unit 37	Project Number: 75034		odes 😭 🗚
Section A Required Client Information:	Company: CRA	Address: 6121 Indian School Rd NE, Ste 200 Copy To: Kelly Blanchard, Angela	Albuquerque, NM 87110	Email To: cmbrown@craworld.com	Phone: (505)884-0672 Fax: (505)884-4932 F	Requested Due Date/TAT: standard		Section D Valid Matrix Codes

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Pace Pkg. Page 20 of 22

Revised COC - emailed 10/24/11

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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.

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Phon	Phone: (505)884-0672	Fax (505)884-4932	Project Name:	<b>–</b>	San Juan 29-7 Unit 37		Pac	8	Colleen Koporc			Site Location	tion					
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Important Note: By signing this form you are

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Pace Analytical <sup>®</sup> Client Name	COP e: <u>CPA</u>	NM	Project #66(6)	5485
	ent Commercial ce Shipping Label Use s DNo Seal	PaceOther ed?Yes ∑ Is intact: ZAYes	Optional No Proj. Due Date Proj. Name: No	e: (1/01
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Temperature should be above freezing to 6°C		Comments:	contents: 00 10	1750
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Short Hold Time analyses (<72hr):	Yes \$2100/	A 6.		
Rush Turn Around Time requested:		4 7.		
Sufficient volume:	PYes DNo DN/	A 8.		
Correct containers used:	7ØYes □No □N#	9.		
-Pace containers used:	YYes DNO DN/	4		
Containers intact:	₽TYes □No □N//	A 10.		
Unpreserved 5035A soils frozen w/in 48hrs?	□Yes )251No 172N//	A 11.		
Filtered volume received for dissolved tests	□Yes □No ₽N/	4 12.		
Sample labels match COC:		4 13.		
-Includes date/time/ID/analyses Matrix:	water/sal			
All containers needing preservation have been checked.		A 14.		
All containers needing preservation are found to be in compliance with EPA recommendation.	⊡Yes ⊡No 121N//	۹		
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	PYes 🗆 No	Initial when completed	Lot # of added preservative	
Trip Blank present:	Yes INO IN/	A 15.		
Pace Trip Blank lot # (if purchased):	<del></del>	soil tri	es	
Headspace in VOA vials ( >6mm):	. Yes No 711/	4 16.		
Project sampled in USDA Regulated Area:	⊡Yes ⊡No 🖼¶//	A 17. List State:		2
Client Notification/ Resolution: Cop	by COC to Client?	Y / N)	Field Data Required?	Y / N
Person Contacted:	Date	e/Time:		
Comments/ Resolution:	ID'S ON C	DC, par Min	tive Mottles	ws. Ema
revised COC.			ne manue	
r	· · · · · · · · · · · · · · · · · · ·	······	<u></u>	
			$-\frac{1}{1}$	1
Project Manager Review:			, Date: <u>0/2</u>	ΥLL
Note: Whenever there is a discrepancy affecting North Certification Office ( i.e out of hold, incorrect preservati			ر I be sent to the North Carolin	L a DEHNR

F-KS-C-003-Rev.05, 19February2010

ace Analytic

October 27, 2011

Cassie Brown COP Conestoga-Rovers & Associa

RE: Project: SAN JUAN 29-7 UNIT 37 (075034) Pace Project No.: 60108495

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

OWA CECURA

Anna Custer

anna.custer@pacelabs.com Project Manager

Enclosures

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



## **REPORT OF LABORATORY ANALYSIS**

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# CERTIFICATIONS

Project: SAN JUAN 29-7 UNIT 37 (075034) Pace Project No.: 60108495

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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Project:

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

# SAMPLE SUMMARY

Pace Project No	.: 60108495			
Lab ID	Sample ID	Matrix	Date Collected	Date Received
60108495001	S-075034-102011-CBB11(100-102)	Solid	10/20/11 09:50	10/21/11 09:00
60108495002	TRIP BLANK	Solid	10/20/11 09:50	10/21/11 09:00

SAN JUAN 29-7 UNIT 37 (075034)

# **REPORT OF LABORATORY ANALYSIS**

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# SAMPLE ANALYTE COUNT

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108495

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60108495001		EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 8260	RAB	8
		ASTM D2974-87	DWC	1
60108495002	TRIP BLANK	EPA 8260	RAB	8

# **REPORT OF LABORATORY ANALYSIS**

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## **PROJECT NARRATIVE**

Project: Pace Project	No.:	SAN JUAN 29-7 UNIT 37 (075034) 60108495	
Method: Description: Client: Date:	80151 COP	8015B B Diesel Range Organics Conestoga-Rovers & Associates, Inc. NM ber 27, 2011	
General Info 1 sample was		on: yzed for EPA 8015B. All samples were received in acceptable condition with any exceptions noted below.	
Hold Time: The samples	were a	analyzed within the method required hold times with any exceptions noted below.	
Sample Prep The samples		on: prepared in accordance with EPA 3546 with any exceptions noted below.	
		s (including MS Tune as applicable): hin method requirements with any exceptions noted below.	
Continuing ( All criteria we		ation: hin method requirements with any exceptions noted below.	
Surrogates: All surrogates	s were	within QC limits with any exceptions noted below.	
<b>Method Blan</b> All analytes w		elow the report limit in the method blank with any exceptions noted below.	
Laboratory C All laboratory		ol Spike: ol spike compounds were within QC limits with any exceptions noted below.	
Matrix Spike All percent re		es and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.	
Duplicate Sa All duplicate s	-	e results were within method acceptance criteria with any exceptions noted below.	
Additional C	omme	ents:	
Batch Comme	ents:		
		ike/matrix spike duplicate is not available for this batch due to a preparation error.	
	•		

# REPORT OF LABORATORY ANALYSIS

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# **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108495

# Method: EPA 8015B

Description:Gasoline Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 27, 2011

## **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 5035A/5030B 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.

QC Batch: GCV/3904

CU: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

• LCS (Lab ID: 897373)

- TPH-GRO
- S-075034-102011-CBB11(100-102) (Lab ID: 60108495001)

• TPH-GRO

## 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 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108495

## Method: EPA 8260

Description:8260 MSV 5035A VOAClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 27, 2011

## **General Information:**

2 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.

## QC Batch: MSV/41097

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:

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

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Project: Pace Project No.:	SAN JUAN 29- 60108495	7 UNIT 37 (075034)			-				
Sample: S-075034 CBB11(10		Lab ID: 6010	8495001	Collected: 10/20/1	1 09:50	) Received: 10	/21/11 09:00 N	Aatrix: Solid	
Results reported o	n a "dry-weight	" basis							
Param	eters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Rang	e Organics	Analytical Meth	od: EPA 801	15B Preparation Me	thod: E	EPA 3546			
TPH-DRO		ND mg	/kg	10.2	1	10/21/11 00:00	10/25/11 20:19		
n-Tetracosane (S)		78 %	·	41-130	1	10/21/11 00:00	10/25/11 20:19	646-31-1	
p-Terphenyl (S)		76 %		39-130	1	10/21/11 00:00	10/25/11 20:19	92-94-4	
Gasoline Range Or	ganics	Analytical Meth	od: EPA 801	15B Preparation Me	thod: E	PA 5035A/5030B			
TPH-GRO		ND mg	/kg	16.7	1	10/24/11 09:08	10/26/11 19:09		CU
4-Bromofluorobenze	ene (S)	93 %	-	68-134	1	10/24/11 09:08	10/26/11 19:09	460-00-4	
8260 MSV 5035A V	DA	Analytical Meth	od: EPA 826	60					
Benzene		ND ug/	'kg	6.4	1		10/22/11 11:28	71-43-2	
Ethylbenzene		ND ug/	kg	6.4	1		10/22/11 11:28	100-41-4	
Toluene		ND ug/	kg	6.4	1		10/22/11 11:28	108-88-3	
Xylene (Total)		ND ug/	'kg	6.4	1		10/22/11 11:28	1330-20-7	
Dibromofluorometha	ine (S)	101 %		68-129	1		10/22/11 11:28	1868-53-7	
Toluene-d8 (S)		101 %		81-121	1		10/22/11 11:28	2037-26-5	
4-Bromofluorobenze	ne (S)	99 %		75-131	1		10/22/11 11:28	460-00-4	
1,2-Dichloroethane-	d4 (S)	105 %		77-131	1		10/22/11 11:28	17060-07-0	
Percent Moisture		Analytical Meth	od: ASTM D	2974-87					
Percent Moisture		3.6 %		0.50	1		10/24/11 00:00		

Date: 10/27/2011 04:10 PM

# REPORT OF LABORATORY ANALYSIS

full.

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Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108495

Sample: TRIP BLANK	Lab ID: 601	08495002	Collected: 10/20	/11 09:50	Received: 1	10/21/11 09:00	Matrix: Solid	
Results reported on a "wet-weig	ht" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Met	hod: EPA 826	60					
Benzene	ND ug	/kg	5.0	1		10/22/11 10:57	7 71-43-2	
Ethylbenzene	ND ug	/kg	5.0	1		10/22/11 10:57	7 100-41-4	
Toluene	ND ug	/kg	5.0	1		10/22/11 10:57	7 108-88-3	
Xylene (Total)	ND ug	/kg	5.0	1		10/22/11 10:57	7 1330-20-7	
Dibromofluoromethane (S)	100 %		68-129	1		10/22/11 10:57	7 1868-53-7	
Toluene-d8 (S)	102 %		81-121	1	•	10/22/11 10:57	7 2037-26-5	
4-Bromofluorobenzene (S)	97 %		75-131	1		10/22/11 10:57	7 460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		77-131	1		10/22/11 10:57	7 17060-07-0	

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Project: Pace Project No.:	SAN JUAN 29-7 60108495	UNIT 37 (075034)							
QC Batch:	OEXT/30782		Analysis	Method:	EP	A 8015B			
QC Batch Method:	EPA 3546		Analysis	Description:	EP	A 8015B			
Associated Lab Sar	mples: 6010849	5001							
METHOD BLANK:	895610		Ma	trix: Solid					
Associated Lab Sa	mples: 6010849	5001							
			Blank	Reportir	ıg		•		
Para	neter	Units	Result	Limit		Analyzeo	l Qualif	iers	
TPH-DRO		mg/kg		ND	9.8	10/24/11 18	:45		
n-Tetracosane (S)		%		76 41	-130	10/24/11 18	:45		
p-Terphenyl (S)		%		82 39	-130	10/24/11 18	:45		
LABORATORY CO	NTROL SAMPLE:	895611							
			Spike	LCS		LCS	% Rec		
Para	neter	Units	Conc.	Result	%	6 Rec	Limits	Qualifiers	
TPH-DRO		mg/kg	82.6	67.2		81	57-120		
n-Tetracosane (S)		%				76	41-130		
p-Terphenyl (S)		%				82	39-130		

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	1 JUAN 29-7 08495	UNIT 37	' (075034)		×								
QC Batch: G	CV/3904			Analys	is Method:	: E	PA 8015B		******				
QC Batch Method: El	PA 5035A/503	0B		Analys	sis Descript	tion: G	Sasoline Rar	nge Organi	cs ·				
Associated Lab Samples	6010849	5001						•					
METHOD BLANK: 897	372			N	Matrix: Sol	id	·····					<b>.</b>	
Associated Lab Samples	: 6010849	5001											
				Blank	K R	eporting							
Parameter			Units	Resu	lt	Limit	Analyz	zed	Qualifiers	_			
TPH-GRO		mg/kg			ND	10.0	10/26/11	18:46					
4-Bromofluorobenzene (	S)	%			95	68-134	10/26/11	18:46					
LABORATORY CONTRO	DL SAMPLE:	89737	73										
Parameter			Ünits	Spike Conc.	LCS Resu		LCS % Rec	% Red Limits		alifiers			
TPH-GRO		mg/kg		50		47.6	95	77	-122 CU		-		
4-Bromofluorobenzene (	S)	%					93	68	3-134				
MATRIX SPIKE & MATR	IX SPIKE DU	PLICAT	E: 897374	4		897375							
				MS	MSD								
_			08495001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	_
Parameter	·····	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
TPH-GRO	mg/	'kg	ND	83.6	83.6	73.6	74.9	88	90	51-130		27	
4-Bromofluorobenzene (	S) %							95	96	68-134			

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# **REPORT OF LABORATORY ANALYSIS**

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 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108495

QC Batch:	MSV/41097	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV 5035A Volatile Organics
Associated Lab Sar	nples: 60108495001, 60108495002		
METHOD BLANK:	896181	Matrix: Solid	
Associated Lab Sar	nples: 60108495001, 60108495002		
		Blank Reportir	

Parameter	Units	Result	Limit	Analyzed	Qualifiers
Benzene	ug/kg	ND	5.0	10/22/11 10:42	
Ethylbenzene	ug/kg	ND	5.0	10/22/11 10:42	
Toluene	ug/kg	ND	5.0	10/22/11 10:42	
Xylene (Total)	ug/kg	ND	5.0	10/22/11 10:42	
1,2-Dichloroethane-d4 (S)	%	103	77-131	10/22/11 10:42	,
4-Bromofluorobenzene (S)	%	99	75-131	10/22/11 10:42	
Dibromofluoromethane (S)	%	100	68-129	10/22/11 10:42	
Toluene-d8 (S)	%	99	81-121	10/22/11 10:42	

LABORATORY CONTROL SAME	PLE: 896182		•			
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	_ <u> </u>	96.9	97	84-119	
Ethylbenzene	ug/kg	100	100	100	80-120	
Toluene	ug/kg	100	94.1	94	83-117	
Xylene (Total)	ug/kg	300	299	100	80-120	
1,2-Dichloroethane-d4 (S)	%			96	77-131	
4-Bromofluorobenzene (S)	%.			97	75-131	
Dibromofluoromethane (S)	%			101	68-129	
Toluene-d8 (S)	%			97	81-121	

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# **REPORT OF LABORATORY ANALYSIS**

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Pace Pkg. Page 12 of 17



QC Batch:PMST/6618QC Batch Method:ASTM D2974-87		Analysis Method: Analysis Description:		STM D2974-87				
				y Weight/Percent M				
Associated Lab Samples: 601	08495001							
METHOD BLANK: 896831	Matrix: Solid					· · ·		
Associated Lab Samples: 601								
		Blank	Reporting					
Parameter	Units`	Result	Limit	Analyzed	Qualifiers			
Percent Moisture	. %	ND	0.50	10/24/11 00:00		_		
SAMPLE DUPLICATE: 896832			· · · · · · · · ·					
		60108468006	Dup		Max			
Parameter	Units	Result	Result	RPD	RPD	Qualifiers		
Percent Moisture	%	9.6	10.7	10	20	,	-	

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# QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 (075034)

60108495

Pace Project No .:

## 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: OEXT/30782

[1] A matrix spike/matrix spike duplicate is not available for this batch due to a preparation error.

Batch: MSV/41097

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

## ANALYTE QUALIFIERS

CU The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

## Date: 10/27/2011 04:10 PM

## **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN Pace Project No.: 6010

SAN JUAN 29-7 UNIT 37 (075034) 60108495

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60108495001	S-075034-102011-CBB11(100-102)	EPA 3546	OEXT/30782	EPA 8015B	GCSV/11400
60108495001	S-075034-102011-CBB11(100-102)	EPA 5035A/5030B	GCV/3904	EPA 8015B	GCV/3911
60108495001 60108495002	S-075034-102011-CBB11(100-102) TRIP BLANK	EPA 8260 EPA 8260	MSV/41097 MSV/41097		
60108495001	S-075034-102011-CBB11(100-102)	ASTM D2974-87	PMST/6618		1

Date: 10/27/2011 04:10 PM

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Section A Required Client Information: Company: CRA

Company: Address;

# CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

	Page: 0f		REGULATORY AGENCY
-	Section C Invoice Information:	Attention: ENFOS	Company Name:
	Section B Required Project Information:	Report To: Cassie Brown	6121 Indian School Rd NE, Ste 200 Copy To: Kelly Blanchard, Angela Bown
	ient Information:	CRA	6121 Indian School Rd NE, Ste 200

	S WATER	MMAZD					مر	0000 Pace Project No./ Lab I.D.									SNC	7			ger	
	DRINKING W	OTHER					Shurd L	Project N	こくしんか)子	<b>5</b> 4)							SAMPLE CONDITIONS	>			Ier	
	TER T	3							2 Callon	1(16							SAMP	$\overline{\mathbf{x}}$	-		uc	
<u>ک</u>	GROUND WATER	RCRA		WN			(N\Y) ənnol	Residual Ch										4.			0	•
RY AGEN	GR	L RC			ered (Y/N		1	-									JMIT	000 000				
REGULATORY AGENCY	NPDES	UST	Site Location	STATE:	alysis Filt												DATE	10/2/1			1.1 7 : : 1	
E E E E E E	L		10	<u>ina</u>	Requested Analysis Filtered (Y/N)			НЬС 8015 СКО 8015 DKO			-						N	3				
					Reque			8260 BTEX								+	AFFILIAT	1/2				
			22			<b>1</b> N /A	ţ129Ţ	Methanol Other Analysis	X								ACCEPTED BY / AFFILIATION	N/	dario			
	•		Colleen Koporc			Preservatives		N <sup>95</sup> S <sup>2</sup> O <sup>3</sup> N <sup>9</sup> OH HCI		Х		_					AC	7)ala	hund			(
any vante.	:SS	uote Ice:	[	Pace Profile #:		Pre	F	HNO <sup>3</sup> H <sup>3</sup> 2O <sup>4</sup> Aubleselved	ХТ		×						TIME	Q				
	Address:	Pace Quote Reference:	Pace P Manag	Pace P			P AT COLLECTION	* OF CONTA		-		-	-				-	1 220		_	TURE	
							SITE VAB	TIME	260								DATE	1-92-01			SAMPLER NAME AND SIGNATURE	
IMO			1			COLLECTED	COMPOSITE END/GRAB	DATE	+ Maul								NO				ER NAME A	
veriy branchard, Angera buwn			San Juan 29-7 Unit 37			COLL	COMPOSITE START	TIME					-				RELINQUISHED BY / AFFILIATION	17			SAMPLE	
olari ci lai d,		- -	an Juan 2	5034		(-10)(-		аут аламаг Марие түү Марие түү	 	-							UISHED BY	PTAN. 1				
		Purchase Order No.:	Varne: S	Project Number: 75034			·····	IOD XIATAM									RELINC	Sal Carl	8			
		Purchas	Project Name:			ix Codes code	ᄩ ᄶᆬᇱᅸᇗᅌᇮᇵᅇ	TS	-11(100-10;									1/2	5			
			184-4932	161		Vatid Matrix Codes <u>MATRIX</u> CO	DRINKING WATER WATER WASTE WATER PRODUCT SOILSOLID OIL OIL MIPE AIR OTHER	TISSUE	102011-(B-B-11(100-1025)51								• • •					
	Albuquerque, NM 87110	vorld.com	Fax (505)884-4932	L'anternation				UNIQUE	102011-	¥	Buck				.		ADDITIONAL COMMENTS	Lab:				
	luerque, N	<u>ocra</u>				t Information	SAMPLE ID	3s MUST BE	5034-	wald ?	J.						DITIONAL C	o Frontenac I				
1710			(505)884-0672	Requested Due Date/TAT:		Section D Required Client Information	SAS	Sample If	lo-c	2 F	4 Eur						ΔV	Return HPC directly to Frontenac Lab:	808 West Mckay Frontenac, KS 66763			
		Email To:	Phone:	Request				# WƏTI		2		<b>4</b>	9	8 6	10	- -	la su di	Return H	808 West Mckay Frontenac, KS 66			

Pace Pkg. Page 16 of 17

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

within 30 days

"important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late changes of 1.5% per month for any invoices not part

Sa	mple Co	nditio	Upon Receipt		
Pace Analytical <sup>*</sup> Client Name	e:	AI	7 <b>m</b>	Project # 60108495	
Courier: ØFed Ex UPS USPS Clie Tracking #: <u>8768 3969 9560</u> Pac	ent Com e Shipping Li		□Pace □Other_ d? □ Yes Ø	Optional No Proj. Due Date: Proj. Name: Hor	- (0
Custody Seal on Cooler/Box Present: 🛛 🖄 Yes	No No	Seal	intact: 🖄 Yes 📋	No	pm '
Packing Material: Bubble Wrap Bubble	Bags [	Foam	None Dther	·	
Thermometer Used: 1-191 / T-194	Type of Ic	ie: Me	Blue None	Samples on ice, cooling process has be	gun
Cooler Temperature: 1.4 Temperature should be above freezing to 6°C			Comments:	Date and Initials of person examining contents: ONS (0/20/10)	30
Chain of Custody present:	YØYes ⊡N	o □n/A	1	······	
Chain of Custody filled out:	Şøryes ⊡N	0 □N/A	2.		
Chain of Custody relinguished:	Ørres ⊡N	0 🗆 N/A	3.		
Sampler name & signature on COC:	ØYes DN		4.	<u> </u>	
Samples arrived within holding time:	ضYes ⊡N	o □n/A	5.		
Short Hold Time analyses (<72hr):		o □n/A	6.	·	
Rush Turn Around Time requested:	Ares DN	₀ □N/A	7. 3 Ly TAT		
Sufficient volume:	¥ØYes □N	o □N/A	8.		
Correct containers used:	ØrYes □N	o ⊡n/A	9.		
-Pace containers used:	ZYes DN	₀ □N/A			
Containers intact:	ØYes ⊡N	⊳ □n/A	10.		
Inpreserved 5035A soils frozen w/in 48hrs?	ØYes □N	₀ □n/A	11.		
iltered volume received for dissolved tests	□Yes □N		12.		
Sample labels match COC:	∑erYes ⊡N	⊳ □n/A	13.		
-Includes date/time/ID/analyses Matrix:	Jet sails	,			
Il containers needing preservation have been checked.		⇒ <b>*∮2</b> N/A	14. ·		
NI containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □N	⊳ Ç21¶î/A			
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water),	ØYes ⊡No	<b>)</b>	Initial when completed	Lot # of added preservative	
Frip Blank present: 0506 //-3 Pace Trip Blank lot # (if purchased): 0606//-3	Øres 🗆 No	∍ □n/A	15. ( Sol +	Instar trip	÷
leadspace in VOA vials ( >6mm):	□Yes □No	> <b>∫⊠1</b> N/A	16.		
Project sampled in USDA Regulated Area:	⊡Yes (281No	• □n/A	17. List State: State	en NM	/
Client Notification/ Resolution: Copy Person Contacted: Comments/ Resolution:	COC to Client	? Date/	rime.	Field Data Required? Y / N	
·····					
· · · · · · · · · · · · · · · · · · ·					
λ		. <u> </u>			
A				- 10/21/11	
Project Manager Review:				Date:	

F-KS-C-003-Rev.05, 19February2010

ce Analytica iww.pacelabs.com

September 30, 2011

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

RE: Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107029

Dear Christine Matthews:

