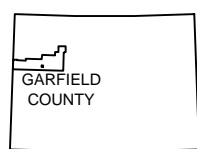


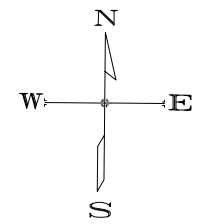
SOURCE: USGS ANVIL POINTS, CO 7.5x7.5 Quad



LOCATION MAP
NOT TO SCALE



COLORADO



SCALE-FEET



| | |
|-----------|------------|
| PROJECT: | 012-1539 |
| DRAWN BY: | sds |
| DATE: | 05.01.2013 |

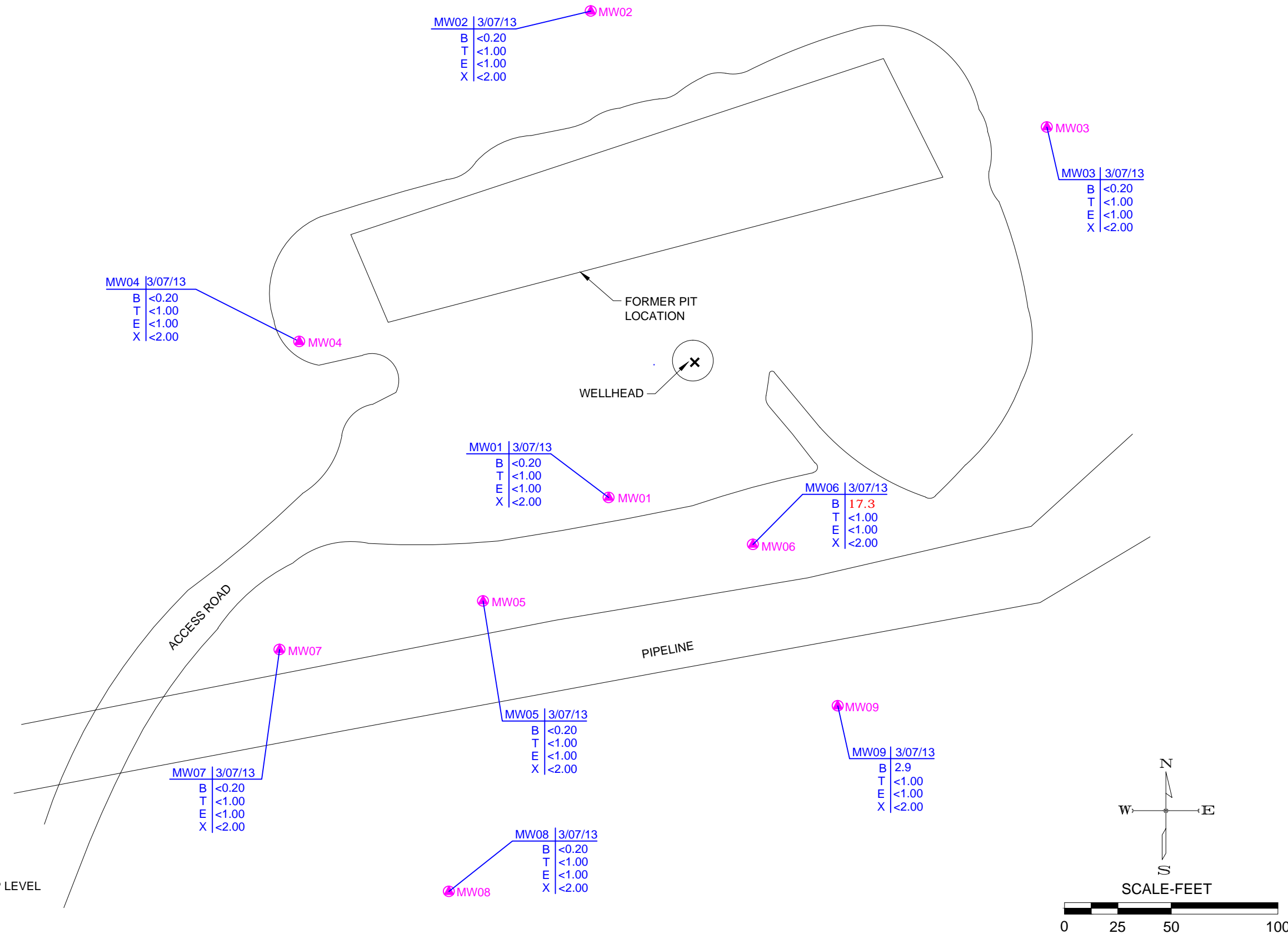
| | |
|--------------------------------|--|
| SITE LOCATION MAP | |
| WPX RMV 216-21 | |
| WPX ENERGY ROCKY MOUNTAIN, LLC | |
| GARFIELD COUNTY, COLORADO | |



760 Horizon Drive, Ste. 102
Grand Junction, CO 81506
TEL 970.263.7800
FAX 970.263.7456

| |
|--------|
| FIGURE |
| 1 |

F:\Projects\012-1539_GJ_RMV_216-21\CMM\Exhibits\2013\2013_01\121539_01_2013_GWA.dwg Layout: GWA

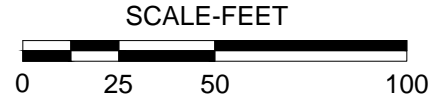
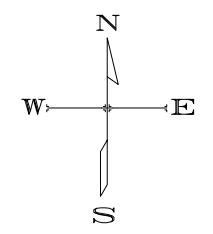


LEGEND:

MW01 ● MONITORING WELL/BOREHOLE

CHEMICAL DATA

- B = BENZENE (ug/l)
- T = TOLUENE (ug/l)
- E = ETHYLBENZENE (ug/l)
- X = XYLENES (ug/l)
- BOLD** = EXCEEDS COGCC GROUNDWATER CLEANUP LEVEL

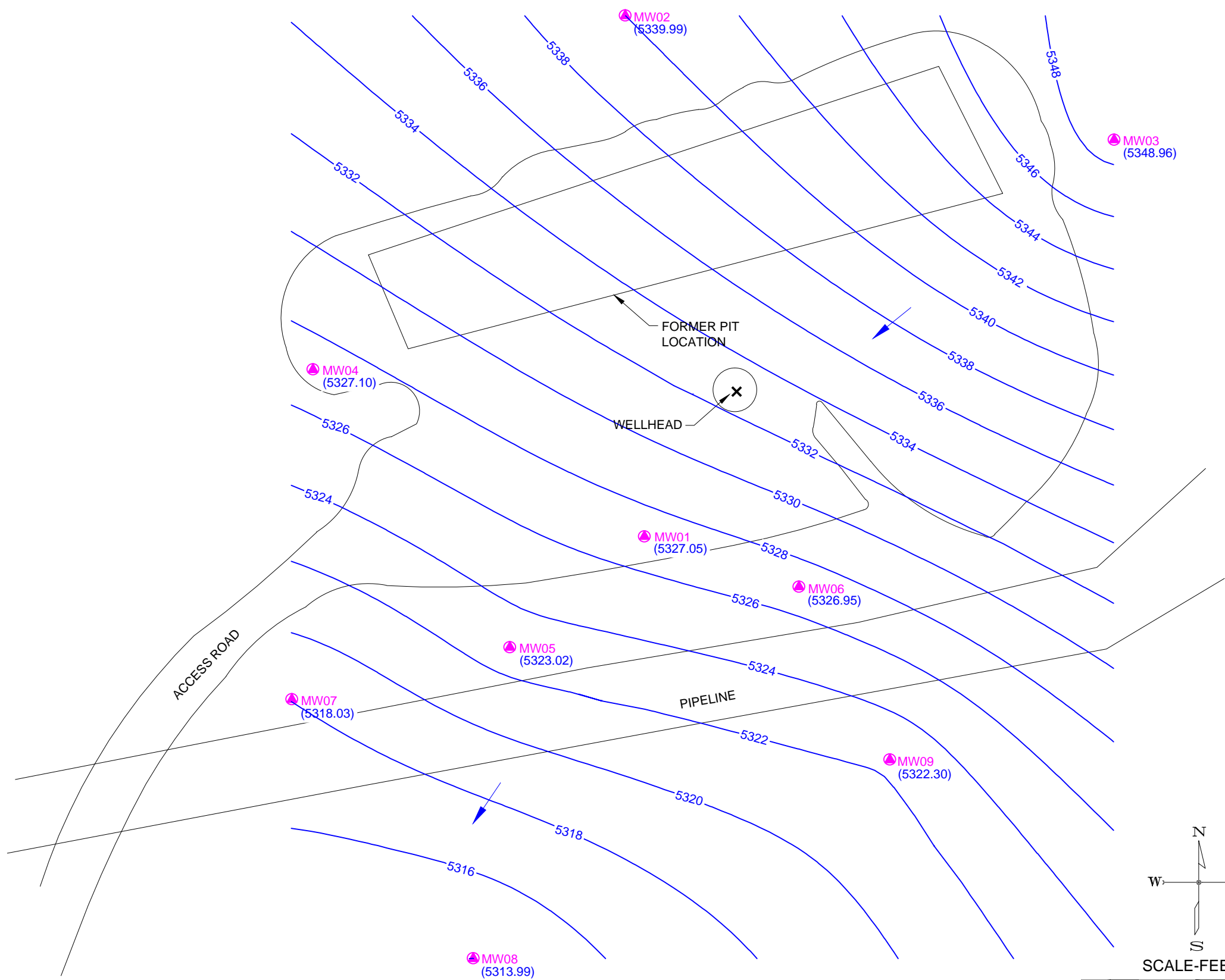


| | |
|-------------|------------|
| PROJECT NO: | 012-1539 |
| DRAWN BY: | sds |
| DATE: | 05.01.2013 |

GROUNDWATER ANALYTICAL RESULTS - MARCH 2013
 WPX RMV 216-21
 WPX ENERGY ROCKY MOUNTAIN, LLC
 GARFIELD COUNTY, COLORADO

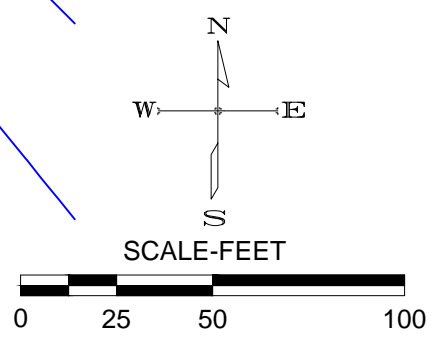
OLSSON ASSOCIATES
 760 Horizon Drive, Ste. 102
 Grand Junction, CO 81506
 TEL 970.263.7800
 FAX 970.263.7456

