

**LABORATORY ANALYTICAL REPORT**

**Client:** Antero Resources - Rifle  
**Project:** Feasibility  
**Lab ID:** T07050027-004  
**Client Sample ID:** River Ranch A-1

**Report Date:** 05/18/07  
**Collection Date:** 05/02/07 11:30  
**Date Received:** 05/04/07  
**Matrix:** Water

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>AGRONOMIC PROPERTIES</b>							
pH	7.1	s.u.		0.1		A4500-H B	05/07/07 00:00 / rjh
<b>PHYSICAL PROPERTIES</b>							
Solids, Total Dissolved TDS @ 180 C	17200	mg/L		10		A2540 C	05/09/07 11:04 / rjh
Solids, Total Suspended TSS @ 105 C	140	mg/L		4		A2540 D	05/09/07 08:30 / rdz
<b>MAJOR IONS</b>							
Alkalinity, Total as CaCO <sub>3</sub>	1430	mg/L		1		A2320 B	05/09/07 10:27 / rjh
Bicarbonate as HCO <sub>3</sub>	1750	mg/L		1		A2320 B	05/09/07 10:27 / rjh
Carbonate as CO <sub>3</sub>	ND	mg/L		1		A2320 B	05/09/07 10:27 / rjh
Chloride	9160	mg/L	D	50		E300.0	05/17/07 13:23 / jcr
Sulfate	ND	mg/L	D	50		E300.0	05/17/07 13:23 / jcr
Calcium	73	mg/L		1		E200.7	05/11/07 09:57 / alk
Magnesium	7	mg/L		1		E200.7	05/11/07 09:57 / alk
Potassium	48	mg/L		1		E200.7	05/11/07 09:57 / alk
Sodium	6030	mg/L		1		E200.7	05/11/07 09:57 / alk
Boron	19.2	mg/L	D	0.2		E200.7	05/11/07 09:57 / alk
Silica	86.6	mg/L	D	0.6		E200.7	05/11/07 09:57 / alk
<b>BALANCE</b>							
Anions	288	meq/L				Calculation	05/18/07 12:10 / glp
Cations	268	meq/L				Calculation	05/18/07 12:10 / glp
A/C Balance (± 5)	-3.7	%				Calculation	05/18/07 12:10 / glp
<b>METALS, DISSOLVED</b>							
Barium	47.2	mg/L		0.01		E200.7	05/15/07 17:47 / alk
Iron	1.67	mg/L		0.05		E200.7	05/11/07 20:09 / alk
Manganese	0.09	mg/L		0.01		E200.7	05/11/07 20:09 / alk
Strontium	42.0	mg/L		0.01		E200.7	05/15/07 17:47 / alk
<b>TOTAL PETROLEUM HYDROCARBONS</b>							
nC6 to nC12	5960	mg/L		100		TNRCC1005	05/11/07 10:33 / jdq
>nC12 to nC28	2230	mg/L		100		TNRCC1005	05/11/07 10:33 / jdq
>nC28 to nC35	96	mg/L	J	100		TNRCC1005	05/11/07 10:33 / jdq
Total Petroleum Hydrocarbons	8290	mg/L		100		TNRCC1005	05/11/07 10:33 / jdq
Surr: o-Terphenyl	0	%REC	S		70-130	TNRCC1005	05/11/07 10:33 / jdq
Surr: Trifluorotoluene	59.0	%REC	JS		70-130	TNRCC1005	05/11/07 10:33 / jdq
S-the surrogate was diluted out. jdq 5/11/2007							

**Report** RL - Analyte reporting limit.  
**Definitions:** QCL - Quality control limit.  
D - RL increased due to sample matrix interference.  
S - Spike recovery outside of advisory limits.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.  
J - Estimated value. The analyte was present but less than the reporting limit.