Enclosed are the analytical results for sample(s) received by the laboratory on September 27, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Colleen Koporc for Dianna Meier dianna.meier@pacelabs.com Project Manager

Enclosures

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



# **REPORT OF LABORATORY ANALYSIS**

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# CERTIFICATIONS

### Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107029

### **Kansas Certification IDs**

Sensar 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: Pace Project No	SAN JUAN 29-7 UNIT 37 5.: 60107029		•	e.
Lab ID	Sample ID	Matrix	Date Collected	Date Received
60107029001	S-075034-92411-CB-MW-5(107-08)	Solid	09/24/11 13:10	09/27/11 09:15
60107029002	TRIP BLANK	Solid	09/26/11 06:30	09/27/11 09:15

# **REPORT OF LABORATORY ANALYSIS**

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# SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107029

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60107029001	S-075034-92411-CB-MW-5(107-08)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 5035A/8260	RAB	7
		ASTM D2974-87	DWC	1
60107029002		EPA 5035A/8260	RAB	7

# **REPORT OF LABORATORY ANALYSIS**

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# **PROJECT NARRATIVE**

Project: Pace Project	SAN JUAN 29-7 UNIT 37 t No.: 60107029	
Method: Description: Client: Date:	EPA 8015B : 8015B Diesel Range Organics COP Conestoga-Rovers & Associates, Inc. NM September 30, 2011	· .
General Info 1 sample was	ormation: s 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 Prep The samples	paration: were prepared in accordance with EPA 3546 with any exceptions noted below.	
	rations (including MS Tune as applicable): are within method requirements with any exceptions noted below.	
<b>Continuing (</b> All criteria we	Calibration: ere within method requirements with any exceptions noted below.	
Surrogates: All surrogates	s were within QC limits with any exceptions noted below.	
<b>Method Blan</b> All analytes w	nk: were below the report limit in the method blank with any exceptions noted below.	
	Control Spike: / control spike compounds were within QC limits with any exceptions noted below.	
Matrix Spike All percent re	es: ecoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.	
Duplicate Sa All duplicate s	ample: sample results were within method acceptance criteria with any exceptions noted below.	
Additional C	comments:	
		•
		•

# **REPORT OF LABORATORY ANALYSIS**

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### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60107029

# Method: EPA 8015B

 Description:
 Gasoline Range Organics

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

 Date:
 September 30, 2011

### **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 5035A/5030B 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: GCV/3864

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:

# **REPORT OF LABORATORY ANALYSIS**

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# PROJECT NARRATIVE

Project: Pace Project N	SAN JUAN 29-7 UNIT 37 No.: 60107029	· .
	EPA 5035A/8260	
•	8260 MSV GRO and Oxygenates	
	COP Conestoga-Rovers & Associates, Inc. NM	
Date:	September 30, 2011	
General Infor 2 samples wer	mation: e analyzed for EPA 5035A/8260. All samples were received in acceptable condition with any exceptions noted be	low.
Hold Time:		
The samples w	vere analyzed within the method required hold times with any exceptions noted below.	
	tions (including MS Tune as applicable): e within method requirements with any exceptions noted below.	
Continuing Ca All criteria were	alibration: e within method requirements with any exceptions noted below.	
Internal Stand All internal star	lards: ndards were within QC limits with any exceptions noted below.	
Surrogates: All surrogates	were within QC limits with any exceptions noted below.	
<b>Method Blank</b> All analytes we	: are below the report limit in the method blank with any exceptions noted below.	
Laboratory Co All laboratory c	ontrol Spike: control spike compounds were within QC limits with any exceptions noted below.	
Matrix Spikes All percent rec	: overies and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.	
QC Batch: MS A matrix sp	V/40488 ike/matrix spike duplicate was not performed due to insufficient sample volume.	
Duplicate San All duplicate sa	nple: ample results were within method acceptance criteria with any exceptions noted below.	
Additional Co	mments:	· .
This data pack	age 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 29 Pace Project No.: 60107029	-7 UNIT 37						
Sample: S-075034-92411-CB-MW 5(107-08)	- Lab ID: 60107029001	Collected: 09/24/1	13:10	Received: 09	9/27/11 09:15 N	Aatrix: Solid	
Results reported on a "dry-weight	t" basis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 80	15B Preparation Me	hod: E	PA 3546			
TPH-DRO	ND mg/kg	10	1	09/29/11 00:00	09/30/11 11:45		
n-Tetracosane (S)	66 %	41-130	1	09/29/11 00:00		646-31-1	
p-Terphenyl (S)	64 %	39-130	1	09/29/11 00:00	09/30/11 11:45	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 80	15B Preparation Me	hod: E	PA 5035A/5030B			
TPH-GRO	ND mg/kg	11.6	1	09/30/11 00:00	09/30/11 11:36		
4-Bromofluorobenzene (S)	82 %	68-134	1	09/30/11 00:00	09/30/11 11:36	460-00-4	
8260 MSV GRO and Oxygenates	Analytical Method: EPA 50	35A/8260		,			
Benzene	ND ug/kg	5.4	1		09/29/11 17:38	71-43-2	
Ethylbenzene	ND ug/kg	5.4	.1		09/29/11 17:38	100-41-4	
Toluene	ND ug/kg	5.4	1		09/29/11 17:38	108-88-3	
Xylene (Total)	ND ug/kg	10.8	1		09/29/11 17:38	1330-20-7	
Toluene-d8 (S)	100 %	81-121	1		09/29/11 17:38	2037-26-5	
4-Bromofluorobenzene (S)	96 %	75-131	1		09/29/11 17:38	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %	77-131	່ 1		09/29/11 17:38	17060-07-0	
Percent Moisture	Analytical Method: ASTM I	D2974-87					
Percent Moisture	2.1 %	0.50	1		09/30/11 00:00		

Date: 09/30/2011 05:15 PM

# **REPORT OF LABORATORY ANALYSIS**

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# ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60107029

Sample: TRIP BLANK	Lab ID: 601	07029002	Collected: 09/26/1	1 06:30	Received: 0	9/27/11 09:15 N	latrix: Solid	
Results reported on a "wet-weight"	basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV GRO and Oxygenates	Analytical Met	hod: EPA 503	5A/8260					
Benzene	ND ug	ı/kg	5.0	1		09/29/11 17:08	71-43-2	•
Ethylbenzene	ND ug	j/kg	5.0	1		09/29/11 17:08	100-41-4	
Toluene	ND ug	j/kg	5.0	1		09/29/11 17:08	108-88-3	
Xylene (Total)	ND ug	ı/kg	10.0	1		09/29/11 17:08	1330-20-7	
Toluene-d8 (S)	101 %		81-121	1		09/29/11 17:08	2037-26-5	
4-Bromofluorobenzene (S)	97 %		75-131	1		09/29/11 17:08	460-00-4	
1,2-Dichloroethane-d4 (S)	101 %		77-131	1		09/29/11 17:08	17060-07-0	

# Date: 09/30/2011 05:15 PM

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# QUALITY CONTROL DATA

Project: SAN JUA Pace Project No.: 6010702	AN 29-7 UNIT 37										
QC Batch: OEXT/		Analys	is Method	: E	PA 8015B						
QC Batch Method: EPA 35	546	Analys	is Descrip	tion: E	PA 8015B						
Associated Lab Samples:	60107029001										
METHOD BLANK: 883587		N	Aatrix: Sol	id .							
Associated Lab Samples:	60107029001										
		Blank		eporting							
Parameter	Units	Resul	t 	Limit	Analyz	ed (	Qualifiers				
TPH-DRO	mg/kg		ND	9.9							
n-Tetracosane (S)	%		74	41-130							
p-Terphenyl (S)	%	•	69	39-130	09/30/11	11:00					
LABORATORY CONTROL SA	AMPLE: 883588										
		Spike	LCS	6	LCS	% Rec					
Parameter	Units	Conc.	Resu	ılt	% Rec	Limits	Q	ualifiers			
TPH-DRO	mg/kg	81.3		74.4	92	57-	120	·	-		
n-Tetracosane (S)	%				84	41-	130				
p-Terphenyl (S)	%				77	39-	130				
MATRIX SPIKE & MATRIX SI	PIKE DUPLICATE: 8835	89		883590							
		MS	MSD								
	60107029001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
TPH-DRO	mg/kg ND	84.5	84.6	78.3	72.2	88	. 81	36-125	8	28	
n-Tetracosane (S)	%					83	73				
p-Terphenyl (S)	%					75	68	39-130			

Date: 09/30/2011 05:15 PM

# **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA

C Batch Method: EPA 5035A/50 ssociated Lab Samples: 601070		<ul> <li>Analysis N</li> <li>Analysis E</li> </ul>	Description:	EPA 8015B Gasoline Ran	ge Orgánics		
IETHOD BLANK: 884012		Matr	ix: Solid				
ssociated Lab Samples: 601070	29001				9.		
Parameter	Units	Blank Result	Reporting Limit	Analyz	ed Qual	ifiers	
PH-GRO -Bromofluorobenzene (S)	mg/kg %	N		0.0 09/30/11	11:14		
ABORATORY CONTROL SAMPLE	884013						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers	
PH-GRO -Bromofluorobenzene (S)	mg/kg %	50	46.5	93 87	77-122 68-134		-
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ate: 09/30/2011 05:15 PM	REP		BORATORY				Page 11 of 1

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# QUALITY CONTROL DATA

09/29/11 16:23

09/29/11 16:23

81-121 09/29/11 16:23

77-131

75-131

SAN JUAN 29-7 UNIT 37 Project: Pace Project No .: 60107029 QC Batch: MSV/40488 Analysis Method: EPA 5035A/8260 QC Batch Method: EPA 5035A/8260 Analysis Description: 8260 MSV GRO and Oxygenates Associated Lab Samples: 60107029001, 60107029002 METHOD BLANK: 883614 Matrix: Solid Associated Lab Samples: 60107029001, 60107029002 Blank Reporting Result Limit Qualifiers Parameter Units Analyzed Benzene 09/29/11 16:23 ug/kg ND 5.0 Ethylbenzene ND 09/29/11 16:23 ug/kg 5.0 Toluene ug/kg ND 09/29/11 16:23 5.0 Xylene (Total) ug/kg ND 09/29/11 16:23 10.0

103

97

101

### LABORATORY CONTROL SAMPLE: 883615

%

%

%

1,2-Dichloroethane-d4 (S)

4-Bromofluorobenzene (S)

Toluene-d8 (S)

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Benzene	ug/kg	100	88.8	89	84-119	
Ethylbenzene	ug/kg	100	94.2	94	80-120	
Toluene	ug/kg	100	90.5	91	83-117	
Xylene (Total)	ug/kg	300	289	96	80-120	
1,2-Dichloroethane-d4 (S)	%			100	77-131	
4-Bromofluorobenzene (S)	%			106	75-131	
Toluene-d8 (S)	%			100	81-121	

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### **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA

QC Batch:     PMST/65       QC Batch Method:     ASTM D2       Associated Lab Samples:     601		Analysis Meth Analysis Desc		STM D2974-87 y Weight/Percent N	Moisture		· .
METHOD BLANK: 884000		Matrix:	Solid			•	
Associated Lab Samples: 601	07029001						
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers		
Percent Moisture	<u>%</u>	ND	0.50	09/30/11 00:00		_	
SAMPLE DUPLICATE: 88400	l						
Parameter	Units	60107029001 Result	Dup Result	RPD	Max RPD	Qualifiers	
Percent Moisture	%	2.1	1.8	16	20		
	/						
				•			
• .							

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# QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37

Pace Project No.: 60107029

### 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/40488

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: GCV/3864

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

Date: 09/30/2011 05:15 PM

### **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Pace Project-No.:

SAN JUAN 29-7 UNIT 37 60107029

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60107029001	S-075034-92411-CB-MW-5(107-08)	EPA 3546	OEXT/30429	EPA 8015B	GCSV/11256
60107029001	S-075034-92411-CB-MW-5(107-08)	EPA 5035A/5030B	GCV/3860	EPA 8015B	GCV/3864
60107029001 60107029002	S-075034-92411-CB-MW-5(107-08) TRIP BLANK	EPA 5035A/8260 EPA 5035A/8260	MSV/40488 MSV/40488		
60107029001	S-075034-92411-CB-MW-5(107-08)	ASTM D2974-87	PMST/6556		

Date: 09/30/2011 05:15 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.

						<b>L</b>				
Section	Section A Required Client Information:	Section B Required Project Information:	Section C Investe Information:				Page:	o		
Company		Report To: Christing Mathems // ABS 20 H DN	Attention: ENFOS			J		4	-	
Address:	6121 Indian School Rd NE, Ste 200	Copy To: Kelly Blanchard, Angela Bown	Comuany Name:	REC	REGULATORY	AGENCY				
		Combrand and war who was	Address:		NPDES	GROUND WATER	WATER	L DRINK	DRINKING WATER	
Email To:	Gereworld.com	Purchase Order No.:	PacerQuote Reference:	[ <b>L</b>	UST	RCRA		X OTHER	NMC	2
Phone:	(505)884-0672 Fax: (505)884-4932	Project Name: San Juan 29-7 Unit 37	Pace Froject Colleen Koporc	ťS	Site Location	1.1.2				
Requeste	Requested Due Date/TAT: standard	Project Number: 07503A	Pace Profile #.		STATE:					
				Requested Analysis Filtered (Y/N)	ysis Filtere	(N/A) p				
	Section D Valid Matrix Codes Required Client Information <u>MATRIX</u>	des କ୍ରିନ ସେହାର ଅନ୍ତି କ୍ରି ସେହାର ସେହାର ସେହାର ସେହାର	Preservatives							
	NERNANG WATER WATER WASTE WATER PRODUCT SCILSOUD OIL OIL ARF ARF	Q ≵ % C the valid codes COMPOSITE COMPOSI	pa	·····			(N\Y) ənnold	-		<b>P</b> 1
# MƏTI	TISSUE	ZZ CO ZIAMPLE TYPE SAMPLE TYPE DATE DATE TIME DATE TIME TIME TIME TIME	SAMPLE 1EN Maculture Macul	НЬС 8015 СКО 8590 ВТЕУ 8260 ВТЕУ				LO D   Pace Projec	しのしていしていい	<u> </u>
•	G-075/34-92411. CB . MW50167	-163-521 4		XXX		2	m)driff()	(fm) 1 (wb)	(Grant (m	(atan)
2	trio blant.							1(1694)	1 (NEDN)	Â
е ч	Heinplant	VIT 9.20-20-11/20-20								
5										
9										
∞ .										
<b>₽</b>										
1										
12										
•• ••?	ADDITIONAL COMMENTS			FILIATION	DATE	TIME		SAMPLE CONDITIONS	DITIONS	
Return H	Return HPC directly to Frontenac Lab:	10 Ballon M (1 2 H 9. 2 min	16710 Sum <	R	4/12/16	515 13	3.11.2	1 4	7	
808 West Mckay	Mckay		man with the	n	•	<u>:</u>				
Frontenac	Frontenac, KS 66763						 			
		SAMPLER NAME AND SIGNATURE	1000							. 0
Pa		PRINT NAME OF SAMPLER.	11:052 EDW	ATE Signed	11.11		ri qməT Redeive	sedeive Ice (Yi Icdy 5 Stody 5 Sodier (	selqme	N/A
age 1			]	(WMDDVY): 7'	1105	-		2 2 		
16 of 17		"Important Nole: 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.	t for any invoices not paid within 30 days.			ш.	-ALL-Q-026	F-ALL-Q-020160.08, 12-UCt-2007	ct-2007	

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Sa	nple Cond	lition	Upon Receipt
Pace Analytical Client Name	:	CPA	<u>NM</u> Project # (00)07029
Tracking #: 6768 0337 5677 Pace	nt Comm Shipping Lat		Pace Other Optional Optional Proj. Due Date: 7/11
Custody Seal on Cooler/Box Present: XYes	🗌 No	Seals	intact: PYes No
Packing Material: 🛛 Bubble Wrap 🗌 Bubble	Bags 📑	oam	None Dther
Thermometer Used: 7-191 DT-194	Type of Ice	: Wet	Blue None Samples on ice, cooling process has begun
Cooler Temperature:Z.   Temperature should be above freezing to 6°C			Comments:
Chain of Custody present:	Yes 🗆 No	⊡n/A	1.
Chain of Custody filled out:		□n/A	2.
Chain of Custody relinquished:	Yes DNo	□n/A	3.
Sampler name & signature on COC:	Yes INO	⊡n/A	
Samples arrived within holding time:	⊡Yes \$24No	□n/A	5. Unproserved viels not frozen w/ 48/m
Short Hold Time analyses (<72hr):	🗆 Yes 🔊	□n/a	6
Rush Turn Around Time requested:	🗆 Yes 🕅 No		7
Sufficient volume:	QPres □No	⊡n/A	8.
Correct containers used:	Şeryes ⊡No	⊡n/a	9.
-Pace containers used:	≁ZYes □No	□n/A	
Containers intact:	ØYes □No	□n/a	10.
Jnpreserved 5035A soils frozen w/in 48hrs?	🗆 Yes 🎾 No	□n/A	11
iltered volume received for dissolved tests	□Yes □No	XIN/A	12.
Sample labels match COC:	ØYes □No	□n/A	13.
-Includes date/time/ID/analyses Matrix:	50.1		
Il containers needing preservation have been checked.	□Yes □No		14.
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No	<b>ja</b> n/a	
Exceptions: VOA, coliform, TOC, O&G, WI-DŔO (water), Phenolics	B∰Yes ⊡No		initial when Lot # of added completed preservative
Trip Blank present:	¥ZYes □No		
Pace Trip Blank lot # (if purchased):	///		
Headspace in VOA vials ( >6mm):	□Yes □No	<b>E</b> N/A	16.
Project sampled in USDA Regulated Area:	TYes No	· □n/A	17. List State: NM San Juan ky
Client Notification/ Resolution: Copy	COC to Client?		Field Data Required? Y / N
Person Contacted:	-	Date/	
Comments/ Resolution:			
· · · · · · · · · · · · · · · · · · ·			
1			
		·	
	$\rightarrow$	)	
Project Manager Review: CAL + DKM	abel. 1		

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

F-KS-C-003-Rev.05, 19February2010

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October 19, 2011

Cassie Brown COP Conestoga-Rovers & Associa

RE: Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60108069

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 14, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

SWACE CUESTE

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

SAN JUAN 29-7 UNIT 37 Project: Pace Project No.: 60108069

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 29-7 UNIT 37Pace Project No.:60108069

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60108069001	S07503A101211CBMW7(105- 107.5)	Solid	10/12/11 12:00	10/14/11 08:55
60108069002	TRIP BLANK	Solid	10/12/11 00:00	10/14/11 08:55

# **REPORT OF LABORATORY ANALYSIS**

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# SAMPLE ANALYTE COUNT

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60108069

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60108069001	S07503A101211CBMW7(105-107.5)	EPA 8015B	SDR	3
		EPA 8015B	PRG	2
		EPA 8260	RAB	8
		ÁSTM D2974-87	DWC	1
60108069002	TRIP BLANK	EPA 8260	RAB	8

# **REPORT OF LABORATORY ANALYSIS**

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### **PROJECT NARRATIVE**

Project:SAN JUAN 29-7 UNIT 37Pace Project No.:60108069

# Method: EPA 8015B

Description:8015B Diesel Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 19, 2011

### 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 3546 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.

### **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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### **PROJECT NARRATIVE**

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: <a>60108069</a>

# Method: EPA 8015B

 Description:
 Gasoline Range Organics

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

 Date:
 October 19, 2011

### **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 5035A/5030B 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: GCV/3890

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60107943001

R1: RPD value was outside control limits.