F:\Projects\012-1539_GJ_RMV_216-21\CMM\Exhibits\2013\2013_01\121539_01_2013_P5.dwg Layout P SURF



LEGEND:

- MW01 MONITORING WELL/BOREHOLE
- 5325.0 GROUNDWATER ELEVATION CONTOUR (FT-MSL)
- (5325.55) GROUNDWATER ELEVATION (FT-MSL)
- GROUNDWATER FLOW DIRECTION



| | |
|-------------|------------|
| PROJECT NO: | 012-1539 |
| DRAWN BY: | sds |
| DATE: | 05.01.2013 |

POTENTIOMETRIC SURFACE MAP - MARCH 2013
 WPX RMV 216-21
 WPX ENERGY ROCKY MOUNTAIN, LLC
 GARFIELD COUNTY, COLORADO

OLSSON ASSOCIATES
 760 Horizon Drive, Ste. 102
 Grand Junction, CO 81506
 TEL 970.263.7800
 FAX 970.263.7456

| | |
|--------|---|
| FIGURE | 2 |
|--------|---|

Table 1
RMV 216-21 Groundwater Monitoring
2013 Water Quality Data Summary

| SAMPLE SUMMARY | |
|----------------------|--------------------------|
| Location Description | RMV 216-21 GW Monitoring |
| Sample Type | Groundwater |

| LABORATORY DATA SUMMARY | | | | | | | | | | | | | |
|----------------------------------|-------------------------------------|-----------------------------------|--------|----------------|---------------------|----------------|---------------------|----------------|----------------|----------------|----------------|---------------------|----------------|
| Sample ID | CDPHE Regulation 41 Standards | COGCC Table 910-1 Standards | UNITS | RMV 216-21 MW1 | RMV 216-21 MW2 | RMV 216-21 MW3 | RMV 216-21 MW4 | RMV 216-21 MW5 | RMV 216-21 MWX | RMV 216-21 MW6 | RMV 216-21 MW7 | RMV 216-21 MW8 | RMV 216-21 MW9 |
| Depth to Water (feet) | | | | 84.45 | 79.2 | 68.14 | 85.69 | 85.81 | MW5 Duplicate | 81.79 | 90.79 | 88.23 | 81.54 |
| Sample Date | | | | 3/7/2013 | 3/7/2013 | 3/7/2013 | 3/7/2013 | 3/7/2013 | 3/7/2013 | 3/7/2013 | 3/7/2013 | 3/7/2013 | 3/7/2013 |
| Analytical Parameters | | | | | | | | | | | | | |
| BTEX | | | | | | | | | | | | | |
| Benzene | 5 | 5 | ug/l | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 17.3 | <0.20 | <0.20 | 2.9 |
| Toluene | 560 to 1000 | 560 to 1000 | ug/l | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Ethylbenzene | 700 | 700 | ug/l | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Xylene (total) | 1400 to 10000 | 1400 to 10000 | ug/l | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| Metals | | | | | | | | | | | | | |
| Calcium | NA | NA | mg/l | 212 | 209 | 222 | 225 | 221 | 221 | 217 | 224 | 202 | 256 |
| Iron | 0.3 | NA | mg/l | <0.07 | <0.07 | <0.07 | <0.07 | <0.07 | <0.07 | <0.07 | <0.07 | <0.07 | <0.07 |
| Magnesium | NA | NA | mg/l | 213 | 171 | 184 | 183 | 234 | 234 | 252 | 219 | 248 | 266 |
| Manganese | 0.05 | NA | mg/l | 0.369 | 0.0488 | 0.137 | <0.005 | 0.123 | 0.124 | 0.182 | 0.0076 | 0.0133 | 0.0933 |
| Potassium | 23 | NA | mg/l | 6.34 | 6.43 | 6.62 | 6.59 | 6.51 | 6.29 | 7.07 | 6.46 | 6.67 | 7.73 |
| Selenium | 0.05 | NA | mg/l | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Sodium | 390 | NA | mg/l | 446 | 343 | 358 | 345 | 500 | 490 | 593 | 464 | 494 | 502 |
| General Chemistry | | | | | | | | | | | | | |
| Alkalinity, Bicarbonate as CaCO3 | NA | NA | mg/l | 726 | 638 | 567 | 577 | 565 | 548 | 1050 | 727 | 822 | 975 |
| Alkalinity, Carbonate | NA | NA | mg/l | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| Alkalinity, Total as CaCO3 | NA | NA | mg/l | 729 | 638 | 567 | 577 | 565 | 548 | 1050 | 727 | 822 | 975 |
| Chloride | 250 | 1.25 x bkgd | mg/l | 225 | 17 | 29.2 | 15.6 | 325 | 331 | 493 | 215 | 319 | 427 |
| Nitrogen, Nitrate | 10 | NA | mg/l | 31.1 | 25.9 | 44.9 | 19.7 | 33.1 | 33.4 | 35 | 24.6 | 33.9 | 46.8 |
| Nitrogen Nitrite | 1.0 | NA | mg/l | 0.15 | <0.020 ^a | 0.04 | <0.020 ^b | 0.031 | 0.043 | 4.5 | 0.024 | <0.020 ^b | 3.3 |
| Solids, Total Dissolved | 10,000 | NA | mg/l | 3210 | 2780 | 2890 | 2980 | 3470 | 3470 | 3830 | 3330 | 3490 | 3830 |
| Sulfate | 250 | 1.25 x bkgd | mg/l | 1390 | 1350 | 1400 | 1480 | 1480 | 1480 | 1460 | 1490 | 1500 | 1560 |
| pH | NA | NA | su | 7.04 | 7.13 | 7.16 | 7.14 | 7.07 | 7.12 | 7.04 | 7.15 | 7.17 | 7.03 |
| Field Readings | | | | | | | | | | | | | |
| Temperature | NA | NA | deg. C | 14.34 | 14.20 | 14.53 | 14.37 | 26.37 | 26.37 | 18.93 | 13.77 | 17.48 | 14.31 |
| Specific Conductivity | NA | NA | mS/cm | 3.91 | 2.94 | 3.36 | 3.24 | 4.24 | 4.24 | 4.93 | 3.94 | 4.13 | 4.79 |
| Dissolved Oxygen | NA | NA | mg/l | 1.05 | 0.81 | 1.48 | 2.21 | 1.65 | 1.65 | 1.3 | 2.17 | 1.6 | 0.92 |
| pH | NA | NA | su | 7.60 | 7.04 | 7.67 | 7.00 | 6.97 | 6.97 | 6.95 | 7.60 | 7.01 | 7.62 |
| Solids, Total Dissolved | NA | NA | mg/l | 2.5 | 1.9 | 2.2 | 2.1 | 2.8 | 2.8 | 3.2 | 2.5 | 2.7 | 3.1 |
| Turbidity | NA | NA | NTU | 5999 | 5999 | 1509 | 2000 | 11.3 | 11.3 | 859 | 1834 | 568 | 2000 |

ug/l - micrograms per liter
mg/l - milligrams per liter
J - indicates an estimated value
umhos/cm - micromhos per centimeter
mS/cm - millisiemens per centimeter
su - standard units
NA - not applicable
NTU - nephelometric turbidity units
NT - not tested

a - Dilution required due to matrix interference
b - Elevated detection limit due to matrix interference
c - Elevated detection limit due to dilution required for possible matrix interference

Technical Report for

WPX Energy Rocky Mountain, LLC

CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

NXEPPARACH

Accutest Job Number: D44204

Sampling Date: 03/07/13

Report to:


**Olsson Associates
760 Horizon Drive Suite 102
Grand Junction, CO 81505
tdobransky@oaconsulting.com**

ATTN: Tim Dobransky

Total number of pages in report: 66



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Brad Madadian
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW), UT (NELAP CO00049), TX (T104704511-12-1)

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Table of Contents

-1-

| | |
|---|-----------|
| Section 1: Sample Summary | 3 |
| Section 2: Case Narrative/Conformance Summary | 5 |
| Section 3: Summary of Hits | 8 |
| Section 4: Sample Results | 13 |
| 4.1: D44204-1: RMV 216-21 MW1 | 14 |
| 4.2: D44204-1F: RMV 216-21 MW1 | 16 |
| 4.3: D44204-2: RMV 216-21 MW2 | 17 |
| 4.4: D44204-2F: RMV 216-21 MW2 | 19 |
| 4.5: D44204-3: RMV 216-21 MW3 | 20 |
| 4.6: D44204-3F: RMV 216-21 MW3 | 22 |
| 4.7: D44204-4: RMV 216-21 MW4 | 23 |
| 4.8: D44204-4F: RMV 216-21 MW4 | 25 |
| 4.9: D44204-5: RMV 216-21 MW5 | 26 |
| 4.10: D44204-5F: RMV 216-21 MW5 | 28 |
| 4.11: D44204-6: RMV 216-21 MW6 | 29 |
| 4.12: D44204-6F: RMV 216-21 MW6 | 31 |
| 4.13: D44204-7: RMV 216-21 MWX | 32 |
| 4.14: D44204-7F: RMV 216-21 MWX | 34 |
| 4.15: D44204-8: RMV 216-21 MW7 | 35 |
| 4.16: D44204-8F: RMV 216-21 MW7 | 37 |
| 4.17: D44204-9: RMV 216-21 MW8 | 38 |
| 4.18: D44204-9F: RMV 216-21 MW8 | 40 |
| 4.19: D44204-10: RMV 216-21 MW9 | 41 |
| 4.20: D44204-10F: RMV 216-21 MW9 | 43 |
| Section 5: Misc. Forms | 44 |
| 5.1: Chain of Custody | 45 |
| Section 6: GC Volatiles - QC Data Summaries | 47 |
| 6.1: Method Blank Summary | 48 |
| 6.2: Blank Spike Summary | 49 |
| 6.3: Matrix Spike/Matrix Spike Duplicate Summary | 50 |
| Section 7: Metals Analysis - QC Data Summaries | 51 |
| 7.1: Prep QC MP9626: Ca,Fe,Mg,Mn,K,Se,Na | 52 |
| Section 8: General Chemistry - QC Data Summaries | 62 |
| 8.1: Method Blank and Spike Results Summary | 63 |
| 8.2: Duplicate Results Summary | 64 |
| 8.3: Matrix Spike Results Summary | 65 |
| 8.4: Matrix Spike Duplicate Results Summary | 66 |



