



Inorganics

Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200209993

Work Order Number: 0905095

1. This report consists of 1 water sample.
2. The sample was received cool and intact by ALS Paragon on 05/13/09.
3. The sample was prepared for analysis based on Methods for the Chemical Analysis of Waters and Wastes (MCAWW), May 1994 procedures and Environmental Monitoring Systems Laboratory (EMSL) Rev 2.1 procedures.
4. The sample was analyzed following MCAWW and EMSL procedures for the following methods:

<u>Analyte</u>	<u>Method</u>	<u>SOP #</u>
Alkalinity	310.1	1106 Rev 7
Bicarbonate	310.1	1106 Rev 7
Carbonate	310.1	1106 Rev 7
pH	150.1	1126 Rev 16
Specific conductance	120.1	1128 Rev 9
TDS	160.1	1101 Rev 10
Bromide	300.0	1113 Rev 11
Chloride	300.0	1113 Rev 11
Fluoride	300.0	1113 Rev 11
Nitrate as N	300.0	1113 Rev 11
Nitrite as N	300.0	1113 Rev 11
Sulfate	300.0	1113 Rev 11

5. All standards and solutions were used within their recommended shelf life.
6. The sample was prepared and analyzed within the established hold time for each analysis.

All in house quality control procedures were followed, as described below.



7. General quality control procedures.

- n A preparation (method) blank and laboratory control sample (LCS) were prepared and analyzed with the samples in each applicable preparation batch. There were not more than 20 samples in each preparation batch.
- n The method blank associated with each applicable batch was below the reporting limit for the requested analytes. This indicates that no contaminants were introduced to the samples during preparation and analysis.
- n The LCS was within the acceptance limits for each applicable analysis.
- n All initial and continuing calibration blanks (ICB/CCB) associated with each applicable analytical batch were below the reporting limit for the requested analytes.
- n All initial and continuing calibration verifications (ICV/CCV) associated with each applicable analytical batch were within the acceptance criteria for the requested analytes. This indicates a valid calibration and stable instrument conditions.

8. Matrix specific quality control procedures.

Sample 0905095-1 was designated as the quality control sample for the specific conductance analysis. Per method requirements, matrix QC was performed for the remaining analyses. Since a sample from this order number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

Similarity of matrix and therefore relevance of the QC results should not be automatically inferred for any sample other than the native sample selected for QC.

- n A sample duplicate was prepared and analyzed with the specific conductance batch. All guidance criteria for precision were met.

9. Reduced aliquots were taken of the sample for the alkalinity, bicarbonate, and carbonate analysis. Reporting limits were elevated accordingly.

10. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in SOP 939 Revision 3.



The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Megan Johnson
Megan Johnson
Inorganics Primary Data Reviewer

5/21/09
Date

A.A. [Signature]
Inorganics Final Data Reviewer

5/21/09
Date



Inorganic Data Reporting Qualifiers

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- Concentration qualifier -- If the analyte was analyzed for but not detected a "U" is entered.
- QC qualifier -- Specified entries and their meanings are as follows:
 - N - Spiked sample recovery not within control limits.
 - * - Duplicate analysis (relative percent difference) not within control limits.
 - Z - Calibration spike recovery not within control limits.

ALS Laboratory Group -- FC

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

Client Project Name: Complaint 200209993

Client Project Number:

Client PO Number: OE PHA 09000000004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Williams WW	0905095-1		WATER	12-May-09	8:36
Trip Blank	0905095-2		WATER	12-May-09	8:30



Paragon Analyticals

225 Commerce Drive Fort Collins, CO 80524
800-443-1511 or (970) 490-1511 (970) 490-1522 Fax

A Division of DataChem Laboratories, Inc.

Accession Number (LAB ID) 0905095

Chain-of-Custody Date 12/4/07 Page 1 of 1

Originator: Retain pink copy!