• MSD (Lab ID: 893637)

• TPH-GRO

### **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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# **PROJECT NARRATIVE**

	PROJECT NARRATIVE
Project: Pace Project N	SAN JUAN 29-7 UNIT 37 Io.: 60108069
Method: E	EPA 8260
	8260 MSV 5035A VOA
	COP Conestoga-Rovers & Associates, Inc. NM
Date: 0	October 19, 2011
General Inform 2 samples were	nation: e analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.
<b>Hold Time:</b> The samples w	vere analyzed within the method required hold times with any exceptions noted below.
	tions (including MS Tune as applicable): e within method requirements with any exceptions noted below.
Continuing Ca All criteria were	alibration: e within method requirements with any exceptions noted below.
Internal Stand All internal stan	lards: ndards were within QC limits with any exceptions noted below.
Surrogates: All surrogates v	were within QC limits with any exceptions noted below.
Method Blank: All analytes we	: The below the report limit in the method blank with any exceptions noted below.
Laboratory Co All laboratory co	ontrol Spike: ontrol spike compounds were within QC limits with any exceptions noted below.
Matrix Spikes: All percent reco	: overies and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.
QC Batch: MS\	//40976
A matrix spi	ike/matrix spike duplicate was not performed due to insufficient sample volume.
Duplicate Sam All duplicate sa	nple: Imple results were within method acceptance criteria with any exceptions noted below.
Additional Cor	mments:
This data packa	age 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 29-7 UNIT 37

Pace Project No.: 60108069

Sample: S07503A101211CBMW7(10 5-107.5)	Lab ID: 60108069001 Co	ollected: 10/12/1	1 12:00	Received: 10	/14/11 08:55 N	Aatrix: Solid	
Results reported on a "dry-weight" ba	asis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 8015B	Preparation Me	hod: Ef	PA 3546			
TPH-DRO	ND mg/kg	11.1	1	10/17/11 00:00	10/18/11 19:05		
n-Tetracosane (S)	86 %	41-130	1	10/17/11 00:00	10/18/11 19:05	646-31-1	
p-Terphenyl (S)	86 %	39-130	1	10/17/11 00:00	10/18/11 19:05	92-94-4	
Gasoline Range Organics	Analytical Method: EPA 8015B	Preparation Met	hod: Ef	PA 5035A/5030B			
TPH-GRO	ND mg/kg	20.3	1	10/18/11 00:00	10/18/11 15:36		
4-Bromofluorobenzene (S)	99 %	68-134	1	10/18/11 00:00	10/18/11 15:36	460-00-4	
8260 MSV 5035A VOA	Analytical Method: EPA 8260						
Benzene	ND ug/kg	5.9	1		10/18/11 18:29	71-43-2	
Ethylbenzene	ND ug/kg	5.9	1		10/18/11 18:29	100-41-4	
Toluene	ND ug/kg	5.9	1		10/18/11 18:29	108-88-3	
Xylene (Total)	ND ug/kg	5.9	1		10/18/11 18:29	1330-20-7	
Dibromofluoromethane (S)	98 %	68-129	1		10/18/11 18:29	1868-53-7	
Toluene-d8 (S)	101 %	81-121	1		10/18/11 18:29	2037-26-5	
4-Bromofluorobenzene (S)	102 %	75-131	1		10/18/11 18:29	460-00-4	
1,2-Dichloroethane-d4 (S)	116 %	77-131	1		10/18/11 18:29	17060-07-0	
Percent Moisture	Analytical Method: ASTM D297	74-87					
Percent Moisture	10.4 %	0.50	1		10/17/11 00:00		

Date: 10/19/2011 03:42 PM

# **REPORT OF LABORATORY ANALYSIS**

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10/18/11 17:59 17060-07-0

# ANALYTICAL RESULTS

SAN JUAN 29-7 UNIT 37 Project:

1,2-Dichloroethane-d4 (S)

Sample: TRIP BLANK	Lab ID: 60	108069002	Collected:	10/12/1	1 00:00	Received:	10/14/11 08:55	Matrix: Solid	
Results reported on a "wet-weig	ght" basis								
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Me	thod: EPA 82	260						
Benzene	ND u	g/kg		5.0	1		10/18/11 17:59	71-43-2	
Ethylbenzene	ND u	g/kg		5.0	1		10/18/11 17:59	100-41-4	
Toluene	ND u	g/kg.		5.0	1		10/18/11 17:59	9 108-88-3	
Xylene (Total)	ND u	g/kg		5.0	1		10/18/11 17:59	1330-20-7	
Dibromofluoromethane (S)	103 %	<b>b</b>	1	68-129	1		10/18/11 17:59	1868-53-7	
Toluene-d8 (S)	· 102 %	, D		81-121	1		10/18/11 17:59	2037-26-5	
4-Bromofluorobenzene (S)	100 %	, D		75-131	1		10/18/11 17:59	460-00-4	

77-131

1

116 %

Date: 10/19/2011 03:42 PM

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# QUALITY CONTROL DATA

Project: SAN JL	JAN 29-7 UNIT 37										
Pace Project No.: 601080	69 ·										
QC Batch: OEXT	/30698	Analys	sis Method:	E	PA 8015B						
QC Batch Method: EPA 3	546	Analys	sis Descript	tion: El	PA 8015B						
Associated Lab Samples:	60108069001										
METHOD BLANK: 892568		N	Matrix: Soli	id							
Associated Lab Samples:	60108069001										
		Blank	K R	eporting							
Parameter	Units	Resul	lt	Limit	Analyz	ed	Qualifie	ers			
TPH-DRO	mg/kg		ND	9.8	10/19/11	11:15					
n-Tetracosane (S)	%		91	41-130	10/19/11						
p-Terphenyl (S)	%		86	39-130	10/19/11	11:15					
LABORATORY CONTROL S	AMPLE: 892569										
LABORATORY CONTROL S	SAMPLE: 892569	Spike	LCS	6	LCS	% R	lec				
LABORATORY CONTROL S Parameter	AMPLE: 892569 Units	Spike Conc.	LCS Resu		LCS % Rec	% R Lim		Qualifiers			
Parameter	Units	•	Resu			Lim		Qualifiers			1
Parameter TPH-DRO		Conc.	Resu	ilt	% Rec	Lim	its	Qualifiers	-		}
Parameter TPH-DRO n-Tetracosane (S)	Units mg/kg	Conc.	Resu	ilt	% Rec 68	Lim	its 57-120	Qualifiers	-		1
Parameter TPH-DRO n-Tetracosane (S) p-Terphenyl (S)	mg/kg % %	Conc.	Resu	ilt	% Rec 68 84	Lim	its 57-120 41-130	Qualifiers			)
	mg/kg % %	Conc82.2	Resu	11t 56.2	% Rec 68 84	Lim	its 57-120 41-130	Qualifiers			)
Parameter TPH-DRO n-Tetracosane (S) p-Terphenyl (S)	mg/kg % %	2570 Conc. 82.2 82.2	Resu	11t 56.2	% Rec 68 84	Lim	its 57-120 41-130		-	Мах	)
Parameter TPH-DRO n-Tetracosane (S) p-Terphenyl (S)	Units mg/kg % % SPIKE DUPLICATE: 893	2570 MS 01 Spike	Resu	56.2 58.2 892571	% Rec 68 84 81	Lim	its 57-120 41-130 39-130	% Rec	RPD		Qual
Parameter TPH-DRO n-Tetracosane (S) p-Terphenyl (S) MATRIX SPIKE & MATRIX S Parameter	Units mg/kg % % SPIKE DUPLICATE: 89 601080690 Units Resul	2570 MS 01 Spike	Resu MSD Spike	56.2 592571 MS	% Rec 68 84 81 MSD	MS	its	% Rec	RPD 1		Qual
Parameter TPH-DRO n-Tetracosane (S) p-Terphenyl (S) MATRIX SPIKE & MATRIX S	Units mg/kg % % SPIKE DUPLICATE: 89 601080690 Units Resul	Conc. 82.2 2570 MS 01 Spike It Conc.	Resu MSD Spike Conc.	56.2 592571 MS Result	% Rec 68 84 81 MSD Result	Lim MS % Rec	its 57-120 41-130 39-130 	% Rec c Limits		RPD	Qual

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# **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA

Project:	SAN JUAN 29-7	UNIT 37											
Pace Project No.: (	60108069		•										
QC Batch:	GCV/3890			Analys	is Method	: E	PA 8015B						
QC Batch Method:	EPA 5035A/503	0B	,	Analys	is Descrip	tion: G	asoline Rar	ige Organic	s				
Associated Lab Sam	oles: 6010806	9001											
METHOD BLANK:	893219			N	latrix: Sol	id							
Associated Lab Samp	oles: 6010806	9001											
				Blank	R	eporting							
Parame	eter	Un	iits	Resul	t	Limit	Analyz	ed	Qualifiers	_			
TPH-GRO		mg/kg			ND	10.0	10/18/11	11:03					
4-Bromofluorobenzer	ne (S)	%			100	68-134	10/18/11	11:03					
LABORATORY CON	TROL SAMPLE:	893220											
				Spike	LCS		LCS	% Rec					
Parame	eter	Un	iits	Conc.	Resu		% Rec	Limits	Qı	ualifiers	-		
TPH-GRO		mg/kg		50		54.4	109		122				
4-Bromofluorobenzen	ie (S)	%					100	68-	134				
					•					-			
MATRIX SPIKE & MA	TRIX SPIKE DU	PLICATE:	893636			893637							
				MS	MSD								
			943001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	<b>-</b> .
Paramete	r I	Jnits I	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	·	Qual
TPH-GRO	mg/	kg	ND	59.7	59.7	69.7	48.5	117	81	51-130	36	27	R1
4-Bromofluorobenzen	ie (S) %							99	99	68-134			

Date: 10/19/2011 03:42 PM

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# QUALITY CONTROL DATA

· · · · <b>/</b> · · · ·	SAN JUAN 29-7 L 60108069	INIT 37					
QC Batch: MSV/40976			Analysis Metl	hod: E	EPA 8260		
QC Batch Method: EPA 8260		Analysis Description:		8260 MSV 5035A Volatile Organics			
Associated Lab Samp	ples: 60108069	001, 60108069002					
METHOD BLANK:	893434		Matrix:	Solid			
Associated Lab Samp	ples: 60108069	001, 60108069002					
			Blank	Reporting			
Parame	eter	Units	Result	Limit	Analyzed	Qualifiers	
Benzene		ug/kg	ND	5.0	0 10/18/11 13:09		
Ethylbenzene		ug/kg	ND	5.0	0 10/18/11 13:09		
Toluene		ug/kg	ND	5.	0 10/18/11 13:09		
Xylene (Total)		ug/kg	ND	5.0	0 10/18/11 13:09		
1,2-Dichloroethane-d	4 (S)	%	110	77-13	1 10/18/11 13:09		
4-Bromofluorobenzer	ne (S)	%	102	75-13	1 10/18/11 13:09		
Dibromofluoromethar	ne (S)	%	96	68-12	9 10/18/11 13:09		
Toluene-d8 (S)		%	100	81-12	1 10/18/11 13:09		

# LABORATORY CONTROL SAMPLE: 893435

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/kg	100	103	103	84-119	
Ethylbenzene	ug/kg	100	99.6	100	80-120	
Toluene	ug/kg	100	96.0	96	83-117	
Xylene (Total)	ug/kg	300	296	99	80-120	
1,2-Dichloroethane-d4 (S)	%			110	77-131	
4-Bromofluorobenzene (S)	%			102	75-131	
Dibromofluoromethane (S)	%			98	68-129	
Toluene-d8 (S)	%			99	81-121	

Date: 10/19/2011 03:42 PM

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# QUALITY CONTROL DATA

	T/6597 M D2974-87 60108069001	1	Analysis Meth Analysis Desc		TM D2974-87 y Weight/Percent M	loisture		
METHOD BLANK: 89240	8		Matrix:	Solid				
Associated Lab Samples:	60108069001	1						
Parameter		Units	Blank Result	Reporting Limit	Analyzed	Qualifiers		. *
Percent Moisture	%		ND	0.50	10/17/11 00:00			۰.
SAMPLE DUPLICATE: 8	92409							<u> </u>
Parameter		Units	60108041001 Result	Dup Result	RPD	Max RPD	Qualifiers	
Percent Moisture	<u> </u>		9.5		10	20		•
•								
		,						
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# QUALIFIERS

Project: **SAN JUAN 29-7 UNIT 37** 60108069

Pace Project No.:

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/40976

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

### ANALYTE QUALIFIERS

R1 RPD value was outside control limits.

Date: 10/19/2011 03:42 PM

# **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SAN JUAN 29-7 UNIT 37 Pace Project No.: 60108069

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60108069001	S07503A101211CBMW7(105- 107.5)	EPA 3546	OEXT/30698	EPA 8015B	GCSV/11366
60108069001	S07503A101211CBMW7(105- 107.5)	EPA 5035A/5030B	GCV/3890	EPA 8015B	GCV/3893
60108069001	S07503A101211CBMW7(105- 107.5)	EPA 8260	MSV/40976		
60108069002	TRIP BLANK	EPA 8260	MSV/40976		
60108069001	S07503A101211CBMW7(105- 107.5)	ASTM D2974-87	PMST/6597		

Date: 10/19/2011 03:42 PM

# **REPORT OF LABORATORY ANALYSIS**

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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.

Pace Analytical"

Ś Pace Project No./ Lab I.D. (N/N) mpies jujaci હે **DRINKING WATER** SAMPLE CONDITIONS 1/2/1- Call upper wear 60102060 OTHER ъ > Received on Ice (Y/V) L > **GROUND WATER** WHAN CHON Page: و Residual Chlorine (Y/V) O• ni qməT 5 REGULATORY AGENCY ΣZ RCRA 0855 Requested Analysis Filtered (Y/N) TIME L £ 10/14 STATE: NPDES Site Location DATE L UST ھ کالا ЭЧЬ 8015 GRO ACCEPTED BY / AFFILIATION 090 2108 S260 BTEX E Brockett \$ tseT sizy £ 1 N /A Other Methanol Colleen Koporc 5514 <sup>e</sup>O<sup>z</sup>S<sup>z</sup>eN Preservatives HOBN ENFOS ЮH N alogn nvoice Information: <sup>€</sup>ONH Company Name: \*OS<sup>z</sup>H 1000 Reference: Pace Project Manager: Pace Profile #: Section C Unpreserved TIME vttention: ace Quoti Address: # OF CONTAINERS SAMPLER NAME AND SIGNATURE SAMPLE TEMP AT COLLECTION 10.8.11 DATE 10-12-11 1200 CARDO ann TIME COMPOSITE END/GRAB 10-13/1 16-31 DATE COLLECTED Copy To: Kelly Blanchard, Angela Bown RELINQUISHED BY / AFFILIATION San Juan 29-7 Unit 37 TIME COMPOSITE START 1051 Brown / DATE Section B Required Project Information: Report To: Cassie Brown Project Number: 75034 J l ١ (G=GRAB C=COMP) SAMPLE TYPE urchase Order No.: <u>F</u>P 4 (see valid codes to left) AMATRIX CODE Project Name: 5-075884-101211. (B. Mu-7(105-10) Valid Matrix Codes <u>MATRIX</u> <u>CODE</u> 8₽₹ ~ % 9 % F F F DRINKING WATER D WATER W WASTE WATER W PRODUCT P SOIL/SOLID S Zday 6121 Indian School Rd NE, Ste 200 Fax: (505)884-4932 oil Mpe Air Other Tissue ADDITIONAL COMMENTS Albuquerque, NM 87110 cmbrown@craworld.com (A-Z, 0-9 / .-) Sample IDs MUST BE UNIQUE SAMPLE ID 10 Jan Return HPC directly to Frontenac Lab: ste Required Client Information Section A Required Client Information: <sup>2</sup>hone: (505)884-0672 Requested Due Date/TAT: D N CRA ontenac, KS 66763 Section D 08 West Mckay npany: Email To: ddress; 9 ۲ 2 6 7 # WBT 5 4 5 80 Ŧ 2

Pace Pkg. Page 16 of 17

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

13 · 13'

DATE Signed

Smar -X BUN

1965

PRINT Name of SAMPLER: SIGNATURE of SAMPLER: Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% por month for any invoices not paid within 50 days

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(N/J) vboisu)

	ample Condition Upon Reco	eipt
Pace Analytical <sup>®</sup> Client Nam	ne: <u>CRA</u>	Project #
Custody Seal on Cooler/Box Present:	ace Shipping Label Used?	Optional       Yes     No       Proj. Due Date:     16/19       Yes     No
Packing Material: Bubble Wrap Bubbl Thermometer Used: <u>T-191 / T-194</u>	le Bags Decam None [ Type of Ice: Wet Blue None	
Cooler Temperature: 2.6 Temperature should be above freezing to 6°C	Type of Ice: Wet Blue None Comments:	Date and Initials of person examining contents: 10 14111
Chain of Custody present:	Dites DNO DN/A 1.	
Chain of Custody filled out:	Pres INO IN/A 2.	·····
Chain of Custody relinquished:	Ves DNo DN/A 3.	· · · · · · · · · · · · · · · · · · ·
Sampler name & signature on COC:	Pres INO IN/A 4.	· · · · · · · · · · · · · · · · · · ·
Samples arrived within holding time:	PYes INO IN/A 5.	
Short Hold Time analyses (<72hr):	Dres []NO []N/A 6. Kit	\$
Rush Turn Around Time requested:	TYPE TING DINIA 7. 3-Da	27
Sufficient volume:	Yes INO IN/A 8.	1
Correct containers used:	Yes INO IN/A 9.	· · · · · · · · · · · · · · · · · · ·
-Pace containers used:		
Containers intact:	TYes DNo DN/A 10.	
Unpreserved 5035A soils frozen w/in 48hrs?	Yes INO IN/A 11.	
Filtered volume received for dissolved tests	Yes INO NA 12.	
Sample labels match COC:	Pres ONO ON/A 13.	
-Includes date/time/ID/analyses Matrix:	GL	
All containers needing preservation have been checked.	□Yes □No □NA 14.	
All containers needing preservation are found to be in compliance with EPA recommendation.		
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water),	Tyes Ano Initial when	Lot # of added
Phenolics	Completed	preservative
Pace Trip Blank lot # (if purchased): DBOBIL-		
Headspace in VOA vials ( >6mm):	UYes DNo DNA 16.	
		Pr
Project sampled in USDA Regulated Area:		Field Data Required? Y / N

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)

F-KS-C-003-Rev.05, 19February2010

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October 25, 2011

Cassie Brown COP Conestoga-Rovers & Associa

RE: Project: SAN JUAN 29-7 UNIT 37 (075034) Pace Project No.: 60108312

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

SWACECUSE

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

SAN JUAN 29-7 UNIT 37 (075034) Project: Pace Project No.: 60108312

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

(

SAN JUAN 29-7 UNIT 37 (075034) .: 60108312			
Sample ID	Matrix	Date Collected	Date Received
GW-075034-101811-CE-MW-5	Water	10/18/11 12:00	10/19/11 09:00
GW-075034-101811-CE-MW-6	Water	10/18/11 12:40	10/19/11 09:00
GW-075034-101811-CE-MW-7	Water	10/18/11 13:40	10/19/11 09:00
TRIP BLANK	Water	10/18/11 00:00	10/19/11 09:00
	GW-075034-101811-CE-MW-5 GW-075034-101811-CE-MW-6 GW-075034-101811-CE-MW-7	60108312       Matrix         Sample ID       Matrix         GW-075034-101811-CE-MW-5       Water         GW-075034-101811-CE-MW-6       Water         GW-075034-101811-CE-MW-7       Water	Sample ID       Matrix       Date Collected         GW-075034-101811-CE-MW-5       Water       10/18/11 12:00         GW-075034-101811-CE-MW-6       Water       10/18/11 12:40         GW-075034-101811-CE-MW-7       Water       10/18/11 13:40

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# SAMPLE ANALYTE COUNT

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108312

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60108312001	GW-075034-101811-CE-MW-5	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 8260	JDM	9
60108312002	GW-075034-101811-CE-MW-6	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 8260	JDM	9
60108312003	GW-075034-101811-CE-MW-7	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 8260	JDM	9
60108312004	TRIP BLANK	EPA 8260	JDM	9

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 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108312

# Method: EPA 8015B

Description:8015B Diesel Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 25, 2011

### **General Information:**

3 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.

### 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/11385

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:** 

# **REPORT OF LABORATORY ANALYSIS**

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### **PROJECT NARRATIVE**

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108312

# Method: EPA 5030B/8015B

Description:Gasoline Range OrganicsClient:COP Conestoga-Rovers & Associates, Inc. NMDate:October 25, 2011

### **General Information:**

3 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.

### 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/3899

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:**

# REPORT OF LABORATORY ANALYSIS

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Method:	EPA 8260	
-	: 8260 MSV UST, Water	
Client:	COP Conestoga-Rovers & Associates, Inc. NM October 25, 2011	
Date.		
General Info 4 samples we	ormation: ere analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.	
Hold Time:		
	were analyzed within the method required hold times with any exceptions noted below.	
	ations (including MS Tune as applicable): ere within method requirements with any exceptions noted below.	
	are waan method requirements war any exceptions noted below.	
Continuing C	Calibration:	
All criteria we	ere within method requirements with any exceptions noted below.	
	·	
Internal Stan All internal sta	ndards: andards were within QC limits with any exceptions noted below.	
•••	· · · · · · · · · · · · · · · · · · ·	
Surrogates:		
All surrogates	s were within QC limits with any exceptions noted below.	
Method Blan	nk•	
	vere below the report limit in the method blank with any exceptions noted below.	
-	Control Spike: control spike compounds were within QC limits with any exceptions noted below.	
All laboratory		
Matrix Spike:	is:	
All percent re	coveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.	
QC Batch: MS	SV/41043	
A matrix s	spike/matrix spike duplicate was not performed due to insufficient sample volume.	
Dunlingto Co		
<b>Duplicate Sa</b> All duplicate s	sample results were within method acceptance criteria with any exceptions noted below.	
Additional Co	omments:	
This data pac	kage has been reviewed for quality and completeness and is approved for release.	

# REPORT OF LABORATORY ANALYSIS

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# Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108312

Sample: GW-075034-101811-CE- MW-5	Lab ID: 60108	312001	Collected: 10/18/1	1 12:00	Received: 10	)/19/11 09:00	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method	I: EPA 801	5B Preparation Me	thod: El	PA 3510C			
TPH-DRO	ND mg/L		0.50	1	10/20/11 00:00	10/21/11 18:18	1	
p-Terphenyl (S)	72 %		40-118	1	10/20/11 00:00	10/21/11 18:18	92-94-4	
n-Tetracosane (S)	80 %		36-120	1	10/20/11 00:00	10/21/11 18:18	646-31-1	
Gasoline Range Organics	Analytical Method	I: EPA 503	0B/8015B					
TPH-GRO	ND mg/L		0.50	1		10/24/11 16:35	;	
4-Bromofluorobenzene (S)	93 %		63-139	1		10/24/11 16:35	460-00-4	
Preservation pH	1.0			1		10/24/11 16:35	i	
8260 MSV UST, Water	Analytical Method	: EPA 826	0					
Benzene	ND ug/L		1.0	1		10/21/11 02:30	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		10/21/11 02:30	100-41-4	
Toluene	ND ug/L		1.0	1		10/21/11 02:30	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		10/21/11 02:30	1330-20-7	
Dibromofluoromethane (S)	102 %		86-112	1		10/21/11 02:30	1868-53-7	
Toluene-d8 (S)	102 %		90-110	1		10/21/11 02:30	2037-26-5	
4-Bromofluorobenzene (S)	98 %		87-113	1		10/21/11 02:30	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		82-119	1		10/21/11 02:30	17060-07-0	
Preservation pH	1.0		1.0	1		10/21/11 02:30	1	•

Date: 10/25/2011 11:17 AM

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Project: SAN JUAN 29-7 UNIT 37 (075034) .

