EPWM - 004

GENERAL CORRESPONDENCE

2008 - Present

ALTELA®
Treating water naturally.

WEB: altelainc.com

ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
7887 E. Belleview Ave., Suite 1100, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

January 27, 2016

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Termination of Temporary Approval EPWM -004 to Store and Use Produced Water for R&D of the AltelaRain® Technology

VIA ELECTRONIC MAIL AND UNITED STATES POSTAL SERVICE

Dear Brad,

Following our recent discussion, Altela Inc.'s ("Altela") Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology at Altela's facilities located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"), EPWM-004 expired by its own terms on January 16, 2016. This letter serves as confirmation that Altela will not be requesting a further extension of this temporary approval at this time.

Enclosed, please find a copy of Altela's final Produced Water Tracking Summary for 2015-2016. We have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing. No water has been stored or treated at the facility during that time period.

Thank you for your assistance and support of the AltelaRain® technology over the past several years. We look forward to working with you on future projects.

Sincerely,

Altela, Inc.

Karen

Karen K. Thomas
Environmental Regulatory Analyst

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary 2015 and 2016											
No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance

ALTELA, INC. DID NOT TREAT ANY PRODUCED WATER DURING 2015 or 2016

Altela Tower Test Data Inputs

Altela Tower Test Data Inputs

Tower: | Test Station: #1

Test Conditions	Test Duration		Natural Gas		Tank Levels				PW Flow	Inlet Air Measurements			Stream		Electical Conductivity								Temperature						
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	DW Tanks Height Delta [inches]	BW Tanks Height Delta [inches]	PW Tank #1 Height Delta [inches]	PW Tank #2 Height Delta [inches]	PW Flow [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. [°F]	Air Press. [inches H2O]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity of DW Basin @ Start [µS/cm]	Electical Conductivity of DW Basin @ End [µS/cm]	Electical Conductivity of DW Tanks @ Start [µS/cm]	Electical Conductivity of DW Tanks @ End [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	Electical Conductivity of CW @ End [µS/cm]	PWT #5 (°F)	PW Inlet (°F)	CW Exit (°F)	DWT Right (°F)	DWT Left (°F)	Exhaust Air Temp, Left (°F)	Exhaust Air Temp, Right (°F)

Jones, Brad A., EMNRD

From: Karen Thomas <karen.thomas@altelainc.com>
Sent: Wednesday, January 27, 2016 12:38 PM
To: Jones, Brad A., EMNRD
Subject: Termination of Temporary Approval EPWM 004
Attachments: 160127 Termination of Temporary Approval EPWM-004.pdf

Importance: High

Brad,

It was a pleasure speaking with you yesterday. I hope you are feeling better.

I've attached an advance copy of the above referenced Termination Letter. The original documents were mailed out today.

Please let me know if you have any questions or require any additional information.

Sincerely,

Karen K. Thomas

Altela, Inc.
DENVER TECHNOLOGY CENTER
7887 E. Belleview Ave., Suite 1100
Denver, CO 80111
PHONE: (303) 993-1950
FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

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January 27, 2016

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Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Termination of Temporary Approval EPWM -004 to Store and Use Produced Water for R&D of the AltelaRain® Technology

VIA ELECTRONIC MAIL AND UNITED STATES POSTAL SERVICE

Dear Brad,

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Enclosed, please find a copy of Altela's final Produced Water Tracking Summary for 2015-2016. We have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing. No water has been stored or treated at the facility during that time period.

Thank you for your assistance and support of the AltelaRain® technology over the past several years. We look forward to working with you on future projects.

Sincerely,

Altela, Inc.

Karen

Karen K. Thomas
Environmental Regulatory Analyst

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary 2015 and 2016										
No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance

ALTELA, INC. DID NOT TREAT ANY PRODUCED WATER DURING 2015 or 2016

Altela Tower Test Data Inputs

Altela Tower Test Data Inputs

Tower: Test Station: #1

Test Conditions	Test Duration		Natural Gas		Tank Levels				PW Flow	Inlet Air Measurements			Stream		Electical Conductivity								Temperature						
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7887 E. Belleview Ave., Suite 1100, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

November 19, 2014

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology Temporary Approval EPWM – 004 expiration January 16, 2015

VIA ELECTRONIC MAIL AND UNITED STATES POSTAL SERVICE

Dear Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. The produced water approved for storage and testing and development of the AltelaRain® technology will only occur at Altela's design, research and manufacturing facility (Meridian), located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water must be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela must retain records documenting all produced water received and removed from the Meridian facility;

5. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted July 10, 2014. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

We request the annual renewal of EPWM – 004 as we anticipate receiving produced water in the coming year to continue the development of the AltelaRain® technology.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Karen K. Evans

Karen K. Evans
Environmental Regulatory Analyst

cc: Altela Day File

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary 2014											
No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance

ALTELA, INC. DID NOT TREAT ANY PRODUCED WATER DURING 2014

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jemi Bailey, Division Director
Oil Conservation Division

July 10, 2014

Ms. Karen Evans
Altela, Inc.
5350 South Roslyn Street, Suite 210
Englewood, Colorado 80111

Re: Renewal Request for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM - 004
Location: 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Ms. Evans:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated July 9, 2014, to renew Altela's temporary approval to store and use oilfield produced water for testing and development of the AltelaRain™ technology at Altela's design, research, and manufacturing facility, which expired January 16, 2014. The OCD has granted this temporary approval to serve certain purposes and achieve certain results. One purpose is to allow Altela the opportunity to use real produced water in a controlled environment to assist in the research and development of the AltelaRain™ technology. Another purpose is to obtain testing results of the treatment of the produced water in order to assess the capability of the AltelaRain™ technology. Such analytical results should represent the initial test/source water concentrations prior to treatment and the concentrations present after treatment for all of the constituents specified in Subsection A, B, and C of 20.6.2.3103 NMAC.

The OCD hereby grants this temporary approval with the following understandings and conditions:

1. The produced water approved for storage and the testing and development of the AltelaRain™ technology shall only occur at Altela's design, research, and manufacturing facility (Meridian), located at 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water shall provide transport of produced water to and from the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water shall be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela shall retain records documenting all produced water received and removed from the Meridian facility. The record shall indicate the facility/well name and permit number in which the produced water is obtained from and the facility/well name and permit number of the OCD approved facility in which the produced is disposed;

5. Altela shall report all unauthorized discharges of produced water pursuant to 19.15.29 NMAC to the OCD within 24 hours of determining a release; and

6. Altela shall provide the OCD copies of the water quality analytical test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

This authorization is approved for a period of one (1) year. This temporary approval will expire January 16, 2015. Renewal requests for temporary approvals shall be submitted 45 days prior to the expiration date. Temporary approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District IV Office, Santa Fe

Altela Tower Test Data Inputs **Altela Tower Test Data Inputs**

Tower: [ ] **Test Station:** #1

Test Conditions	Test Duration		Natural Gas		Tank Levels				PW Flow	Inlet Air Measurements			Stream		Electical Conductivity								Temperature						
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	DW Tanks Height Delta [inches]	BW Tanks Height Delta [inches]	PW Tank #1 Height Delta [inches]	PW Tank #2 Height Delta [inches]	PW Flow [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. [°F]	Air Press. [Inches H2O]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity at DW Basin @ Start [µS/cm]	Electical Conductivity at DW Basin @ End [µS/cm]	Electical Conductivity at DW Tanks @ Start [µS/cm]	Electical Conductivity at DW Tanks @ End [µS/cm]	Electical Conductivity at PW @ Start [µS/cm]	Electical Conductivity at CW @ Start [µS/cm]	Electical Conductivity at PW @ End [µS/cm]	Electical Conductivity at CW @ End [µS/cm]	PWT #5 [°F]	PW Inlet [°F]	CW Exit [°F]	DWT Right [°F]	DWT Left [°F]	Exhaust Air Temp, Left [°F]	Exhaust Air Temp, Right [°F]

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Wednesday, November 19, 2014 10:35 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: NM OCD REQUEST FOR TEMP APPROVAL - PERMIT EPWM-004
Attachments: 11.19.14 Renewal Request Temp Approval EPWM 004.pdf

Importance: High

Brad,

Attached please find an advance email copy of the annual renewal request for Temporary Approval of EPWM-004 which expires January 16, 2015. The original was mailed out today.

Should you have any questions, please do not hesitate to contact me.

Thanks again for your assistance throughout the year!

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
7887 E. Belleview Ave., Suite 1100
Englewood, CO 80111
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Follow us on Facebook and Twitter:

Go to www.CARESforWater.com and www.CAESwater.com to view Altela's two new centralized wastewater treatment facilities in Pennsylvania.

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November 19, 2014

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology
Temporary Approval EPWM – 004 expiration January 16, 2015

VIA ELECTRONIC MAIL AND UNITED STATES POSTAL SERVICE

Dear Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

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6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted July 10, 2014. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

We request the annual renewal of EPWM – 004 as we anticipate receiving produced water in the coming year to continue the development of the AltelaRain® technology.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Karen K. Evans

Karen K. Evans
Environmental Regulatory Analyst

cc: Altela Day File

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary 2014											
No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance

ALTELA, INC. DID NOT TREAT ANY PRODUCED WATER DURING 2014

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Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division

July 10, 2014

Ms. Karen Evans
Altela, Inc.
5350 South Roslyn Street, Suite 210
Englewood, Colorado 80111

Re: Renewal Request for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM - 004
Location: 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Ms. Evans:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated July 9, 2014, to renew Altela's temporary approval to store and use oilfield produced water for testing and development of the AltelaRain™ technology at Altela's design, research, and manufacturing facility, which expired January 16, 2014. The OCD has granted this temporary approval to serve certain purposes and achieve certain results. One purpose is to allow Altela the opportunity to use real produced water in a controlled environment to assist in the research and development of the AltelaRain™ technology. Another purpose is to obtain testing results of the treatment of the produced water in order to assess the capability of the AltelaRain™ technology. Such analytical results should represent the initial test/source water concentrations prior to treatment and the concentrations present after treatment for all of the constituents specified in Subsection A, B, and C of 20.6.2.3103 NMAC.

The OCD hereby grants this temporary approval with the following understandings and conditions:

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6. Altela shall provide the OCD copies of the water quality analytical test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

This authorization is approved for a period of one (1) year. This temporary approval will expire January 16, 2015. Renewal requests for temporary approvals shall be submitted 45 days prior to the expiration date. Temporary approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District IV Office, Santa Fe

Altela Tower Test Data Inputs

Altela Tower Test Data Inputs

Tower: _____ Test Station: #1

Test Conditions	Test Duration		Natural Gas		Tank Levels				PW Flow	Inlet Air Measurements			Stream		Electical Conductivity								Temperature						
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Altela Tower Test Data Inputs

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

David Martin
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey, Division Director
Oil Conservation Division

October 21, 2014

Ms. Karen Evans
Altela, Inc.
7887 E. Belleview Ave, Suite 1100
Englewood, Colorado 80111

Re: Request for a Temporary Exemption Regarding Condition #2 of an Annual Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Altela, Inc.
Temporary Approval: EPWM -004
Location: 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Ms. Evans:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) email request, dated October 21, 2014, for a temporary exemption regarding Condition #2 of Altela's annual temporary approval (EPWM-004) to store and use oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facility dated July 10 2014. Condition #2 requires "only haulers authorized (OCD approved C-133) to move produced water shall provide transport of produced water to the Meridian facility."

Based upon the information provided in the request, Altela proposes to ship "no more than 2000 gallons" of produced water by a commercial shipper from the Fayetteville Basin of Arkansas to Altela's Albuquerque Meridian facility for testing. The test bench analyses will allow Altela to finalize the design requirements of the AltelaRain® system for a specific project.

The OCD hereby approves this temporary exemption request with the following understandings and conditions:

1. Altela shall transport the produced water from the Fayetteville Basin of Arkansas to Altela's Albuquerque Alamo facility via a commercial shipper. Altela shall ensure that the commercial shipper will be responsible for complying with all applicable shipping requirements and related Department of Transportation rules and regulations; and

2. Altela shall continue to comply with the conditions specified within the OCD temporary approval (EPWM-004), dated July 10 2014, upon the arrival and acceptance of the

produced water from the Fayetteville Basin of Arkansas at Altela's Albuquerque Meridian facility;

This authorization is a one-time approval. Altela shall request and obtain OCD approval for any future exemption requests of a similar nature. Approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District IV Office, Santa Fe

WEB: altelainc.com

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7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
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October 21, 2014

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. Request for Exemption for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology

VIA ELECTRONIC MAIL

Dear Brad,

Per our discussions, this letter serves as written request for an exemption to employ a C-133 NM permitted water hauler.

Part of this project deals with influent water quality review and testing. Specifically, Altela has received a request to provide bench testing on produced and/or frac flow-back water from the Fayetteville Basin area in regards to removal of ammonia and methanol. This test bench analysis will verify water treatment efficacy as well as finalize design requirements of the AltelaRain® system to be used for this project.

The cost to have a C-133 water hauler send a truck out to Arkansas is prohibitively expensive for such a small amount of water. As discussed, Altela would like approval to utilize a commercial shipper to send no more than 2,000 gallons of produced and or frac-flow back water to Altela's Albuquerque facility for testing. The commercial shipper will be responsible for complying with all shipping requirements and related Department of Transportation rules and regulations. Once the samples arrive at Altela's Albuquerque facility, Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Meridian facility;

2. No produced water shall be disposed at the Meridian facility. All produced water must be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

3. Altela must retain records documenting all produced water received and removed from the Meridian facility;

4. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

5. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

As we reviewed on the phone, we would like to have this water sent to Altela in the next week or so and would appreciate receiving the approval this week so we may coordinate shipping schedules.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Karen K. Evans
Environmental Regulatory Analyst

cc: Altela Day File

Enclosures as noted

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Tuesday, October 21, 2014 2:06 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff; Mike Quinn
Subject: Exemption Request Revised
Attachments: 10.21.14 Request for Exemption.pdf

Importance: High

Brad,

I'm sorry. I just found out that the amount of water would probably be closer to 2000 gallons. I have revised the request to state that. I had already mailed a hard copy so please disregard that and I will send a revised request via USPS.

Thanks again for your assistance and sorry for the inconvenience.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
7887 E. Belleview Ave., Suite 1100
Englewood, CO 80111
PHONE: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

From: Karen Evans
Sent: Tuesday, October 21, 2014 9:37 AM
To: 'brad.a.jones@state.nm.us'
Subject: Exemption Request
Importance: High

Brad,

It was a pleasure speaking with you this morning.

Attached please find an advance email request for the temporary exemption that was discussed. Per our conversation, I have also mailed the original request to you. In addition, we would like to have this water sent to Altela in the next

week or so and would appreciate receiving the approval as soon as possible so we may coordinate shipping schedules. Would you be able to send an advance email version of the approval as well?

Please note that our Denver address has changed, see address in signature line (Albuquerque's facility address remains the same).

Please let me know if you have any questions or require additional information.

Thanks for your assistance over the years.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

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ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
7887 E. Belleview Ave., Suite 1100, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

October 21, 2014

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. Request for Exemption for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology

VIA ELECTRONIC MAIL

Dear Brad,

Per our discussions, this letter serves as written request for an exemption to employ a C-133 NM permitted water hauler.

Part of this project deals with influent water quality review and testing. Specifically, Altela has received a request to provide bench testing on produced and/or frac flow-back water from the Fayetteville Basin area in regards to removal of ammonia and methanol. This test bench analysis will verify water treatment efficacy as well as finalize design requirements of the AltelaRain® system to be used for this project.

The cost to have a C-133 water hauler send a truck out to Arkansas is prohibitively expensive for such a small amount of water. As discussed, Altela would like approval to utilize a commercial shipper to send no more than 2,000 gallons of produced and or frac-flow back water to Altela's Albuquerque facility for testing. The commercial shipper will be responsible for complying with all shipping requirements and related Department of Transportation rules and regulations. Once the samples arrive at Altela's Albuquerque facility, Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Meridian facility;

2. No produced water shall be disposed at the Meridian facility. All produced water must be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

3. Altela must retain records documenting all produced water received and removed from the Meridian facility;

4. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

5. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

As we reviewed on the phone, we would like to have this water sent to Altela in the next week or so and would appreciate receiving the approval this week so we may coordinate shipping schedules.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Karen K. Evans

Karen K. Evans
Environmental Regulatory Analyst

cc: Altela Day File

Enclosures as noted

ALTELA®
Treating water naturally

WEB: altelainc.com

ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
5350 South Roslyn Street, Suite 210, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

July 9, 2014

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology
Temporary Approval EPWM – 004 expiration January 16, 2014

VIA ELECTRONIC MAIL AND UNITED STATES POSTAL SERVICE

Dear Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. The produced water approved for storage and testing and development of the AltelaRain® technology will only occur at Altela's design, research and manufacturing facility (Meridian), located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121;

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4. Altela must retain records documenting all produced water received and removed from the Meridian facility;

5. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted January 16, 2013. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

We request the annual renewal of EPWM – 004 as we anticipate receiving produced water in the coming year to continue the development of the AltelaRain® technology. Per our conversation, our request for renewal was delayed due to a computer crash in October last year. The annual tickler for renewing the permit in January must have been lost in that crash, however, the 1st and 2nd Quarterly Reports for 2014 have been submitted at the proper times.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Karen K. Evans

Karen K. Evans
Environmental Regulatory Analyst

cc: Altela Day File

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary 2013										
No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance

ALTELA, INC. DID NOT TREAT ANY PRODUCED WATER DURING 2013

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

January 16, 2013

Mr. Matthew Bruff
Altela, Inc.
Denver Technology Center
5350 South Roslyn Street, Suite 210
Englewood, Colorado 80111

Re: Renewal Request for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM - 004
Location: 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Mr. Bruff:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated January 14, 2013, to renew Altela's temporary approval to store and use oilfield produced water for testing and development of the AltelaRain™ technology at Altela's design, research, and manufacturing facility, which expires January 16, 2013. The OCD has granted this temporary approval to serve certain purposes and achieve certain results. One purpose is to allow Altela the opportunity to use real produced water in a controlled environment to assist in the research and development of the AltelaRain™ technology. Another purpose is to obtain testing results of the treatment of the produced water in order to assess the capability of the AltelaRain™ technology. Such analytical results should represent the initial test/source water concentrations prior to treatment and the concentrations present after treatment for all of the constituents specified in Subsection A, B, and C of 20.6.2.3103 NMAC.

The OCD hereby grants this temporary approval with the following understandings and conditions:

1. The produced water approved for storage and the testing and development of the AltelaRain™ technology shall only occur at Altela's design, research, and manufacturing facility (Meridian), located at 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water shall provide transport of produced water to and from the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water shall be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela shall retain records documenting all produced water received and removed from the Meridian facility. The record shall indicate the facility/well name and permit number in which the produced water is obtained from and the facility/well name and permit number of the OCD approved facility in which the produced is disposed;

5. Altela shall report all unauthorized discharges of produced water pursuant to 19.15.29 NMAC to the OCD within 24 hours of determining a release; and

6. Altela shall provide the OCD copies of the water quality analytical test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

This authorization is approved for a period of one (1) year. This temporary approval will expire January 16, 2014. Renewal requests for temporary approvals shall be submitted 45 days prior to the expiration date. Temporary approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District IV Office, Santa Fe

Altela Tower Test Data Inputs

Altela Tower Test Data Inputs

Tower: _____ **Test Station:** #1

Test Conditions	Test Duration		Natural Gas		Tank Levels				PW Flow	Inlet Air Measurements			Stream		Electical Conductivity							
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	DW Tanks Height Delta [inches]	BW Tanks Height Delta [inches]	PW Tank #1 Height Delta [inches]	PW Tank #2 Height Delta [inches]	PW Flow [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. [°F]	Air Press. [inches H2O]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity of DW Basin @ Start [µS/cm]	Electical Conductivity of DW Basin @ End [µS/cm]	Electical Conductivity of DW Tanks @ Start [µS/cm]	Electical Conductivity of DW Tanks @ End [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Thursday, July 10, 2014 2:47 PM
To: 'Karen Evans'
Cc: Matthew J. Bruff
Subject: RE: Altela, Inc. Renewal Request for Temporary Approval EPWM 004
Attachments: 2014 0710 EPWM-004 renewal approval.pdf

Karen,

Thank for making the appropriate revisions and clarifying that the documented water was landfill leachate instead of produced water. Please see the attached renewal approval. Hardcopies will be mailed today. If you have any questions, please contact me.

Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Karen Evans [mailto:karen.evans@altelainc.com]
Sent: Thursday, July 10, 2014 1:42 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela, Inc. Renewal Request for Temporary Approval EPWM 004

Brad,

Please find attached a revised Request for Temporary Approval of EPWM 004 (the original will be sent via USPS). The Tracking Summary that was initially submitted was incorrect and reflected Leachate. Altela, Inc. did not treat any Produced Water in 2013.

Upon your review, please let me know if you have any questions, etc.

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952

FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Go to www.CARESforWater.com and www.CAESwater.com to view Altela's two new centralized wastewater treatment facilities in Pennsylvania.

From: Karen Evans
Sent: Wednesday, July 09, 2014 11:55 AM
To: 'Jones, Brad A., EMNRD'
Cc: Matthew J. Bruff
Subject: Altela, Inc. Renewal Request for Temporary Approval EPWM 004
Importance: High

Brad,

Good morning.

Thanks again for your understanding and for your time on the phone yesterday. Per our conversation, attached please find an advance PDF copy of the request for renewal. The original documents were mailed today.

Upon review of the request, should you have any questions please do not hesitate to contact me.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
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From: Jones, Brad A., EMNRD [mailto:brad.a.jones@state.nm.us]
Sent: Tuesday, July 08, 2014 9:43 AM
To: Karen Evans
Cc: Matthew J. Bruff
Subject: RE: Altela Inc. EPWM-004 Quarterly Report - 2nd Qtr 2014

Karen,

OCD records indicate that EPWM-004 expired on January 16, 2014. Please contact me if Altela wishes to continue to operate under this approval.

Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Karen Evans [mailto:karen.evans@altelainc.com]
Sent: Wednesday, July 02, 2014 8:48 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc. EPWM-004 Quarterly Report - 2nd Qtr 2014

Brad,

With respect to the State's quarterly survey, for the period April 1 through June 30, 2014, Altela treated zero barrels of produced water in New Mexico.

Thanks -

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952
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WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Thursday, July 10, 2014 1:42 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela, Inc. Renewal Request for Temporary Approval EPWM 004
Attachments: 7.10.14 Revised Request Temp Approval EPWM 004.pdf

Brad,

Please find attached a revised Request for Temporary Approval of EPWM 004 (the original will be sent via USPS). The Tracking Summary that was initially submitted was incorrect and reflected Leachate. Altela, Inc. did not treat any Produced Water in 2013.

Upon your review, please let me know if you have any questions, etc.

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
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From: Karen Evans
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Importance: High

Brad,

Good morning.

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Upon review of the request, should you have any questions please do not hesitate to contact me.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

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Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
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To: Jones, Brad A., EMNRD

Cc: Matthew J. Bruff
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Karen K. Evans
Environmental Regulatory Analyst

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DENVER OFFICE
5350 South Roslyn Street, Suite 210, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

July 9, 2014

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology
Temporary Approval EPWM – 004 expiration January 16, 2014

VIA ELECTRONIC MAIL AND UNITED STATES POSTAL SERVICE

Dear Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. The produced water approved for storage and testing and development of the AltelaRain® technology will only occur at Altela's design, research and manufacturing facility (Meridian), located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121;

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Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted January 16, 2013. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

We request the annual renewal of EPWM – 004 as we anticipate receiving produced water in the coming year to continue the development of the AltelaRain® technology. Per our conversation, our request for renewal was delayed due to a computer crash in October last year. The annual tickler for renewing the permit in January must have been lost in that crash, however, the 1st and 2nd Quarterly Reports for 2014 have been submitted at the proper times.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Karen K. Evans

Karen K. Evans
Environmental Regulatory Analyst

cc: Altela Day File

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary 2013										
No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance

ALTELA, INC. DID NOT TREAT ANY PRODUCED WATER DURING 2013

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

January 16, 2013

Mr. Matthew Bruff
Altela, Inc.
Denver Technology Center
5350 South Roslyn Street, Suite 210
Englewood, Colorado 80111

Re: Renewal Request for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM - 004
Location: 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Mr. Bruff:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated January 14, 2013, to renew Altela's temporary approval to store and use oilfield produced water for testing and development of the AltelaRain™ technology at Altela's design, research, and manufacturing facility, which expires January 16, 2013. The OCD has granted this temporary approval to serve certain purposes and achieve certain results. One purpose is to allow Altela the opportunity to use real produced water in a controlled environment to assist in the research and development of the AltelaRain™ technology. Another purpose is to obtain testing results of the treatment of the produced water in order to assess the capability of the AltelaRain™ technology. Such analytical results should represent the initial test/source water concentrations prior to treatment and the concentrations present after treatment for all of the constituents specified in Subsection A, B, and C of 20.6.2.3103 NMAC.

The OCD hereby grants this temporary approval with the following understandings and conditions:

1. The produced water approved for storage and the testing and development of the AltelaRain™ technology shall only occur at Altela's design, research, and manufacturing facility (Meridian), located at 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water shall provide transport of produced water to and from the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water shall be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela shall retain records documenting all produced water received and removed from the Meridian facility. The record shall indicate the facility/well name and permit number in which the produced water is obtained from and the facility/well name and permit number of the OCD approved facility in which the produced is disposed;

5. Altela shall report all unauthorized discharges of produced water pursuant to 19.15.29 NMAC to the OCD within 24 hours of determining a release; and

6. Altela shall provide the OCD copies of the water quality analytical test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

This authorization is approved for a period of one (1) year. This temporary approval will expire January 16, 2014. Renewal requests for temporary approvals shall be submitted 45 days prior to the expiration date. Temporary approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District IV Office, Santa Fe

Altela Tower Test Data Inputs

Altela Tower Test Data Inputs

Tower: _____ Test Station: #1

Test Conditions	Test Duration		Natural Gas		Tank Levels				PW Flow	Inlet Air Measurements			Stream		Electical Conductivity								Temperature						
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	DW Tanks Height Delta [inches]	BW Tanks Height Delta [inches]	PW Tank #1 Height Delta [inches]	PW Tank #2 Height Delta [inches]	PW Flow [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. (°F)	Air Press. [inches H2O]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity of DW Basin @ Start [µS/cm]	Electical Conductivity of DW Basin @ End [µS/cm]	Electical Conductivity of DW Tanks @ Start [µS/cm]	Electical Conductivity of DW Tanks @ End [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	Electical Conductivity of CW @ End [µS/cm]	PWT #5 (°F)	PW Inlet (°F)	CW Exit (°F)	DWT Right (°F)	DWT Left (°F)	Exhaust Air Temp, Left (°F)	Exhaust Air Temp, Right (°F)

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Wednesday, July 09, 2014 11:55 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela, Inc. Renewal Request for Temporary Approval EPWM 004
Attachments: 7.9.14 Renewal Request Temp Approval EPWM 004.pdf

Importance: High

Brad,

Good morning.

Thanks again for your understanding and for your time on the phone yesterday. Per our conversation, attached please find an advance PDF copy of the request for renewal. The original documents were mailed today.

Upon review of the request, should you have any questions please do not hesitate to contact me.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

From: Jones, Brad A., EMNRD [mailto:brad.a.jones@state.nm.us]
Sent: Tuesday, July 08, 2014 9:43 AM
To: Karen Evans
Cc: Matthew J. Bruff
Subject: RE: Altela Inc. EPWM-004 Quarterly Report - 2nd Qtr 2014

Karen,

OCD records indicate that EPWM-004 expired on January 16, 2014. Please contact me if Altela wishes to continue to operate under this approval.

Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Karen Evans [mailto:karen.evans@altelainc.com]
Sent: Wednesday, July 02, 2014 8:48 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc. EPWM-004 Quarterly Report - 2nd Qtr 2014

Brad,

With respect to the State's quarterly survey, for the period April 1 through June 30, 2014, Altela treated zero barrels of produced water in New Mexico.

Thanks -

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952
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ALTELA®
Treating water naturally

WEB: altelainc.com

ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
5350 South Roslyn Street, Suite 210, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

July 9, 2014

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology
Temporary Approval EPWM – 004 expiration January 16, 2014

VIA ELECTRONIC MAIL AND UNITED STATES POSTAL SERVICE

Dear Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. The produced water approved for storage and testing and development of the AltelaRain® technology will only occur at Altela's design, research and manufacturing facility (Meridian), located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water must be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela must retain records documenting all produced water received and removed from the Meridian facility;

5. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted January 16, 2013. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

We request the annual renewal of EPWM – 004 as we anticipate receiving produced water in the coming year to continue the development of the AltelaRain® technology. Per our conversation, our request for renewal was delayed due to a computer crash in October last year. The annual tickler for renewing the permit in January must have been lost in that crash, however, the 1st and 2nd Quarterly Reports for 2014 have been submitted at the proper times.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Karen K. Evans

Karen K. Evans
Environmental Regulatory Analyst

cc: Altela Day File

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary

No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance
1	5/31/13	ABF Freight System			(505) 883-1010		unavailable	Delaware County Solid Waste Authority - LEACHATE (not PW)		1,500 Gallons Delivered	+*1500 gallons
2	6/26/13	M&R Trucking, Inc.		PO Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-399	NA		1260 Gallons Taken Away	+* 240 gallons

*240 gallon difference in volume being taken away attributable to clean, distilled water vapor being exhausted during process.

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John Bemis
Cabinet Secretary

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

January 16, 2013

Mr. Matthew Bruff
Altela, Inc.
Denver Technology Center
5350 South Roslyn Street, Suite 210
Englewood, Colorado 80111

Re: Renewal Request for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM - 004
Location: 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Mr. Bruff:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated January 14, 2013, to renew Altela's temporary approval to store and use oilfield produced water for testing and development of the AltelaRain™ technology at Altela's design, research, and manufacturing facility, which expires January 16, 2013. The OCD has granted this temporary approval to serve certain purposes and achieve certain results. One purpose is to allow Altela the opportunity to use real produced water in a controlled environment to assist in the research and development of the AltelaRain™ technology. Another purpose is to obtain testing results of the treatment of the produced water in order to assess the capability of the AltelaRain™ technology. Such analytical results should represent the initial test/source water concentrations prior to treatment and the concentrations present after treatment for all of the constituents specified in Subsection A, B, and C of 20.6.2.3103 NMAC.

The OCD hereby grants this temporary approval with the following understandings and conditions:

1. The produced water approved for storage and the testing and development of the AltelaRain™ technology shall only occur at Altela's design, research, and manufacturing facility (Meridian), located at 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water shall provide transport of produced water to and from the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water shall be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela shall retain records documenting all produced water received and removed from the Meridian facility. The record shall indicate the facility/well name and permit number in which the produced water is obtained from and the facility/well name and permit number of the OCD approved facility in which the produced is disposed;

5. Altela shall report all unauthorized discharges of produced water pursuant to 19.15.29 NMAC to the OCD within 24 hours of determining a release: and

6. Altela shall provide the OCD copies of the water quality analytical test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

This authorization is approved for a period of one (1) year. This temporary approval will expire January 16, 2014. Renewal requests for temporary approvals shall be submitted 45 days prior to the expiration date. Temporary approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District IV Office, Santa Fe

Altela Tower Test Data Inputs

Altela Tower Test Data Inputs

Tower: _____ Test Station: #1

Test Conditions	Test Duration		Natural Gas		Tank Levels				PW Flow	Inlet Air Measurements			Stream		Electical Conductivity								Temperature						
Test Conditions / Notes/ Change In Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	DW Tanks Height Delta [inches]	BW Tanks Height Delta [inches]	PW Tank #1 Height Delta [inches]	PW Tank #2 Height Delta [inches]	PW Flow [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. [°F]	Air Press. [inches H2O]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity of DW Basin @ Start [µS/cm]	Electical Conductivity of DW Basin @ End [µS/cm]	Electical Conductivity of DW Tanks @ Start [µS/cm]	Electical Conductivity of DW Tanks @ End [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	Electical Conductivity of CW @ End [µS/cm]	PWT #5 [°F]	PW Inlet [°F]	CW Exit [°F]	DWT Right [°F]	DWT Left [°F]	Exhaust Air Temp, Left [°F]	Exhaust Air Temp, Right [°F]

Altela Tower Test Data Inputs

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Thursday, January 02, 2014 9:04 AM
To: Jones, Brad A., EMNRD
Cc: matthew.bruff@altelainc.com
Subject: Altela Inc EPWM-004 Quarterly Report - 4th Qtr 2013

Brad,

With respect to the State's quarterly survey, for the period October 1 through December 31, 2013, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

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Go to www.CARESforWater.com and www.CAESwater.com to view Altela's two new centralized wastewater treatment facilities in Pennsylvania.

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Monday, September 30, 2013 11:07 AM
To: Jones, Brad A., EMNRD
Cc: matthew.bruff@altelainc.com
Subject: Altela Inc. EPWM-004 Quarterly Report - third Qtr 2013

Brad,

With respect to the State's quarterly survey, for the period July1 through September 30, 2013, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Go to www.CARESforWater.com and www.CAESwater.com to view Altela's two new centralized wastewater treatment facilities in Pennsylvania.

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Monday, July 01, 2013 8:04 AM
To: Jones, Brad A., EMNRD
Subject: NM OCD Altela 2nd Qtr 2013 Report

Brad,

Hope all is well with you.

With respect to the State's quarterly survey, for the period April 1 through June 30, 2013, Altela treated zero barrels of produced water in New Mexico.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Go to www.CARESforWater.com and www.CAESwater.com to view Altela's two new centralized wastewater treatment facilities in Pennsylvania.

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Tuesday, April 02, 2013 10:50 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 1st Qtr 2013

Brad,

Good morning.

With respect to the State's quarterly survey, for the period January 1 through March 31, 2013, Altela treated zero barrels of produced water in New Mexico.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Go to www.CARESforWater.com and www.CAESwater.com to view Altela's two new centralized wastewater treatment facilities in Pennsylvania.

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Wednesday, January 02, 2013 3:04 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 4th Qtr 2012

Brad,

With respect to the State's quarterly survey, for the period October 1 through December 31, 2012, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
PHONE: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Go to www.CARESforWater.com and www.CAESwater.com to view Altela's two new centralized wastewater treatment facilities in Pennsylvania.

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Monday, July 02, 2012 9:14 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-001 Quarterly Report - 2nd Qtr 2012

Brad,

With respect to the State's quarterly survey, for the period April 1 through June 30, 2012, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
DIRECT: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Visit **CAES** *and* **CARES** *for updates on Altela's joint venture projects – two centralized wastewater treatment facilities in Pennsylvania!*

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Monday, April 02, 2012 2:36 PM
To: Jones, Brad A., EMNRD
Subject: EPWM-004 Quarterly Report - 1st Qtr 2012

Importance: High

Brad,

With respect to the State's quarterly survey, for the period January 1 through March 31, 2012, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
DIRECT: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Please note our new Denver address and Albuquerque Headquarters new phone numbers!

PHONE: (505) 227-8560
FAX: (505) 227-8561

Follow us on Facebook and Twitter:

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Monday, January 02, 2012 8:17 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 4th Qtr 2011

Brad,

With respect to the State's quarterly survey, for the period October 1 through December 31, 2011, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111
DIRECT: (303) 993-1952
FAX: (303) 993-1955
WEB: www.altelainc.com

Please note our Albuquerque Main Headquarters new phone numbers!
PHONE: (505) 227-8560
FAX: (505) 227-8561

Follow us on Facebook and Twitter:

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Monday, October 03, 2011 9:03 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 3rd Qtr 2011

Brad,

With respect to the State's quarterly survey, for the period July1 through September 30, 2011, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111
PHONE: (303) 993-1952 [work & cell]
FAX: (505) 923-4130
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Friday, July 01, 2011 9:56 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 2nd Qtr 2011

Brad,

With respect to the State's quarterly survey, for the period April 1 through June 30, 2011, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

Altela, Inc.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111
PHONE: (303) 993-1952 [work & cell]
FAX: (505) 923-4130
WEB: www.altelainc.com

Follow us on Facebook and Twitter:

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Monday, April 04, 2011 11:38 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 1st Qtr 2011

Brad,

With respect to the State's quarterly survey, for the period January 1 through March 31, 2011, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Monday, January 03, 2011 5:44 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 4th Qtr 2010

Brad,

With respect to the State's quarterly survey, for the period October 1 through December 31, 2010, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Environmental Regulatory Analyst

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Friday, October 01, 2010 9:29 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 3rd Qtr 2010

Brad,

With respect to the State's quarterly survey, for the period July 1 through September 30, 2010, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Jones, Brad A., EMNRD

From: Karen Evans <karen.evans@altelainc.com>
Sent: Thursday, July 01, 2010 11:20 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 2nd Qtr 2010

Brad,

With respect to the State's quarterly survey, for the period April 1 through June 30, 2010, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Jones, Brad A., EMNRD

From: Karen Evans [karen.evans@altelainc.com]
Sent: Thursday, April 01, 2010 12:04 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 1st Qtr 2010

Brad,

With respect to the State's quarterly survey, for the period January 1 through March 31, 2010, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Thanks,

Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Jones, Brad A., EMNRD

From: Karen Evans [karen.evans@altelainc.com]
Sent: Thursday, April 01, 2010 1:19 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: EPWM-004 Change of Address Notification
Attachments: 4.1.10 Change of Address Notification.docx

Brad,

Attached, please find a letter advising of Altela's recent change of address.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

WEB: altelainc.com

ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
5350 South Roslyn Street, Suite 450, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

April 1, 2010

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Change of Address Notification for Temporary Approval EPWM-004

Dear Brad,

Per your recent conversation with Matt Bruff, please be advised that Altela, Inc. has moved its Albuquerque facilities, effective March 1, 2010.

The previous facility location under the above referenced Permit was:
2450 Alamo SE
Albuquerque, NM 87106

The new facility address is:
7500 Meridian Pl NW, Suite B
Albuquerque, NM 87121

We would appreciate the Oil Conservation Division's acknowledgement and confirmation of this change of address with respect to Altela, Inc.'s Temporary Approval EPWM -004 to Store and Use Produced Water for R&D of the AltelaRain® Technology.

Thank you in advance for your continued assistance and support. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Matthew Bruff
CDO

cc: Altela Day File

ALTELA®
Treating water naturally.

WEB: altelainc.com

ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
5350 South Roslyn Street, Suite 210, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

January 14, 2013

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology Temporary Approval EPWM – 004 expiration January 16, 2013

VIA UNITED STATES POSTAL SERVICE

Dear Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. The produced water approved for storage and testing and development of the AltelaRain® technology will only occur at Altela's design, research and manufacturing facility (Meridian), located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water must be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela must retain records documenting all produced water received and removed from the Meridian facility;

5. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted December 5, 2011. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

We request renewal of EPWM – 004 as we anticipate receiving produced water in the coming year to continue the development of the AltelaRain® technology.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Matthew Bruff
CDO

cc: Altela Day File

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary

No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance
1	8/29/12	RL Carriers		P.O. Box Box 271, Wilmington, OH 45177	(814) 226-6001		unavailable	RNI Trucking		1,050 Gallons Delivered	+'1050 gallons
2	10/19/12	M&R Trucking, Inc.		PO Box 600, Farmington, NM 87499	(505) 326-5541	(505) 328-6002	C-133-399	NA		428 Gallons Taken Away	0 gallons

*622 gallon difference in volume being taken away attributable to clean, distilled water vapor being exhausted during process.

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

December 5, 2011

Mr. Matthew J. Bruff
Altela, Inc.
Denver Technology Center
5350 South Roslyn Street, Suite 450
Englewood, Colorado 80111

Re: Renewal Request for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM -004
Location: 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Mr. Bruff:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated November 29, 2011, to renew Altela's temporary approval to store and use oilfield produced water for testing and development of the AltelaRain™ technology at Altela's design, research, and manufacturing facility, which expires January 16, 2012. The OCD has granted this temporary approval to serve certain purposes and achieve certain results. One purpose is to allow Altela the opportunity to use real produced water in a controlled environment to assist in the research and development of the AltelaRain™ technology. Another purpose is to obtain testing results of the treatment of the produced water in order to assess the capability of the AltelaRain™ technology. Such analytical results should represent the initial test/source water concentrations prior to treatment and the concentrations present after treatment for all of the constituents specified in Subsection A, B, and C of 20.6.2.3103 NMAC.

The OCD hereby grants this temporary approval with the following understandings and conditions:

1. The produced water approved for storage and the testing and development of the AltelaRain™ technology shall only occur at Altela's design, research, and manufacturing facility (Meridian), located at 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121.

2. Only haulers authorized (OCD approved C-133) to move produced water shall provide transport of produced water to and from the Meridian facility.

3. No produced water shall be disposed at the Meridian facility. All produced water shall be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility.

4. Altela shall retain records documenting all produced water received and removed from the Meridian facility. The record shall indicate the facility/well name and permit number in which the produced water is obtained from and the facility/well name and permit number of the OCD approved facility in which the produced is disposed.

5. Altela shall report all unauthorized discharges of produced water pursuant to 19.15.29 NMAC to the OCD within 24 hours of determining a release.

