

# ESN

ROCKY MOUNTAIN

ENVIRONMENTAL  
SERVICES NETWORK

Thursday, September 14, 2006

Mr. Dion Plsek  
Cordilleran Compliance Services  
826 21 1/2 Road  
Grand Junction, CO 81505

RE: Divide Creek

Order No.: 0609004

Dear Mr. Dion Plsek:

ESN Rocky Mountain received 1 sample(s) on 9/6/2006 for the analyses presented in the following report.

Enclosed are the analytical results and quality control data for the project carried out at our laboratory in Golden, Colorado.

These results are accompanied by a project narrative which discuss sample receipt, holding times and methods used for analysis.

Any unusual circumstances related to this project that effect the results are discussed in the narrative.

If you should have any questions, please call.

Sincerely,



Steve Merritt

## ESN Rocky Mountain

Date: 14-Sep-06

CLIENT: Cordilleran Compliance Services  
Project: Divide Creek  
Lab Order: 0609004

## CASE NARRATIVE

Samples were received on 9/6/06 from Cordilleran Compliance Services and were accompanied by a chain of custody form. The samples and their containers appeared to be in good condition and the chain of custody form was complete and accurate.

All samples were received and analyzed within the EPA recommended holding times.

Samples were analyzed using the methods outlined in the following references:  
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition and  
EPA Methods for Chemical Analysis of Water and Wastes (MCAWW).

Calibration - The laboratory instruments are calibrated using method appropriate standards. On each day project samples are analyzed the instrument calibration is verified using a mid level Continuing Calibration Verification (CCV). Calculations are carried out by the data system to compute the actual concentration of analyte in the original sample.

Method Blanks, Trip Blanks and Instrument Blanks - Blanks are analyzed after each initial calibration, continuing calibration verification, and after samples determined to have high concentrations of analytes to verify system cleanliness. Method blanks are analyzed to verify the cleanliness of procedures requiring sample preparation prior to analysis. Trip blanks are prepared by the laboratory and accompany the samples to verify that there was no contamination during transport.

Surrogate Recoveries - Some methods require the addition of surrogate compounds and are monitored to determine the efficacy of the analyte recovery from the sample matrix. In cases where multiple surrogates are added at least one must be recovered within Quality Control limits for the data to be accepted.

Batch QC - Prior to analysis, the project samples are associated with a QC batch. This batch is then prepared and analyzed along with QC samples prepared at the same time and using the same reagents and standards. The QC samples associated with a sample batch may include Method Blanks (MB), Laboratory Control Samples (LCS), Sample Duplicates (DUP), and Matrix Spikes (MS). The results of the batch QC samples are included in the QC section of the report.

Analyst Comments:  
None.



Steve Merritt  
Laboratory Manager

# ESN Rocky Mountain

Date: 14-Sep-06

**CLIENT:** Cordilleran Compliance Services **Client Sample ID:** 090506-DCS2  
**Lab Order:** 0609004 **Tag Number:**  
**Project:** Divide Creek **Collection Date:** 9/5/2006 10:50:00 AM  
**Lab ID:** 0609004-001A **Date Received:** 9/6/2006 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>DISSOLVED HYDROCARBONS IN WATER</b>						
Methane	2.69	0.068		µg/L	1	9/7/2006
						Analyst: BG
<b>ICP METALS, TOTAL</b>						
Sodium	110	5.0		mg/L	1	9/11/2006 1:34:00 PM
						Analyst: SV
<b>VOLATILES BY GC/MS</b>						
Benzene	ND	0.25		µg/L	1	9/7/2006
Ethylbenzene	ND	0.25		µg/L	1	9/7/2006
m,p-Xylene	ND	0.50		µg/L	1	9/7/2006
Methyl tert-butyl ether	ND	0.25		µg/L	1	9/7/2006
o-Xylene	ND	0.25		µg/L	1	9/7/2006
Toluene	ND	0.25		µg/L	1	9/7/2006
Surr: 4-Bromofluorobenzene	109	70-130		%REC	1	9/7/2006
Surr: Dibromofluoromethane	96.3	70-130		%REC	1	9/7/2006
Surr: Toluene-d8	99.1	70-130		%REC	1	9/7/2006
						Analyst: RB
<b>SPECIFIC CONDUCTANCE</b>						
Specific Conductance	870	2.0		µmhos/cm	1	9/6/2006
						Analyst: SV
<b>LABORATORY HYDROGEN ION (PH)</b>						
Hydrogen Ion (pH)	8.36	0.10		pH Units	1	9/6/2006
						Analyst: SV
<b>RESIDUE, DISSOLVED (TDS)</b>						
Total Dissolved Solids (Residue, Filterable)	575	10		mg/L	1	9/6/2006
						Analyst: SV
<b>ANIONS</b>						
Chloride	18.2	1.00		mg/L	1	9/6/2006
						Analyst: SV