Pace Project No.: 60108312

Sample: GW-075034-101811-CE- MW-6	Lab ID: 60108312002	Collected: 10/18/1	1 12:40	Received: 10	)/19/11 09:00 N	latrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 8015	iB Preparation Me	thod: El	PA 3510C			
TPH-DRO	ND mg/L	- 0.50	1	10/20/11 00:00	10/21/11 18:30		
p-Terphenyl (S)	76 %	40-118	1	10/20/11 00:00	10/21/11 18:30	92-94-4	
n-Tetracosane (S)	84 %	36-120	1	10/20/11 00:00	10/21/11 18:30	646-31-1	
Gasoline Range Organics	Analytical Method: EPA 5030	B/8015B					
TPH-GRO	ND mg/L	0.50	1		10/24/11 16:58		
4-Bromofluorobenzene (S)	93 %	63-139	1		10/24/11 16:58	460-00-4	
Preservation pH	1.0		1		10/24/11 16:58		
8260 MSV UST, Water	Analytical Method: EPA 8260	)					
Benzene	<b>33.3</b> ug/L	1.0	1		10/21/11 02:45	71-43-2	
Ethylbenzene	ND ug/L	1.0	<u>,</u> 1		10/21/11 02:45	100-41-4	
Toluene	ND ug/L	1.0	1		10/21/11 02:45	108-88-3	
Xylene (Total)	<b>12.4</b> ug/L	3.0	1		10/21/11 02:45	1330-20-7	
Dibromofluoromethane (S)	104 %	86-112	1		10/21/11 02:45	1868-53-7	
Toluene-d8 (S)	99 %	90-110	1 '		10/21/11 02:45	2037-26-5	
4-Bromofluorobenzene (S)	98 %	87-113	1		10/21/11 02:45	460-00-4	
1,2-Dichloroethane-d4 (S)	105 %	82-119	1		10/21/11 02:45	17060-07-0	
Preservation pH	1.0	1.0	1		10/21/11 02:45		

Date: 10/25/2011 11:17 AM

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Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108312

Sample: GW-075034-101811-CE- MW-7	Lab ID: 60108312003	Collected: 10/18/1	1 13:40	Received: 10	/19/11 09:00	Matrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 80	015B Preparation Me	thod: El	PA 3510C			
TPH-DRO	ND mg/L	0.50	1	10/20/11 00:00	10/21/11 18:41		
p-Terphenyl (S)	74 %	40-118	1	10/20/11 00:00	10/21/11 18:41	92-94-4	
n-Tetracosane (S)	78 %	36-120	1	10/20/11 00:00	10/21/11 18:41	646-31-1	
Gasoline Range Organics	Analytical Method: EPA 50	)30B/8015B				·	
TPH-GRO	ND mg/L	0.50	1		10/24/11 17:20		
4-Bromofluorobenzene (S)	92 %	63-139	1		10/24/11 17:20	460-00-4	
Preservation pH	1.0		1		10/24/11 17:20		
8260 MSV UST, Water	Analytical Method: EPA 82	260					
Benzene	ND ug/L	1.0	1		10/21/11 03:00	71-43-2	
Ethylbenzene	ND ug/L	1.0	1		10/21/11 03:00	100-41-4	
Toluene	ND ug/L	. 1.0	1		10/21/11 03:00	108-88-3	
Xylene (Total)	ND ug/L	3.0	1		10/21/11 03:00	1330-20-7	
Dibromofluoromethane (S)	102 %	86-112	1		10/21/11 03:00	1868-53-7	
Toluene-d8 (S)	102 %	90-110	1		10/21/11 03:00	2037-26-5	
4-Bromofluorobenzene (S)	94 %	87-113	1		10/21/11 03:00	460-00-4	
1,2-Dichloroethane-d4 (S)	10 <b>4</b> %	82-119	1		10/21/11 03:00	17060-07-0	
Preservation pH	1.0	1.0	1		10/21/11 03:00		

Date: 10/25/2011 11:17 AM

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Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108312

Sample: TRIP BLANK	Lab ID: 60108312004	Collected: 10/18/1	1 00:00	Received: 10	0/19/11 09:00	Matrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water	Analytical Method: EPA 8	260			۰.		
Benzene	ND ug/L	1.0	1		10/21/11 03:16	5 71-43-2	
Ethylbenzene	ND ug/L	1.0	1		10/21/11 03:16	6 100-41-4	
Toluene	ND ug/L	1.0	1		10/21/11 03:16	6 108-88-3	
Xylene (Total)	ND ug/L	3.0	1 · ·		10/21/11 03:16	3 1330-20-7	
Dibromofluoromethane (S)	100 %	86-112	1		10/21/11 03:16	1868-53-7	
Toluene-d8 (S)	99 %	90-110	1		10/21/11 03:16	2037-26-5	
4-Bromofluorobenzene (S)	96 %	87-113	1	•	10/21/11 03:16	460-00-4	
1,2-Dichloroethane-d4 (S)	104 %	82-119	1		10/21/11 03:16	17060-07-0	
Preservation pH	· <b>1.0</b>	1.0	1		10/21/11 03:16	;	

Date: 10/25/2011 11:17 AM

# **REPORT OF LABORATORY ANALYSIS**

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Project:	SAN JUAN 29-7 UNIT 37 (075034)				
Pace Project No.:	60108312				
	0.51/7/0.550				<u> </u>
QC Batch:	OEXT/30758	Analysis Method:	EPA 8015B		
QC Batch Method:	EPA 3510C	Analysis Description:	EPA 8015B		
Associated Lab Sar	nples: 60108312001, 60108312002, 6	0108312003			

METHOD BLANK: 89447	4	Matrix:	Water			
Associated Lab Samples:	60108312001, 60108312002,	60108312003				
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyzed	Qualifiers	
TPH-DRO	mg/L	ND	0.50	10/21/11 17:56	<u> </u>	
n-Tetracosane (S)	%	72	36-120	10/21/11 17:56		
p-Terphenyl (S)	%	67	40-118	10/21/11 17:56		

# LABORATORY CONTROL SAMPLE: 894475

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/L	2.5	1.8	71	48-119	
n-Tetracosane (S)	%			79	36-120	
p-Terphenyl (S)	%			. 72	40-118	

Date: 10/25/2011 11:17 AM

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-		JNIT 37 (075034)								
Pace Project No.: 6	0108312									
QC Batch:	GCV/3899		Analysis N	lethod:	EF	A 5030B/80	)15B			
QC Batch Method:	EPA 5030B/801	5B	Analysis D	escription:	Ga	soline Rang	ge Organic	s		
Associated Lab Samp	les: 6010831	2001, 60108312002	, 60108312003							
METHOD BLANK: 8	95535		Matri	x: Water		-				 
Associated Lab Samp	les: 6010831	2001, 60108312002	, 60108312003							
		•	Blank	Report	ting				•	
Parame	ter	Units	Result	Lim	it	Analyze	ed (	Qualifier	S	
TPH-GRO		mg/L	N	5	0.50	10/24/11 1	2:36			
4-Bromofluorobenzen	e (S)	%	9	ο ε	3-139	10/24/11 1	2:36			
LABORATORY CONT	ROL SAMPLE:	895536								 
			Spike	LCS		LCS	% Rec			
Parame	ter	Units	Conc.	Result	9	6 Rec	Limits		Qualifiers	

Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
TPH-GRO	mg/L	1	0.93	93	74-127	
4-Bromofluorobenzene (S)	%			93	63-139	

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Project:	SAN JUAN 29-7	UNIT 37 (075034)				
Pace Project No.:	60108312			,		
QC Batch:	MSV/41043		Analysis Meth	iod: E	PA 8260	
QC Batch Method:	EPA 8260		Analysis Desc	cription: 8	260 MSV UST-WAT	ER
Associated Lab Sam	ples: 6010831	2001, 60108312002,	60108312003, 60	108312004		
METHOD BLANK:	894834		Matrix:	Water		
Associated Lab Sam	ples: 6010831	2001, 60108312002,	60108312003, 60	108312004		
			Blank	Reporting		
Param	neter	Units	Result	Limit	Analyzed	Qualifiers
Benzene		ug/L	ND	. 1.0	10/20/11 22:39	
Ethylbenzene		ug/L	ND	1.0	10/20/11 22:39	
Toluene		ug/L	ND	1.0	10/20/11 22:39	
Xylene (Total)		ug/L	ND	3.0	10/20/11 22:39	
1,2-Dichloroethane-c	d4 (S)	%	100	82-119	10/20/11 22:39	
4-Bromofluorobenze	ne (S)	%	99	87-113	10/20/11 22:39	
Dibromofluorometha	(0)	%	98	86-112	10/20/11 22:39	
	ne (S)	70	90	00-112	10/20/11 22.39	

### LABORATORY CONTROL SAMPLE: 894835

Parameter	Units	Spike Conc.	⁻LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.8	99	82-117	
Ethylbenzene	ug/L	20	21.0	105	79-121	
Toluene	ug/L	20	20.5	103	80-120	
Xylene (Total)	ug/L	60	60.2	100	79-120	
1,2-Dichloroethane-d4 (S)	%			100	82-119	
4-Bromofluorobenzene (S)	%			96	87-113	
Dibromofluoromethane (S)	%			99	86-112	
Toluene-d8 (S)	%			97	90-110	

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# QUALIFIERS

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108312

### 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: OEXT/30758

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/41043

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: GCV/3899

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

Date: 10/25/2011 11:17 AM

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108312

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60108312001	GW-075034-101811-CE-MW-5	EPA 3510C	OEXT/30758	EPA 8015B	GCSV/11385
60108312002	GW-075034-101811-CE-MW-6	EPA 3510C	OEXT/30758	EPA 8015B	GCSV/11385
60108312003	GW-075034-101811-CE-MW-7	EPA 3510C	OEXT/30758	EPA 8015B	GCSV/11385
60108312001	GW-075034-101811-CE-MW-5	EPA 5030B/8015B	GCV/3899		·
60108312002	GW-075034-101811-CE-MW-6	EPA 5030B/8015B	GCV/3899		
60108312003	GW-075034-101811-CE-MW-7	EPA 5030B/8015B	GCV/3899		
60108312001	GW-075034-101811-CE-MW-5	EPA 8260	MSV/41043		
60108312002	GW-075034-101811-CE-MW-6	EPA 8260	MSV/41043		
60108312003	GW-075034-101811-CE-MW-7	EPA 8260	MSV/41043		
60108312004	TRIP BLANK	EPA 8260	MSV/41043		

Date: 10/25/2011 11:17 AM

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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.

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чаманат         Zuxy         Гред Иллиег         Зал. П         За	Phone:	Fax: (505)884-4932	Project Nam	1	an Ju	an 29-7				Pace F Manao	roject sr	Collee	in Kopc	22			i	Site Loc	ation						
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Characteristics       Client Name:	Sa	mple Conditio	n Upon Receipt		
Tracking #:       Bibble 0337 + 3727       Pace Shipping Label Used?       Yes       No       Proj. Due Date:       To [7,4], ji         Custody Seal on Cooler/Box Present:       Yes       No       Seals intact:       Yes       No         Packing Material:       Dabubble Wrap       Bubble Bags       Foam       None       Date and Initials of person symmining contents:         Cooler Temperature:       2.4       Type of Ice:       Yes       Date and Initials of person symmining contents:         Chain of Custody relegation be above freezing to 6*C       Comments:       Comments:       Date and Initials of person symmining contents:         Chain of Custody relegation to 6*C       Comments:       Pres       DNo       Date and Initials of person symmining contents:         Samples name & signature on COC:       Pres       DNo       DNA       1.         Chain of Custody relegation on CC:       Pres       DNo       DNA       3.         Samples arrived within holding time:       Pres       DNo       DNA       4.         Samples arrived within holding time:       Pres       DNo       DNA       5.         Sufficient volume:       Pres       DNo       DNA       7.       2 dow         Sufficient volume:       Pres       DNo       DNA       9.	Pace Analytical <sup>®</sup> Client Name	CRA	MM	Project #	6008312
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Cooler Temperature:       2.4       Date and Initials of person comining Contents:         Temperature should be above freezing to 6°C       Omments:       Comments:       Contents:       Contanse:       Contents:       <		•			oling process has becup
Chain of Custody present:       Pres       No       INA       1.         Chain of Custody filled out:       Pres       No       INA       2.         Chain of Custody relinquished:       Pres       No       INA       3.         Sampler name & signature on COC:       Pres       No       INA       3.         Samplers arrived within holding time:       Pres       No       INA       4.         Samples arrived within holding time:       Pres       No       INA       5.         Short Hold Time analyses (<72hr):	Cooler Temperature: 2.4			Date and Initials o	f person examining
Chain of Custody relinquished:       Image: Stress Image: St			A 1.		
Sampler name & signature on COC: Eves DNo DNA 4.   Samples arrived within holding time: Save DNo DNA 5.   Short Hold Time analyses (<72hr):	Chain of Custody filled out:	₩Yes □No □N	A 2.	•	
Samples arrived within holding time:       Yes       INo       INio       5.         Short Hold Time analyses (<72hr):	Chain of Custody relinquished:	ØYes □No □N/	A 3.		
Short Hold Time analyses (<72hr):	Sampler name & signature on COC:	ØYes □No □N/	4.		
Rush Turn Around Time requested: Yres INo INi/a 7. 2 Jory   Sufficient volume: Pres INo INi/a 8.   Correct containers used: Pres INo INi/a 9.   -Pace containers used: Pres INo INi/a 9.   -Pace containers used: Pres INo INi/a 9.   Containers intact: Pres INo INi/a 10.   Unpreserved 5035A soils frozen w/in 48hrs? Ires Ini/a 11.   Filtered volume received for dissolved tests Ires INo Pres   Sample labels match COC: Pres INo Pres Ini/a   -includes date/time/ID/analyses Matrix: Ini/a Ini/a   -includes date/time/ID/analyses	Samples arrived within holding time:	YØYes □No □N/	5.		
Sufficient volume:       Image: Suffic	Short Hold Time analyses (<72hr):	□Yes 221No □N/	6.		
Correct containers used:       Pres       IN/A       9.        Pace containers used:       Pres       IN/A       10.         Containers intact:       Pres       IN/A       10.         Unpreserved 5035A soils frozen w/in 48hrs?       IYes       IN/A       11.         Filtered volume received for dissolved tests       IYes       IN/A       12.         Sample labels match COC:       Pres       IN/A       13.        Includes date/time/ID/analyses       Matrix:       Matrix:       Matrix:         All containers needing preservation have been checked.       IYes       IN/A       14.         All containers needing preservation are found to be in compliance with EPA recommendation.       IYes       IN/A       Initial when completed with EPA recommendation.         Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water).       Pres       IN/A       15.         Preace Trip Blank lot # (if purchased): of orded de completed in USDA Regulated Area:       IYes       IN/A       16.         Project sampled in USDA Regulated Area:       IYes       IN/A       17. List State:       M         Client Notification/ Resolution:       Copy COC to Client?       Y       /       N         Person Contacted:	Rush Turn Around Time requested:	Yes No N/	7. Zday		· · · · · · · · · · · · · · · · · · ·
-Pace containers used:       Øres       No       Nv/A         Containers intact:       Øres       No       Nv/A       10.         Unpreserved 5035A soils frozen w/in 48hrs?       Ives       No       Ør/A       11.         Filtered volume received for dissolved tests       Ives       Ives       Ør/A       12.         Sample labels match COC:       Øres       Ives       Ives       Ives       Ives         -Includes date/time/ID/analyses       Matrix:       Ives       Ives       Ives       Ives         All containers needing preservation have been checked.       Ives       Ives       Ives       Ives       Ives         Completed       Order       Ives	Sufficient volume:	Pres No N/	8.		
Containers intact:       Image: Second	Correct containers used:	ØYes ⊡No ⊡N/	9.		
Unpreserved 5035A soils frozen win 48hrs? I'ves DNo ANVA 11. Filtered volume received for dissolved tests Sample labels match COC: -Includes date/time/ID/analyses Matrix: -Includes date/time/ID/	-Pace containers used:	Yes No N/	<b>\</b>		
Filtered volume received for dissolved tests Yes No ØN/A 12.   Sample labels match COC:   Pres No DN/A 13.   Includes date/time/ID/analyses Matrix:	Containers intact:	ŹYes ⊡No ⊡N/	10.		
Sample labels match COC:   Includes date/time/ID/analyses   Matrix:   Includes   Intial when   Interver   Project sampled in USDA Regulated Area:   Interver    Interver   Interver <	Unpreserved 5035A soils frozen w/in 48hrs?	Yes No Mark	11.		
-Includes date/time/ID/analyses       Matrix:	Filtered volume received for dissolved tests	Yes No 21.	12.	<u></u>	
All containers needing preservation have been checked. All containers needing preservation are found to be in compliance with EPA recommendation. Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics Trip Blank present: Pace Trip Blank lot # (if purchased): <u>9905//·3</u> Headspace in VOA vials ( >6mm): Project sampled in USDA Regulated Area: Project sampled in USDA Regulated Area: Client Notification/ Resolution: Person Contacted: Person Contacted: Pers	Sample labels match COC:		13.		
All containers needing preservation are found to be in compliance with EPA recommendation. Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics Trip Blank present: Pace Trip Blank lot # (if purchased):9Vs □No □N/A 15. Headspace in VOA vials (>6mm): Project sampled in USDA Regulated Area: Project sampled in USDA Regulated Area: Client Notification/ Resolution: Copy COC to Client? Person Contacted:  Pace Trip: Copy COC to Client? Copy COC to Client? C	-Includes date/time/ID/analyses Matrix:	water			
compliance with EPA recommendation.   Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water),   Phenolics   Trip Blank present:   Pace Trip Blank lot # (if purchased):	All containers needing preservation have been checked.	□Yes □No 月11/1	14.		
Partnenolics       Party es       No       completed       preservative         Trip Blank present:       Pare Trip Blank lot # (if purchased):90 S//.3       15.       15.         Pace Trip Blank lot # (if purchased):90 S//.3       Inva       16.         Project sampled in USDA Regulated Area:       Inva       Inva       16.         Project sampled in USDA Regulated Area:       Inva       Inva       Inva       Inva         Client Notification/ Resolution:       Copy COC to Client?       Y       Y       N         Person Contacted:		🗆 Yes 🗆 No 🗹 N/			
Pace Trip Blank lot # (if purchased):90 5//.3         Headspace in VOA vials (>6mm):       □Yes \$\Project sampled in USDA Regulated Area:         Project sampled in USDA Regulated Area:       □Yes □No \$\Project N/A\$ 17. List State:         Client Notification/ Resolution:       Copy COC to Client?       Y / N         Person Contacted:		ØYes □No	1 /		
Headspace in VOA vials ( >6mm):       Image: I	Trip Blank present:	je Yes □No □N/			
Project sampled in USDA Regulated Area:       IYes       No       IN/A       17. List State:       IV/A         Client Notification/ Resolution:       Copy COC to Client?       Y       Y       Field Data Required?       Y       N         Person Contacted:	Pace Trip Blank lot # (if purchased):905//.3	-			
Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N Person Contacted: Date/Time:	Headspace in VOA vials ( >6mm):	⊡Yes 197No □N/	16.		
Person Contacted: Date/Time:	Project sampled in USDA Regulated Area:	Yes No PN/	17. List State:		lø
	Client Notification/ Resolution: Copy	COC to Client?	Y I/N	Field Data Required	? Y/N
Comments/ Resolution:	Person Contacted:	Date	/Time:		
	Comments/ Resolution:	<u> </u>			·
				<u> </u>	· · · · · · · · · · · · · · · · · · ·
					. 1
Project Manager Review:					shahi

F-KS-C-003-Rev.05, 19February2010

ice Analytica ww.pacelabs.com

November 02, 2011

Cassie Brown COP Conestoga-Rovers & Associa

# RE: Project: SAN JUAN 29-7 UNIT 37 (075034) Pace Project No.: 60108486

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

OWA (ECUISTE

Anna Custer

anna.custer@pacelabs.com Project Manager

Enclosures

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



# **REPORT OF LABORATORY ANALYSIS**

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Page 1 of 15



# CERTIFICATIONS

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108486

### 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 29-7 UNIT 37 (075034)			
Pace Project No	.: 60108486			•
Lab ID	Sample ID	Matrix	Date Collected	Date Received
60108486001	GW-075034-101911-CE-MW-8	 Water	10/19/11 14:30	10/20/11 08:50

# **REPORT OF LABORATORY ANALYSIS**

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Page 3 of 15



# SAMPLE ANALYTE COUNT

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108486

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60108486001	GW-075034-101911-CE-MW-8	EPA 8015B	SDR	3
		EPA 5030B/8015B	PRG	3
		EPA 8260	JDM, PRG	9

# **REPORT OF LABORATORY ANALYSIS**

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Page 4 of 15

ce Analytica

Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108486

# Method: EPA 8015B

 Description:
 8015B Diesel Range Organics

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

 Date:
 November 02, 2011

### 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/11424

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:

# **REPORT OF LABORATORY ANALYSIS**

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Anaivti

Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108486

# Method: EPA 5030B/8015B

 Description:
 Gasoline Range Organics

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

 Date:
 November 02, 2011

### General Information:

1 sample was 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.

### 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.

### QC Batch: GCV/3922

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

• GW-075034-101911-CE-MW-8 (Lab ID: 60108486001)

TPH-GRO

### 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/3922

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:**

# REPORT OF LABORATORY ANALYSIS

Page 6 of 15

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 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108486

Meth	oc	1:	E	PA :	5030	B/80	15B	
-			_			_	-	

 Description:
 Gasoline Range Organics

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

 Date:
 November 02, 2011.

Analyte Comments:

QC Batch: GCV/3922

P2: Re-extraction or re-analysis could not be performed due to insufficient sample amount.

• GW-075034-101911-CE-MW-8 (Lab ID: 60108486001)

• 4-Bromofluorobenzene (S)

# **REPORT OF LABORATORY ANALYSIS**

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Page 7 of 15

# **PROJECT NARRATIVE**

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108486

### Method: EPA 8260 Description: 8260 MSV UST, Water

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

 Date:
 November 02, 2011

### **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/41220

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

### QC Batch: MSV/41272

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:

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

# REPORT OF LABORATORY ANALYSIS

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SAN JUAN 29-7 UNIT 37 (075034) Project: 0108486

Pace Project	t No.:	60
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Sample: GW-075034-101911-CE- MW-8	Lab ID: 60108486001	Collected: 10/19/1	1 14:30	Received: 10	)/20/11 08:50 N	Aatrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8015B Diesel Range Organics	Analytical Method: EPA 80	)15B Preparation Me	thod: E	PA 3510C			
TPH-DRO	ND mg/L	0.50	1	10/24/11 00:00	10/28/11 09:03		
p-Terphenyl (S)	71 %	40-118	1	10/24/11 00:00	10/28/11 09:03	92-94-4	
n-Tetracosane (S)	70 %	36-120	1	10/24/11 00:00	10/28/11 09:03	646-31-1	
Gasoline Range Organics	Analytical Method: EPA 50	)30B/8015B					
TPH-GRO	7.1 mg/L	2.5	5		10/31/11 14:00		СН
4-Bromofluorobenzene (S)	86 %	63-139	5		10/31/11 14:00	460-00-4	P2
Preservation pH	1.0		5		10/31/11 14:00		-
8260 MSV UST, Water	Analytical Method: EPA 82	260					
Benzene	<b>150</b> ug/L	5.0	5		10/28/11 13:21	71-43-2	
Ethylbenzene	70.2 ug/L	5.0	5		10/28/11 13:21	100-41-4	
Toluene	<b>1240</b> ug/L	20.0	20		10/31/11 10:40	108-88-3	
Xylene (Total)	1430 ug/L	15.0	5		10/28/11 13:21	1330-20-7	
Dibromofluoromethane (S)	99 %	86-112	5		10/28/11 13:21	1868-53-7	
Toluene-d8 (S)	100 %	90-110	5		10/28/11 13:21	2037-26-5	
4-Bromofluorobenzene (S)	101 %	87-113	5		10/28/11 13:21	460-00-4	
1,2-Dichloroethane-d4 (S)	99 %	82-119	5		10/28/11 13:21	17060-07-0	
Preservation pH	1.0	1.0	5		10/28/11 13:21		

Date: 11/02/2011 03:34 PM

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Project:SAN JUANPace Project No.:60108486	29-7 UNIT 37 (075034)						
QC Batch: OEXT/307	95	Analysis	Method:	EPA 8015B		•	<u></u>
QC Batch Method: EPA 35100	C	Analysis	Description:	EPA 8015B			
Associated Lab Samples: 601	08486001						
METHOD BLANK: 896809	·····	Mat	rix: Water		· · · ·		
Associated Lab Samples: 601	08486001						
		Blank	Reporting				
Parameter	Units	Result	Limit	Analyze	d Quali	fiers	
TPH-DRO	mg/L		1D 0	.50 10/28/11 0	8:41		
n-Tetracosane (S)	%		85 · 36-1	20 10/28/11 0	8:41		
p-Terphenyl (S)	%		78 40-1	18 10/28/11 0	8:41		
LABORATORY CONTROL SAM	PLE: 896810						
		Spike	LCS	LCS	% Rec		
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers	
TPH-DRO	mg/L	2.5	2.1	83	48-119		
n-Tetracosane (S)	%			79	36-120		
p-Terphenyl (S)	%			76	40-118		