6. Altela shall provide the OCD copies of the water quality analytical test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

This authorization is approved for a period of one (1) year. This temporary approval will expire January 16, 2013. Renewal requests for temporary approvals shall be submitted 45 days prior to the expiration date. Temporary approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

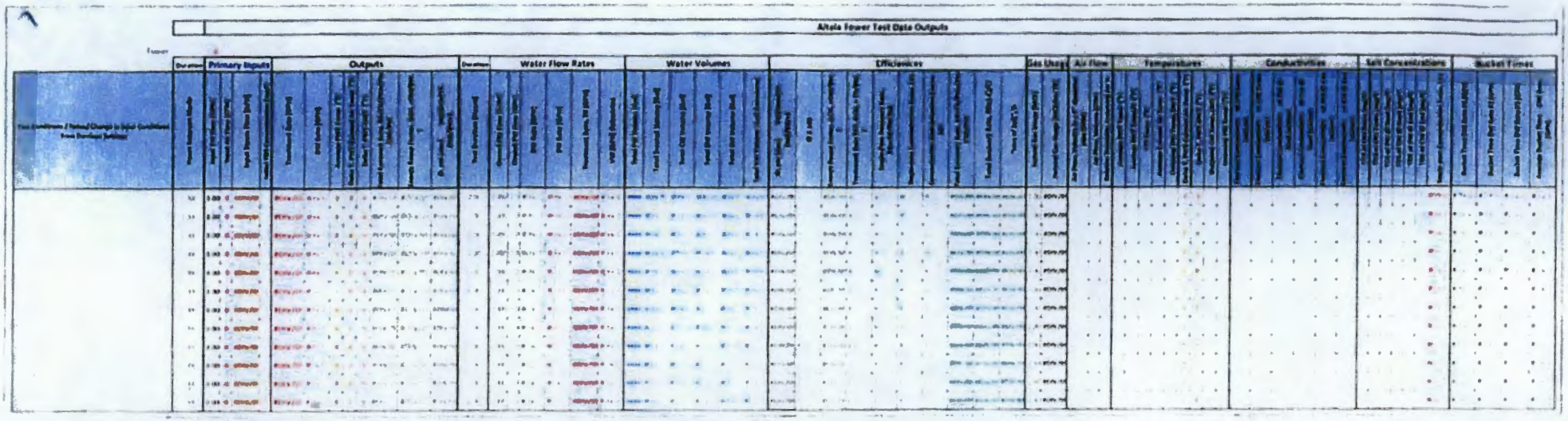
BAJ/baj

cc: OCD District IV Office, Santa Fe

Altela Tower Test Data Inputs

Tower: | Test Station: #1

Test Conditions	Test Duration		Natural Gas			Tank Levels								PW Flows					Inlet Air Measurements							m Measurem				Electical Conductivity								Tower Temperatures																		Bucket Times		
Test Conditions / Notes/ Change in Input Conditions from Previous Setting	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start (CCF)	Natural Gas Meter Reading, End (CCF)	Inlet TDS Concentration (mg/l)	DW Tank #1 Height Delta (inches)	DW Tank #2 Height Delta (inches)	BWE1 Tank Height Delta (inches)	BWE2 Tank Height Delta (inches)	BWE3 Tank Height Delta (inches)	PW Tank #1 Height Delta (inches)	PW Tank #2 Height Delta (inches)		PW Flows #1 (GPM)	PW Flows #2 (GPM)	PW Flows #3 (GPM)	PW Flows #4 (GPM)	PW Flows #5 (GPM)	Air Flow Measurement (Test Fan Nozzle)	Inlet Air Temp. (°F)	Inlet Air Wet Bulb Temp (°F)	Air Press. (inches H2O)	Left Exhaust Press. (inches H2O)	Right Exhaust Press. (inches H2O)		Boiler NG Pressure (inches H2O)	Steam Pressure (psig)	Steam Press. Before Valve (psig)	Steam Press. After Valve (psig)	Electrical Conductivity of DW Basin @ Start (µS/cm)	Electrical Conductivity of DW Basin @ End (µS/cm)	Electrical Conductivity of DW Tanks @ Start (µS/cm)	Electrical Conductivity of DW Tanks @ End (µS/cm)	Electrical Conductivity of PW @ Start (µS/cm)	Electrical Conductivity of CW @ Start (µS/cm)	Electrical Conductivity of PW @ End (µS/cm)	Electrical Conductivity of CW @ End (µS/cm)		TTT (°F)	Pad1 #1 (°F)	Pad1 #2 (°F)	Pad1 #3 (°F)	Pad1 #4 (°F)	Pad1 #5 (°F)	Pad1 #6 (°F)	Pad1 #7 (°F)	Pad1 #8 (°F)	Pad1 #9 (°F)	Pad1 #10 (°F)	PW Inlet (°F)	CW East (°F)	CW Right (°F)	CW Left (°F)	Exhaust Air Temp. Left (°F)	Exhaust Air Temp. Right (°F)		Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #2 (seconds) for a 5 Gallon Bucket	Bucket Time #3 (seconds) for a 5 Gallon Bucket


Altela Tower Test Data Outputs
Primary Inputs
Outputs
Water Flow Rates
Water Volumes
Efficiencies
Gas Usage
Air Flow
Temperatures
Conductivities
Salt Concentrations
Bucket Times

RNI Produced Water Testing

Tower: PT-1244 Test Station: #1

Test Conditions	Test Duration		Natural Gas			Tank Levels					
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	Initial TDS Concentration [mg/l]	DW Tank #1 Height Delta [inches]	DW Tank #2 Height Delta [inches]	BW#1 Tank Height Delta [inches]	BW#2 Tank Height Delta [inches]	BW#3 Tank Height Delta [inches]	PW Tank #1 Height Delta [inches]
Starting Reading	9/5/12 7:30 AM	-	4,231.0	-	-	-	-	-	-	-	-
2nd Reading	9/5/12 7:30 AM	9/5/12 8:30 AM	4,231.0	4,236.8	-	-	-	-	-	-	-
3rd Reading	9/5/12 8:30 AM	9/5/12 9:30 AM	4,236.8	4,240.9	-	7.625	-	6.563	6.563	6.563	7.000
4th Reading	9/5/12 9:30 AM	9/5/12 10:30 AM	4,241	4,245	-	5.750	-	4.250	4.250	4.250	3.833
5th Reading	9/5/12 10:30 AM	9/5/12 11:30 AM	4,245	4,250	-	4.375	-	3.500	3.500	3.500	4.250
6th Reading	9/5/12 11:30 AM	9/5/12 12:30 PM	4,250	4,255	-	4.250	-	3.750	3.750	3.750	5.750
7th Reading	9/5/12 12:30 PM	9/5/12 1:30 PM	4,255	4,259	-	4.063	-	3.125	3.125	3.125	3.188
8th Reading	9/5/12 1:30 PM	9/5/12 2:30 PM	4,259	4,264	-	3.063	-	3.563	3.563	3.563	3.188
9th Reading	9/5/12 2:30 PM	9/5/12 3:30 PM	4,264	4,268	-	3.063	-	3.188	3.188	3.188	3.625
10th Reading	9/5/12 3:30 PM	9/5/12 4:30 PM	4,268	4,272	-	3.375	-	3.625	3.625	3.625	3.313
11th Reading	9/5/12 4:30 PM	9/5/12 5:30 PM	4,272	4,277	-	2.875	-	3.375	3.375	3.375	2.500

Altela Tower Test Data Inputs

	PW Flows					Inlet Air Measurements						Steam Measurements					
PW Tank #2 Height Delta [inches]	PW Flows #1 [GPM]	PW Flows #2 [GPM]	PW Flows #3 [GPM]	PW Flows #4 [GPM]	PW Flows #5 [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. [°F]	Inlet Air Wet Bulb Temp. [°F]	Air Press. [inches H2O]	Left Exhaust Press. [inches H2O]	Right Exhaust Press. [inches H2O]	Boiler NG Pressure [inches H2O]	Steam Pressure [psig]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity of DW Basin @ Start [µS/cm]	Electical Conductivity of DW Basin @ End [µS/cm]
-	15.00	0.00	0.00	0.00	0.00	1,829	91.4	77.2	-2.00	N/A	N/A	3.0	13.3	11.4	5.4	-	-
-	15.00	0.00	0.00	0.00	0.00	1,856	126.5	89.4	-0.90	N/A	N/A	3.0	13.4	12.5	6	-	203.80
-	15.00	0.00	0.00	0.00	0.00	1,805	139.4	94.2	-0.50	N/A	N/A	3.0	13.8	12.4	5.9	203.80	190.90
-	15.00	0.00	0.00	0.00	0.00	1,978	143.8	92.1	0.10	N/A	N/A	3.0	13.4	12.4	5.9	190.90	122.60
-	15.00	0.00	0.00	0.00	0.00	1,878	146.9	111.3	0.10	N/A	N/A	3.0	12	12	4.4	122.60	74.78
-	15.00	0.00	0.00	0.00	0.00	2,065	144.7	90.6	0.15	N/A	N/A	3.0	13.6	12.4	5.9	74.78	101.30
-	15.00	0.00	0.00	0.00	0.00	1,814	147.3	87.4	0.10	N/A	N/A	4.1	13.9	12.4	5.9	101.30	192.20
-	15.00	0.00	0.00	0.00	0.00	1,829	145.5	91.5	0.00	N/A	N/A	4.1	13.9	12.4	5.9	192.20	282.30
-	15.00	0.00	0.00	0.00	0.00	1,827	147.6	88.6	0.00	N/A	N/A	4.1	13.9	12.4	5.9	282.30	109.10
-	15.00	0.00	0.00	0.00	0.00	1,825	147.4	91.8	0.00	N/A	N/A	4.1	13.9	12.4	5.9	109.10	268.20
-	15.00	0.00	0.00	0.00	0.00	1,878	148.3	89.1	0.10	N/A	N/A	4.1	13.9	12.4	5.9	268.20	209.20

Electical Conductivity						Tower Temperatures											
Electical Conductivity of DW Tanks @ Start [µS/cm]	Electical Conductivity of DW Tanks @ End [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	Electical Conductivity of CW @ End [µS/cm]	TTT (°F)	PWT #1 (°F)	PWT #2 (°F)	PWT #3 (°F)	PWT #4 (°F)	PWT #5 (°F)	PWT #6 (°F)	PWT #7 (°F)	PWT #8 (°F)	PWT #9 (°F)	PWT #10 (°F)	PW Inlet (°F)
-	-	156,000	142,800	-	-	N/A	N/A	174.6	N/A	N/A	163.9	176.8	N/A	N/A	N/A	175.7	91.1
-	-	156,000	142,800	157,400	161,500	N/A	N/A	179.5	N/A	N/A	169.6	181.3	N/A	N/A	N/A	180.5	111
-	-	157,400	161,500	167,700	172,900	N/A	N/A	181.1	N/A	N/A	175.5	183.3	N/A	N/A	N/A	181.8	121.8
-	-	167,700	172,900	169,100	177,300	N/A	N/A	183.6	N/A	N/A	177.2	183.2	N/A	N/A	N/A	181.3	122.5
-	-	169,100	177,300	174,200	180,700	N/A	N/A	180.4	N/A	N/A	175.5	181.6	N/A	N/A	N/A	179.3	126.4
-	-	174,200	180,700	184,400	189,900	N/A	N/A	182	N/A	N/A	176.2	181.7	N/A	N/A	N/A	178.6	127.2
-	-	184,400	189,900	188,600	200,900	N/A	N/A	181.6	N/A	N/A	176.6	180.8	N/A	N/A	N/A	180.3	146.6
-	-	188,600	200,900	199,300	208,700	N/A	N/A	180.1	N/A	N/A	174.6	180.7	N/A	N/A	N/A	176.9	132
-	-	199,300	208,700	211,500	214,200	N/A	N/A	180.3	N/A	N/A	174.7	179.5	N/A	N/A	N/A	179.5	133.4
-	-	211,500	214,200	213,900	216,500	N/A	N/A	180.2	N/A	N/A	185	173.1	N/A	N/A	N/A	178.1	125.6
-	-	213,900	216,500	212,100	215,600	N/A	N/A	179	N/A	N/A	171.4	177.2	N/A	N/A	N/A	176.7	137.3

					Bucket Times		
CW Exit (°F)	DWT Right (°F)	DWT Left (°F)	Exhaust Air Temp, Left (°F)	Exhaust Air Temp, Right (°F)	Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #1 (seconds) for a 5 Gallon Bucket
123.2	110.9	111.2	122.7	123.8	N/A	N/A	N/A
122.4	144.8	141.5	134.3	134.2	N/A	N/A	N/A
128.7	155.9	152.3	145.9	145.7	N/A	N/A	N/A
132.7	159.6	157.3	151.4	148.1	N/A	N/A	N/A
134.8	159.7	158.7	152.2	152.5	N/A	N/A	N/A
135.2	160.6	160.1	149.3	153.5	N/A	N/A	N/A
136.3	160.5	160.1	153.5	153.8	N/A	N/A	N/A
137.3	159.5	159.4	153.9	154.4	N/A	N/A	N/A
138.6	160.1	154.3	153.9	154.1	N/A	N/A	N/A
137.5	161	158.3	155.3	155.9	N/A	N/A	N/A
139.1	161.4	164.2	157.4	156.8	N/A	N/A	N/A

Tower: PT-1244

	Primary Inputs		
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Input PW Flow [GPM]	Input Air Flow [CFM]	Input Steam Flow [GPH]
Starting Reading	15.00	359	#VALUE!
2nd Reading	15.00	365	#VALUE!
3rd Reading	15.00	355	37.2
4th Reading	15.00	389	48.2
5th Reading	15.00	369	39.7
6th Reading	15.00	406	42.5
7th Reading	15.00	356	35.4
8th Reading	15.00	359	40.4
9th Reading	15.00	359	36.2
10th Reading	15.00	359	41.1
11th Reading	15.00	369	38.3
0	0.00	0	#DIV/0!

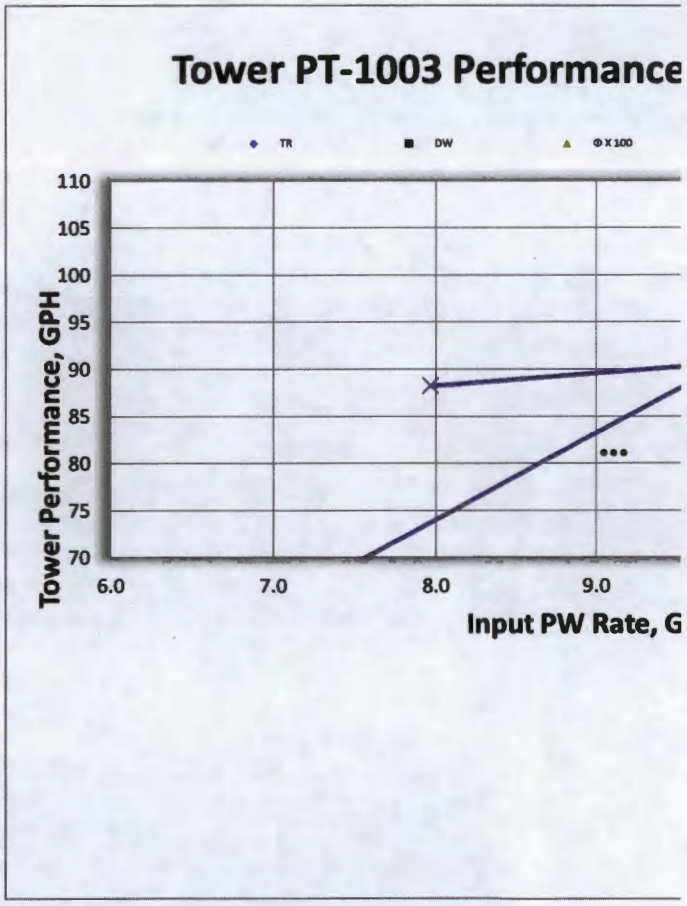
	Outputs								Duration	Water Flow Rates						
Initial TDS Concentration [mg/l]	Treatment Rate [GPH]	DW Rate [GPH]	Average PWT Temp [°F]	Delta T, PWT-Exhaust Air Temp [°F]	Delta T, PWT-DWT [°F]	Total Recovery Rate, RR=TR/PW=(PW-CW)/PW	Energy Reuse Factor, GOR, =DW/BW, f	Φ, phi [dim] VW/BW=(TR-DW)/BW+1	Test Duration [Hours]	Overall PW Flow [GPM]	Overall PW Flow [GPH]	DW Rate [GPH]	BW Rate [GPH]	Treatment Rate, TR [GPH]	VW [GPH] *Calculated*	Total PW Volume [Gal]
146,474	#VALUE!	#VALUE!	173	50	62	#VALUE!	#VALUE!	#VALUE!	#VALUE!	15.000	900.0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	1,850
146,474	#VALUE!	#VALUE!	178	43	35	#VALUE!	#VALUE!	#VALUE!	1.00	15.000	900.0	#VALUE!	#VALUE!	#VALUE!	#VALUE!	1,850
148,421	65.2	71.0	180	35	26	3.5%	1.91	84%	1.00	15.000	900.0	70.99	37.21	65.17	31.39	1,850
162,996	71.4	107.1	181	32	23	4.5%	2.22	26%	1.00	15.000	900.0	107.07	48.20	71.37	12.50	1,600
165,011	79.1	81.5	179	27	20	4.3%	2.05	94%	1.00	15.000	900.0	81.46	39.69	79.14	37.36	1,850
172,418	107.1	79.1	180	28	19	5.8%	1.86	166%	1.00	15.000	900.0	79.13	42.52	107.06	70.45	1,850
187,544	59.4	75.7	180	26	20	3.2%	2.13	54%	1.00	15.000	900.0	75.65	35.44	59.36	19.15	1,850
193,891	59.4	57.0	178	24	19	3.2%	1.41	106%	1.00	15.000	900.0	57.03	40.40	59.36	42.73	1,850
210,365	67.5	57.0	179	25	21	3.6%	1.58	129%	1.00	15.000	900.0	57.03	36.15	67.50	46.62	1,850
229,671	61.7	62.8	179	24	19	3.3%	1.53	97%	1.00	15.000	900.0	62.84	41.11	61.69	39.95	1,850
233,532	46.6	53.5	176	19	13	2.5%	1.40	82%	1.00	15.000	900.0	53.53	38.27	46.55	31.29	1,850
0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1,850

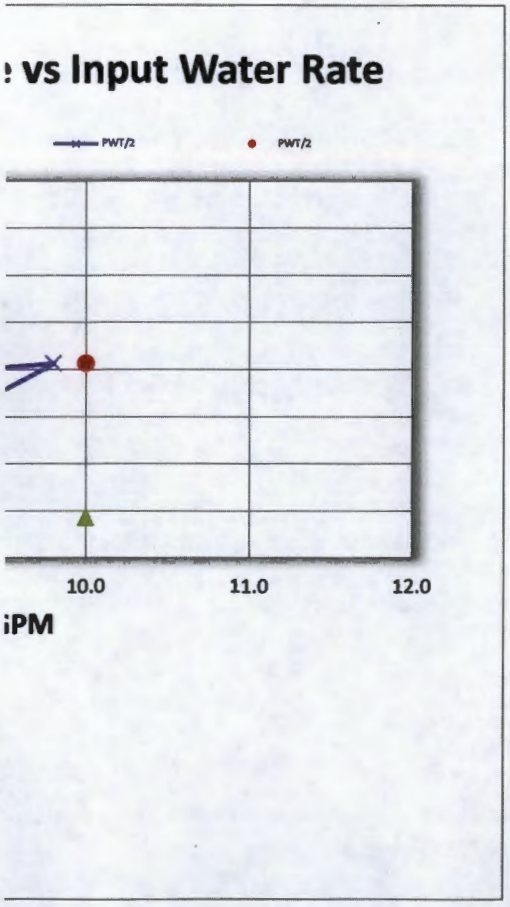
Altela Tower Test Data Outputs

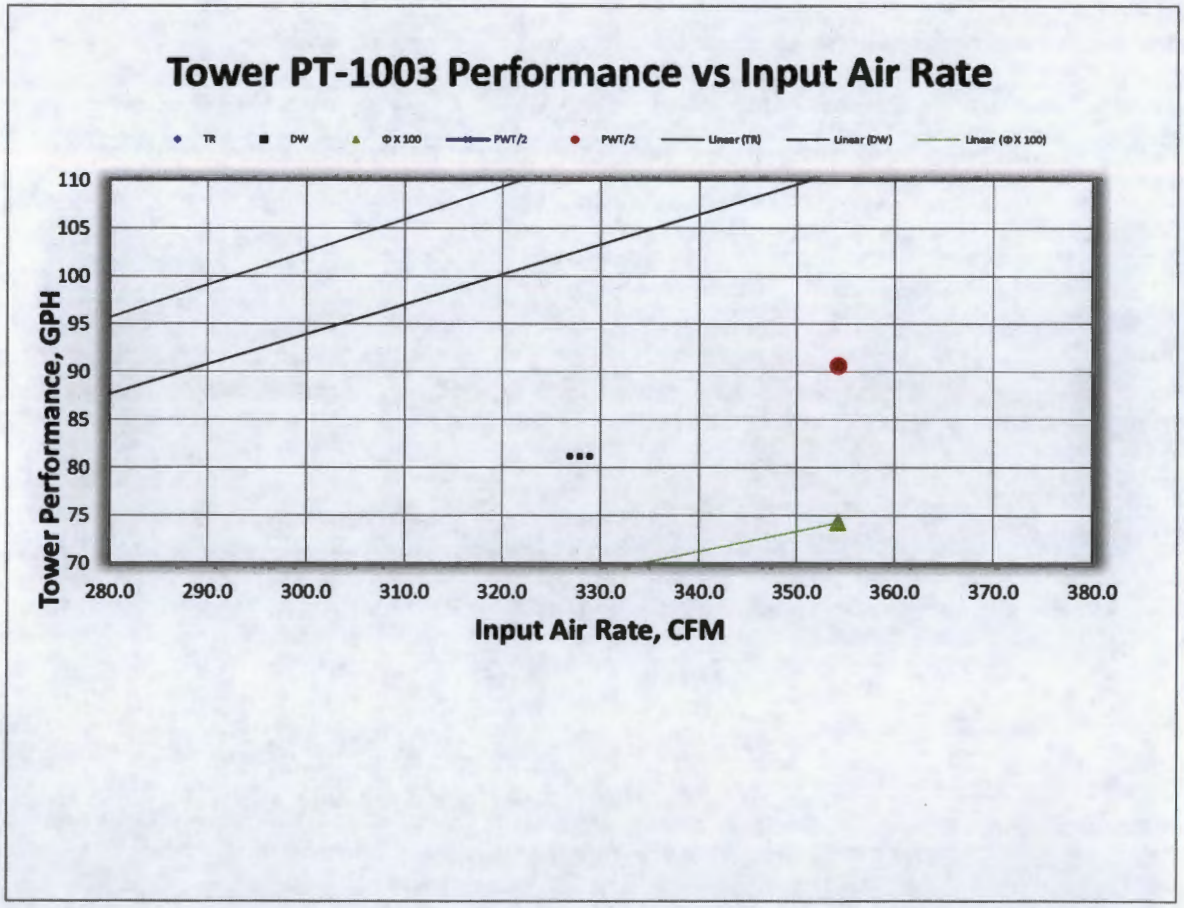
Water Volumes					Efficienices										Gas Usage		
Total Treated Volume [Gal]	Total CW Volume [Gal]	Total DW Volume [Gal]	Total BW Volume [Gal]	Total VW Volume [Gal] *Calculated*	Φ, phi [dim] VW/BW=(TR-DW)/BW+1	Φ X 100	Energy Reuse Factor, GOR, =DW/BW, f	Treatment Rate ERF, GOR, = TR/BW, f'	Single-Pass Recovery Rate, RRs=TR/PW [%]	Single-pass Concentration Ratio, CCs	Concentration Multiplication Factor, MF	Total Recovery Rate, RR=TR/PW=[PW-CW]/PW	Total Recovery Rate, RR=1-Ci/Cf	"Loss of Salt", %	Natural Gas Usage [MCF]	Natural Gas Usage [MCF/bbl TR]	Air Flow, Velocity in a 6" diameter pipe [FPM]
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	1,829
#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	3.9%	#VALUE!	#VALUE!	5.0%	#VALUE!	0.58	#VALUE!	1,856
65	1,785	71	37	31	84%	84	1.91	1.75	7.2%	4.6%	1.037	3.5%	13.0%	-9.4%	0.41	0.264	1,805
71	1,529	107	48	13	26%	26	2.22	1.48	7.9%	7.2%	1.047	4.5%	7.9%	-3.4%	0.44	0.259	1,978
79	1,771	81	40	37	94%	94	2.05	1.99	8.8%	5.6%	1.045	4.3%	9.3%	-5.1%	0.50	0.265	1,878
107	1,743	79	43	70	166%	166	1.86	2.52	11.9%	4.4%	1.061	5.8%	12.0%	-6.2%	0.49	0.192	2,065
59	1,791	76	35	19	54%	54	2.13	1.68	6.6%	9.8%	1.033	3.2%	11.9%	-8.7%	0.40	0.283	1,814
59	1,791	57	40	43	106%	106	1.41	1.47	6.6%	7.0%	1.033	3.2%	13.9%	-10.7%	0.47	0.333	1,829
67	1,783	57	36	47	129%	129	1.58	1.87	7.5%	1.9%	1.038	3.6%	10.1%	-6.5%	0.39	0.243	1,827
62	1,788	63	41	40	97%	97	1.53	1.50	6.9%	1.8%	1.034	3.3%	3.4%	-0.1%	0.43	0.293	1,825
47	1,803	54	38	31	82%	82	1.40	1.22	5.2%	2.4%	1.026	2.5%	1.2%	1.4%	0.45	0.406	1,878
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0

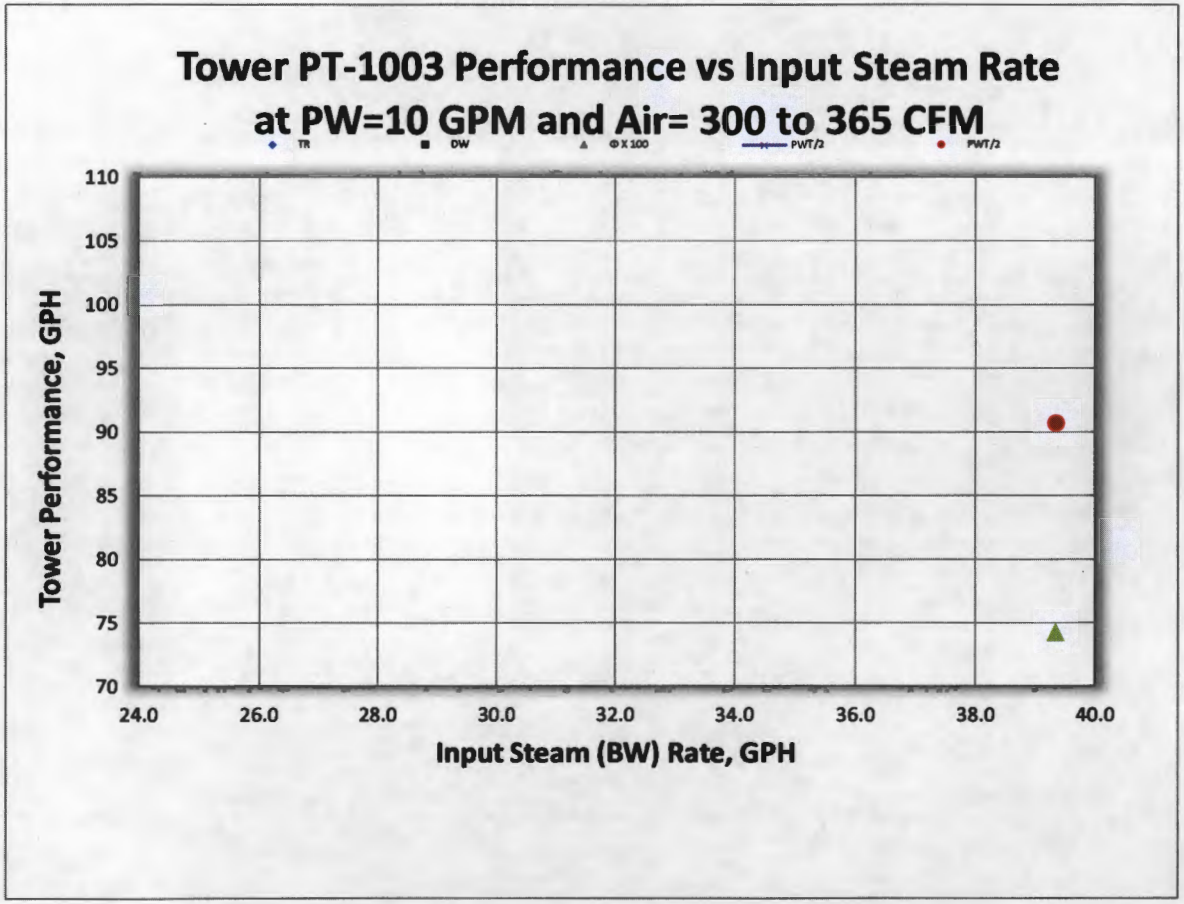
Air Flow		Temperatures									Conductivities						
Air Flow, Volume [CFM]	Relative Humidity, Incoming Air %	Average PWT Temp [°F]	Average PWT Temp/2 [°F]	TTT Temp [°F]	Average Exhaust Air Temp [°F]	Outgoing DW Temp, DWT [°F]	Delta T, PWT-Exhaust Air Temp [°F]	Delta T, PWT-DWT [°F]	Outgoing CW Temp, CWT [°F]	Incoming PW Temp [°F]	Electical Conductivity of DW Basin [µS/cm]	Electical Conductivity of DW Tanks [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	Electical Conductivity of CW @ End [µS/cm]	TDS of DW Basin [mg/l]
359		173	86	N/A	123	111	50	62	123	91	-	-	156,000	142,800	-	-	#VALUE!
365		178	89	N/A	134	143	43	35	122	111	204	-	156,000	142,800	157,400	161,500	102
355		180	90	N/A	146	154	35	26	129	122	191	-	157,400	161,500	167,700	172,900	95
389		181	91	N/A	150	158	32	23	133	123	123	-	167,700	172,900	169,100	177,300	61
369		179	90	N/A	152	159	27	20	135	126	75	-	169,100	177,300	174,200	180,700	37
406		180	90	N/A	151	160	28	19	135	127	101	-	174,200	180,700	184,400	189,900	51
356		180	90	N/A	154	160	26	20	136	147	192	-	184,400	189,900	188,600	200,900	96
359		178	89	N/A	154	159	24	19	137	132	282	-	188,600	200,900	199,300	208,700	141
359		179	89	N/A	154	157	25	21	139	133	109	-	199,300	208,700	211,500	214,200	55
359		179	90	N/A	156	160	24	19	138	126	268	-	211,500	214,200	213,900	216,500	134
369		176	88	N/A	157	163	19	13	139	137	209	-	213,900	216,500	212,100	215,600	105
0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Salt Concentrations						Bucket Times			
TDS of DW Tanks [mg/l]	TDS of PW @ Start [mg/l]	TDS of CW @ Start [mg/l]	TDS of PW @ End [mg/l]	TDS of CW @ End [mg/l]	Single-pass Concentration Ratio, CCs	Bucket Time DW Rate #1 (GPH)	Bucket Time DW Rate #2 (GPH)	Bucket Time DW Rate #3 (GPH)	Average Bucket Time DW Rate (GPH)
#VALUE!	146,474	128,534	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	146,474	128,534	148,421	154,170	3.9%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	148,421	154,170	162,996	170,520	4.6%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	162,996	170,520	165,011	176,972	7.2%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	165,011	176,972	172,418	182,010	5.6%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	172,418	182,010	187,544	195,869	4.4%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	187,544	195,869	193,891	212,866	9.8%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	193,891	212,866	210,365	225,191	7.0%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	210,365	225,191	229,671	234,017	1.9%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	229,671	234,017	233,532	237,740	1.8%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
#VALUE!	233,532	237,740	230,634	236,280	2.4%	#VALUE!	#VALUE!	#VALUE!	#VALUE!
0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!









HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 27, 2012

Michael Wimberly
Altela Inc.
7500 Meridian Place NW Suite B
Albuquerque, NM 87121
TEL: (505) 227-8601
FAX

RE: RNI Produced Water/ Solidification OrderNo.: 1209213

Dear Michael Wimberly:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/6/2012 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1209213**
Date Reported: **9/27/2012**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Altela Inc.
Client Sample ID: RNI Pruduced Water-Stat
Project: RNI Produced Water/ Solidification
Collection Date: 9/4/2012 3:30:00 PM
Lab ID: 1209213-001
Matrix: AQUEOUS
Received Date: 9/6/2012 2:55:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	188000	1000		mg/L	1	9/12/2012 6:37:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Altela Inc.
Client Sample ID: RNI Pruduced Water-CW At En
Project: RNI Produced Water/ Solidification
Collection Date: 9/5/2012 5:30:00 PM
Lab ID: 1209213-002 **Matrix:** AQUEOUS **Received Date:** 9/6/2012 2:55:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **JRR**
Chloride	250000	10000		mg/L	20000	9/13/2012 5:33:16 PM
Sulfate	ND	25		mg/L	50	9/10/2012 10:33:43 PM
EPA METHOD 7470: MERCURY						Analyst: **JLF**
Mercury	ND	0.00020		mg/L	1	9/13/2012 10:31:49 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **JLF**
Arsenic	ND	0.20		mg/L	5	9/17/2012 3:38:31 PM
Barium	6600	200		mg/L	5000	9/19/2012 12:12:33 PM
Cadmium	ND	0.020		mg/L	5	9/17/2012 3:38:31 PM
Chromium	ND	0.060		mg/L	5	9/17/2012 3:38:31 PM
Lead	ND	0.50		mg/L	50	9/19/2012 12:28:58 PM
Selenium	ND	0.50		mg/L	5	9/17/2012 3:38:31 PM
Silver	ND	0.050		mg/L	5	9/17/2012 3:38:31 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KS**
Total Dissolved Solids	373000	1000		mg/L	1	9/12/2012 6:37:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
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
P	Sample pH greater than 2	R	RPD outside accepted recovery limits
RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209213**

27-Sep-12

Client: Altela Inc.

Project: RNI Produced Water/ Solidification

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R5413**	RunNo: **5413**
Prep Date:	Analysis Date: **9/10/2012**	SeqNo: **154452** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R5413**	RunNo: **5413**
Prep Date:	Analysis Date: **9/10/2012**	SeqNo: **154453** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sulfate	9.5	0.50	10.00	0	94.7	90	110			

Sample ID **MB**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW**	Batch ID: **R5528**	RunNo: **5528**
Prep Date:	Analysis Date: **9/13/2012**	SeqNo: **158122** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	0.50								

Sample ID **LCS**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW**	Batch ID: **R5528**	RunNo: **5528**
Prep Date:	Analysis Date: **9/13/2012**	SeqNo: **158123** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	4.7	0.50	5.000	0	93.6	90	110			

Sample ID **1209493-002AMS**	SampType: **MS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R5528**	RunNo: **5528**
Prep Date:	Analysis Date: **9/13/2012**	SeqNo: **158136** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	0.50	5.000	11.12	104	87.8	111			

Sample ID **1209493-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 300.0: Anions**
Client ID: **BatchQC**	Batch ID: **R5528**	RunNo: **5528**
Prep Date:	Analysis Date: **9/13/2012**	SeqNo: **158137** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	0.50	5.000	11.12	105	87.8	111	0.226	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **1209213**

Hall Environmental Analysis Laboratory, Inc.

27-Sep-12

Client: Altela Inc.

Project: RNI Produced Water/ Solidification

Sample ID **MB-3725**	SampType: **MBLK**	TestCode: **EPA Method 7470: Mercury**
Client ID: **PBW**	Batch ID: **3725**	RunNo: **5495**
Prep Date: **9/12/2012**	Analysis Date: **9/13/2012**	SeqNo: **157092** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.00020								

Sample ID **LCS-3725**	SampType: **LCS**	TestCode: **EPA Method 7470: Mercury**
Client ID: **LCSW**	Batch ID: **3725**	RunNo: **5495**
Prep Date: **9/12/2012**	Analysis Date: **9/13/2012**	SeqNo: **157093** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0050	0.00020	0.005000	0	99.8	80	120			

Sample ID **1209172-001FMS**	SampType: **MS**	TestCode: **EPA Method 7470: Mercury**
Client ID: **BatchQC**	Batch ID: **3725**	RunNo: **5495**
Prep Date: **9/12/2012**	Analysis Date: **9/13/2012**	SeqNo: **157099** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0048	0.00020	0.005000	0	96.3	75	125			

Sample ID **1209172-001FMSD**	SampType: **MSD**	TestCode: **EPA Method 7470: Mercury**
Client ID: **BatchQC**	Batch ID: **3725**	RunNo: **5495**
Prep Date: **9/12/2012**	Analysis Date: **9/13/2012**	SeqNo: **157100** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.0049	0.00020	0.005000	0	99.0	75	125	2.74	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209213**

27-Sep-12

Client: Altela Inc.

Project: RNI Produced Water/ Solidification

Sample ID **MB-3763**	SampType: **MBLK**	TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **PBW**	Batch ID: **3763**	RunNo: **5574**
Prep Date: **9/14/2012**	Analysis Date: **9/17/2012**	SeqNo: **159602** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	0.020								
Barium	ND	0.020								
Cadmium	ND	0.0020								
Chromium	ND	0.0060								
Lead	ND	0.0050								
Selenium	ND	0.050								
Silver	ND	0.0050								

Sample ID **LCS-3763**	SampType: **LCS**	TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **LCSW**	Batch ID: **3763**	RunNo: **5574**
Prep Date: **9/14/2012**	Analysis Date: **9/17/2012**	SeqNo: **159603** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.47	0.020	0.5000	0	95.0	80	120			
Barium	0.47	0.020	0.5000	0	94.0	80	120			
Cadmium	0.47	0.0020	0.5000	0.0005200	94.5	80	120			
Chromium	0.47	0.0060	0.5000	0.002920	93.5	80	120			
Lead	0.48	0.0050	0.5000	0.003730	94.5	80	120			
Selenium	0.46	0.050	0.5000	0	92.3	80	120			
Silver	0.096	0.0050	0.1000	0.0002600	95.3	80	120			

Sample ID **1209328-001AMS**	SampType: **MS**	TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **BatchQC**	Batch ID: **3763**	RunNo: **5574**
Prep Date: **9/14/2012**	Analysis Date: **9/17/2012**	SeqNo: **159631** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.46	0.020	0.5000	0	92.9	75	125			
Cadmium	0.47	0.0020	0.5000	0	93.3	75	125			
Chromium	0.44	0.0060	0.5000	0	88.8	75	125			
Selenium	0.44	0.050	0.5000	0	87.0	75	125			
Silver	0.095	0.0050	0.1000	0	94.7	75	125			

Sample ID **1209328-001AMSD**	SampType: **MSD**	TestCode: **EPA 6010B: Total Recoverable Metals**
Client ID: **BatchQC**	Batch ID: **3763**	RunNo: **5574**
Prep Date: **9/14/2012**	Analysis Date: **9/17/2012**	SeqNo: **159632** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.48	0.020	0.5000	0	95.0	75	125	2.32	20	
Cadmium	0.47	0.0020	0.5000	0	93.3	75	125	0.0171	20	
Chromium	0.45	0.0060	0.5000	0	89.6	75	125	0.854	20	
Selenium	0.39	0.050	0.5000	0	78.8	75	125	9.91	20	
Silver	0.095	0.0050	0.1000	0	95.3	75	125	0.600	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

WO#: **1209213**

Hall Environmental Analysis Laboratory, Inc.

27-Sep-12

Client: Altela Inc.

Project: RNI Produced Water/ Solidification

Sample ID **1209328-001AMS** SampType: **MS** TestCode: **EPA 6010B: Total Recoverable Metals**

Client ID: **BatchQC** Batch ID: **3763** RunNo: **5627**

Prep Date: **9/14/2012** Analysis Date: **9/19/2012** SeqNo: **161200** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.020	0.5000	0.01961	95.2	75	125			
Lead	0.46	0.0050	0.5000	0.005690	90.4	75	125			

Sample ID **1209328-001AMSD** SampType: **MSD** TestCode: **EPA 6010B: Total Recoverable Metals**

Client ID: **BatchQC** Batch ID: **3763** RunNo: **5627**

Prep Date: **9/14/2012** Analysis Date: **9/19/2012** SeqNo: **161201** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.50	0.020	0.5000	0.01961	96.2	75	125	1.05	20	
Lead	0.46	0.0050	0.5000	0.005690	90.6	75	125	0.164	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1209213**

27-Sep-12

Client: Altela Inc.

Project: RNI Produced Water/ Solidification

Sample ID **MB-3698**	SampType: **MBLK**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **PBW**	Batch ID: **3698**	RunNo: **5470**
Prep Date: **9/11/2012**	Analysis Date: **9/12/2012**	SeqNo: **156268** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	ND	20.0								

Sample ID **LCS-3698**	SampType: **LCS**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **LCSW**	Batch ID: **3698**	RunNo: **5470**
Prep Date: **9/11/2012**	Analysis Date: **9/12/2012**	SeqNo: **156269** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1020	20.0	1000	0	102	80	120			

Sample ID **1209265-001BMSD**	SampType: **MSD**	TestCode: **SM2540C MOD: Total Dissolved Solids**
Client ID: **BatchQC**	Batch ID: **3698**	RunNo: **5470**
Prep Date: **9/11/2012**	Analysis Date: **9/12/2012**	SeqNo: **156286** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Dissolved Solids	1470	20.0	1000	446.0	102	80	120	0.137	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH greater than 2
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Altela Inc. Work Order Number: 1209213

Received by/date: RM 09/06/12

Logged By: **Ashley Gallegos** 9/6/2012 2:55:00 PM AG

Completed By: **Ashley Gallegos** 9/6/2012 4:24:28 PM AG

Reviewed By: 09/06/12

Chain of Custody

1. Were seals intact?	Yes	No	Not Present ✔
2. Is Chain of Custody complete?	Yes ✔	No	Not Present
3. How was the sample delivered?	Client		

Log In

4. Coolers are present? (see 19. for cooler specific information)	Yes ✔	No	NA
5. Was an attempt made to cool the samples?	Yes ✔	No	NA
6. Were all samples received at a temperature of >0° C to 6.0°C	Yes ✔	No	NA
7. Sample(s) in proper container(s)?	Yes ✔	No	
8. Sufficient sample volume for indicated test(s)?	Yes ✔	No	
9. Are samples (except VOA and ONG) properly preserved?	Yes ✔	No	
10. Was preservative added to bottles?	Yes	No ✔	NA
11. VOA vials have zero headspace?	Yes	No	No VOA Vials ✔
12. Were any sample containers received broken?	Yes	No ✔	
13. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ✔	No	# of preserved bottles checked for pH: 1
14. Are matrices correctly identified on Chain of Custody?	Yes ✔	No	(<2 or >12 unless noted)
15. Is it clear what analyses were requested?	Yes ✔	No	Adjusted?
16. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ✔	No	Checked by:

Special Handling (If applicable)

17. Was client notified of all discrepancies with this order? Yes No NA ✔

Person Notified: Date:

By Whom: Via: eMail Phone Fax In Person

Regarding:

Client Instructions:

18. Additional remarks:

19. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good	Not Present			

Chain-of-Custody Record

Client: Altela Inc.

Mailing Address: 7500 Meridian Place NW, Suite B, Albuquerque, NM 87121

Phone #: 505-227-8560

email or Fax#: 505-227-8561

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: RNI Produced Water / Solid Fraction Testing

Project #:

Project Manager: Michael Lamberty / Victor Hargrave

Sampler:

On Ice:

Sample Temperature:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	121293-13	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TDS: SM2540C MOD	EPA Method 300.0: Anions			Air Bubbles (Y or N)
9/4/12	3:30p	PW	RNI Produced Water - Start	1x500mLP	—	-001												✓				
9/5/12	5:30p	CW	RNI Produced Water - CW at End	2x500mLP	HNO_3	-002							✓					✓	✓			

Date: 9/6/12 Time: 2:37p Relinquished by: _____ Received by: _____ Date Time

Date: 9/6/12 Time: 2:55 Relinquished by: _____ Received by: _____ Date Time 09/06/12 1455

Remarks: Will drop off Solids sample early next week. Samples will be related to this project.

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Jones, Brad A., EMNRD

From: Matthew J. Bruff <matthew.bruff@altelainc.com>
Sent: Monday, December 10, 2012 2:15 PM
To: Jones, Brad A., EMNRD
Cc: karen.evans@altelainc.com; michael.wimberly@altelainc.com
Subject: Temporary Approval EPWM-004

Brad,
Following our discussion today, we hereby request you retract our submittal dated November 26, 2012 with respect to Temporary Approval EPWM-004. We will re-submit the renewal request and limit the information to what is requested and required under the authorization.
Thanks,
Matt

Matthew Bruff
Altela, Inc.
5350 South Roslyn Street, Suite 210
Englewood, CO 80111
Phone 303-993-1951
Fax 303-993-1955
www.altelainc.com

ALTELA®
Treating water naturally

WEB: altelainc.com

ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
5350 South Roslyn Street, Suite 210, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

November 26, 2012

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology Temporary Approval EPWM – 004 expiration January 16, 2013

VIA UNITED STATES POSTAL SERVICE

Dear Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. The produced water approved for storage and testing and development of the AltelaRain® technology will only occur at Altela's design, research and manufacturing facility (Meridian), located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water must be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela must retain records documenting all produced water received and removed from the Meridian facility;

5. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted December 5, 2011. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

We request renewal of EPWM – 004 as we anticipate receiving produced water in the coming year to continue the development of the AltelaRain® technology.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Matthew Bruff
CDO

cc: Altela Day File

Enclosures as noted

ALTELA

Meridian Produced Water Tracking Summary

No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance
1	5/11/12	ABF Freight System			505-883-1010			Delaware County Solid Waste		1650 Gallons Delivered	+1650 gallons
2	6/19/12	M&R Trucking, Inc.		Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	NA		996 Gallons Taken Away	0 gallons
3	7/2/12	YRC Freight	Kyle Craig	2500 State Road 60 W, Bartow, Fl 33830	(863) - 533 - 8776			Cedar Trail Landfill	Republic Services	1535 Gallons Delivered	+1535 gallons
4	8/22/12	M&R Trucking, Inc.		Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	NA		746 Gallons Taken Away	0 gallons
5	8/29/12	RL Carriers		P.O. Box Box 271, Wilmington, OH 45177	(814) 226-8001			RNI Trucking		1,050 Gallons Delivered	+'1050 gallons
6	10/5/12	ABF Freight System		P.O. Box 10048, Fort Smith , AR 72917	(515) 283-0406			Feed Energy Company		1,800 Gallons Delivered	+'2,850 gallons
7	10/19/12	M&R Trucking, Inc.		Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	NA		1,386 Gallons Taken Away	+'1464 gallons
8											
9											
10											
11											
12											

***1464 gallon difference in volume being taken away attributable to clean, distilled water vapor being exhausted during process and also remaining Feed Energy Water to be tested.**

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

John H. Bemis
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.
Deputy Cabinet Secretary

Jami Bailey
Division Director
Oil Conservation Division

December 5, 2011

Mr. Matthew J. Bruff
Altela, Inc.
Denver Technology Center
5350 South Roslyn Street, Suite 450
Englewood, Colorado 80111

Re: Renewal Request for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM -004
Location: 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Mr. Bruff:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated November 29, 2011, to renew Altela's temporary approval to store and use oilfield produced water for testing and development of the AltelaRain™ technology at Altela's design, research, and manufacturing facility, which expires January 16, 2012. The OCD has granted this temporary approval to serve certain purposes and achieve certain results. One purpose is to allow Altela the opportunity to use real produced water in a controlled environment to assist in the research and development of the AltelaRain™ technology. Another purpose is to obtain testing results of the treatment of the produced water in order to assess the capability of the AltelaRain™ technology. Such analytical results should represent the initial test/source water concentrations prior to treatment and the concentrations present after treatment for all of the constituents specified in Subsection A, B, and C of 20.6.2.3103 NMAC.

The OCD hereby grants this temporary approval with the following understandings and conditions:

1. The produced water approved for storage and the testing and development of the AltelaRain™ technology shall only occur at Altela's design, research, and manufacturing facility (Meridian), located at 7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121.

2. Only haulers authorized (OCD approved C-133) to move produced water shall provide transport of produced water to and from the Meridian facility.

3. No produced water shall be disposed at the Meridian facility. All produced water shall be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility.

4. Altela shall retain records documenting all produced water received and removed from the Meridian facility. The record shall indicate the facility/well name and permit number in which the produced water is obtained from and the facility/well name and permit number of the OCD approved facility in which the produced is disposed.

5. Altela shall report all unauthorized discharges of produced water pursuant to 19.15.29 NMAC to the OCD within 24 hours of determining a release.