Project Name/No.: Gintantus Sampler(s): Gintantus Turnaround (circle one) Standard or Rush (Due Ydy) Dispose: WCS Date WCS or Return to Client

Report To: Peter Gintantus
Phone: 719-846-3091
Fax:
E-mail: Peter.gintantus@state.co.us
Company: Colco Oil + Gas Cons. Linn.
Address:

Circle method (right); provide additional information as needed (comments).

Complaint
2002-09993
Sample ID

Date	Time*	Lab ID	Matrix	Preservative	No. of Containers	Matrix Key:	Method	Result
12/4/07	06:30	①	W	none	5	Oil, Soil, NS = non-soil solid, W = water, L = liquid, E = extract, F = filter	OC Pesticides	SW8081A
			W	HCL	3		Herbicides	SW8151A
			W	H ₂ SO ₄	1		Explosives	SW8330
		②	W	HCL	3		TCLP Organics	SW1311
							TCLP Metals	SW6010B 7470
							Total Metals by ICP Hg	SW6010B 7470 7471 E200.7
							Dissolved Metals by ICP Hg	SW6010B 7470 E200.7
							Total Metals by ICP/MS	SW6020A E200.8
							Dissolved Metals by ICP/MS	SW6020A E200.8
							Heavy Metals Chromium	SW796A
							Inorganic Anions	SW9056 E300.0
							Solids:	Total E160.3 TDS E160.1 TSS E160.2
							pH	SW9040B SW9045C
							TPH Conductivity	SW9015B GRO DRO (circle one or both)
							Gross Alpha / Beta	SW9310 E900.0
							Actinides by Paragon SOP	Pu / U / Am / Th / Cm /
							Tritium	E906.0
							Total Alpha-Emitting Radium	SW9315 E903.0
							Radium 226	E903.1
							Radium 228	SW9320 E904.0
							Strontium 90 (Total RadioSr)	D5811-00
							Gamma Isotopes	E901.1
							Radon 222	SM7510Rn

*Time Zone: EST CST MST PST Matrix Key: O = oil, S = soil, NS = non-soil solid, W = water, L = liquid, E = extract, F = filter

Comments: Anions = Br, Cl, F, NO₂, NO₃, SO₄
Filter + preserve metals upon receipt.
200.7 = Bi, B, Ba, Cr, Co, Cu, Fe, Li, Mg, Mn, Ni, K, Sr, Zn
200.6 = Sb, As, Cd, Pb, Mo, Se, Ag, Te, U

Relinquished By: (1) Signature P. Gintantus Printed Name Peter Gintantus Date 12/4/07 Time 13:30 Company

Relinquished By: (2) Signature _____ Printed Name _____ Date _____ Time _____ Company _____

Received By: (1) Signature Cheryl Trumble Printed Name Cheryl Trumble Date 5-13-09 Time 0945 Company ALS

Received By: (2) Signature _____ Printed Name _____ Date _____ Time _____ Company _____

CONDITION OF SAMPLE UPON RECEIPT FORM

Paragon Analytics

Client: COGCC

Workorder No: 0905095

Project Manager: AW

Initials: CDT Date: 5-13-09

1. Does this project require any special handling in addition to standard Paragon procedures?	YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	NONE	<input checked="" type="radio"/> YES NO
3. Are Custody seals on sample containers intact?	<input checked="" type="radio"/> NONE	YES NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?	<input checked="" type="radio"/> YES	NO
5. Are the COC and bottle labels complete and legible ?	<input checked="" type="radio"/> YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)	<input checked="" type="radio"/> YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF <input checked="" type="radio"/> YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A <input checked="" type="radio"/> YES	<input checked="" type="radio"/> NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A <input checked="" type="radio"/> YES	NO
10. Is there sufficient sample for the requested analyses?	<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the proper containers for the requested analyses?	<input checked="" type="radio"/> YES	NO
12. Are all samples within holding times for the requested analyses?	<input checked="" type="radio"/> YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)	<input checked="" type="radio"/> YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: _____ < green pea _____ > green pea	N/A	YES <input checked="" type="radio"/> NO
15. Do perchlorate LCMS-MS samples have headspace? (at least 1/3 of container required)	<input checked="" type="radio"/> N/A	YES NO
16. Were samples checked for and free from the presence of residual chlorine? (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	<input checked="" type="radio"/> N/A	YES NO
17. Were the samples shipped on ice?	<input checked="" type="radio"/> YES	NO
18. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 <input checked="" type="radio"/> #4 <input checked="" type="radio"/> RAD ONLY <input checked="" type="radio"/> YES		NO
Cooler #: <u>1</u>		
Temperature (°C): <u>5.6</u>		
No. of custody seals on cooler: <u>1</u>		
External µR/hr reading: <u>13</u>		
Background µR/hr reading: <u>11</u>		
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES / NO / NA (If no. see Form 008.)		