Sample Summary

WPX Energy Rocky Mountain, LLC

Job No: D44204

CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

Project No: NXEPPARACH

| Sample Number | Collected | | Received | Matrix | | Client Sample ID |
|---------------|-----------|---------|----------|--------|----------------------|------------------|
| | Date | Time By | | Code | Type | |
| D44204-1 | 03/07/13 | 11:20 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW1 |
| D44204-1F | 03/07/13 | 11:20 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW1 |
| D44204-2 | 03/07/13 | 14:00 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW2 |
| D44204-2F | 03/07/13 | 14:00 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW2 |
| D44204-3 | 03/07/13 | 15:00 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW3 |
| D44204-3F | 03/07/13 | 15:00 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW3 |
| D44204-4 | 03/07/13 | 12:35 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW4 |
| D44204-4F | 03/07/13 | 12:35 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW4 |
| D44204-5 | 03/07/13 | 11:10 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW5 |
| D44204-5F | 03/07/13 | 11:10 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW5 |
| D44204-6 | 03/07/13 | 12:40 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW6 |
| D44204-6F | 03/07/13 | 12:40 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW6 |
| D44204-7 | 03/07/13 | 11:22 | 03/08/13 | AQ | Ground Water | RMV 216-21 MWX |



Sample Summary

(continued)

WPX Energy Rocky Mountain, LLC

Job No: D44204

CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

Project No: NXEEPPARACH

| Sample Number | Collected | | Received | Matrix | | Client Sample ID |
|---------------|-----------|---------|----------|--------|----------------------|------------------|
| | Date | Time By | | Code | Type | |
| D44204-7F | 03/07/13 | 11:22 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MWX |
| D44204-8 | 03/07/13 | 09:55 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW7 |
| D44204-8F | 03/07/13 | 09:55 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW7 |
| D44204-9 | 03/07/13 | 10:10 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW8 |
| D44204-9F | 03/07/13 | 10:10 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW8 |
| D44204-10 | 03/07/13 | 13:30 | 03/08/13 | AQ | Ground Water | RMV 216-21 MW9 |
| D44204-10F | 03/07/13 | 13:30 | 03/08/13 | AQ | Groundwater Filtered | RMV 216-21 MW9 |



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: WPX Energy Rocky Mountain, LLC

Job No D44204

Site: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

Report Date 3/14/2013 2:47:52 PM

On 03/08/2013, 10 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 3.1 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D44204 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GC By Method SW846 8021B

| | |
|------------------|--------------------------|
| Matrix AQ | Batch ID: GTA1047 |
|------------------|--------------------------|

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D44204-1MS, D44204-1MSD were used as the QC samples indicated.
- D44204-1,D44204-1MS/MSD, D44204-6: The pH of the sample was >2 at time of analysis.

Metals By Method SW846 6010C

| | |
|------------------|-------------------------|
| Matrix AQ | Batch ID: MP9626 |
|------------------|-------------------------|

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D44204-1FMS, D44204-1FMSD, D44204-1FSDL were used as the QC samples for the metals analysis.
- The matrix spike /matrix spike duplicate(MS/MSD) recovery(s) are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- The serial dilution RPD(s) for Iron, Potassium, Selenium are outside control limits for sample MP9626-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

Wet Chemistry By Method EPA 300.0/SW846 9056

Matrix AQ

Batch ID: GP9532

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D44172-5MS, D44172-5MSD were used as the QC samples for the Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate, Nitrogen, Nitrate analysis.
- D44204-2, D44204-4, D44204-9 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.

Matrix AQ

Batch ID: R16350

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16351

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16352

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16353

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16354

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16355

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16356

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16357

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16358

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Matrix AQ

Batch ID: R16359

- The data for EPA 300.0/SW846 9056 meets quality control requirements. Nitrogen, Nitrate + Nitrite: Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

Wet Chemistry By Method SM 2320B-2011

Matrix AQ **Batch ID:** GN19236

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D43868-1DUP, D43868-1MS, D43868-1MSD were used as the QC samples for the Alkalinity, Total as CaCO₃ analysis.

Matrix AQ **Batch ID:** GN19239

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix AQ **Batch ID:** GN19240

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix AQ **Batch ID:** GN19299

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D44047-1DUP, D44047-1MS, D44047-1MSD were used as the QC samples for the Alkalinity, Total as CaCO₃ analysis.

Matrix AQ **Batch ID:** GN19300

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix AQ **Batch ID:** GN19301

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM 2540C-2011

Matrix AQ **Batch ID:** GN19269

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D44198-2DUP were used as the QC samples for the Solids, Total Dissolved analysis.

Wet Chemistry By Method SM 5310B-2011

Matrix AQ **Batch ID:** GP9533

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D44138-2MS, D44138-2MSD, D44172-4DUP were used as the QC samples for the Total Organic Carbon analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D44204
Account: WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)
Collected: 03/07/13



| Lab Sample ID | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---------------|------------------|-----------------|----|-----|-------|--------|
|---------------|------------------|-----------------|----|-----|-------|--------|

D44204-1 RMV 216-21 MW1

| | | | | | | |
|--|------|-------|--|--|------|-----------------------|
| Alkalinity, Bicarbonate as CaCO3 | 729 | 5.0 | | | mg/l | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 729 | 5.0 | | | mg/l | SM 2320B-2011 |
| Chloride | 225 | 5.0 | | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 31.1 | 0.50 | | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 31.3 | 0.52 | | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 0.15 | 0.020 | | | mg/l | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3210 | 10 | | | mg/l | SM 2540C-2011 |
| Sulfate | 1390 | 25 | | | mg/l | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 6.0 | 1.0 | | | mg/l | SM 5310B-2011 |
| pH | 7.04 | | | | su | SM4500HB+ -2011/9040C |

D44204-1F RMV 216-21 MW1

| | | | | | | |
|-----------|--------|------|--|--|------|-------------|
| Calcium | 212000 | 400 | | | ug/l | SW846 6010C |
| Magnesium | 213000 | 200 | | | ug/l | SW846 6010C |
| Manganese | 369 | 5.0 | | | ug/l | SW846 6010C |
| Potassium | 6340 | 1000 | | | ug/l | SW846 6010C |
| Sodium | 446000 | 400 | | | ug/l | SW846 6010C |

D44204-2 RMV 216-21 MW2

| | | | | | | |
|--|------|------|--|--|------|-----------------------|
| Alkalinity, Bicarbonate as CaCO3 | 638 | 5.0 | | | mg/l | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 638 | 5.0 | | | mg/l | SM 2320B-2011 |
| Chloride | 17.0 | 2.5 | | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 25.9 | 0.50 | | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 25.9 | 0.52 | | | mg/l | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 2780 | 10 | | | mg/l | SM 2540C-2011 |
| Sulfate | 1350 | 25 | | | mg/l | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 5.4 | 1.0 | | | mg/l | SM 5310B-2011 |
| pH | 7.13 | | | | su | SM4500HB+ -2011/9040C |

D44204-2F RMV 216-21 MW2

| | | | | | | |
|-----------|--------|------|--|--|------|-------------|
| Calcium | 209000 | 400 | | | ug/l | SW846 6010C |
| Magnesium | 171000 | 200 | | | ug/l | SW846 6010C |
| Manganese | 48.8 | 5.0 | | | ug/l | SW846 6010C |
| Potassium | 6430 | 1000 | | | ug/l | SW846 6010C |
| Sodium | 343000 | 400 | | | ug/l | SW846 6010C |

D44204-3 RMV 216-21 MW3

| | | | | | | |
|----------------------------------|-----|-----|--|--|------|---------------|
| Alkalinity, Bicarbonate as CaCO3 | 567 | 5.0 | | | mg/l | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 567 | 5.0 | | | mg/l | SM 2320B-2011 |