6. Altela shall provide the OCD copies of the water quality analytical test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

This authorization is approved for a period of one (1) year. This temporary approval will expire January 16, 2013. Renewal requests for temporary approvals shall be submitted 45 days prior to the expiration date. Temporary approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

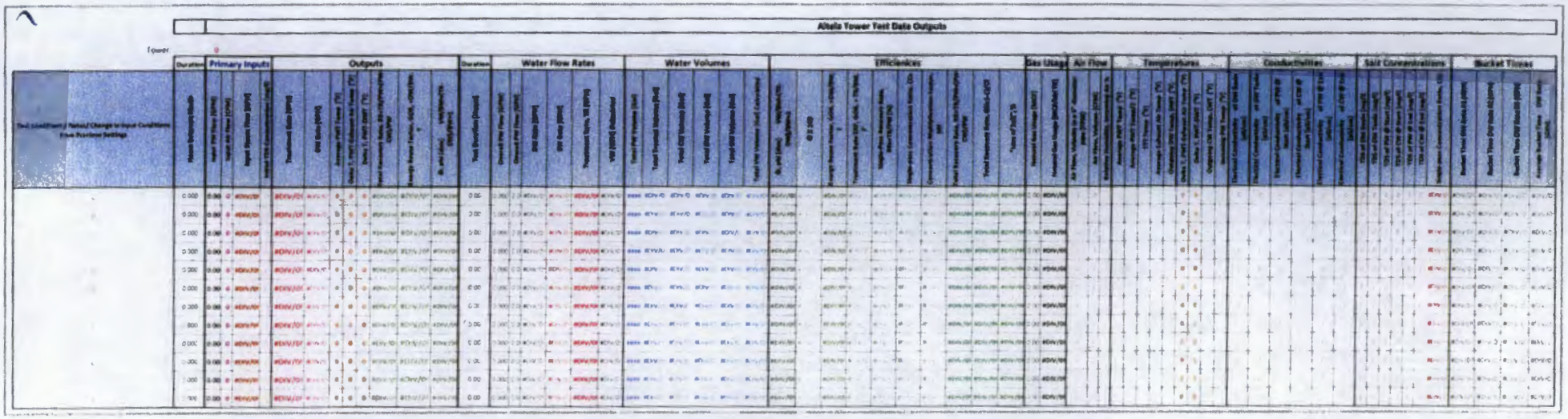
BAJ/baj

cc: OCD District IV Office, Santa Fe

Altela Tower Test Data Inputs

Tower: | **Test Station:** #1

Test Conditions	Test Duration		Natural Gas			Tank Levels							PW Flows					Inlet Air Measurements						am Measurem			Electical Conductivity								Tower Temperatures																		Bucket Times		
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	Initial TDS Concentration [mg/l]	DW Tank #1 Height Delta [inches]	DW Tank #2 Height Delta [inches]	BM#1 Tank Height Delta [inches]	BM#2 Tank Height Delta [inches]	BM#3 Tank Height Delta [inches]	PW Tank #1 Height Delta [inches]	PW Tank #2 Height Delta [inches]	PW Flows #1 [GPM]	PW Flows #2 [GPM]	PW Flows #3 [GPM]	PW Flows #4 [GPM]	PW Flows #5 [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. [°F]	Inlet Air Wet Bulb Temp. [°F]	Air Press. [inches H2O]	Left Exhaust Press. [inches H2O]	Right Exhaust Press. [inches H2O]	Boiler NG Pressure [inches H2O]	Steam Pressure [psig]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity of DW Basin @ Start [µS/cm]	Electical Conductivity of DW Basin @ End [µS/cm]	Electical Conductivity of DW Tanks @ Start [µS/cm]	Electical Conductivity of DW Tanks @ End [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	Electical Conductivity of CW @ End [µS/cm]	TTI (°F)	PWT #1 (°F)	PWT #2 (°F)	PWT #3 (°F)	PWT #4 (°F)	PWT #5 (°F)	PWT #6 (°F)	PWT #7 (°F)	PWT #8 (°F)	PWT #9 (°F)	PWT #10 (°F)	PW Inlet (°F)	CW Exit (°F)	DWT Right (°F)	DWT Left (°F)	Exhaust Air Temp. Left (°F)	Exhaust Air Temp. Right (°F)	Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #1 (seconds) for a 5 Gallon Bucket



ALTELA®
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WEB: altelainc.com

ALBUQUERQUE OFFICE
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PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
5350 South Roslyn Street, Suite 450, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

November 29, 2011

Mr. Wayne Price
Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology
Temporary Approval EPWM – 004 expiration January 16, 2012

VIA UNITED STATES POSTAL SERVICE

Dear Wayne and Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. The produced water approved for storage and testing and development of the AltelaRain® technology will only occur at Altela's design, research and manufacturing facility (Meridian), located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121;

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6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted January 5, 2011. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

While we have not received, stored or used any produced water this year, we request renewal of EPWM – 004 as we anticipate receiving produced water in the coming year to continue the development of the AltelaRain® technology.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Matthew Bruff
CDO

cc: Altela Day File

Enclosures as noted

ALTELA

Alamo Produced Water Tracking Summary											
No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Bill Brancard
Acting Cabinet Secretary

Daniel Sanchez
Acting Division Director
Oil Conservation Division

January 5, 2011

Mr. Matthew J. Bruff
Altela, Inc.
Denver Technology Center
5350 South Roslyn Street, Suite 450
Englewood, Colorado 80111

Re: Renewal Request for Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM -004
7500 Meridian Pl. NW, Suite B, Albuquerque, New Mexico 87121

Dear Mr. Bruff:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated November 30, 2010, to renew Altela's temporary approval to store and use oilfield produced water for testing and development of the AltelaRain™ technology at Altela's design, research, and manufacturing facility, which expires January 16, 2011. The OCD has granted this temporary approval to serve certain purposes and achieve certain results. One purpose is to allow Altela the opportunity to use real produced water in a controlled environment to assist in the research and development of the AltelaRain™ technology. Another purpose is to obtain testing results of the treatment of the produced water in order to assess the capability of the AltelaRain™ technology. Such analytical results should represent the initial test/source water concentrations prior to treatment and the concentrations present after treatment for all of the constituents specified in Subsection A, B, and C of 20.6.2.3103 NMAC.

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Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District IV Office, Santa Fe

ALTELA

Altela Tower Test Data Inputs

Tower: | Test Station: #1

Test Conditions	Test Duration		Natural Gas			Tank Levels							PW Flows					Inlet Air Measurements						am Measurem				Electical Conductivity								Tower Temperatures																	Bucket Times		
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	Initial TDS Concentration [mg/l]	DW Tank #1 Height Delta [inches]	DW Tank #2 Height Delta [inches]	BW#1 Tank Height Delta [inches]	BW#2 Tank Height Delta [inches]	BW#3 Tank Height Delta [inches]	PW Tank #1 Height Delta [inches]	PW Tank #2 Height Delta [inches]	PW Flows #1 [GPM]	PW Flows #2 [GPM]	PW Flows #3 [GPM]	PW Flows #4 [GPM]	PW Flows #5 [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. [°F]	Inlet Air Wet Bulb Temp. [°F]	Air Press. [inches H2O]	Left Exhaust Press. [inches H2O]	Right Exhaust Press. [inches H2O]	Boiler NG Pressure [inches H2O]	Steam Pressure [psig]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity of DW Basin @ Start [µS/cm]	Electical Conductivity of DW Basin @ End [µS/cm]	Electical Conductivity of DW Tanks @ Start [µS/cm]	Electical Conductivity of DW Tanks @ End [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	Electical Conductivity of CW @ End [µS/cm]	TTT (°F)	PWT #1 (°F)	PWT #2 (°F)	PWT #3 (°F)	PWT #4 (°F)	PWT #5 (°F)	PWT #6 (°F)	PWT #7 (°F)	PWT #8 (°F)	PWT #9 (°F)	PWT #10 (°F)	PW Inlet (°F)	CW Exit (°F)	DWT Right (°F)	DWT Left (°F)	Exhaust Air Temp, Left (°F)	Exhaust Air Temp, Right (°F)	Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #1 (seconds) for a 5 Gallon Bucket

Altela Tower Test Data Outputs

Tower: 0

Test Conditions / Status / Change in Input Conditions from Previous Settings	Duration	Primary Inputs				Outputs								Duration
	Hours between Marks	[illegible]	[illegible]	Input Steam Flow [GPH]	[illegible]	Treatment Rate [GPH]	DW Rate [GPH]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Φ, phi [dim] VW/BW=(TR-DW)/BW+1	Test Duration [Hours]
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00
0	0.000	0.00	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	0.00

Test Conditions / Status / Change in Input Conditions from Previous Settings	Water Flow Rates						Water Volumes					
	Overall PW Flow [GPM]	[illegible]	DW Rate [GPH]	BW Rate [GPH]	Treatment Rate, TR [GPH]	VW [GPH] Calculated	Total PW Volume [Gal]	Total Treated Volume [Gal]	Total CW Volume [Gal]	Total DW Volume [Gal]	Total BW Volume [Gal]	Total VW Volume [Gal] Calculated
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0.000	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	####	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Test Conditions / Status / Change in Input Conditions from Previous Settings	Efficienices										Gas Usage		Air Flow		
	Φ, phi [dim] VW/BW=(TR-DW)/BW+1	Φ X 100	[illegible]	[illegible]	Single-Pass Recovery Rate, RR=TR/PW [%]	[illegible]	[illegible]	[illegible]	Total Recovery Rate, RR=1-C2/C?	"Loss of Salt", %	[illegible]	Natural Gas Usage [MCF/bbl TR]	[illegible]	[illegible]	[illegible]
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
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0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	
0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.00	#DIV/0!	0	0	

Test Conditions / Status / Change in Input Conditions from Previous Settings	Temperatures									Conductivities						Salt Concentrations							Bucket Times			
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Bucket Time DW Rate #1 (GPH)	Bucket Time DW Rate #2 (GPH)	Bucket Time DW Rate #3 (GPH)	Average Bucket Time DW Rate (GPH)
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

ALTELA®
Treating water naturally

WEB: altelainc.com

ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
5350 South Roslyn Street, Suite 450, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

November 30, 2010

Mr. Wayne Price
Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain® Technology Temporary Approval EPWM – 004 expiration January 16, 2011

VIA UNITED STATES POSTAL SERVICE

Dear Wayne and Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain® technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facilities. These facilities are located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121 ("Meridian"). Altela continues to agree to the following conditions with respect to use the produced water at Alamo:

1. The produced water approved for storage and testing and development of the AltelaRain® technology will only occur at Altela's design, research and manufacturing facility (Meridian), located at 7500 Meridian Pl., N.W., Suite B, Albuquerque, New Mexico 87121;

2. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Meridian facility;

3. No produced water shall be disposed at the Meridian facility. All produced water must be removed from the Meridian facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela must retain records documenting all produced water received and removed from the Meridian facility;

5. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Meridian facility.

Enclosed, please find a copy of Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal except as noted per the enclosed Temporary Exemption/Approval letter granted January 27, 2010. Please also find copies of the water quality analytical test results received from third party water quality laboratories with respect to tests conducted on the produced water at our facility. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

Thank you in advance for your continued assistance and support of the AltelaRain® technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Matthew Bruff
CDO

cc: Altela Day File

Enclosures as noted

ALTELA

Alamo Produced Water Tracking Summary

No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance
1	2/22/07	M&R Trucking, Inc	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	Blackshawl Com #001 (San Juan Basin)	Merrion Oil and Gas Corporation	300 Gallons Delivered	+300 gallons
2	11/19/07	M&R Trucking, Inc	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	NA		300 Gallons Taken Away	0 gallons
3	11/19/07	M&R Trucking, Inc	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	Blackshawl Com #001 (San Juan Basin)	Merrion Oil and Gas Corporation	300 Gallons Delivered	+300 gallons
4	6/16/08	Mountain States Hot Shot Oil Field Services	Adam Stevens	P.O Box 1210, Grand Junction, CO 81502	(970) 434-4030	(970) 314-9724	(Attached)	Occidental Piceance Basin	Occidental Petroleum Corporation	500 Gallons	+ 800 gallons
5	9/22/08	M&R Trucking, Inc	Barry Bonds	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	NA		500 Gallons Taken Away*	0 gallons
6	2/8/10	Associated Global Systems	Pat Riedel	2300 Buena Vista S E., Albuquerque, NM 87106	(505) 842-2000	505-842-2002	Temp Exemption granted per attached letter dated Jan 27, 2010	Grant Project - Marcellus Basin	BLX, Inc.	599 Gallons Delivered	599 gallons
7	7/7/10	M&R Trucking, Inc	Kelvin Matthews	Post Office Box 600, Farmington, NM 87499	(505) 334-5541	(505) 326-6002	C-133-66	NA		205 Gallons Taken Away*	0 gallons
8											
9											
10											
11											
12											

*694 gallon difference in volume being taken away attributable to clean, distilled water vapor being exhausted during process

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Jon Goldstein
Cabinet Secretary

Jim Noel
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

January 27, 2010

Mr. Matthew J. Bruff
Altela, Inc.
Denver Technology Center
5350 South Roslyn Street, Suite 430
Englewood, Colorado 80111

Re: Request for a Temporary Exemption Regarding Condition #2 of an Annual Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain™ Technology
Temporary Approval: EPWM -004
2450 Alamo SE Albuquerque, New Mexico 87106

Dear Mr. Bruff:

The Oil Conservation Division (OCD) has received and reviewed Altela, Inc.'s (Altela) request, dated January 26, 2010, for a temporary exemption regarding Condition #2 of Altela's annual temporary approval (EPWM-004) to store and use oilfield produced water for testing and development of the AltelaRain® technology at Altela's design, research, and manufacturing facility dated December 14, 2009. Condition #2 requires "only haulers authorized (OCD approved C-133) to move produced water shall provide transport of produced water to the Alamo facility."

Based upon the information provided in the request, Altela proposes to ship approximately 660 gallons, not to exceed 1000 gallons, of produced water by a commercial shipper from the Marcellus Basin of Pennsylvania to Altela's Albuquerque Alamo facility for testing. The test bench analyses will allow Altela to finalize the design requirements of the AltelaRain® system for the Marcellus grant project.

The OCD hereby approves this temporary exemption request with the following understandings and conditions:

1. Altela shall transport the produced water from the Marcellus Basin of Pennsylvania to Altela's Albuquerque Alamo facility via a commercial shipper. Altela shall ensure that the commercial shipper will be responsible for complying with all applicable shipping requirements and related Department of Transportation rules and regulations; and

2. Altela shall continue to comply with the conditions specified within the OCD temporary approval (EPWM-004), dated December 14, 2009, upon the arrival and acceptance of the produced water from the Marcellus Basin of Pennsylvania at Altela's Albuquerque Alamo facility;

This authorization is a one-time approval. Altela shall request and obtain OCD approval for any future exemption requests of a similar nature. Approval may be revoked or suspended for violation of any applicable provisions and/or conditions.

Please be advised that approval of this request does not relieve Altela of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Altela of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones
Environmental Engineer

BAJ/baj

cc: OCD District IV Office, Santa Fe

CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Thorium 232	0.150 pCi/L	pCi/L	HSL-300m	3/19/10 13:34	6502103
Thorium 228	22.7 pCi/L	pCi/L	HSL-300M	3/19/10 13:32	6502103
Thorium 230	0.465 pCi/L	pCi/L	HSL-300m	3/19/10 13:34	6502103
Copper	2.0 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:16	AML
Benzene	1.2 ug/L	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
pH	5.96 SU	SU	SM4500 H+B	2/24/10 15:21	AML
Total Dissolved Solids	345,680 mg/l	5 mg/l	SM 2540 C	2/23/10 11:49	RCS
Total Suspended Solids	176 mg/L	3 mg/L	SM 2540 D	2/23/10 13:00	RCS
Oil & Grease	2.2 mg/l	5 mg/l	EPA 1664 Rev A	2/26/10 12:40	NJD
BOD	62.7 mg/L	2 mg/L	SM5210B	2/24/10 10:35	TO
COD	3800 mg/L	10 mg/L	HACH 8000	3/10/10 7:22	NJD
Surfactants (MBAS)	0.184 mg/L	0.025 mg/L	SM20-5540 C	2/24/10 21:45	22-293
Color	20 pccu	5 pccu		2/23/10 11:16	WEH

Ryan C Shafer, Technical Director

Analyte names in bold are listed under the laboratory's current NELAP scope of accreditation.

CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A

Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Temperature (F), Field	NA	deg F	na	3/5/10 9:02	RCS
Osmotic Pressure	2970 mOs/kg	10 mOs/kg	PA DEP	2/25/10 6:00	22-293
Ammonia Distillation	Completed	mg/L	SM 4500 NH3 B	2/25/10 8:42	WEH
Ammonia Nitrogen	267 mg/L	.10 mg/L	SM 4500 NH3 D	2/25/10 9:40	WEH
Nitrate	<5.0 mg/l	0.10 mg/l	EPA 300.0	2/24/10 12:52	AML
Nitrite	<5.0 mg/l	0.10 mg/l	EPA 300.0	2/24/10 12:51	AML
Nitrate / Nitrite	<10.0 mg/l	0.20 mg/l	EPA 300.0	2/24/10 12:51	AML
Acidity	236.0 mg/L	3 mg/L	SM 2310 B	2/24/10 16:13	AML
Alkalinity	32.0 mg/l	5 mg/l	SM 2320 B	2/24/10 15:20	AML
Bicarbonate	32.0 mg/L	5 mg/L	SM4500 CO2 D	2/25/10 10:46	AML
Sulfate	550.0 mg/l	1 mg/l	EPA 300.0	2/24/10 12:52	AML
Chloride	205200 mg/L	1 mg/L	EPA 300.0	2/24/10 12:53	AML
Fluoride	10.5 mg/l	0.20 mg/l	EPA 300.0	2/24/10 12:52	AML

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A

Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Calcium	29,800 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Iron	2.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Iron, Dissolved	<0.4 mg/l	0.02 mg/l	EPA 200.7	3/12/10 13:47	AML
Magnesium	3120.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Potassium	1320 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Sodium	85,600 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Aluminum	<2.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:25	AML
Arsenic	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Barium	148.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:28	AML
Beryllium	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Cadmium	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Chromium	<0.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Cobalt	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Manganese	8.2 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Molybdenum	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML
Nickel	<1.0 mg/l	0.05 mg/l	EPA 200.7	2/26/10 14:51	AML
Selenium	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:58	AML
Silver	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:57	AML
Strontium, Total	4970 mg/L	1.5 mg/L	EPA 200.7	3/5/10 9:10	22-293
Thallium	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:59	AML
Tin	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:02	AML
Titanium	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Zinc	<0.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Gross Alpha DW	1,912 PCi/L	3 PCi/L	EPA 900	3/3/10 11:49	6502103
Gross Beta DW	529 PCi/L	4 PCi/L	EPA 900	3/3/10 11:49	6502103
Radium 226	1,527 pCi/L	.6 pCi/L	EPA 903.1	3/19/10 11:47	6502103

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A

Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Radium 228	751 pCi/L	.9 pCi/L	EPA 904.0	3/18/10 11:48	6502103
Total Residual Chlorine	<0.10 mg/L	0.10 mg/L	HACH 8167	2/23/10 15:39	RCS
Phenolics	ND	0.01 mg/L	EPA 420.4	3/1/10 10:11	22-293
Uranium	ND	1.1 mg/L	SW846 6020A	3/8/10 14:52	22-293
Mercury, Total	ND	0.013 mg/L	EPA 245.1	3/1/10 12:01	22-293
Lead	<0.4 mg/L	0.02 mg/L	EPA 200.7	2/26/10 14:51	AML
Lithium, Total	319 mg/L	30.0 mg/L	EPA 200.7	3/5/10 9:10	22-293
Boron	17.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:48	AML
Antimony	<1.0 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Silicon, Total	10.0 mg/L	10.0 mg/L	EPA 200.7	3/3/10 11:07	22-293
Bromide	2360.0 mg/l	0.10 mg/l	EPA 300.1	2/24/10 12:53	AML
Hardness, Total	87,259 mg/l	10 mg/l	EPA 200.7	2/26/10 13:43	AML
Heterotrophic Plate Count	32 /ml	1 /ml	SM 9215B	2/23/10 15:14	WEH

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Total Coliform	0 /100 mls	0 /100 mls	SM 9223B	2/23/10 15:14	WEH
E Coli	NA	+/-	SM 9223B	2/23/10 15:14	WEH
Specific Conductance	234,000 umhos/cm	2 umhos/cm	EPA 120.1	2/23/10 0:00	WEH
Gasoline Range Organics	ND	500 ug/L	SW846 8015D	3/1/10 20:52	22-293
Diesel Range Organics C10-C28	1.0 mg/L	0.15 mg/L	SW846 8015D	2/28/10 1:53	22-293
Methane	ND	1.0 ug/L	RSK 175	2/26/10 20:39	22-293
Ethylene Glycol	ND	10.0 mg/L	SW846 8015D	2/25/10 2:54	22-293
Alkalinity, Carbonate	ND	5 mg/L	SM20-2322	2/25/10 8:31	22-293
Alkalinity, Hydroxide	ND	5 mg/L	SM20-2320 B	2/25/10 8:31	22-293
Alkalinity, Phenolphthalein	ND	5 mg/L	SM20-2320 B	2/25/10 8:31	22-293
Total Kjeldahl Nitrogen	42.3 mg/L	1.0 mg/L	SM20-4500-N C	2/27/10 11:00	22-293
Formaldehyde	34.5 mg/L	1.0 mg/L	SW846 8015D	3/4/10 17:41	22-293
Acetone	978 ug/L	10.0 ug/L	SW846 8260B	3/1/10 7.00	22-293

Ryan C Shafer, Technical Director

Analyte names in bold are listed under the laboratory's current NELAP scope of accreditation.

CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Silica, Dissolved	15 mg/L	1 mg/L	SM20-4500SiD	3/2/10 0:15	22-293
2-Hexanone	ND	5.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
4-Methyl-2-Pentanone(MIBK)	ND	5.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
2-Butanone	74.0 ug/L	10.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Ethene	ND	3.0 ug/L	RSK 175	2/26/10 20:39	22-293
Methanol	11.3 mg/L	1.0 mg/L	SW846 8015D	3/7/10 20:54	22-293
o-Xylene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
mp-Xylene	3.3 ug/L	2.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Chloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Ethane	ND	3.0 ug/L	RSK 175	2/26/10 20:39	22-293
Chlorodibromomethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Chloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Chloroform	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Bromomethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Carbon Disulfide	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Bromide	2000 mg/L	1000 mg/L	EPA 300	3/2/10 6:42	22-293
Bromochloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Bromodichloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,2-Dibromo-3-chloropropane	ND	7.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,2-Dibromoethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,1,2,2-Tetrachloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,1-Dichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,1-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
cis-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Methylene Chloride	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,2-Dichloropropane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resutant CW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:03
Matrix: N/A
Collection Method: Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Chlorobenzene	ND	1 0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Tetrachloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Trichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
trans-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
trans-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
cis-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Carbon Tetrachloride	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,2-Dichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Ethylbenzene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Styrene	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Toluene	3.0 ug/L	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,1,1-Trichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
1,1,2-Trichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer:	Altela	**Collection Date:**	02/18/10 17:25
Site:	NETL Ross PW	**Received Date:**	02/23/10 11:03
Monitoring Pt:	Resutant CW	**Matrix:**	N/A
Source Type:	N/A	**Collection Method:**	Grab

02100762	Result	Reporting Limit	Method	Analysis Date	Analyst
Vinyl Chloride	24 8 ug/L	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Total Xylenes	4.1 ug/L	3.0 ug/L	SW846 8260B	3/1/10 7:00	22-293
Vanadium, Total	ND	1.5 mg/L	EPA 200.7	3/5/10 9:10	22-293
Bromoform	ND	1.0 ug/L	SW846 8260B	3/1/10 7:00	22-293

Sample Comments:

BOD: Unseeded Blank depletion was greater than 0.2 mg/L limit.

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CWM Environmental
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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Thorium 232	0.000 pCi/L	pCi/L	HSL-300m	3/18/10 13:35	6502103
Copper	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:16	AML
Thorium 228	0.177 pCi/L	pCi/L	HSL-300M	3/18/10 13:32	6502103
Thorium 230	0.400 pCi/L	pCi/L	HSL-300m	3/18/10 13:34	6502103
Benzene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
pH	8.58 SU	SU	SM4500 H+B	2/24/10 15:21	AML
Total Dissolved Solids	88 mg/l	5 mg/l	SM 2540 C	2/23/10 11:49	RCS
Total Suspended Solids	<3 mg/L	3 mg/L	SM 2540 D	2/23/10 13:00	RCS
Oil & Grease	2.9 mg/l	5 mg/l	EPA 1664 Rev A	2/26/10 12:40	NJD
BOD	> 75.3	2 mg/L	SM5210B	2/24/10 10:35	TO
COD	185 mg/L	10 mg/L	HACH 8000	3/10/10 7:22	NJD
Surfactants (MBAS)	ND	0.025 mg/L	SM20-5540 C	2/24/10 21:45	22-293
Color	< 5 pccu	5 pccu		2/23/10 11:16	WEH

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Temperature (F), Field	NA	deg F	na	3/5/10 9:02	RCS
Osmotic Pressure	27 mOs/kg	10 mOs/kg	PA DEP	2/25/10 6:00	22-293
Ammonia Distillation	Completed	mg/L	SM 4500 NH3 B	2/25/10 8:42	WEH
Ammonia Nitrogen	6.99 mg/L	.10 mg/L	SM 4500 NH3 D	2/25/10 9:40	WEH
Nitrate	<0.10 mg/l	0.10 mg/l	EPA 300.0	2/24/10 12:52	AML
Nitrite	<0.10 mg/l	0.10 mg/l	EPA 300.0	2/24/10 12:51	AML
Nitrate / Nitrite	<0.20 mg/l	0.20 mg/l	EPA 300.0	2/24/10 12:51	AML
Acidity	-18.0 mg/L	3 mg/L	SM 2310 B	2/24/10 16:13	AML
Alkalinity	30.0 mg/l	5 mg/l	SM 2320 B	2/24/10 15:20	AML
Bicarbonate	29.0 mg/L	5 mg/L	SM4500 CO2 D	2/25/10 10:46	AML
Sulfate	3.1 mg/l	1 mg/l	EPA 300.0	2/24/10 12:52	AML
Chloride	45.1 mg/L	1 mg/L	EPA 300.0	2/24/10 12:53	AML
Fluoride	0.16 mg/l	0.20 mg/l	EPA 300.0	2/24/10 12:52	AML

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Lab # 03-457

Lab Analysis Report

Customer: Altela
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Monitoring Pt: Resultant DW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Calcium	5.12 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Iron	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Iron, Dissolved	<0.02 mg/l	0.02 mg/l	EPA 200.7	3/12/10 13:47	AML
Magnesium	0.47 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Potassium	0.35 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Sodium	24.8 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:56	AML
Aluminum	<0.10 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:25	AML
Arsenic	<0.5 mg/L	0:001 mg/L	EPA 200.7	3/10/10 14:01	AML
Barium	<0.10 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:28	AML
Beryllium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Cadmium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Chromium	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Cobalt	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML

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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Manganese	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Molybdenum	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML
Nickel	<0.05 mg/l	0.05 mg/l	EPA 200.7	2/26/10 14:51	AML
Selenium	<0.5 mg/L	0.001 mg/L	EPA 200 7	3/10/10 13:58	AML
Silver	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:57	AML
Strontium, Total	0.70 mg/L	0.0025 mg/L	EPA 200.7	3/1/10 14:34	22-293
Thallium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:59	AML
Tin	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:02	AML
Titanium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Zinc	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Gross Alpha DW	0.685 PCi/L	3 PCi/L	EPA 900	3/3/10 11:49	6502103
Gross Beta DW	0.429 PCi/L	4 PCi/L	EPA 900	3/3/10 11:49	6502103
Radium 226	0.231 pCi/L	.6 pCi/L	EPA 903.1	3/17/10 11:47	6502103

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Radium 228	0.434 pCi/L	.9 pCi/L	EPA 904.0	3/11/10 11:48	6502103
Total Residual Chlorine	<0.10 mg/L	0.10 mg/L	HACH 8167	2/23/10 15:39	RCS
Phenolics	0.06 mg/L	0.01 mg/L	EPA 420.4	3/1/10 10:12	22-293
Uranium	ND	1.1 mg/L	SW846 6020A	3/8/10 14:54	22-293
Mercury, Total	ND	0.00050 mg/L	EPA 245.1	3/1/10 12:02	22-293
Lead	<0.02 mg/L	0.02 mg/L	EPA 200.7	2/26/10 14:51	AML
Lithium, Total	ND	0.050 mg/L	EPA 200.7	3/1/10 14:34	22-293
Boron	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:48	AML
Antimony	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Silicon, Total	0.20 mg/L	0.050 mg/L	EPA 200.7	3/3/10 11:11	22-293
Bromide	0.40 mg/l	0.10 mg/l	EPA 300 1	2/24/10 12:53	AML
Hardness, Total	15 mg/l	10 mg/l	EPA 200.7	2/26/10 13:43	AML
Heterotrophic Plate Count	5400 /ml	1 /ml	SM 9215B	2/23/10 15:14	WEH

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Total Coliform	0 /100 mls	0 /100 mls	SM 9223B	2/23/10 15:14	WEH
E Coli	NA	+/-	SM 9223B	2/23/10 15:14	WEH
Specific Conductance	211 umhos/cm	2 umhos/cm	EPA 120.1	2/23/10 0:00	WEH
Gasoline Range Organics	ND	100 ug/L	SW846 8015D	2/27/10 0:36	22-293
Diesel Range Organics C10-C28	0.53 mg/L	0.15 mg/L	SW846 8015D	2/28/10 3:52	22-293
Methane	ND	1.0 ug/L	RSK 175	2/26/10 20:54	22-293
Ethylene Glycol	ND	10.0 mg/L	SW846 8015D	2/25/10 3:15	22-293
Alkalinity, Carbonate	9 mg/L	5 mg/L	SM20-2322	2/25/10 8:40	22-293
Alkalinity, Hydroxide	ND	5 mg/L	SM20-2320 B	2/25/10 8:40	22-293
Alkalinity, Phenolphthalein	ND	5 mg/L	SM20-2320 B	2/25/10 8:40	22-293
Total Kjeldahl Nitrogen	6.0 mg/L	1.0 mg/L	SM20-4500-N C	2/27/10 11:00	22-293
Formaldehyde	1870 mg/L	500 mg/L	SW846 8015D	3/4/10 19:22	22-293
Acetone	195 ug/L	10 0 ug/L	SW846 8260B	2/26/10 19:36	22-293

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A
Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Silica, Dissolved	ND	1 mg/L	SM20-4500SiD	3/2/10 0:15	22-293
2-Hexanone	ND	5.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
4-Methyl-2-Pentanone(MIBK)	ND	5.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
2-Butanone	ND	10.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Ethene	ND	3.0 ug/L	RSK 175	2/26/10 20:54	22-293
Methanol	1030 mg/L	100 mg/L	SW846 8015D	3/3/10 19:07	22-293
o-Xylene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
mp-Xylene	ND	2.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Chloromethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Ethane	ND	3.0 ug/L	RSK 175	2/26/10 20:54	22-293
Chlorodibromomethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Chloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Chloroform	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Bromomethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Carbon Disulfide	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Bromide	0.43 mg/L	0.30 mg/L	EPA 300	2/25/10 9:03	22-293
Bromochloromethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Bromodichloromethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,2-Dibromo-3-chloropropane	ND	7.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,2-Dibromoethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,1,2,2-Tetrachloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,1-Dichloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,1-Dichloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
cis-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Methylene Chloride	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,2-Dichloropropane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293

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11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Chlorobenzene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Tetrachloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Trichloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
trans-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
trans-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
cis-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Carbon Tetrachloride	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,2-Dichloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Ethylbenzene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Styrene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Toluene	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,1,1-Trichloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
1,1,2-Trichloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Ross PW
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/18/10 17:25
Received Date: 02/23/10 11:06
Matrix: N/A
Collection Method: Grab

02100763	Result	Reporting Limit	Method	Analysis Date	Analyst
Vinyl Chloride	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Total Xylenes	ND	3 0 ug/L	SW846 8260B	2/26/10 19:36	22-293
Vanadium, Total	ND	0.0025 mg/L	EPA 200.7	3/1/10 14:34	22-293
Bromoform	ND	1.0 ug/L	SW846 8260B	2/26/10 19:36	22-293

Sample Comments:

BOD: Unseeded Blank depletion was greater than 0.2 mg/L limit.

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
Thorium 230	0.554 pCi/L	pCi/L	HSL-300m	3/18/10 13:34	6502103
Thorium 232	0.111 pCi/L	pCi/L	HSL-300m	3/18/10 13:35	6502103
Bromoform	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Copper	0.8 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:16	AML
Thorium 228	2.07 pCi/L	pCi/L	HSL-300M	3/18/10 13:32	6502103
pH	7.58 SU	SU	SM4500 H+B	2/24/10 15:21	AML
Total Dissolved Solids	52,504 mg/l	5 mg/l	SM 2540 C	2/26/10 12:55	RCS
Total Suspended Solids	338 mg/L	3 mg/L	SM 2540 D	2/25/10 14:00	RCS
Oil & Grease	6.4 mg/l	5 mg/l	EPA 1664 Rev A	2/26/10 12:40	NJD
BOD	373 mg/L	2 mg/L	SM5210B	2/25/10 9:38	TO
COD	2275 mg/L	10 mg/L	HACH 8000	3/10/10 7:22	NJD
Surfactants (MBAS)	0.395 mg/L	0.025 mg/L	SM20-5540 C	2/25/10 23:00	22-293
Color	150 pccu	5 pccu		2/24/10 11:47	WEH

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
Temperature (F), Field	NA	deg F	na	3/5/10 9:02	RCS
Osmotic Pressure	1620 mOs/kg	10 mOs/kg	PA DEP	2/26/10 6:50	22-293
Ammonia Distillation	Completed	mg/L	SM 4500 NH3 B	2/25/10 8:42	WEH
Ammonia Nitrogen	9.04 mg/L	.10 mg/L	SM 4500 NH3 D	2/25/10 9:40	WEH
Nitrate	< 5.0 mg/l	0.10 mg/l	EPA 300.0	2/24/10 0:00	AML
Nitrite	< 5 mg/l	0.10 mg/l	EPA 300.0	2/24/10 0:00	AML
Nitrate / Nitrite	< 10 mg/l	0.20 mg/l	EPA 300.0	2/24/10 0:00	AML
Acidity	14.0 mg/L	3 mg/L	SM 2310 B	2/24/10 16:13	AML
Alkalinity	160.0 mg/l	5 mg/l	SM 2320 B	2/24/10 15:20	AML
Bicarbonate	159.0 mg/L	5 mg/L	SM4500 CO2 D	2/25/10 10:46	AML
Sulfate	240 mg/l	1 mg/l	EPA 300.0	2/24/10 0:00	AML
Chloride	32400 mg/L	1 mg/L	EPA 300.0	2/24/10 0:00	AML
Fluoride	15.5 mg/l	0.20 mg/l	EPA 300.0	2/24/10 0:00	AML

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
Calcium	2540 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Iron	10.8 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Iron, Dissolved	11.1 mg/l	0.02 mg/l	EPA 200.7	3/12/10 13:47	AML
Magnesium	240.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Potassium	180.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Sodium	15,840 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Aluminum	<2.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:25	AML
Arsenic	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Barium	25.4 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:28	AML
Beryllium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Cadmium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Chromium	<0.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Cobalt	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
Manganese	<0.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Molybdenum	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML
Nickel	<1.0 mg/l	0.05 mg/l	EPA 200.7	2/26/10 14:51	AML
Selenium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:58	AML
Silver	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:57	AML
Strontium, Total	305 mg/L	0.13 mg/L	EPA 200.7	3/4/10 14:10	22-293
Thallium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:59	AML
Tin	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:02	AML
Titanium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Zinc	<0.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Gross Alpha DW	-92.601 PCi/L	3 PCi/L	EPA 900	3/3/10 11:53	6502103
Gross Beta DW	2.46 PCi/L	4 PCi/L	EPA 900	3/3/10 11:53	6502103
Radium 226	86.2 pCi/L	.6 pCi/L	EPA 903.1	3/17/10 11:54	6502103

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
Radium 228	16.9 pCi/L	.9 pCi/L	EPA 904.0	3/11/10 11:54	6502103
Phenolics	0.06 mg/L	0.01 mg/L	EPA 420.4	3/1/10 11:26	22-293
Uranium	ND	0.050 mg/L	SW846 6020A	3/3/10 21:46	22-293
Mercury, Total	ND	0.00050 mg/L	EPA 245.1	3/1/10 12:03	22-293
Lead	<0.4 mg/L	0.02 mg/L	EPA 200.7	2/26/10 14:51	AML
Lithium, Total	32.0 mg/L	2.5 mg/L	EPA 200.7	3/4/10 14:10	22-293
Boron	10.0 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:48	AML
Antimony	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Silicon, Total	22 1 mg/L	2.5 mg/L	EPA 200.7	3/3/10 11:34	22-293
Bromide	467.5 mg/l	0.10 mg/l	EPA 300.1	2/24/10 0:00	AML
Hardness, Total	7331 mg/l	10 mg/l	EPA 200.7	2/26/10 13:43	AML
Heterotrophic Plate Count	58000 /ml	1 /ml	SM 9215B	2/24/10 15:30	WEH
Total Coliform	0 /100 mls	0 /100 mls	SM 9223B	2/24/10 15:50	WEH

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
E Coli	NA	+/-	SM 9223B	2/24/10 15:50	WEH
Specific Conductance	76,600 umhos/cm	2 umhos/cm	EPA 120.1	2/26/10 0:00	TO
Gasoline Range Organics	2560 ug/L	2500 ug/L	SW846 8015D	3/4/10 1:55	22-293
Diesel Range Organics C10-C28	3.5 mg/L	0.76 mg/L	SW846 8015D	3/3/10 10:17	22-293
Methane	5.5 ug/L	1.0 ug/L	RSK 175	2/26/10 21:12	22-293
Ethylene Glycol	33.2 mg/L	10.0 mg/L	SW846 8015D	3/5/10 20:01	22-293
Alkalinity, Carbonate	ND	5 mg/L	SM20-2322	2/26/10 11:22	22-293
Alkalinity, Hydroxide	ND	5 mg/L	SM20-2320 B	2/26/10 11:22	22-293
Alkalinity, Phenolphthalein	ND	5 mg/L	SM20-2320 B	2/26/10 11:22	22-293
Total Kjeldahl Nitrogen	5.4 mg/L	1.0 mg/L	SM20-4500-N C	3/1/10 19:44	22-293
Formaldehyde	ND	1.0 mg/L	SW846 8015D	3/4/10 18:02	22-293
Acetone	1850 ug/L	50.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Silica, Dissolved	142 mg/L	10 mg/L	SM20-4500SiD	3/2/10 0:15	22-293

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A
Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
2-Hexanone	ND	25.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
4-Methyl-2-Pentanone(MIBK)	ND	25.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
2-Butanone	ND	50.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Ethene	ND	3.0 ug/L	RSK 175	2/26/10 21:12	22-293
Methanol	ND	1.0 mg/L	SW846 8015D	9/8/10 21:51	22-293
o-Xylene	6.4 ug/L	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
mp-Xylene	34.2 ug/L	10.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Chloromethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Ethane	3.5 ug/L	3.0 ug/L	RSK 175	2/26/10 21:12	22-293
Chlorodibromomethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Chloroethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Chloroform	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Bromomethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
Carbon Disulfide	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Bromide	425 mg/L	150 mg/L	EPA 300	2/26/10 5:06	22-293
Bromochloromethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Bromodichloromethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,2-Dibromo-3-chloropropane	ND	35.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,2-Dibromoethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,1,2,2-Tetrachloroethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,1-Dichloroethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,1-Dichloroethene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
cis-1,2-Dichloroethene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Methylene Chloride	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,2-Dichloropropane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Chlorobenzene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac water
Monitoring Pt: Resultant CW
Source Type: N/A
Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:20
Matrix: N/A
Collection Method: Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
Tetrachloroethene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Trichloroethene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
trans-1,2-Dichloroethene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
trans-1,3-Dichloropropene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
cis-1,3-Dichloropropene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Benzene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Carbon Tetrachloride	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,2-Dichloroethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Ethylbenzene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Styrene	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Toluene	11.8 ug/L	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,1,1-Trichloroethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
1,1,2-Trichloroethane	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer:	Altela	**Collection Date:**	02/22/10 14:45
Site:	NETL Frac water	**Received Date:**	02/24/10 10:20
Monitoring Pt:	Resultant CW	**Matrix:**	N/A
Source Type:	N/A	**Collection Method:**	Grab

02100809	Result	Reporting Limit	Method	Analysis Date	Analyst
Vinyl Chloride	ND	5.0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Total Xylenes	40.6 ug/L	15 0 ug/L	SW846 8260B	2/26/10 21:08	22-293
Vanadium, Total	ND	0.13 mg/L	EPA 200.7	3/4/10 14:10	22-293

Sample Comments:

BOD: Unseeded Blank depletion was greater than 0.2 mg/L limit.

Ryan C Shafer, Technical Director

Analyte names in bold are listed under the laboratory's current NELAP scope of accreditation.

CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
Thorium 230	0.244 pCi/L	pCi/L	HSL-300m	3/18/10 13:34	6502103
Thorium 232	0.027 pCi/L	pCi/L	HSL-300m	3/18/10 13:35	6502103
Bromoform	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Copper	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:16	AML
Thorium 228	0.236 pCi/L	pCi/L	HSL-300M	3/18/10 13:32	6502103
pH	9.22 SU	SU	SM4500 H+B	2/24/10 15:21	AML
Total Dissolved Solids	198 mg/l	5 mg/l	SM 2540 C	2/26/10 12:55	RCS
Total Suspended Solids	<3 mg/L	3 mg/L	SM 2540 D	2/25/10 14:00	RCS
Oil & Grease	1.3 mg/l	5 mg/l	EPA 1664 Rev A	2/26/10 12:40	NJD
BOD	74.3 mg/L	2 mg/L	SM5210B	2/25/10 9:38	TO
COD	194 mg/L	10 mg/L	HACH 8000	3/10/10 7:22	NJD
Surfactants (MBAS)	ND	0.025 mg/L	SM20-5540 C	2/25/10 23:00	22-293
Color	< 5 pccu	5 pccu		2/24/10 11:47	WEH

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
Temperature (F), Field	NA	deg F	na	3/5/10 9:02	RCS
Osmotic Pressure	ND	10 mOs/kg	PA DEP	2/26/10 6:50	22-293
Ammonia Distillation	Completed	mg/L	SM 4500 NH3 B	2/25/10 8:42	WEH
Ammonia Nitrogen	8.22 mg/L	.10 mg/L	SM 4500 NH3 D	2/25/10 9:40	WEH
Nitrate	< 0.10 mg/l	0.10 mg/l	EPA 300.0	2/24/10 0:00	AML
Nitrite	< 0.10 mg/l	0.10 mg/l	EPA 300.0	2/24/10 0:00	AML
Nitrate / Nitrite	< 0.20 mg/l	0.20 mg/l	EPA 300.0	2/24/10 0:00	AML
Acidity	-118.0 mg/L	3 mg/L	SM 2310 B	2/24/10 16:13	AML
Alkalinity	38.0 mg/l	5 mg/l	SM 2320 B	2/24/10 15:20	AML
Bicarbonate	32.0 mg/L	5 mg/L	SM4500 CO2 D	2/25/10 10:46	AML
Sulfate	2.4 mg/l	1 mg/l	EPA 300.0	2/24/10 0:00	AML
Chloride	23.2 mg/L	1 mg/L	EPA 300.0	2/24/10 0:00	AML
Fluoride	0.14 mg/l	0.20 mg/l	EPA 300.0	2/24/10 0:00	AML

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
Calcium	1.91 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Iron	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Iron, Dissolved	0.04 mg/l	0.02 mg/l	EPA 200.7	3/12/10 13:47	AML
Magnesium	0.17 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Potassium	0.14 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Sodium	14.3 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:56	AML
Aluminum	<0.10 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:25	AML
Arsenic	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Barium	<0.10 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:28	AML
Beryllium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Cadmium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Chromium	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Cobalt	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
Manganese	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Molybdenum	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML
Nickel	<0.05 mg/l	0.05 mg/l	EPA 200.7	2/26/10 14:51	AML
Selenium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:58	AML
Silver	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:57	AML
Strontium, Total	0.23 mg/L	0.0025 mg/L	EPA 200.7	3/1/10 19:48	22-293
Thallium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:59	AML
Tin	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:02	AML
Titanium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Zinc	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Gross Alpha DW	-0.127 PCi/L	3 PCi/L	EPA 900	3/3/10 11:53	6502103
Gross Beta DW	0.481 PCi/L	4 PCi/L	EPA 900	3/3/10 11:53	6502103
Radium 226	0.144 pCi/L	6 pCi/L	EPA 903.1	3/17/10 11:54	6502103

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
Radium 228	0.238 pCi/L	.9 pCi/L	EPA 904.0	3/11/10 11:54	6502103
Phenolics	0.06 mg/L	0.01 mg/L	EPA 420.4	3/1/10 11:27	22-293
Uranium	ND	0.0050 mg/L	SW846 6020A	3/3/10 21:17	22-293
Mercury, Total	ND	0.00050 mg/L	EPA 245.1	3/1/10 12:04	22-293
Lead	<0.02 mg/L	0.02 mg/L	EPA 200.7	2/26/10 14:51	AML
Lithium, Total	ND	0.050 mg/L	EPA 200.7	3/1/10 19:48	22-293
Boron	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:48	AML
Antimony	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Silicon, Total	0.12 mg/L	0.050 mg/L	EPA 200.7	3/3/10 11:55	22-293
Bromide	0.23 mg/l	0.10 mg/l	EPA 300.1	2/24/10 0:00	AML
Hardness, Total	<10 mg/l	10 mg/l	EPA 200.7	2/26/10 13:43	AML
Heterotrophic Plate Count	5000 /ml	1 /ml	SM 9215B	2/24/10 15:30	WEH
Total Coliform	0 /100 mls	0 /100 mls	SM 9223B	2/24/10 15:50	WEH

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11931 State Route 85
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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
E Coli	NA	+/-	SM 9223B	2/24/10 15:50	WEH
Specific Conductance	130 umhos/cm	2 umhos/cm	EPA 120.1	2/26/10 0:00	TO
Gasoline Range Organics	266 ug/L	100 ug/L	SW846 8015D	3/2/10 5:54	22-293
Diesel Range Organics C10-C28	1.4 mg/L	0.15 mg/L	SW846 8015D	3/2/10 19:28	22-293
Methane	ND	1.0 ug/L	RSK 175	3/2/10 14:54	22-293
Ethylene Glycol	ND	10.0 mg/L	SW846 8015D	3/5/10 20:21	22-293
Alkalinity, Carbonate	15 mg/L	5 mg/L	SM20-2322	2/26/10 11:30	22-293
Alkalinity, Hydroxide	ND	5 mg/L	SM20-2320 B	2/26/10 11:30	22-293
Alkalinity, Phenolphthalein	7 mg/L	5 mg/L	SM20-2320 B	2/26/10 11:30	22-293
Total Kjeldahl Nitrogen	7.2 mg/L	1.0 mg/L	SM20-4500-N C	3/2/10 12:30	22-293
Formaldehyde	71.4 mg/L	1.0 mg/L	SW846 8015D	3/4/10 18:14	22-293
Acetone	985 ug/L	10.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Silica, Dissolved	ND	1 mg/L	SM20-4500SiD	3/2/10 0:15	22-293

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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
2-Hexanone	ND	5.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
4-Methyl-2-Pentanone(MIBK)	ND	5.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
2-Butanone	ND	10.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Ethene	ND	3.0 ug/L	RSK 175	3/2/10 14:54	22-293
Methanol	22.3 mg/L	1.0 mg/L	SW846 8015D	9/8/10 22:07	22-293
o-Xylene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
mp-Xylene	ND	2.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Chloromethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Ethane	ND	3.0 ug/L	RSK 175	3/2/10 14:54	22-293
Chlorodibromomethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Chloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Chloroform	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Bromomethane	ND	1 0 ug/L	SW846 8260B	2/26/10 20:37	22-293

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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
Carbon Disulfide	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Bromide	0.21 mg/L	0.10 mg/L	EPA 300	2/26/10 5:21	22-293
Bromochloromethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Bromodichloromethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,2-Dibromo-3-chloropropane	ND	7.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,2-Dibromoethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,1,2,2-Tetrachloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,1-Dichloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,1-Dichloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
cis-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Methylene Chloride	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,2-Dichloropropane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Chlorobenzene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293

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CWM Environmental
11931 State Route 85
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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A
Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
Tetrachloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Trichloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
trans-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
trans-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
cis-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Benzene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Carbon Tetrachloride	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,2-Dichloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Ethylbenzene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Styrene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Toluene	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,1,1-Trichloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
1,1,2-Trichloroethane	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293

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CWM Environmental
11931 State Route 85
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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Frac Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/22/10 14:45
Received Date: 02/24/10 10:21
Matrix: N/A
Collection Method: Grab

02100810	Result	Reporting Limit	Method	Analysis Date	Analyst
Vinyl Chloride	ND	1.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Total Xylenes	ND	3.0 ug/L	SW846 8260B	2/26/10 20:37	22-293
Vanadium, Total	ND	0.0025 mg/L	EPA 200.7	3/1/10 19:48	22-293

Sample Comments:

BOD: Unseeded Blank depletion was greater than 0.2 mg/L limit.