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

HEADSPACE: 0905095-1-1 < green pea
 Metals will be filtered and preserved in house.
 aw 5/13/09

If applicable, was the client contacted? YES / NO / NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: Swaff 5/13/09

*IR Gun #2: Oakton. SN 29922500201-0066

*IR Gun #4: Oakton. SN 2372220101-0002

BICARBONATE AS CaCO3

Method EPA310.1

Sample Results

Lab Name: ALS Laboratory Group -- FC

Client Name: Colorado Oil & Gas Conservation Commission

Client Project ID: Complaint 200209993

Work Order Number: 0905095

Final Volume: 100 ml

Reporting Basis: As Received

Matrix: WATER

Prep Method: NONE

Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
Williams WW	0905095-1	05/12/2009	05/20/2009	05/20/2009	N/A	1	210	20		25 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak0905095-1*

CARBONATE AS CaCO3

Method EPA310.1

Sample Results

Lab Name: ALS Laboratory Group -- FC

Client Name: Colorado Oil & Gas Conservation Commission

Client Project ID: Complaint 200209993

Work Order Number: 0905095

Final Volume: 100 ml

Reporting Basis: As Received

Matrix: WATER

Prep Method: NONE

Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
Williams WW	0905095-1	05/12/2009	05/20/2009	05/20/2009	N/A	1	20	20	U	25 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak0905095-1*

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Sample Results

Lab Name: ALS Laboratory Group -- FC

Client Name: Colorado Oil & Gas Conservation Commission

Client Project ID: Complaint 200209993

Work Order Number: 0905095

Final Volume: 100 ml

Reporting Basis: As Received

Matrix: WATER

Prep Method: NONE

Result Units: MG/L

Client Sample ID	Lab ID	Date Collected	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag	Sample Aliquot
Williams WW	0905095-1	05/12/2009	05/20/2009	05/20/2009	N/A	1	210	20		25 ml

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: *ak0905095-1*

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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LIMS Version: 6.264A

pH

Method EPA150.1

Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Field ID:	Williams WW
Lab ID:	0905095-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 12-May-09

Date Extracted: 15-May-09

Date Analyzed: 15-May-09

Prep Method: METHOD

Prep Batch: PH090515-1

QCBatchID: PH090515-1-1

Run ID: ph090515-1a

Cleanup: NONE

Basis: As Received

File Name:

Sample Aliquot: 20 ml

Final Volume: 20 ml

Result Units: pH

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
10-29-7	PH	1	8.05	0.1		

Data Package ID: *ph0905095-1*

Specific Conductance in Water

Method EPA120.1

Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Field ID:	Williams WW
Lab ID:	0905095-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 12-May-09

Date Extracted: 14-May-09

Date Analyzed: 14-May-09

Prep Method: NONE

Prep Batch: SC090514-1

QCBatchID: SC090514-1-1

Run ID: sc090514-1a

Cleanup: NONE

Basis: As Received

File Name:

Sample Aliquot: 45 ml

Final Volume: 45 ml

Result Units: umhos/cm

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
10-34-4	SPECIFIC CONDUCTIVITY	1	413	1		