Summary of Hits

Job Number: D44204
Account: WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)
Collected: 03/07/13



| Lab Sample ID | Client Sample ID | Result/ Analyte | Qual | RL | MDL | Units | Method |
|---------------------------------|------------------|--|--------|-------|-----|-------|-----------------------|
| | | Chloride | 29.2 | 2.5 | | mg/l | EPA 300.0/SW846 9056 |
| | | Nitrogen, Nitrate | 44.9 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| | | Nitrogen, Nitrate + Nitrite ^a | 44.9 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| | | Nitrogen, Nitrite | 0.040 | 0.020 | | mg/l | EPA 300.0/SW846 9056 |
| | | Solids, Total Dissolved | 2890 | 10 | | mg/l | SM 2540C-2011 |
| | | Sulfate | 1400 | 50 | | mg/l | EPA 300.0/SW846 9056 |
| | | Total Organic Carbon | 5.1 | 1.0 | | mg/l | SM 5310B-2011 |
| | | pH | 7.16 | | | su | SM4500HB+ -2011/9040C |
| D44204-3F RMV 216-21 MW3 | | | | | | | |
| | | Calcium | 222000 | 400 | | ug/l | SW846 6010C |
| | | Magnesium | 184000 | 200 | | ug/l | SW846 6010C |
| | | Manganese | 137 | 5.0 | | ug/l | SW846 6010C |
| | | Potassium | 6620 | 1000 | | ug/l | SW846 6010C |
| | | Sodium | 358000 | 400 | | ug/l | SW846 6010C |
| D44204-4 RMV 216-21 MW4 | | | | | | | |
| | | Alkalinity, Bicarbonate as CaCO3 | 577 | 5.0 | | mg/l | SM 2320B-2011 |
| | | Alkalinity, Total as CaCO3 | 577 | 5.0 | | mg/l | SM 2320B-2011 |
| | | Chloride | 15.6 | 2.5 | | mg/l | EPA 300.0/SW846 9056 |
| | | Nitrogen, Nitrate | 19.7 | 0.25 | | mg/l | EPA 300.0/SW846 9056 |
| | | Nitrogen, Nitrate + Nitrite ^a | 19.7 | 0.27 | | mg/l | EPA 300.0/SW846 9056 |
| | | Solids, Total Dissolved | 2980 | 10 | | mg/l | SM 2540C-2011 |
| | | Sulfate | 1480 | 50 | | mg/l | EPA 300.0/SW846 9056 |
| | | Total Organic Carbon | 4.9 | 1.0 | | mg/l | SM 5310B-2011 |
| | | pH | 7.14 | | | su | SM4500HB+ -2011/9040C |
| D44204-4F RMV 216-21 MW4 | | | | | | | |
| | | Calcium | 225000 | 400 | | ug/l | SW846 6010C |
| | | Magnesium | 183000 | 200 | | ug/l | SW846 6010C |
| | | Potassium | 6590 | 1000 | | ug/l | SW846 6010C |
| | | Sodium | 345000 | 400 | | ug/l | SW846 6010C |
| D44204-5 RMV 216-21 MW5 | | | | | | | |
| | | Alkalinity, Bicarbonate as CaCO3 | 565 | 5.0 | | mg/l | SM 2320B-2011 |
| | | Alkalinity, Total as CaCO3 | 565 | 5.0 | | mg/l | SM 2320B-2011 |
| | | Chloride | 325 | 13 | | mg/l | EPA 300.0/SW846 9056 |
| | | Nitrogen, Nitrate | 33.1 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| | | Nitrogen, Nitrate + Nitrite ^a | 33.1 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| | | Nitrogen, Nitrite | 0.031 | 0.020 | | mg/l | EPA 300.0/SW846 9056 |
| | | Solids, Total Dissolved | 3470 | 10 | | mg/l | SM 2540C-2011 |

Summary of Hits

Job Number: D44204
Account: WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)
Collected: 03/07/13



| Lab Sample ID | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---------------|------------------|-----------------|----|-----|-------|--------|
|---------------|------------------|-----------------|----|-----|-------|--------|

| | | | | | | |
|----------------------|--|------|-----|--|------|-----------------------|
| Sulfate | | 1480 | 50 | | mg/l | EPA 300.0/SW846 9056 |
| Total Organic Carbon | | 5.8 | 1.0 | | mg/l | SM 5310B-2011 |
| pH | | 7.07 | | | su | SM4500HB+ -2011/9040C |

D44204-5F RMV 216-21 MW5

| | | | | | | |
|-----------|--|--------|------|--|------|-------------|
| Calcium | | 221000 | 400 | | ug/l | SW846 6010C |
| Magnesium | | 234000 | 200 | | ug/l | SW846 6010C |
| Manganese | | 123 | 5.0 | | ug/l | SW846 6010C |
| Potassium | | 6510 | 1000 | | ug/l | SW846 6010C |
| Sodium | | 500000 | 400 | | ug/l | SW846 6010C |

D44204-6 RMV 216-21 MW6

| | | | | | | |
|--|--|------|-------|------|------|-----------------------|
| Benzene ^b | | 17.3 | 1.0 | 0.20 | ug/l | SW846 8021B |
| Alkalinity, Bicarbonate as CaCO ₃ | | 1050 | 5.0 | | mg/l | SM 2320B-2011 |
| Alkalinity, Total as CaCO ₃ | | 1050 | 5.0 | | mg/l | SM 2320B-2011 |
| Chloride | | 493 | 50 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | | 35.0 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | | 39.5 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | | 4.5 | 0.040 | | mg/l | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | | 3830 | 10 | | mg/l | SM 2540C-2011 |
| Sulfate | | 1460 | 50 | | mg/l | EPA 300.0/SW846 9056 |
| Total Organic Carbon | | 7.9 | 1.0 | | mg/l | SM 5310B-2011 |
| pH | | 7.04 | | | su | SM4500HB+ -2011/9040C |

D44204-6F RMV 216-21 MW6

| | | | | | | |
|-----------|--|--------|------|--|------|-------------|
| Calcium | | 217000 | 400 | | ug/l | SW846 6010C |
| Magnesium | | 252000 | 200 | | ug/l | SW846 6010C |
| Manganese | | 182 | 5.0 | | ug/l | SW846 6010C |
| Potassium | | 7070 | 1000 | | ug/l | SW846 6010C |
| Sodium | | 593000 | 400 | | ug/l | SW846 6010C |

D44204-7 RMV 216-21 MWX

| | | | | | | |
|--|--|-------|-------|--|------|----------------------|
| Alkalinity, Bicarbonate as CaCO ₃ | | 548 | 5.0 | | mg/l | SM 2320B-2011 |
| Alkalinity, Total as CaCO ₃ | | 548 | 5.0 | | mg/l | SM 2320B-2011 |
| Chloride | | 331 | 13 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | | 33.4 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | | 33.4 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | | 0.043 | 0.020 | | mg/l | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | | 3470 | 10 | | mg/l | SM 2540C-2011 |
| Sulfate | | 1480 | 50 | | mg/l | EPA 300.0/SW846 9056 |
| Total Organic Carbon | | 5.9 | 1.0 | | mg/l | SM 5310B-2011 |

Summary of Hits

Job Number: D44204
Account: WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)
Collected: 03/07/13



| Lab Sample ID | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|--|-----------------------|-----------------|-------|-----|-------|-----------------------|
| | | 7.12 | | | su | SM4500HB+ -2011/9040C |
| D44204-7F | RMV 216-21 MWX | | | | | |
| Calcium | | 221000 | 400 | | ug/l | SW846 6010C |
| Magnesium | | 234000 | 200 | | ug/l | SW846 6010C |
| Manganese | | 124 | 5.0 | | ug/l | SW846 6010C |
| Potassium | | 6290 | 1000 | | ug/l | SW846 6010C |
| Sodium | | 490000 | 400 | | ug/l | SW846 6010C |
| D44204-8 | RMV 216-21 MW7 | | | | | |
| Alkalinity, Bicarbonate as CaCO3 | | 727 | 5.0 | | mg/l | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | | 727 | 5.0 | | mg/l | SM 2320B-2011 |
| Chloride | | 215 | 5.0 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | | 24.6 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | | 24.6 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | | 0.024 | 0.020 | | mg/l | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | | 3330 | 10 | | mg/l | SM 2540C-2011 |
| Sulfate | | 1490 | 50 | | mg/l | EPA 300.0/SW846 9056 |
| Total Organic Carbon | | 7.2 | 1.0 | | mg/l | SM 5310B-2011 |
| pH | | 7.15 | | | su | SM4500HB+ -2011/9040C |
| D44204-8F | RMV 216-21 MW7 | | | | | |
| Calcium | | 224000 | 400 | | ug/l | SW846 6010C |
| Magnesium | | 219000 | 200 | | ug/l | SW846 6010C |
| Manganese | | 7.6 | 5.0 | | ug/l | SW846 6010C |
| Potassium | | 6460 | 1000 | | ug/l | SW846 6010C |
| Sodium | | 464000 | 400 | | ug/l | SW846 6010C |
| D44204-9 | RMV 216-21 MW8 | | | | | |
| Alkalinity, Bicarbonate as CaCO3 | | 822 | 5.0 | | mg/l | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | | 822 | 5.0 | | mg/l | SM 2320B-2011 |
| Chloride | | 319 | 13 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | | 33.9 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | | 33.9 | 1.0 | | mg/l | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | | 3490 | 10 | | mg/l | SM 2540C-2011 |
| Sulfate | | 1500 | 50 | | mg/l | EPA 300.0/SW846 9056 |
| Total Organic Carbon | | 6.4 | 1.0 | | mg/l | SM 5310B-2011 |
| pH | | 7.17 | | | su | SM4500HB+ -2011/9040C |

Summary of Hits

Job Number: D44204
Account: WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)
Collected: 03/07/13



| Lab Sample ID | Client Sample ID | Result/ Qual | RL | MDL | Units | Method |
|---------------|------------------|-----------------|----|-----|-------|--------|
|---------------|------------------|-----------------|----|-----|-------|--------|

D44204-9F RMV 216-21 MW8

| | | | | | | |
|-----------|--------|------|--|--|------|-------------|
| Calcium | 202000 | 400 | | | ug/l | SW846 6010C |
| Magnesium | 248000 | 200 | | | ug/l | SW846 6010C |
| Manganese | 13.3 | 5.0 | | | ug/l | SW846 6010C |
| Potassium | 6670 | 1000 | | | ug/l | SW846 6010C |
| Sodium | 494000 | 400 | | | ug/l | SW846 6010C |

D44204-10 RMV 216-21 MW9

| | | | | | | |
|--|------|-------|------|--|------|-----------------------|
| Benzene | 2.9 | 1.0 | 0.20 | | ug/l | SW846 8021B |
| Alkalinity, Bicarbonate as CaCO3 | 975 | 5.0 | | | mg/l | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 975 | 5.0 | | | mg/l | SM 2320B-2011 |
| Chloride | 427 | 13 | | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 46.8 | 1.0 | | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 50.1 | 1.0 | | | mg/l | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 3.3 | 0.040 | | | mg/l | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3830 | 10 | | | mg/l | SM 2540C-2011 |
| Sulfate | 1560 | 50 | | | mg/l | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 8.6 | 1.0 | | | mg/l | SM 5310B-2011 |
| pH | 7.03 | | | | su | SM4500HB+ -2011/9040C |

D44204-10F RMV 216-21 MW9

| | | | | | | |
|-----------|--------|------|--|--|------|-------------|
| Calcium | 256000 | 400 | | | ug/l | SW846 6010C |
| Magnesium | 266000 | 200 | | | ug/l | SW846 6010C |
| Manganese | 93.3 | 5.0 | | | ug/l | SW846 6010C |
| Potassium | 7730 | 1000 | | | ug/l | SW846 6010C |
| Sodium | 502000 | 400 | | | ug/l | SW846 6010C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

(b) The pH of the sample was > 2 at time of analysis.