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
Thorium 228	5.31 pCi/L	pCi/L	HSL-300M	3/19/10 13:35	6502103
Thorium 230	0.635 pCi/L	pCi/L	HSL-300m	3/19/10 13:36	6502103
Thorium 232	0.276 pCi/L	pCi/L	HSL-300m	3/19/10 13:36	6502103
Copper	0.8 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:16	AML
Bromoform	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
pH	6.90 SU	SU	SM4500 H+B	2/25/10 15:10	AML
Total Dissolved Solids	113,460 mg/l	5 mg/l	SM 2540 C	2/26/10 12:55	RCS
Total Suspended Solids	32 mg/L	3 mg/L	SM 2540 D	2/25/10 14:00	RCS
Oil & Grease	1.4 mg/l	5 mg/l	EPA 1664 Rev A	2/26/10 12:40	NJD
BOD	> 379	2 mg/L	SM5210B	2/26/10 9:13	TO
COD	1040 mg/L	10 mg/L	HACH 8000	3/10/10 7:22	NJD
Surfactants (MBAS)	0.184 mg/L	0.025 mg/L	SM20-5540 C	2/26/10 21:45	22-293
Color	250 pccu	5 pccu		2/25/10 11:36	WEH

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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
Temperature (F), Field	NA	deg F	na	3/5/10 9:02	RCS
Osmotic Pressure	3440 mOs/kg	10 mOs/kg	PA DEP	2/27/10 4:35	22-293
Ammonia Distillation	Completed	mg/L	SM 4500 NH3 B	3/3/10 13:51	WEH
Ammonia Nitrogen	28.2 mg/L	.10 mg/L	SM 4500 NH3 D	3/4/10 14:58	WEH
Nitrate	<5.0 mg/l	0.10 mg/l	EPA 300.0	2/26/10 10:43	AML
Nitrite	<5.0 mg/l	0.10 mg/l	EPA 300.0	2/26/10 10:44	AML
Nitrate / Nitrite	<10.0 mg/l	0.20 mg/l	EPA 300.0	2/26/10 10:43	AML
Acidity	50.0 mg/L	3 mg/L	SM 2310 B	2/25/10 15:09	AML
Alkalinity	148.0 mg/l	5 mg/l	SM 2320 B	2/25/10 15:10	AML
Bicarbonate	148.0 mg/L	5 mg/L	SM4500 CO2 D	2/25/10 10:46	AML
Sulfate	275.0 mg/l	1 mg/l	EPA 300.0	2/26/10 10:45	AML
Chloride	64,800 mg/L	1 mg/L	EPA 300.0	2/26/10 10:42	AML
Fluoride	12.0 mg/l	0.20 mg/l	EPA 300.0	2/26/10 10:45	AML

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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
Calcium	6780 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Iron	16.6 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Iron, Dissolved	16.7 mg/l	0.02 mg/l	EPA 200.7	3/12/10 13:47	AML
Magnesium	660.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Potassium	360.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Sodium	32,200 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Aluminum	<2.0 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:25	AML
Arsenic	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Barium	45.4 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:28	AML
Beryllium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Cadmium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Chromium	<0.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Cobalt	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML

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Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
Manganese	2.6 mg/l	0.02 mg/l	EPA 200 7	2/26/10 14:26	AML
Molybdenum	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML
Nickel	<1.0 mg/l	0.05 mg/l	EPA 200.7	2/26/10 14:51	AML
Selenium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:58	AML
Silver	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:57	AML
Strontium, Total	788 mg/L	0.25 mg/L	EPA 200.7	3/4/10 10:25	22-293
Thallium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:59	AML
Tin	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:02	AML
Titanium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Zinc	<0.4 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Gross Alpha DW	15.8 PCi/L	3 PCi/L	EPA 900	3/3/10 11:56	6502103
Gross Beta DW	86.5 PCi/L	4 PCi/L	EPA 900	3/3/10 11:57	6502103
Radium 226	46.6 pCi/L	.6 pCi/L	EPA 903.1	3/17/10 11:58	6502103

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11931 State Route 85
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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
Radium 228	17.9 pCi/L	.9 pCi/L	EPA 904.0	3/18/10 11:58	6502103
Phenolics	0.02 mg/L	0.01 mg/L	EPA 420.4	3/1/10 11:48	22-293
Uranium	ND	0.050 mg/L	SW846 6020A	3/3/10 21:56	22-293
Mercury, Total	ND	0.010 mg/L	EPA 200.8	3/4/10 8:29	22-293
Lead	<0.4 mg/L	0.02 mg/L	EPA 200.7	2/26/10 14:51	AML
Lithium, Total	66.1 mg/L	5.0 mg/L	EPA 200.7	3/4/10 10:25	22-293
Boron	17.0 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:48	AML
Antimony	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Silicon, Total	26.6 mg/L	5.0 mg/L	EPA 200.7	3/3/10 11:59	22-293
Bromide	995.0 mg/l	0.10 mg/l	EPA 300.1	2/26/10 10:44	AML
Hardness, Total	19,648 mg/l	10 mg/l	EPA 200.7	2/26/10 13:43	AML
Heterotrophic Plate Count	8,200 /ml	1 /ml	SM 9215B	2/25/10 15:37	WEH
Total Coliform	0 /100 mls	0 /100 mls	SM 9223B	2/25/10 15:35	WEH

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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
E Coli	NA	+/-	SM 9223B	2/25/10 15:35	WEH
Specific Conductance	143,500 umhos/cm	2 umhos/cm	EPA 120.1	2/26/10 0:00	TO
Gasoline Range Organics	2850 ug/L	2500 ug/L	SW846 8015D	3/4/10 1:21	22-293
Diesel Range Organics C10-C28	5.1 mg/L	0.75 mg/L	SW846 8015D	3/3/10 11:16	22-293
Methane	ND	1.0 ug/L	RSK 175	3/2/10 15:10	22-293
Ethylene Glycol	ND	10.0 mg/L	SW846 8015D	3/6/10 1:13	22-293
Alkalinity, Carbonate	ND	5 mg/L	SM20-2322	2/27/10 7:14	22-293
Alkalinity, Hydroxide	ND	5 mg/L	SM20-2320 B	2/27/10 7:14	22-293
Alkalinity, Phenolphthalein	ND	5 mg/L	SM20-2320 B	2/27/10 7:14	22-293
Total Kjeldahl Nitrogen	47.0 mg/L	4.0 mg/L	SM20-4500-N C	3/8/10 11:20	22-293
Formaldehyde	ND	1.0 mg/L	SW846 8015D	3/4/10 18:25	22-293
Acetone	661 ug/L	10.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Silica, Dissolved	14 mg/L	1 mg/L	SM20-4500SiD	3/2/10 0:15	22-293

Ryan C Shafer, Technical Director

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
2-Hexanone	ND	5.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
4-Methyl-2-Pentanone(MIBK)	ND	5.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
2-Butanone	46.6 ug/L	10.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Ethene	ND	3.0 ug/L	RSK 175	3/2/10 15:10	22-293
Methanol	ND	1.0 mg/L	SW846 8015D	9/8/10 22:22	22-293
o-Xylene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
mp-Xylene	3.5 ug/L	2.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Chloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Ethane	ND	3.0 ug/L	RSK 175	3/2/10 15:10	22-293
Chlorodibromomethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Chloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Chloroform	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Bromomethane	ND	1 0 ug/L	SW846 8260B	3/1/10 23:39	22-293

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CWM Environmental
11931 State Route 85
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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A
Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
Carbon Disulfide	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Bromide	825 mg/L	150 mg/L	EPA 300	2/27/10 9:17	22-293
Bromochloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Bromodichloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,2-Dibromo-3-chloropropane	ND	7.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,2-Dibromoethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,1,2,2-Tetrachloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,1-Dichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,1-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
cis-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Methylene Chloride	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,2-Dichloropropane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Chlorobenzene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293

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CWM Environmental
11931 State Route 85
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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant CW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:10
Matrix: N/A
Collection Method: Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
Tetrachloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Trichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
trans-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
trans-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
cis-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Benzene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Carbon Tetrachloride	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,2-Dichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Ethylbenzene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Styrene	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Toluene	1.3 ug/L	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,1,1-Trichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
1,1,2-Trichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293

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CWM Environmental
11931 State Route 85
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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer:	Altela	**Collection Date:**	02/23/10 17:55
Site:	NETL Flowback Water	**Received Date:**	02/25/10 11:10
Monitoring Pt:	Resultant CW	**Matrix:**	N/A
Source Type:	N/A	**Collection Method:**	Grab

02100864	Result	Reporting Limit	Method	Analysis Date	Analyst
Vinyl Chloride	ND	1.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Total Xylenes	4.3 ug/L	3.0 ug/L	SW846 8260B	3/1/10 23:39	22-293
Vanadium, Total	ND	0.25 mg/L	EPA 200.7	3/4/10 10:25	22-293

Sample Comments:

None

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
Thorium 228	0.143 pCi/L	pCi/L	HSL-300M	3/18/10 13:35	6502103
Thorium 230	0.126 pCi/L	pCi/L	HSL-300m	3/18/10 13:36	6502103
Thorium 232	0.000 pCi/L	pCi/L	HSL-300m	3/18/10 13:37	6502103
Copper	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:16	AML
Bromoform	ND	1:0 ug/L	SW846 8260B	3/1/10 12:09	22-293
pH	9.94 SU	SU	SM4500 H+B	2/25/10 15:10	AML
Total Dissolved Solids	76 mg/l	5 mg/l	SM 2540 C	2/26/10 12:55	RCS
Total Suspended Solids	<3 mg/L	3 mg/L	SM 2540 D	2/25/10 14:00	RCS
Oil & Grease	1.2 mg/l	5 mg/l	EPA 1664 Rev A	2/26/10 12:40	NJD
BOD	> 75.3	2 mg/L	SM5210B	2/26/10 9:13	TO
COD	410 mg/L	10 mg/L	HACH 8000	3/10/10 7:22	NJD
Surfactants (MBAS)	ND	0.025 mg/L	SM20-5540 C	2/26/10 21:45	22-293
Color	< 5 pccu	5 pccu		2/25/10 11:36	WEH

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
Temperature (F), Field	NA	deg F	na	3/5/10 9:02	RCS
Osmotic Pressure	ND	10 mOs/kg	PA DEP	2/27/10 4:35	22-293
Ammonia Distillation	Completed	mg/L	SM 4500 NH3 B	3/3/10 13:51	WEH
Ammonia Nitrogen	9.64 mg/L	.10 mg/L	SM 4500 NH3 D	3/4/10 14:58	WEH
Nitrate	0.19 mg/l	0.10 mg/l	EPA 300.0	2/26/10 10:43	AML
Nitrite	<0.10 mg/l	0.10 mg/l	EPA 300.0	2/26/10 10:44	AML
Nitrate / Nitrite	0.29 mg/l	0.20 mg/l	EPA 300.0	2/26/10 10:43	AML
Acidity	- 22.0 mg/L	3 mg/L	SM 2310 B	2/25/10 15:09	AML
Alkalinity	48.0 mg/l	5 mg/l	SM 2320 B	2/25/10 15:10	AML
Bicarbonate	24.0 mg/L	5 mg/L	SM4500 CO2 D	2/25/10 10:46	AML
Sulfate	2.2 mg/l	1 mg/l	EPA 300.0	2/26/10 10:45	AML
Chloride	35.4 mg/L	1 mg/L	EPA 300.0	2/26/10 10:42	AML
Fluoride	0.15 mg/l	0.20 mg/l	EPA 300.0	2/26/10 10:45	AML

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
Calcium	3.81 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:52	AML
Iron	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Iron, Dissolved	0.02 mg/l	0.02 mg/l	EPA 200.7	3/12/10 13:47	AML
Magnesium	0.36 mg/l	0 10 mg/l	EPA 200.7	2/26/10 14:52	AML
Potassium	0.19 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:53	AML
Sodium	18.6 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:56	AML
Aluminum	<0.10 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:25	AML
Arsenic	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Barium	<0.10 mg/l	0.10 mg/l	EPA 200.7	2/26/10 14:28	AML
Beryllium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Cadmium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:00	AML
Chromium	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Cobalt	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
Manganese	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:26	AML
Molybdenum	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:59	AML
Nickel	<0.05 mg/l	0.05 mg/l	EPA 200.7	2/26/10 14:51	AML
Selenium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:58	AML
Silver	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 13:57	AML
Strontium, Total	0.47 mg/L	0.0025 mg/L	EPA 200.7	3/4/10 12:30	22-293
Thallium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:59	AML
Tin	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:02	AML
Titanium	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Zinc	0.16 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:49	AML
Gross Alpha DW	-0.125 PCi/L	3 PCi/L	EPA 900	3/3/10 11:56	6502103
Gross Beta DW	-0.088 PCi/L	4 PCi/L	EPA 900	3/3/10 11:57	6502103
Radium 226	0.0917 pCi/L	.6 pCi/L	EPA 903.1	3/17/10 11:58	6502103

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CWM Environmental
11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
Radium 228	-0.134 pCi/L	.9 pCi/L	EPA 904.0	3/11/10 11:59	6502103
Phenolics	0.05 mg/L	0.01 mg/L	EPA 420.4	3/1/10 11:49	22-293
Uranium	ND	0.0050 mg/L	SW846 6020A	3/3/10 21:37	22-293
Mercury, Total	ND	0.0010 mg/L	EPA 200.8	3/4/10 8:19	22-293
Lead	<0.02 mg/L	0.02 mg/L	EPA 200.7	2/26/10 14:51	AML
Lithium, Total	ND	0.050 mg/L	EPA 200.7	3/4/10 12:30	22-293
Boron	<0.02 mg/l	0.02 mg/l	EPA 200.7	2/26/10 14:48	AML
Antimony	<0.5 mg/L	0.001 mg/L	EPA 200.7	3/10/10 14:01	AML
Silicon, Total	0.089 mg/L	0.050 mg/L	EPA 200.7	3/3/10 12:04	22-293
Bromide	0.40 mg/l	0.10 mg/l	EPA 300.1	2/26/10 10:44	AML
Hardness, Total	11 mg/l	10 mg/l	EPA 200.7	2/26/10 13:43	AML
Heterotrophic Plate Count	55,000 /ml	1 /ml	SM 9215B	2/25/10 15:37	WEH
Total Coliform	0 /100 mls	0 /100 mls	SM 9223B	2/25/10 15:35	WEH

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
E Coli	NA	+/-	SM 9223B	2/25/10 15:35	WEH
Specific Conductance	184 umhos/cm	2 umhos/cm	EPA 120.1	2/26/10 0:00	TO
Gasoline Range Organics	154 ug/L	100 ug/L	SW846 8015D	3/2/10 5:19	22-293
Diesel Range Organics C10-C28	1.7 mg/L	0.15 mg/L	SW846 8015D	3/2/10 22:31	22-293
Methane	ND	1.0 ug/L	RSK 175	2/26/10 21:26	22-293
Ethylene Glycol	ND	10.0 mg/L	SW846 8015D	3/6/10 1:34	22-293
Alkalinity, Carbonate	20 mg/L	5 mg/L	SM20-2322	2/27/10 7:22	22-293
Alkalinity, Hydroxide	ND	5 mg/L	SM20-2320 B	2/27/10 7:22	22-293
Alkalinity, Phenolphthalein	10 mg/L	5 mg/L	SM20-2320 B	2/27/10 7:22	22-293
Total Kjeldahl Nitrogen	9.8 mg/L	1.0 mg/L	SM20-4500-N C	3/3/10 14:00	22-293
Formaldehyde	41.4 mg/L	1.0 mg/L	SW846 8015D	3/4/10 18:37	22-293
Acetone	5230 ug/L	200 ug/L	SW846 8260B	3/2/10 0:40	22-293
Silica, Dissolved	ND	1 mg/L	SM20-4500SiD	3/2/10 0:15	22-293

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724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
2-Hexanone	ND	5.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
4-Methyl-2-Pentanone(MIBK)	ND	5.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
2-Butanone	ND	10.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Ethene	ND	3.0 ug/L	RSK 175	2/26/10 21:26	22-293
Methanol	27 4 mg/L	1.0 mg/L	SW846 8015D	9/8/10 22:37	22-293
o-Xylene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
mp-Xylene	ND	2.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Chloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Ethane	ND	3.0 ug/L	RSK 175	2/26/10 21:26	22-293
Chlorodibromomethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Chloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Chloroform	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Bromomethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
Carbon Disulfide	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Bromide	0.38 mg/L	0.30 mg/L	EPA 300	2/27/10 9:32	22-293
Bromochloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Bromodichloromethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,2-Dibromo-3-chloropropane	ND	7.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,2-Dibromoethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,1,2,2-Tetrachloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,1-Dichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,1-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
cis-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Methylene Chloride	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,2-Dichloropropane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Chlorobenzene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293

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Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
Tetrachloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Trichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
trans-1,2-Dichloroethene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
trans-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
cis-1,3-Dichloropropene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Benzene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Carbon Tetrachloride	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,2-Dichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Ethylbenzene	ND	1 0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Styrene	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Toluene	2.2 ug/L	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,1,1-Trichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
1,1,2-Trichloroethane	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293

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11931 State Route 85
Kittanning, Pennsylvania 16201
724-543-3011

Lab # 03-457

Lab Analysis Report

Customer: Altela
Site: NETL Flowback Water
Monitoring Pt: Resultant DW
Source Type: N/A

Collection Date: 02/23/10 17:55
Received Date: 02/25/10 11:11
Matrix: N/A
Collection Method: Grab

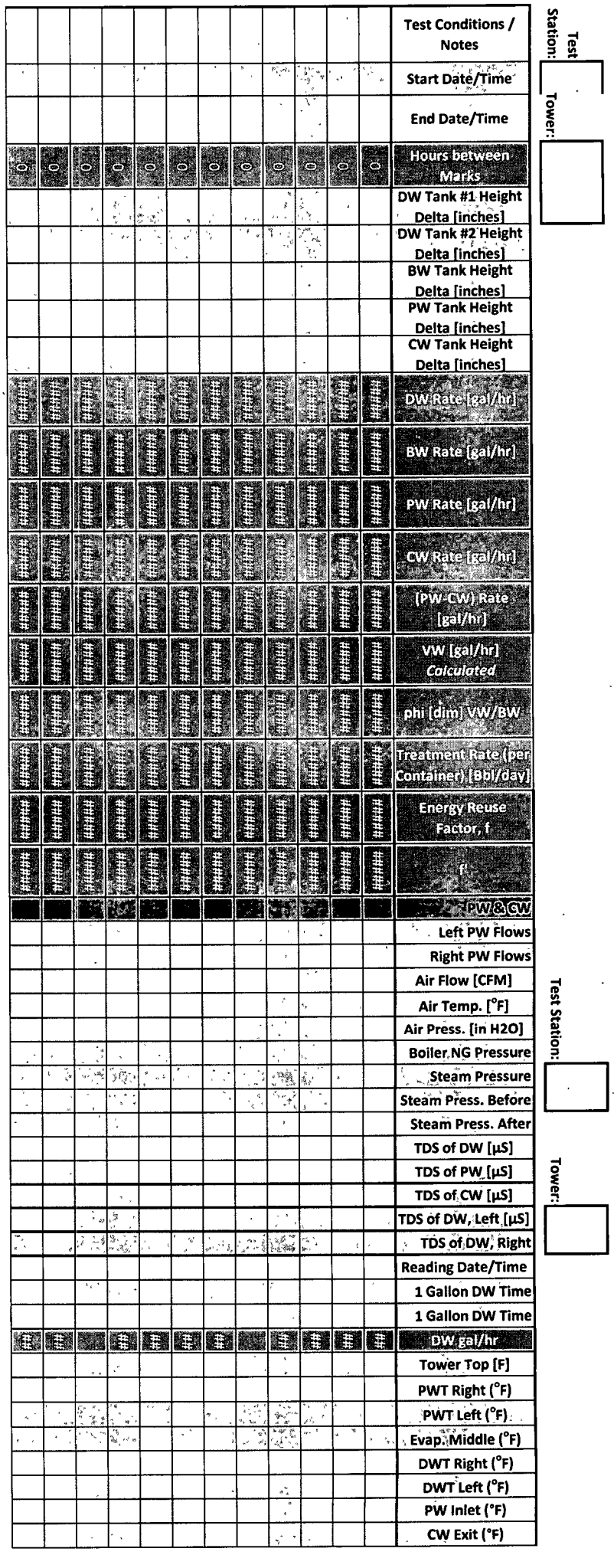
02100865	Result	Reporting Limit	Method	Analysis Date	Analyst
Vinyl Chloride	ND	1.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Total Xylenes	ND	3.0 ug/L	SW846 8260B	3/1/10 12:09	22-293
Vanadium, Total	ND	0.0025 mg/L	EPA 200.7	3/4/10 12:30	22-293

Sample Comments:

None

Ryan C Shafer, Technical Director

Analyte names in bold are listed under the laboratory's current NELAP scope of accreditation.


Test Conditions / Notes
Start Date/Time
End Date/Time
Hours between Marks
DW Tank #1 Height Delta [inches]
DW Tank #2 Height Delta [inches]
BW Tank Height Delta [inches]
PW Tank Height Delta [inches]
CW Tank Height Delta [inches]
DW Rate [gal/hr]
BW Rate [gal/hr]
PW Rate [gal/hr]
CW Rate [gal/hr]
[PW-CW] Rate [gal/hr]
VW [gal/hr] Calculated
phi [dim] VW/BW
Treatment Rate (per Container) [Bbl/day]
Energy Reuse Factor, f
f'
PW & CW
Left PW Flows
Right PW Flows
Air Flow [CFM]
Air Temp. [°F]
Air Press. [in H2O]
Boiler NG Pressure
Steam Pressure
Steam Press. Before
Steam Press. After
TDS of DW [µS]
TDS of PW [µS]
TDS of CW [µS]
TDS of DW, Left [µS]
TDS of DW, Right
Reading Date/Time
1 Gallon DW Time
1 Gallon DW Time
DW gal/hr
Tower Top [F]
PWT Right (°F)
PWT Left (°F)
Evap. Middle (°F)
DWT Right (°F)
DWT Left (°F)
PW Inlet (°F)
CW Exit (°F)
Test Station:
Tower:
Test Station:
Tower:

Altela Tower Test Data Inputs

Tower: ____ Test Station: #1

Test Conditions	Test Duration		Natural Gas			Tank Levels							PW Flows					Inlet Air Measurements						Steam Measurements				Electrical Conductivity								Tower Temperatures																	Bucket Times		
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Start Date/Time	End Date/Time	Natural Gas Meter Reading, Start [CCF]	Natural Gas Meter Reading, End [CCF]	Initial TDS Concentration [mg/l]	DW Tank #1 Height Delta [inches]	DW Tank #2 Height Delta [inches]	BW#1 Tank Height Delta [inches]	BW#2 Tank Height Delta [inches]	BW#3 Tank Height Delta [inches]	PW Tank #1 Height Delta [inches]	PW Tank #2 Height Delta [inches]	PW Flows #1 [GPM]	PW Flows #2 [GPM]	PW Flows #3 [GPM]	PW Flows #4 [GPM]	PW Flows #5 [GPM]	Air Flow Measurement [Feet Per Minute]	Inlet Air Temp. [°F]	Inlet Air Wet Bulb Temp. [°F]	Air Press. [inches H2O]	Left Exhaust Press. [inches H2O]	Right Exhaust Press. [inches H2O]	Boiler NG Pressure [inches H2O]	Steam Pressure [psig]	Steam Press. Before Valve [psig]	Steam Press. After Valve [psig]	Electical Conductivity of DW Basin @ Start [µS/cm]	Electical Conductivity of DW Basin @ End [µS/cm]	Electical Conductivity of DW Tanks @ Start [µS/cm]	Electical Conductivity of DW Tanks @ End [µS/cm]	Electical Conductivity of PW @ Start [µS/cm]	Electical Conductivity of CW @ Start [µS/cm]	Electical Conductivity of PW @ End [µS/cm]	Electical Conductivity of CW @ End [µS/cm]	TTT (°F)	PWT #1 (°F)	PWT #2 (°F)	PWT #3 (°F)	PWT #4 (°F)	PWT #5 (°F)	PWT #6 (°F)	PWT #7 (°F)	PWT #8 (°F)	PWT #9 (°F)	PWT #10 (°F)	PW Inlet (°F)	CW Exit (°F)	DWT Right (°F)	DWT Left (°F)	Exhaust Air Temp. Left (°F)	Exhaust Air Temp. Right (°F)	Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #1 (seconds) for a 5 Gallon Bucket	Bucket Time #1 (seconds) for a 5 Gallon Bucket

Altela Tower Test Data Outputs

Tower ##

	Primary Inputs				Outputs								Duratio	Water Flow Rates						Water Volumes						Efficienices										s Usa		Air Flow			Temperatures									Conductivities						Salt Concentrations							Bucket Times			
Test Conditions / Notes/ Change in Input Conditions from Previous Settings	Input PW Flow [GPM]	Input Air Flow [CFM]	Input Steam Flow [GPH]	Initial TDS Concentration [mg/l]	Treatment Rate [GPH]	DW Rate [GPH]	Average PWT Temp [°F]	Delta T, PWT-Exhaust Air Temp [°F]	Delta T, PWT-DWT [°F]	Total Recovery Rate, RR=TR/PW=(PW-CW)/PW	Energy Reuse Factor, GOR, =DW/BW, f	Φ, phi [dim] VW/BW=(TR-DW)/BW+1	Test Duration [Hours]	Overall PW Flow [GPM]	Overall PW Flow [GPH]	DW Rate [GPH]	BW Rate [GPH]	Treatment Rate, TR [GPH]	VW [GPH] *Calculated*	Total PW Volume [Gal]	Total Treated Volume [Gal]	Total CW Volume [Gal]	Total DW Volume [Gal]	Total BW Volume [Gal]	Total VW Volume [Gal] *Calculated*	Φ, phi [dim] VW/BW=(TR-DW)/BW+1	Φ X 100	Energy Reuse Factor, GOR, =DW/BW, f	Treatment Rate ERF, GOR, = TR/BW, f'	Single-Pass Recovery Rate, RRs=TR/PW [%]	Single-pass Concentration Ratio, CCs	Concentration Multiplication Factor, MF	Total Recovery Rate, RR=TR/PW=(PW-CW)/PW	Total Recovery Rate, RR=1-Ci/Cf	Loss of Salt, %	Natural Gas Usage [MCF]	Natural Gas Usage [MCF/bbl TR]	Air Flow, Velocity in a 6" diameter pipe [FPM]	Air Flow, Volume [CFM]	Relative Humidity, Incoming Air %	Average PWT Temp [°F]	Average PWT Temp/2 [°F]	TT Temp [°F]	Average Exhaust Air Temp [°F]	Outgoing DW Temp, DWT [°F]	Delta T, PWT-Exhaust Air Temp [°F]	Delta T, PWT-DWT [°F]	Outgoing CW Temp, CWT [°F]	Incoming PW Temp [°F]	Electical Conductivity of DW Basin [μS/cm]	Electical Conductivity of DW Tanks [μS/cm]	Electical Conductivity of PW @ Start [μS/cm]	Electical Conductivity of CW @ Start [μS/cm]	Electical Conductivity of PW @ End [μS/cm]	Electical Conductivity of CW @ End [μS/cm]	TDS of DW Basin [mg/l]	TDS of DW Tanks [mg/l]	TDS of PW @ Start [mg/l]	TDS of CW @ Start [mg/l]	TDS of PW @ End [mg/l]	TDS of CW @ End [mg/l]	Single-pass Concentration Ratio, CCs	Bucket Time DW Rate #1 (GPH)	Bucket Time DW Rate #2 (GPH)	Bucket Time DW Rate #3 (GPH)	Average Bucket Time DW Rate (GPH)
#REF!	##	##	##	##	##	##	##	###	###	###	###	###	#REF!	###	###	###	###	###	###	###	###	###	###	###	###	###	##	###	###	###	###	###	###	#	#	#	#	###	###		#	#	#	#	#	#	#	#	#	###	###	###	###	###	###	###	###	###	###	###	###	###	###	###	###	###
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Jones, Brad A., EMNRD

From: Karen Evans [karen.evans@altelainc.com]
Sent: Friday, October 01, 2010 9:29 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 3rd Qtr 2010

Brad,

With respect to the State's quarterly survey, for the period July 1 through September 30, 2010, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Sincerely,

Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Jones, Brad A., EMNRD

From: Karen Evans [karen.evans@altelainc.com]
Sent: Thursday, July 01, 2010 11:20 AM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 2nd Qtr 2010

Brad,

With respect to the State's quarterly survey, for the period April 1 through June 30, 2010, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Jones, Brad A., EMNRD

From: Karen Evans [karen.evans@altelainc.com]
Sent: Thursday, April 01, 2010 1:19 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: EPWM-004 Change of Address Notification
Attachments: 4.1.10 Change of Address Notification.docx

Brad,

Attached, please find a letter advising of Altela's recent change of address.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

WEB: altelainc.com

ALBUQUERQUE OFFICE
7500 Meridian Pl NW, Suite B, Albuquerque, NM 87121
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
5350 South Roslyn Street, Suite 450, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

April 1, 2010

Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Change of Address Notification for Temporary Approval EPWM-004

Dear Brad,

Per your recent conversation with Matt Bruff, please be advised that Altela, Inc. has moved its Albuquerque facilities, effective March 1, 2010.

The previous facility location under the above referenced Permit was:
2450 Alamo SE
Albuquerque, NM 87106

The new facility address is:
7500 Meridian Pl NW, Suite B
Albuquerque, NM 87121

We would appreciate the Oil Conservation Division's acknowledgement and confirmation of this change of address with respect to Altela, Inc.'s Temporary Approval EPWM -004 to Store and Use Produced Water for R&D of the AltelaRain® Technology.

Thank you in advance for your continued assistance and support. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Matthew Bruff
CDO

cc: Altela Day File

Jones, Brad A., EMNRD

From: Karen Evans [karen.evans@altelainc.com]
Sent: Thursday, April 01, 2010 12:04 PM
To: Jones, Brad A., EMNRD
Cc: Matthew J. Bruff
Subject: Altela Inc EPWM-004 Quarterly Report - 1st Qtr 2010

Brad,

With respect to the State's quarterly survey, for the period January 1 through March 31, 2010, Altela treated zero barrels of produced water in New Mexico.

Please let me know if you have any questions.

Thanks,

Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 450
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (505) 923-4130
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

ALTELA℠
Treating water naturally.

WEB: altelainc.com

ALBUQUERQUE OFFICE
ONE TECHNOLOGY CENTER
2450 Alamo Ave. SE, Suite 200, Albuquerque, NM 87106
PHONE: 505.923.4140 FAX: 505.923.4130

DENVER OFFICE
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 430, Englewood, CO 80111
PHONE: 303.993.1950 FAX: 303.993.1955

December 8, 2008

Mr. Wayne Price
Mr. Brad Jones
Environmental Bureau
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain℠ Technology

VIA FEDERAL EXPRESS

Dear Wayne and Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain℠ technology. Altela requests a one-year renewal to continue using real oilfield produced water for testing and development of the AltelaRain℠ technology at Altela's design, research, and manufacturing facilities. These facilities are located at 2450 Alamo SE, Albuquerque, New Mexico 87106 ("Alamo"). Altela continues to agree to the following conditions with respect to use of the produced water at Alamo:

1. The produced water approved for storage and the testing and development of the AltelaRain℠ technology will only occur at Altela's design, research, and manufacturing facility (Alamo), located at 2450 Alamo SE, Albuquerque, New Mexico 87106;

2. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Alamo facility;

3. No produced water shall be disposed at the Alamo facility. All produced water must be removed from the Alamo facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela must retain records documenting all produced water received and removed from the Alamo facility;

5. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Alamo facility.

Enclosed, please find a copy Altela's Produced Water Tracking Summary used to ensure that all produced water is accounted for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal. Please also find copies of the water quality analytical test results received from third party water quality laboratories with respect to tests conducted on the produced water at the Alamo facility. Finally, we have also enclosed a copy of our test-bench protocol spreadsheet which outlines the various parameters and data points tracked during testing.

Thank you in advance for your continued assistance and support of the AltelaRain^{SM} technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Matthew Bruff
CDO

cc: Altela Day File

Enclosures as noted

ALTELA

Alamo Produced Water Tracking Summary

No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Disposal Location (If Delivery - NA)	Balance
1	2/22/07	M&R Trucking, Inc.	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	Blackshawl Com. #001 (San Juan Basin, NM)	Merrion Oil and Gas Corporation	300 Gallons Delivered	NA	+300 gallons
2	11/19/07	M&R Trucking, Inc.	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	NA		300 Gallons Taken Away	Pretty Lady 3011 34 Well No.1 San Juan County, NM	0 gallons
3	11/19/07	M&R Trucking, Inc.	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	Blackshawl Com. #001 (San Juan Basin, NM)	Merrion Oil and Gas Corporation	300 Gallons Delivered	NA	+300 gallons
4	6/16/08	Mountain States Hot Shot Oil Field Services	Adam Stevens	P.O. Box 1210, Grand Junction, CO 81502	(970) 434-4030	(970) 314-9724	(Attached)	Occidental Facility (Piceance Basin, CO)	Occidental Petroleum Corporation	500 Gallons Delivered	NA	+ 800 gallons
5	10/1/08	M&R Trucking, Inc.	Barry Bonds	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	NA		Remaing Concentrated Produced Water at Alamo, 479 Gallons*	Pretty Lady 3011 34 Well No.1 San Juan County, NM	0 gallons

*The AltelaRain[SM] technology treats produced water by a distillation process. The Altela System is a waste reduction process, meaning the "bad" water is reduced by up to 80% through the creation of distilled water ("DW"). Approximately half of this DW is used to fund steam boilers. A portion of this DW is exhausted by the boiler as steam vapor resulting in less water being available for disposal compared to original produced water delivery volumes.

Submit a single copy to Santa Fe Office

State of New Mexico
Energy Minerals and Natural Resources

Form C-133
Revised May 27, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

AUTHORIZATION TO MOVE PRODUCED WATER

Transporter Name Mountain States Hotshot LLC

Address 1012 Marquez Place
Suite 106B
Santa Fe NM 87505

Office Location (If different)
3181 Bunting Ave
Grand Jct CO 81501

Phone Numbers(s) 970-434-4030 970-361-1121

State Corporation Commission Permit No. 40441301

*Please attach a copy of the New Mexico Public Regulation Commission (PRC) Warrant for Transportation Services. if a corporation name or LLC has not been established with the PRC or a partnership has not been established with the New Mexico Secretary of State Office In accordance with Section 51 of 19.6.2 NMAC, "the division may deny approval of a form C-133 if

(1) the applicant is a corporation or limited liability company, and is not registered with the public regulation commission to do business in New Mexico.

(2) the applicant is a limited partnership, and is not registered with the New Mexico secretary of state to do business in New Mexico.

(3) the applicant does not possess a carrier permit under the single state registration system the public regulation commission administers, if it is required to have such a permit under applicable statutes or rules, or

(4) the applicant or an officer, director or partner in the applicant, or a person with an interest in the applicant exceeding 25 percent, is or was within the past five years an officer, director, partner or person with an interest exceeding 25 percent in another entity that possesses or has possessed an approved form C-133 that has been cancelled or suspended, has a history of violating division rules or other state or federal environmental laws, is subject to a commission or division order, issued after notice and hearing, finding such entity to be in violation of an order requiring corrective action, or has a penalty assessment for violation of division or commission rules or orders that is unpaid more than 70 days after issuance of the order assessing the penalty."

NOTE: It is the responsibility of each holder of an approved Form C-133 to familiarize its personnel with the content of Sections 51 and 52 of 19.15.2 NMAC and to assure operations in compliance therewith. Failure to move and dispose of produced water in accordance with Sections 51 and 52 of 19.15.2 NMAC are cause for cancellation of Form C-133 and the authority to move produced water.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signature Kate Ottman Date 5-16-08

Printed Name Kate Ottman Title Office Manager

E-mail Address Kate@mountainstateshotshot.com

(This space for State Use)

Approved by [signature] Title EBC

Date 6/16/08

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

ANALYTICAL SUMMARY REPORT

July 21, 2008

Matthew Bruff
Altela Inc
5350 S Roslyn St Ste 430
Englewood, CO 80111

Workorder No.: C08070342

Project Name: Not Indicated

Energy Laboratories, Inc. received the following 4 samples from Altela Inc on 7/8/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C08070342-001	Oxy CW	07/02/08 14:38	07/08/08	Aqueous	Solids, Total Dissolved
C08070342-002	Oxy CW	07/07/08 10:01	07/08/08	Aqueous	Same As Above
C08070342-003	Oxy CW	07/07/08 11:34	07/08/08	Aqueous	Same As Above
C08070342-004	Oxy CW	07/07/08 12:44	07/08/08	Aqueous	Same As Above

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:
STEVE CARLSTON

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Site Name: Not Indicated
Report Date: 07/18/08

Lab ID: C08070342-001
Client Sample ID: Oxy CW
Matrix: Aqueous
Collection Date: 07/02/08 14:38
DateReceived: 07/08/08

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	34900	mg/L		10		A2540 C	07/09/08 10:30 / dd

Lab ID: C08070342-002
Client Sample ID: Oxy CW
Matrix: Aqueous
Collection Date: 07/07/08 10:01
DateReceived: 07/08/08

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	36500	mg/L		10		A2540 C	07/09/08 10:30 / dd

Lab ID: C08070342-003
Client Sample ID: Oxy CW
Matrix: Aqueous
Collection Date: 07/07/08 11:34
DateReceived: 07/08/08

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	40900	mg/L		10		A2540 C	07/09/08 10:30 / dd

Lab ID: C08070342-004
Client Sample ID: Oxy CW
Matrix: Aqueous
Collection Date: 07/07/08 12:44
DateReceived: 07/08/08

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Dissolved TDS @ 180 C	48400	mg/L		10		A2540 C	07/09/08 10:31 / dd

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/18/08
Work Order: C08070342

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C								Batch: 080709_1_SLDS-TDS-W	
Sample ID: MBLK1_080709	Method Blank				Run: BAL-1_080710A			07/09/08 10:25	
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	6						
Sample ID: LCS1_080709	Laboratory Control Sample				Run: BAL-1_080710A			07/09/08 10:26	
Solids, Total Dissolved TDS @ 180 C	994	mg/L	10	99	90	110			
Sample ID: C08070343-001FMS	Sample Matrix Spike				Run: BAL-1_080710A			07/09/08 10:31	
Solids, Total Dissolved TDS @ 180 C	4480	mg/L	10	100	90	110			
Sample ID: C08070343-001FMSD	Sample Matrix Spike Duplicate				Run: BAL-1_080710A			07/09/08 10:31	
Solids, Total Dissolved TDS @ 180 C	4490	mg/L	10	100	90	110	0.3	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Chain of Custody and Analytical Request Record

Page 1 of 1

PLEASE PRINT- Provide as much information as possible.

Company Name: Altela Inc.	Project Name, PWS, Permit, Etc.: Oxy CW	Sample Origin State: NM	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: 2450 Alamo SE Suite 200 Albuquerque, NM 87106	Contact Name: Matthew Bruff Phone/Fax: (303) 993-1950 Email: matthew.bruff@altelainc.com		Sampler: (Please Print) Michael Wimberly
Invoice Address: Same	Invoice Contact & Phone: Bill Huitt (505-923-4149)	Purchase Order:	Quote/Bottle Order: 2860/23571

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ GSA ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____
☐ A2LA ☐ EDD/EDT (Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

Number of Containers
Sample Type: A Air W Water S Soils/Solids V Vegetation B Bioassay O Other

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Solids, Total Dissolved	SEE ATTACHED	Normal Turnaround (TAT)	RUSH	
1 Oxy CW	7/6/08	2:38pm	W 1L	X				Grab
2 Oxy CW	7/7/08	10:01am	W 1L	X				Grab
3 Oxy CW	7/7/08	11:34pm	W 1L	X				Grab
4 Oxy CW	7/7/08	12:44pm	N 1L	X				Grab
5								
6								
7								
8								C0870342
9								
10								

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: Fed Ex Exp
Cooler ID(s): C-3045
Receipt Temp: 1 °C
On Ice: (Yes) No
Custody Seal Y (N)
Intact Y N
Signature Match Y N

LABORATORY USE ONLY

Custody Record MUST be Signed

Relinquished by (print): William Huitt	Date/Time: 7/7/08 3:00PM	Signature:	Received by (print): K Ward	Date/Time: 7/8/08 945	Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time:	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested.
This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

Energy Laboratories Inc
Workorder Receipt Checklist

C08070342

Altela Inc

Login completed by: Jennifer McVay

Date and Time Received: 7/8/2008 9:45 AM

Reviewed by:

Received by: KW

Reviewed Date:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	1°C On Ice
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Contact and Corrective Action Comments:

None

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Date: 18-Jul-08

CLIENT: Altela Inc
Project: Not Indicated
Sample Delivery Group: C08070342

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS USING EPA 505
Data for Atrazine and Simazine are reported from EPA 525.2, not from EPA 505. Data reported by ELI using EPA method 505 reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTFICATIONS:
USEPA: WY00002; FL-DOH NELAC: E87641; Arizona: AZ0699; California: 02118CA
Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

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ANALYTICAL SUMMARY REPORT

July 31, 2008

Altela Inc
5350 S Roslyn St Ste 430
Englewood, CO 80111

Workorder No.: C08070223 Quote ID: C2860

Project Name: Not Indicated

Energy Laboratories, Inc. received the following 1 sample from Altela Inc on 7/3/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C08070223-001	Oxy DW	07/02/08 10:18	07/03/08	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity QA Calculations Chloride Conductivity Sample Filtering Liquid-Liquid Extraction SW8021B, BTEX Diesel Range Organics Gasoline Range Organics Methanol Prep for TOX SW9020B Total Organic Halogens Hardness Nitrogen, Ammonia Nitrogen, Nitrite Dissolved Nitrogen, Nitrate + Nitrite Dissolved Nitrogen, Nitrate Dissolved Nitrogen, Total Kjeldahl pH Services Provided by Lab Solids, Total Dissolved Solids, Total Suspended Sulfate

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Kristin Bradley

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Not Indicated
Lab ID: C08070223-001
Client Sample ID: Oxy DW

Report Date: 07/31/08
Collection Date: 07/02/08 10:18
DateReceived: 07/03/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Phenolphthalein as CaCO3	6	mg/L		1		A2320 B	07/08/08 11:57 / ljl
Alkalinity, Total as CaCO3	18	mg/L		1		A2320 B	07/08/08 11:57 / ljl
Carbonate as CO3	7	mg/L		1		A2320 B	07/08/08 11:57 / ljl
Bicarbonate as HCO3	7	mg/L		1		A2320 B	07/08/08 11:57 / ljl
Hydroxide as OH	ND	mg/L		1		A2320 B	07/08/08 11:57 / ljl
Chloride	ND	mg/L		1		A4500-Cl B	07/10/08 15:41 / ljl
Nitrogen, Ammonia as N	4.57	mg/L		0.05		E350.1	07/14/08 14:25 / eli-b
Nitrogen, Kjeldahl, Total as N	5.0	mg/L		0.5		E351.2	07/09/08 14:46 / eli-b
Sulfate	ND	mg/L		1		A4500-SO4 E	07/08/08 16:14 / jal
MAJOR IONS - DISSOLVED							
Nitrogen, Nitrate as N	ND	mg/L		0.1		E353.2	07/18/08 11:31 / sec
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	07/17/08 11:35 / jal
Nitrogen, Nitrite as N	ND	mg/L		0.1		A4500-NO2 B	07/03/08 16:05 / jal
PHYSICAL PROPERTIES							
Conductivity	32	umhos/cm		1		A2510 B	07/07/08 11:45 / dd
Hardness as CaCO3	2	mg/L		1		A2340 B	07/23/08 10:51 / sec
pH	9.36	s.u.		0.01		A4500-H B	07/07/08 11:45 / dd
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		10		A2540 C	07/07/08 09:16 / dd
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1		A2540 D	07/03/08 15:41 / sp
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Antimony	ND	mg/L		0.05		E200.8	07/21/08 21:48 / sml
Arsenic	ND	mg/L		0.001		E200.8	07/21/08 21:48 / sml
Barium	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Beryllium	ND	mg/L		0.01		E200.8	07/21/08 21:48 / sml
Boron	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Cadmium	ND	mg/L		0.01		E200.8	07/21/08 21:48 / sml
Calcium	ND	mg/L		1		E200.8	07/21/08 21:48 / sml
Chromium	ND	mg/L		0.05		E200.8	07/21/08 21:48 / sml
Cobalt	ND	mg/L		0.01		E200.8	07/21/08 21:48 / sml
Copper	ND	mg/L		0.01		E200.8	07/21/08 21:48 / sml
Iron	ND	mg/L		0.03		E200.8	07/21/08 21:48 / sml
Lead	ND	mg/L		0.05		E200.8	07/21/08 21:48 / sml
Lithium	ND	mg/L		0.1		E200.7	07/22/08 12:32 / rw
Magnesium	ND	mg/L		1		E200.8	07/21/08 21:48 / sml
Manganese	ND	mg/L		0.01		E200.8	07/21/08 21:48 / sml
Molybdenum	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Nickel	ND	mg/L		0.05		E200.8	07/21/08 21:48 / sml
Phosphorus	ND	mg/L		0.1		E200.7	07/22/08 12:32 / rw

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Not Indicated
Lab ID: C08070223-001
Client Sample ID: Oxy DW

Report Date: 07/31/08
Collection Date: 07/02/08 10:18
DateReceived: 07/03/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - DISSOLVED							
Potassium	ND	mg/L		1		E200.8	07/21/08 21:48 / sml
Selenium	ND	mg/L		0.001		E200.8	07/21/08 21:48 / sml
Silica	ND	mg/L		0.1		E200.7	07/22/08 12:32 / rw
Silicon	ND	mg/L		0.05		E200.7	07/22/08 12:32 / rw
Silver	ND	mg/L		0.01		E200.8	07/21/08 21:48 / sml
Sodium	1	mg/L		1		E200.8	07/21/08 21:48 / sml
Strontium	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Thallium	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Tin	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Titanium	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Uranium	ND	mg/L		0.0003		E200.8	07/21/08 21:48 / sml
Vanadium	ND	mg/L		0.1		E200.8	07/21/08 21:48 / sml
Zinc	ND	mg/L		0.01		E200.8	07/21/08 21:48 / sml
DATA QUALITY							
A/C Balance (± 5)	9.71	%				Calculation	07/23/08 12:11 / sw
Anions	0.363	meq/L				Calculation	07/23/08 12:11 / sw
Cations	0.441	meq/L				Calculation	07/23/08 12:11 / sw
- The ion balance is not appropriate for near blank results.							
VOLATILE ORGANIC COMPOUNDS							
Benzene	0.89	ug/L		0.50		SW8021B	07/08/08 01:35 / dkh
Ethylbenzene	ND	ug/L		0.50		SW8021B	07/08/08 01:35 / dkh
m+p-Xylenes	0.54	ug/L		0.50		SW8021B	07/08/08 01:35 / dkh
o-Xylene	ND	ug/L		0.50		SW8021B	07/08/08 01:35 / dkh
Toluene	1.1	ug/L		0.50		SW8021B	07/08/08 01:35 / dkh
Surr: Trifluorotoluene	99.0	%REC		80-120		SW8021B	07/08/08 01:35 / dkh
NON-HALOGENATED VOLATILES							
Methanol	ND	mg/L		1.0		SW8015B	07/10/08 10:40 / eli-b
Surr: sec-Butyl Alcohol	102	%REC		80-120		SW8015B	07/10/08 10:40 / eli-b
ORGANIC CHARACTERISTICS							
Diesel Range Organics (DRO)	ND	mg/L		1.0		SW8015M as	07/08/08 18:27 / cjs
Surr: o-Terphenyl	95.0	%REC		60-120		SW8015M as	07/08/08 18:27 / cjs
Gasoline Range Organics (GRO)	ND	mg/L		0.040		SW8015M as	07/08/08 01:35 / dkh
Surr: Trifluorotoluene	95.0	%REC		80-120		SW8015M as	07/08/08 01:35 / dkh
ORGANIC CHARACTERISTICS							
Organic Halides, Total	ND	mg Cl/L		0.1		SW9020B	07/11/08 10:54 / wen

Report Definitions: RL - Analyte reporting limit. QCL - Quality control limit. MCL - Maximum contaminant level. ND - Not detected at the reporting limit.