**Qualifiers:** \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

**Lab Order:** 0609004  
**Client:** Cordilleran Compliance Services  
**Project:** Divide Creek

**DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
0609004-001A	090506-DCS2	9/5/2006 10:50:00 AM	Water	Anions		9/6/2006	9/6/2006
				Dissolved Hydrocarbons in water		9/7/2006	9/7/2006
				ICP METALS, Total		9/6/2006	9/11/2006
				Laboratory Hydrogen Ion (pH)		9/6/2006	9/6/2006
				Residue, Dissolved (TDS)		9/6/2006	9/6/2006
				Specific Conductance		9/6/2006	9/6/2006
				Volatiles by GC/MS		9/7/2006	9/7/2006

ESN Rocky Mountain

ANALYTICAL QC SUMMARY REPORT

CLIENT: Cordilleran Compliance Services  
 Work Order: 0609004  
 Project: Divide Creek

TestCode: 120.1

Sample ID: 0609004-001ADUP	SampType: DUP	TestCode: 120.1	Units: µmhos/cm	Prep Date: 9/6/2006	RunNo: 796						
Client ID: 090506-DCS2	Batch ID: 719	TestNo: E120.1	(E120.1)	Analysis Date: 9/6/2006	SeqNo: 8626						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Specific Conductance	857.0	2.00						870	1.51	20	

Qualifiers: E Value above quantitation range H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits S Spike Recovery outside accepted recovery limits

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Cordilleran Compliance Services  
**Work Order:** 0609004  
**Project:** Divide Creek

**TestCode: 150.1**

Sample ID: 0609004-001ADUP	SampType: DUP	TestCode: 150.1	Units: pH Units	Prep Date: 9/6/2006	RunNo: 795
Client ID: 090506-DCS2	Batch ID: 720	TestNo: E150.1	(E150.1)	Analysis Date: 9/6/2006	SeqNo: 8624
Analyte	Result	PQL	SPK value	SPK RefVal	%REC
Hydrogen Ion (pH)	8.410	0.100			
				LowLimit	HighLimit
				RPD Ref Val	RPD Limit
				8.36	0.596
					20

**Qualifiers:** E Value above quantitation range      H Holding times for preparation or analysis exceeded      J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit      R RPD outside accepted recovery limits      S Spike Recovery outside accepted recovery limits

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Cordilleran Compliance Services  
**Work Order:** 0609004  
**Project:** Divide Creek

**TestCode: 160.1**

Sample ID: <b>MBLK-718</b>	SampType: <b>MBLK</b>	TestCode: <b>160.1</b>	Units: <b>mg/L</b>	Prep Date: <b>9/6/2006</b>	RunNo: <b>798</b>						
Client ID: <b>ZZZZZ</b>	Batch ID: <b>718</b>	TestNo: <b>E160.1</b>	( <b>E160.1</b> )	Analysis Date: <b>9/6/2006</b>	SeqNo: <b>8638</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%RPD	RPDLimit	Qual				
Total Dissolved Solids (Residue, Filtera		ND	10.0								
Sample ID: <b>0609004-001ADUP</b>	SampType: <b>DUP</b>	TestCode: <b>160.1</b>	Units: <b>mg/L</b>	Prep Date: <b>9/6/2006</b>	RunNo: <b>798</b>						
Client ID: <b>090506-DCS2</b>	Batch ID: <b>718</b>	TestNo: <b>E160.1</b>	( <b>E160.1</b> )	Analysis Date: <b>9/6/2006</b>	SeqNo: <b>8637</b>						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Dissolved Solids (Residue, Filtera		582.0	10.0		575	1.21				20	

**Qualifiers:** E Value above quantitation range      H Holding times for preparation or analysis exceeded      J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit      R RPD outside accepted recovery limits      S Spike Recovery outside accepted recovery limits

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Cordilleran Compliance Services  
**Work Order:** 0609004  
**Project:** Divide Creek

