Customer: 200438711
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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-79843-1
Client Project/Site: COGCC - Petras WW #200438711

For:
Colorado Oil&Gas Conservation Commision
1120 Lincoln St.
Suite 801
Denver, Colorado 80203

Attn: Mr. Steven Arauza

Jessica DeHerrera

Authorized for release by:
3/14/2016 5:04:24 PM
Jessica DeHerrera, Project Mgmt. Assistant
jessica.deherrera@testamericainc.com

Designee for

Donna Rydberg, Senior Project Manager
(303)736-0192
donna.rydberg@testamericainc.com

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Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE
Client: Colorado Oil&Gas Conservation Commision
Project: COGCC - Petras WW #200438711
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With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 02/16/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.4°C.

One of nine hydrochloric preserved VOA vials for sample PETRAS WATER WELL (280-79843-1) was broken prior to receipt. Sufficient volume remained to proceed with the requested analysis. The client was notified on 2/17/2016.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample PETRAS WATER WELL (280-79843-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/21/2016 and analyzed on 03/03/2016.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-314238. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GAS RANGE ORGANICS

Sample PETRAS WATER WELL (280-79843-1) was analyzed for gas range organics in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 02/29/2016.

Matrix spike/matrix spike duplicate (MS/MSD) is not reported for analytical batch 280-315066. The batch MS/MSD was originally performed on another sample, and this sample required reanalysis in another batch. This MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GC)

Sample PETRAS WATER WELL (280-79843-1) was analyzed for volatile organic compounds (GC) in accordance with EPA SW-846 Method 8021B. The samples were analyzed on 02/26/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED GASES

Sample PETRAS WATER WELL (280-79843-1) was analyzed for dissolved gases in accordance with RSK_175. The samples were analyzed on 02/29/2016.

Analytes Acetylene/Ethane co-eluted on one of the columns used for this analysis. As a result, there are no results reported for the

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Laboratory: TestAmerica Denver (Continued)

%Difference in the concentration on the associated Form X.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DIESEL RANGE ORGANICS
Sample PETRAS WATER WELL (280-79843-1) was analyzed for Diesel Range Organics in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 02/18/2016 and analyzed on 02/23/2016.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 280-314015. Method precision and accuracy have been verified by the acceptable LCS/LCSD analysis data.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS
Sample PETRAS WATER WELL (280-79843-1) was analyzed for dissolved metals in accordance with EPA SW-846 Method 6010B. The samples were prepared on 02/23/2016 and analyzed on 03/02/2016, 03/03/2016 and 03/07/2016.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SODIUM ABSORPTION RATIO
Sample PETRAS WATER WELL (280-79843-1) was analyzed for Sodium Absorption Ratio in accordance with USDA Handbook 60 - 20B. The samples were analyzed on 03/03/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ALKALINITY
Sample PETRAS WATER WELL (280-79843-1) was analyzed for Alkalinity in accordance with SM20 2320B. The samples were analyzed on 02/17/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SPECIFIC CONDUCTIVITY
Sample PETRAS WATER WELL (280-79843-1) was analyzed for specific conductivity in accordance with SM20 2510B. The samples were analyzed on 02/21/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS
Sample PETRAS WATER WELL (280-79843-1) was analyzed for total dissolved solids in accordance with SM20 2540C. The samples were analyzed on 02/17/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS (28 DAYS)
Sample PETRAS WATER WELL (280-79843-1) was analyzed for anions (28 days) in accordance with EPA Method 300.0. The samples were analyzed on 02/17/2016 and 02/18/2016.

Sample PETRAS WATER WELL (280-79843-1) required dilution prior to analysis due to the Matrix Conductivity Threshold (MCT) of the instrument for fluoride and bromide. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS (48 HOURS)
Sample PETRAS WATER WELL (280-79843-1) was analyzed for anions (48 hours) in accordance with EPA Method 300.0. The samples were analyzed on 02/17/2016.