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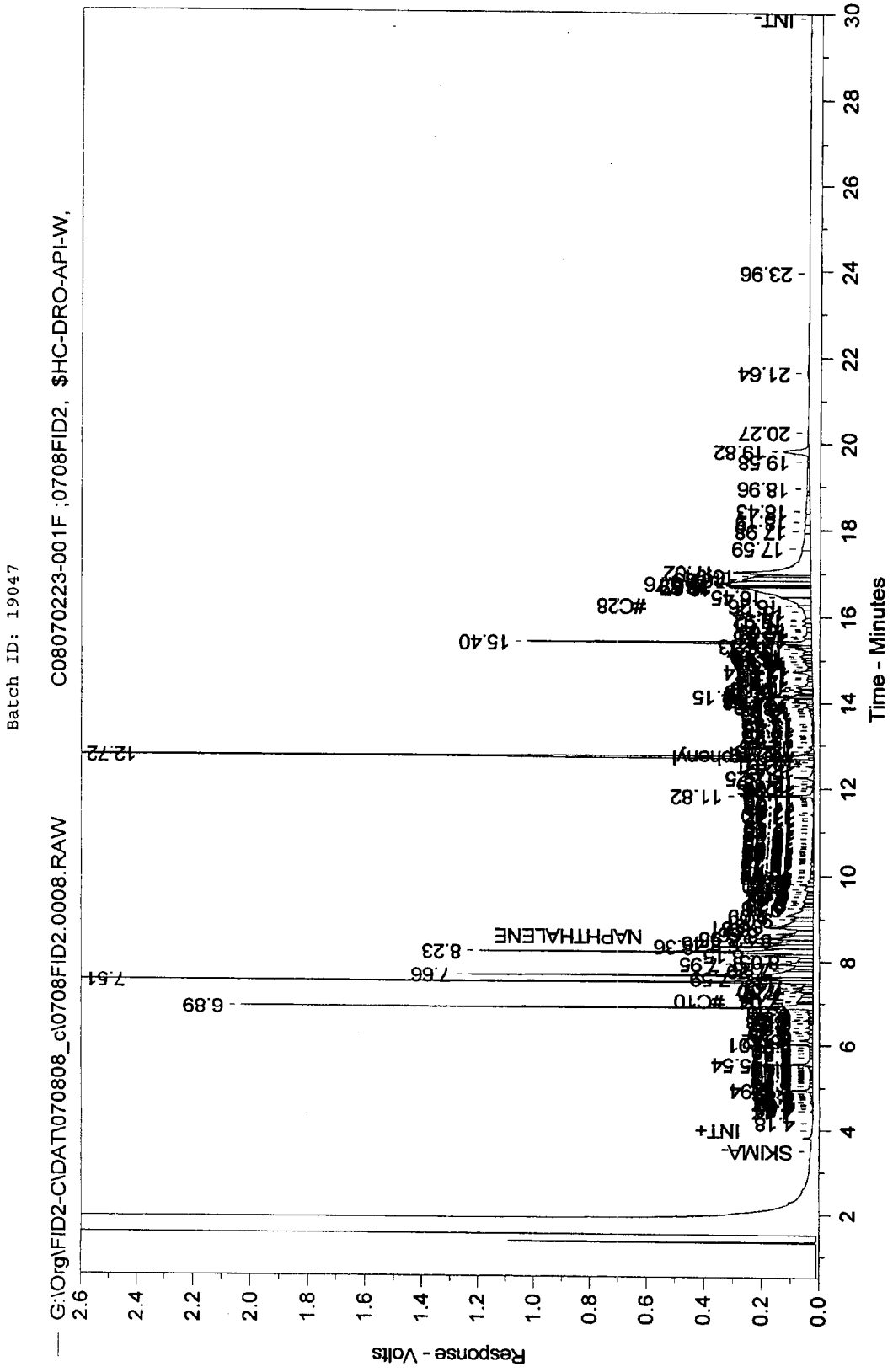

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: R103884
Sample ID: MBLK-1	Method Blank				Run: MANTECH_080708A				07/08/08 10:46
Alkalinity, Phenolphthalein as CaCO3	ND	mg/L	1						
Alkalinity, Total as CaCO3	ND	mg/L	0.2						
Carbonate as CO3	ND	mg/L	1						
Bicarbonate as HCO3	ND	mg/L	1						
Hydroxide as OH	ND	mg/L	1						
Sample ID: LCS-1	Laboratory Control Sample				Run: MANTECH_080708A				07/08/08 10:53
Alkalinity, Total as CaCO3	200	mg/L	1.0	100	90	110			
Sample ID: C08070223-001AMS	Sample Matrix Spike				Run: MANTECH_080708A				07/08/08 12:05
Alkalinity, Total as CaCO3	138	mg/L	1.0	104	80	120			
Sample ID: C08070223-001AMSD	Sample Matrix Spike Duplicate				Run: MANTECH_080708A				07/08/08 12:12
Alkalinity, Total as CaCO3	138	mg/L	1.0	105	80	120	0.4	10	
Method: A2510 B									Analytical Run: ORION555A_080707A
Sample ID: ICV2_080707_1	Initial Calibration Verification Standard								07/07/08 11:03
Conductivity	1380	umhos/cm	1.0	98	90	110			
Method: A2510 B									Batch: 080707_1_PH-W_555A-1
Sample ID: MBLK1_080707_1	Method Blank				Run: ORION555A_080707A				07/07/08 10:58
Conductivity	0.7	umhos/cm	0.2						
Sample ID: C08070220-001FDUP	Sample Duplicate				Run: ORION555A_080707A				07/07/08 11:41
Conductivity	756	umhos/cm	1.0				0.0	10	
Method: A2540 C									Batch: 080707_1_SLDS-TDS-W
Sample ID: MBLK1_080707	Method Blank				Run: BAL-1_080707A				07/07/08 09:10
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	6						
Sample ID: LCS1_080707	Laboratory Control Sample				Run: BAL-1_080707A				07/07/08 09:11
Solids, Total Dissolved TDS @ 180 C	1010	mg/L	10	101	90	110			
Sample ID: C08070217-001FMS	Sample Matrix Spike				Run: BAL-1_080707A				07/07/08 09:15
Solids, Total Dissolved TDS @ 180 C	2250	mg/L	10	100	90	110			
Sample ID: C08070217-001FMSD	Sample Matrix Spike Duplicate				Run: BAL-1_080707A				07/07/08 09:16
Solids, Total Dissolved TDS @ 180 C	2230	mg/L	10	99	90	110	0.8	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D									Batch: 080703B-SLDS-TSS-W
Sample ID: MBLK1_080703B	Method Blank				Run: BAL-1_080703B				07/03/08 15:39
Solids, Total Suspended TSS @ 105 C	ND	mg/L	0.7						
Sample ID: C08070223-001ADUP	Sample Duplicate				Run: BAL-1_080703B				07/03/08 15:41
Solids, Total Suspended TSS @ 105 C	ND	mg/L	1.0				0.0	25	
Method: A4500-Cl B									Batch: 080710A-CL-TTR-W
Sample ID: MBLK9-080710A	Method Blank				Run: TITRATION_080710A				07/10/08 13:33
Chloride	ND	mg/L	0.4						
Sample ID: C08070237-001BMS	Sample Matrix Spike				Run: TITRATION_080710A				07/10/08 15:57
Chloride	32700	mg/L	1.0	101	90	110			
Sample ID: C08070237-001BMSD	Sample Matrix Spike Duplicate				Run: TITRATION_080710A				07/10/08 15:58
Chloride	32700	mg/L	1.0	101	90	110	0.0	10	
Sample ID: LCS35-080710A	Laboratory Control Sample				Run: TITRATION_080710A				07/10/08 16:03
Chloride	3550	mg/L	1.0	100	90	110			
Method: A4500-H B									Analytical Run: ORION555A_080707A
Sample ID: ICV1_080707_1	Initial Calibration Verification Standard								07/07/08 11:00
pH	6.89	s.u.	0.010	100	98	102			
Method: A4500-H B									Batch: 080707_1_PH-W_555A-1
Sample ID: C08070220-001FDUP	Sample Duplicate				Run: ORION555A_080707A				07/07/08 11:41
pH	7.64	s.u.	0.010				0.0	10	
Method: A4500-NO2 B									Analytical Run: HACH DR3000_080703C
Sample ID: ICV-2	Initial Calibration Verification Standard								07/03/08 16:04
Nitrogen, Nitrite as N	0.969	mg/L	0.10	97	90	110			
Method: A4500-NO2 B									Batch: A2008-07-03_6_NO2_02
Sample ID: MBLK-1	Method Blank				Run: HACH DR3000_080703C				07/03/08 16:04
Nitrogen, Nitrite as N	ND	mg/L	0.003						
Sample ID: C08070231-001FMS	Sample Matrix Spike				Run: HACH DR3000_080703C				07/03/08 16:05
Nitrogen, Nitrite as N	0.0490	mg/L	0.10	103	80	120			
Sample ID: C08070231-001FMSD	Sample Matrix Spike Duplicate				Run: HACH DR3000_080703C				07/03/08 16:05
Nitrogen, Nitrite as N	0.0497	mg/L	0.10	105	80	120	0.0	10	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-SO4 E									Batch: 080708_1_SO4-TURB-W
Sample ID: LCS-1_080708	Laboratory Control Sample				Run: TURB-2_080708A				07/08/08 10:56
Sulfate	5010	mg/L	59	104	90	110			
Sample ID: MBLK-1_080708	Method Blank				Run: TURB-2_080708A				07/08/08 10:56
Sulfate	ND	mg/L	0.6						
Sample ID: C08070231-001CMS	Sample Matrix Spike				Run: TURB-2_080708A				07/08/08 16:42
Sulfate	356	mg/L	5.9	108	90	110			
Sample ID: C08070231-001CMSD	Sample Matrix Spike Duplicate				Run: TURB-2_080708A				07/08/08 16:44
Sulfate	353	mg/L	5.9	106	90	110	1.1	10	
Method: E200.7									Analytical Run: ICP3-C_080722A
Sample ID: CCB	Continuing Calibration Blank								07/22/08 11:40
Lithium	0.0210	mg/L	0.10						
Phosphorus	-0.00500	mg/L	0.10						
Silica	-0.00400	mg/L	0.10						
Method: E200.7									Batch: R104679
Sample ID: CCV-ICP	ICP Continuing Calibration				Run: ICP3-C_080722A				07/22/08 11:44
Lithium	2.44	mg/L	0.10	98	90	110			
Phosphorus	2.54	mg/L	0.10	102	90	110			
Silica	2.51	mg/L	0.10	100	90	110			
Silicon	1.17	mg/L	0.047		0	0			
Sample ID: C08061205-004AMS	Sample Matrix Spike				Run: ICP3-C_080722A				07/22/08 12:16
Lithium	1.34	mg/L	0.10	106	70	130			
Sample ID: C08061205-004AMSD	Sample Matrix Spike Duplicate				Run: ICP3-C_080722A				07/22/08 12:20
Lithium	1.22	mg/L	0.10	94	70	130	9.2	20	
Sample ID: C08070893-002BDUP	Sample Duplicate				Run: ICP3-C_080722A				07/23/08 01:34
Lithium	0.0100	mg/L	0.10				0.0	20	
Phosphorus	ND	mg/L	0.10				0.0	20	
Silica	ND	mg/L	0.10						
Silicon	ND	mg/L	0.047				0.0	20	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R104609
Sample ID: LRB	Method Blank				Run: ICPMS4-C_080721B				07/21/08 16:56
Aluminum	0.0006	mg/L	0.0001						
Antimony	9E-06	mg/L	4E-06						
Arsenic	ND	mg/L	4E-05						
Barium	ND	mg/L	3E-05						
Beryllium	ND	mg/L	4E-06						
Boron	ND	mg/L	0.0004						
Cadmium	ND	mg/L	3E-06						
Calcium	ND	mg/L	0.005						
Chromium	ND	mg/L	4E-05						
Cobalt	ND	mg/L	5E-06						
Copper	ND	mg/L	3E-05						
Iron	ND	mg/L	0.0002						
Lead	ND	mg/L	3E-06						
Magnesium	ND	mg/L	0.003						
Manganese	ND	mg/L	6E-06						
Molybdenum	ND	mg/L	9E-06						
Nickel	0.0003	mg/L	3E-05						
Potassium	0.006	mg/L	0.006						
Selenium	ND	mg/L	0.0001						
Silver	9E-06	mg/L	7E-06						
Sodium	ND	mg/L	0.01						
Strontium	ND	mg/L	2E-05						
Thallium	ND	mg/L	4E-06						
Tin	1.0E-05	mg/L	8E-06						
Titanium	ND	mg/L	6E-05						
Uranium	ND	mg/L	2E-06						
Vanadium	ND	mg/L	3E-05						
Zinc	0.0007	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS4-C_080721B				07/21/08 17:02
Aluminum	0.0472	mg/L	0.0010	93	85	115			
Antimony	0.0508	mg/L	0.0010	102	85	115			
Arsenic	0.0503	mg/L	0.0010	101	85	115			
Barium	0.0501	mg/L	0.0010	100	85	115			
Beryllium	0.0491	mg/L	0.0010	98	85	115			
Boron	0.0479	mg/L	0.0010	96	85	115			
Cadmium	0.0510	mg/L	0.0010	102	85	115			
Calcium	3.16	mg/L	0.0049	101	85	115			
Chromium	0.0498	mg/L	0.0010	100	85	115			
Cobalt	0.0489	mg/L	0.0010	98	85	115			
Copper	0.0506	mg/L	0.0010	101	85	115			

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R104609
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS4-C_080721B				07/21/08 17:02
Iron	0.301	mg/L	0.0010	96	85	115			
Lead	0.0494	mg/L	0.0010	99	85	115			
Magnesium	2.57	mg/L	0.0030	82	85	115			S
Manganese	0.0463	mg/L	0.0010	93	85	115			
Molybdenum	0.0488	mg/L	0.0010	98	85	115			
Nickel	0.0501	mg/L	0.0010	100	85	115			
Potassium	2.48	mg/L	0.0059	79	85	115			S
Selenium	0.0518	mg/L	0.0010	104	85	115			
Silver	0.0196	mg/L	0.0010	98	85	115			
Sodium	2.56	mg/L	0.010	82	85	115			S
Strontium	0.0464	mg/L	0.0010	93	85	115			
Thallium	0.0490	mg/L	0.0010	98	85	115			
Tin	0.0510	mg/L	0.0010	102	85	115			
Titanium	0.0481	mg/L	0.0010	96	85	115			
Uranium	0.0483	mg/L	0.00030	97	85	115			
Vanadium	0.0488	mg/L	0.0010	98	85	115			
Zinc	0.0584	mg/L	0.0010	115	85	115			
Sample ID: C08061327-001KMS4	Post Digestion Spike				Run: ICPMS4-C_080721B				07/21/08 22:59
Aluminum	0.0486	mg/L	0.10	90	70	130			
Antimony	0.0516	mg/L	0.050	100	70	130			
Arsenic	0.0500	mg/L	0.0010	98	70	130			
Barium	0.106	mg/L	0.10	100	70	130			
Beryllium	0.0442	mg/L	0.010	88	70	130			
Boron	0.208	mg/L	0.10	94	70	130			
Cadmium	0.0492	mg/L	0.010	96	70	130			
Calcium	141	mg/L	1.0		70	130			A
Chromium	0.0478	mg/L	0.050	95	70	130			
Cobalt	0.0468	mg/L	0.010	93	70	130			
Copper	0.0536	mg/L	0.010	92	70	130			
Iron	0.293	mg/L	0.030	92	70	130			
Lead	0.0494	mg/L	0.050	98	70	130			
Magnesium	45.4	mg/L	1.0		70	130			A
Manganese	0.171	mg/L	0.010	92	70	130			
Molybdenum	0.0498	mg/L	0.10	96	70	130			
Nickel	0.0528	mg/L	0.050	91	70	130			
Potassium	14.1	mg/L	1.0	70	70	130			
Selenium	0.0489	mg/L	0.0010	98	70	130			
Silver	0.0119	mg/L	0.010	60	70	130			S
Sodium	62.6	mg/L	1.0		70	130			A
Strontium	2.23	mg/L	0.10		70	130			A

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S - Spike recovery outside of advisory limits.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Batch: R104609	
Sample ID: C08061327-001KMS4	Post Digestion Spike				Run: ICPMS4-C_080721B			07/21/08 22:59	
Thallium	0.0495	mg/L	0.10	99	70	130			
Tin	0.0502	mg/L	0.10	100	70	130			
Titanium	0.0484	mg/L	0.10	95	70	130			
Uranium	0.152	mg/L	0.00030	133	70	130			S
Vanadium	0.0484	mg/L	0.10	96	70	130			
Zinc	0.497	mg/L	0.010		70	130			A
Sample ID: C08061327-001KMSD4	Post Digestion Spike Duplicate				Run: ICPMS4-C_080721B			07/21/08 23:06	
Aluminum	0.0470	mg/L	0.10	87	70	130	0.0	20	
Antimony	0.0515	mg/L	0.050	100	70	130	0.2	20	
Arsenic	0.0511	mg/L	0.0010	100	70	130	2.1	20	
Barium	0.106	mg/L	0.10	99	70	130	0.3	20	
Beryllium	0.0437	mg/L	0.010	87	70	130	1.1	20	
Boron	0.211	mg/L	0.10	100	70	130	1.4	20	
Cadmium	0.0496	mg/L	0.010	97	70	130	0.7	20	
Calcium	143	mg/L	1.0		70	130	0.9	20	A
Chromium	0.0488	mg/L	0.050	97	70	130	0.0	20	
Cobalt	0.0466	mg/L	0.010	93	70	130	0.3	20	
Copper	0.0550	mg/L	0.010	95	70	130	2.5	20	
Iron	0.301	mg/L	0.030	95	70	130	2.7	20	
Lead	0.0496	mg/L	0.050	99	70	130	0.0	20	
Magnesium	45.0	mg/L	1.0		70	130	0.9	20	A
Manganese	0.170	mg/L	0.010	91	70	130	0.5	20	
Molybdenum	0.0508	mg/L	0.10	98	70	130	0.0	20	
Nickel	0.0539	mg/L	0.050	93	70	130	2.0	20	
Potassium	14.2	mg/L	1.0	73	70	130	0.7	20	
Selenium	0.0504	mg/L	0.0010	101	70	130	3.0	20	
Silver	0.0125	mg/L	0.010	63	70	130	5.0	20	S
Sodium	61.4	mg/L	1.0		70	130	2.0	20	A
Strontium	2.24	mg/L	0.10		70	130	0.4	20	A
Thallium	0.0501	mg/L	0.10	100	70	130	0.0	20	
Tin	0.0502	mg/L	0.10	100	70	130	0.0	20	
Titanium	0.0489	mg/L	0.10	96	70	130	0.0	20	
Uranium	0.151	mg/L	0.00030	131	70	130	0.5	20	S
Vanadium	0.0492	mg/L	0.10	97	70	130	0.0	20	
Zinc	0.497	mg/L	0.010		70	130	0.1	20	A

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E350.1									Batch: B_R114023
Sample ID: MBLK	Method Blank				Run: SUB-B114023				07/14/08 14:19
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-B114023				07/14/08 14:20
Nitrogen, Ammonia as N	1.05	mg/L	0.10	106	90	110			
Sample ID: B08070664-001EMS	Sample Matrix Spike				Run: SUB-B114023				07/14/08 14:26
Nitrogen, Ammonia as N	5.47	mg/L	0.10	90	90	110			
Sample ID: B08070664-001EMSD	Sample Matrix Spike Duplicate				Run: SUB-B114023				07/14/08 14:27
Nitrogen, Ammonia as N	5.47	mg/L	0.10	89	90	110	0.1	10	S
Method: E351.2									Batch: B_R113744
Sample ID: MBLK	Method Blank				Run: SUB-B113744				07/09/08 14:27
Nitrogen, Kjeldahl, Total as N	ND	mg/L	0.03						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-B113744				07/09/08 14:27
Nitrogen, Kjeldahl, Total as N	5.27	mg/L	0.50	105	90	110			
Sample ID: B08070669-001BMS	Sample Matrix Spike				Run: SUB-B113744				07/09/08 14:39
Nitrogen, Kjeldahl, Total as N	5.79	mg/L	0.50	112	90	110			S
Sample ID: B08070669-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-B113744				07/09/08 14:40
Nitrogen, Kjeldahl, Total as N	5.71	mg/L	0.50	111	90	110	1.4	10	S
Method: E353.2									Batch: R104395
Sample ID: MBLK-1	Method Blank				Run: TECHNICON_080717A				07/17/08 11:30
Nitrogen, Nitrate+Nitrite as N	ND	mg/L	0.03						
Sample ID: LCS-2	Laboratory Control Sample				Run: TECHNICON_080717A				07/17/08 11:32
Nitrogen, Nitrate+Nitrite as N	2.59	mg/L	0.10	104	90	110			
Sample ID: C08070560-001DMS	Sample Matrix Spike				Run: TECHNICON_080717A				07/17/08 11:47
Nitrogen, Nitrate+Nitrite as N	2.28	mg/L	0.10	101	90	110			
Sample ID: C08070560-001DMSD	Sample Matrix Spike Duplicate				Run: TECHNICON_080717A				07/17/08 11:50
Nitrogen, Nitrate+Nitrite as N	2.30	mg/L	0.10	102	90	110	0.9	10	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015B									Batch: B_33452
Sample ID: LCS-33452	Laboratory Control Sample				Run: SUB-B113819				07/10/08 09:52
Methanol	52	mg/L	1.0	103	70	130			
Surr: sec-Butyl Alcohol			1.0	101	80	120			
Sample ID: MB-33452	Method Blank				Run: SUB-B113819				07/10/08 10:16
Methanol	ND	mg/L	1.0						
Surr: sec-Butyl Alcohol			1.0	98	80	120			
Sample ID: B08070670-001JMS	Sample Matrix Spike				Run: SUB-B113819				07/10/08 11:49
Methanol	51	mg/L	1.1	103	70	130			
Surr: sec-Butyl Alcohol			1.1	102	80	120			
Sample ID: B08070670-001JMSD	Sample Matrix Spike Duplicate				Run: SUB-B113819				07/10/08 12:12
Methanol	50	mg/L	1.1	99	70	130	3.6	20	
Surr: sec-Butyl Alcohol			1.1	101	80	120			
Method: SW8015M as D									Batch: 19047
Sample ID: MB-19047	Method Blank				Run: FID2-C_080709A				07/08/08 13:54
Diesel Range Organics (DRO)	ND	mg/L	0.03						
Surr: o-Terphenyl			0.002	94	60	120			
Sample ID: LCS-19047	Laboratory Control Sample				Run: FID2-C_080709A				07/08/08 14:40
Diesel Range Organics (DRO)	1.8	mg/L	1.0	90	57	112			
Surr: o-Terphenyl			0.020	90	67	117			
Sample ID: LCSD-19047	Laboratory Control Sample Duplicate				Run: FID2-C_080709A				07/08/08 17:40
Diesel Range Organics (DRO)	1.6	mg/L	1.0	79	57	112	12	20	
Surr: o-Terphenyl			0.020	84	67	117	0.0	20	
Sample ID: C08070223-001FMS	Sample Matrix Spike				Run: FID2-C_080709A				07/08/08 19:14
Diesel Range Organics (DRO)	2.3	mg/L	1.0	74	50	115			
Surr: o-Terphenyl			0.020	73	60	120			
Sample ID: C08070223-001FMSD	Sample Matrix Spike Duplicate				Run: FID2-C_080709A				07/08/08 20:00
Diesel Range Organics (DRO)	2.4	mg/L	1.0	76	50	115	1.3	20	
Surr: o-Terphenyl			0.020	84	60	120			

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015M as G									Batch: R103852
Sample ID: LCS_0707HP207r	Laboratory Control Sample				Run: PIDFID1-C_080707B				07/07/08 14:58
Gasoline Range Organics (GRO)	0.205	mg/L	0.040	103	82	120			
Surr: Trifluorotoluene			0.0020	104	80	120			
Sample ID: MBLK_0707HP208r	Method Blank				Run: PIDFID1-C_080707B				07/07/08 15:33
Gasoline Range Organics (GRO)	ND	mg/L	0.02						
Surr: Trifluorotoluene				100	80	120			
Sample ID: C08070237-001IMS	Sample Matrix Spike				Run: PIDFID1-C_080707B				07/08/08 06:54
Gasoline Range Organics (GRO)	3.98	mg/L	0.36	100	70	130			
Surr: Trifluorotoluene			0.0020	96	80	120			
Sample ID: C08070237-001IMSD	Sample Matrix Spike Duplicate				Run: PIDFID1-C_080707B				07/08/08 07:30
Gasoline Range Organics (GRO)	4.07	mg/L	0.36	102	70	130	2.2	20	
Surr: Trifluorotoluene			0.0020	99	80	120	0.0	10	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8021B									Batch: R103848
Sample ID: LCS_0707HP206r	Laboratory Control Sample				Run: PIDFID1-C_080707A				07/07/08 14:22
Benzene	10	ug/L	0.50	103	80	120			
Ethylbenzene	11	ug/L	0.50	105	80	120			
m+p-Xylenes	21	ug/L	0.50	103	80	120			
o-Xylene	10	ug/L	0.50	102	80	120			
Toluene	11	ug/L	0.50	104	80	120			
Surr: Trifluorotoluene			0.50	103	80	120			
Sample ID: MBLK_0707HP208r	Method Blank				Run: PIDFID1-C_080707A				07/07/08 15:33
Benzene	ND	ug/L	0.05						
Ethylbenzene	ND	ug/L	0.05						
m+p-Xylenes	ND	ug/L	0.1						
o-Xylene	0.1	ug/L	0.05						
Toluene	0.1	ug/L	0.05						
Surr: Trifluorotoluene				102	80	120			
Sample ID: C08070237-001HMS	Sample Matrix Spike				Run: PIDFID1-C_080707A				07/08/08 05:43
Benzene	220	ug/L	1.0	103	80	120			
Ethylbenzene	210	ug/L	1.0	104	80	120			
m+p-Xylenes	420	ug/L	2.0	101	80	120			
o-Xylene	210	ug/L	1.0	102	80	120			
Toluene	240	ug/L	1.0	102	80	120			
Surr: Trifluorotoluene			0.50	99	80	120			
Sample ID: C08070237-001HMSD	Sample Matrix Spike Duplicate				Run: PIDFID1-C_080707A				07/08/08 06:19
Benzene	220	ug/L	1.0	102	80	120	0.4	20	
Ethylbenzene	210	ug/L	1.0	103	80	120	1.2	20	
m+p-Xylenes	420	ug/L	2.0	100	80	120	1.2	20	
o-Xylene	210	ug/L	1.0	101	80	120	0.9	20	
Toluene	230	ug/L	1.0	101	80	120	1.1	20	
Surr: Trifluorotoluene			0.50	105	80	120	0.0	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 07/31/08
Work Order: C08070223

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW9020B									Batch: 19104
Sample ID: MB-19104	Method Blank				Run: TOXBOX_080712A				07/11/08 10:22
Organic Halides, Total	ND	mg Cl/L	0.03						
Sample ID: LCS-19104	Laboratory Control Sample				Run: TOXBOX_080712A				07/11/08 10:38
Organic Halides, Total	0.950	mg Cl/L	0.10	95	80	120			
Sample ID: C08070223-001GMS	Sample Matrix Spike				Run: TOXBOX_080712A				07/11/08 11:34
Organic Halides, Total	1.03	mg Cl/L	0.10	103	80	120			
Sample ID: C08070223-001GMSD	Sample Matrix Spike Duplicate				Run: TOXBOX_080712A				07/11/08 12:03
Organic Halides, Total	1.09	mg Cl/L	0.10	109	80	120	5.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name:	Project Name, PWS, Permit, Etc.	Sample Origin	EPA/State Compliance:
Altela Inc.	Oxy DW	State: NM	Yes ☐ No ☐
Report Mail Address:	**Contact Name:** Phone/Fax:	Email:	Sampler: (Please Print)
2450 Alamo SE Suite 200 Albuquerque, NM 87106	Matthew Bruff (303) 993-1950	matthew.bruff@altelainc.com	Michael Wimberly
Invoice Address:	**Invoice Contact & Phone:**	Purchase Order:	Quote/Bottle Order:
Same	Bill Hurtt (505)923-4140		2860/23570

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ GSA ☐ POTW/WWTP ☐ State: _____ ☐ Other: _____

☐ A2LA ☐ EDD/EDT (Electronic Data) Format: _____ ☐ LEVEL IV ☐ NELAC

Number of Containers
Sample Type: A Air W Water S Soils/Solids V Vegetation B Bioassay O Other

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Diesel Range Organics	Cond., QA Calc., pH etc..	Total Organic Halogens	Chloride, sulfate, etc....	Gasoline Range Organics	Methanol	BTEX	Nitrogen, Nitrate etc...	Metals by ICP/ICPMS etc	SEE ATTACHED	Normal Turnaround (TAT)
1 Oxy DW	7/2/08	9:20am	W1L	X										
2	7/2/08	9:33am	W1L		X									
3	7/2/08	9:40am	W250mL			X								
4	7/2/08	9:44am	W250mL				X							
5	7/2/08	9:49am	W40mL					X						
6	7/2/08	9:56am	W40mL						X					
7	7/2/08	10:03am	W40mL							X				
8	7/2/08	10:12am	W500mL								X			
9 Oxy DW	7/2/08	10:15am	W500mL									X		
10													X	

RUSH

Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

Comments: Grab ... Grab

Shipped by: Fed Ex
Cooler ID(s): C1831
Receipt Temp: 3 °C
On Ice: (Yes) No
Custody Seal (Y) N
Bottles/Coolers B (C)
Intact (Y) N
Signature Match (Y) N

LABORATORY USE ONLY
L08070223

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Michael Wimberly	7/2/08 4:37pm	Michael Wimberly	Jennifer McVay	7-3-08 13:30	McVay
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time:	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name:	Project Name, PWS, Permit, Etc.	Sample Origin	EPA/State Compliance:
Altela Inc	Oxy OW	State: NM	Yes ☐ No ☐

Report Mail Address:	Contact Name:	Phone/Fax:	Email:	Sampler: (Please Print)
2450 Alamo SE Suite 200 Albuquerque, NM 87106	Matthew Bruff	(303) 993-1950	matthew.bruff@altelainc.com	Michael Wimberly

Invoice Address:	Invoice Contact & Phone:	Purchase Order:	Quote/Bottle Order:
Same	Bill Huitt (505)923-4140		2860/23570

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format: _____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Number of Containers
Sample Type: A W S V B O
Air Water Soils/Solids
Vegetation Bioassay Other

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Nitrogen, Ammonia								SEE ATTACHED	Normal Turnaround (TAT)
1 Oxy OW	7/2/08	10:18am	W 500mL	X									
2													
3													
4													
5													
6													
7													
8													
9													
10													

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments: Grab

Shipped by: FedEx
Cooler ID(s): C-1831
Receipt Temp: 5 °C
On Ice: Yes No
Custody Seal: Y N
Bottles/Coolers: B C
Intact: Y N
Signature Match: Y N

LABORATORY USE ONLY
C0807023

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Michael Wimberly	7/2/08 / 4:30pm		Jennifer McVay	7-3-08 13:30	
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time:	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

Energy Laboratories Inc
Workorder Receipt Checklist

C08070223

Altela Inc

Login completed by: Edith McPike

Date and Time Received: 7/3/2008 1:30 PM

Reviewed by:

Received by: jm

Reviewed Date:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☐	No ☑	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	5°C On Ice
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Contact and Corrective Action Comments:

1 Vial for BTEX received broken

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Date: 31-Jul-08

CLIENT: Altela Inc
Project: Not Indicated
Sample Delivery Group: C08070223

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS USING EPA 505
Data for Atrazine and Simazine are reported from EPA 525.2, not from EPA 505. Data reported by ELI using EPA method 505 reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTFICATIONS:
USEPA: WY00002; FL-DOH NELAC: E87641; Arizona: AZ0699; California: 02118CA
Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

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ANALYTICAL SUMMARY REPORT

August 02, 2008

Altela Inc
5350 S Roslyn St Ste 430
Englewood, CO 80111

Workorder No.: C08070232 Quote ID: C2860

Project Name: Not Indicated

Energy Laboratories, Inc. received the following 1 sample from Altela Inc on 7/3/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C08070232-001	Oxy PW	07/01/08 13:05	07/03/08	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity QA Calculations Chloride Conductivity Sample Filtering Liquid-Liquid Extraction SW8021B, BTEX Diesel Range Organics Gasoline Range Organics Methanol Prep for TOX SW9020B Total Organic Halogens Hardness Nitrogen, Ammonia Nitrogen, Nitrite Dissolved Nitrogen, Nitrate + Nitrite Dissolved Nitrogen, Nitrate Dissolved Nitrogen, Total Kjeldahl pH Services Provided by Lab Solids, Total Dissolved Solids, Total Suspended Sulfate

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Kristin Bradley

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Not Indicated
Lab ID: C08070232-001
Client Sample ID: Oxy PW

Report Date: 08/02/08
Collection Date: 07/01/08 13:05
DateReceived: 07/03/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Phenolphthalein as CaCO3	ND	mg/L		1		A2320 B	07/08/08 12:46 / ljl
Alkalinity, Total as CaCO3	624	mg/L		1		A2320 B	07/08/08 12:46 / ljl
Carbonate as CO3	ND	mg/L		1		A2320 B	07/08/08 12:46 / ljl
Bicarbonate as HCO3	761	mg/L		1		A2320 B	07/08/08 12:46 / ljl
Hydroxide as OH	ND	mg/L		1		A2320 B	07/08/08 12:46 / ljl
Calcium	284	mg/L	D	5		E200.7	07/25/08 15:49 / cp
Chloride	11300	mg/L		1		A4500-Cl B	07/10/08 15:49 / ljl
Magnesium	41	mg/L	D	2		E200.7	07/25/08 15:49 / cp
Nitrogen, Ammonia as N	11.9	mg/L	D	0.1		E350.1	07/15/08 11:13 / eli-b
Nitrogen, Kjeldahl, Total as N	15.0	mg/L		0.5		E351.2	07/14/08 08:56 / eli-b
Phosphorus	ND	mg/L	D	1		E200.7	07/25/08 15:49 / cp
Potassium	264	mg/L		1		E200.7	07/25/08 15:49 / cp
Silica	27.8	mg/L		0.1		E200.7	07/25/08 15:49 / cp
Sodium	6780	mg/L	D	40		E200.7	07/25/08 15:49 / cp
Sulfate	22	mg/L		1		A4500-SO4 E	07/08/08 16:45 / jal
MAJOR IONS - DISSOLVED							
Nitrogen, Nitrate as N	ND	mg/L		0.1		E353.2	07/18/08 11:31 / sec
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	07/17/08 11:37 / jal
Nitrogen, Nitrite as N	ND	mg/L		0.1		A4500-NO2 B	07/03/08 17:16 / jal
PHYSICAL PROPERTIES							
Conductivity	32100	umhos/cm		1		A2510 B	07/07/08 11:55 / dd
Hardness as CaCO3	878	mg/L		1		A2340 B	07/25/08 15:49 / lab
pH	6.96	s.u.		0.01		A4500-H B	07/07/08 11:55 / dd
Solids, Total Dissolved TDS @ 180 C	18500	mg/L		10		A2540 C	07/07/08 09:17 / dd
Solids, Total Suspended TSS @ 105 C	50	mg/L		1		A2540 D	07/07/08 11:20 / sp
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	07/21/08 22:01 / sml
Antimony	ND	mg/L		0.05		E200.8	07/21/08 22:01 / sml
Arsenic	0.015	mg/L		0.001		E200.8	07/21/08 22:01 / sml
Barium	46.7	mg/L	D	0.3		E200.7	07/25/08 15:49 / cp
Beryllium	ND	mg/L		0.01		E200.8	07/21/08 22:01 / sml
Boron	2.5	mg/L	D	0.8		E200.7	07/24/08 17:07 / cp
Cadmium	ND	mg/L		0.01		E200.8	07/21/08 22:01 / sml
Chromium	0.12	mg/L		0.05		E200.8	07/21/08 22:01 / sml
Cobalt	0.01	mg/L		0.01		E200.8	07/21/08 22:01 / sml
Copper	ND	mg/L		0.01		E200.8	07/21/08 22:01 / sml
Iron	7.3	mg/L	D	0.2		E200.7	07/25/08 15:49 / cp
Lead	ND	mg/L		0.05		E200.8	07/21/08 22:01 / sml
Lithium	2.6	mg/L		0.1		E200.7	07/25/08 15:49 / cp

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Not Indicated
Lab ID: C08070232-001
Client Sample ID: Oxy PW

Report Date: 08/02/08
Collection Date: 07/01/08 13:05
DateReceived: 07/03/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - DISSOLVED							
Manganese	0.81	mg/L		0.01		E200.8	07/21/08 22:01 / sml
Molybdenum	ND	mg/L		0.1		E200.8	07/21/08 22:01 / sml
Nickel	ND	mg/L		0.05		E200.8	07/21/08 22:01 / sml
Selenium	ND	mg/L		0.001		E200.8	07/21/08 22:01 / sml
Silicon	14.2	mg/L	D	0.9		E200.7	07/24/08 17:07 / cp
Silver	ND	mg/L		0.01		E200.8	07/21/08 22:01 / sml
Strontium	29.2	mg/L		0.1		E200.7	07/25/08 15:49 / cp
Thallium	ND	mg/L		0.1		E200.8	07/21/08 22:01 / sml
Tin	ND	mg/L		0.1		E200.8	07/21/08 22:01 / sml
Titanium	ND	mg/L		0.1		E200.8	07/21/08 22:01 / sml
Uranium	0.0011	mg/L		0.0003		E200.8	07/21/08 22:01 / sml
Vanadium	ND	mg/L		0.1		E200.8	07/21/08 22:01 / sml
Zinc	0.05	mg/L		0.01		E200.8	07/21/08 22:01 / sml
DATA QUALITY							
A/C Balance (± 5)	-1.79	%				Calculation	07/29/08 17:00 / lab
Anions	332	meq/L				Calculation	07/29/08 17:00 / lab
Cations	320	meq/L				Calculation	07/29/08 17:00 / lab
Solids, Total Dissolved Calculated	19100	mg/L				Calculation	07/29/08 17:00 / lab
TDS Balance (0.80 - 1.20)	0.970					Calculation	07/29/08 17:00 / lab
VOLATILE ORGANIC COMPOUNDS							
Benzene	5900	ug/L	D	10		SW8021B	07/12/08 05:02 / dkh
Ethylbenzene	46	ug/L	D	1.0		SW8021B	07/12/08 04:26 / dkh
m+p-Xylenes	1800	ug/L	D	2.0		SW8021B	07/12/08 04:26 / dkh
o-Xylene	470	ug/L	D	1.0		SW8021B	07/12/08 04:26 / dkh
Toluene	5500	ug/L	D	10		SW8021B	07/12/08 05:02 / dkh
Surr: Trifluorotoluene	95.0	%REC		80-120		SW8021B	07/12/08 04:26 / dkh
NON-HALOGENATED VOLATILES							
Methanol	ND	mg/L		1.0		SW8015B	07/10/08 11:02 / eli-b
Surr: sec-Butyl Alcohol	101	%REC		80-120		SW8015B	07/10/08 11:02 / eli-b
ORGANIC CHARACTERISTICS							
Diesel Range Organics (DRO)	2.0	mg/L		1.0		SW8015M as	07/08/08 20:47 / cjs
Surr: o-Terphenyl	25.0	%REC	S	60-120		SW8015M as	07/08/08 20:47 / cjs
Gasoline Range Organics (GRO)	29.6	mg/L	D	0.36		SW8015M as	07/12/08 04:26 / dkh
Surr: Trifluorotoluene	89.0	%REC		80-120		SW8015M as	07/12/08 04:26 / dkh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Not Indicated
Lab ID: C08070232-001
Client Sample ID: Oxy PW

Report Date: 08/02/08
Collection Date: 07/01/08 13:05
DateReceived: 07/03/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Halides, Total	0.2	mg Cl/L		0.1		SW9020B	07/11/08 12:17 / wen

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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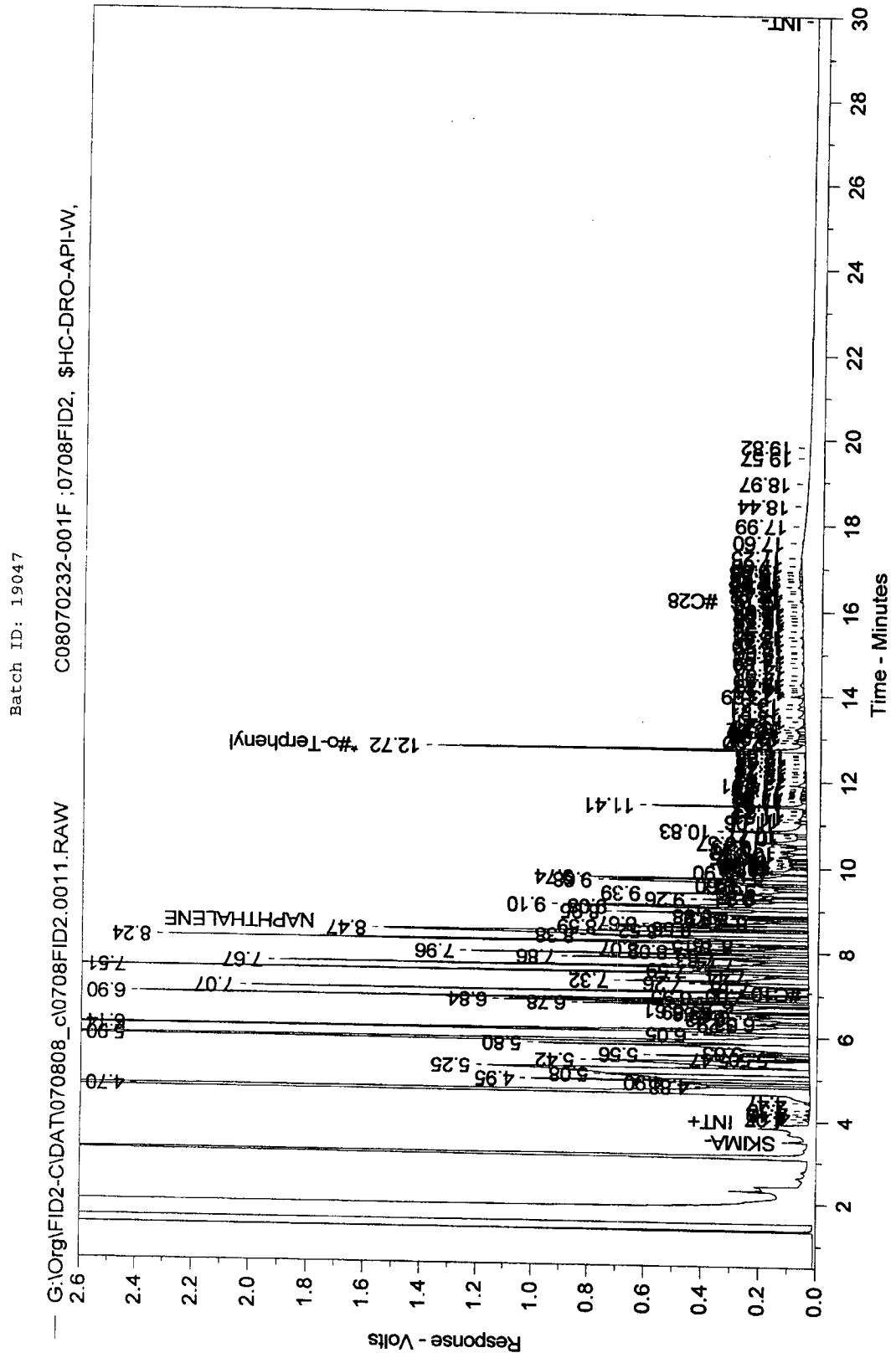