Date: 11/02/2011 03:34 PM

# **REPORT OF LABORATORY ANALYSIS**

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Project: SAN JUAN	1 29-7 UNIT 37 (075034)						
Pace Project No.: 60108486	·						
QC Batch: GCV/392	2	Analysis	Method:	EPA 5030B/8	8015B		<del>.</del> .
QC Batch Method: EPA 503	0B/8015B	Analysis	Description:	Gasoline Ra	nge Organics		
Associated Lab Samples: 60	108486001						
METHOD BLANK: 902705		Ма	trix: Water				
Associated Lab Samples: 60	108486001						
		Blank	Reporti	ng			
Parameter	Units	Result	Limit	Analy	zed Qual	ifiers	
TPH-GRO	mg/L		ND	0.50 10/31/11	13:25		
4-Bromofluorobenzene (S)	%		87 63	8-139 10/31/11	13:25		
LABORATORY CONTROL SAM	/PLE: 902706		<u>.</u>				
		Spike	LCS	LCS	% Rec		
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers	
TPH-GRO	mg/L		0.88	88	74-127		
4-Bromofluorobenzene (S)	%			87	63-139		

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# **REPORT OF LABORATORY ANALYSIS**

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QC Batch: MSV/41220		Analysis Metl	hod: E	EPA 8260	
QC Batch Method: EPA 8260		Analysis Des	cription: 8	260 MSV UST-WAT	ER
Associated Lab Samples: 6010	8486001				
METHOD BLANK: 900421		Matrix:	Water		
Associated Lab Samples: 6010	8486001				
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.(	0 10/28/11 10:50	
Ethylbenzene	ug/L	ND	1.(	0 10/28/11 10:50	
Xylene (Total)	ug/L	ND	3.0	0 10/28/11 10:50	
1,2-Dichloroethane-d4 (S)	%	102	82-119	9 10/28/11 10:50	
4-Bromofluorobenzene (S)	%	100	87-11:	3 · 10/28/11 10:50	
Dibromofluoromethane (S)	%	101	86-112	2 10/28/11 10:50	
Toluene-d8 (S)	%	99	90-110	0 10/28/11 10:50	

Parameter	Units	Spike Conc.	LCS Result	% Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.9	100	82-117	
Ethylbenzene	ug/L	20	21.2	106	79-121	
Xylene (Total)	ug/L	60	62.1	104	79-120	
1,2-Dichloroethane-d4 (S)	%			100	82-119	
<ul> <li>4-Bromofluorobenzene (S)</li> </ul>	%			101	87-113	
Dibromofluoromethane (S)	· %			100	86-112	
Toluene-d8 (S)	%			100	90-110	

Date: 11/02/2011 03:34 PM

# **REPORT OF LABORATORY ANALYSIS**

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•	N JUAN 29-7 UNIT 37 (075	034)				
Pace Project No.: 601	08486					. · · ·
QC Batch: M	SV/41272	Analysis Met	thod: E	PA 8260		· ·
QC Batch Method: Ef	PA 8260	Analysis Des	scription: 8	260 MSV UST-WAT	ËR	
Associated Lab Samples	60108486001					
METHOD BLANK: 902	105	Matrix:	Water			· .
Associated Lab Samples	60108486001					
		Blank	Reporting			
Parameter	Units	Result	Limit	Analyzed	Qualifiers	
Toluene	ug/L	ND	1.0	10/31/11 10:25		-
1,2-Dichloroethane-d4 (S	S) %	102	82-119	10/31/11 10:25		·
4-Bromofluorobenzene (	S) %	97	· 87-113	10/31/11 10:25		
Dibromofluoromethane (	S) %	103	86-112	10/31/11 10:25		
Toluene-d8 (S)	· %	97	90-110	10/31/11 10:25		

# LABORATORY CONTROL SAMPLE: 902106

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	<ul> <li>% Rec Limits</li> </ul>	Qualifiers
Toluene	ug/L	20	21.5	107	80-120	
1,2-Dichloroethane-d4 (S)	%		·	97	82-119	
4-Bromofluorobenzene (S)	%			93	87-113	•
Dibromofluoromethane (S)	%			98	86-112	
Toluene-d8 (S)	%			103	90-110	

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# **REPORT OF LABORATORY ANALYSIS**

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ce Analytic

# QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 (075034)

60108486

Pace Project No .:

### 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: OEXT/30795

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/41220

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: MSV/41272

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume. Batch: GCV/3922

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

### ANALYTE QUALIFIERS

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

high.

P2 Re-extraction or re-analysis could not be performed due to insufficient sample amount.

Date: 11/02/2011 03:34 PM

# **REPORT OF LABORATORY ANALYSIS**

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# QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project:	
Pace Project No .:	

SAN JUAN 29-7 UNIT 37 (075034) 60108486

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60108486001	GW-075034-101911-CE-MW-8	EPA 3510C	OEXT/30795	EPA 8015B	GCSV/11424
60108486001	GW-075034-101911-CE-MW-8	EPA 5030B/8015B	GCV/3922		
60108486001	GW-075034-101911-CE-MW-8	EPA 8260	MSV/41220		
60108486001	GW-075034-101911-CE-MW-8	EPA 8260	MSV/41272		

### Date: 11/02/2011 03:34 PM

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# **REPORT OF LABORATORY ANALYSIS**

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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.

-		
		0

F Section A Required Client Information:	ation:	Section B Required Project Information:	Section C Invoice Information:	Page: of	
Company: CRA		Report To: Cassie Brown	Attention: ENFOS		
Address: 6121	ndian School Rd NE, Ste 200	6121 Indian School Rd NE, Ste 200 Copy To: Kelly Blanchard, Angela Bown	Company Name:	REGULATORY AGENCY	
Albuqi	Albuquerque, NM 87110		Address:	T" NPDES T GROUND WATER T DRINKING WATER	Ш
Email To: Cmbro	cmbrown@craworld.com	Purchase Order No.:	Pace Quote Reference:	F UST F RCRA X OTHER WAN BC.D	A l
Phone: (505)884-0	Phone: (505)884-0672 Fax: (505)884-4932	Project Name: San Juan 29-7 Unit 37	Pace Project Colleen Koporc Manager:	Site Location	
Requested Due Date/TAT: standard	FAT: standard	Project Number: 75034	Pace Profile #:	STATE	
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																eques	ted A	naiysi	Kequested Analysis Filtered (Y/N)	red (Y	N)					
	Section D Valid M Required Client Information MATRIX	Valid Matrix Codes MATRIX CODE	щ	(awc		COLLECTED	CTED				Pres	Preservatives	sə/	<b>1</b> N //	▲16000											
	£	WATER VATER T JD	i səpcə pilev əəs	00=0 8AR0=	COMPOSITE	DSITE 2T	COMPOSITE END/GRAB							na traite 	en de la belie 🕷							(N/A) (				
# WƏTI	SAMPLE IU WIE (A.Z. 0.91/-) AR Sample IDS MUST BE UNIQUE TISSUE	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	MATRIX CODE	D) BAYT BJAMAS	DATE	TIME	DATE	M TA GM 3T A TA TA GM 3T A TA GM		H <sup>5</sup> 20 <sup>4</sup> Nupreserved	€ONH	N <sup>s</sup> OH HCI	Na <sub>z</sub> S <sub>z</sub> O <sub>3</sub> Methanol	Other Analysis Test		8015 DRO 8260 BTEX	8015 GRO	НЬС				Residual Chlorine	hac Pac	(a 0 1 0 SM S C	( <sub>0</sub> 0105486 Pace Project No/ Lab I.D.	
	GW-075034-101911-	1- CE-MM-8	-8 WT	5		1	11-6-01	0EH1	Æ	И	Ĕ	6	<u> </u>		È		X		-		F		21 Henri		(HB-00)	193
2											Þ						L	<u> </u>	_		F					
90°													-						-							
4													_			-		_				F				
3																						F				
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	ADDITIONAL COMMENTS		REL	INQUE	SHED BY /	RELINQUISHED BY / AFFILIATION	NC	DATE		TIME	•		ACCEF	TED B	ACCEPTED BY / AFFILIATION	LIATIO		<b>0</b> .21 .22	DATE	TIME	Ш. Ц		SAM	SAMPLE CONDITIONS	DITIONS	
Return	Return HPC directly to Frontenac Lab:		JAL-	[h]	1 VU	CRA		11-61-01	- IV	1500	<b> </b>		1			R	3	10/	10/10/		224	(,3	>	$\succ$		
808 We	808 West Mckay												$\downarrow$	1	Γ			]	+							
Fronten	Frontenac, KS 66763																									
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						SAMPLE	R NAME A	PLER NAME AND SIGNATURE	URE												÷.	о.		ojet A	tact	
						ď	RINT Name	PRINT Name of SAMPLER:		141	is c	ris Evans	Š		ľ							ui dı	bəvia AYY) e	(N/X)	(N/Y)	(N/A
		~-				s	IGNATURE	SIGNATURE OF SAMPLER:	ä	2	12	C)	5		A P	DATE Signed (MM/DD/YY):	л: //	1-61-01	1-1			nəT		əlsəŻ	dweg	)

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

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

Sa	mple Condition Upon Rec	ceipt
Pace Analytical <sup>*</sup> Client Name	COP CRA NM	Project # 60108486
	e Shipping Label Used?	Optional       Yes     Yes       Yes     Yes         Yes     Yes
Custody Seal on Cooler/Box Present: XYes	No Seals intact:	/es No
Packing Material: Bubble Wrap Bubble	Bags Foam None	Dther
Thermometer Used: 191/ T-194	Type of Ice: De Blue None	Samples on ice, cooling process has begun
Cooler Temperature:	Comments:	Date and Initials of person examining contents: <u>000 10/20/11</u>
Chain of Custody present:	ØYes □No □N/A 1.	
Chain of Custody filled out:	Øyes □No □N/A 2.	······································
Chain of Custody relinquished:	Øyes []No []N/A 3.	· · · · · · · · · · · · · · · · · · ·
Sampler name & signature on COC:	Erres []No []N/A 4	· · · · · · · · · · · · · · · · · · ·
Samples arrived within holding time:	27Yes DNo DN/A 5.	
Short Hold Time analyses (<72hr):		
Rush Turn Around Time requested:		
Sufficient volume:	₩2Yes □No □N/A 8.	
correct containers used:	12 Yes □No □N/A 9.	
-Pace containers used:		
Containers intact:	ØYes ⊡No ⊡N/A 10,	
Inpreserved 5035A soils frozen w/in 48hrs?	□Yes	· · · · · · · · · · · · · · · · · · ·
iltered volume received for dissolved tests	□Yes □No 2011/A 12.	
Sample labels match COC:	12 Yes □No □N/A 13.	
-Includes date/time/ID/analyses Matrix:	water/sal	······
Il containers needing preservation have been checked.	□Yes □No 1771N/A 14.	
If containers needing preservation are found to be in ompliance with EPA recommendation.	□Yes □No 12/1N/A	
xceptions: VOA, coliform, TOC, O&G, WI-DRO (water), henolics	Yes INo Initial when completed	Lot # of added preservative .
rip Blank present:	√21Yes □No □N/A 15.	•
ace Trip Blank lot # (if purchased):		trips per 10/2
leadspace in VOA vials ( >6mm):	□Yes □No 97N/A 16.	
roject sampled in USDA Regulated Area:	□Yes □No 271/A 17. List State:	Øv
lient Notification/ Resolution: Copy	COC to Client? Y / N	Field Data Required? Y / N
erson Contacted:	Date/Time	
Comments/ Resolution:		· · · · · · · · · · · · · · · · · · ·
)	·······	
		, <u>, , , , , , , , , , , , , , , , , , </u>
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roject Manager Review:		Date: 02///
Project Manager Review:	<u></u>	Date:021/[_]
roject Manager Review:		

e Analvtica

October 25, 2011

Cassie Brown COP Conestoga-Rovers & Associa

RE: Project: SAN JUAN 29-7 UNIT 37 (075034) Pace Project No.: 60108657

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

AND CECUET

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 15

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## CERTIFICATIONS

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108657

#### **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 29-7 UNIT 37 (075034)
Pace Project No.:	60108657

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60108657001	GW-075034-101811-CE-MW-1	Water	10/18/11 14:00	10/19/11 10:45
60108657002	GW-075034-101811-CE-MW-2	Water	10/18/11 13:10	10/19/11 10:45
60108657003	GW-075034-101811-CE-MW-3	Water	10/18/11 13:00	10/19/11 10:45
60108657004	GW-075034-101811-CE-MW-4	Water	10/18/11 13:25	10/19/11 10:45
60108657005	GW-075034-101811-CE-MW-5	Water	10/18/11 12:00	10/19/11 10:45
60108657006	GW-075034-101811-CE-MW-6	Water	10/18/11 12:40	10/19/11 10:45
60108657007	GW-075034-101811-CE-MW-7	Water	10/18/11 13:40	10/19/11 10:45

## **REPORT OF LABORATORY ANALYSIS**

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## SAMPLE ANALYTE COUNT

Project:	SAN JUAN 29-7 UNIT 37 (075034)
Pace Project No.:	60108657

Lab iD	Sample ID	Method	Analysts	Analytes Reported
60108657001		SM 9215B	MEB	1
60108657002	GW-075034-101811-CE-MW-2	SM 9215B	MEB	1
60108657003	GW-075034-101811-CE-MW-3	SM 9215B	MEB	1
60108657004	GW-075034-101811-CE-MW-4	SM 9215B	MEB	1
60108657005	GW-075034-101811-CE-MW-5	SM 9215B	MEB	1
60108657006	GW-075034-101811-CE-MW-6	SM 9215B	MEB	1
60108657007	GW-075034-101811-CE-MW-7	SM 9215B	MEB	1

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### **PROJECT NARRATIVE**

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108657

## Method: SM 9215B

 Description:
 MBIO HPC (Drinking Water)

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

 Date:
 October 25, 2011

#### General Information:

7 samples were analyzed for SM 9215B. 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.

u3: Analysis initiated more than 6 hours but less than 24 hours after sample collection.

- GW-075034-101811-CE-MW-1 (Lab ID: 60108657001)
- GW-075034-101811-CE-MW-2 (Lab ID: 60108657002)
- GW-075034-101811-CE-MW-3 (Lab ID: 60108657003)
- GW-075034-101811-CE-MW-4 (Lab ID: 60108657004)
- GW-075034-101811-CE-MW-7 (Lab ID: 60108657007)
- u6: Analysis initiated more than 24 hours after sample collection.
  - GW-075034-101811-CE-MW-5 (Lab ID: 60108657005)
  - GW-075034-101811-CE-MW-6 (Lab ID: 60108657006)

#### Sample Preparation:

The samples were prepared in accordance with SM 9215B 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

SAN JUAN 29-7 UNIT 37 (075034) Project: Pace Project No.: 60108657 Sample: GW-075034-101811-CE-Lab ID: 60108657001 Collected: 10/18/11 14:00 Received: 10/19/11 10:45 Matrix: Water MW-1 CAS No. Parameters Results Units Report Limit DF Prepared Analyzed Qual MBIO HPC (Drinking Water) Analytical Method: SM 9215B Preparation Method: SM 9215B Heterotrophic Plate Count 300000 CFU/mL 10/19/11 12:55 10/21/11 12:00 u3 1.0 1

Date: 10/25/2011 11:18 AM

## **REPORT OF LABORATORY ANALYSIS**

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## ANALYTICAL RESULTS

Sample: GW-075034-101811-CE- MW-2	Lab ID: 601	108657002	Collected:	10/18/1	11 13:10	Received: 10	/19/11 10:45	Matrix: Water	
Parameters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water)	Analytical Met	hod: SM 92	15B Prepara	tion Me	thod: SN	1 9215B			
Heterotrophic Plate Count	<b>124000</b> C	FU/mL		1.0	1	10/19/11 12:55	10/21/11 12:00	) .	u3
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## ANALYTICAL RESULTS

•	AN JUAN 29-7 0108657	UNIT 37 (07503)	4)					
Sample: GW-075034 MW-3	-101811-CE-	Lab ID: 60	108657003	Collected: 10/18/	11 13:00	Received: 10	)/19/11 10:45 M	latrix: Water
Paramete	ers .	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.
MBIO HPC (Drinking	Water)	Analytical Me	ethod: SM 9215	B Preparation Me	thod: Sl	M 9215B		
Heterotrophic Plate Co	unt	230000 (	CFU/mL	1.0	1	10/19/11 12:55	10/21/11 12:00	
٠								

Date: 10/25/2011 11:18 AM

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## ANALYTICAL RESULTS

Project: SAN JUAN 29-7 UNIT 37 (075034)

Pace Project No.: 60108657

Sample: GW-075034-101811-CE- MW-4	Lab ID: 6010	08657004	Collected: 10	)/18/1 <sup>-</sup>	13:25	Received: 1	0/19/11 10:45	Matrix: Water		
Parameters	Results	Units	Report Li	mit	DF	Prepared	Analyzed	CAS No.	Qual	
MBIO HPC (Drinking Water)       Analytical Method: SM 9215B										
Heterotrophic Plate Count	90000 CF	U/mL		1.0	1	10/19/11 12:55	5 10/21/11 12:00	<b>D</b>	u3	

Date: 10/25/2011 11:18 AM

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SAN JUAN 29-7 UNIT 37 (075034)

Project:

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

## ANALYTICAL RESULTS

Pace Project No .: 60108657 Sample: GW-075034-101811-CE-Lab ID: 60108657005 Collected: 10/18/11 12:00 Received: 10/19/11 10:45 Matrix: Water **MW-5** Parameters Results Units Report Limit DF Prepared CAS No. Qual Analyzed MBIO HPC (Drinking Water) Analytical Method: SM 9215B Preparation Method: SM 9215B Heterotrophic Plate Count 970000 CFU/mL 1.0 1 10/19/11 12:55 10/21/11 12:00 u6

Date: 10/25/2011 11:18 AM

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## ANALYTICAL RESULTS

Project: SAN JUAN 2 Pace Project No.: 60108657	9-7 UNIT 37 (075034)				• ,	
Sample: GW-075034-101811-CE MW-6	- Lab ID: 60108657	006 Collected: 10/18/	11 12:40 Re	ceived: 10/19/11 10:45	Matrix: Water	
Parameters	Results Ur	nits Report Limit	DF P	repared Analyzed	CAS No.	Qual
MBIO HPC (Drinking Water)	Analytical Method: Si	M 9215B Preparation Me	thod: SM 9215	iВ		
Heterotrophic Plate Count	720000 CFU/mL	1.0	1 10/1	9/11 12:55 10/21/11 12:	:00	u6

Date: 10/25/2011 11:18 AM

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## ANALYTICAL RESULTS

Project: Pace Project No.:	SAN JUAN 29-7 60108657	UNIT 37 (075034	•)							
Sample: GW-0750 MW-7	034-101811-CE-	Lab ID: 60	108657007	Collected:	10/18/1	1 13:40	Received: 1	0/19/11-10:45	Matrix: Water	
Paran	neters	Results	Units	Report	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinki	ng Water)	Analytical Me	thod: SM 92	15B Prepara	ition Met	hod: SM	9215B			
Heterotrophic Plate	Count	2000000 C	FU/mL		1.0	1	10/19/11 12:55	5 10/21/11 12:0	0	u3

Date: 10/25/2011 11:18 AM

## **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA

DC Batch:         MBIO/8655           DC Batch Method:         SM 9215B           Issociated Lab Samples:         60106	8657001, 60108657002	Analysis Meth Analysis Desc , 60108657003, 60	ription: 92	/l 9215B 15B Heterotrophic 9108657005, 60108		08657007	
ETHOD BLANK: 897497		Matrix: S	Solid		• •		
ssociated Lab Samples: 6010	8657001, 60108657002			108657005, 60108	3657006, 601	08657007	
Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers		
leterotrophic Plate Count	CFU/mL	<1	1.0	10/21/11 12:00		_	
AMPLE DUPLICATE: 897498							
Parameter	Units	60108657001 Result	Dup Result	RPD	Max RPD	Qualifiers	
leterotrophic Plate Count	CFU/mL	300000	270000				
						x	
				• .			

Date: 10/25/2011 11:18 AM

## **REPORT OF LABORATORY ANALYSIS**

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## QUALIFIERS

Project: SAN JUAN 29-7 UNIT 37 (075034)

60108657

Pace Project No.:

#### 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.

#### ANALYTE QUALIFIERS

u3 Analysis initiated more than 6 hours but less than 24 hours after sample collection.

u6 Analysis initiated more than 24 hours after sample collection.

Date: 10/25/2011 11:18 AM

#### **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

 Project:
 SAN JUAN 29-7 UNIT 37 (075034)

 Pace Project No.:
 60108657

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60108657001	GW-075034-101811-CE-MW-1	SM 9215B	MBIO/8655	SM 9215B	MBIO/8656
60108657002	GW-075034-101811-CE-MW-2	SM 9215B	MBIO/8655	SM 9215B	MBIO/8656
60108657003	GW-075034-101811-CE-MW-3	SM 9215B	MBIO/8655	SM 9215B	MBIO/8656
60108657004	GW-075034-101811-CE-MW-4	SM 9215B	MBIO/8655	SM 9215B	MBIO/8656
60108657005	GW-075034-101811-CE-MW-5	SM 9215B	MBIO/8655	SM 9215B	MBIO/8656
60108657006	GW-075034-101811-CE-MW-6	SM 9215B	MBIO/8655	SM 9215B	MBIO/8656
60108657007	GW-075034-101811-CE-MW-7	SM 9215B	MBIO/8655	SM 9215B	MBIO/8656

#### Date: 10/25/2011 11:18 AM

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

Pace Analytical"

10-18-01 НЬС ×  $\times$ DATE Signed (MM/DD/VY): 095 GRO ACCEPTED BY / AFFILIATION C ORD Brog S260 BTEX JassT sizvisnA IN 7A Other sed in M Thissulfally Nethanol 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 pair within 30 days <sup>E</sup>O<sup>z</sup>S<sup>z</sup>eN Preservatives 1115 EVANS HOeN Mr Zim ICH <sup>£</sup>ONH ⁰OS<sup>z</sup>H 1700 TIME Unpreserved # OF CONTAINERS SAMPLER NAME AND SIGNATURE SIGNATURE of SAMPLER: PRINT Name of SAMPLER: SAMPLE TEMP AT COLLECTION 10-18-11 DATE 1310 1400 1300 1325 1200 10-18-11 12240 0451 TIME COMPOSITE END/GRAB 110-13-01 10-18-11 10-18-11 10-12-01 10-20-11 10-4-1 DATE COLLECTED RELINQUISHED BY / AFFILIATION CRA TIME 1 1 ١ COMPOSITE START 10-18-01 10-18-11 11-18-01 11-81-01 10-18-1 10-18-11 10-18-11 DATE ١ WET 6 G J D G SAMPLE TYPE ড J ١ (GRAB C=COMP) Z 5 F 5 F F (net valid codes to ten) MATRIX CODE ĽŻ Valid Matrix Codes <u>MATRIX</u> CODE Reinsuckwitten WATTER WT WATTER MT PRODUCT E-MM-J-118101-120560-MM-3 C-111-D75034-101311-CE-MW-7 GW-075034-101811-CE-MW-6 5-MM-37-118181-65-MM-2 2-MM-975034-101811-CE-MM-2 410-075034-101811-CE- WW-4 5W-075034-1018/1-CE-MW-**ADDITIONAL COMMENTS** (A-Z, 0-9 / .-) Sample IDs MUST BE UNIQUE SAMPLE ID Return HPC directly to Frontenac Lab: temp blank Required Client Information rontenac, KS 66763 Section D **108 West Mckay** ø 7 # WƏTI 9 ÷ ю ي 6 ~ Pace Pkg. Page 16 of 17

Pace Project No./ Lab I.D.

