



ALS Paragon



Inorganics Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200204503

Work Order Number: 0903158

1. This report consists of 1 water sample.
2. The sample was received cool and intact by ALS Paragon on 03/20/09.
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.



- 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.
 - 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.
 - The LCS was within the acceptance limits for each applicable analysis.
 - All initial and continuing calibration blanks (ICB/CCB) associated with each applicable analytical batch were below the reporting limit for the requested analytes with the exception of CCB2 for chloride on 03/24/09. The sample bracketed by this CCB was re-analyzed with acceptable CCBs.
 - 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.
- Per method requirements, matrix QC was performed for each analysis. 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.
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 Paragon 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

3/30/09
Date

R.A.E.
Inorganics Final Data Reviewer

3/30/09
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 Paragon

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

Client Project Name: Complaint 200204503

Client Project Number:

Client PO Number: OE PHA 090000000004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
VanAlestyn 090319	0903158-1		WATER	19-Mar-09	12:40

0903158

Chain-of-Custody Date 3/19/09 Page 1 of 1

Originator: Retain pink copy!

Project Name/No.: NER Sampler(s): C. Whitmore Turnaround (circle one) (Standard) for Rush (Due 14) Dispose: Date 3/6/04 or Return to Client

Report To: Peter Gintantus
Phone: 719-846-3091
Fax:
E-mail: peter.gintantus@state.co.us
Company: Colo. Oil & Gas Conservation Comm.
Address:
Comments: RUSSEFER W/2002041502
VANAESEIN W/2002041503

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

Sample ID	Date	Time *	Lab ID	Matrix	Preservative (Indicate type... HCl, etc.)	No. of Containers	VOCs	BTEX (only)	SVOCs	OC Pesticides	PCBs	Herbicides	Explosives	TCLP Organics SW1311	TCLP Metals SW1311 Hg	Total Metals by ICP Hg	Dissolved Metals by ICP Hg	Total Metals by ICP/MS	Dissolved Metals by ICP/MS *	Hexavalent Chromium	Inorganic Anions	Solids:	pH	TPH	Gross Alpha / Beta	Actinides by Paragon SOP	Tritium	Total Alpha-Emitting Radium	Radium 226	Radium 228	Strontium 90 (Total RadioSr)	Gamma Isotopes	Radon 222
GORDON BRASS 090319	3/11/09	10:05	W			10	X	X	X				X				X	X		X	X	X	X	X								X	
PULSTER 090319		11:05				3	X	X	X				X				X	X		X	X	X	X	X								X	
VAN AESTYU 090319		12:40	①			3	X	X	X				X				X	X		X	X	X	X	X								X	
KOSSELYU 090319		13:45				3	X	X	X				X				X	X		X	X	X	X	X								X	

* 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:

filter + preserve metals upon receipt
 Anne - Ba, Cl, F, Ni, W, Zn, S, Pb

200.7 = Ba, Be, B, Ca, Cr, Cu, Fe, Li, Mn, Mg, Ni, K, Na, Sr, Zn
200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Te, U

CONDITION OF SAMPLE UPON RECEIPT FORM

Paragon Analytics

Client: COGCCWorkorder No: 09 03 158Project Manager: AWInitials: LJODate: 3/20/09

1. Does this project require any special handling in addition to standard Paragon procedures?	YES	<u>NO</u>
2. Are custody seals on shipping containers intact?	NONE	<u>YES</u> NO
3. Are Custody seals on sample containers intact?	<u>NONE</u>	YES NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?	<u>YES</u>	YES NO
5. Are the COC and bottle labels complete and legible ?	<u>YES</u>	YES NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)	* <u>YES</u>	YES NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<u>YES</u> NO
8. Are all aqueous samples requiring preservation preserved correctly ? (excluding volatiles)	N/A	<u>YES</u> <u>NO</u>
9. Are all aqueous non-preserved samples pH 4-9 ?	N/A	<u>YES</u> NO
10. Is there sufficient sample for the requested analyses?	<u>YES</u>	YES NO
11. Were all samples placed in the proper containers for the requested analyses?	<u>YES</u>	YES NO
12. Are all samples within holding times for the requested analyses?	<u>YES</u>	YES NO
13. Were all sample containers received intact ? (not broken or leaking, etc.)	<u>YES</u>	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	<u>YES</u> NO
15. Do perchlorate LCMS-MS samples have headspace? (at least 1/3 of container required)	<u>N/A</u>	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.)	<u>N/A</u>	YES NO
17. Were the samples shipped on ice ?	<u>YES</u>	YES NO
18. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: <u>#2</u> #4 RAD ONLY	<u>YES</u>	YES NO
Cooler #: <u>1</u>		
Temperature (°C): <u>2.2</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? <u>YES</u> NO / NA (If no. see Form 008.)		