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: R103884
Sample ID: MBLK-1	Method Blank				Run: MANTECH_080708A				07/08/08 10:46
Alkalinity, Phenolphthalein as CaCO3	ND	mg/L	1						
Alkalinity, Total as CaCO3	ND	mg/L	0.2						
Carbonate as CO3	ND	mg/L	1						
Bicarbonate as HCO3	ND	mg/L	1						
Hydroxide as OH	ND	mg/L	1						
Sample ID: LCS-1	Laboratory Control Sample				Run: MANTECH_080708A				07/08/08 10:53
Alkalinity, Total as CaCO3	200	mg/L	1.0	100	90	110			
Sample ID: C08070223-001AMS	Sample Matrix Spike				Run: MANTECH_080708A				07/08/08 12:05
Alkalinity, Total as CaCO3	138	mg/L	1.0	104	80	120			
Sample ID: C08070223-001AMSD	Sample Matrix Spike Duplicate				Run: MANTECH_080708A				07/08/08 12:12
Alkalinity, Total as CaCO3	138	mg/L	1.0	105	80	120	0.4	10	
Method: A2510 B									Analytical Run: ORION555A_080707A
Sample ID: ICV2_080707_1	Initial Calibration Verification Standard								07/07/08 11:03
Conductivity	1380	umhos/cm	1.0	98	90	110			
Method: A2510 B									Batch: 080707_1_PH-W_555A-1
Sample ID: MBLK1_080707_1	Method Blank				Run: ORION555A_080707A				07/07/08 10:58
Conductivity	0.7	umhos/cm	0.2						
Sample ID: C08070220-001FDUP	Sample Duplicate				Run: ORION555A_080707A				07/07/08 11:41
Conductivity	756	umhos/cm	1.0				0.0	10	
Method: A2540 C									Batch: 080707_1_SLDS-TDS-W
Sample ID: MBLK1_080707	Method Blank				Run: BAL-1_080707A				07/07/08 09:10
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	6						
Sample ID: LCS1_080707	Laboratory Control Sample				Run: BAL-1_080707A				07/07/08 09:11
Solids, Total Dissolved TDS @ 180 C	1010	mg/L	10	101	90	110			
Sample ID: C08070238-001CMS	Sample Matrix Spike				Run: BAL-1_080707A				07/07/08 09:18
Solids, Total Dissolved TDS @ 180 C	2140	mg/L	10	99	90	110			
Sample ID: C08070238-001CMSD	Sample Matrix Spike Duplicate				Run: BAL-1_080707A				07/07/08 09:18
Solids, Total Dissolved TDS @ 180 C	2150	mg/L	10	99	90	110	0.4	10	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D								Batch: 080707A-SLDS-TSS-W	
Sample ID: MBLK1_080707A	Method Blank				Run: BAL-1_080707B			07/07/08 11:20	
Solids, Total Suspended TSS @ 105 C	ND	mg/L	0.7						
Sample ID: C08070242-002ADUP	Sample Duplicate				Run: BAL-1_080707B			07/07/08 11:22	
Solids, Total Suspended TSS @ 105 C	3.00	mg/L	1.0					25	
Method: A4500-Cl B								Batch: 080710A-CL-TTR-W	
Sample ID: MBLK9-080710A	Method Blank				Run: TITRATION_080710A			07/10/08 13:33	
Chloride	ND	mg/L	0.4						
Sample ID: C08070237-001BMS	Sample Matrix Spike				Run: TITRATION_080710A			07/10/08 15:57	
Chloride	32700	mg/L	1.0	101	90	110			
Sample ID: C08070237-001BMSD	Sample Matrix Spike Duplicate				Run: TITRATION_080710A			07/10/08 15:58	
Chloride	32700	mg/L	1.0	101	90	110	0.0	10	
Sample ID: LCS35-080710A	Laboratory Control Sample				Run: TITRATION_080710A			07/10/08 16:03	
Chloride	3550	mg/L	1.0	100	90	110			
Method: A4500-H B								Analytical Run: ORION555A_080707A	
Sample ID: ICV1_080707_1	Initial Calibration Verification Standard							07/07/08 11:00	
pH	6.89	s.u.	0.010	100	98	102			
Method: A4500-H B								Batch: 080707_1_PH-W_555A-1	
Sample ID: C08070220-001FDUP	Sample Duplicate				Run: ORION555A_080707A			07/07/08 11:41	
pH	7.64	s.u.	0.010				0.0	10	
Method: A4500-NO2 B								Analytical Run: HACH DR3000_080703C	
Sample ID: ICV-2	Initial Calibration Verification Standard							07/03/08 16:04	
Nitrogen, Nitrite as N	0.969	mg/L	0.10	97	90	110			
Method: A4500-NO2 B								Batch: A2008-07-03_6_NO2_02	
Sample ID: MBLK-1	Method Blank				Run: HACH DR3000_080703C			07/03/08 16:04	
Nitrogen, Nitrite as N	ND	mg/L	0.003						
Sample ID: C08070231-001FMS	Sample Matrix Spike				Run: HACH DR3000_080703C			07/03/08 16:05	
Nitrogen, Nitrite as N	0.0490	mg/L	0.10	103	80	120			
Sample ID: C08070231-001FMSD	Sample Matrix Spike Duplicate				Run: HACH DR3000_080703C			07/03/08 16:05	
Nitrogen, Nitrite as N	0.0497	mg/L	0.10	105	80	120	0.0	10	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-SO4 E								Batch: 080708_1_SO4-TURB-W	
Sample ID: LCS-1_080708	Laboratory Control Sample				Run: TURB-2_080708A			07/08/08 10:56	
Sulfate	5010	mg/L	59	104	90	110			
Sample ID: MBLK-1_080708	Method Blank				Run: TURB-2_080708A			07/08/08 10:56	
Sulfate	ND	mg/L	0.6						
Sample ID: C08070231-001CMS	Sample Matrix Spike				Run: TURB-2_080708A			07/08/08 16:42	
Sulfate	356	mg/L	5.9	108	90	110			
Sample ID: C08070231-001CMSD	Sample Matrix Spike Duplicate				Run: TURB-2_080708A			07/08/08 16:44	
Sulfate	353	mg/L	5.9	106	90	110	1.1	10	
Method: E200.7								Batch: R104799	
Sample ID: MB-080724A	Method Blank				Run: ICP2-C_080724A			07/24/08 13:13	
Boron	0.02	mg/L	0.008						
Silica	ND	mg/L	0.02						
Sample ID: LFB-080724A	Laboratory Fortified Blank				Run: ICP2-C_080724A			07/24/08 13:17	
Boron	1.06	mg/L	0.10	105	85	125			
Silica	0.395	mg/L	0.10	99	85	125			
Sample ID: C08070339-001JMS2	Sample Matrix Spike				Run: ICP2-C_080724A			07/24/08 17:19	
Boron	2.25	mg/L	0.10	103	70	130			
Silica	7.85	mg/L	0.10		70	130			A
Sample ID: C08070339-001JMSD2	Sample Matrix Spike Duplicate				Run: ICP2-C_080724A			07/24/08 17:23	
Boron	2.23	mg/L	0.10	102	70	130	0.9	20	
Silica	7.77	mg/L	0.10		70	130	1.0	20	A

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: R104879
Sample ID: MB-080725A	Method Blank				Run: ICP2-C_080725A				07/25/08 13:29
Barium	ND	mg/L	0.006						
Calcium	ND	mg/L	0.1						
Iron	ND	mg/L	0.005						
Lithium	ND	mg/L	0.0001						
Magnesium	ND	mg/L	0.04						
Phosphorus	ND	mg/L	0.02						
Potassium	ND	mg/L	0.02						
Silica	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Strontium	ND	mg/L	0.0002						
Sample ID: LFB-080725A	Laboratory Fortified Blank				Run: ICP2-C_080725A				07/25/08 13:33
Barium	0.988	mg/L	0.10	99	85	125			
Calcium	51.9	mg/L	0.50	104	85	125			
Iron	1.04	mg/L	0.030	104	85	125			
Lithium	0.948	mg/L	0.10	95	85	125			
Magnesium	51.5	mg/L	0.50	103	85	125			
Phosphorus	2.07	mg/L	0.10	103	85	125			
Potassium	45.9	mg/L	0.50	92	85	125			
Silica	0.373	mg/L	0.10	93	85	125			
Sodium	47.5	mg/L	0.77	95	85	125			
Strontium	0.968	mg/L	0.10	97	85	125			
Sample ID: C08071144-001BMS2	Sample Matrix Spike				Run: ICP2-C_080725A				07/25/08 13:51
Barium	2.06	mg/L	0.10	103	70	130			
Calcium	125	mg/L	1.0	109	70	130			
Iron	2.27	mg/L	0.030	108	70	130			
Lithium	1.86	mg/L	0.10	90	70	130			
Magnesium	118	mg/L	1.0	107	70	130			
Phosphorus	4.41	mg/L	0.10	110	70	130			
Potassium	94.9	mg/L	1.0	92	70	130			
Silica	7.28	mg/L	0.10		70	130			A
Sodium	408	mg/L	1.5	102	70	130			
Strontium	2.52	mg/L	0.10	100	70	130			
Sample ID: C08071144-001BMSD2	Sample Matrix Spike Duplicate				Run: ICP2-C_080725A				07/25/08 13:55
Barium	2.09	mg/L	0.10	105	70	130	1.6	20	
Calcium	129	mg/L	1.0	112	70	130	2.4	20	
Iron	2.31	mg/L	0.030	110	70	130	1.8	20	
Lithium	1.86	mg/L	0.10	90	70	130	0.2	20	
Magnesium	121	mg/L	1.0	110	70	130	2.4	20	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7								Batch: R104879	
Sample ID: C08071144-001BMSD2	Sample Matrix Spike Duplicate				Run: ICP2-C_080725A			07/25/08 13:55	
Phosphorus	4.45	mg/L	0.10	111	70	130	1.0	20	
Potassium	96.2	mg/L	1.0	93	70	130	1.4	20	
Silica	7.37	mg/L	0.10		70	130	1.2	20	A
Sodium	417	mg/L	1.5	111	70	130	2.2	20	
Strontium	2.57	mg/L	0.10	102	70	130	1.8	20	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R104609
Sample ID: LRB	Method Blank				Run: ICPMS4-C_080721B				07/21/08 16:56
Aluminum	0.0006	mg/L	0.0001						
Antimony	9E-06	mg/L	4E-06						
Arsenic	ND	mg/L	4E-05						
Beryllium	ND	mg/L	4E-06						
Cadmium	ND	mg/L	3E-06						
Chromium	ND	mg/L	4E-05						
Cobalt	ND	mg/L	5E-06						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Manganese	ND	mg/L	6E-06						
Molybdenum	ND	mg/L	9E-06						
Nickel	0.0003	mg/L	3E-05						
Selenium	ND	mg/L	0.0001						
Silver	9E-06	mg/L	7E-06						
Thallium	ND	mg/L	4E-06						
Tin	1.0E-05	mg/L	8E-06						
Titanium	ND	mg/L	6E-05						
Uranium	ND	mg/L	2E-06						
Vanadium	ND	mg/L	3E-05						
Zinc	0.0007	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS4-C_080721B				07/21/08 17:02
Aluminum	0.0472	mg/L	0.0010	93	85	115			
Antimony	0.0508	mg/L	0.0010	102	85	115			
Arsenic	0.0503	mg/L	0.0010	101	85	115			
Beryllium	0.0491	mg/L	0.0010	98	85	115			
Cadmium	0.0510	mg/L	0.0010	102	85	115			
Chromium	0.0498	mg/L	0.0010	100	85	115			
Cobalt	0.0489	mg/L	0.0010	98	85	115			
Copper	0.0506	mg/L	0.0010	101	85	115			
Lead	0.0494	mg/L	0.0010	99	85	115			
Manganese	0.0463	mg/L	0.0010	93	85	115			
Molybdenum	0.0488	mg/L	0.0010	98	85	115			
Nickel	0.0501	mg/L	0.0010	100	85	115			
Selenium	0.0518	mg/L	0.0010	104	85	115			
Silver	0.0196	mg/L	0.0010	98	85	115			
Thallium	0.0490	mg/L	0.0010	98	85	115			
Tin	0.0510	mg/L	0.0010	102	85	115			
Titanium	0.0481	mg/L	0.0010	96	85	115			
Uranium	0.0483	mg/L	0.00030	97	85	115			
Vanadium	0.0488	mg/L	0.0010	98	85	115			

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R104609
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS4-C_080721B				07/21/08 17:02
Zinc	0.0584	mg/L	0.0010	115	85	115			
Sample ID: C08061327-001KMS4	Post Digestion Spike				Run: ICPMS4-C_080721B				07/21/08 22:59
Aluminum	0.0486	mg/L	0.10	90	70	130			
Antimony	0.0516	mg/L	0.050	100	70	130			
Arsenic	0.0500	mg/L	0.0010	98	70	130			
Beryllium	0.0442	mg/L	0.010	88	70	130			
Cadmium	0.0492	mg/L	0.010	96	70	130			
Chromium	0.0478	mg/L	0.050	95	70	130			
Cobalt	0.0468	mg/L	0.010	93	70	130			
Copper	0.0536	mg/L	0.010	92	70	130			
Lead	0.0494	mg/L	0.050	98	70	130			
Manganese	0.171	mg/L	0.010	92	70	130			
Molybdenum	0.0498	mg/L	0.10	96	70	130			
Nickel	0.0528	mg/L	0.050	91	70	130			
Selenium	0.0489	mg/L	0.0010	98	70	130			
Silver	0.0119	mg/L	0.010	60	70	130			S
Thallium	0.0495	mg/L	0.10	99	70	130			
Tin	0.0502	mg/L	0.10	100	70	130			
Titanium	0.0484	mg/L	0.10	95	70	130			
Uranium	0.152	mg/L	0.00030	133	70	130			S
Vanadium	0.0484	mg/L	0.10	96	70	130			
Zinc	0.497	mg/L	0.010		70	130			A
Sample ID: C08061327-001KMSD4	Post Digestion Spike Duplicate				Run: ICPMS4-C_080721B				07/21/08 23:06
Aluminum	0.0470	mg/L	0.10	87	70	130	0.0	20	
Antimony	0.0515	mg/L	0.050	100	70	130	0.2	20	
Arsenic	0.0511	mg/L	0.0010	100	70	130	2.1	20	
Beryllium	0.0437	mg/L	0.010	87	70	130	1.1	20	
Cadmium	0.0496	mg/L	0.010	97	70	130	0.7	20	
Chromium	0.0488	mg/L	0.050	97	70	130	0.0	20	
Cobalt	0.0466	mg/L	0.010	93	70	130	0.3	20	
Copper	0.0550	mg/L	0.010	95	70	130	2.5	20	
Lead	0.0496	mg/L	0.050	99	70	130	0.0	20	
Manganese	0.170	mg/L	0.010	91	70	130	0.5	20	
Molybdenum	0.0508	mg/L	0.10	98	70	130	0.0	20	
Nickel	0.0539	mg/L	0.050	93	70	130	2.0	20	
Selenium	0.0504	mg/L	0.0010	101	70	130	3.0	20	
Silver	0.0125	mg/L	0.010	63	70	130	5.0	20	S
Thallium	0.0501	mg/L	0.10	100	70	130	0.0	20	
Tin	0.0502	mg/L	0.10	100	70	130	0.0	20	

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S - Spike recovery outside of advisory limits.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R104609
Sample ID: C08061327-001KMSD4	Post Digestion Spike Duplicate				Run: ICPMS4-C_080721B				07/21/08 23:06
Titanium	0.0489	mg/L	0.10	96	70	130	0.0	20	
Uranium	0.151	mg/L	0.00030	131	70	130	0.5	20	S
Vanadium	0.0492	mg/L	0.10	97	70	130	0.0	20	
Zinc	0.497	mg/L	0.010		70	130	0.1	20	A
Method: E350.1									Batch: B_R114068
Sample ID: MBLK	Method Blank				Run: SUB-B114068				07/15/08 10:58
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-B114068				07/15/08 10:59
Nitrogen, Ammonia as N	1.02	mg/L	0.10	103	90	110			
Sample ID: C08061359-007B	Sample Matrix Spike				Run: SUB-B114068				07/15/08 11:04
Nitrogen, Ammonia as N	0.630	mg/L	0.10	50	90	110			S
Sample ID: C08061359-007B	Sample Matrix Spike Duplicate				Run: SUB-B114068				07/15/08 11:05
Nitrogen, Ammonia as N	0.624	mg/L	0.10	50	90	110	1.0	10	S
Method: E351.2									Batch: B_R113960
Sample ID: MBLK	Method Blank				Run: SUB-B113960				07/14/08 08:40
Nitrogen, Kjeldahl, Total as N	0.1	mg/L	0.03						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-B113960				07/14/08 08:41
Nitrogen, Kjeldahl, Total as N	5.33	mg/L	0.50	104	90	110			
Sample ID: B08070864-001CMS	Sample Matrix Spike				Run: SUB-B113960				07/14/08 08:53
Nitrogen, Kjeldahl, Total as N	5.89	mg/L	0.50	113	90	110			S
Sample ID: B08070864-001CMSD	Sample Matrix Spike Duplicate				Run: SUB-B113960				07/14/08 08:53
Nitrogen, Kjeldahl, Total as N	5.94	mg/L	0.50	114	90	110	0.9	10	S

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E353.2									Batch: R104395
Sample ID: MBLK-1	Method Blank				Run: TECHNICON_080717A				07/17/08 11:30
Nitrogen, Nitrate+Nitrite as N	ND	mg/L	0.03						
Sample ID: LCS-2	Laboratory Control Sample				Run: TECHNICON_080717A				07/17/08 11:32
Nitrogen, Nitrate+Nitrite as N	2.59	mg/L	0.10	104	90	110			
Sample ID: C08070560-001DMS	Sample Matrix Spike				Run: TECHNICON_080717A				07/17/08 11:47
Nitrogen, Nitrate+Nitrite as N	2.28	mg/L	0.10	101	90	110			
Sample ID: C08070560-001DMSD	Sample Matrix Spike Duplicate				Run: TECHNICON_080717A				07/17/08 11:50
Nitrogen, Nitrate+Nitrite as N	2.30	mg/L	0.10	102	90	110	0.9	10	
Method: SW8015B									Batch: B_33452
Sample ID: LCS-33452	Laboratory Control Sample				Run: SUB-B113819				07/10/08 09:52
Methanol	52	mg/L	1.0	103	70	130			
Surr: sec-Butyl Alcohol			1.0	101	80	120			
Sample ID: MB-33452	Method Blank				Run: SUB-B113819				07/10/08 10:16
Methanol	ND	mg/L	1.0						
Surr: sec-Butyl Alcohol			1.0	98	80	120			
Sample ID: B08070670-001JMS	Sample Matrix Spike				Run: SUB-B113819				07/10/08 11:49
Methanol	51	mg/L	1.1	103	70	130			
Surr: sec-Butyl Alcohol			1.1	102	80	120			
Sample ID: B08070670-001JMSD	Sample Matrix Spike Duplicate				Run: SUB-B113819				07/10/08 12:12
Methanol	50	mg/L	1.1	99	70	130	3.6	20	
Surr: sec-Butyl Alcohol			1.1	101	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015M as D									Batch: 19047
Sample ID: MB-19047	Method Blank				Run: FID2-C_080709A				07/08/08 13:54
Diesel Range Organics (DRO)	ND	mg/L	0.03						
Surr: o-Terphenyl			0.002	94	60	120			
Sample ID: LCS-19047	Laboratory Control Sample				Run: FID2-C_080709A				07/08/08 14:40
Diesel Range Organics (DRO)	1.8	mg/L	1.0	90	57	112			
Surr: o-Terphenyl			0.020	90	67	117			
Sample ID: LCSD-19047	Laboratory Control Sample Duplicate				Run: FID2-C_080709A				07/08/08 17:40
Diesel Range Organics (DRO)	1.6	mg/L	1.0	79	57	112	12	20	
Surr: o-Terphenyl			0.020	84	67	117	0.0	20	
Sample ID: C08070223-001FMS	Sample Matrix Spike				Run: FID2-C_080709A				07/08/08 19:14
Diesel Range Organics (DRO)	2.3	mg/L	1.0	74	50	115			
Surr: o-Terphenyl			0.020	73	60	120			
Sample ID: C08070223-001FMSD	Sample Matrix Spike Duplicate				Run: FID2-C_080709A				07/08/08 20:00
Diesel Range Organics (DRO)	2.4	mg/L	1.0	76	50	115	1.3	20	
Surr: o-Terphenyl			0.020	84	60	120			
Method: SW8015M as G									Batch: R104115
Sample ID: LCS_0711HP207r	Laboratory Control Sample				Run: PIDFID1-C_080711C				07/11/08 12:26
Gasoline Range Organics (GRO)	0.202	mg/L	0.040	101	82	120			
Surr: Trifluorotoluene			0.0020	102	80	120			
Sample ID: MBLK_0711HP208r	Method Blank				Run: PIDFID1-C_080711C				07/11/08 13:01
Gasoline Range Organics (GRO)	ND	mg/L	0.02						
Surr: Trifluorotoluene				98	80	120			
Sample ID: C08070261-001BMS	Sample Matrix Spike				Run: PIDFID1-C_080711C				07/11/08 18:21
Gasoline Range Organics (GRO)	4.27	mg/L	0.36	107	70	130			
Surr: Trifluorotoluene			0.0020	98	80	120			
Sample ID: C08070261-001BMSD	Sample Matrix Spike Duplicate				Run: PIDFID1-C_080711C				07/11/08 18:56
Gasoline Range Organics (GRO)	4.24	mg/L	0.36	106	70	130	0.6	20	
Surr: Trifluorotoluene			0.0020	97	80	120	0.0	10	

Qualifiers:

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ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8021B									Batch: R104113
Sample ID: LCS_0711HP206r	Laboratory Control Sample				Run: PIDFID1-C_080711A				07/11/08 11:50
Benzene	10	ug/L	0.50	101	80	120			
Ethylbenzene	10	ug/L	0.50	102	80	120			
m+p-Xylenes	20	ug/L	0.50	100	80	120			
o-Xylene	10	ug/L	0.50	100	80	120			
Toluene	10	ug/L	0.50	102	80	120			
Surr: Trifluorotoluene			0.50	99	80	120			
Sample ID: MBLK_0711HP208r	Method Blank				Run: PIDFID1-C_080711A				07/11/08 13:01
Benzene	ND	ug/L	0.05						
Ethylbenzene	ND	ug/L	0.05						
m+p-Xylenes	ND	ug/L	0.1						
o-Xylene	ND	ug/L	0.05						
Toluene	ND	ug/L	0.05						
Surr: Trifluorotoluene				100	80	120			
Sample ID: C08070261-001BMS	Sample Matrix Spike				Run: PIDFID1-C_080711A				07/11/08 17:10
Benzene	200	ug/L	1.0	102	80	120			
Ethylbenzene	200	ug/L	1.0	102	80	120			
m+p-Xylenes	400	ug/L	2.0	100	80	120			
o-Xylene	200	ug/L	1.0	101	80	120			
Toluene	210	ug/L	1.0	101	80	120			
Surr: Trifluorotoluene			0.50	102	80	120			
Sample ID: C08070261-001BMSD	Sample Matrix Spike Duplicate				Run: PIDFID1-C_080711A				07/11/08 17:45
Benzene	200	ug/L	1.0	102	80	120	0.0	20	
Ethylbenzene	210	ug/L	1.0	103	80	120	0.8	20	
m+p-Xylenes	400	ug/L	2.0	101	80	120	0.7	20	
o-Xylene	200	ug/L	1.0	101	80	120	0.3	20	
Toluene	210	ug/L	1.0	101	80	120	0.2	20	
Surr: Trifluorotoluene			0.50	98	80	120	0.0	10	

Qualifiers:

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ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070232

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW9020B									Batch: 19104
Sample ID: MB-19104	Method Blank				Run: TOXBOX_080712A				07/11/08 10:22
Organic Halides, Total	ND	mg Cl/L	0.03						
Sample ID: LCS-19104	Laboratory Control Sample				Run: TOXBOX_080712A				07/11/08 10:38
Organic Halides, Total	0.950	mg Cl/L	0.10	95	80	120			
Sample ID: C08070223-001GMS	Sample Matrix Spike				Run: TOXBOX_080712A				07/11/08 11:34
Organic Halides, Total	1.03	mg Cl/L	0.10	103	80	120			
Sample ID: C08070223-001GMSD	Sample Matrix Spike Duplicate				Run: TOXBOX_080712A				07/11/08 12:03
Organic Halides, Total	1.09	mg Cl/L	0.10	109	80	120	5.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: Altela Inc.

Project Name, PWS, Permit, Etc.: Oxy PW

Sample Origin State: NM

EPA/State Compliance: Yes ☐ No ☐

Report Mail Address: 2450 Alamo SE Suite 200 Albuquerque, NM 87106

Contact Name: Matthew Bruff

Phone/Fax: (303) 993-1950

Email: matthew.bruff@altelainc.com

Sampler: (Please Print) Michael Wimberly

Invoice Address: Same

Invoice Contact & Phone: Bill Huitt (505) 923-4140

Purchase Order:

Quote/Bottle Order: 2860/ 28569

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ GSA ☐ POTW/WWTP ☐ State: ____ ☐ Other: ____

☐ A2LA ☐ EDD/EDT (Electronic Data) Format: ____ ☐ LEVEL IV ☐ NELAC

Number of Containers; Sample Type: A W S V B O — Air Water Soils/Solids Vegetation Bioassay Other

ANALYSIS REQUESTED

#	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Diesel Range Organics	Cond., QA Calc, pH...etc	Total Organic Halogens	Chloride, Sulfate, etc.	Gasoline Range Organics	Methanol	BTEX	Nitrogen, Nitrate Dissolved, etc	Metals by ICP/ICPMS etc	SEE ATTACHED	Normal Turnaround (TAT)	RUSH	Comments
1	Oxy PW	7/1/08	12:03pm	W 1L	X												Grab
2	↕	7/1/08	12:15pm	W 1L		X											↕
3	↕	7/1/08	12:21pm	W 250mL			X										↕
4	↕	7/1/08	12:25pm	W 250mL				X									↕
5	↕	7/1/08	12:31pm	W 40mL					X								↕
6	↕	7/1/08	12:39pm	W 40mL						X							↕
7	↕	7/1/08	12:48pm	W 40mL							X						↕
8	↕	7/1/08	12:57pm	W 500mL								X					↕
9	Oxy PW	7/1/08	1:00pm	W 500mL									X				Grab
10														X			

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Shipped by: Fed Ex

Cooler ID(s): C-2702

Receipt Temp 5 °C

On Ice: (Yes) No

Custody Seal (Y) N

Bottles/Coolers B (C)

Intact (Y) N

Signature Match (Y) N

LABORATORY USE ONLY

C08070232

Custody Record MUST be Signed

Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
Michael Wimberly	7/2/08/3:10pm	[signature]	Jennifer McVay	7-3-08 13:30	[signature]

Received by Laboratory: Date/Time: Signature:

Sample Disposal: Return to Client: ____ Lab Disposal: ____

Chain of Custody and Analytical Request Record

Page 2 of 2

PLEASE PRINT- Provide as much information as possible.

Company Name:	Project Name, PWS, Permit, Etc.	Sample Origin	EPA/State Compliance:
Altela Inc.	Oxy PW	State: NM	Yes ☐ No ☐
Report Mail Address:	**Contact Name:** Phone/Fax:	Email:	Sampler: (Please Print)
2450 Alamo SE Suite 200 Albuquerque, NM 87106	Matthew Broff (303) 993-1950	matthew.broff@altelainc.com	Michael Wimberly
Invoice Address:	**Invoice Contact & Phone:**	Purchase Order:	Quote/Bottle Order:
Same	Bill Huitt (505) 923-4140		2860/23569

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

- ☐ DW
- ☐ GSA
- ☐ POTW/WWTP
- ☐ State: _____
- ☐ Other: _____
- ☐ A2LA
- ☐ EDD/EDT (Electronic Data) Format: _____
- ☐ LEVEL IV
- ☐ NELAC

Number of Containers
Sample Type: A W S V B O
Air Water Soils/Solids Vegetation Bioassay Other

ANALYSIS REQUESTED

Nitrogen, Ammonia etc...

SEE ATTACHED

Normal Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: Fed Ex

Cooler ID(s): C-2702

Receipt Temp: 5 °C

On Ice: (Yes) No

Custody Seal (Y) N

Bottles/Coolers B (C)

Intact (Y) N

Signature Match (Y) N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX												
1	Oxy PW	7/1/08	1:05pm	WS	500mL	X									Grab	
2																
3																
4																
5																
6																
7																
8																
9																
10																

LABORATORY USE ONLY 0807032

Custody Record MUST be Signed

Relinquished by (print): Michael Wimberly	Date/Time: 7/2/08 / 3:10pm	Signature:	Received by (print): Jennifer Mackay	Date/Time: 7.3.08 13:30	Signature:
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time:	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested.
This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

Energy Laboratories Inc
Workorder Receipt Checklist

C08070232

Altela Inc

Login completed by: Edith McPike

Date and Time Received: 7/3/2008 1:30 PM

Reviewed by:

Received by: jm

Reviewed Date:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☐	No ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	5°C On Ice
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Contact and Corrective Action Comments:

Nitrite received out of hold. Per phone conversation with Matthew Bruff on 7-3-08 @ 16:00; run nitrite analysis out of hold

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Date: 02-Aug-08

CLIENT: Altela Inc
Project: Not Indicated
Sample Delivery Group: C08070232

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS USING EPA 505
Data for Atrazine and Simazine are reported from EPA 525.2, not from EPA 505. Data reported by ELI using EPA method 505 reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTFICATIONS:
USEPA: WY00002; FL-DOH NELAC: E87641; Arizona: AZ0699; California: 02118CA
Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

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ANALYTICAL SUMMARY REPORT

August 02, 2008

Altela Inc
5350 S Roslyn St Ste 430
Englewood, CO 80111

Workorder No.: C08070237 Quote ID: C2860

Project Name: Not Indicated

Energy Laboratories, Inc. received the following 1 sample from Altela Inc on 7/3/2008 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C08070237-001	Oxy CW	07/01/08 17:11	07/03/08	Aqueous	Metals by ICP/ICPMS, Dissolved Alkalinity QA Calculations Chloride Conductivity Sample Filtering Liquid-Liquid Extraction SW8021B, BTEX Diesel Range Organics Gasoline Range Organics Methanol Prep for TOX SW9020B Total Organic Halogens Hardness Nitrogen, Ammonia Nitrogen, Nitrite Dissolved Nitrogen, Nitrate + Nitrite Dissolved Nitrogen, Nitrate Dissolved Nitrogen, Total Kjeldahl pH Services Provided by Lab Solids, Total Dissolved Solids, Total Suspended Sulfate

As appropriate, any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By: Kyle Bradley

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Not Indicated
Lab ID: C08070237-001
Client Sample ID: Oxy CW

Report Date: 07/30/08
Collection Date: 07/01/08 17:11
DateReceived: 07/03/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Alkalinity, Phenolphthalein as CaCO3	4	mg/L		1		A2320 B	07/08/08 12:54 / ljl
Alkalinity, Total as CaCO3	208	mg/L		1		A2320 B	07/08/08 12:54 / ljl
Carbonate as CO3	5	mg/L		1		A2320 B	07/08/08 12:54 / ljl
Bicarbonate as HCO3	244	mg/L		1		A2320 B	07/08/08 12:54 / ljl
Hydroxide as OH	ND	mg/L		1		A2320 B	07/08/08 12:54 / ljl
Calcium	193	mg/L	D	5		E200.7	07/25/08 15:53 / cp
Chloride	14700	mg/L		1		A4500-Cl B	07/10/08 15:53 / ljl
Magnesium	42	mg/L	D	2		E200.7	07/25/08 15:53 / cp
Nitrogen, Ammonia as N	3.51	mg/L		0.05		E350.1	07/15/08 11:14 / eli-b
Nitrogen, Kjeldahl, Total as N	5.0	mg/L		0.5		E351.2	07/14/08 08:56 / eli-b
Phosphorus	ND	mg/L	D	2		E200.7	07/24/08 17:11 / cp
Potassium	327	mg/L		1		E200.7	07/25/08 15:53 / cp
Silica	28.0	mg/L		0.1		E200.7	07/25/08 15:53 / cp
Sodium	8600	mg/L	D	40		E200.7	07/25/08 15:53 / cp
Sulfate	3	mg/L		1		A4500-SO4 E	07/08/08 16:48 / jal
MAJOR IONS - DISSOLVED							
Nitrogen, Nitrate as N	ND	mg/L		0.1		E353.2	07/18/08 11:31 / sec
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	07/17/08 11:40 / jal
Nitrogen, Nitrite as N	ND	mg/L		0.1		A4500-NO2 B	07/03/08 17:16 / jal
PHYSICAL PROPERTIES							
Conductivity	40400	umhos/cm		1		A2510 B	07/07/08 11:58 / dd
Hardness as CaCO3	655	mg/L		1		A2340 B	07/25/08 15:53 / lab
pH	8.64	s.u.		0.01		A4500-H B	07/07/08 11:58 / dd
Solids, Total Dissolved TDS @ 180 C	23700	mg/L		10		A2540 C	07/07/08 09:17 / dd
Solids, Total Suspended TSS @ 105 C	27	mg/L		1		A2540 D	07/03/08 17:37 / sp
METALS - DISSOLVED							
Aluminum	ND	mg/L		0.1		E200.8	07/21/08 22:33 / sml
Antimony	ND	mg/L		0.05		E200.8	07/21/08 22:33 / sml
Arsenic	0.036	mg/L		0.001		E200.8	07/21/08 22:33 / sml
Barium	53.8	mg/L	D	0.3		E200.7	07/25/08 15:53 / cp
Beryllium	ND	mg/L		0.01		E200.8	07/21/08 22:33 / sml
Boron	2.6	mg/L	D	0.8		E200.7	07/24/08 17:11 / cp
Cadmium	ND	mg/L		0.01		E200.8	07/21/08 22:33 / sml
Chromium	0.15	mg/L		0.05		E200.8	07/21/08 22:33 / sml
Cobalt	0.04	mg/L		0.01		E200.8	07/21/08 22:33 / sml
Copper	0.01	mg/L		0.01		E200.8	07/21/08 22:33 / sml
Iron	ND	mg/L	D	0.2		E200.7	07/25/08 15:53 / cp
Lead	ND	mg/L		0.05		E200.8	07/21/08 22:33 / sml
Lithium	3.2	mg/L		0.1		E200.7	07/25/08 15:53 / cp

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Not Indicated
Lab ID: C08070237-001
Client Sample ID: Oxy CW

Report Date: 07/30/08
Collection Date: 07/01/08 17:11
DateReceived: 07/03/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - DISSOLVED							
Manganese	0.03	mg/L		0.01		E200.8	07/21/08 22:33 / sml
Molybdenum	ND	mg/L		0.1		E200.8	07/21/08 22:33 / sml
Nickel	ND	mg/L		0.05		E200.8	07/21/08 22:33 / sml
Selenium	ND	mg/L		0.001		E200.8	07/21/08 22:33 / sml
Silicon	16.1	mg/L	D	0.9		E200.7	07/24/08 17:11 / cp
Silver	ND	mg/L		0.01		E200.8	07/21/08 22:33 / sml
Strontium	32.4	mg/L		0.1		E200.7	07/25/08 15:53 / cp
Thallium	ND	mg/L		0.1		E200.8	07/21/08 22:33 / sml
Tin	ND	mg/L		0.1		E200.8	07/21/08 22:33 / sml
Titanium	ND	mg/L		0.1		E200.8	07/21/08 22:33 / sml
Uranium	0.0006	mg/L		0.0003		E200.8	07/21/08 22:33 / sml
Vanadium	ND	mg/L		0.1		E200.8	07/21/08 22:33 / sml
Zinc	0.06	mg/L		0.01		E200.8	07/21/08 22:33 / sml
DATA QUALITY							
A/C Balance (± 5)	-2.78	%				Calculation	07/29/08 17:05 / lab
Anions	418	meq/L				Calculation	07/29/08 17:05 / lab
Cations	396	meq/L				Calculation	07/29/08 17:05 / lab
Solids, Total Dissolved Calculated	24000	mg/L				Calculation	07/29/08 17:05 / lab
TDS Balance (0.80 - 1.20)	0.990					Calculation	07/29/08 17:05 / lab
VOLATILE ORGANIC COMPOUNDS							
Benzene	12	ug/L		0.50		SW8021B	07/08/08 02:46 / dkh
Ethylbenzene	ND	ug/L		0.50		SW8021B	07/08/08 02:46 / dkh
m+p-Xylenes	15	ug/L		0.50		SW8021B	07/08/08 02:46 / dkh
o-Xylene	3.5	ug/L		0.50		SW8021B	07/08/08 02:46 / dkh
Toluene	29	ug/L		0.50		SW8021B	07/08/08 02:46 / dkh
Surr: Trifluorotoluene	100	%REC		80-120		SW8021B	07/08/08 02:46 / dkh
NON-HALOGENATED VOLATILES							
Methanol	ND	mg/L		1.0		SW8015B	07/10/08 11:26 / eli-b
Surr: sec-Butyl Alcohol	102	%REC		80-120		SW8015B	07/10/08 11:26 / eli-b
ORGANIC CHARACTERISTICS							
Diesel Range Organics (DRO)	1.6	mg/L		1.0		SW8015M as	07/08/08 21:33 / cjs
Surr: o-Terphenyl	32.0	%REC	S	60-120		SW8015M as	07/08/08 21:33 / cjs
Gasoline Range Organics (GRO)	0.143	mg/L		0.040		SW8015M as	07/08/08 02:46 / dkh
Surr: Trifluorotoluene	96.0	%REC		80-120		SW8015M as	07/08/08 02:46 / dkh

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
S - Spike recovery outside of advisory limits.

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Not Indicated
Lab ID: C08070237-001
Client Sample ID: Oxy CW

Report Date: 07/30/08
Collection Date: 07/01/08 17:11
DateReceived: 07/03/08
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
ORGANIC CHARACTERISTICS							
Organic Halides, Total	0.2	mg Cl/L		0.1		SW9020B	07/11/08 13:47 / wen

Report Definitions:
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QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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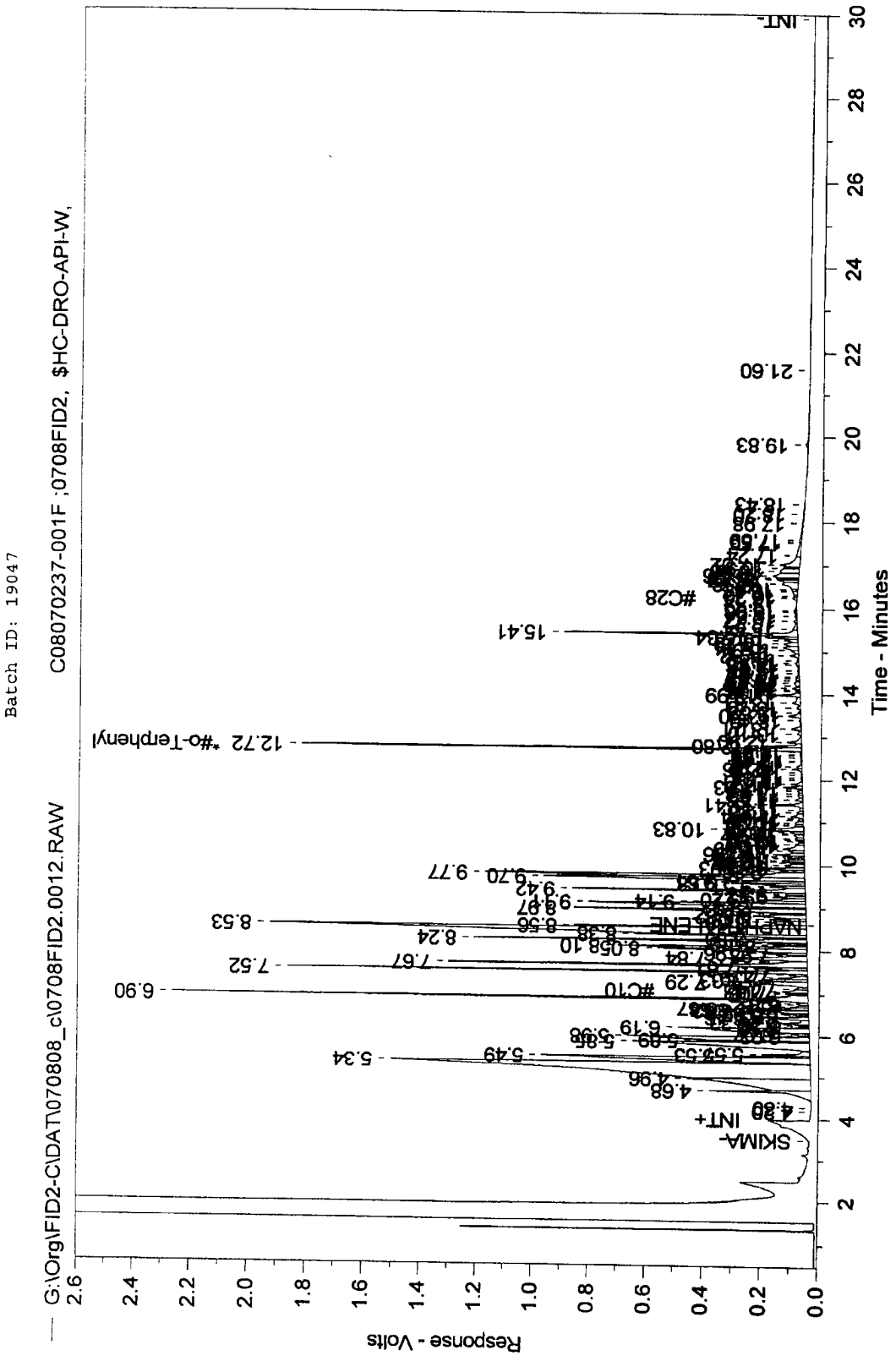

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B									Batch: R103884
Sample ID: MBLK-1	Method Blank				Run: MANTECH_080708A				07/08/08 10:46
Alkalinity, Phenolphthalein as CaCO3	ND	mg/L	1						
Alkalinity, Total as CaCO3	ND	mg/L	0.2						
Carbonate as CO3	ND	mg/L	1						
Bicarbonate as HCO3	ND	mg/L	1						
Hydroxide as OH	ND	mg/L	1						
Sample ID: LCS-1	Laboratory Control Sample				Run: MANTECH_080708A				07/08/08 10:53
Alkalinity, Total as CaCO3	200	mg/L	1.0	100	90	110			
Sample ID: C08070240-003AMS	Sample Matrix Spike				Run: MANTECH_080708A				07/08/08 13:39
Alkalinity, Total as CaCO3	185	mg/L	1.0	103	80	120			
Sample ID: C08070240-003AMSD	Sample Matrix Spike Duplicate				Run: MANTECH_080708A				07/08/08 13:46
Alkalinity, Total as CaCO3	185	mg/L	1.0	103	80	120	0.2	10	
Method: A2510 B									Analytical Run: ORION555A_080707A
Sample ID: ICV2_080707_1	Initial Calibration Verification Standard								07/07/08 11:03
Conductivity	1380	umhos/cm	1.0	98	90	110			
Method: A2510 B									Batch: 080707_1_PH-W_555A-1
Sample ID: MBLK1_080707_1	Method Blank				Run: ORION555A_080707A				07/07/08 10:58
Conductivity	0.7	umhos/cm	0.2						
Sample ID: C08070220-001FDUP	Sample Duplicate				Run: ORION555A_080707A				07/07/08 11:41
Conductivity	756	umhos/cm	1.0				0.0	10	
Method: A2540 C									Batch: 080707_1_SLDS-TDS-W
Sample ID: MBLK1_080707	Method Blank				Run: BAL-1_080707A				07/07/08 09:10
Solids, Total Dissolved TDS @ 180 C	ND	mg/L	6						
Sample ID: LCS1_080707	Laboratory Control Sample				Run: BAL-1_080707A				07/07/08 09:11
Solids, Total Dissolved TDS @ 180 C	1010	mg/L	10	101	90	110			
Sample ID: C08070238-001CMS	Sample Matrix Spike				Run: BAL-1_080707A				07/07/08 09:18
Solids, Total Dissolved TDS @ 180 C	2140	mg/L	10	99	90	110			
Sample ID: C08070238-001CMSD	Sample Matrix Spike Duplicate				Run: BAL-1_080707A				07/07/08 09:18
Solids, Total Dissolved TDS @ 180 C	2150	mg/L	10	99	90	110	0.4	10	

Qualifiers:

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D									Batch: 080703B-SLDS-TSS-W
Sample ID: MBLK1_080703B	Method Blank				Run: BAL-1_080703B				07/03/08 15:39
Solids, Total Suspended TSS @ 105 C	ND	mg/L	0.7						
Sample ID: C08070223-001ADUP	Sample Duplicate				Run: BAL-1_080703B				07/03/08 15:41
Solids, Total Suspended TSS @ 105 C	ND	mg/L	1.0				0.0	25	
Method: A4500-Cl B									Batch: 080710A-CL-TTR-W
Sample ID: MBLK9-080710A	Method Blank				Run: TITRATION_080710A				07/10/08 13:33
Chloride	ND	mg/L	0.4						
Sample ID: C08070237-001BMS	Sample Matrix Spike				Run: TITRATION_080710A				07/10/08 15:57
Chloride	32700	mg/L	1.0	101	90	110			
Sample ID: C08070237-001BMSD	Sample Matrix Spike Duplicate				Run: TITRATION_080710A				07/10/08 15:58
Chloride	32700	mg/L	1.0	101	90	110	0.0	10	
Sample ID: LCS35-080710A	Laboratory Control Sample				Run: TITRATION_080710A				07/10/08 16:03
Chloride	3550	mg/L	1.0	100	90	110			
Method: A4500-H B									Analytical Run: ORION555A_080707A
Sample ID: ICV1_080707_1	Initial Calibration Verification Standard								07/07/08 11:00
pH	6.89	s.u.	0.010	100	98	102			
Method: A4500-H B									Batch: 080707_1_PH-W_555A-1
Sample ID: C08070220-001FDUP	Sample Duplicate				Run: ORION555A_080707A				07/07/08 11:41
pH	7.64	s.u.	0.010				0.0	10	
Method: A4500-NO2 B									Analytical Run: HACH DR3000_080703C
Sample ID: ICV-2	Initial Calibration Verification Standard								07/03/08 16:04
Nitrogen, Nitrite as N	0.969	mg/L	0.10	97	90	110			
Method: A4500-NO2 B									Batch: A2008-07-03_6_NO2_02
Sample ID: MBLK-1	Method Blank				Run: HACH DR3000_080703C				07/03/08 16:04
Nitrogen, Nitrite as N	ND	mg/L	0.003						
Sample ID: C08070231-001FMS	Sample Matrix Spike				Run: HACH DR3000_080703C				07/03/08 16:05
Nitrogen, Nitrite as N	0.0490	mg/L	0.10	103	80	120			
Sample ID: C08070231-001FMSD	Sample Matrix Spike Duplicate				Run: HACH DR3000_080703C				07/03/08 16:05
Nitrogen, Nitrite as N	0.0497	mg/L	0.10	105	80	120	0.0	10	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-SO4 E								Batch: 080708_1_SO4-TURB-W	
Sample ID: LCS-1_080708	Laboratory Control Sample				Run: TURB-2_080708A			07/08/08 10:56	
Sulfate	5010	mg/L	59	104	90	110			
Sample ID: MBLK-1_080708	Method Blank				Run: TURB-2_080708A			07/08/08 10:56	
Sulfate	ND	mg/L	0.6						
Sample ID: C08070231-001CMS	Sample Matrix Spike				Run: TURB-2_080708A			07/08/08 16:42	
Sulfate	356	mg/L	5.9	108	90	110			
Sample ID: C08070231-001CMSD	Sample Matrix Spike Duplicate				Run: TURB-2_080708A			07/08/08 16:44	
Sulfate	353	mg/L	5.9	106	90	110	1.1	10	
Method: E200.7								Batch: R104799	
Sample ID: MB-080724A	Method Blank				Run: ICP2-C_080724A			07/24/08 13:13	
Boron	0.02	mg/L	0.008						
Phosphorus	ND	mg/L	0.02						
Silica	ND	mg/L	0.02						
Sample ID: LFB-080724A	Laboratory Fortified Blank				Run: ICP2-C_080724A			07/24/08 13:17	
Boron	1.06	mg/L	0.10	105	85	125			
Phosphorus	2.14	mg/L	0.10	107	85	125			
Silica	0.395	mg/L	0.10	99	85	125			
Sample ID: C08070339-001JMS2	Sample Matrix Spike				Run: ICP2-C_080724A			07/24/08 17:19	
Boron	2.25	mg/L	0.10	103	70	130			
Phosphorus	4.27	mg/L	0.10	107	70	130			
Silica	7.85	mg/L	0.10		70	130			A
Sample ID: C08070339-001JMSD2	Sample Matrix Spike Duplicate				Run: ICP2-C_080724A			07/24/08 17:23	
Boron	2.23	mg/L	0.10	102	70	130	0.9	20	
Phosphorus	4.20	mg/L	0.10	105	70	130	1.8	20	
Silica	7.77	mg/L	0.10		70	130	1.0	20	A

Qualifiers:

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ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: R104879
Sample ID: MB-080725A	Method Blank				Run: ICP2-C_080725A				07/25/08 13:29
Barium	ND	mg/L	0.006						
Calcium	ND	mg/L	0.1						
Iron	ND	mg/L	0.005						
Lithium	ND	mg/L	0.0001						
Magnesium	ND	mg/L	0.04						
Potassium	ND	mg/L	0.02						
Silica	ND	mg/L	0.02						
Sodium	ND	mg/L	0.8						
Strontium	ND	mg/L	0.0002						
Sample ID: LFB-080725A	Laboratory Fortified Blank				Run: ICP2-C_080725A				07/25/08 13:33
Barium	0.988	mg/L	0.10	99	85	125			
Calcium	51.9	mg/L	0.50	104	85	125			
Iron	1.04	mg/L	0.030	104	85	125			
Lithium	0.948	mg/L	0.10	95	85	125			
Magnesium	51.5	mg/L	0.50	103	85	125			
Potassium	45.9	mg/L	0.50	92	85	125			
Silica	0.373	mg/L	0.10	93	85	125			
Sodium	47.5	mg/L	0.77	95	85	125			
Strontium	0.968	mg/L	0.10	97	85	125			
Sample ID: C08071144-001BMS2	Sample Matrix Spike				Run: ICP2-C_080725A				07/25/08 13:51
Barium	2.06	mg/L	0.10	103	70	130			
Calcium	125	mg/L	1.0	109	70	130			
Iron	2.27	mg/L	0.030	108	70	130			
Lithium	1.86	mg/L	0.10	90	70	130			
Magnesium	118	mg/L	1.0	107	70	130			
Potassium	94.9	mg/L	1.0	92	70	130			
Silica	7.28	mg/L	0.10		70	130			A
Sodium	408	mg/L	1.5	102	70	130			
Strontium	2.52	mg/L	0.10	100	70	130			
Sample ID: C08071144-001BMSD2	Sample Matrix Spike Duplicate				Run: ICP2-C_080725A				07/25/08 13:55
Barium	2.09	mg/L	0.10	105	70	130	1.6	20	
Calcium	129	mg/L	1.0	112	70	130	2.4	20	
Iron	2.31	mg/L	0.030	110	70	130	1.8	20	
Lithium	1.86	mg/L	0.10	90	70	130	0.2	20	
Magnesium	121	mg/L	1.0	110	70	130	2.4	20	
Potassium	96.2	mg/L	1.0	93	70	130	1.4	20	
Silica	7.37	mg/L	0.10		70	130	1.2	20	A
Sodium	417	mg/L	1.5	111	70	130	2.2	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									Batch: R104879
Sample ID: C08071144-001BMSD2	Sample Matrix Spike Duplicate				Run: ICP2-C_080725A				07/25/08 13:55
Strontium	2.57	mg/L	0.10	102	70	130	1.8	20	

Qualifiers:

RL - Analyte reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R104609
Sample ID: LRB	Method Blank				Run: ICPMS4-C_080721B				07/21/08 16:56
Aluminum	0.0006	mg/L	0.0001						
Antimony	9E-06	mg/L	4E-06						
Arsenic	ND	mg/L	4E-05						
Beryllium	ND	mg/L	4E-06						
Cadmium	ND	mg/L	3E-06						
Chromium	ND	mg/L	4E-05						
Cobalt	ND	mg/L	5E-06						
Copper	ND	mg/L	3E-05						
Lead	ND	mg/L	3E-06						
Manganese	ND	mg/L	6E-06						
Molybdenum	ND	mg/L	9E-06						
Nickel	0.0003	mg/L	3E-05						
Selenium	ND	mg/L	0.0001						
Silver	9E-06	mg/L	7E-06						
Thallium	ND	mg/L	4E-06						
Tin	1.0E-05	mg/L	8E-06						
Titanium	ND	mg/L	6E-05						
Uranium	ND	mg/L	2E-06						
Vanadium	ND	mg/L	3E-05						
Zinc	0.0007	mg/L	3E-05						
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS4-C_080721B				07/21/08 17:02
Aluminum	0.0472	mg/L	0.0010	93	85	115			
Antimony	0.0508	mg/L	0.0010	102	85	115			
Arsenic	0.0503	mg/L	0.0010	101	85	115			
Beryllium	0.0491	mg/L	0.0010	98	85	115			
Cadmium	0.0510	mg/L	0.0010	102	85	115			
Chromium	0.0498	mg/L	0.0010	100	85	115			
Cobalt	0.0489	mg/L	0.0010	98	85	115			
Copper	0.0506	mg/L	0.0010	101	85	115			
Lead	0.0494	mg/L	0.0010	99	85	115			
Manganese	0.0463	mg/L	0.0010	93	85	115			
Molybdenum	0.0488	mg/L	0.0010	98	85	115			
Nickel	0.0501	mg/L	0.0010	100	85	115			
Selenium	0.0518	mg/L	0.0010	104	85	115			
Silver	0.0196	mg/L	0.0010	98	85	115			
Thallium	0.0490	mg/L	0.0010	98	85	115			
Tin	0.0510	mg/L	0.0010	102	85	115			
Titanium	0.0481	mg/L	0.0010	96	85	115			
Uranium	0.0483	mg/L	0.00030	97	85	115			
Vanadium	0.0488	mg/L	0.0010	98	85	115			

Qualifiers:

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ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									Batch: R104609
Sample ID: LFB	Laboratory Fortified Blank				Run: ICPMS4-C_080721B				07/21/08 17:02
Zinc	0.0584	mg/L	0.0010	115	85	115			
Sample ID: C08061327-001KMS4	Post Digestion Spike				Run: ICPMS4-C_080721B				07/21/08 22:59
Aluminum	0.0486	mg/L	0.10	90	70	130			
Antimony	0.0516	mg/L	0.050	100	70	130			
Arsenic	0.0500	mg/L	0.0010	98	70	130			
Beryllium	0.0442	mg/L	0.010	88	70	130			
Cadmium	0.0492	mg/L	0.010	96	70	130			
Chromium	0.0478	mg/L	0.050	95	70	130			
Cobalt	0.0468	mg/L	0.010	93	70	130			
Copper	0.0536	mg/L	0.010	92	70	130			
Lead	0.0494	mg/L	0.050	98	70	130			
Manganese	0.171	mg/L	0.010	92	70	130			
Molybdenum	0.0498	mg/L	0.10	96	70	130			
Nickel	0.0528	mg/L	0.050	91	70	130			
Selenium	0.0489	mg/L	0.0010	98	70	130			
Silver	0.0119	mg/L	0.010	60	70	130			S
Thallium	0.0495	mg/L	0.10	99	70	130			
Tin	0.0502	mg/L	0.10	100	70	130			
Titanium	0.0484	mg/L	0.10	95	70	130			
Uranium	0.152	mg/L	0.00030	133	70	130			S
Vanadium	0.0484	mg/L	0.10	96	70	130			
Zinc	0.497	mg/L	0.010		70	130			A
Sample ID: C08061327-001KMSD4	Post Digestion Spike Duplicate				Run: ICPMS4-C_080721B				07/21/08 23:06
Aluminum	0.0470	mg/L	0.10	87	70	130	0.0	20	
Antimony	0.0515	mg/L	0.050	100	70	130	0.2	20	
Arsenic	0.0511	mg/L	0.0010	100	70	130	2.1	20	
Beryllium	0.0437	mg/L	0.010	87	70	130	1.1	20	
Cadmium	0.0496	mg/L	0.010	97	70	130	0.7	20	
Chromium	0.0488	mg/L	0.050	97	70	130	0.0	20	
Cobalt	0.0466	mg/L	0.010	93	70	130	0.3	20	
Copper	0.0550	mg/L	0.010	95	70	130	2.5	20	
Lead	0.0496	mg/L	0.050	99	70	130	0.0	20	
Manganese	0.170	mg/L	0.010	91	70	130	0.5	20	
Molybdenum	0.0508	mg/L	0.10	98	70	130	0.0	20	
Nickel	0.0539	mg/L	0.050	93	70	130	2.0	20	
Selenium	0.0504	mg/L	0.0010	101	70	130	3.0	20	
Silver	0.0125	mg/L	0.010	63	70	130	5.0	20	S
Thallium	0.0501	mg/L	0.10	100	70	130	0.0	20	
Tin	0.0502	mg/L	0.10	100	70	130	0.0	20	

Qualifiers:

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ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

S - Spike recovery outside of advisory limits.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Batch: R104609	
Sample ID: C08061327-001KMSD4	Post Digestion Spike Duplicate				Run: ICPMS4-C_080721B			07/21/08 23:06	
Titanium	0.0489	mg/L	0.10	96	70	130	0.0	20	
Uranium	0.151	mg/L	0.00030	131	70	130	0.5	20	S
Vanadium	0.0492	mg/L	0.10	97	70	130	0.0	20	
Zinc	0.497	mg/L	0.010		70	130	0.1	20	A
Method: E350.1								Batch: B_R114068	
Sample ID: MBLK	Method Blank				Run: SUB-B114068			07/15/08 10:58	
Nitrogen, Ammonia as N	ND	mg/L	0.02						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-B114068			07/15/08 10:59	
Nitrogen, Ammonia as N	1.02	mg/L	0.10	103	90	110			
Sample ID: B08070675-001BMS	Sample Matrix Spike				Run: SUB-B114068			07/15/08 11:19	
Nitrogen, Ammonia as N	0.987	mg/L	0.10	99	90	110			
Sample ID: B08070675-001BMSD	Sample Matrix Spike Duplicate				Run: SUB-B114068			07/15/08 11:21	
Nitrogen, Ammonia as N	1.01	mg/L	0.10	101	90	110	2.0	10	
Method: E351.2								Batch: B_R113960	
Sample ID: MBLK	Method Blank				Run: SUB-B113960			07/14/08 08:40	
Nitrogen, Kjeldahl, Total as N	0.1	mg/L	0.03						
Sample ID: LFB	Laboratory Fortified Blank				Run: SUB-B113960			07/14/08 08:41	
Nitrogen, Kjeldahl, Total as N	5.33	mg/L	0.50	104	90	110			
Sample ID: B08070864-001CMS	Sample Matrix Spike				Run: SUB-B113960			07/14/08 08:53	
Nitrogen, Kjeldahl, Total as N	5.89	mg/L	0.50	113	90	110			S
Sample ID: B08070864-001CMSD	Sample Matrix Spike Duplicate				Run: SUB-B113960			07/14/08 08:53	
Nitrogen, Kjeldahl, Total as N	5.94	mg/L	0.50	114	90	110	0.9	10	S

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S - Spike recovery outside of advisory limits.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E353.2									Batch: R104395
Sample ID: MBLK-1	Method Blank				Run: TECHNICON_080717A				07/17/08 11:30
Nitrogen, Nitrate+Nitrite as N	ND	mg/L	0.03						
Sample ID: LCS-2	Laboratory Control Sample				Run: TECHNICON_080717A				07/17/08 11:32
Nitrogen, Nitrate+Nitrite as N	2.59	mg/L	0.10	104	90	110			
Sample ID: C08070560-001DMS	Sample Matrix Spike				Run: TECHNICON_080717A				07/17/08 11:47
Nitrogen, Nitrate+Nitrite as N	2.28	mg/L	0.10	101	90	110			
Sample ID: C08070560-001DMSD	Sample Matrix Spike Duplicate				Run: TECHNICON_080717A				07/17/08 11:50
Nitrogen, Nitrate+Nitrite as N	2.30	mg/L	0.10	102	90	110	0.9	10	
Method: SW8015B									Batch: B_33452
Sample ID: LCS-33452	Laboratory Control Sample				Run: SUB-B113819				07/10/08 09:52
Methanol	52	mg/L	1.0	103	70	130			
Surr: sec-Butyl Alcohol			1.0	101	80	120			
Sample ID: MB-33452	Method Blank				Run: SUB-B113819				07/10/08 10:16
Methanol	ND	mg/L	1.0						
Surr: sec-Butyl Alcohol			1.0	98	80	120			
Sample ID: B08070670-001JMS	Sample Matrix Spike				Run: SUB-B113819				07/10/08 11:49
Methanol	51	mg/L	1.1	103	70	130			
Surr: sec-Butyl Alcohol			1.1	102	80	120			
Sample ID: B08070670-001JMSD	Sample Matrix Spike Duplicate				Run: SUB-B113819				07/10/08 12:12
Methanol	50	mg/L	1.1	99	70	130	3.6	20	
Surr: sec-Butyl Alcohol			1.1	101	80	120			

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015M as D									Batch: 19047
Sample ID: MB-19047	Method Blank				Run: FID2-C_080709A				07/08/08 13:54
Diesel Range Organics (DRO)	ND	mg/L	0.03						
Surr: o-Terphenyl			0.002	94	60	120			
Sample ID: LCS-19047	Laboratory Control Sample				Run: FID2-C_080709A				07/08/08 14:40
Diesel Range Organics (DRO)	1.8	mg/L	1.0	90	57	112			
Surr: o-Terphenyl			0.020	90	67	117			
Sample ID: LCSD-19047	Laboratory Control Sample Duplicate				Run: FID2-C_080709A				07/08/08 17:40
Diesel Range Organics (DRO)	1.6	mg/L	1.0	79	57	112	12	20	
Surr: o-Terphenyl			0.020	84	67	117	0.0	20	
Sample ID: C08070223-001FMS	Sample Matrix Spike				Run: FID2-C_080709A				07/08/08 19:14
Diesel Range Organics (DRO)	2.3	mg/L	1.0	74	50	115			
Surr: o-Terphenyl			0.020	73	60	120			
Sample ID: C08070223-001FMSD	Sample Matrix Spike Duplicate				Run: FID2-C_080709A				07/08/08 20:00
Diesel Range Organics (DRO)	2.4	mg/L	1.0	76	50	115	1.3	20	
Surr: o-Terphenyl			0.020	84	60	120			
Method: SW8015M as G									Batch: R103852
Sample ID: LCS_0707HP207r	Laboratory Control Sample				Run: PIDFID1-C_080707B				07/07/08 14:58
Gasoline Range Organics (GRO)	0.205	mg/L	0.040	103	82	120			
Surr: Trifluorotoluene			0.0020	104	80	120			
Sample ID: MBLK_0707HP208r	Method Blank				Run: PIDFID1-C_080707B				07/07/08 15:33
Gasoline Range Organics (GRO)	ND	mg/L	0.02						
Surr: Trifluorotoluene				100	80	120			
Sample ID: C08070237-001IMS	Sample Matrix Spike				Run: PIDFID1-C_080707B				07/08/08 06:54
Gasoline Range Organics (GRO)	3.98	mg/L	0.36	100	70	130			
Surr: Trifluorotoluene			0.0020	96	80	120			
Sample ID: C08070237-001IMSD	Sample Matrix Spike Duplicate				Run: PIDFID1-C_080707B				07/08/08 07:30
Gasoline Range Organics (GRO)	4.07	mg/L	0.36	102	70	130	2.2	20	
Surr: Trifluorotoluene			0.0020	99	80	120	0.0	10	

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8021B									Batch: R103848
Sample ID: LCS_0707HP206r	Laboratory Control Sample				Run: PIDFID1-C_080707A				07/07/08 14:22
Benzene	10	ug/L	0.50	103	80	120			
Ethylbenzene	11	ug/L	0.50	105	80	120			
m+p-Xylenes	21	ug/L	0.50	103	80	120			
o-Xylene	10	ug/L	0.50	102	80	120			
Toluene	11	ug/L	0.50	104	80	120			
Surr: Trifluorotoluene			0.50	103	80	120			
Sample ID: MBLK_0707HP208r	Method Blank				Run: PIDFID1-C_080707A				07/07/08 15:33
Benzene	ND	ug/L	0.05						
Ethylbenzene	ND	ug/L	0.05						
m+p-Xylenes	ND	ug/L	0.1						
o-Xylene	0.1	ug/L	0.05						
Toluene	0.1	ug/L	0.05						
Surr: Trifluorotoluene				102	80	120			
Sample ID: C08070237-001HMS	Sample Matrix Spike				Run: PIDFID1-C_080707A				07/08/08 05:43
Benzene	220	ug/L	1.0	103	80	120			
Ethylbenzene	210	ug/L	1.0	104	80	120			
m+p-Xylenes	420	ug/L	2.0	101	80	120			
o-Xylene	210	ug/L	1.0	102	80	120			
Toluene	240	ug/L	1.0	102	80	120			
Surr: Trifluorotoluene			0.50	99	80	120			
Sample ID: C08070237-001HMSD	Sample Matrix Spike Duplicate				Run: PIDFID1-C_080707A				07/08/08 06:19
Benzene	220	ug/L	1.0	102	80	120	0.4	20	
Ethylbenzene	210	ug/L	1.0	103	80	120	1.2	20	
m+p-Xylenes	420	ug/L	2.0	100	80	120	1.2	20	
o-Xylene	210	ug/L	1.0	101	80	120	0.9	20	
Toluene	230	ug/L	1.0	101	80	120	1.1	20	
Surr: Trifluorotoluene			0.50	105	80	120	0.0	10	

Qualifiers:

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ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Altela Inc
Project: Not Indicated

Report Date: 08/02/08
Work Order: C08070237

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW9020B									Batch: 19104
Sample ID: MB-19104	Method Blank				Run: TOXBOX_080712A				07/11/08 10:22
Organic Halides, Total	ND	mg Cl/L	0.03						
Sample ID: LCS-19104	Laboratory Control Sample				Run: TOXBOX_080712A				07/11/08 10:38
Organic Halides, Total	0.950	mg Cl/L	0.10	95	80	120			
Sample ID: C08070223-001GMS	Sample Matrix Spike				Run: TOXBOX_080712A				07/11/08 11:34
Organic Halides, Total	1.03	mg Cl/L	0.10	103	80	120			
Sample ID: C08070223-001GMSD	Sample Matrix Spike Duplicate				Run: TOXBOX_080712A				07/11/08 12:03
Organic Halides, Total	1.09	mg Cl/L	0.10	109	80	120	5.7	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Chain of Custody and Analytical Request Record

Page 1 of 2

PLEASE PRINT- Provide as much information as possible.

Company Name:	Project Name, PWS, Permit, Etc.	Sample Origin	EPA/State Compliance:
Altela Inc.	Oxy CW	State: NM	Yes ☐ No ☐
Report Mail Address:	**Contact Name:** Phone/Fax:	**Email:**	**Sampler: (Please Print)**
2450 Alcon SE Suite 200 Albuquerque, NM 87106	Matthew Broff (303) 993-1950	matthew.broff@altelainc.com	Michael Wimberly
Invoice Address:	**Invoice Contact & Phone:**	**Purchase Order:**	**Quote/Bottle Order:**
Same	Bill Huitt (505) 923-4140		2860/23571

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ A2LA
☐ GSA ☐ EDD/EDT (Electronic Data)
☐ POTW/WWTP Format:_____
☐ State: _____ ☐ LEVEL IV
☐ Other: _____ ☐ NELAC

Number of Containers
Sample Type: A Air W Water S Soils/Solids V Vegetation B Bioassay O Other

ANALYSIS REQUESTED

Normal Turnaround (TAT)

RUSH

Contact ELI prior to **RUSH** sample submittal for charges and scheduling – See Instruction Page

Comments:

Shipped by: FedEx
Cooler ID(s): C-3024
Receipt Temp 5 °C
On Ice: Yes No
Custody Seal Y N
Bottles/Coolers C B
Intact Y N
Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Diesel Range Organics	Cond, OA Calc, pH, etc	Solids, Total Dissolved	Total Organic Halogens	Chloride	Gasoline Range Organics	Methanol	BTEX	Nitrogen, Nitrate (Dissolved), ... etc	SEE ATTACHED	Normal Turnaround (TAT)	RUSH	Comments
1	Oxy CW	7/1/08	4:00pm	W1L	X												Grab
2	↑	7/1/08	4:13pm	W1L		X											↑
3		7/1/08	4:20pm	W1L			X										
4		7/1/08	4:28pm	W250mL				X									
5		7/1/08	4:33pm	W250mL					X								
6		7/1/08	4:36pm	W40mL						X							
7		7/1/08	4:47pm	W40mL							X						
8	↓	7/1/08	4:53pm	W40mL								X					
9	Oxy CW	7/1/08	5:01pm	W500mL									X				Grab
10														X			

LABORATORY USE ONLY C08070237

Custody Record MUST be Signed

Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Michael Wimberly	7/2/08 / 4:15pm	Michael Wimberly	Jennifer McVay	7-3-08 (3:30	Jennifer McVay
Relinquished by (print):	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
			Received by Laboratory:	Date/Time:	Signature:

Sample Disposal: Return to Client: _____ Lab Disposal: _____

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested.
This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.
Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: Altela Inc.	Project Name, PWS, Permit, Etc.: Oxy CW		Sample Origin State: NM	EPA/State Compliance: Yes ☐ No ☐
Report Mail Address: 2450 Alamo SE Suite 200 Albuquerque, NM ~~8780~~ 87106	Contact Name: Matthew Bruff	Phone/Fax: (303) 993-1950	Email: matthew.bruff@altelainc.com	Sampler: (Please Print) Michael Wimberly
Invoice Address: Same	Invoice Contact & Phone: Bill Huitt (505) 923-4140		Purchase Order:	Quote/Bottle Order: 2860/23571

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

☐ DW ☐ GSA ☐ POTW/WWTP ☐ State: ______ ☐ Other: ______

☐ A2LA ☐ EDD/EDT (Electronic Data) Format: ______ ☐ LEVEL IV ☐ NELAC

Number of Containers; Sample Type: A W S V B O (Air Water Soils/Solids Vegetation Bioassay Other)

ANALYSIS REQUESTED: Metals by ICP/ICPMS, etc...; Nitrogen Ammonia etc...; SEE ATTACHED; Normal Turnaround (TAT)

RUSH — Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Metals by ICP/ICPMS, etc...	Nitrogen Ammonia etc...	Comments
1 Oxy CW	7/1/08	5:05pm	W500mL	X		Grab
2 Oxy CW	7/1/08	5:11pm	W500mL		X	Grab
3						
4						
5						
6						
7						
8						
9						
10						

LABORATORY USE ONLY: Shipped by: FedEx; Cooler ID(s): C-3024; Receipt Temp 5 °C; On Ice: (Yes) No; Custody Seal (Y) N; Bottles/Coolers B (C); Intact (Y) N; Signature Match (Y) N; C08070237

Custody Record MUST be Signed

Relinquished by (print): Michael [signature]	Date/Time: 7/2/08 / 4:15pm	Signature:	Received by (print): Jennifer McVay	Date/Time: 7-3-08 13:30	Signature: [signature]
Relinquished by (print): Michael Wimberly	Date/Time:	Signature:	Received by (print):	Date/Time:	Signature:
Sample Disposal: Return to Client: ______	Lab Disposal: ______		Received by Laboratory:	Date/Time:	Signature:

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

Energy Laboratories Inc
Workorder Receipt Checklist

C08070237

Altela Inc

Login completed by: Edith McPike

Date and Time Received: 7/3/2008 1:30 PM

Reviewed by:

Received by: jm

Reviewed Date:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	5°C On Ice
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Contact and Corrective Action Comments:

None

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Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

Date: 02-Aug-08

CLIENT: Altela Inc
Project: Not Indicated
Sample Delivery Group: C08070237

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS
Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS
The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES
All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS USING EPA 505
Data for Atrazine and Simazine are reported from EPA 525.2, not from EPA 505. Data reported by ELI using EPA method 505 reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTFICATIONS:
USEPA: WY00002; FL-DOH NELAC: E87641; Arizona: AZ0699; California: 02118CA
Oregon: WY200001; Utah: 3072350515; Virginia: 00057; Washington: C1903

ISO 17025 DISCLAIMER:
The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

Test Station:

Tower:

												Test Conditions / Notes
												Start Date/Time
												End Date/Time
0	0	0	0	0	0	0	0	0	0	0	0	Hours between Marks
												DW Tank Height Delta [inches]
												BW Tank Height Delta [inches]
												PW Tank Height Delta [inches]
												CW Tank Height Delta [inches]
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	DW Rate [gal/hr] BW Rate [gal/hr] PW Rate [gal/hr] CW Rate [gal/hr] (PW-CW) Rate [gal/hr] VW [gal/hr] *Calculated* phi [dim] VW/BW Treatment Rate (per Container) [Bbl/day] Energy Reuse Factor, f Stripping Rate (%)
												PW & CW Equalized?
												PW Flow [gal/min]
												Air Velocity [ft/min]
												Air Temperature [°F]
												Air Pressure [in H2O]
												Boiler NG Pressure [in H2O]

Test Station:

Tower:

												Steam Pressure [psig]
												TDS of DW [µS]
												TDS of CW [µS]
												TDS of DW, Left [µS]
												TDS of DW, Right [µS]
												Reading Date/Time
												1 Gallon DW Time [min]
												1 Gallon DW Time [sec]
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	DW gal/hr
												Tower Top Temp [F]
												PWT Right (°F)
												PWT Left (°F)
												COND Channel Right (F)
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												Relative Humidity (%)

Contact: Shelley Barratt

Altela, Inc.
One Technology Center
2450 Alamo Avenue SE, Ste. 200
Albuquerque, NM 87106
(505) 923-4140
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NEWS RELEASE

16 July 2008
For Immediate Release
Contact: Shelley Barratt, (505) 923-4142

Altela, Inc. Turns Energy Industry Waste into New Water Source in the Arid West

Treating Oilfield Produced Water and Discharging Pure Water into Colorado River

Rifle, Colorado – Altela, Inc., in cooperation with Laramie Energy II, LLC, produced and released clean distilled water, purer than drinking water, from their treatment system into the Colorado River for the first time on July 3rd 2008. This new water source comes from Altela's ability to treat oilfield fluids directly at the wellhead.

Altela's ARS-4000 system removes all contaminates from the water co-produced with natural gas production. Altela and Laramie Energy received precedent-setting environmental regulatory approval to discharge and beneficially re-use clean, treated frac and produced water from the patented AltelaRain℠ system for irrigation, commercial and industrial uses, including discharging into the Colorado River Basin for valuable in-stream flow rights.

Across the western United States alone, more than five billion gallons per day of brackish water is brought to the surface during oil and gas production. This waste water has historically been re-injected deep back into the ground where it came from, never to be used again. Turning this waste water into usable water benefits farmers, ranchers, and communities across the water-starved western United States and helps address the country's water and energy security.

Laramie Energy's President, Bruce Payne, states, "Our collaboration with the Altela team and its revolutionary technology represents a unique and compelling opportunity to lower our costs of produced water handling and disposal while creating a new source of clean water in the arid west in support of responsible energy production." Bob Hea, V.P. of Laramie Energy, said, "Altela has demonstrated its ability to turn frac water and brackish produced water into clean distilled water. This clean water meets standards for re-use, which increases environmental efficiency of natural gas production by limiting the amount of produced water having to be disposed of as waste. In addition, by treating our water at the well-site, we are able to reduce the amount of trucking typically associated with hauling this waste product away, which is a huge benefit to area residents."

"We are excited about our successful venture with Laramie Energy," said Ned Godshall, CEO of Altela. "Laramie Energy is visionary in its commitment to environmentally sustainable energy production and we are honored to be their partner in reducing production waste handling costs while creating a valuable water asset in the over-appropriated Colorado River Basin. Rarely does such a win-win solution exist."

About Laramie Energy II, LLC www.laramie-energy.com

Laramie Energy II, LLC is a Denver-based company primarily focused on finding and developing natural gas reserves from unconventional gas reservoirs within the U.S. Rockies. Laramie Energy is backed by over $300 million of equity capital commitments funded by the Company's management team, EnCap Investments, Avista Capital, and DLJ Merchant Banking Partners (an affiliate of Credit Suisse Securities). In addition, Laramie Energy is debt financed by JPMorgan Chase Bank, BNP Paribas, and Wells Fargo Bank.

About Altela, Inc. www.altelainc.com

Altela, Inc. manufactures and services water treatment systems for the oil & gas industry based on a fundamentally different water desalination/decontamination solution inspired by nature itself. Through the use of its proprietary, patented AltelaRain^{SM} technology, Altela desalinates and decontaminates highly challenged water without the energy intensive equipment, pressure or high temperatures of other water desalination technologies – representing the first new low-cost water desalination technology in the last 50 years. The company has assembled a strong intellectual property position, experienced management team, and strategic partners. By removing all contaminants from highly challenged E&P waste water and brackish water, Altela converts these contaminated water liabilities into clean water assets, thereby removing our customer's environmental liability and high treatment/disposal costs. Altela turns waste into water, naturally.

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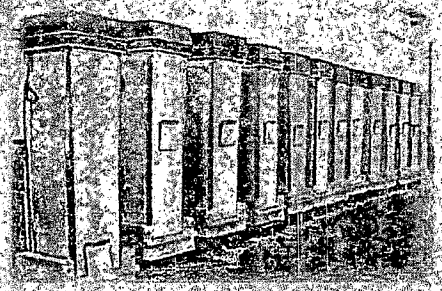
MARCH/APRIL 2008/VOLUME 8/NO. 2

CASE STUDY

Positive Results

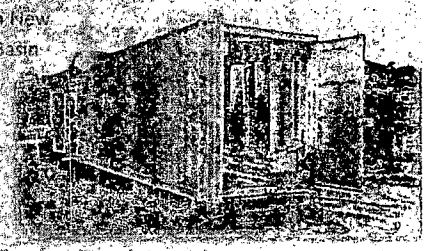
Altela's first product is in the field with five commercial, revenue-generating systems in operation at natural gas wells in the San Juan Basin of northwestern New Mexico. Extensive independent-laboratory testing over multiple months in the field have shown that TDS levels of these systems' distillate water is very low (typically about 20 ppm – more than 10 times less than drinking water), and the levels of organics, metals, and radioactive compounds are either undetectable or several orders of magnitude below even the strictest drinking water standards. Because the systems continuously monitor the TDS level of both influent and treated effluent streams, there's a high degree of control and certainty over the clean water that's discharged or utilized by the customer.

The technology is designed to minimize maintenance and operation costs. Use of plastics cuts many maintenance issues related to scaling, fouling or corrosion of metal systems. Moving parts are few, and consist of proven, robust, off-the-shelf components, such as low-pressure water pumps and air blowers. The system operates at ambient pressures and modest temperatures, and as such, has few mechanical failures in plumbing and related systems. A remote monitoring ability also allows field operators to detect system problems early and take remedial action before major failures take place.



AltelaRain towers at Altela's Albuquerque manufacturing facility

AltelaRain system in New Mexico's San Juan Basin



Conclusion

Because of Altela's successful track record in the oil & gas industry to date, the company is now unveiling this technology for other uses, such as mineral extraction, concentrate "tail-water" from large-scale desalination systems, industrial wastewater treatment in the semiconductor and manufacturing industries, food and beverage industries, cleaning water used at power plants, and for production of potable water from seawater. This technology offers the ability and affordability to help address the world's water shortages. The AltelaRain process offers another solution to water desalination, brackish water treatment and wastewater remediation. **IWW**

About the Authors: Ned Godshall, Ph.D., is the CEO of Altela Inc. Matthew Bruff is general counsel and chief development officer (CDO) of the company. With offices in Albuquerque, NM, and Englewood, CO, Altela desalinates and decontaminates highly challenged water without the energy intensive equipment, high temperatures or high pressures of other water desalination technologies. Contact: 505-923-4140, info@altelainc.com or www.altelainc.com

May 2008

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Bush signs bill to clean up 'produced water'

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DENVER — Federal legislation to explore putting groundwater pumped out during oil and gas production to use was signed into law Thursday.

The bill signed by President Bush directs the Interior Department to assess the feasibility of recovering and cleaning up the millions of gallons of water that are reinjected into the ground or disposed of during oil and gas development.

The water's fate has become contentious as natural gas development has increased in the Rockies. Large volumes of water are pumped out during coal-bed methane production. Pumping groundwater relieves the pressure that traps the gas in the coal seams.

"Every day, 2 million gallons of 'produced water' are wasted in this nation, unfit for any use," said Sen. Ken Salazar, D-Colo., one of the bill's sponsors.

New Mexico Sens. Jeff Bingaman, a Democrat, and Pete Domenici, a Republican, and Sen. Mike Enzi, R-Wyo., were the other sponsors.

The House version of the bill was approved last year.

"This bill will change an energy-industry problem into an opportunity, not just for oil and gas producers but for everyone else who would benefit from increased supplies of useable water," said Rep. Mark Udall, D-Colo., the bill's House sponsor.

The bill authorizes federal grants for pilot projects to test technology that could make the water usable for irrigation, industry or municipal use. It calls for providing federal funds, which would match up to 50 percent of the total cost, for at least one project each in Colorado, New Mexico, Utah and Wyoming with other projects possible in Arizona, California and Nevada.

A recent report by the Colorado Geological Survey found that coal-bed methane production in the southern part of the state was depleting area water by an estimated 2,500 acre feet a year. That amounted to roughly 815 million gallons of water that aren't returned to streams and rivers in the Raton Basin.

The agency has said the current total is likely quite a bit lower because of wells temporarily shut down in the northern part of the basin.

In Montana, state officials and landowners worry that Wyoming's coal-bed methane development is harming water quality and depleting streams and groundwater. The state of Wyoming and the energy industry are suing to overturn Montana's water-quality standards aimed at preventing pollution from Wyoming's natural gas production.

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May 29, 2008 4:00 AM PDT

Squeezing water out of oil

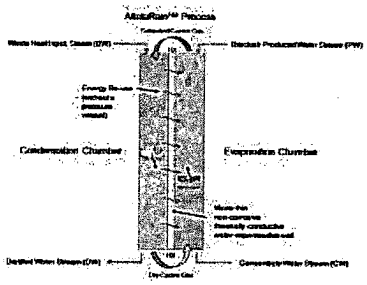
Posted by Stefanie Olsen 4 comments

Excavating oil and gas has a little-known byproduct that costs the energy industry billions of dollars annually in removal--smelly sludge water.

A New Mexico start-up is trying to deal with the problem. Privately held Altela has developed a hydrothermal system that aims to turn the ancient groundwater extracted in oil or gas production into clean drinking water. The company calls its system "clean technology" because it can produce potable water with less energy than other desalinization methods, such as carbon filtration, without the use of pumps. Its technology can also be considered more energy efficient than hiring 18-wheel trucks to port the water away for burial in specialized wells, according to company CEO Ned Godshall.

"There's a great need for cleaning up this water rather than putting it back three miles underground, which is what's happening," Godshall said in an interview with CNET News.com.

So-called produced water is the oil and gas industry's dirty big secret. In the United States, an average of 9 out of every 10 gallons of liquid extracted in oil or gas production is salty, mineralized water that's thought to be between 30 million and 60 million years old. (In the Middle East, the ratio is more like three to one.) In 1993, for example, the energy industry generated 1.09 trillion gallons of produced water--enough to flow over Niagara Falls for nine days, according to the scientific group Produced Water Society.



A schematic of Altela's desalinization process. Click the image to see an enlarged view.

After production, the onus is on the energy companies to separate the water from oil, and treat the water before it can be reused, or otherwise truck it away for disposal "down hole." That's because it typically contains oil and metals that can be harmful to the environment. Offshore oil rigs, for example, must ensure that they dilute produced water to 29 parts per million, or something like the equivalent of an eyedropper of oil (produced water) in a five-gallon bucket, before it can put it back into the Gulf of Mexico. Anything higher will cause a sheen on the ocean.

For that reason, the energy industry must invest in equipment like reverse osmosis systems to clean the water. Reverse osmosis separates silt or salt from freshwater by moving it through a semipermeable membrane with applied pressure, but it can be expensive because of the energy needed to produce large amounts of pressure. At land excavation sites, energy companies will also spend as much as $63 a barrel to truck away the water for removal, according to Altela's estimations.

"It's kind of a black magic industry," said Brad Tinder, president of Maverick Energy Services, an oil and gas consultant who's on the board of the Produced Water Society. "There are so many different technologies that aid in the removal of oil from water. And all have professed over the years to do it the best. But it is a million-dollar piece of equipment that does not produce the energy industry any money."

That's where Altela hopes to be of some use. The three-year-old company, which first unveiled its technology in March 2007, said it can take 90 percent of produced water and turn it into clean water.

The standard system, which is about the size of a residential water heater, includes boilers, holding tanks, water treatment towers, and a satellite-based communications system for remote monitoring.

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Innovation in energy and environmental technol overdue. But it's here now--and growing fast. To everything from water to wind turbines, CNET N Martin LaMonica and other CNET writers serve green tech news and commentary.

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"Our system goes out to a well site, and instead of it venting methane into the atmosphere, we use it to make steam, and that steam is what drives our process of desalinization."

Beyond that detail, Godshall wouldn't divulge how the patent-pending technology works. But he said key to Altela's system is that it's made with a low-cost plastic. It's light enough to be ported to excavation sites in shipping containers.

What's unclear is exactly how much the system costs, and how it differs from the cost of other technologies. Godshall said that he doesn't sell or lease his system. Rather, Altela charges the energy company per gallon to convert produced water into reusable water. Without disclosing the per-gallon conversion fee, he said it's as much as "120 times less money than trucking away the water." And it's less environmentally damaging.

"The liability of produced water is converted into an asset of clean water," Godshall said.

What happens to that water? Godshall said the company deals with the clean water in one of two ways for its four current customers, which include New Mexico-based Yates Petroleum. (It has seven systems installed in areas around New Mexico, Colorado, and Canada.) One is to give away the water to local ranchers to feed cattle or green their land.

The other is to reuse the water for so-called frac jobs, short for fracturing. Fracturing is a process in which energy companies use huge amounts of clean water to exert energy on a rock underground in order to release new gas and oil.

It's a fairly new and growing method of finding natural resources. Tinder said, for example, that his company has worked with Siemans Water Technology in Arkansas and in the Black Hills of Wyoming on recovery of produced water for frac jobs. He said the industry often takes freshwater from lakes, rivers, and streams for frac jobs, but because water is such a precious commodity, it's trying to reuse produced water several times over.

"We're using carbon filtration, but that takes a lot of power because you're running pumps and filters," said Tinder, who wasn't familiar with Altela's technology.

Still, the technology helps out in a high-need field. Tinder said Shell, for example, was sending 30 trucks in each day to an excavation site in Wyoming to haul out 3,000 gallons of produced water per truck, 300 miles away for disposal. With desalinization technology, it cut down the process to three trucks per day, Tinder said.

For its part, Altela is in talks with investors to raise $26 million in a series B round of funding to expand its manufacturing facility in Albuquerque. It has already raised about $10 million from venture capitalists, including EnerTech Ventures in Philadelphia.

After oil and gas, Altela hopes to tackle the treatment of industrial wastewater, such as the semiconductor industry or the food and beverage business.

"The industry has huge needs to get rid of and reuse dirty water," Godshall said.

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Altela Cleans Up Dirty Water's Act

The water- purifying and desalination company looks to raise a second round of funding to expand the use of its technology that curbs the harsh water disposal methods used by companies that drill for oil and gas.

by: Rachel Barron

May 21, 2008

Altela, a company that claims it can make the water extracted during oil and gas drilling drinkable, is seeking $26 million in a second round of funding.

At the Dow Jones Environmental Ventures conference in San Mateo, Calif., this week, CEO Ned Godshall said the Albuquerque, N.M.-based company hopes to close the round in the third quarter.

In May, the company announced that it had snagged $7.1 million from CCS Income Trust and other investors (see Investors High on Water). The company has raised a total of $10 million in funding so far.

Altela plans to use the new financial infusion to expand its manufacturing capacity and to grow its sales beyond the United States and Canada.

Founded in 2005, Altela has developed a water-purifying and desalination system that uses thermal distillation, an energy-intensive process of heating dirty or salty water and then capturing fresh water as vapor rises from the mixture.

Thermal distillation isn't new. "It's what I call a 10th-grade science experiment," Godshall said.

But the company claims it has figured out how to make the process more energy efficient, making three gallons of water using the energy it normally would take to make one.

Godshall wouldn't reveal how the company does it. But he said the technology is made of a cheap plastic material, which helps keep costs down, and the whole system fits into a single shipping container that is trucked in and dropped off at a drilling site.

Today, oil and gas companies have to use big rigs to haul away the salty polluted water from drilling. The companies then have a few ways in which they can dispose of the water, including injecting it into specially created wells.

By using Altela's technology, oil and gas companies can cut nine out of 10 truck trips, Godshall said, making the company's approach cheaper and more environmentally friendly.

In spite of a rapidly growing demand for water, a market in the billions of dollars and venture capitalists calling water-treatment technologies the Next Big Thing, water investments have been scarce for years (see Parched for VC Funding, VCs Say Water Industry Should Take Lessons From Energy and Hedge Fund Picks: Solar, Energy Storage, Water ... and Biofuels).

But those tides are starting to change (see Water Investment Picks Up and Water Investment Drought Over?). Among the water-purification companies that have scored funding in the last year are Ioteq, Purfresh and Cascade EcoSolutions. Desalination companies Seven Seas Water, Advanced Desalination Technologies, Tampa Bay Water and Stonybrook Purification also have raised cash.

Most of those desalination technologies use membranes to filter out impurities.

But Godshall claims membrane technology can't handle high levels of salt. "Reverse osmosis pretty

much peters out at the level of sea water," he said, adding the brackish water that surfaces when drilling for oil and gas is saltier than the oceans.

Quos, which counts Vinod Khosla among its backers, also uses no membrane. Ioteq and Purfresh also don't use membranes, but are targeting a different market - food.

Godshall claims that Altela-treated water has 20 times less salt then a glass of tap water and is pure enough to drink, something he said he has done many times.

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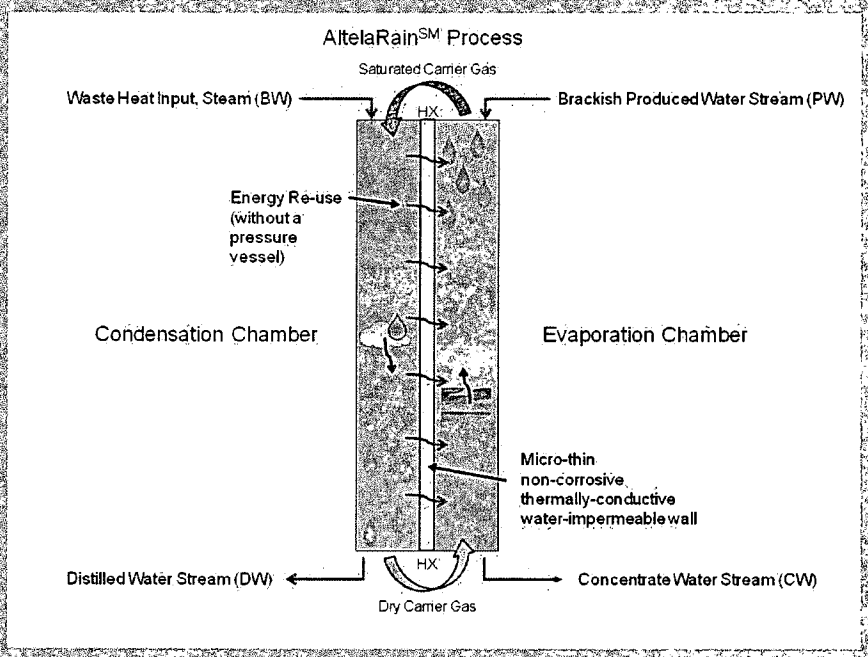

Figure 1: AltelaRain^{SM} Process

Water quality test results received from independent water quality labs demonstrate the very high quality of treated water obtained from this simple technology for the treatment of highly-challenged produced water. Total dissolved solids were reduced 99.8% from 41,700 mg/L to 106 mg/L. Chloride was reduced 99.8% from 25,300 mg/L to 59 mg/L. Similarly, benzene levels were reduced from 450 µg/L to non-detectable following AltelaRain^{SM} treatment.