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SAMPLE CONDITIONS

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60108657

Residual Chlorine (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

	Section C Invoice Information:	Attention: ENFOS	Company Name: REGULATORY/AGENCY	Address: F RPDES I GROUND WATER F DRINKING WATER	Pare Quote IF UST F RCRA X OTHER NUMCO	Pace Project Colleen Koporc Site Location Manager		Remission Analysis Filtered (VIN)
	Section B Required Project Information:	Report To: Cassie Brown	6121 Indian School Rd NE, Ste 200 Copy To: Kelly Blanchard, Angela Bown		Purchase Order No.:	Project Name: San Juan 29-7 Unit 37	Project Number: 75034	
			School Rd NE, Ste 200	Albuquerque, NM 87110		Phone: (505)884-0672 Fax: (505)884-4932	standard	
9 4 1 - V- 1 - V	Section A Required Client Information:	Company: CRA	Address: 6121 Indian	Albuquerque	Email To: <u>cmbrown@craworld.com</u>	10ne: (505)884-0672	Requested Due Date/TAT:	

(N/A) locini selqme2 (N/A) Sealed Cooler

(N/Y) eol Received on

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

Sar	nple Conditio	n Upon Receipt	
Pace Analytical Client Name	PARI	2 × 111	Drainat # ( Aug . E.
			Project #
	nt Commercial	Pace Other	Optional
	Shipping Label Use		No Proj. Due Date:
Custody Seal on Cooler/Box Present:	🗌 No Seal	s intact: 🕂 Yes 📋	Proj. Name: 10(7)
Packing Material: Bubble Wrap Bubble	Bags Foam	None Dther	
Thermometer Used: $\underline{7-1(1)}$	Type of Ice: /We	t Blue None	Samples on ice, cooling process has begun
Cooler Temperature: 2-0	$\cup$		Date and Initials of person examining
Temperature should be above freezing to 6°C		Comments:	contents: 1913 1011911 1045
Chain of Custody present:	Yes DNo DN/	A 1	
Chain of Custody filled out:		2.	
Chain of Custody relinquished:		3.	
Sampler name & signature on COC:	Ves No N/	4.	
Samples arrived within holding time:	TYes No DN/	5.	
Short Hold Time analyses (<72hr):		6.	
Rush Turn Around Time requested:		7.	
Sufficient volume:		8.	
Correct containers used:	PYes □No □N/A	9.	
-Pace containers used:	Yes No N/	<u> </u>	
Containers intact:		10.	
Unpreserved 5035A soils frozen w/in 48hrs?		11.	
Filtered volume received for dissolved tests		12	
Sample labels match COC:		13.	
-Includes date/time/ID/analyses Matrix:	WT		
All containers needing preservation have been checked.	□Yes □No 21N/4	14.	
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No ØN/A		
Exceptions: VOA. coliform, TOC, O&G, WI-DRO (water), Phenolics	12 Yes INO	Initial when completed	Lot # of added preservative
Trip Blank present:		15.	
Pace Trip Blank lot # (if purchased):	<u></u>		
Headspace in VOA vials ( >6mm):	□Yes □No 0/1/1/	16.	
Project sampled in USDA Regulated Area:		17. List State:	þi
Client Notification/ Resolution: Copy	COC to Client?	Y /(N)	Field Data Required? Y / N
Person Contacted:	Date	/Time:	
Comments/ Resolution:			
			)
Preiast Managar Baying	/		Date: 10/24/11
Project Manager Review:	***		
Note: Whenever there is a discrepancy affecting North C Certification Office ( i.e out of hold, incorrect preservative			Il be sent to the North Carolina DEHNR

F-KS-C-003-Rev.05, 19February2010 Pace Pkg. Page 17 of 17

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October 25, 2011

Cassie Brown COP Conestoga-Rovers & Associa

RE: Project: SAN JUAN 29-7 Unit 37 (075034) Pace Project No.: 60108490

Dear Cassie Brown:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sund (ECurste

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 29-7 Unit 37 (075034) Pace Project No.: 60108490

Kansas Certification IDs 9608 Loiret Boulevard, Lenexa, KS 66219 A2LA Certification #: 2456.01, Arkansas Certification #: 05-008-0 Illinois Certification #: 001191 lowa 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

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60108490001	GW-075034-101911-CE-MW-8	Water	10/19/11 14:30	10/20/11 09:40
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## SAMPLE ANALYTE COUNT

Project:	SAN JUAN 29-7 Unit 37 (075034)
Pace Project No.:	60108490

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60108490001	GW-075034-101911-CE-MW-8	SM 9215B	MEB	1

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## **PROJECT NARRATIVE**

 Project:
 SAN JUAN 29-7 Unit 37 (075034)

 Pace Project No.:
 60108490

## Method: SM 9215B

 Description:
 MBIO HPC (Drinking Water)

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

 Date:
 October 25, 2011

#### General Information:

1 sample was analyzed for SM 9215B. 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.

u3: Analysis initiated more than 6 hours but less than 24 hours after sample collection.

• GW-075034-101911-CE-MW-8 (Lab ID: 60108490001)

#### Sample Preparation:

The samples were prepared in accordance with SM 9215B 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.

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## ANALYTICAL RESULTS

Project: Pace Project No.:	SAN JUAN 29-7 60108490	Unit 37 (075034)								
Sample: GW-0750 MW-8	034-101911-CE-	Lab ID: 60	108490001	Collected:	10/19/1	1 14:30	Received: 10	0/20/11 09:40	Matrix: Water	
Paran	neters	Results	Units	Repor	t Limit	DF	Prepared	Analyzed	CAS No.	Qual
MBIO HPC (Drinki	ng Water)	Analytical Me	thod: SM 92	15B Prepara	tion Met	hod: SM	9215B			
Heterotrophic Plate	Count	<b>2300000</b> C	FU/mL		1.0	1	10/20/11 12:15	10/22/11 11:3	5	u3

Date: 10/25/2011 11:18 AM

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## QUALITY CONTROL DATA

SAN JUAN 29-7 Unit 37 (075034) Project: 60108490 Pace Project No .: QC Batch: MBIO/8657 SM 9215B Analysis Method: QC Batch Method: SM 9215B Analysis Description: 9215B Heterotrophic Plate Count Associated Lab Samples: 60108490001 METHOD BLANK: 897499 Matrix: Solid Associated Lab Samples: 60108490001 Blank Reporting Parameter Units Result Limit Analyzed Qualifiers Heterotrophic Plate Count CFU/mL 10/22/11 11:35 <1 1.0

SAMPLE DUPLICATE: 897500

Parameter	Units	60108490001 Result	Dup Result	RPD	Max RPD	Qualifiers	
Heterotrophic Plate Count	CFU/mL	2300000	2100000				
·							
	· · · · ·	· ·					

Date: 10/25/2011 11:18 AM

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## QUALIFIERS

Project: SAN JUAN 29-7 Unit 37 (075034)

60108490

Pace Project No.:

#### 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.

#### **ANALYTE QUALIFIERS**

u3 Analysis initiated more than 6 hours but less than 24 hours after sample collection.

Date: 10/25/2011 11:18 AM

#### **REPORT OF LABORATORY ANALYSIS**

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

 Project:
 SAN JUAN 29-7 Unit 37 (075034)

 Pace Project No.:
 60108490

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
0108490001	GW-075034-101911-CE-MW-8	SM 9215B	MBIO/8657	SM 9215B	MBIO/8658
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Date: 10/25/2011 11:18 AM

## **REPORT OF LABORATORY ANALYSIS**

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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.

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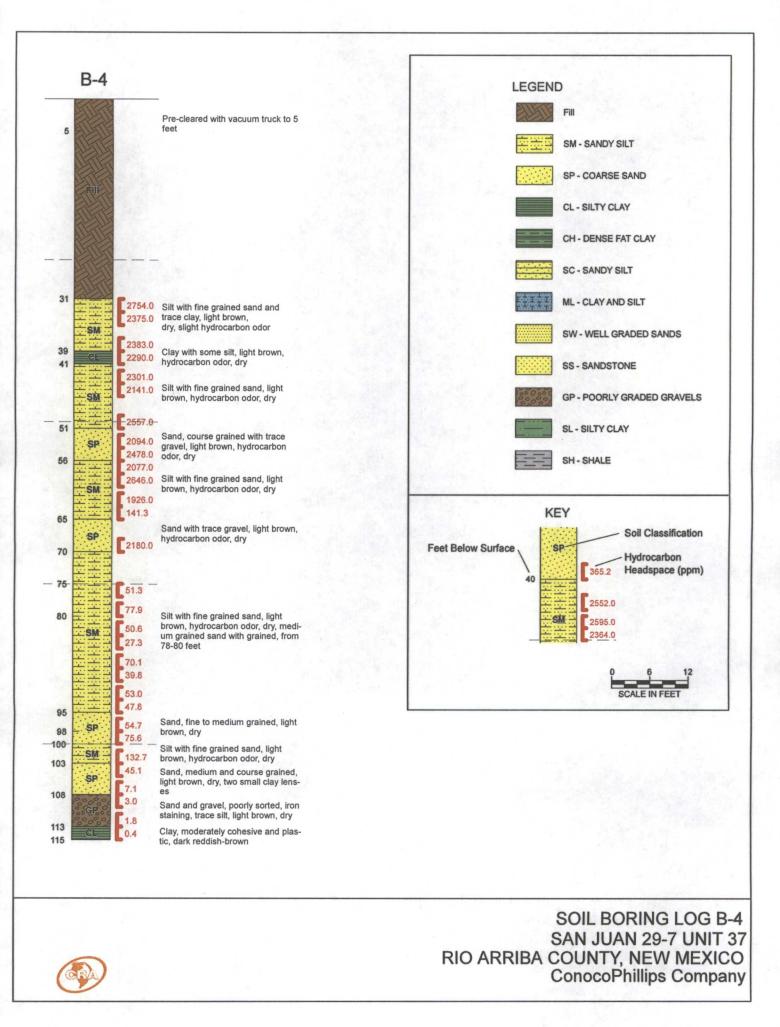
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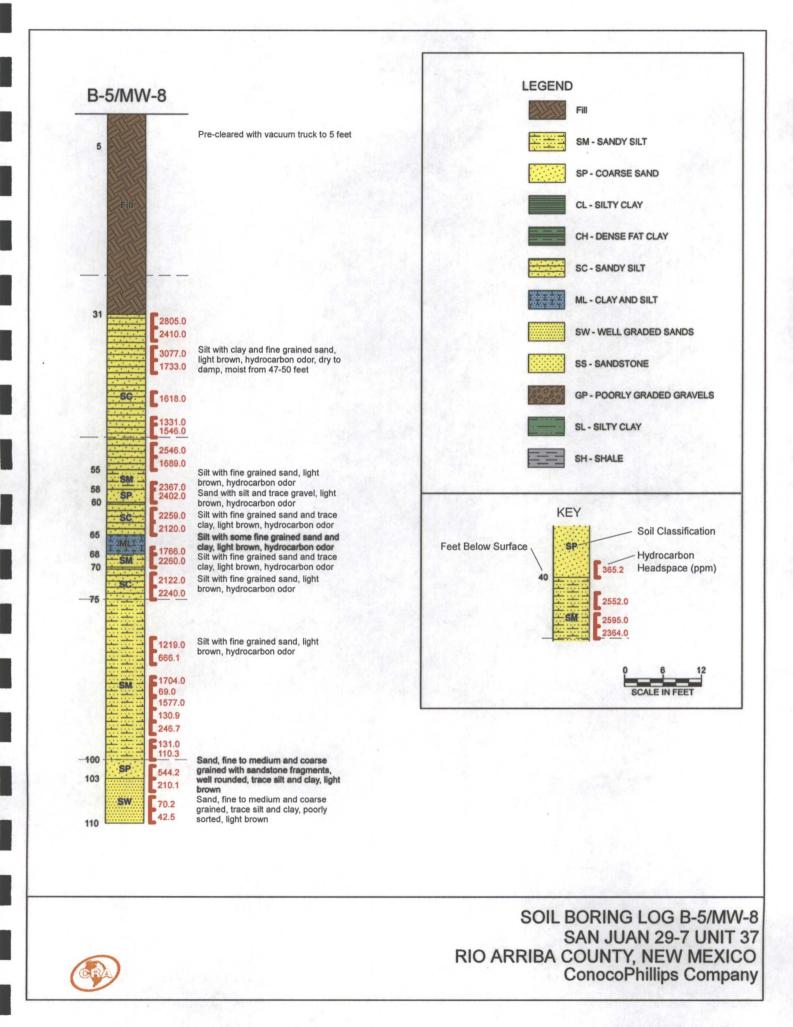
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Pace Analytical Client Name	Raila	JM	Project #0	08490
Courier:Fed ExUPSUSPSClie Tracking #: Pac Custody Seal on Cooler/Box Present: XYes	e Shipping Label Use	□Pace □Otr d? □ Yes s intact: ☑XYes	erOptional No Proj. Due Proj. Nam	11141
Packing Material: 🗌 Bubble Wrap 🗍 Bubble Thermometer Used: 7 - 1 (	Bags Foam	Blue None	her Samples on ice, coolin	a process has begun
Cooler Temperature: 2_0 Temperature should be above freezing to 6°C		Comments:	Date and Initials of percenters:	erson examining
Chain of Custody present:		T		
Chain of Custody filled out:			······································	
Chain of Custody relinquished:		1		
Sampler name & signature on COC:				
Samples arrived within holding time:				
Short Hold Time analyses (<72hr):		1		
Rush Turn Around Time requested:		1		<b></b>
Sufficient volume:		1		
Correct containers used:	KoYes ⊡No ⊡N/A	9.		
-Pace containers used:	Gares DNo DN/A			
Containers intact:		10.		
Unpreserved 5035A soils frozen w/in 48hrs?		11.	· · · · · · · · · · · · · · · · · · ·	
Filtered volume received for dissolved tests		12.		
Sample labels match COC:		13.		
-Includes date/time/ID/analyses Matrix:	Gr			
All containers needing preservation have been checked.		14.		
All containers needing preservation are found to be in compliance with EPA recommendation.	□Yes □No \$N/A			
Exceptions VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	1∕Øÿes ⊡No	Initial when completed	Lot # of added preservative	
Trip Blank present				<u></u>
Pace Trip Blank lot # (if purchased):	<u> </u>			<u>.</u>
Headspace in VOA vials ( >6mm);	□Yes □No ØN/A	16.		
Project sampled in USDA Regulated Area:		17. List State:		h
Client Notification/ Resolution: Copy	COC to Client?	Y / N	Field Data Required?	Y / N
Person Contacted:				
Comments/ Resolution:				
·				
Project Manager Review:	<u> </u>		Date:	

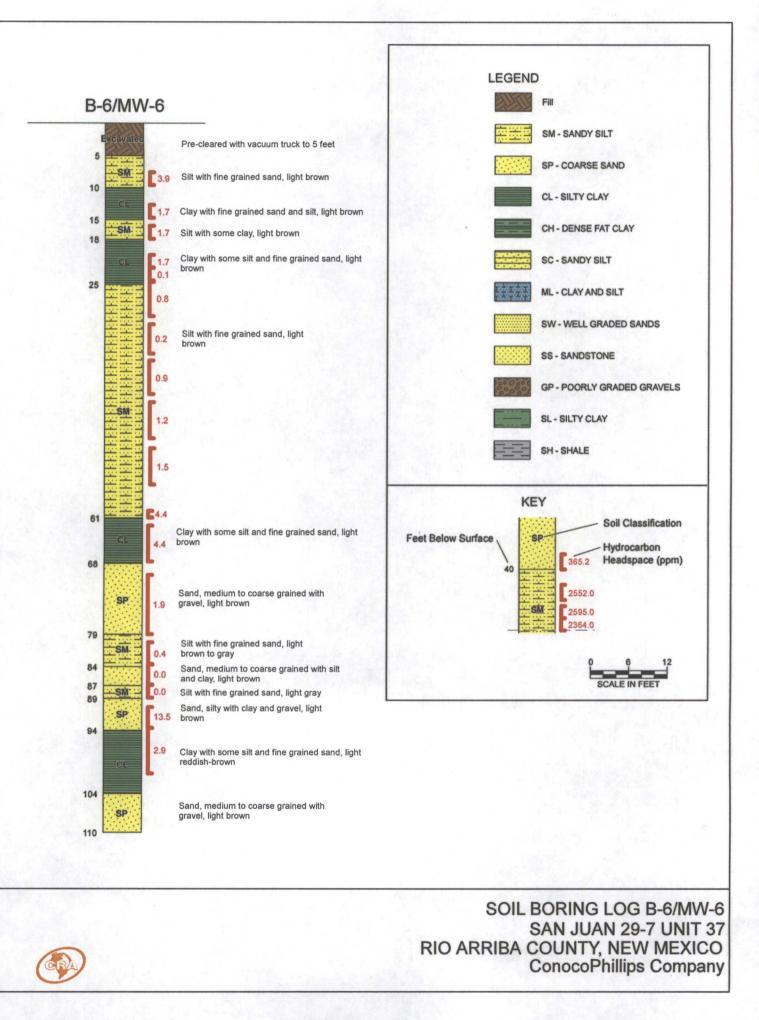
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

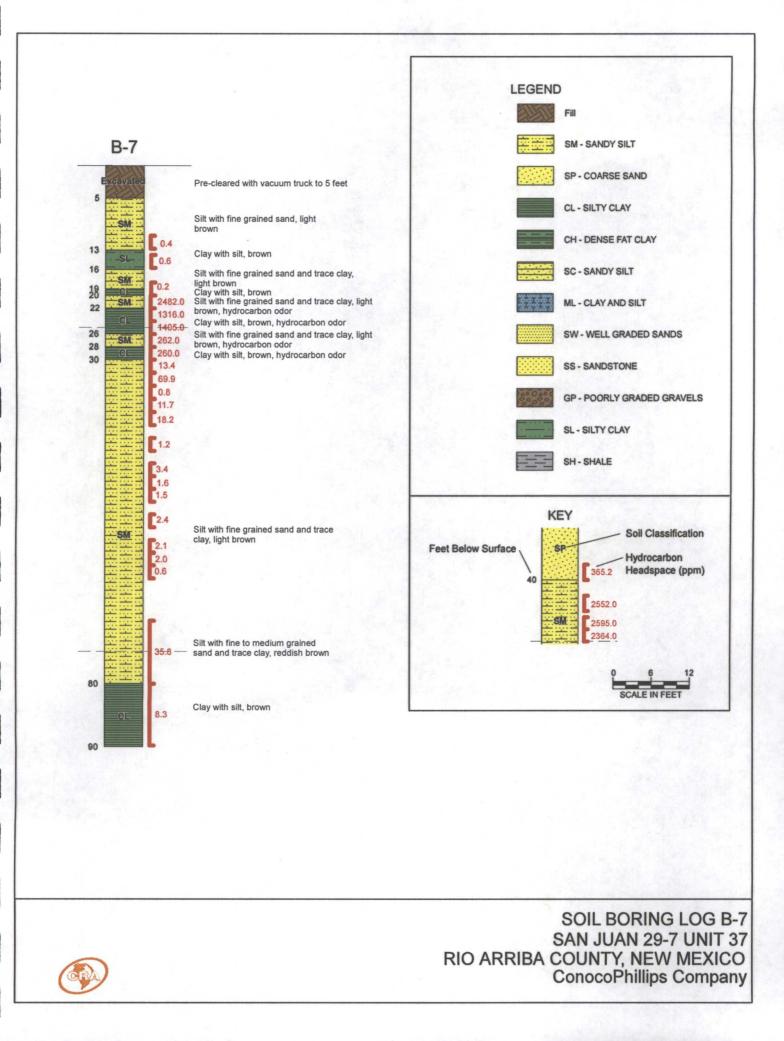
APPENDIX B

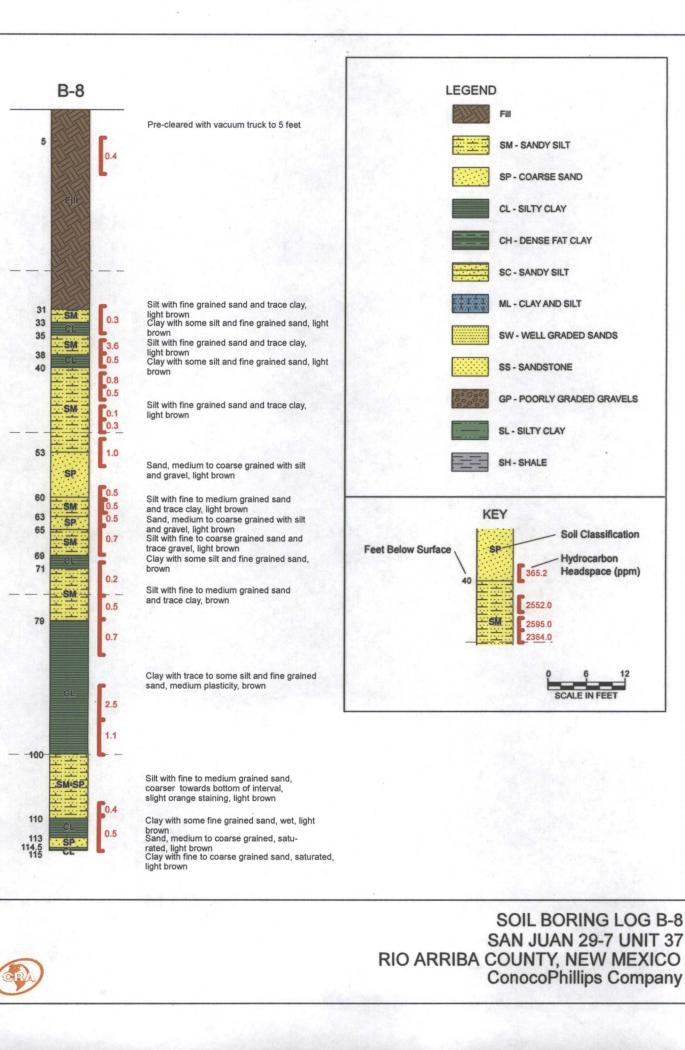
# BORING LOGS AND WELL COMPLETION DIAGRAMS