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Laboratory: TestAmerica Denver (Continued)

Sample PETRAS WATER WELL (280-79843-1) required dilution prior to analysis due to the Matrix Conductivity Threshold (MCT) of the instrument for nitrite and nitrate. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CATION ANION BALANCE

Sample PETRAS WATER WELL (280-79843-1) was analyzed for Cation Anion Balance in accordance with Cation Anion Balance. The samples were analyzed on 03/04/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CORROSIVITY (PH)

Sample PETRAS WATER WELL (280-79843-1) was analyzed for corrosivity (pH) in accordance with SM20 4500 H+ B. The samples were analyzed on 02/18/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Detection Summary

Client: Colorado Oil&Gas Conservation Commision
Project/Site: COGCC - Petras WW #200438711

TestAmerica Job ID: 280-79843-1

Client Sample ID: PETRAS WATER WELL

Lab Sample ID: 280-79843-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Methane	11		5.0		ug/L	1		RSK-175	Total/NA
Sodium Adsorption Ratio	15		0.40		No Unit	1		20B	Total/NA
Calcium	200000		200		ug/L	1		6010B	Dissolved
Magnesium	56000		200		ug/L	1		6010B	Dissolved
Manganese	79		10		ug/L	1		6010B	Dissolved
Potassium	11000		3000		ug/L	1		6010B	Dissolved
Sodium	950000		1000		ug/L	1		6010B	Dissolved
Barium	13		10		ug/L	1		6010B	Dissolved
Chloride	140		6.0		mg/L	2		300.0	Total/NA
Sulfate	2200		100		mg/L	20		300.0	Total/NA
Total Anions	60				meq/L	1		SM 1030E	Total/NA
Total Cations	56				meq/L	1		SM 1030E	Total/NA
Percent Difference	-2.9				%	1		SM 1030E	Total/NA
Anion/Cation Balance	-2.9				%	1		SM 1030E	Total/NA
Total Alkalinity	490		5.0		mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	490		5.0		mg/L	1		SM 2320B	Total/NA
Specific Conductance	3500		2.0		umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	3800		20		mg/L	1		SM 2540C	Total/NA
pH	7.90	HF	0.100		SU	1		SM 4500 H+ B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Colorado Oil&Gas Conservation Commision
Project/Site: COGCC - Petras WW #200438711

TestAmerica Job ID: 280-79843-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN
8015B	Gasoline Range Organics - (GC)	SW846	TAL DEN
8021B	Volatile Organic Compounds (GC)	SW846	TAL DEN
RSK-175	Dissolved Gases in Water	RSK	TAL DEN
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL DEN
20B	Sodium Adsorption Ratio	USDA	TAL DEN
6010B	Metals (ICP)	SW846	TAL DEN
300.0	Anions, Ion Chromatography	MCAWW	TAL DEN
SM 1030E	Cation Anion Balance	SM	TAL DEN
SM 2320B	Alkalinity	SM	TAL DEN
SM 2510B	Conductivity, Specific Conductance	SM	TAL DEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL DEN
SM 4500 H+ B	pH	SM	TAL DEN

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

USDA = "USDA Agriculture Handbook 60, section 20B".

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Colorado Oil&Gas Conservation Commision
Project/Site: COGCC - Petras WW #200438711

TestAmerica Job ID: 280-79843-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-79843-1	PETRAS WATER WELL	Water	02/16/16 12:20	02/16/16 14:26