**TestCode: 8260B\_BTEX\_W**

Sample ID: MBLK-730	SampType: MBLK	TestCode: 8260B_BTEX	Units: µg/L	Prep Date: 9/7/2006	RunNo: 818						
Client ID: ZZZZZ	Batch ID: 730	TestNo: SW8260B	(5030B)	Analysis Date: 9/7/2006	SeqNo: 8822						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual

Benzene	ND	0.500									
Ethylbenzene	ND	0.500									
m,p-Xylene	ND	1.00									
Methyl tert-butyl ether	ND	0.500									
o-Xylene	ND	0.500									
Toluene	ND	0.500									
Surr: 4-Bromofluorobenzene	11.20	0	10	0	112	70	130				
Surr: Dibromofluoromethane	10.99	0	10	0	110	70	130				
Surr: Toluene-d8	10.32	0	10	0	103	70	130				

Sample ID: LCS-730	SampType: LCS	TestCode: 8260B_BTEX	Units: µg/L	Prep Date: 9/7/2006	RunNo: 818						
Client ID: ZZZZZ	Batch ID: 730	TestNo: SW8260B	(5030B)	Analysis Date: 9/7/2006	SeqNo: 8823						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual

Benzene	9.847	0.500	10	0	98.5	70	130				
Ethylbenzene	9.356	0.500	10	0	93.6	70	130				
m,p-Xylene	18.66	1.00	20	0	93.3	70	130				
Methyl tert-butyl ether	10.75	0.500	10	0	107	70	130				
o-Xylene	9.237	0.500	10	0	92.4	70	130				
Toluene	9.333	0.500	10	0	93.3	70	130				
Surr: 4-Bromofluorobenzene	9.888	0	10	0	98.9	70	130				
Surr: Dibromofluoromethane	10.44	0	10	0	104	70	130				
Surr: Toluene-d8	10.17	0	10	0	102	70	130				

Sample ID: 0609004-001AMS	SampType: MS	TestCode: 8260B_BTEX	Units: µg/L	Prep Date: 9/7/2006	RunNo: 818						
Client ID: 090506-DCS2	Batch ID: 730	TestNo: SW8260B	(5030B)	Analysis Date: 9/7/2006	SeqNo: 8826						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual

Benzene	10.32	0.500	10	0	103	70	130				
Ethylbenzene	10.31	0.500	10	0	103	70	130				

**Qualifiers:** E Value above quantitation range      H Holding times for preparation or analysis exceeded      J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit      R RPD outside accepted recovery limits      S Spike Recovery outside accepted recovery limits

CLIENT: Cordilleran Compliance Services  
 Work Order: 0609004  
 Project: Divide Creek

# ANALYTICAL QC SUMMARY REPORT

TestCode: 8260B\_BTEX\_W

Sample ID: 0609004-001AMS	SampType: MS	TestCode: 8260B_BTEX	Units: µg/L	Prep Date: 9/7/2006	RunNo: 818
Client ID: 090506-DCS2	Batch ID: 730	TestNo: SW8260B	(5030B)	Analysis Date: 9/7/2006	SeqNo: 8826

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
m,p-Xylene	20.46	1.00	20	0	102	70	130				
Methyl tert-butyl ether	9.928	0.500	10	0	99.3	70	130				
o-Xylene	10.34	0.500	10	0	103	70	130				
Toluene	9.847	0.500	10	0	98.5	70	130				
Surr: 4-Bromofluorobenzene	10.41	0	10	0	104	70	130				
Surr: Dibromofluoromethane	10.40	0	10	0	104	70	130				
Surr: Toluene-d8	10.41	0	10	0	104	70	130				

Sample ID: 0609004-001ADup	SampType: DUP	TestCode: 8260B_BTEX	Units: µg/L	Prep Date: 9/7/2006	RunNo: 818
Client ID: 090506-DCS2	Batch ID: 730	TestNo: SW8260B	(5030B)	Analysis Date: 9/7/2006	SeqNo: 8825

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.500							0	0	30
Ethylbenzene	ND	0.500							0	0	30
m,p-Xylene	ND	1.00							0	0	30
Methyl tert-butyl ether	ND	0.500							0	0	30
o-Xylene	ND	0.500							0	0	30
Toluene	ND	0.500							0	0	30
Surr: 4-Bromofluorobenzene	10.91	0	10	0	109	70	130		0	0	0
Surr: Dibromofluoromethane	9.927	0	10	0	99.3	70	130		0	0	0
Surr: Toluene-d8	10.20	0	10	0	102	70	130		0	0	0