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

* 3 of ~~16~~ 40 ml vials for methane analysis listed no sample time on labels.
4/3/20/09

• The 500ml poly for metals analysis needs to be filtered and preserved in house.

If applicable, was the client contacted? YES / NO / NA Contact: _____ Date/Time: _____Project Manager Signature / Date: Candy 3/23/09

*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 Paragon

Client Name: Colorado Oil & Gas Conservation Commission

Client Project ID: Complaint 200204503

Work Order Number: 0903158

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
VanAlestyn 090319	0903158-1	03/19/2009	03/20/2009	03/20/2009	N/A	1	180	20		25 ml

Comments:

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

Data Package ID: *ak0903158-1*

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 3

CARBONATE AS CaCO₃

Method EPA310.1

Sample Results

Lab Name: ALS Paragon
Client Name: Colorado Oil & Gas Conservation Commission
Client Project ID: Complaint 200204503
Work Order Number: 0903158
Reporting Basis: As Received
Prep Method: NONE
Final Volume: 100 ml
Matrix: WATER
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
VanAlestyn 090319	0903158-1	03/19/2009	03/20/2009	03/20/2009	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: *ak0903158-1*

Date Printed: Friday, March 27, 2009

ALS Paragon
LIMS Version: 6.252A

Page 2 of 3

TOTAL ALKALINITY AS CaCO3

Method EPA310.1

Sample Results

Lab Name: ALS Paragon

Client Name: Colorado Oil & Gas Conservation Commission

Client Project ID: Complaint 200204503

Work Order Number: 0903158

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
VanAlestyn 090319	0903158-1	03/19/2009	03/20/2009	03/20/2009	N/A	1	180	20		25 ml

Comments:

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

Data Package ID: *ak0903158-1*

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 3 of 3

pH

Method EPA150.1

Sample Results

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Field ID:	VanAlestyn 090319
Lab ID:	0903158-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 19-Mar-09

Date Extracted: 23-Mar-09

Date Analyzed: 23-Mar-09

Prep Method: METHOD

Prep Batch: PH090323-1

QCBatchID: PH090323-1-1

Run ID: ph090323-1a

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	7.88	0.1		

Data Package ID: *ph0903158-1*

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 1

Specific Conductance in Water

Method EPA120.1

Sample Results

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Field ID:	VanAlestyn 090319
Lab ID:	0903158-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 19-Mar-09

Date Extracted: 23-Mar-09

Date Analyzed: 23-Mar-09

Prep Method: METHOD

Prep Batch: SC090323-1

QCBatchID: SC090323-1-2

Run ID: sc090323-1a

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	432	1		

Data Package ID: sc0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 1

Total Dissolved Solids

Method EPA160.1

Sample Results

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Field ID:	VanAlestyn 090319
Lab ID:	0903158-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 19-Mar-09

Date Extracted: 23-Mar-09

Date Analyzed: 24-Mar-09

Prep Method: METHOD

Prep Batch: TD090323-1

QCBatchID: TD090323-1-1

Run ID: td090324-1a

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	250	20		

Data Package ID: *td0903158-1*

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 1

Ion Chromatography

Method EPA300.0 Revision 2.1

Sample Results

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Field ID: VanAlestyn 090319

Lab ID: 0903158-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 19-Mar-09

Date Extracted: 24-Mar-09

Date Analyzed: 24-Mar-09

Prep Method: NONE

Prep Batch: IC090324-1

QCBatchID: IC090324-1-1

Run ID: ic090324-1a

Cleanup: NONE

Basis: As Received

File Name: 90324_028.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	0.34	0.1		
16887-00-6	CHLORIDE	1	3.9	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	0.21	0.2		
14808-79-8	SULFATE	1	62	1		

Data Package ID: ic0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 1

BICARBONATE AS CaCO₃

Method EPA310.1

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: AK090320-1MB

Sample Matrix: WATER

% Moisture: N/A

Prep Batch: AK090320-1

QCBatchID: AK090320-1-1

Run ID: ak090320-1a

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
AK090320-1MB	3/20/2009	03/20/2009	N/A	1	5	5	U