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis[1-chloropropane]	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2,4,5-Trichlorophenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2,4,6-Trichlorophenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2,4-Dichlorophenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2,4-Dimethylphenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2,4-Dinitrophenol	ND		28		ug/L		02/21/16 10:50	03/03/16 15:46	1
2,4-Dinitrotoluene	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2,6-Dinitrotoluene	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2-Chloronaphthalene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
2-Chlorophenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2-Methylnaphthalene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
2-Methylphenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2-Nitroaniline	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
2-Nitrophenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
3 & 4 Methylphenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
3,3'-Dichlorobenzidine	ND		47		ug/L		02/21/16 10:50	03/03/16 15:46	1
3-Nitroaniline	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
4,6-Dinitro-2-methylphenol	ND		47		ug/L		02/21/16 10:50	03/03/16 15:46	1
4-Bromophenyl phenyl ether	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
4-Chloro-3-methylphenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
4-Chloroaniline	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
4-Chlorophenyl phenyl ether	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
4-Nitroaniline	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
4-Nitrophenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Acenaphthene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Acenaphthylene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Acetophenone	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Anthracene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Atrazine	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Benzidine	ND		94		ug/L		02/21/16 10:50	03/03/16 15:46	1
Benzo[a]anthracene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Benzo[a]pyrene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Benzo[b]fluoranthene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Benzo[g,h,i]perylene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Benzo[k]fluoranthene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Bis(2-chloroethoxy)methane	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Bis(2-chloroethyl)ether	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Bis(2-ethylhexyl) phthalate	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Butyl benzyl phthalate	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Caprolactam	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Carbazole	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Chrysene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Cresols, Total	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Dibenz(a,h)anthracene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Dibenzofuran	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Diethyl phthalate	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Dimethyl phthalate	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Di-n-butyl phthalate	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Di-n-octyl phthalate	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Fluorene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Hexachlorobenzene	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Hexachlorobutadiene	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Hexachlorocyclopentadiene	ND		47		ug/L		02/21/16 10:50	03/03/16 15:46	1
Hexachloroethane	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Indeno[1,2,3-cd]pyrene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Naphthalene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Nitrobenzene	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
N-Nitrosodi-n-propylamine	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Pentachlorophenol	ND		47		ug/L		02/21/16 10:50	03/03/16 15:46	1
Phenanthrene	ND		3.8		ug/L		02/21/16 10:50	03/03/16 15:46	1
Phenol	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1
Pyrene	ND		9.4		ug/L		02/21/16 10:50	03/03/16 15:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*48 - 135*	*02/21/16 10:50*	*03/03/16 15:46*	*1*
2-Fluorobiphenyl	*76*		*48 - 135*	*02/21/16 10:50*	*03/03/16 15:46*	*1*
2-Fluorophenol	*76*		*41 - 135*	*02/21/16 10:50*	*03/03/16 15:46*	*1*
Nitrobenzene-d5	*78*		*42 - 135*	*02/21/16 10:50*	*03/03/16 15:46*	*1*
Phenol-d5	*78*		*46 - 135*	*02/21/16 10:50*	*03/03/16 15:46*	*1*
Terphenyl-d14	*82*		*20 - 135*	*02/21/16 10:50*	*03/03/16 15:46*	*1*

Method: 8015B - Gasoline Range Organics - (GC)

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		25		ug/L			02/29/16 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*102*		*82 - 110*		*02/29/16 21:43*	*1*

Method: 8021B - Volatile Organic Compounds (GC)

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			02/26/16 19:31	1
Ethylbenzene	ND		0.50		ug/L			02/26/16 19:31	1
Toluene	ND		0.50		ug/L			02/26/16 19:31	1
m-Xylene & p-Xylene	ND		0.50		ug/L			02/26/16 19:31	1
o-Xylene	ND		0.50		ug/L			02/26/16 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
a,a,a-Trifluorotoluene	*91*		*85 - 115*		*02/26/16 19:31*	*1*

Method: RSK-175 - Dissolved Gases in Water

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethane	ND		5.0		ug/L			02/29/16 19:28	1
Methane	**11**		5.0		ug/L			02/29/16 19:28	1
Propane	ND		5.0		ug/L			02/29/16 19:28	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C36	ND		0.47		mg/L		02/18/16 21:54	02/23/16 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*50 - 115*	*02/18/16 21:54*	*02/23/16 21:57*	*1*

Method: 20B - Sodium Adsorption Ratio

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	**15**		0.40		No Unit			03/03/16 15:29	1