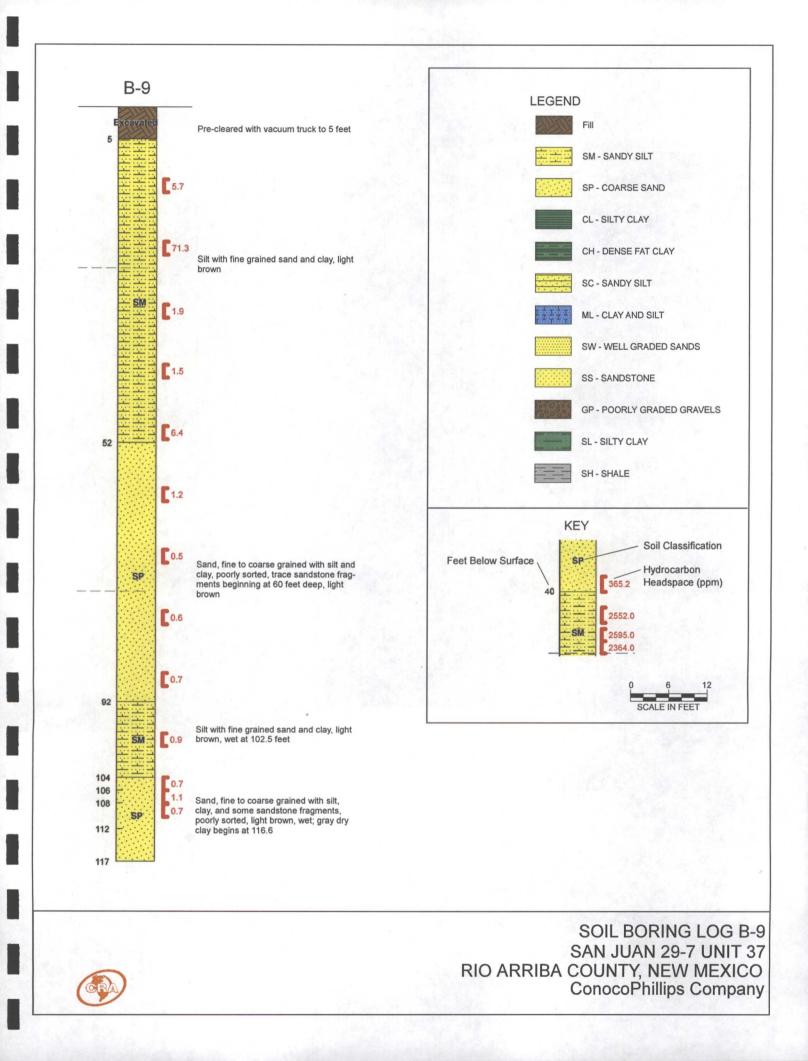


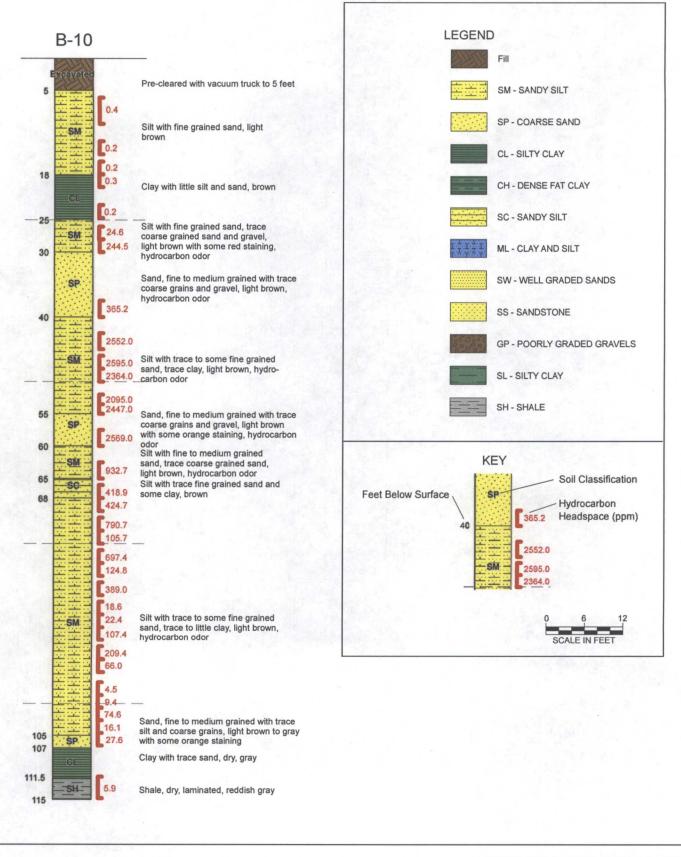






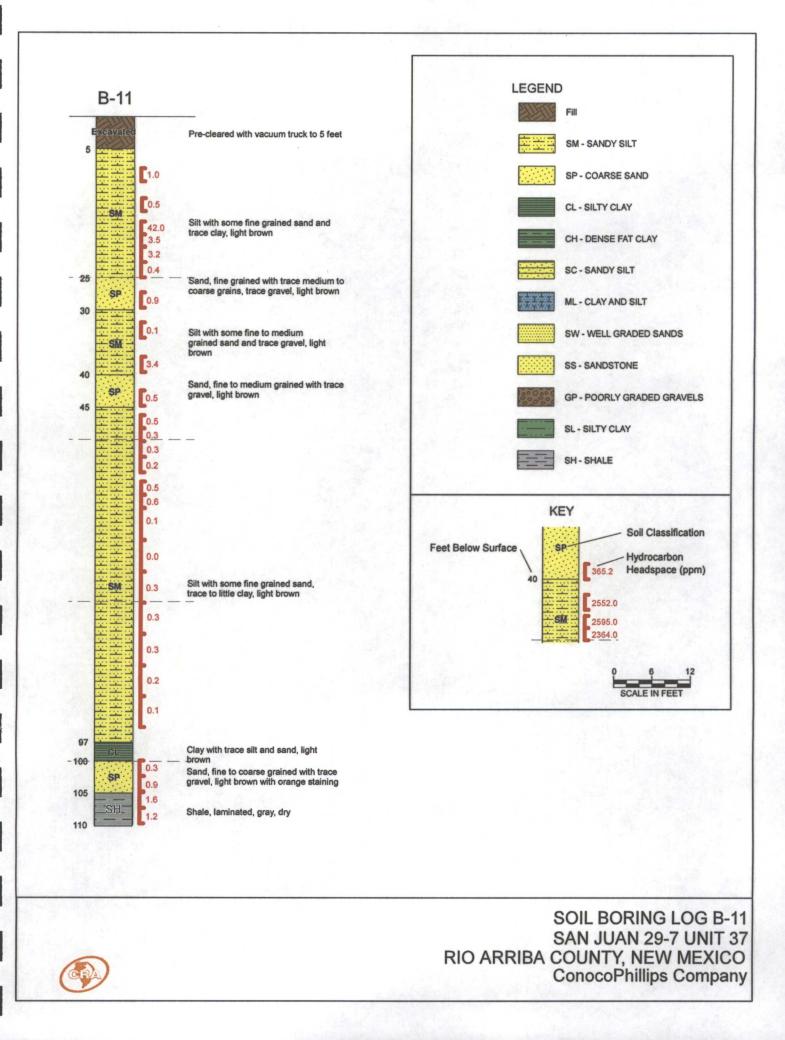


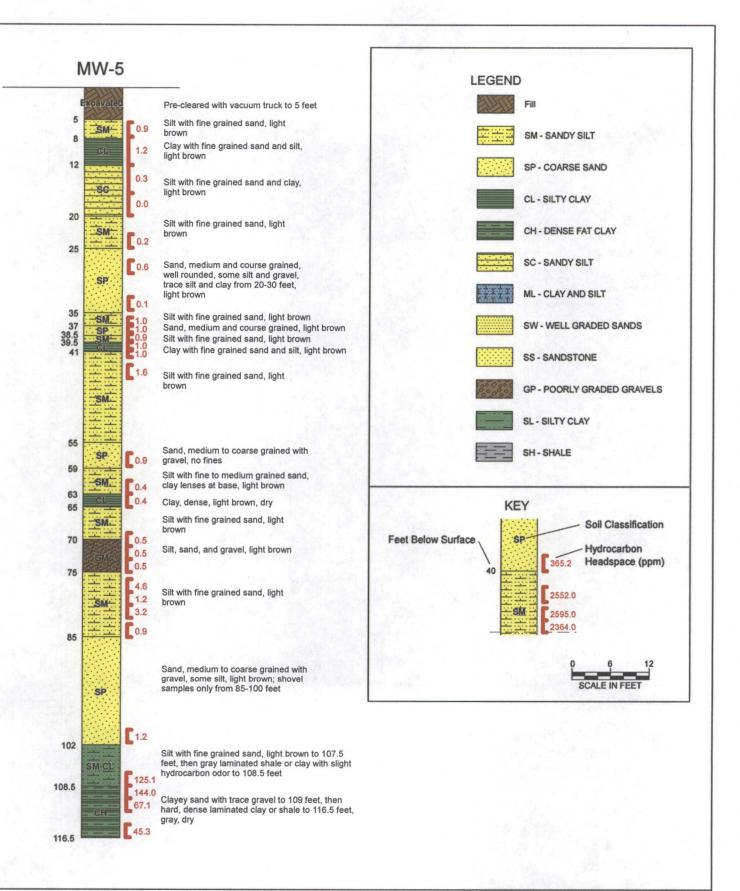




SOIL BORING LOG B-10 SAN JUAN 29-7 UNIT 37 RIO ARRIBA COUNTY, NEW MEXICO ConocoPhillips Company

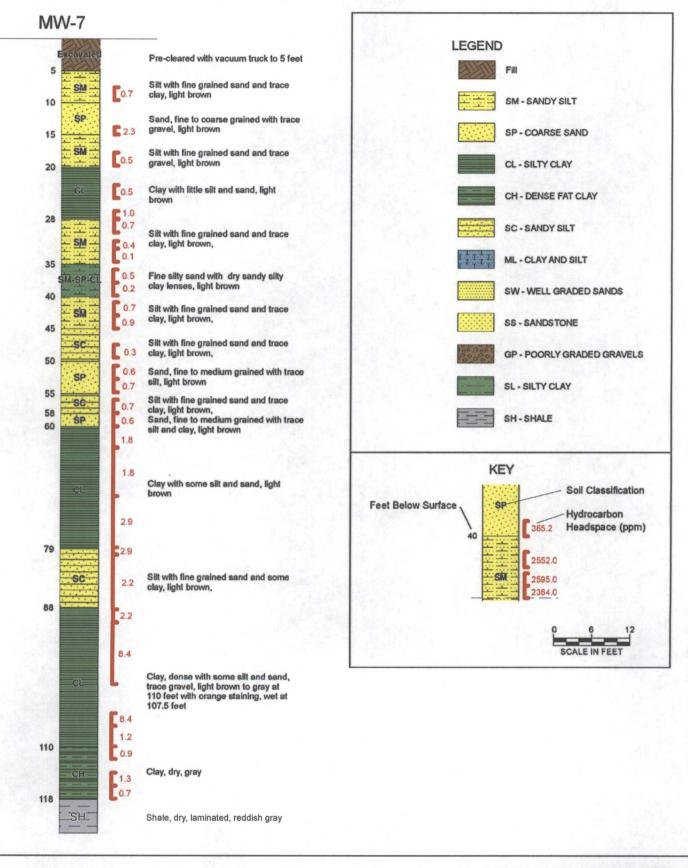






SOIL BORING LOG MW-5 SAN JUAN 29-7 UNIT 37 RIO ARRIBA COUNTY, NEW MEXICO ConocoPhillips Company





SOIL BORING LOG MW-7 SAN JUAN 29-7 UNIT 37 RIO ARRIBA COUNTY, NEW MEXICO ConocoPhillips Company



PROJECT NAME San Juan 29-7 Unit 37	
PROJECT NUMBER 075034	DATE COMPLETED September 24, 2011
CLIENT ConocoPhillips	DRILLING METHOD CME-75 Hollow Stem Aug
LOCATION Rio Arriba County, NM	CRA SUPERVISOR Kelly Blanchard
looking	MEASURE BOTTOM OF WELL 119.4 (AFTER COMPLETION) (BELOW TOP OF RISER PIPE)
CAP TYPE locking	
PROTECTIVE CASING	
GROUND	$\operatorname{STICK} UP = \underbrace{0}_{(t)} \tilde{m}$
BOTTOM OF	SURFACE SEAL TYPE Portland Ceme
SURFACE SEAL(ft/)m	
	BOREHOLE DIAMETER8
	RISER PIPE
TOP OF 78.0 SEAL* AT	ANNULUS BACKFILL TYPE Cement Grout
	SEAL TYPE: Bentonite Hole Plug
BOTTOM OF 103.0 ft m	SEAL TYPE: Demonite Flore Flore
TOP OF SCREEN* AT	PACK TYPE:-SAND, SIZE 10-20 Sar
	-GRAVEL -NATURAL
BOTTOM OF 120.0 (t) .	BOREHOLE BACKFILL MATERIAL (IF NOT FILTER PACK) None_
BOTTOM OF FILTER PACK AT 120.0(ft)m	IF NOT FILTER PACK)      NOTE:
$\smile$	ALL DIMENSIONS ARE: BELOW GROUND SURFACE (BGS)
BOTTOM OF 120.0 (t) m	·
SCREEN TYPE	wire wrapped 💭 louvre 🗋 other:
SCREEN MATERIAL: 🗋 stainless steel 🔀	pvc other:
	METER (in)em SCREEN SLOT SIZE:
RISER PIPE MATERIAL. Schedule 40 PVC	RISER PIPE DIAMETER:2
SURFACE CASING (Y/N) Yes MATE	RIAL Steel DEPTH 2 (t)m
DIAM	TER8 In em SEALANTManhole
DEVELOPMENT: METHOD: Bailed	DURATION:
DESCRIPTION OF PURGED WATE	R Silty, very little volume

PROJECT NAME San Juan 29-7 Unit 37 PROJECT NUMBER 075034 CLIENT ConocoPhillips LOCATION Rio Arriba County, NM	WELL DESIGNATION       MW-6         DATE COMPLETED       October 11, 2011         DRILLING METHOD       CME-75 Hollow Stem Auge         CRA SUPERVISOR       Kelly Blanchard
CAP TYPElocking PROTECTIVE CASING GROUND BOTTOM OF SURFACE SEAL _2 (t) n TOP OF89.0 (t) m BOTTOM OF101.0 (t) m SEAL* AT101.0 (t) m SEAL* AT105.0 (t) m BOTTOM OF105.0 (t) m BOTTOM OF120.0 (t) m BOTTOM OF120.0 (t) m	MEASURE BOTTOM OF WELL 120.0 (APTER COMPLETION) (APTER COMPLETION) (BELOW TOP OF RISER PIPE) (T) (BELOW TOP OF RISER PIPE) (T) (T) (T) (T) (T) (T) (T) (T) (T) (T
RISER PIPE MATERIAL. Schedule 40 PVC SURFACE CASING (Y/N) Yes MATERIAL	other:

200010-00(002)GN-WA049 APR 30/2008 (SP-15) REVISION 5

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WELL COMPLE	TION DIAGRAM
PROJECT NAME San Juan 29-7 Unit 37 PROJECT NUMBER	MW-7 MW-7 DATE COMPLETED October 12, 2011 DRILLING METHOD CME-75 Hollow Stem Augu
LOCATION Rio Arriba County, NM	CRA SUPERVISOR Kelly Blanchard
	MEASURE BOTTOM OF WELL 125.0 (AFTER COMPLETION) (AFTER COMPLETION) (BELOW TOP OF RISER PIPE)
PROTECTIVE CASING	$\operatorname{STICK} \mathbf{UP} = \underbrace{0}_{\mathbf{U}} (\mathbf{t}) \mathbf{m}$
BOTTOM OF SURFACE SEAL _2(t)n	SURFACE SEAL TYPE Portland Cemer
TOP OF 93.0 SEAL* AT	BOREHOLE DIAMETER 8 (in) RISER PIPE ANNULUS BACKFILL TYPE: Cement Grout SEAL TYPE: Bentonite Hole Plug
BOTTOM OF 101.0 (t) m TOP OF SCREEN* AT 105.0 (t) m	PACK TYPE: SAND, SIZE 10-20 Sand -GRAVEL -NATURAL
BOTTOM OF 125.0 (t)m BOTTOM OF 125.0 (t)m FILTER PACK AT 125.0 (t)m BOTTOM OF 125.0 (t)m	BOREHOLE BACKFILL MATERIAL None (IF NOT FILTER PACK) None • NOTE: ALL DIMENSIONS ARE BELOW GROUND SURFACE (BGS)
SCREEN TYPE: 🔀 continuous slot 🔲 wire w	rapped 🔲 louvre 💭 other:
SCREEN MATERIAL: 🔲 stainless steel 🔀 pvc	other:
SCREEN LENGTH: 20m SCREEN DIAMETER RISER PIPE MATERIAL: Schedule 40 PVC	
SURFACE CASING (Y/N) Yes MATERIAL	•
DESCRIPTION OF PURGED WATER:	DURATION: Silty, very low volume. Recharges after approxima one hour

,

WELL COMPLET	ION DIAGRAM
PROJECT NAME San Juan 29-7 Unit 37 PROJECT NUMBER 075034 CLIENT ConocoPhillips LOCATION Rio Arriba County, NM	WELL DESIGNATION       MW-8         DATE       COMPLETED         DRILLING       METHOD         CME-75       Hollow         SUPERVISOR       Kelly
CAP TYPE locking PROTECTIVE CASING GROUND BOTTOM OF SURFACE SEAL 2 ft m	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} $
TOP OF 88.0 SEAL* AT BOTTOM OF 101.0 (t) m SEAL* AT TOP OF SCREEN* AT TOP. OF SCREEN* AT	RISER PIPE ANNULUS BACKPILL TYPE Cement Grout SEAL TYPE: Bentonite Hole Plug PACK TYPE: SAND, SIZE 10-20 Sand -GRAVEL -NATURAL
BOTTOM OF 124.0 (t/)n BOTTOM OF 124.0 (t/)n FILTER PACK AT 124.0 (t/)n BOTTOM OF 124.0 (t/)m	BOREHOLE BACKFILL MATERIAL (IF NOT FILTER PACK) None • NOTE: ALL DIMENSIONS ARE BELOW GROUND SURFACE (BGS)
SCREEN MATERIAL.  SCREEN MATERIAL.  SCREEN LENGTH: 20 (t) m SCREEN DIAMETER: RISER PIPE MATERIAL. SURFACE CASING (Y/N) Yes MATERIAL	(n)em SCREEN SLOT SIZE:0.010
DEVELOPMENT: METHOD: Bailed DESCRIPTION OF PURGED WATER: 200010-00(002)GN-WA049 APR 30/2008; (SP-15) REVISION 5	······································

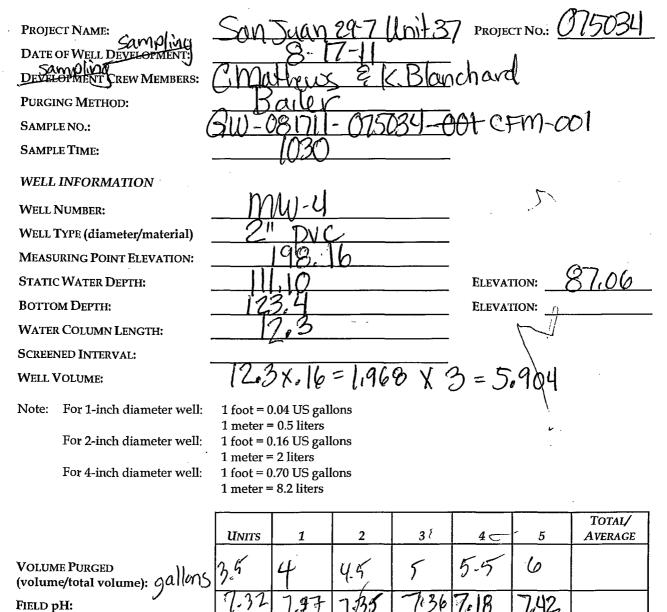
GRC

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APPENDIX C

## GROUNDWATER SAMPLING FIELD FORMS

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than

none

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7.0

non

1.52

It. tan

None

209.4

brok

31

non

FIELD pH:

FIELD TEMPERATURE: *lc*m FIELD CONDUCTIVITY:

s; 9/L

han

5m

6,66

CLARITY/FURBIDE

COLOR:

**ODOR:** 

COMMENTS:

COPIES TO: Mg[l

CRA 200010 (2) - Form SP-06 - Revision 0 - May 12, 2008

PROJECT NO .: 075034 Un:137 **PROJECT NAME:** DATE OF WELL DE SGmplmg Development Crew Members: Man disposable, dedicated 1.5"PVC) **PURGING METHOD:** 075034-CFM-002 SAMPLE NO.: SAMPLE TIME: WELL INFORMATION WELL NUMBER: WELL TYPE (diameter/material) **MEASURING POINT ELEVATION:** 9,00 STATIC WATER DEPTH: **ELEVATION: BOTTOM DEPTH: ELEVATION:** WATER COLUMN LENGTH: SCREENED INTERVAL:

1 foot = 0.04 US gallons1 meter = 0.5 liters

1 foot = 0.16 US gallons 1 meter = 2 liters

1 foot = 0.70 US gallons 1 meter = 8.2 liters

12.43 ×.16 = 1.98 ×3 = 5.96

Note: For 1-inch diameter well: For 2-inch diameter well:

WELL VOLUME:

For 4-inch diameter well:

		1	2	2		-	TOTAL/
	<u>UNITS</u>	1	2	3	4	5	AVERAGE
VOLUME PURGED (volume/total volume): 99/1075	4	4.5	5	5.5	6		
FIELD pH:	7.01	6.96	6.89	6-87	6.80		
FIELD TEMPERATURE: °C	15.72	15:44	15.55	15.56	15.31		
FIELD CONDUCTIVITY: US/CM	2188	2179	2185	2180	2179		
CLARITY/ <del>TURBIDITY VALUES:</del>	1.730	1.734	1.735	1:737	1,736	1	
COLOR:	Haray	Haray	Ht grays	Jr. brow	n. H. Brit	prown	
Odor:	none	none	none	none	none		
COMMENTS:	-33.2	-30-1	_ 25.2	-20,9	-19.6		
ORP Do ng/L	3.01	2.14	1.17	1.56	1.61		
COPIES TO:					r	a	

/ \_\_\_\_\_

COPIES TO:

PROJECT NO.: (175034 **PROJECT NAME:** DATE OF WELL DÉ T CREW MEMBERS: **PURGING METHOD:** SAMPLE NO.: SAMPLE TIME: WELL INFORMATION WELL NUMBER: 01 WELL TYPE (diameter/material) **MEASURING POINT ELEVATION:** STATIC WATER DEPTH: **ELEVATION: BOTTOM DEPTH: ELEVATION:** WATER COLUMN LENGTH: SCREENED INTERVAL: 11,44 ×.16 = 1,83 ×3= 6.49 WELL VOLUME: Note: For 1-inch diameter well: 1 foot = 0.04 US gallons 1 meter = 0.5 litersFor 2-inch diameter well: 1 foot = 0.16 US gallons1 meter = 2 litersFor 4-inch diameter well: 1 foot = 0.70 US gallons1 meter = 8.2 litersTOTAL/ **U**NITS 1 2 3 4 5 AVERAGE **VOLUME PURGED** 4 5.5 allons γĽ (volume/total volume): 82 0,90 FIELD pH: 474 F۵ E

FIELD TEMPERATURE:  $\mu S/\ell m$ FIELD CONDUCTIVITY:  $\mu S/\ell m$ CLARITY/TURBIDITY VALUES:  $\theta/\ell$ COLOR: ODOR:

22 83

mone

120.4

10.50

ЯШ

2276

1X40

1220

1.02

1t.brown

NON

6.50

nov

123,3

6.50

COMMENTS: DRP Db

COPIES TO:

**PROJECT NAME:** samplin DATE OF WELL DEVELOPMENT Sampling Development Crew Members: **PURGING METHOD:** N-1914 SAMPLE NO .: SAMPLE TIME: )uplicate : WELL INFORMATION SW-081711-075034 WELL NUMBER: WELL TYPE (diameter/material) **MEASURING POINT ELEVATION: ELEVATION:** STATIC WATER DEPTH: **ELEVATION: BOTTOM DEPTH:** WATER COLUMN LENGTH: **SCREENED INTERVAL:** 16.63 ×.16= 2.66 ×3=7.98 WELL VOLUME: cenable Dl. 1 foot = 0.04 US gallonsNote: For 1-inch diameter well: 1 meter = 0.5 litersFor 2-inch diameter well: 1 foot = 0.16 US gallons15/2 1 meter = 2 litersFor 4-inch diameter well: 1 foot = 0.70 US gallons 1 meter = 8.2 litersTOTAL/ **U**NITS 2 3 4 5 AVERAGE 1 **VOLUME PURGED** (volume/total volume): gallons FIELD pH: FIELD TEMPERATURE: \*C FIELD CONDUCTIVITY: US/CM CLARITY/TURBIDITY VALUES: TD5 g/L COLOR: ODOR: COMMENTS: COPIES TO:

Well rephanged enough to collect samples in about 15 minutes.