Comments:

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

Data Package ID: ak0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 3

CARBONATE AS CaCO₃

Method EPA310.1

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: AK090320-1MB

Sample Matrix: WATER

% Moisture: N/A

Prep Batch: AK090320-1

QCBatchID: AK090320-1-1

Run ID: ak090320-1a

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
AK090320-1MB	3/20/2009	03/20/2009	N/A	1	5	5	U

Comments:

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

Data Package ID: ak0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 2 of 3

TOTAL ALKALINITY AS CaCO₃

Method EPA310.1

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: AK090320-1MB

Sample Matrix: WATER

% Moisture: N/A

Prep Batch: AK090320-1

QCBatchID: AK090320-1-1

Run ID: ak090320-1a

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
AK090320-1MB	3/20/2009	03/20/2009	N/A	1	5	5	U

Comments:

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

Data Package ID: ak0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 3 of 3

TOTAL ALKALINITY AS CaCO₃

Method EPA310.1

Laboratory Control Sample

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: AK090320-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 03/20/2009

Date Analyzed: 03/20/2009

Prep Batch: AK090320-1

QCBatchID: AK090320-1-1

Run ID: ak090320-1a

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 CaCO ₃	100	101	5		100	85 - 115

Data Package ID: ak0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 1

Total Dissolved Solids

Method EPA160.1

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: TD090323-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 23-Mar-09

Date Analyzed: 24-Mar-09

Prep Method: METHOD

Prep Batch: TD090323-1

QCBatchID: TD090323-1-1

Run ID: td090324-1a

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: *td0903158-1*

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 1

Total Dissolved Solids

Method EPA160.1

Laboratory Control Sample

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: TD090323-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 03/23/2009

Date Analyzed: 03/24/2009

Prep Method: METHOD

Prep Batch: TD090323-1

QCBatchID: TD090323-1-1

Run ID: td090324-1a

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	408	20		102	85 - 115%

Data Package ID: *td0903158-1*

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 1

Ion Chromatography

Method EPA300.0 Revision 2.1

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: IC090320-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 20-Mar-09

Date Analyzed: 20-Mar-09

Prep Method: NONE

Prep Batch: IC090320-1

QCBatchID: IC090320-1-1

Run ID: ic090320-1a

Cleanup: NONE

Basis: N/A

File Name: 90320_009.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
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	

Data Package ID: ic0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 2

Ion Chromatography

Method EPA300.0 Revision 2.1

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: IC090324-1MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 24-Mar-09

Date Analyzed: 24-Mar-09

Prep Method: NONE

Prep Batch: IC090324-1

QCBatchID: IC090324-1-1

Run ID: ic090324-1a

Cleanup: NONE

Basis: N/A

File Name: 90324_013.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	
14808-79-8	SULFATE	1	1	1	U	

Data Package ID: ic0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 2 of 2

Ion Chromatography

Method EPA300.0 Revision 2.1

Laboratory Control Sample

Lab Name: ALS Paragon

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: IC090320-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 03/20/2009

Date Analyzed: 03/20/2009

Prep Method: NONE

Prep Batch: IC090320-1

QCBatchID: IC090320-1-1

Run ID: ic090320-1a

Cleanup: NONE

Basis: N/A

File Name: 90320_010.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
14797-65-0	NITRITE AS N	2	1.99	0.1		99	90 - 110%
24959-67-9	BROMIDE	5	5.02	0.2		100	90 - 110%
14797-55-8	NITRATE AS N	5	4.89	0.2		98	90 - 110%

Data Package ID: *ic0903158-1*

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 1 of 2

Ion Chromatography

Method EPA300.0

Laboratory Control Sample

Lab Name: Paragon Analytics

Work Order Number: 0903158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204503

Lab ID: IC090324-1LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 03/24/2009

Date Analyzed: 03/24/2009

Prep Method: NONE

Prep Batch: IC090324-1

QCBatchID: IC090324-1-1

Run ID: ic090324-1a

Cleanup: NONE

Basis: N/A

File Name: 90324_014.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	2.45	0.1		98	90 - 110%
16887-00-6	CHLORIDE	5	5.24	0.2		105	90 - 110%
14808-79-8	SULFATE	25	25.2	1		101	90 - 110%

Data Package ID: ic0903158-1

Date Printed: Friday, March 27, 2009

ALS Paragon

LIMS Version: 6.252A

Page 2 of 2