Data Package ID: sc0905095-1

Total Dissolved Solids

Method EPA160.1

Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Field ID:	Williams WW
Lab ID:	0905095-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 12-May-09

Date Extracted: 14-May-09

Date Analyzed: 15-May-09

Prep Method: METHOD

Prep Batch: TD090514-1

QCBatchID: TD090514-1-1

Run ID: td090515-1a

Cleanup: NONE

Basis: As Received

File Name: Manual Entry

Sample Aliquot: 100 ml

Final Volume: 100 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
10-33-3	TOTAL DISSOLVED SOLIDS	1	230	20		

Data Package ID: *td0905095-1*

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Field ID:	Williams WW
Lab ID:	0905095-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 12-May-09

Date Extracted: 13-May-09

Date Analyzed: 13-May-09

Prep Method: NONE

Prep Batch: IC090513-1

QCBatchID: IC090513-1-1

Run ID: ic090513-1a

Cleanup: NONE

Basis: As Received

File Name: 90513_042.DXD

Sample Aliquot: 5 ml

Final Volume: 5 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE	1	0.27	0.1		
16887-00-6	CHLORIDE	1	2.1	0.2		
14797-65-0	NITRITE AS N	1	0.1	0.1	U	
24959-67-9	BROMIDE	1	0.2	0.2	U	
14797-55-8	NITRATE AS N	1	0.2	0.2	U	
14808-79-8	SULFATE	1	9.7	1		

Data Package ID: *ic0905095-1*

BICARBONATE AS CaCO3

Method EPA310.1

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Lab ID: AK090520-1MB

Sample Matrix: WATER

% Moisture: N/A

Prep Batch: AK090520-1

QCBatchID: AK090520-1-1

Run ID: ak090520-1a

Cleanup: NONE

Basis: N/A

Sample Aliquot: 100 ml

Final Volume: 100 ml

Result Units: MG/L

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK090520-1MB	5/20/2009	05/20/2009	N/A	1	5	5	U

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: ak0905095-1

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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CARBONATE AS CaCO3

Method EPA310.1

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Lab ID: AK090520-1MB

Sample Matrix: WATER

% Moisture: N/A

Prep Batch: AK090520-1

QCBatchID: AK090520-1-1

Run ID: ak090520-1a

Cleanup: NONE

Basis: N/A

Sample Aliquot: 100 ml

Final Volume: 100 ml

Result Units: MG/L

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK090520-1MB	5/20/2009	05/20/2009	N/A	1	5	5	U

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: ak0905095-1

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Lab ID: AK090520-1MB

Sample Matrix: WATER

% Moisture: N/A

Prep Batch: AK090520-1

QCBatchID: AK090520-1-1

Run ID: ak090520-1a

Cleanup: NONE

Basis: N/A

Sample Aliquot: 100 ml

Final Volume: 100 ml

Result Units: MG/L

Lab ID	Date Prepared	Date Analyzed	Percent Moisture	Dilution Factor	Result	Reporting Limit	Flag
AK090520-1MB	5/20/2009	05/20/2009	N/A	1	5	5	U

Comments:

1. ND or U = Not Detected at or above the client requested detection limit.

Data Package ID: ak0905095-1

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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LIMS Version: 6.264A

TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Laboratory Control Sample

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Lab ID: AK090520-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 05/20/2009

Date Analyzed: 05/20/2009

Prep Batch: AK090520-1

QCBatchID: AK090520-1-1

Run ID: ak090520-1a

Cleanup: NONE

Basis: N/A

Sample Aliquot: 100 ml

Final Volume: 100 ml

Result Units: MG/L

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
11-43-8	TOTAL ALKALINITY AS CaCO3	100	99.2	5		99	85 - 115

Data Package ID: ak0905095-1

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

LIMS Version: 6.264A

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Specific Conductance in Water

Method EPA120.1

Duplicate Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Field ID: Williams WW