Qualifiers: E Value above quantitation range  
 ND Not Detected at the Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted/recovery limits

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Cordilleran Compliance Services  
**Work Order:** 0609004  
**Project:** Divide Creek

**TestCode:** 9056 M

Sample ID: MBLK-728	SampType: MBLK	TestCode: 9056 M	Units: mg/L	Prep Date: 9/6/2006	RunNo: 799						
Client ID: ZZZZZ	Batch ID: 728	TestNo: 9056 Mod.	(9056 Mod.)	Analysis Date: 9/6/2006	SeqNo: 8641						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	ND	1.00									

Sample ID: LCS-728	SampType: LCS	TestCode: 9056 M	Units: mg/L	Prep Date: 9/6/2006	RunNo: 799						
Client ID: ZZZZZ	Batch ID: 728	TestNo: 9056 Mod.	(9056 Mod.)	Analysis Date: 9/6/2006	SeqNo: 8642						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	20.51	1.00	20	0	103	80	120				

Sample ID: 0609004-001ADUP	SampType: DUP	TestCode: 9056 M	Units: mg/L	Prep Date: 9/6/2006	RunNo: 799						
Client ID: 090506-DCS2	Batch ID: 728	TestNo: 9056 Mod.	(9056 Mod.)	Analysis Date: 9/6/2006	SeqNo: 8640						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloride	18.17	1.00						18.21	0.207	20	

**Qualifiers:** E Value above quantitation range    H Holding times for preparation or analysis exceeded    J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit    R RPD outside accepted recovery limits    S Spike Recovery outside accepted recovery limits

# ANALYTICAL QC SUMMARY REPORT

**CLIENT:** Cordilleran Compliance Services  
**Work Order:** 0609004  
**Project:** Divide Creek

**TestCode:** C1\_C6\_DISSW

Sample ID: MBLK-745	SampType: MBLK	TestCode: C1_C6_DISS	Units: µg/L	Prep Date: 9/7/2006	RunNo: 821						
Client ID: ZZZZZ	Batch ID: 745	TestNo: NLAG108	(NLAG108)	Analysis Date: 9/7/2006	SeqNo: 8856						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	ND	0.0680									

Sample ID: 0609008-001ADUP	SampType: DUP	TestCode: C1_C6_DISS	Units: µg/L	Prep Date: 9/7/2006	RunNo: 821						
Client ID: ZZZZZ	Batch ID: 745	TestNo: NLAG108	(NLAG108)	Analysis Date: 9/7/2006	SeqNo: 8854						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methane	1.770	0.0680				1.63			8.24	30	

**Qualifiers:** E Value above quantitation range  
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

CLIENT: Cordilleran Compliance Services  
 Work Order: 0609004  
 Project: Divide Creek

# ANALYTICAL QC SUMMARY REPORT

TestCode: ICP\_TW

Sample ID: MBLK-721	SampType: MBLK	TestCode: ICP_TW	Units: mg/L	Prep Date: 9/6/2006	RunNo: 809						
Client ID: ZZZZZ	Batch ID: 721	TestNo: SW6010B	(SW3010A)	Analysis Date: 9/11/2006	SeqNo: 8751						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	ND	5.0									

Sample ID: LCS-721	SampType: LCS	TestCode: ICP_TW	Units: mg/L	Prep Date: 9/6/2006	RunNo: 809						
Client ID: ZZZZZ	Batch ID: 721	TestNo: SW6010B	(SW3010A)	Analysis Date: 9/11/2006	SeqNo: 8752						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	22.70	5.0	20	0	113	80	120				

Sample ID: 0609004-001AMS	SampType: MS	TestCode: ICP_TW	Units: mg/L	Prep Date: 9/6/2006	RunNo: 809						
Client ID: 090506-DCS2	Batch ID: 721	TestNo: SW6010B	(SW3010A)	Analysis Date: 9/11/2006	SeqNo: 8755						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	128.6	5.0	20	106.4	111	80	120				

Sample ID: 0609004-001ADUP	SampType: DUP	TestCode: ICP_TW	Units: mg/L	Prep Date: 9/6/2006	RunNo: 809						
Client ID: 090506-DCS2	Batch ID: 721	TestNo: SW6010B	(SW3010A)	Analysis Date: 9/11/2006	SeqNo: 8754						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	106.4	5.0						106.4	0.0464	20	

Qualifiers: E Value above quantitation range  
 ND Not Detected at the Reporting Limit  
 H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