Method: 6010B - Metals (ICP) - Dissolved

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**200000**		200		ug/L		02/23/16 14:40	03/02/16 01:15	1
Iron	ND		100		ug/L		02/23/16 14:40	03/02/16 01:15	1
Magnesium	**56000**		200		ug/L		02/23/16 14:40	03/03/16 21:10	1
Manganese	**79**		10		ug/L		02/23/16 14:40	03/03/16 21:10	1
Potassium	**11000**		3000		ug/L		02/23/16 14:40	03/02/16 01:15	1
Sodium	**950000**		1000		ug/L		02/23/16 14:40	03/07/16 20:33	1
Barium	**13**		10		ug/L		02/23/16 14:40	03/02/16 01:15	1
Arsenic	ND		15		ug/L		02/23/16 14:40	03/02/16 01:15	1
Lead	ND		9.0		ug/L		02/23/16 14:40	03/02/16 01:15	1
Selenium	ND		15		ug/L		02/23/16 14:40	03/02/16 01:15	1
Chromium	ND		10		ug/L		02/23/16 14:40	03/02/16 01:15	1

General Chemistry

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.40		mg/L			02/17/16 14:46	2
Nitrate as N	ND		1.0		mg/L			02/17/16 14:46	2
Chloride	**140**		6.0		mg/L			02/17/16 14:46	2
Nitrite as N	ND		1.0		mg/L			02/17/16 14:46	2

Client: Colorado Oil&Gas Conservation Commision
Project/Site: COGCC - Petras WW #200438711

TestAmerica Job ID: 280-79843-1

General Chemistry (Continued)

Client Sample ID: PETRAS WATER WELL
Date Collected: 02/16/16 12:20
Date Received: 02/16/16 14:26

Lab Sample ID: 280-79843-1
Matrix: Water

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		1.0		mg/L			02/17/16 14:46	2
Nitrate Nitrite as N	ND		1.0		mg/L			02/17/16 14:46	2
Sulfate	**2200**		100		mg/L			02/18/16 05:29	20
Total Anions	**60**				meq/L			03/04/16 14:58	1
Total Cations	**56**				meq/L			03/04/16 14:58	1
Percent Difference	**-2.9**				%			03/04/16 14:58	1
Anion/Cation Balance	**-2.9**				%			03/04/16 14:58	1
Total Alkalinity	**490**		5.0		mg/L			02/17/16 17:14	1
Bicarbonate Alkalinity as CaCO3	**490**		5.0		mg/L			02/17/16 17:14	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/17/16 17:14	1
Hydroxide Alkalinity	ND		5.0		mg/L			02/17/16 17:14	1
Specific Conductance	**3500**		2.0		umhos/cm			02/21/16 11:39	1
Total Dissolved Solids	**3800**		20		mg/L			02/17/16 15:10	1
pH	**7.90**	**HF**	0.100		SU			02/18/16 19:15	1

Surrogate Summary

Client: Colorado Oil&Gas Conservation Commision
Project/Site: COGCC - Petras WW #200438711

TestAmerica Job ID: 280-79843-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(48-135)	(48-135)	(41-135)	(42-135)	(46-135)	(20-135)
280-79843-1	PETRAS WATER WELL	82	76	76	78	78	82
LCS 280-314238/2-A	Lab Control Sample	90	82	82	84	83	84
LCSD 280-314238/3-A	Lab Control Sample Dup	86	79	79	82	81	81
MB 280-314238/1-A	Method Blank	82	75	80	83	84	86

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPH = Terphenyl-d14

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT1
Lab Sample ID	Client Sample ID	(82-110)
280-79843-1	PETRAS WATER WELL	102
LCS 280-315213/5	Lab Control Sample	101
LCSD 280-315213/6	Lab Control Sample Dup	103
MB 280-315213/3	Method Blank	103