Lab ID: 0905095-1D

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 05/12/2009

Date Extracted: 05/14/2009

Date Analyzed: 05/14/2009

Prep Batch: SC090514-1

QCBatchID: SC090514-1-1

Run ID: sc090514-1a

Cleanup: NONE

Basis: As Received

File Name:

Sample Aliquot: 45 ml

Final Volume: 45 ml

Result Units: umhos/cm

Clean DF: 1

CASNO	Target Analyte	Sample Result	Samp Qual	Duplicate Result	Dup Qual	Reporting Limit	Dilution Factor	RPD	RPD Limit
10-34-4	SPECIFIC CONDUCTIVITY	413		412		1	1	0	10

Data Package ID: sc0905095-1

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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LIMS Version: 6.264A

Total Dissolved Solids

Method EPA160.1

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Lab ID: TD090514-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 14-May-09

Date Analyzed: 15-May-09

Prep Method: METHOD

Prep Batch: TD090514-1

QCBatchID: TD090514-1-1

Run ID: td090515-1a

Cleanup: NONE

Basis: N/A

File Name: Manual Entry

Sample Aliquot: 100 ml

Final Volume: 100 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
10-33-3	TOTAL DISSOLVED SOLIDS	1	20	20	U	

Data Package ID: *td0905095-1*

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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LIMS Version: 6.264A

Total Dissolved Solids

Method EPA160.1

Laboratory Control Sample

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Lab ID: TD090514-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 05/14/2009

Date Analyzed: 05/15/2009

Prep Method: METHOD

Prep Batch: TD090514-1

QCBatchID: TD090514-1-1

Run ID: td090515-1a

Cleanup: NONE

Basis: N/A

File Name: Manual Entry

Sample Aliquot: 100 ml

Final Volume: 100 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
10-33-3	TOTAL DISSOLVED SOLIDS	400	405	20		101	85 - 115%

Data Package ID: *td0905095-1*

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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LIMS Version: 6.264A

Ion Chromatography

Method EPA300.0 Revision 2.1

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Lab ID: IC090513-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 13-May-09

Date Analyzed: 13-May-09

Prep Method: NONE

Prep Batch: IC090513-1

QCBatchID: IC090513-1-1

Run ID: ic090513-1a

Cleanup: NONE

Basis: N/A

File Name: 90513_010.DXD

Sample Aliquot: 5 ml

Final Volume: 5 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
16984-48-8	FLUORIDE	1	0.1	0.1	U	
16887-00-6	CHLORIDE	1	0.2	0.2	U	
14797-65-0	NITRITE AS N	1	0.1	0.1	U	
24959-67-9	BROMIDE	1	0.2	0.2	U	
14797-55-8	NITRATE AS N	1	0.2	0.2	U	
14808-79-8	SULFATE	1	1	1	U	

Data Package ID: ic0905095-1

Date Printed: Wednesday, May 20, 2009

ALS Laboratory Group -- FC

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LIMS Version: 6.264A

Ion Chromatography

Method EPA300.0 Revision 2.1

Laboratory Control Sample

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 0905095

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200209993

Lab ID: IC090513-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 05/13/2009

Date Analyzed: 05/13/2009

Prep Method: NONE

Prep Batch: IC090513-1

QCBatchID: IC090513-1-1

Run ID: ic090513-1a

Cleanup: NONE

Basis: N/A

File Name: 90513_011.DXD

Sample Aliquot: 5 ml

Final Volume: 5 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
16984-48-8	FLUORIDE	2.5	2.39	0.1		95	90 - 110%
16887-00-6	CHLORIDE	5	4.83	0.2		97	90 - 110%
14797-65-0	NITRITE AS N	2	2.01	0.1		101	90 - 110%
24959-67-9	BROMIDE	5	4.88	0.2		98	90 - 110%
14797-55-8	NITRATE AS N	5	4.81	0.2		96	90 - 110%
14808-79-8	SULFATE	25	24.8	1		99	90 - 110%

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