CRA 200010 (2) - Form SP-06 - Revision 0 - May 12, 2008

	WELL SAMPLING FIELD INFORMATION FORM
SITE/PROJECT NAM	ие: <u>Ди Juan 29-7 или 37</u> јов <u>и 05034</u>
SAMPLE	ID: <u>GW-07603A-101811-CE-MW</u> WELL# <u>MW-1</u>
PURGE DATE (MM DD YY)	WELL PURGING INFORMATION       1400     2.66       SAMPLE DATE     SAMPLE TIME       (MM DD YY)     (24 HOUR)       (24 HOUR)     (GALLONS)
PURGING EQUIPMENTDI	EDICATED Y N SAMPLING EQUIPMENT (CIRCLE ONE) (CIRCLE ONE)
PURGING DEVICE	A - SUBMERSIBLE PUMP D - GAS LIFT PUMP G - BAILER X= B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRA@ PURGING DEVICE OTHER (SPECIFY)
SAMPLING DEVICE	B - PERISTALTIC PUMP E - PURGE PUMP H - WATERRA® PURGING DEVICE OTHER (SPECIFY) C - BLADDER PUMP F - DIPPER BOTTLE X - OTHER
PURGING MATERIAL	E A-TEFLON D-PVC X=
SAMPLING MATERIAL	B-STAINLESS STEEL E-POLYETHYLENE PURGING MATERIAL OTHER (SPECIFY) C-POLYPROPYLENE X-OTHER X-OTHER (SPECIFY)
PURGE TUBING	C A-TEFLON D-POLYPROPYLENE G-COMBINATION X=
SAMPLING TUBING	B-TYGON E-POLYETHYLENE TEFLON/POLYPROPYLENE PURGE TUBING OTHER (SPECIFY) C-ROPE F-SILICONE X-OTHER X=
FILTERING DEVICES 0.45	SAMPLING TUBING OTHER (SPECIFY) A - IN-LINE DISPOSABLE B - PRESSURE C - VACUUM
· ·	FIELD MEASUREMENTS
DEPTH TO WATER WELL DEPTH TEMPERATURE	
(°C)	(g/L) (uS/cm) (mV) (gal)
(°C)	(std) (g/L) (µS/cm) (mV) (gal)
(°C)	(gal) (g/L) (g/L) (gal)
(°C)	(std) (g/L) (µS/cm) (mV) (gal)
SAMPLE APPEARANCE: WEATHER CONDITIONS: SPECIFIC COMMENTS:	FIELD COMMENTS         Godor:       Lighthat       Sheen y/n       No         TEMPERATURE       600       WINDY Y/N       N       PRECIPITATION Y/N (IF Y TYPE)       N
I CERTIFY THAT SAMPLING P	PETERDURES WERE IN ACCORDANCE WITH APPLICABLE CEL PENTOCOLE WISTING MATTERS (WILLING MAURILE) PRINT

SITE/PROJECT NAME:	Jan Juan	29-7 UNIT 37	JOB#	1634	
SAMPLE ID:	(JW-075034-	bIBII-CE - MW-2	WELL#	MW-2	<u> </u>
PURGE DATE (MM DD YY)	ID · IB · II SAMPLE DATE (MM DD YY)	WELL PURGING INFORM	MATION MATER VOL. IN (GALLOP		5.5 AL VOL. PURGED GALLONS)
PURGING EQUIPMENTDEDICAT		RGING AND SAMPLING			
PORGING EQUIPMENTDEDICAT	(CIRCLE ONE)		SAMPI	JING EQUIPMENTDI	EDICATERY N (CIRCLE ONE)
	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP C - BLADDER PUMP	E - PURGE PUMP H -	BAILER WATERRA® YTHER		OTHER (SPECIFY)
GAMPLING DEVICE	C-BLADDER POMP	F-DIPPER BOTTLE X-C	JIHEK	X= SAMPLING DEVIC	CE OTHER (SPECIFY)
	A - TEFLON B - STAINLESS STEEL	D - PVC E - POLYETHYLENE			IAL OTHER (SPECIFY)
SAMPLING MATERIAL	C - POLYPROPYLENE	X - OTHER		X= SAMPLING MATE	RIAL OTHER (SPECIFY)
	A - TEFLON	· -	COMBINATION TEFLON/POLYPROPYLENE	X≖	
	B - TYGON C - ROPE		THER	X=	IG OTHER (SPECIFY)
ILTERING DEVICES 0.45	A - IN-LINE DISPOSAE	BLE B - PRESSURE	C-VACUUM		
		FIELD MEASUREME	NTS		-
DEPTH TO WATER	109 13	(feet) WELI	ELEVATION	188 94	(feet)
WELL DEPTH	1200	(feet) GROUNDWATH	· •	79 _81	(feet)
TEMPERATURE	pH 7.98 (std)	11	DUCTIVITY 1933 (µS/cm)	ORP 183.8_(m	VOLUME V) 5.5 (gal
(°C)	(std)	(g/L)	(µS/cm)		V)(gal
(°C)	(std)	(g/L)	(μS/cm)	(m	V)(gal
(°C)	(std)	(g/L)	(μS/cm)	(m	V)(gal
(°C)	(std)	(g/L)	(µS/cm)	(m)	V) (gal
	 [	FIELD COMMENT	s i	- <u>.</u>	
AMPLE APPEARANCE:	PATURE 60	None con	- /// / ///	) SHEEN Y/N	No
EATHER CONDITIONS: TEMPE PECIFIC COMMENTS:	Porture <u>60</u> °	WINDY YN	PRECI	PITATION Y/N (IF Y TYPE)	<u> </u>
					<u> </u>

SITE/PROJECT NAME:	San Juan 2	9-7 UNIT 37	JOB#_076	034	
SAMPLE ID:		-101811-CE-MW -		1.3	
U	SAMPLE DATE (MM DD YY)	WELL PURGING INFORM SAMPLE TIME (24 HOUR) GING AND SAMPLING EQ	WATER VOL. IN CAS (GALLONS)	ING ACTUAL VOL. PU (GALLONS)	
URGING EQUIPMENTDEDICATE		· · · · · · · · · · · · · · · · · · ·		EQUIPMENTDEDICATEL	CLE ONE)
URGING DEVICE	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP C - BLADDER PUMP	D - GAS LIFT PUMP G - BA E - PURGE PUMP H - W. F - DIPPER BOTTLE X - OT	TERRA®	X= FURGING DEVICE OTHER (SI X=	PECIFY)
URGING MATERIAL	A - TEFLON	D-PVC	·	SAMPLING DEVICE OTHER (:	SPECIFY)
AMPLING MATERIAL	B - STAINLESS STEEL C - POLYPROPYLENE	E - POLYETHYLENE X - OTHER		PURGING MATERIAL OTHER X=	(SPECIFY)
	A - TEFLON B - TYGON		MBINATION LON/POLYPROPYLENE	SAMPLING MATERIAL OTHE X=- PURGE TUBING OTHER (SPEC	
AMPLING TUBING	C - ROPE	F - SILICONE X - OT	łER	X= SAMPLING TUBING OTHER (	SPECIFY)
LTERING DEVICES 0.45	A - IN-LINE DISPOSABL	LE B - PRESSURE C	- VACUUM	<u>.</u>	
DEPTH TO WATER WELL DEPTH TEMPERATURE F 	1.16     (std)     1.       (std)	d (feet) GROUNDWATER	CTIVITY 7.3 (µS/cm)	188       35       (fee         78       98       (fee         0RP       V         130.0       (mV)       (mV)         (mV)       (mV)       (mV)	
			· · · · · · · · · · · · · · · · · · ·	······································	
•		ITH APPLICABLE CRA PROTOCOL			

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SITE/PROJECT NAI		<u>37</u> јов#_ <u>07</u>	5034
SAMPLE		MW-4 WELL# M	W-4
10.17.11           PURGE DATE           (MM DD YY)	WELL PURGING IN 16.18.11 SAMPLE DATE (MM DD YY) PURGING AND SAMP	ME WATER VOL. IN C R) (GALLONS)	
PURGING EQUIPMENT			NG EQUIPMENTDEDICATED Y N (CIRCLE ONE)
PURGING DEVICE	A - SUBMERSIBLE PUMP D - GAS LIFT PUMP B - PERISTALTIC PUMP E - PURGE PUMP C - BLADDER PUMP F - DIPPER BOTTLE	G - BAILER H - WATERRA® X - OTHER	X= PURGING DEVICE OTHER (SPECIFY)
		x-other	X= SAMPLING DEVICE OTHER (SPECIFY)
PURGING MATERIAL SAMPLING MATERIAL	A - TEFLON     D - PVC       B - STAINLESS STEEL     E - POLYETHYLENE       C - POLYPROPYLENE     X - OTHER		X= PURGING MATERIAL OTHER (SPECIFY) X=
PURGE TUBING	A - TEFLON D - POLYPROPYLENE B - TYGON E - POLYETHYLENE	G - COMBINATION TEFLON/POLYPROPYLENE	SAMPLING MATERIAL OTHER (SPECIFY) X= PURGE TUBING OTHER (SPECIFY)
AMPLING TUBING	C - ROPE F - SILICONE	X - OTHER	χ=
ILTERING DEVICES 0.45	A - IN-LINE DISPOSABLE B - PRESSUR	RE C-VACUUM	SAMPLING TUBING OTHER (SPECIFY)
	FIELD MEASU	REMENTS	· .
DEPTH TO WATE		WELL ELEVATION	198 16 (feet)
WELL DEPT	I 19 44 (feet) GROUN	DWATER ELEVATION	87 00 (feet)
TEMPERATURE	pH TDS 7.24 (std) 1.643 (g/L)	CONDUCTIVITY	ORP VOLUME
<u>15. [2</u> (°C)	7.24 (std) 643 (g/L)	<u>[927]</u> (μS/cm) (μS/cm)	224.5 (mV) (gal
	(std) (g/L)	(µS/cm)	(mV) (gal
(°C)	(std) (g/L)	(μS/cm)	(mV) (gal
(°C)	(std) (g/L)	(µS/cm)	(mV)(gal
	FIELD COM	MENTS	
AMPLE APPEARANCE: "EATHER CONDITIONS; PECIFIC COMMENTS:	Billy ODOR: NOR. TEMPERATURE 600 WINDY Y/N	color: <u>light fau</u> <u>NO</u> PRECIPT	SHEEN Y/N NO
· · · · · · · · · · · · · · · · · · ·			
<u> </u>	/	1	<u></u>
I CERTIFY THAT SAMPLING	ROCHDURES WERE IN ACCORDANCE WITH APPLICABLE RAT	ACTOCOLOUR MOG	Tao
			<u></u>

	WELL SAMPLIN	IG FIELD INFO	RMATION FO	ORM	
SITE/PROJECT NAM	TE Antitud	29-7 UNIT 37	JOB# 07	16034	
SITE/FROJECT NAM SAMPLE	ID: (-u)-(575)3	4-101811.(E.M.W.:		W-5	
	Giu Dian				
10:17:11 PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	WELL PURGING INFOR 1200 SAMPLE TIME (24 HOUR)	WATER VOL. IN C		22 OL. PURGED LONS)
		RGING AND SAMPLING			$\sim$
PURGING EQUIPMENTD	EDICATED Y N (CIRCLE ONE)	· · · · · · · · · · · · · · · · · · ·	SAMPLIN	NG EQUIPMENTDEDK	(CIRCLE ONE)
PURGING DEVICE	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP		BAILER WATERRA®	X= PURGING DEVICE OT	HER (SPECIFY)
SAMPLING DEVICE	C - BLADDER PUMP	F - DIPPER BOTTLE X - 4	OTHER	X= SAMPLING DEVICE O	THER (SPECIFY)
PURGING MATERIAL	A - TEFLON B - STAINLESS STEEL	D - PVC E - POLYETHYLENE		X= PURGING MATERIAL	OTHER (SPECIFY)
SAMPLING MATERIAL	C - POLYPROPYLENE	X - OTHER		X= SAMPLING MATERIAI	
PURGE TUBING	A - TEFLON B - TYGON		COMBINATION FEFLON/POLYPROPYLENE	X= PURGE TUBING OTHE	R (SPECIEV)
SAMPLING TUBING	C-ROPE		DTHER	X= SAMPLING TUBING O	•
FILTERING DEVICES 0.45	A - IN-LINE DISPOSA	ABLE B - PRESSURE	C-VACUUM		
· ·		FIELD MEASUREME	NTS		
DEPTH TO WATE		(feet) WEL	L ELEVATION		(feet)
WELL DEPTH	I <u>119</u> 44	(feet) GROUNDWAT			(feet)
TEMPERATURE	pH 6.13 (std)	TDS CONI		ORP   1107.5 (mV)	VOLUME $(gal)$
	(std)	(g/L) (g/L)	(µS/cm)	(mV)	(gal)
	(std)	(g/L)	(μ5/cm)	(mV)	(gal)
	(std)	(g/L)	(μ5/cm)	(mV)	(gal)
(°C)	(std)	(g/L)	(μ5/cm)	(mV)	(gal)
SAMPLE APPEARANCE; WEATHER CONDITIONS; SPECIFIC COMMENTS:	<u>3</u> ;//4 TEMPERATURE <u>60</u>	FIELD COMMENT I Jigh + tuu eot WINDY Y/N N	for rine	SHEEN Y/N NIF Y TYPE)	No
				· · · · · · · · · · · · · · · · · · ·	
I CERTIFY THAT SAMPLING	PROCEDURES WERE IN ACCORDANCE	MITH APPLICABLE CRA POPULO HUS SIENATU	1940 Mal	and and	
171111	2 8441 Y 2			· · · · · · · · · · · · · · · · · · ·	

WI	ELL SAMPLING FIELD INFORMATION FORM	
SITE/PROJECT NAME:	Jans Juan 29-7 Unit 37 JOB# 1575034	
SAMPLE ID:	GW075034 OBILE MW-Le WELL# MW-LO	
PURGE DATH (MM DD YY)	WELL PURGING INFORMATION         10.18.11       1240       1.672       6.26         SAMPLE DATE         (MM DD YY)       (24 HOUR)       (GALLONS)       ACTUAL VOL. PUR	GED
PURGING EQUIPMENTDEDICATI		Y N CLE ONE)
PURGING DEVICE	A - SUBMERSIBLE PUMP     D - GAS LIFT PUMP     G - BAILER     X=       B - PERISTALTIC PUMP     E - PURGE PUMP     H - WATERRA®     PURGING DEVICE OTHER (SPE       C - BLADDER PUMP     F - DIPPER BOTTLE     X - OTHER     X=	ecify)
PURGING MATERIAL	A - TEFLON       D - PVC       X=         B - STAINLESS STEEL       E - POLYETHYLÉNE       PURGING MATERIAL OTHER (SE         C - POLYPROPYLENE       X - OTHER       X=         SAMPLING MATERIAL OTHER       X=	(SPECIFY)
PURGE TUBING	A - TEFLON     D - FOLYPROPYLENE     G - COMBINATION     X=       B - TYGON     E - POLYETHYLENE     TEFLON/POLYPROPYLENE     PURGE TUBING OTHER (SPECI VICE TUBING OTHER (SPECI SAMPLING TUBING TUBING OTHER (SPECI	
FILTERING DEVICES 0.45	A - IN-LINE DISPOSABLE B - PRESSURE C - VACUUM	
DEPTH TO WATER WELL DEPTH TEMPERATURE (°C) (°C) (°C) (°C) (°C) CO CO CO CO CO CO CO CO CO CO	(std)       (g/L)       (µS/cm)       (mV)       5         (std)       (g/L)       (µS/cm)       (mV)         FIELD COMMENTS       COLOR:       124/ 4/222, SHEEN Y/N       NO	
I CERTIFY THAT SAMPLING PROCEDUR	RES WERE IN ACCORDANCE WITH APPLICABLE CEAPEOPCOLE	
	Vistive Mattews ( (Il Cuelly Kalled)	

V V	VELL SAMPLING		MATION FC	DRM
SITE/PROJECT NAME:	ITE/PROJECT NAME: JUN JUAN 29-7 UNIT 37		JOB#	16034
SAMPLE ID:		11. (E. MW-7	WELL#	MW-7
PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	LL PURGING INFORMAT 1340 SAMPLE TIME (24 HOUR)	TION 	ACTUAL VOL. PURGED (GALLONS)
PURGING EQUIPMENTDEDIC		IG AND SAMPLING EQU		GEQUIPMENTDEDICATED () N (CIRCLE ONE)
PURGING DEVICE	B - PERISTALTIC PUMP E -	- GAS LIFT PUMP G - BAILI PURGE PUMP H - WAT	ERRA®	X= PURGING DEVICE OTHER (SPECIFY)
SAMPLING DEVICE		DIPPER BOTTLE X - OTHE	2K	X= SAMPLING DEVICE OTHER (SPECIFY)
PURGING MATERIAL	B - STAINLESS STEEL E -	PVC ' POLYETHYLENE OTHER		X= PURGING MATERIAL OTHER (SPECIFY) X=
PURGE TUBING	B-TYGON E-		BINATION DN/POLYPROPYLENE R	SAMPLING MATERIAL OTHER (SPECIFY) X= PURGE TUBING OTHER (SPECIFY) X= SAMPLING TUBING OTHER (SPECIFY)
FILTERING DEVICES 0.45	A - IN-LINE DISPOSABLE	B - PRESSURE C - V	ACUUM	
DEPTH TO WATER Well Depth Temperature	<u>119</u> 70 125 рн тоз 7.22 (std) 1.912	FIELD MEASUREMENTS (feet) WELL ELE (feet) GROUNDWATER EL CONDUCT 3 (g/L) 2610	EVATION	(feet) (feet) ORP VOLUME 218.5 (mV)
(°)	(std)(std)	(g/L)	(μS/cm) (μS/cm)	(mV)(ga
(°C)	(std)(std)	(g/L)	(μS/cm)	(mV)(ga (mV)(ga
AMPLE APPEARANCE:	//. /	FIELD COMMENTS	light ban	
I CERTIFY THAT SAMPLING PROCE	BURES WERE IN ACCORDANCE WITH A MUSTURE MATTER FRINT	PPLICABLE CRAPROTOCOLS	WadMa	TIMO

.... ..... . . .....

WI	ELL SAMPLIN	G FIELD INFO	RMATION I	FORM	
SITE/PROJECT NAME: SAMPLE ID:	<u>June Juan 29-7 Unit 37</u> JOB# <u>076034</u> GW -076034-101911. EE MU-8 WELL# MW-8				
UB:11	1/3-1/9-1/1         SAMPLE DATE           (MM DD YY)	WELL PURGING INFOR SAMPLE TIME (24 HOUR)	WATER VOL. IN (GALLON		DL. PURGED LONS)
PURGING EQUIPMENTDEDICAT		RGING AND SAMPLING		ING EQUIPMENTDEDIC	ATED Y N (CIRCLE ONE)
PURGING DEVICE	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP C - BLADDER PUMP	E - PURGE PUMP H -	BAILER WATERRA® OTHER	X= PURGING DEVICE OTH X=	· · · ·
PURGING MATERIAL B	A - TEPLON B - STAINLESS STEEL C - POLYPROPYLENE	D - PVC E - POLYETHYLENE X - OTHER	*·····	SAMPLING DEVICE OT X= 	THER (SPECIFY)
PURGE TUBING	A - TEFLON B - TYGON C - ROPE A - IN-LINE DISPOSAT	E - POLYETHYLENE 7 F - SILICONE X - C	COMBINATION TEFLON/POLYPROPYLENE DTHER C - VACUUM	X= PURGE TUBING OTHER X= SAMPLING TUBING OT	(SPECIFY)
		FIELD MEASUREME			
DEPTH TO WATER	pH 7.07 (std) (std) (std) (std) (std)	(feet) WELL (feet) GROUNDWATE TDS CONE (g/L) (g/L) (g/L)	ELEVATION	ORP //57.4 (mV) (mV) (mV) (mV) (mV)	(feet) (feet) VOLUME (gal) (gal) (gal) (gal)
AMPLE APPEARANCE: VEATHER CONDITIONS: TEMPER PECIFIC COMMENTS: UP 11 10.10.11 DY E	<u>huun kal hy</u> odor: ATURB <u>D</u> O <u>DUIGCO of</u> 1	FIELD COMMENTS	DR: hgh bran	SHEEN Y/N NO ITATION Y/N (IF Y TYPE) PUYPUES ON	
ICERTIFY THAT SAMPLING PROCEDUR	reswere in accordance w	VITH APPLICABLE ORA UNDTOCO		To Do	