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		TFT1
Lab Sample ID	Client Sample ID	(85-115)
280-79843-1	PETRAS WATER WELL	91
280-79907-B-1 MS	Matrix Spike	97
280-79907-B-1 MSD	Matrix Spike Duplicate	98
LCS 280-315066/6	Lab Control Sample	103
LCSD 280-315066/7	Lab Control Sample Dup	99
MB 280-315066/5	Method Blank	99

Surrogate Legend

TFT = a,a,a-Trifluorotoluene

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTPH1
Lab Sample ID	Client Sample ID	(50-115)
280-79843-1	PETRAS WATER WELL	90

Surrogate Summary

Client: Colorado Oil&Gas Conservation Commision
Project/Site: COGCC - Petras WW #200438711

TestAmerica Job ID: 280-79843-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTPH1 (50-115)
LCS 280-314015/2-A	Lab Control Sample	96
LCSD 280-314015/3-A	Lab Control Sample Dup	97
MB 280-314015/1-A	Method Blank	93

Surrogate Legend

OTPH = o-Terphenyl

GC/MS Semi VOA

Prep Batch: 314238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	3520C	
LCS 280-314238/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 280-314238/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 280-314238/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 315694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	8270C	314238
LCS 280-314238/2-A	Lab Control Sample	Total/NA	Water	8270C	314238
LCSD 280-314238/3-A	Lab Control Sample Dup	Total/NA	Water	8270C	314238
MB 280-314238/1-A	Method Blank	Total/NA	Water	8270C	314238

GC VOA

Analysis Batch: 315046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	RSK-175	
280-80176-V-4 DU	Duplicate	Total/NA	Water	RSK-175	
280-80176-Y-4 MS	Matrix Spike	Total/NA	Water	RSK-175	
280-80176-Y-4 MSD	Matrix Spike Duplicate	Total/NA	Water	RSK-175	
LCS 280-315046/10	Lab Control Sample	Total/NA	Water	RSK-175	
MB 280-315046/9	Method Blank	Total/NA	Water	RSK-175	

Analysis Batch: 315066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	8021B	
280-79907-B-1 MS	Matrix Spike	Total/NA	Water	8021B	
280-79907-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	
LCS 280-315066/6	Lab Control Sample	Total/NA	Water	8021B	
LCSD 280-315066/7	Lab Control Sample Dup	Total/NA	Water	8021B	
MB 280-315066/5	Method Blank	Total/NA	Water	8021B	

Analysis Batch: 315213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	8015B	
LCS 280-315213/5	Lab Control Sample	Total/NA	Water	8015B	
LCSD 280-315213/6	Lab Control Sample Dup	Total/NA	Water	8015B	
MB 280-315213/3	Method Blank	Total/NA	Water	8015B	

GC Semi VOA

Prep Batch: 314015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	3510C	
LCS 280-314015/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 280-314015/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 280-314015/1-A	Method Blank	Total/NA	Water	3510C	

GC Semi VOA (Continued)

Analysis Batch: 314515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	8015B	314015
LCS 280-314015/2-A	Lab Control Sample	Total/NA	Water	8015B	314015
LCSD 280-314015/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	314015
MB 280-314015/1-A	Method Blank	Total/NA	Water	8015B	314015

Metals

Filtration Batch: 314112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Dissolved	Water	FILTRATION	
280-79843-1 MS	PETRAS WATER WELL	Dissolved	Water	FILTRATION	
280-79843-1 MSD	PETRAS WATER WELL	Dissolved	Water	FILTRATION	
LCS 280-314112/2-D	Lab Control Sample	Dissolved	Water	FILTRATION	
MB 280-314112/1-D	Method Blank	Dissolved	Water	FILTRATION	

Prep Batch: 314423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Dissolved	Water	3005A	314112
280-79843-1 MS	PETRAS WATER WELL	Dissolved	Water	3005A	314112
280-79843-1 MSD	PETRAS WATER WELL	Dissolved	Water	3005A	314112
LCS 280-314112/2-D	Lab Control Sample	Dissolved	Water	3005A	314112
MB 280-314112/1-D	Method Blank	Dissolved	Water	3005A	314112