Sample Results

Report of Analysis

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW1 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-1 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Method: SW846 8021B | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 ^a | TA18391.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 100% | | 60-140% |

(a) The pH of the sample was > 2 at time of analysis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.1
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW1 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-1 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|--------|-------|-------|----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 729 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 729 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Chloride | 225 | 5.0 | mg/l | 10 | 03/09/13 00:38 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 31.1 | 0.50 | mg/l | 50 | 03/08/13 20:52 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 31.3 | 0.52 | mg/l | 1 | 03/08/13 20:52 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 0.15 | 0.020 | mg/l | 5 | 03/08/13 14:16 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3210 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1390 | 25 | mg/l | 50 | 03/08/13 20:52 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 6.0 | 1.0 | mg/l | 1 | 03/12/13 09:05 | JML | SM 5310B-2011 |
| pH | 7.04 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW1 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-1F | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 212000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 213000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 369 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 6340 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 446000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.2
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW2 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-2 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Method: SW846 8021B | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | TA18394.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 101% | | 60-140% |

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.3
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW2 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-2 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|---------|-------|-------|----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 638 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 638 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Chloride | 17.0 | 2.5 | mg/l | 5 | 03/08/13 14:30 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 25.9 | 0.50 | mg/l | 50 | 03/08/13 21:06 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 25.9 | 0.52 | mg/l | 1 | 03/08/13 21:06 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite ^b | < 0.020 | 0.020 | mg/l | 5 | 03/08/13 14:30 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 2780 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1350 | 25 | mg/l | 50 | 03/08/13 21:06 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 5.4 | 1.0 | mg/l | 1 | 03/12/13 09:18 | JML | SM 5310B-2011 |
| pH | 7.13 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

(b) Elevated detection limit due to matrix interference.

RL = Reporting Limit

4.3

4

Report of Analysis

| | | |
|--|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW2 | | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-2F | | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 209000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 171000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 48.8 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 6430 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 343000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.4
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW3 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-3 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Method: SW846 8021B | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | TA18395.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 101% | | 60-140% |

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.5
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW3 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-3 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|--------|-------|-------|-----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 567 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO ₃ | 567 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Chloride | 29.2 | 2.5 | mg/l | 5 | 03/08/13 14:44 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 44.9 | 1.0 | mg/l | 100 | 03/08/13 21:20 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 44.9 | 1.0 | mg/l | 1 | 03/08/13 21:20 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 0.040 | 0.020 | mg/l | 5 | 03/08/13 14:44 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 2890 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1400 | 50 | mg/l | 100 | 03/08/13 21:20 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 5.1 | 1.0 | mg/l | 1 | 03/12/13 09:42 | JML | SM 5310B-2011 |
| pH | 7.16 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW3 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-3F | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analysed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 222000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 184000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 137 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 6620 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 358000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.6
4

Report of Analysis

| | | |
|--|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW4 | | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-4 | | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Method: SW846 8021B | | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | TA18396.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 102% | | 60-140% |

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.7
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW4 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-4 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|---------|-------|-------|-----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 577 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 577 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Chloride | 15.6 | 2.5 | mg/l | 5 | 03/08/13 14:58 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 19.7 | 0.25 | mg/l | 25 | 03/08/13 21:34 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 19.7 | 0.27 | mg/l | 1 | 03/08/13 21:34 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite ^b | < 0.020 | 0.020 | mg/l | 5 | 03/08/13 14:58 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 2980 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1480 | 50 | mg/l | 100 | 03/09/13 01:20 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 4.9 | 1.0 | mg/l | 1 | 03/12/13 09:53 | JML | SM 5310B-2011 |
| pH | 7.14 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

(b) Elevated detection limit due to matrix interference.

RL = Reporting Limit

4.7
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW4 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-4F | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 225000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 183000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | < 5.0 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 6590 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 345000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.8
4

Report of Analysis

| | | |
|--|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW5 | | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-5 | | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Method: SW846 8021B | | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | TA18397.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 101% | | 60-140% |

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.9
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW5 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-5 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|--------|-------|-------|-----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 565 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 565 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Chloride | 325 | 13 | mg/l | 25 | 03/09/13 01:34 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 33.1 | 1.0 | mg/l | 100 | 03/08/13 22:17 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 33.1 | 1.0 | mg/l | 1 | 03/08/13 22:17 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 0.031 | 0.020 | mg/l | 5 | 03/08/13 15:13 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3470 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1480 | 50 | mg/l | 100 | 03/08/13 22:17 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 5.8 | 1.0 | mg/l | 1 | 03/12/13 10:04 | JML | SM 5310B-2011 |
| pH | 7.07 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW5 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-5F | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 221000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 234000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 123 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 6510 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 500000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.10
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW6 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-6 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Method: SW846 8021B | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---------------------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 ^a | TA18398.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | 17.3 | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 103% | | 60-140% |

(a) The pH of the sample was > 2 at time of analysis.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.11
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW6 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-6 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|--------|-------|-------|-----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 1050 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 1050 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Chloride | 493 | 50 | mg/l | 100 | 03/08/13 22:31 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 35.0 | 1.0 | mg/l | 100 | 03/08/13 22:31 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 39.5 | 1.0 | mg/l | 1 | 03/08/13 22:45 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 4.5 | 0.040 | mg/l | 10 | 03/08/13 22:45 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3830 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1460 | 50 | mg/l | 100 | 03/08/13 22:31 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 7.9 | 1.0 | mg/l | 1 | 03/12/13 10:15 | JML | SM 5310B-2011 |
| pH | 7.04 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

RL = Reporting Limit

4.11
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW6 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-6F | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analized By | Method | Prep Method |
|-----------|--------|------|-------|----|-------------------|-------------|--------------------------|--------------------------|
| Calcium | 217000 | 400 | ug/l | 1 | 03/12/13 03/13/13 | JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 03/13/13 | JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 252000 | 200 | ug/l | 1 | 03/12/13 03/13/13 | JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 182 | 5.0 | ug/l | 1 | 03/12/13 03/13/13 | JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 7070 | 1000 | ug/l | 1 | 03/12/13 03/13/13 | JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 03/13/13 | JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 593000 | 400 | ug/l | 1 | 03/12/13 03/13/13 | JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.12
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MWX | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-7 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Method: SW846 8021B | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | TA18399.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 103% | | 60-140% |

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.13
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MWX | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-7 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|--------|-------|-------|-----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 548 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 548 | 5.0 | mg/l | 1 | 03/11/13 | JK | SM 2320B-2011 |
| Chloride | 331 | 13 | mg/l | 25 | 03/09/13 01:48 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 33.4 | 1.0 | mg/l | 100 | 03/08/13 22:59 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 33.4 | 1.0 | mg/l | 1 | 03/08/13 22:59 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 0.043 | 0.020 | mg/l | 5 | 03/08/13 16:38 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3470 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1480 | 50 | mg/l | 100 | 03/08/13 22:59 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 5.9 | 1.0 | mg/l | 1 | 03/12/13 10:28 | JML | SM 5310B-2011 |
| pH | 7.12 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

| | | |
|--|--|--------------------------------|
| Client Sample ID: RMV 216-21 MWX | | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-7F | | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 221000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 234000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 124 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 6290 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 490000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.14
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW7 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-8 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Method: SW846 8021B | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | TA18400.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 101% | | 60-140% |

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.15
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW7 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-8 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|--------|-------|-------|-----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 727 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO ₃ | 727 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Chloride | 215 | 5.0 | mg/l | 10 | 03/09/13 02:02 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 24.6 | 1.0 | mg/l | 100 | 03/08/13 23:13 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 24.6 | 1.0 | mg/l | 1 | 03/08/13 23:13 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 0.024 | 0.020 | mg/l | 5 | 03/08/13 16:52 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3330 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1490 | 50 | mg/l | 100 | 03/08/13 23:13 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 7.2 | 1.0 | mg/l | 1 | 03/12/13 10:41 | JML | SM 5310B-2011 |
| pH | 7.15 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

| | | |
|--|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW7 | | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-8F | | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | | |

4.16
4

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analysed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 224000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 219000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 7.6 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 6460 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 464000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

Report of Analysis

| | | |
|--|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW8 | | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-9 | | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Method: SW846 8021B | | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | TA18401.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 100% | | 60-140% |

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.17
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW8 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-9 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|---------|-------|-------|-----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 822 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO3 | 822 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Chloride | 319 | 13 | mg/l | 25 | 03/09/13 02:16 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 33.9 | 1.0 | mg/l | 100 | 03/08/13 23:27 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 33.9 | 1.0 | mg/l | 1 | 03/08/13 23:27 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite ^b | < 0.020 | 0.020 | mg/l | 5 | 03/08/13 17:06 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3490 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1500 | 50 | mg/l | 100 | 03/08/13 23:27 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 6.4 | 1.0 | mg/l | 1 | 03/12/13 10:54 | JML | SM 5310B-2011 |
| pH | 7.17 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

(b) Elevated detection limit due to matrix interference.