In summary, the key advantages of the AltelaRain^{SM} technology include:

- Reduces water hauling/trucking costs
- High thermal efficiency
- Unattended operation
- No pre- or post-treatment required
- No membranes to replace
- Easily sized to location's need
- Extremely high quality of treated water
- No fouling or scaling
- Low operating cost
- Operates at ambient pressure
- Operates at low temperature
- Uses low-grade waste heat to operate

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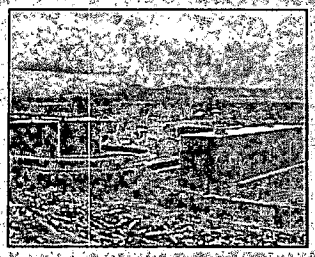

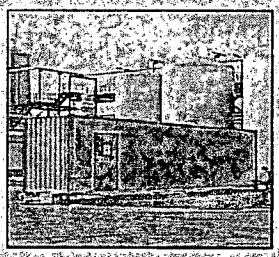

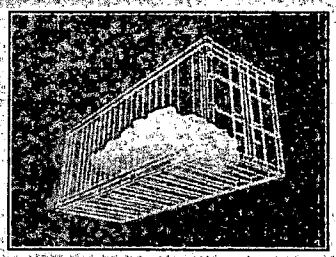

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ALTELARAIN℠ LOWERS OIL AND GAS PRODUCTION COSTS.

AltelaRain℠ lowers the cost of oil and gas production while dramatically decreasing the volume of waste water that needs to be trucked away. It purifies the most highly challenged water using energy produced at the wellhead, in a simple, mobile and modular system located on-site. The system treats 100 barrels a day, decreasing disposal volumes and costs by 90% and extending the life of a well.

AN UNLIMITED POTENTIAL ACROSS MANY INDUSTRY SECTORS.

The AltelaRain℠ system is an effective solution for the desalination and decontamination of highly challenged water including produced water in the oil, natural gas and mineral extraction industries, highly salinated concentrate "tail-water" from large-scale desalination systems, industrial waste water treatment such as in the semi-conductor, electroplating, food and beverage industries and more.

Other key advantages include:

- Extremely high quality of treated water
- Unattended operation
- No fouling or scaling
- Operates at ambient pressure
- Low operating cost
- Operates at low temperature
- Uses low-grade waste heat to operate
- No pre- or post-treatment required
- No membranes to replace

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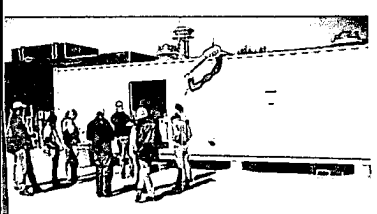
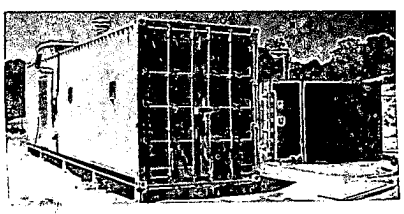
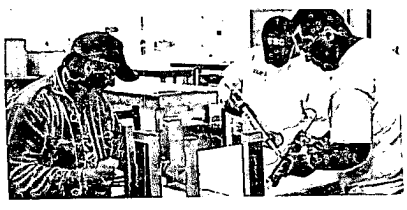
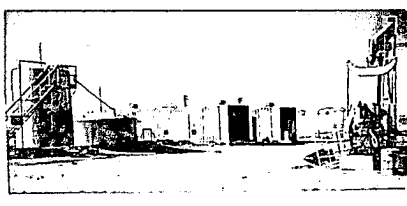

We set out to lower the cost of oil and gas production by treating the brackish water produced when drilling. We ended up with a breakthrough technology inspired by nature. Right now, our AltelaRain℠ system is desalinating and decontaminating highly challenged water sources without the energy-intensive equipment, high temperature or pressure of other technologies. And it's all done in a simple, transportable shipping container located on-site. Today, we're helping the Oil & Gas industry increase efficiency and productivity in the Piceance Gas Basin of Colorado. Tomorrow, the sky's the limit. To learn more, call 505.923.4140 or visit altelainc.com.

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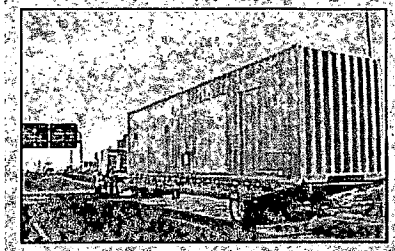
ALTELARAIN℠ SYSTEM ARS-4000

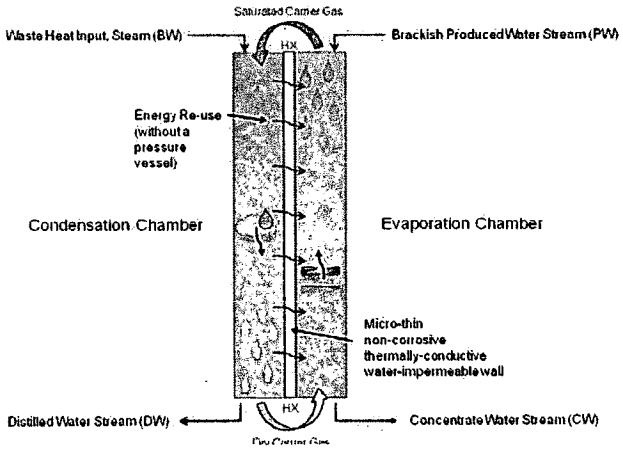


The AltelaRain℠ System ARS-4000 provides a mobile, fully integrated water desalination/decontamination solution to clean previously untreatable produced water. Unique to the ARS-4000 is its ability to treat the produced and frac water on-site, adjacent to each well-head, irrespective of varying water quality prevalent throughout the industry. Each ARS-4000 is contained in a standard 45' shipping container. The system treats 4,000 gallons per day GPD (100 BPD) of produced water. Following treatment, the clean water meets surface discharge standards and can also be used by the producer, thereby reducing freshwater demand at the well-site. Up to 90% of all disposal costs – 9 out of every 10 water-hauling truckloads – are eliminated on-site at the well-head with the AltelaRain℠ System ARS-4000.

AltelaRain℠ System highlights include:

- Reduces water hauling/trucking costs
- High thermal efficiency
- Unattended operation
- No pre- or post-treatment required
- No membranes to replace
- Easily sized to location's need
- Extremely high quality of treated water
- No fouling or scaling
- Low operating cost
- Extremely safe operation at ambient pressure and low temperature
- Uses low-grade waste heat to operate

AltelaRain℠ Process

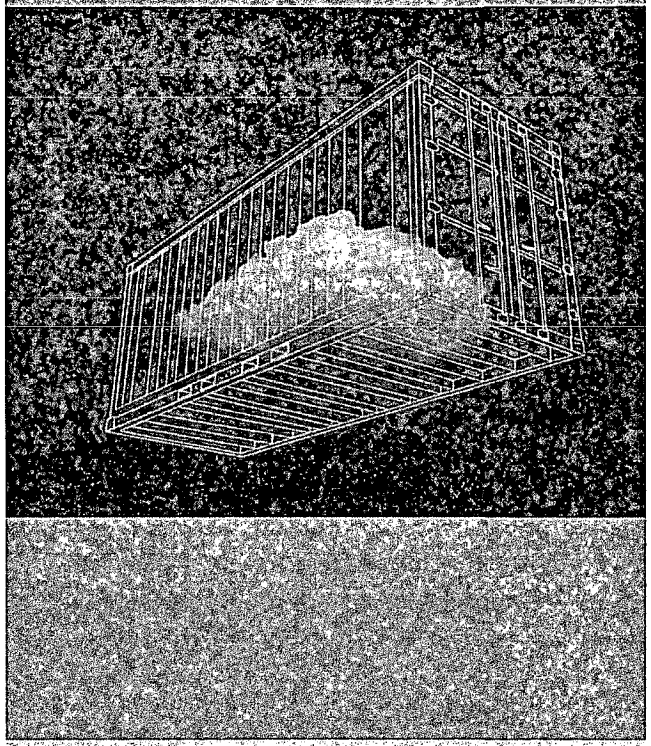


ALTELA™
Treating water naturally.

One Technology Center
2450 Alamo Ave. SE, Suite 200, Albuquerque, NM 87106
PHONE: 505.923.4140 FAX: 505.923.4130
EMAIL: info@altelainc.com WEB: www.altelainc.com

OIL AND GAS INDUSTRY

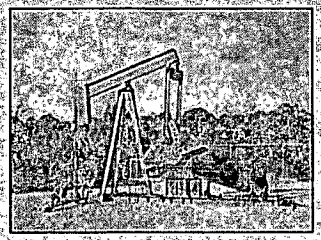
AltelaRain℠ System ARS-4000



An exciting new technology to clean produced and frac water at the well-site.

ALTELA™
Treating water naturally

A NEW SOLUTION FOR AN OLD PROBLEM



The AltelaRain℠ System allows highly-challenged produced and frac water to be economically treated and cleaned on-site, can treat concentrated brine regardless of total dissolved solids (TDS) concentration, and can be scaled according to treatment demand. This removes the customer's high disposal costs and environmental liability by the present oilfield methods.

HIGH PERFORMANCE STANDARDS

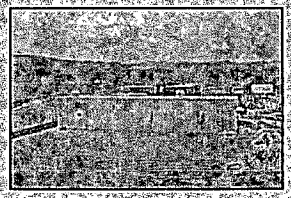
Oil and gas operators demand 24-hour-a-day, 7-day-a-week performance from their wells, and any equipment associated with well operation must meet this performance standard. Altela's systems are designed to be operated unattended on a continuous basis in the harsh oil and gas field environmental conditions and require minimal maintenance.

ALTELA IS DOING THIS, TODAY.... AND IT WORKS!!

AltelaRain℠ Systems are successfully treating produced water and frac water. Multiple commercial sites have been commissioned in the Piceance Gas Basin of Colorado, the San Juan Basin of New Mexico, and Western Canada. Clean water from the AltelaRain℠ System has been permitted by the State of Colorado for release into the Colorado River and is also being successfully re-used by the Navajo Nation from a well site in northwestern New Mexico, saving the people in the region from having to travel hundreds of miles for clean water.

THE TECHNOLOGY: TREATING WATER NATURALLY

The basic Altela technology is a simple and elegant process based on thermal distillation, which desalinates and decontaminates salty and polluted water in a fundamentally different way than the more familiar reverse osmosis (RO) and other membrane-based desalination technologies. In simple terms, the technology mimics nature's process of making pure rain water from seawater. What positions it as the first, truly new and disruptive water desalination/decontamination technology in over 50 years, however, is a scientifically complex, but inexpensively implemented, internal heat transfer process that re-uses the heat of condensation over and over again.



Altela's process makes 3 gallons of clean water from the heat energy that would usually only make 1 gallon – through 300% energy-re-use – thus making Altela both a clean-tech energy and water technology company.

MAKING WATER FROM WASTE

The AltelaRain℠ System operates on low-grade waste heat or waste well-head gas, free in many locations, further lowering Altela's operating costs relative to competing high-pressure, high-electricity-cost technologies such as RO and mechanical vacuum compression. The system is robust, using no pressure, high temperatures, filters, or membranes – allowing it to be manufactured from inexpensive plastics rather than exotic and expensive metals.

Through Altela's professional services division, the company has successfully acquired precedent-setting environmental permits to discharge cleaned water (for irrigation, livestock use, aquifer recharge and in-stream water right flows) – and provide it back to the customer for frac and other well completion needs. These permits include EPA-based approval to discharge treated, clean water into the Colorado River; approval for beneficial re-use of treated, clean water in the Piceance Basin; the first-ever approval in New Mexico to surface discharge treated, clean water for re-use; the first-ever EPA-based approval for a centralized waste treatment facility to treat produced water for in-stream flow and aquifer recharge through the publically owned treatment works (POTW); and the first-ever Navajo Nation environmental permit to surface discharge treated, clean water for the benefit of district grazing-communities.

WE CAN GROW WITH YOU AND TREAT HIGH VOLUMES

Not only is our AltelaRain℠ System ARS-4000 available today, but Altela's product migration path, based on our proven core technology, enables us to build scalable, dedicated plants that can grow along with your increasing treatment needs. A truly unique feature of our technology allows us to build an AltelaRain℠ System plant that can easily scale from 1,000 barrels-per-day (BPD) up to over 5,000 BPD.

Let us help you convert contaminated water liabilities into clean water assets. For more information, please call 505.923.4140 or visit www.altelainc.com.

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Wednesday, January 14, 2009 10:12 AM
To: 'Matthew J. Bruff'
Subject: RE: Altela, Inc. Renewal Approval to Store and Use Produced Water for R&D

Matt,

Since OCD received your request for renewal prior to its expiration date, Altela may continue operator under the existing temporary approval until OCD has the opportunity to review and make a determination the renewal request. If you have any questions regarding this matter, please contact me.

Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Matthew J. Bruff [mailto:matthew.bruff@altelainc.com]
Sent: Wednesday, January 14, 2009 9:59 AM
To: Jones, Brad A., EMNRD
Subject: Altela, Inc. Renewal Approval to Store and Use Produced Water for R&D

Brad,

Good morning. I hope the New Year is starting off well for you!

I spoke with Glenn Vongonten this morning with respect to Altela's 4th quarter produced water treatment volumes in New Mexico. We are working on his urgent request and will get back with him yet today. Originally, I thought his call was regarding our pending request to renew Altela's approval to store and use produced water for R&D of the AltelaRain℠ technology. He informed me that you were still the point of contact for this approval request and I should touch base with you directly. I understand you are very busy and are preparing for a hearing. We are not rushing you by any means - our current approval will expire this Friday, January 16, 2009 and we're just trying to stay on top of it.
Thanks,
Matt

Matthew Bruff, CDO
Altela, Inc.
5350 South Roslyn Street, Suite 430
Englewood, CO 80111
Phone 303-993-1950

Fax 303-993-1955
www.altelainc.com

Jones, Brad A., EMNRD

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Sent: Wednesday, January 14, 2009 9:59 AM
To: Jones, Brad A., EMNRD
Subject: Altela, Inc. Renewal Approval to Store and Use Produced Water for R&D

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Matt

Matthew Bruff, CDO
Altela, Inc.
5350 South Roslyn Street, Suite 430
Englewood, CO 80111
Phone 303-993-1950
Fax 303-993-1955
www.altelainc.com

Jones, Brad A., EMNRD

From: Matthew J. Bruff [matthew.bruff@altelainc.com]
Sent: Wednesday, November 28, 2007 10:47 AM
To: Price, Wayne, EMNRD; Jones, Brad A., EMNRD
Subject: Altela, Inc. PW Use at Alamo
Attachments: Alamo PW Renewal Request, 28 Nov 07.pdf; Alamo Produced Water Tracking Summary.pdf; Alamo PW Water Quality Report.pdf

Wayne and Brad,
Please find attached Altela, Inc.'s written request to renew Altela's temporary approval to store and use produced water for R&D of the AltelaRain[SM] technology at our Alamo design, research, and manufacturing facilities. A hard copy will follow via USPS First Class Mail.
Thanks,
Matt

Matthew Bruff
Altela, Inc.
Denver Technology Center
7887 E. Belleview Ave., Ste. 1100
Englewood, CO 80111
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F (303) 228-1655
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ALTELA™

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F 505 923 [illegible]

Denver [illegible]
[illegible]
[illegible]
Englewood Colorado [illegible]
T 303 [illegible]
F 303 [illegible]

November 28, 2007

Mr. Wayne Price
Mr. Brad Jones
Environmental Bureau Chief
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc. – Renewal of Temporary Approval to Store and Use Produced Water for R&D of the AltelaRain℠ Technology

VIA FIRST CLASS MAIL & ELECTRONIC MAIL

Dear Wayne and Brad,

This letter serves as written request to renew Altela, Inc.'s (Altela) temporary approval to store and use produced water for R&D of the AltelaRain℠ technology. A copy of the original NM Oil Conservation Division (OCD) approval letter dated January 16, 2007 has been attached. Pursuant to the terms of the original approval letter, we hereby submit this renewal request forty-five (45) prior to the expiration date of the original approval.

Altela requests a one-year renewal to use real oilfield produced water for testing and development of the AltelaRain℠ technology at Altela's design, research, and manufacturing facilities. These facilities are located at 2450 Alamo SE, Albuquerque, New Mexico 87106 ("Alamo"). Altela continues to agree to the following conditions with respect to use of the produced water at Alamo:

1. The produced water approved for storage and the testing and development of the AltelaRain℠ technology will only occur at Altela's design, research, and manufacturing facility (Alamo), located at 2450 Alamo SE, Albuquerque, New Mexico 87106;

2. Only haulers authorized (OCD approved C-133) to move produced water may provide transport of produced water to the Alamo facility;

3. No produced water shall be disposed at the Alamo facility. All produced water must be removed from the Alamo facility by a hauler authorized (OCD approved C-133) to move produced water and properly disposed at an OCD approved facility;

4. Altela must retain records documenting all produced water received and removed from the Alamo facility;

5. Altela must report all unauthorized discharges of produced water pursuant to OCD Rule 116 to the OCD within 24 hours of determining a release; and

6. Altela will provide the OCD copies of the water quality test results received from third party water quality laboratories with respect to tests using the produced water at the Alamo facility.

Enclosed, please find a copy Altela's Produced Water Tracking Summary used to ensure that all produced water is accounting for as well as delivered by approved C-133 permitted water haulers and removed by approved C-133 permitted water haulers for disposal. Please also find a copy of the water quality analytical report with respect to the produced water by Energy Laboratories, Inc.

Thank you in advance for your continued assistance and support of the AltelaRain[SM] technology. Please do not hesitate to contact me if the need arises.

Sincerely,

Altela, Inc.

Matthew Bruff
CDO

cc: Altela Day File

Enclosures as noted

ALTELA

Alamo Produced Water Tracking Summary

No	Date	Transport Company Name	Contact at Company	Address	Phone Number	Fax Number	C133 Permit No.	Name of Originating Well (If Taken Away - NA)	Owner of Well	Delivered / Taken Away	Balance
1	2/22/07	M&R Trucking, Inc.	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	Blackshawl Com. #001 (San Juan Basin)	Merrion Oil and Gas Corporation	300 Gallons Delivered	+300 gallons
2	11/19/07	M&R Trucking, Inc.	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	NA		300 Gallons Taken Away	0 gallons
3	11/19/07	M&R Trucking, Inc.	John Davis	Post Office Box 600, Farmington, NM 87499	(505) 326-5541	(505) 326-6002	C-133-66	Blackshawl Com. #001 (San Juan Basin)	Merrion Oil and Gas Corporation	300 Gallons Delivered	+300 gallons
4											
5											
6											
7											
8											
9											
10											
11											
12											

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Alamo Lab P-38 DW from Blackshawl PW
Lab ID: C07030114-001
Client Sample ID: P-38

Report Date: 03/13/07
Collection Date: 03/01/07 11:52
DateReceived: 03/02/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Calcium	ND	mg/L		0.5		E200.7	03/07/07 15:38 / ts
Chloride	ND	mg/L		1		A4500-Cl B	03/06/07 14:17 / jl
Fluoride	1.0	mg/L		0.1		A4500-F C	03/05/07 15:23 / jaj
Magnesium	ND	mg/L		0.5		E200.7	03/07/07 15:38 / ts
Nitrogen, Ammonia as N	7.3	mg/L		0.1		E350.1	03/08/07 11:14 / eli-b
Nitrogen, Kjeldahl, Total as N	7.7	mg/L		0.5		E351.2	03/06/07 10:32 / eli-b
Nitrogen, Nitrite as N	ND	mg/L	H	0.1		A4500-NO2 B	03/06/07 15:32 / jal
Phosphorus	ND	mg/L		0.1		E200.7	03/07/07 15:38 / ts
Phosphorus, Orthophosphate as P	ND	mg/L		0.010		E365.1	03/06/07 14:59 / eli-b
Sodium	ND	mg/L		0.5		E200.7	03/07/07 15:38 / ts
Sulfate	ND	mg/L		1		A4500-SO4 E	03/05/07 17:44 / ljl
NON-METALS							
Cyanide, Free	NA	mg/L		0.2		A4500-CN-F	03/07/07 12:00 / eli-b
Phenolics, Total Recoverable (Distilled)	0.105	mg/L		0.010		E420.1	03/05/07 14:43 / jl
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		D2036	03/06/07 10:42 / eli-b
Sulfide	ND	mg/L		0.50		E376.1	03/07/07 10:27 / jl
- The Total Automated Cyanide was analyzed, and was < 200 ug/L, the detection limit for Free Cyanide. Free Cyanide was not analyzed.							
PHYSICAL PROPERTIES							
Chlorine, Residual Total	ND	mg/L		0.01		H8021	03/05/07 16:09 / jl
Conductivity	35.3	umhos/cm		1.0		A2510 B	03/05/07 14:49 / lm
Hardness as CaCO3	ND	mg/L		6.5		A2340 B	03/08/07 11:15 / sec
pH	8.95	s.u.		0.01		A4500-H B	03/05/07 14:49 / lm
Solids, Total Dissolved TDS @ 180 C	ND	mg/L		10		A2540 C	03/05/07 13:51 / lm
Solids, Total Suspended TSS @ 105 C	ND	mg/L		1.0		E160.2	03/05/07 10:32 / lm
METALS - TOTAL							
Aluminum	ND	mg/L		0.01		E200.7	03/07/07 15:38 / ts
Antimony	ND	mg/L		0.05		E200.8	03/08/07 00:43 / sml
Arsenic	ND	mg/L		0.001		E200.8	03/08/07 00:43 / sml
Barium	ND	mg/L		0.1		E200.8	03/08/07 00:43 / sml
Beryllium	ND	mg/L		0.01		E200.8	03/08/07 00:43 / sml
Boron	ND	mg/L		0.1		E200.7	03/07/07 15:38 / ts
Cadmium	ND	mg/L		0.01		E200.8	03/08/07 00:43 / sml
Chromium	ND	mg/L		0.05		E200.8	03/08/07 00:43 / sml
Copper	ND	mg/L		0.01		E200.8	03/08/07 00:43 / sml
Lead	ND	mg/L		0.05		E200.8	03/08/07 00:43 / sml
Mercury	ND	mg/L		0.001		E200.8	03/08/07 00:43 / sml
Nickel	ND	mg/L		0.05		E200.8	03/08/07 00:43 / sml
Selenium	ND	mg/L		0.001		E200.8	03/08/07 00:43 / sml
Silver	ND	mg/L		0.01		E200.8	03/08/07 00:43 / sml
Thallium	ND	mg/L		0.1		E200.8	03/08/07 00:43 / sml
Zinc	ND	mg/L		0.01		E200.8	03/08/07 00:43 / sml

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
H - Analysis performed past recommended holding time.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

ENERGY LABORATORIES, INC. - 2393 Salt Creek Highway (82601) - P.O. Box 3258 Casper, WY 82602
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LABORATORY ANALYTICAL REPORT

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Project: Alamo Lab P-38 DW from Blackshawl PW
Lab ID: C07030114-001
Client Sample ID: P-38

Report Date: 03/13/07
Collection Date: 03/01/07 11:52
DateReceived: 03/02/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - QUICK COUNT - TOTAL							
Radium 226	ND	pCi/L		0.2		E903.0	03/08/07 11:05 / trs
RADIONUCLIDES - TOTAL							
Radium 226	ND	pCi/L		0.2		E903.0	03/13/07 09:16 / trs
Radium 228	ND	pCi/L		1.0		RA-05	03/08/07 10:35 / plj
VOLATILE ORGANIC COMPOUNDS							
1,1,1,2-Tetrachloroethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,1,1-Trichloroethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,1,2-Trichloroethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,1-Dichloroethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,1-Dichloroethene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,1-Dichloropropene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,2,3-Trichloropropane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,2-Dibromoethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,2-Dichlorobenzene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,2-Dichloroethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,2-Dichloropropane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,3-Dichlorobenzene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,3-Dichloropropane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
1,4-Dichlorobenzene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
2,2-Dichloropropane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
2-Chloroethyl vinyl ether	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
2-Chlorotoluene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
4-Chlorotoluene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Acetone	433	ug/L		20.0		E624	03/07/07 04:35 / dkh
Acetonitrile	ND	ug/L		10.0		E624	03/07/07 04:35 / dkh
Acrolein	ND	ug/L		10.0		E624	03/07/07 04:35 / dkh
Acrylonitrile	ND	ug/L		10.0		E624	03/07/07 04:35 / dkh
Benzene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Bromobenzene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Bromochloromethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Bromodichloromethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Bromoform	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Bromomethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Carbon disulfide	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Carbon tetrachloride	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Chlorobenzene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Chlorodibromomethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Chloroethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Chloroform	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Chloromethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh

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Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
cis-1,2-Dichloroethene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
cis-1,3-Dichloropropene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Dibromomethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Dichlorodifluoromethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Ethylbenzene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
m+p-Xylenes	ND	ug/L		2.00		E624	03/07/07 04:35 / dkh
Methyl ethyl ketone	23.4	ug/L		20.0		E624	03/07/07 04:35 / dkh
Methyl isobutyl ketone	ND	ug/L		20.0		E624	03/07/07 04:35 / dkh
Methyl tert-butyl ether (MTBE)	ND	ug/L		2.00		E624	03/07/07 04:35 / dkh
Methylene chloride	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Naphthalene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
o-Xylene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Styrene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Tetrachloroethene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Toluene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
trans-1,2-Dichloroethene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
trans-1,3-Dichloropropene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Trichloroethene	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Trichlorofluoromethane	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Vinyl acetate	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Vinyl chloride	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Xylenes, Total	ND	ug/L		1.00		E624	03/07/07 04:35 / dkh
Surr: 1,2-Dichlorobenzene-d4	102	%REC			80-120	E624	03/07/07 04:35 / dkh
Surr: Dibromofluoromethane	104	%REC			80-120	E624	03/07/07 04:35 / dkh
Surr: p-Bromofluorobenzene	99.0	%REC			80-120	E624	03/07/07 04:35 / dkh
Surr: Toluene-d8	99.0	%REC			80-120	E624	03/07/07 04:35 / dkh
ORGANIC CHARACTERISTICS							
Organic Halides, Total	ND	mg Cl/L		0.1		SW9020B	03/09/07 11:03 / cjs
Oil & Grease (HEM)	ND	mg/L		5.0	10	SW1664A	03/06/07 10:35 / bah
SYNTHETIC ORGANIC COMPOUNDS							
1,2,4-Trichlorobenzene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
1,2-Dichlorobenzene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
1,3-Dichlorobenzene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
1,4-Dichlorobenzene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
2,4,6-Trichlorophenol	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
2,4-Dichlorophenol	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
2,4-Dimethylphenol	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
2,4-Dinitrophenol	ND	ug/L		50		E625	03/07/07 06:11 / eli-b
2,4-Dinitrotoluene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
2,6-Dinitrotoluene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
2-Chloronaphthalene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b

Report Definitions: RL Analyte reporting limit. QCL Quality control limit.
MCL Maximum contaminant level. ND Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Alamo Lab P-38 DW from Blackshawl PW
Lab ID: C07030114-001
Client Sample ID: P-38

Report Date: 03/13/07
Collection Date: 03/01/07 11:52
DateReceived: 03/02/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SYNTHETIC ORGANIC COMPOUNDS							
2-Chlorophenol	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
2-Nitrophenol	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
3,3 -Dichlorobenzidine	ND	ug/L		20		E625	03/07/07 06:11 / eli-b
4,6-Dinitro-2-methylphenol	ND	ug/L		50		E625	03/07/07 06:11 / eli-b
4-Bromophenyl phenyl ether	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
4-Chloro-3-methylphenol	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
4-Chlorophenyl phenyl ether	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
4-Nitrophenol	ND	ug/L		50		E625	03/07/07 06:11 / eli-b
Acenaphthene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Acenaphthylene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Anthracene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Azobenzene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Benzidine	ND	ug/L		20		E625	03/07/07 06:11 / eli-b
Benzo(a)anthracene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Benzo(a)pyrene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Benzo(b)fluoranthene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Benzo(g,h,i)perylene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Benzo(k)fluoranthene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
bis(-2-chloroethoxy)Methane	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
bis(-2-chloroethyl)Ether	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
bis(2-chloroisopropyl)Ether	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
bis(2-ethylhexyl)Phthalate	190	ug/L		20		E625	03/07/07 20:05 / eli-b
Butylbenzylphthalate	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Chrysene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Dibenzo(a,h)anthracene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Diethyl phthalate	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Dimethyl phthalate	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Di-n-butyl phthalate	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Di-n-octyl phthalate	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Fluoranthene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Fluorene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Hexachlorobenzene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Hexachlorobutadiene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Hexachlorocyclopentadiene	ND	ug/L		20		E625	03/07/07 06:11 / eli-b
Hexachloroethane	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Indeno(1,2,3-cd)pyrene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Isophorone	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Naphthalene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Nitrobenzene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
n-Nitrosodimethylamine	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
n-Nitroso-di-n-propylamine	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
n-Nitrosodiphenylamine	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Pentachlorophenol	ND	ug/L		50		E625	03/07/07 06:11 / eli-b
Phenanthrene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MCL Maximum contaminant level.
ND - Not detected at the reporting limit

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Alamo Lab P-38 DW from Blackshawl PW
Lab ID: C07030114-001
Client Sample ID: P-38

Report Date: 03/13/07
Collection Date: 03/01/07 11:52
DateReceived: 03/02/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
SYNTHETIC ORGANIC COMPOUNDS							
Phenol	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Pyrene	ND	ug/L		10		E625	03/07/07 06:11 / eli-b
Surr: 2,4,6-Tribromophenol	92.0	%REC			26-116	E625	03/07/07 06:11 / eli-b
Surr: 2-Fluorobiphenyl	82.0	%REC			25-94	E625	03/07/07 06:11 / eli-b
Surr: 2-Fluorophenol	28.0	%REC			11-67	E625	03/07/07 06:11 / eli-b
Surr: Nitrobenzene-d5	70.0	%REC			19-102	E625	03/07/07 06:11 / eli-b
Surr: Phenol-d5	19.0	%REC			15-54	E625	03/07/07 06:11 / eli-b
Surr: Terphenyl-d14	89.0	%REC			39-106	E625	03/07/07 06:11 / eli-b
PESTICIDES							
4,4'-DDD	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
4,4'-DDE	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
4,4'-DDT	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Aldrin	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
alpha-BHC	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
alpha-Chlordane	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
beta-BHC	ND	ug/L	D	0.080		E608	03/06/07 14:45 / eli-b
Chlordane	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
delta-BHC	ND	ug/L	D	0.085		E608	03/06/07 14:45 / eli-b
Dieldrin	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Endosulfan I	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Endosulfan II	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Endosulfan sulfate	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Endrin	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Endrin aldehyde	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Endrin Ketone	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
gamma-BHC (Lindane)	ND	ug/L	D	0.10		E608	03/06/07 14:45 / eli-b
gamma-Chlordane	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Heptachlor	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Heptachlor epoxide	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Methoxychlor	ND	ug/L		0.050		E608	03/06/07 14:45 / eli-b
Toxaphene	ND	ug/L		5.0		E608	03/06/07 14:45 / eli-b
Aroclor 1016	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Aroclor 1221	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Aroclor 1232	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Aroclor 1242	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Aroclor 1248	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Aroclor 1254	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Aroclor 1260	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Aroclor 1262	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Aroclor 1268	ND	ug/L		0.50		E608	03/06/07 14:45 / eli-b
Surr: Decachlorobiphenyl	37.0	%REC	S		44-119	E608	03/06/07 14:45 / eli-b
Surr: Tetrachloro-m-xylene	57.0	%REC			40-120	E608	03/06/07 14:45 / eli-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit
D RL increased due to sample matrix interference.
MCL Maximum contaminant level.
ND - Not detected at the reporting limit.
S Spike recovery outside of advisory limits

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Alamo Lab P-38 DW from Blackshawl PW
Lab ID: C07030114-002
Client Sample ID: Trip Blank

Report Date: 03/13/07
Collection Date: 03/01/07 11:52
DateReceived: 03/02/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
1,1,1,2-Tetrachloroethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,1,1-Trichloroethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,1,2,2-Tetrachloroethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,1,2-Trichloroethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,1-Dichloroethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,1-Dichloroethene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,1-Dichloropropene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,2,3-Trichloropropane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,2-Dibromoethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,2-Dichlorobenzene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,2-Dichloroethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,2-Dichloropropane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,3-Dichlorobenzene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,3-Dichloropropane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
1,4-Dichlorobenzene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
2,2-Dichloropropane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
2-Chloroethyl vinyl ether	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
2-Chlorotoluene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
4-Chlorotoluene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Acetone	ND	ug/L		20.0		E624	03/06/07 18:09 / dkh
Acetonitrile	ND	ug/L		10.0		E624	03/06/07 18:09 / dkh
Acrolein	ND	ug/L		10.0		E624	03/06/07 18:09 / dkh
Acrylonitrile	ND	ug/L		10.0		E624	03/06/07 18:09 / dkh
Benzene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Bromobenzene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Bromochloromethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Bromodichloromethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Bromoform	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Bromomethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Carbon disulfide	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Carbon tetrachloride	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Chlorobenzene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Chlorodibromomethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Chloroethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Chloroform	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Chloromethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
cis-1,2-Dichloroethene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
cis-1,3-Dichloropropene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Dibromomethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Dichlorodifluoromethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Ethylbenzene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
m+p-Xylenes	ND	ug/L		2.00		E624	03/06/07 18:09 / dkh
Methyl ethyl ketone	ND	ug/L		20.0		E624	03/06/07 18:09 / dkh
Methyl isobutyl ketone	ND	ug/L		20.0		E624	03/06/07 18:09 / dkh

Report Definitions: RL - Analyte reporting limit. MCL - Maximum contaminant level.
QCL - Quality control limit. ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Alamo Lab P-38 DW from Blackshawl PW
Lab ID: C07030114-002
Client Sample ID: Trip Blank

Report Date: 03/13/07
Collection Date: 03/01/07 11:52
DateReceived: 03/02/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Methyl tert-butyl ether (MTBE)	ND	ug/L		2.00		E624	03/06/07 18:09 / dkh
Methylene chloride	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Naphthalene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
o-Xylene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Styrene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Tetrachloroethene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Toluene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
trans-1,2-Dichloroethene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
trans-1,3-Dichloropropene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Trichloroethene	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Trichlorofluoromethane	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Vinyl acetate	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Vinyl chloride	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Xylenes, Total	ND	ug/L		1.00		E624	03/06/07 18:09 / dkh
Surr: 1,2-Dichlorobenzene-d4	101	%REC			80-120	E624	03/06/07 18:09 / dkh
Surr: Dibromofluoromethane	97.0	%REC			80-120	E624	03/06/07 18:09 / dkh
Surr: p-Bromofluorobenzene	98.0	%REC			80-120	E624	03/06/07 18:09 / dkh
Surr: Toluene-d8	97.0	%REC			80-120	E624	03/06/07 18:09 / dkh

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

DATA CHEM LABORATORIES, INC.

SUBMITTED TO:

Roger Garling
Energy Laboratories
P.O. Box 3258
Casper, WY 82602-3258

REFERENCE DATA:

Client Sample Nos.:	C07030114-001N
P.O. Number:	1770
Sample Location:	P38DW6
Sample Type:	Drinking Water
Method Reference:	Asbestos in Potable Water by TEM EPA 600/4-83-043, Method 100.1
DCL Set ID No..	07-T-1167
DCL Sample ID Nos.:	07-07053

The samples indicated on the following data sheet(s) were analyzed by Transmission Electron Microscopy (TEM) for asbestos using the method EPA 600/4-83-043, Method 100.1 Each sample was ultrasonically treated in its original container for 15 minutes to suspend the solids. An aliquot of this suspension was added to 100 mL of de-ionized water and filtered onto a 0.1µm pore size polycarbonate filter. Portions of this filter were coated with carbon and mounted on grids for TEM analysis. Analysis was performed on a Philips CM-12 TEM with EDAX Genesis System providing energy dispersive X-ray analysis (EDXA) capabilities.

Results apply only to portions of samples analyzed and are tabulated on the following data sheet(s). Representative EDXA spectra and selected area electron diffraction (SAED) measurements of asbestos types detected (if any) are included and are referenced to the structure identification numbers listed on the count sheets. The limit of detection (LOD) for this method has been determined to be one asbestos fiber in the total number of grid openings analyzed. The number of openings analyzed is dependent on the sample volume filtered (4 minimum).

Angela Solm
Analyst

Anna Marie Ristich
Section Manager

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DataChem Laboratories Test Report
Asbestos in Drinking Water by TEM

DCL Sample Set ID. 07-T-1167
Client: Energy Laboratories
Sample Location: P38DW6

SAMPLE PREP DATA		*ANALYSIS DATA*	
Date Received:	1/2/2007	Date Analyzed:	3/7/2007
Date Filtered:	3/2/2007	Magnification:	9,720 X
Time Filtered:	15:00	Calibration Constant:	1 cm = 1.05 µm
Filter Type:	PC, 0.1 µm	EDXA Resolution:	160 9 eV
Filter Size:	47 mm	Accelerating Voltage:	100 keV
Collection Area:	1075 mm^2	Camera Constant:	31.97 mm-Å

SAMPLE IDENTIFICATION	
Client ID:	C07030114-001N
DCL ID:	07-07053
Date Sampled:	3/1/2007
Time Sampled.	11:24
Volume (L):	0.100
No. Grid Openings Analyzed:	6
Average Grid Opening Area.	0.0102
LOD (MFL):	0.18
Asbestos Fibers ≥ 10 microns	
Chrysotile:	0
Amosite:	0
Crocidolite:	0
Actinolite-Tremolite:	0
Anthophyllite.	0
TOTAL ASBESTOS	
Count:	0
Concentration (MFL):	<LOD

ND = None Detected LOD = Limit of Detection MFL = Millions of Fibers per Liter

Angela Sohn
Analyst

Anna Marie Ristich
Section Manager

ENERGY LABORATORIES, INC. * 2393 Salt Creek Highway (82601) * PO Box 3258 * Casper, WY 82602

LABORATORY ANALYTICAL REPORT

Client: Altela Inc
Project: Alamo Lab P-38 DW from Blackshawl PW
Lab ID: C07030045-008
Client Sample ID: P-38

Report Date: 03/13/07
Collection Date: 02/28/07 15:20
DateReceived: 03/01/07
Matrix: Aqueous

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.1		E353.2	03/05/07 15:11 / jal
NON-METALS							
Organic Carbon, Total (TOC)	26.4	mg/L		1.0		A5310 B	03/08/07 12:29 / jl
Sulfite	ND	mg/L		2.0		E377.1	03/01/07 15:05 / jl
PHYSICAL PROPERTIES							
Oxygen Demand, Chemical (COD)	100	mg/L		1.0		HACH 8000	03/08/07 07:40 / jal
BOD, 5-Day	61	mg/L		2.0		A5210 B	03/01/07 15:46 / jrf

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Wednesday, January 17, 2007 7:37 AM
To: 'Matthew J. Bruff'
Subject: RE: Altela, Inc.
Attachments: PWapproval.pdf

Matt,

It was great meeting all of you in person and visiting the Alamo facility. Wayne and I are still reviewing the regulations to determine which permitting options are available for the placement and operation of your units. As for the approval to store and utilize for testing and development of the AltelaRain system, please see the attached document. A hardcopy is also being mailed. Wayne and I will contact you as soon as we determine the proper regulatory approach. Please keep us apprised of the status of your projects.

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Matthew J. Bruff [mailto:matthew.bruff@altelainc.com]
Sent: Tuesday, January 16, 2007 9:18 PM
To: Price, Wayne, EMNRD; Jones, Brad A., EMNRD; Hansen, Edward J., EMNRD
Cc: Ned Godshall; Tom Neustedter
Subject: Altela, Inc.

Gentlemen,
Thank you for your valued time today. Ned, Tom, and I enjoyed our meeting this morning and the opportunity to share the Altela story with you all first-hand.
We are all excited about furthering our unique technology aimed at turning produced water into a valuable resource.
Thanks again,
Matt

Matthew Bruff
Altela, Inc.
Denver Technology Center (DTC)
7887 East Belleview Ave., Suite 1100
Englewood, Colorado 80111

w: 303.228.1605
c: 303.960.9105
f: 303.228.1655

ALTELA™

2006 DEC 8 PM 2 14

Albuquerque Office
One Technology Center
1155 University Blvd. SE
Albuquerque, New Mexico 87106
T: 505.843.4197
F: 505.843.4198

Denver Office
Denver Technology Center
Belleview Tower
7887 E. Belleview Ave., Suite 1100
Englewood, Colorado 80111
T: 303.228.1605
F: 303.228.1655

December 5, 2006

Mr. Wayne Price
Environmental Bureau Chief
NM Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

RE: Altela, Inc.

VIA FIRST CLASS MAIL

Dear Mr. Price,

Following our recent discussion, this letter serves as written request to use real oilfield produced water for testing and development of the AltelaRain™ technology at Altela, Inc.'s ("Altela") design, research, and manufacturing facilities. These facilities are located at 2450 Alamo SE, Albuquerque, New Mexico 87106 ("Alamo"). Altela agrees to the following conditions with respect to use of the produced water at Alamo:

1. The produced water transported to Alamo will be done using New Mexico Oil Conservation Division approved C-133 permitted water haulers.
2. No produced water will be disposed of at Alamo using the municipal drain/sewer system. All produced water at Alamo will be taken away by an approved C-133 permitted water hauler for disposal.
3. All incoming produced water brought to Alamo will be accounted for to ensure the same amount of produced water is removed.
4. Altela will report any unauthorized discharges of the produced water at Alamo to the Oil Conservation Division.
5. Altela will provide the Oil Conservation Division with a copy of water quality test results received from third party water quality laboratories with respect to tests using the produced water at Alamo.

Thank you for your assistance. Please do not hesitate to contact me if the need arises.

Sincerely,

ALTELA, INC.

Matthew Bruff
Chief Development Officer

cc: Altela Day File

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, April 21, 2009 5:50 PM
To: 'jgolob@maralexinc.com'; 'gwendolynne.frost@conocophillips.com'; 'monica.johnson@conocophillips.com'; 'karen.evans@altelainc.com'
Subject: RE: Produced Water Diversion Quarterly Report (Jan 1 - March 31, 2009)

Ladies and Gentlemen:

I am writing to request that you mark your calendars to report your diversion numbers (gallons) to me the day after each quarter ends, since the numbers must be reported to OCD Management by the 6th day after each quarter or period ends.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Chavez, Carl J, EMNRD
Sent: Tuesday, April 14, 2009 8:48 AM
To: 'jgolob@maralexinc.com'; 'gwendolynne.frost@conocophillips.com'; 'monica.johnson@conocophillips.com'; 'karen.evans@altelainc.com'
Cc: Prouty, Jane, EMNRD
Subject: Produced Water Diversion Quarterly Report (Jan 1 - March 31, 2009)

Ladies and gentlemen:

Could you please send me your numbers for treated and diverted produced for the quarter listed above ASAP? Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: http://www.emnrd.state.nm.us/ocd/index.htm
(Pollution Prevention Guidance is under "Publications")

From: Jones, Brad A., EMNRD
Sent: Wednesday, February 18, 2009 2:04 PM
To: Chavez, Carl J, EMNRD
Subject: RE: Request to Give Presentation, meet with OCD

These are the numbers for treated and diverted produced for the last quarter of 2008.

D. Jeremy Golob

Sr. Engineer
Maralex Resources, Inc.
Office: (970) 563-4000
Cell: (970) 799-4278
Fax: (970) 563-4116

Maralex:
672,000 gallons/ 16,000 bbls

Matt Bruff
Vice President or
Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 430
Englewood, CO 80111

PHONE: (303) 993-1952 **FAX:** (303) 993-1955
EMAIL: karen.evans@altelainc.com **WEB:** altelainc.com

Altela, Inc.:
4,480 gallons/ 107 bbls

Monica D. Johnson
Sr. Environmental Scientist
ConocoPhillips Company
3401 East 30th Street
Farmington, NM 87402
Office: (505) 326-9829
Cell: (505) 320-9056
Direct Fax: (918) 662-1826
Office Fax: (505) 599-4005

ConocoPhillips/Burlington Resources/BLM/Sandia Labs/NM Tech Project:
7,560 gallons/ 180 bbls

The total volume of treated and diverted produced for the last quarter of 2008 is **684,040 gallons** or **16,287 barrels.**

Chavez, Carl J, EMNRD

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Sent: Tuesday, April 14, 2009 8:48 AM
To: 'jgolob@maralexinc.com'; 'gwendolynne.frost@conocophillips.com'; 'monica.johnson@conocophillips.com'; 'karen.evans@altelainc.com'
Cc: Prouty, Jane, EMNRD
Subject: Produced Water Diversion Quarterly Report (Jan 1 - March 31, 2009)

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Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3490
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To: Chavez, Carl J, EMNRD
Subject: RE: Request to Give Presentation, meet with OCD

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D. Jeremy Golob
Sr. Engineer
Maralex Resources, Inc.
Office: (970) 563-4000
Cell: (970) 799-4278
Fax: (970) 563-4116

Maralex:
672,000 gallons/ 16,000 bbls

Matt Bruff
Vice President or
Karen K. Evans
Executive Administrator

ALTELA, INC.
DENVER TECHNOLOGY CENTER
5350 South Roslyn Street, Suite 430
Englewood, CO 80111

PHONE: (303) 993-1952 FAX: (303) 993-1955

Altela, Inc.:
4,480 gallons/ 107 bbls

Monica D. Johnson
Sr. Environmental Scientist
ConocoPhillips Company
3401 East 30th Street
Farmington, NM 87402
Office: (505) 326-9829
Cell: (505) 320-9056
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