Analysis Batch: 315500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Dissolved	Water	6010B	314423
280-79843-1 MS	PETRAS WATER WELL	Dissolved	Water	6010B	314423
280-79843-1 MSD	PETRAS WATER WELL	Dissolved	Water	6010B	314423
LCS 280-314112/2-D	Lab Control Sample	Dissolved	Water	6010B	314423
MB 280-314112/1-D	Method Blank	Dissolved	Water	6010B	314423

Analysis Batch: 315820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Dissolved	Water	6010B	314423
280-79843-1 MS	PETRAS WATER WELL	Dissolved	Water	6010B	314423
280-79843-1 MSD	PETRAS WATER WELL	Dissolved	Water	6010B	314423
LCS 280-314112/2-D	Lab Control Sample	Dissolved	Water	6010B	314423
MB 280-314112/1-D	Method Blank	Dissolved	Water	6010B	314423

Analysis Batch: 315853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	20B	
280-79843-1 DU	PETRAS WATER WELL	Total/NA	Water	20B	
MB 280-315853/1	Method Blank	Total/NA	Water	20B	

Analysis Batch: 316079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Dissolved	Water	6010B	314423
280-79843-1 MS	PETRAS WATER WELL	Dissolved	Water	6010B	314423
280-79843-1 MSD	PETRAS WATER WELL	Dissolved	Water	6010B	314423

Metals (Continued)

Analysis Batch: 316079 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-314112/2-D	Lab Control Sample	Dissolved	Water	6010B	314423
MB 280-314112/1-D	Method Blank	Dissolved	Water	6010B	314423

General Chemistry

Analysis Batch: 313725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	300.0	
280-79846-A-1 DU	Duplicate	Total/NA	Water	300.0	
280-79846-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
280-79846-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-79846-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 280-313725/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-313725/49	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-313725/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-313725/50	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 280-313725/53	Method Blank	Total/NA	Water	300.0	
MB 280-313725/6	Method Blank	Total/NA	Water	300.0	
MRL 280-313725/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 313726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	300.0	
280-79843-1	PETRAS WATER WELL	Total/NA	Water	300.0	
280-79846-A-1 DU	Duplicate	Total/NA	Water	300.0	
280-79846-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
280-79846-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
280-79846-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	
LCS 280-313726/4	Lab Control Sample	Total/NA	Water	300.0	
LCS 280-313726/49	Lab Control Sample	Total/NA	Water	300.0	
LCSD 280-313726/5	Lab Control Sample Dup	Total/NA	Water	300.0	
LCSD 280-313726/50	Lab Control Sample Dup	Total/NA	Water	300.0	
MB 280-313726/53	Method Blank	Total/NA	Water	300.0	
MB 280-313726/6	Method Blank	Total/NA	Water	300.0	
MRL 280-313726/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 313791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	SM 2540C	
280-79855-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 280-313791/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 280-313791/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 313827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79841-F-10 DU	Duplicate	Total/NA	Water	SM 2320B	
280-79843-1	PETRAS WATER WELL	Total/NA	Water	SM 2320B	
LCS 280-313827/30	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 280-313827/31	Method Blank	Total/NA	Water	SM 2320B	

General Chemistry (Continued)

Analysis Batch: 314005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	SM 4500 H+ B	
280-79896-G-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	
LCS 280-314005/4	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 314254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79684-B-1 DU	Duplicate	Total/NA	Water	SM 2510B	
280-79843-1	PETRAS WATER WELL	Total/NA	Water	SM 2510B	
LCS 280-314254/29	Lab Control Sample	Total/NA	Water	SM 2510B	
MB 280-314254/30	Method Blank	Total/NA	Water	SM 2510B	

Analysis Batch: 315883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-79843-1	PETRAS WATER WELL	Total/NA	Water	SM 1030E	
MB 280-315883/1	Method Blank	Total/NA	Water	SM 1030E	

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-314238/1-A
Matrix: Water
Analysis Batch: 315694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314238