RL = Reporting Limit

4.17
 4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW8 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-9F | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 202000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 248000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 13.3 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 6670 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 494000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.18
4

Report of Analysis

| | | |
|--|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW9 | | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-10 | | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | | Percent Solids: n/a |
| Method: SW846 8021B | | |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | | |

| Run # | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------|-----------|----|----------|----|-----------|------------|------------------|
| Run #1 | TA18402.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| Run #2 | | | | | | | |

| Run # | Purge Volume |
|--------|--------------|
| Run #1 | 5.0 ml |
| Run #2 | |

Purgeable Aromatics

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | 2.9 | 1.0 | 0.20 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|----------|------------------------|--------|--------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 104% | | 60-140% |

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

4.19
4

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW9 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-10 | Date Received: 03/08/13 |
| Matrix: AQ - Ground Water | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

General Chemistry

| Analyte | Result | RL | Units | DF | Analyzed | By | Method |
|--|--------|-------|-------|-----|----------------|-----|-----------------------|
| Alkalinity, Bicarbonate as CaC | 975 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Alkalinity, Carbonate | < 5.0 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Alkalinity, Total as CaCO ₃ | 975 | 5.0 | mg/l | 1 | 03/14/13 | JK | SM 2320B-2011 |
| Chloride | 427 | 13 | mg/l | 25 | 03/09/13 02:30 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate | 46.8 | 1.0 | mg/l | 100 | 03/08/13 23:55 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrate + Nitrite ^a | 50.1 | 1.0 | mg/l | 1 | 03/08/13 23:55 | JML | EPA 300.0/SW846 9056 |
| Nitrogen, Nitrite | 3.3 | 0.040 | mg/l | 10 | 03/08/13 23:41 | JML | EPA 300.0/SW846 9056 |
| Solids, Total Dissolved | 3830 | 10 | mg/l | 1 | 03/12/13 | KB | SM 2540C-2011 |
| Sulfate | 1560 | 50 | mg/l | 100 | 03/08/13 23:55 | JML | EPA 300.0/SW846 9056 |
| Total Organic Carbon | 8.6 | 1.0 | mg/l | 1 | 03/12/13 11:05 | JML | SM 5310B-2011 |
| pH | 7.03 | | su | 1 | 03/08/13 15:25 | JD | SM4500HB+ -2011/9040C |

(a) Calculated as: (Nitrogen, Nitrate) + (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

| | |
|--|--------------------------------|
| Client Sample ID: RMV 216-21 MW9 | Date Sampled: 03/07/13 |
| Lab Sample ID: D44204-10F | Date Received: 03/08/13 |
| Matrix: AQ - Groundwater Filtered | Percent Solids: n/a |
| Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539) | |

Dissolved Metals Analysis

| Analyte | Result | RL | Units | DF | Prep | Analyzed By | Method | Prep Method |
|-----------|--------|------|-------|----|----------|-------------|--------------------------|--------------------------|
| Calcium | 256000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Iron | < 70 | 70 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Magnesium | 266000 | 200 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Manganese | 93.3 | 5.0 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Potassium | 7730 | 1000 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Selenium | < 50 | 50 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |
| Sodium | 502000 | 400 | ug/l | 1 | 03/12/13 | 03/13/13 JB | SW846 6010C ¹ | SW846 3010A ² |

(1) Instrument QC Batch: MA3365

(2) Prep QC Batch: MP9626

RL = Reporting Limit

4.20
4

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



WPX CHAIN OF CUSTODY

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-425-6021 FAX: 303-425-6854
www.accutest.com

| | |
|-------------------|------------------------------|
| FED-EX Tracking # | Bottle Order Control # |
| Accutest Quote # | Accutest Job # D44204 |

| Client / Reporting Information | | Project Information | | | | | | | | | | Requested Analysis (see TEST CODE sheet) | | | | | | Matrix Codes | |
|---|--------------------------------|---|------------|--------------------|--------------------------|----------------------------|-------------------------------------|--------------------|------------|--------------------|------------|---|------------|--------------------|------------|--------------------|--------------|--|------------|
| Company Name Olsson Associates | | Project Name: CORCCOGJ: | | | | | | | | | | BTEX - (8021B) Dissolved Metals LF (6010)* TOC - (SM20 5310B) TDS/pH - (2540C/SM4500) Alkalinity Series - (SM2320) Anions - (E300.0)* | | | | | | DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank | |
| Street Address 760 Horizon Drive Suite 102 | | RMV 216-21 GW Monitoring (012.1539) | | | | | | | | | | | | | | | | | |
| City Grand Junction, CO 81506 | | Billing Information (if different from Report to) Company Name WPX Energy Rocky Mountain, LLC (WILLCOP) | | | | | | | | | | | | | | | | | |
| Project Contact Email Tim Dobransky tdobransky@olssonassociates. | | Project # | | | | | | | | | | | | | | | | | |
| Phone # 970-263-7800 | | Client Purchase Order # NXEPPARACH | | | | | | | | | | | | | | | | | |
| Sampler(s) Name(s) | | Street Address 1058 County Road 215 | | | | | | | | | | | | | | | | | |
| | | City Parachute, CO 81635 | | | | | | | | | | | | | | | | | |
| | | Attention: Leo Braun | | | | | | | | | | | | | | | | | |
| | | Email Invoices: Leo.Braun@wpxenergy.com | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| Accutest Sample # | Field ID / Point of Collection | MECH/DI Vial # | Date | Time | Sampled by | Matrix | # of bottles | HCl | NO3H | HNO3 | H2SO4 | H2SO4 | NO3 | DI Water | MECH | ENCORE | LAB USE ONLY | | |
| | RMV 216-21 MW1 | | 3/7/13 | 1120 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 01 | |
| | RMV 216-21 MW2 | | 3/7/13 | 1400 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 02 | |
| | RMV 216-21 MW3 | | 3/7/13 | 1500 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 03 | |
| | RMV 216-21 MW4 | | 3/7/13 | 1235 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 04 | |
| | RMV 216-21 MW5 | | 3/7/13 | 1110 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 05 | |
| | RMV 216-21 MW6 | | 3/7/13 | 1240 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 06 | |
| | RMV 216-21 MWX | | 3/7/13 | 1122 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 07 | |
| | RMV 216-21 MW7 | | 3/7/13 | 0955 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 08 | |
| | RMV 216-21 MW8 | | 3/7/13 | 1010 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 09 | |
| | RMV 216-21 MW9 | | 3/7/13 | 1:30 | | GW | 8 | 3 | | | | | 1 | 4 | | | X X X X X X | 10 | |
| Turnaround Time (Business days) | | Data Deliverable Information | | | | | | | | | | Comments / Special Instructions | | | | | | | |
| <input type="checkbox"/> 5 Business Day Std. (per contract) <input type="checkbox"/> 3 Day Emergency <input type="checkbox"/> 2 Day Emergency <input type="checkbox"/> 1 Day Emergency | | Approved By (Accutest PM): / Date: JGM 12/6/12 Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> COMMBN <input type="checkbox"/> COMMBN+ <input type="checkbox"/> Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial BN = Results/QC/Narrative (+ = chromatograms) | | | | | | | | | | State Forms Required <input type="checkbox"/> Send Forms to State <input type="checkbox"/> Report by Fax <input type="checkbox"/> <input checked="" type="checkbox"/> Report by PDF <input type="checkbox"/> EDD Format Also email final report to: Karolina.Blaney@wpxenergy.com *Anions - NO2, NO3, SO4, Cl, nitrate-nitrite **Metals - Ca, Fe, K, Mg, Mn, Na, Se | | | | | | | |
| Emergency & Rush TIA data available VIA Lablink | | Sample Custody must be documented below each time samples change possession, including courier delivery. | | | | | | | | | | | | | | | | | |
| Relinquished by Sampler: | Date Time: | Received By: | Date Time: | Relinquished By: | Date Time: | Received By: | Date Time: | Relinquished By: | Date Time: | Received By: | Date Time: | Relinquished By: | Date Time: | Received By: | Date Time: | Relinquished By: | Date Time: | Received By: | Date Time: |
| <i>[Signature]</i> | 3/7/13 1545 | <i>[Signature]</i> | | <i>[Signature]</i> | | <i>[Signature]</i> | | <i>[Signature]</i> | | <i>[Signature]</i> | | <i>[Signature]</i> | | <i>[Signature]</i> | | <i>[Signature]</i> | | <i>[Signature]</i> | |
| Relinquished by Sampler: | Date Time: | Received By: | Date Time: | Relinquished By: | Date Time: | Received By: | Date Time: | Relinquished By: | Date Time: | Received By: | Date Time: | Relinquished By: | Date Time: | Received By: | Date Time: | Relinquished By: | Date Time: | Received By: | Date Time: |
| | | | | | | | | | | | | | | | | | | | |
| Relinquished by: | Date Time: | Received By: | Date Time: | Custody Seal # | Inlet | Preserved where applicable | On Ice | Cooler Temp. | | | | | | | | | | | |
| 5 | | 5 | | 4020 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 3.1 | | | | | | | | | | | |

5.1
5



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D44204

Client: OLSSON ASS.

Immediate Client Services Action Required: No

Date / Time Received: 3/8/2013 12:00:00 PM

No. Coolers: 2

Client Service Action Required at Login: No

Project: CORCCOGJ

Airbill #'s: HD-CO

| <u>Cooler Security</u> | <u>Y or N</u> | | <u>Y or N</u> | |
|---------------------------|-------------------------------------|--------------------------|------------------------|--|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smp'l Dates/Time OK | <input checked="" type="checkbox"/> <input type="checkbox"/> |

| <u>Cooler Temperature</u> | <u>Y or N</u> | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | Infrared gun | |
| 3. Cooler media: | Ice (bag) | |

| <u>Quality Control Preservation</u> | <u>Y or N</u> | | <u>N/A</u> |
|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| <u>Sample Integrity - Documentation</u> | <u>Y or N</u> | |
|---|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| <u>Sample Integrity - Condition</u> | <u>Y or N</u> | |
|-------------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

| <u>Sample Integrity - Instructions</u> | <u>Y or N</u> | | <u>N/A</u> |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume rec'd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

5.1
5

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D44204
Account: WILLCOP WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| GTA1047-MB | TA18389.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |

The QC reported here applies to the following samples:

Method: SW846 8021B

D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|-----------|-----------------|--------|-----|------|-------|---|
| 71-43-2 | Benzene | ND | 1.0 | 0.20 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 2.0 | 1.0 | ug/l | |
| 108-88-3 | Toluene | ND | 2.0 | 1.0 | ug/l | |
| 1330-20-7 | Xylenes (total) | ND | 2.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Limits |
|----------|------------------------|--------------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 102% 60-140% |

Blank Spike Summary

Job Number: D44204
Account: WILLCOP WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|------------|-----------|----|----------|----|-----------|------------|------------------|
| GTA1047-BS | TA18390.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |

The QC reported here applies to the following samples: **Method:** SW846 8021B

D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|-----------|-----------------|---------------|-------------|----------|--------|
| 71-43-2 | Benzene | 27.2 | 26.3 | 97 | 70-130 |
| 100-41-4 | Ethylbenzene | 45.6 | 43.0 | 94 | 70-130 |
| 108-88-3 | Toluene | 212 | 193 | 91 | 70-130 |
| 1330-20-7 | Xylenes (total) | 216 | 211 | 98 | 70-130 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|----------|------------------------|------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 106% | 60-140% |

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D44204
Account: WILLCOP WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|--------------------------|-----------|----|----------|----|-----------|------------|------------------|
| D44204-1MS ^a | TA18392.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| D44204-1MSD ^a | TA18393.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |
| D44204-1 ^a | TA18391.D | 1 | 03/11/13 | BR | n/a | n/a | GTA1047 |

The QC reported here applies to the following samples:

Method: SW846 8021B

D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10

| CAS No. | Compound | D44204-1 ug/l | Spike Q ug/l | MS ug/l | MS % | MSD ug/l | MSD % | RPD | Limits Rec/RPD |
|-----------|-----------------|------------------|--------------------|------------|---------|-------------|----------|-----|-------------------|
| 71-43-2 | Benzene | ND | 27.2 | 27.9 | 103 | 26.2 | 96 | 6 | 55-133/30 |
| 100-41-4 | Ethylbenzene | ND | 45.6 | 42.3 | 93 | 41.9 | 92 | 1 | 63-130/30 |
| 108-88-3 | Toluene | ND | 212 | 189 | 89 | 188 | 89 | 1 | 70-130/30 |
| 1330-20-7 | Xylenes (total) | ND | 216 | 207 | 96 | 205 | 95 | 1 | 64-130/30 |

| CAS No. | Surrogate Recoveries | MS | MSD | D44204-1 | Limits |
|----------|------------------------|------|------|----------|---------|
| 120-82-1 | 1,2,4-Trichlorobenzene | 104% | 102% | 100% | 60-140% |

(a) The pH of the sample was > 2 at time of analysis.

* = Outside of Control Limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D44204
Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 03/12/13

| Metal | RL | IDL | MDL | MB raw | final |
|------------|------|-----|-----|-----------|-------|
| Aluminum | 100 | 21 | 25 | | |
| Antimony | 30 | 3.6 | 3.6 | | |
| Arsenic | 25 | 5.4 | 8.4 | | |
| Barium | 10 | .8 | 1.8 | | |
| Beryllium | 10 | 1.3 | 3.1 | | |
| Boron | 50 | 4.3 | 4.4 | | |
| Cadmium | 10 | .6 | .59 | | |
| Calcium | 400 | 8.4 | 16 | 3.6 | <400 |
| Chromium | 10 | .3 | .56 | | |
| Cobalt | 5.0 | .4 | .42 | | |
| Copper | 10 | 1.2 | 3 | | |
| Iron | 70 | 1.9 | 20 | -0.20 | <70 |
| Lead | 50 | 2.4 | 2.9 | | |
| Lithium | 2.0 | 2.8 | | | |
| Magnesium | 200 | 22 | 22 | 2.9 | <200 |
| Manganese | 5.0 | 1.2 | 1.2 | 0.10 | <5.0 |
| Molybdenum | 10 | 2.1 | 2.1 | | |
| Nickel | 30 | .5 | .57 | | |
| Phosphorus | 100 | 14 | 59 | | |
| Potassium | 1000 | 150 | 150 | 33.3 | <1000 |
| Selenium | 50 | 6.1 | 11 | 1.9 | <50 |
| Silicon | 50 | 6.5 | | | |
| Silver | 30 | .5 | .98 | | |
| Sodium | 400 | 21 | 98 | 8.3 | <400 |
| Strontium | 5.0 | .2 | 1.5 | | |
| Thallium | 10 | 2.9 | 8.6 | | |
| Tin | 50 | 12 | | | |
| Titanium | 10 | .1 | | | |
| Uranium | 50 | 4.6 | 4.6 | | |
| Vanadium | 10 | .3 | .48 | | |
| Zinc | 30 | .8 | 2.4 | | |

Associated samples MP9626: D44204-1F, D44204-2F, D44204-3F, D44204-4F, D44204-5F, D44204-6F, D44204-7F, D44204-8F, D44204-9F, D44204-10F

Results < IDL are shown as zero for calculation purposes

7.1.1
7

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D44204
Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(*) Outside of QC limits
(anr) Analyte not requested

7.1.1
7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D44204
 Account: WILLCOP - WPX Energy Rocky Mountain, LLC
 Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 03/12/13

| Metal | D44204-1F Original MS | | SpikeLot ICPAL2 | % Rec | QC Limits |
|------------|--------------------------|--------|--------------------|-----------|--------------|
| Aluminum | | | | | |
| Antimony | | | | | |
| Arsenic | | | | | |
| Barium | | | | | |
| Beryllium | | | | | |
| Boron | | | | | |
| Cadmium | | | | | |
| Calcium | 212000 | 228000 | 25000 | 64.0 (a) | 75-125 |
| Chromium | | | | | |
| Cobalt | | | | | |
| Copper | | | | | |
| Iron | 5.6 | 5330 | 5000 | 106.5 | 75-125 |
| Lead | | | | | |
| Lithium | | | | | |
| Magnesium | 213000 | 239000 | 25000 | 104.0 | 75-125 |
| Manganese | 369 | 831 | 500 | 92.4 | 75-125 |
| Molybdenum | | | | | |
| Nickel | | | | | |
| Phosphorus | | | | | |
| Potassium | 6340 | 38200 | 25000 | 127.4N(b) | 75-125 |
| Selenium | 26.6 | 1100 | 1000 | 107.3 | 75-125 |
| Silicon | | | | | |
| Silver | | | | | |
| Sodium | 446000 | 471000 | 25000 | 100.0 | 75-125 |
| Strontium | | | | | |
| Thallium | | | | | |
| Tin | | | | | |
| Titanium | | | | | |
| Uranium | | | | | |
| Vanadium | | | | | |
| Zinc | | | | | |

Associated samples MP9626: D44204-1F, D44204-2F, D44204-3F, D44204-4F, D44204-5F, D44204-6F, D44204-7F, D44204-8F, D44204-9F, D44204-10F

Results < IDL are shown as zero for calculation purposes

7.12
 7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D44204
Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

7.1.2

7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D44204
 Account: WILLCOP - WPX Energy Rocky Mountain, LLC
 Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 03/12/13

| Metal | D44204-1F Original MSD | | SpikeLot ICPAL2 % Rec | | MSD RPD | QC Limit |
|------------|---------------------------|--------|--------------------------|-----------|------------|-------------|
| Aluminum | | | | | | |
| Antimony | | | | | | |
| Arsenic | | | | | | |
| Barium | | | | | | |
| Beryllium | | | | | | |
| Boron | | | | | | |
| Cadmium | | | | | | |
| Calcium | 212000 | 229000 | 25000 | 68.0 (a) | 0.4 | 20 |
| Chromium | | | | | | |
| Cobalt | | | | | | |
| Copper | | | | | | |
| Iron | 5.6 | 5340 | 5000 | 106.7 | 0.2 | 20 |
| Lead | | | | | | |
| Lithium | | | | | | |
| Magnesium | 213000 | 237000 | 25000 | 96.0 | 0.8 | 20 |
| Manganese | 369 | 831 | 500 | 92.4 | 0.0 | 20 |
| Molybdenum | | | | | | |
| Nickel | | | | | | |
| Phosphorus | | | | | | |
| Potassium | 6340 | 37900 | 25000 | 126.2N(b) | 0.8 | 20 |
| Selenium | 26.6 | 1110 | 1000 | 108.3 | 0.9 | 20 |
| Silicon | | | | | | |
| Silver | | | | | | |
| Sodium | 446000 | 473000 | 25000 | 108.0 | 0.4 | 20 |
| Strontium | | | | | | |
| Thallium | | | | | | |
| Tin | | | | | | |
| Titanium | | | | | | |
| Uranium | | | | | | |
| Vanadium | | | | | | |
| Zinc | | | | | | |

Associated samples MP9626: D44204-1F, D44204-2F, D44204-3F, D44204-4F, D44204-5F, D44204-6F, D44204-7F, D44204-8F, D44204-9F, D44204-10F

Results < IDL are shown as zero for calculation purposes

7.12
 7

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D44204
Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

- (*) Outside of QC limits
- (N) Matrix Spike Rec. outside of QC limits
- (anr) Analyte not requested
- (a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.
- (b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

7.1.2

7

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D44204
 Account: WILLCOP - WPX Energy Rocky Mountain, LLC
 Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 03/12/13

| Metal | BSP Result | Spikelot ICPALL2 | % Rec | QC Limits |
|------------|------------|------------------|-------|-----------|
| Aluminum | | | | |
| Antimony | | | | |
| Arsenic | | | | |
| Barium | | | | |
| Beryllium | | | | |
| Boron | | | | |
| Cadmium | | | | |
| Calcium | 25200 | 25000 | 100.8 | 80-120 |
| Chromium | | | | |
| Cobalt | | | | |
| Copper | | | | |
| Iron | 5320 | 5000 | 106.4 | 80-120 |
| Lead | | | | |
| Lithium | | | | |
| Magnesium | 26000 | 25000 | 104.0 | 80-120 |
| Manganese | 481 | 500 | 96.2 | 80-120 |
| Molybdenum | | | | |
| Nickel | | | | |
| Phosphorus | | | | |
| Potassium | 27000 | 25000 | 108.0 | 80-120 |
| Selenium | 1010 | 1000 | 101.0 | 80-120 |
| Silicon | | | | |
| Silver | | | | |
| Sodium | 26600 | 25000 | 106.4 | 80-120 |
| Strontium | | | | |
| Thallium | | | | |
| Tin | | | | |
| Titanium | | | | |
| Uranium | | | | |
| Vanadium | | | | |
| Zinc | | | | |

Associated samples MP9626: D44204-1F, D44204-2F, D44204-3F, D44204-4F, D44204-5F, D44204-6F, D44204-7F, D44204-8F, D44204-9F, D44204-10F

Results < IDL are shown as zero for calculation purposes

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D44204

Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(*) Outside of QC limits
(anr) Analyte not requested

7.1.3

7

SERIAL DILUTION RESULTS SUMMARY

Login Number: D44204
 Account: WILLCOP - WPX Energy Rocky Mountain, LLC
 Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
 Matrix Type: AQUEOUS

Methods: SW846 6010C
 Units: ug/l

Prep Date: 03/12/13

| Metal | D44204-1F Original SDL 1:5 | | %DIF | QC Limits |
|------------|-------------------------------|--------|----------|--------------|
| Aluminum | | | | |
| Antimony | | | | |
| Arsenic | | | | |
| Barium | | | | |
| Beryllium | | | | |
| Boron | | | | |
| Cadmium | | | | |
| Calcium | 212000 | 219000 | 3.3 | 0-10 |
| Chromium | | | | |
| Cobalt | | | | |
| Copper | | | | |
| Iron | 0.00 | 0.00 | NC (a) | 0-10 |
| Lead | | | | |
| Lithium | | | | |
| Magnesium | 209000 | 234000 | 9.7 | 0-10 |
| Manganese | 368 | 363 | 1.8 | 0-10 |
| Molybdenum | | | | |
| Nickel | | | | |
| Phosphorus | | | | |
| Potassium | 6340 | 5590 | 11.9 (a) | 0-10 |
| Selenium | 26.6 | 0.00 | 100.0(a) | 0-10 |
| Silicon | | | | |
| Silver | | | | |
| Sodium | 444000 | 478000 | 7.0 | 0-10 |
| Strontium | | | | |
| Thallium | | | | |
| Tin | | | | |
| Titanium | | | | |
| Uranium | | | | |
| Vanadium | | | | |
| Zinc | | | | |

Associated samples MP9626: D44204-1F, D44204-2F, D44204-3F, D44204-4F, D44204-5F, D44204-6F, D44204-7F, D44204-8F, D44204-9F, D44204-10F

Results < IDL are shown as zero for calculation purposes

7.1.4
 7

SERIAL DILUTION RESULTS SUMMARY

Login Number: D44204
Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

QC Batch ID: MP9626
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

- (*) Outside of QC limits
- (anr) Analyte not requested
- (a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D44204
Account: WILLCOPI - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

| Analyte | Batch ID | RL | MB Result | Units | Spike Amount | BSP Result | BSP %Recov | QC Limits |
|--------------------------------|----------------|--------|-----------|-------|--------------|------------|------------|------------|
| Alkalinity, Bicarbonate as CaC | GN19239 | 5.0 | 0.0 | mg/l | 100 | 102 | 101.5 | 90-110% |
| Alkalinity, Bicarbonate as CaC | GN19300 | 5.0 | 0.0 | mg/l | 100 | 101 | 101.3 | 90-110% |
| Alkalinity, Carbonate | GN19240 | 5.0 | 0.0 | mg/l | 100 | 102 | 101.5 | 80-120% |
| Alkalinity, Carbonate | GN19301 | 5.0 | 0.0 | mg/l | 100 | 101 | 101.3 | 80-120% |
| Alkalinity, Total as CaCO3 | GN19236 | 5.0 | 0.0 | mg/l | 100 | 102 | 101.5 | 90-110% |
| Alkalinity, Total as CaCO3 | GN19299 | 5.0 | 0.0 | mg/l | 100 | 101 | 101.3 | 90-110% |
| Bromide | GP9532/GN19253 | 0.050 | 0.0 | mg/l | 20 | 20.5 | 102.5 | 90-110% |
| Chloride | GP9532/GN19253 | 0.50 | 0.25 | mg/l | 20 | 19.8 | 99.0 | 90-110% |
| Nitrogen, Nitrate | GP9532/GN19253 | 0.010 | 0.0 | mg/l | 4.52 | 4.36 | 96.5 | 90-110% |
| Nitrogen, Nitrite | GP9532/GN19253 | 0.0040 | 0.0 | mg/l | 6.09 | 6.18 | 101.5 | 90-110% |
| Solids, Total Dissolved | GN19269 | 10 | 0.0 | mg/l | 400.0 | 401 | 100.3 | 90-110% |
| Sulfate | GP9532/GN19253 | 0.50 | 0.0 | mg/l | 30 | 30.2 | 100.7 | 90-110% |
| Total Organic Carbon | GP9533/GN19258 | 1.0 | 0.0 | mg/l | 8.82 | 8.79 | 99.7 | 90-110% |
| pH | GN19225 | | | su | 8.00 | 7.97 | 99.6 | 99.3-100.7 |

Associated Samples:

Batch GP9532: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10
 Batch GP9533: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10
 Batch GN19225: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10
 Batch GN19236: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7
 Batch GN19239: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7
 Batch GN19240: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7
 Batch GN19269: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10
 Batch GN19299: D44204-8, D44204-9, D44204-10
 Batch GN19300: D44204-8, D44204-9, D44204-10
 Batch GN19301: D44204-8, D44204-9, D44204-10
 (*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D44204
Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

| Analyte | Batch ID | QC Sample | Units | Original Result | DUP Result | RPD | QC Limits |
|----------------------------|----------------|-----------|-------|-----------------|------------|-----|-----------|
| Alkalinity, Total as CaCO3 | GN19236 | D43868-1 | mg/l | 137 | 134 | 2.2 | 0-20% |
| Alkalinity, Total as CaCO3 | GN19299 | D44047-1 | mg/l | 153 | 158 | 3.3 | 0-20% |
| Solids, Total Dissolved | GN19269 | D44198-2 | mg/l | 22900 | 22900 | 0.0 | 0-20% |
| Total Organic Carbon | GP9533/GN19258 | D44172-4 | mg/l | 2.2 | 2.1 | 4.7 | 0-20% |

Associated Samples:

Batch GP9533: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10
Batch GN19236: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7

Batch GN19269: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10

Batch GN19299: D44204-8, D44204-9, D44204-10

(*) Outside of QC limits

8.2

8

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D44204
Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

| Analyte | Batch ID | QC Sample | Units | Original Result | Spike Amount | MS Result | %Rec | QC Limits |
|----------------------------|----------------|-----------|-------|-----------------|--------------|-----------|-------|-----------|
| Alkalinity, Total as CaCO3 | GN19236 | D43868-1 | mg/l | 137 | 100 | 231 | 93.7 | 80-120% |
| Alkalinity, Total as CaCO3 | GN19299 | D44047-1 | mg/l | 153 | 100 | 256 | 103.5 | 80-120% |
| Bromide | GP9532/GN19253 | D44172-5 | mg/l | 0.73 | 12.5 | 13.8 | 104.6 | 80-120% |
| Nitrogen, Nitrate | GP9532/GN19253 | D44172-5 | mg/l | 0.59 | 2.83 | 3.4 | 99.5 | 80-120% |
| Nitrogen, Nitrite | GP9532/GN19253 | D44172-5 | mg/l | 0.0 | 1.52 | 1.5 | 98.5 | 80-120% |
| Sulfate | GP9532/GN19253 | D44172-5 | mg/l | 48.1 | 50 | 99.8 | 103.4 | 80-120% |
| Total Organic Carbon | GP9533/GN19258 | D44138-2 | mg/l | 4.0 | 10 | 14.5 | 105.0 | 80-120% |

Associated Samples:

Batch GP9532: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10

Batch GP9533: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10

Batch GN19236: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7

Batch GN19299: D44204-8, D44204-9, D44204-10

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits



MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D44204
Account: WILLCOP - WPX Energy Rocky Mountain, LLC
Project: CORCCOGJ: RMV 216-21 GW Monitoring(012.1539)

| Analyte | Batch ID | QC Sample | Units | Original Result | Spike Amount | MSD Result | RPD | QC Limit |
|----------------------------|----------------|-----------|-------|-----------------|--------------|------------|-----|----------|
| Alkalinity, Total as CaCO3 | GN19236 | D43868-1 | mg/l | 137 | 100 | 233 | 0.9 | 20% |
| Alkalinity, Total as CaCO3 | GN19299 | D44047-1 | mg/l | 153 | 100 | 257 | 0.3 | 20% |
| Bromide | GP9532/GN19253 | D44172-5 | mg/l | 0.73 | 12.5 | 14.6 | 5.6 | 20% |
| Nitrogen, Nitrate | GP9532/GN19253 | D44172-5 | mg/l | 0.59 | 2.83 | 3.6 | 5.7 | 20% |
| Nitrogen, Nitrite | GP9532/GN19253 | D44172-5 | mg/l | 0.0 | 1.52 | 1.5 | 0.0 | 20% |
| Sulfate | GP9532/GN19253 | D44172-5 | mg/l | 48.1 | 50 | 103 | 3.2 | 20% |
| Total Organic Carbon | GP9533/GN19258 | D44138-2 | mg/l | 4.0 | 10 | 14.6 | 0.7 | 20% |

Associated Samples:

Batch GP9532: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10

Batch GP9533: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7, D44204-8, D44204-9, D44204-10

Batch GN19236: D44204-1, D44204-2, D44204-3, D44204-4, D44204-5, D44204-6, D44204-7

Batch GN19299: D44204-8, D44204-9, D44204-10

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

8.4

8