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2,2'-oxybis[1-chloropropane]	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2,4,5-Trichlorophenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2,4,6-Trichlorophenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2,4-Dichlorophenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2,4-Dimethylphenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2,4-Dinitrophenol	ND		30		ug/L		02/21/16 10:50	03/03/16 13:53	1
2,4-Dinitrotoluene	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2,6-Dinitrotoluene	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2-Chloronaphthalene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
2-Chlorophenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2-Methylnaphthalene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
2-Methylphenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2-Nitroaniline	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
2-Nitrophenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
3 & 4 Methylphenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
3,3'-Dichlorobenzidine	ND		50		ug/L		02/21/16 10:50	03/03/16 13:53	1
3-Nitroaniline	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
4,6-Dinitro-2-methylphenol	ND		50		ug/L		02/21/16 10:50	03/03/16 13:53	1
4-Bromophenyl phenyl ether	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
4-Chloro-3-methylphenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
4-Chloroaniline	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
4-Chlorophenyl phenyl ether	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
4-Nitroaniline	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
4-Nitrophenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Acenaphthene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Acenaphthylene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Acetophenone	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Anthracene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Atrazine	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Benzidine	ND		100		ug/L		02/21/16 10:50	03/03/16 13:53	1
Benzo[a]anthracene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Benzo[a]pyrene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Benzo[b]fluoranthene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Benzo[g,h,i]perylene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Benzo[k]fluoranthene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Bis(2-chloroethoxy)methane	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Bis(2-chloroethyl)ether	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Bis(2-ethylhexyl) phthalate	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Butyl benzyl phthalate	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Caprolactam	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Carbazole	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Chrysene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Cresols, Total	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Dibenz(a,h)anthracene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Dibenzofuran	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Diethyl phthalate	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Dimethyl phthalate	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Di-n-butyl phthalate	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-314238/1-A
Matrix: Water
Analysis Batch: 315694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314238

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Fluoranthene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Fluorene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Hexachlorobenzene	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Hexachlorobutadiene	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Hexachlorocyclopentadiene	ND		50		ug/L		02/21/16 10:50	03/03/16 13:53	1
Hexachloroethane	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Indeno[1,2,3-cd]pyrene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Naphthalene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Nitrobenzene	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
N-Nitrosodi-n-propylamine	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
n-Nitrosodiphenylamine(as diphenylamine)	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Pentachlorophenol	ND		50		ug/L		02/21/16 10:50	03/03/16 13:53	1
Phenanthrene	ND		4.0		ug/L		02/21/16 10:50	03/03/16 13:53	1
Phenol	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1
Pyrene	ND		10		ug/L		02/21/16 10:50	03/03/16 13:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*48 - 135*	*02/21/16 10:50*	*03/03/16 13:53*	*1*
2-Fluorobiphenyl	*75*		*48 - 135*	*02/21/16 10:50*	*03/03/16 13:53*	*1*
2-Fluorophenol	*80*		*41 - 135*	*02/21/16 10:50*	*03/03/16 13:53*	*1*
Nitrobenzene-d5	*83*		*42 - 135*	*02/21/16 10:50*	*03/03/16 13:53*	*1*
Phenol-d5	*84*		*46 - 135*	*02/21/16 10:50*	*03/03/16 13:53*	*1*
Terphenyl-d14	*86*		*20 - 135*	*02/21/16 10:50*	*03/03/16 13:53*	*1*

Lab Sample ID: LCS 280-314238/2-A
Matrix: Water
Analysis Batch: 315694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	80.0	55.9		ug/L		70	44 - 135
1,4-Dichlorobenzene	80.0	52.5		ug/L		66	40 - 135
2,4,5-Trichlorophenol	80.0	72.4		ug/L		90	64 - 135
2,4,6-Trichlorophenol	80.0	74.1		ug/L		93	62 - 135
2,4-Dinitrotoluene	80.0	77.1		ug/L		96	65 - 135
2-Chlorophenol	80.0	70.0		ug/L		88	58 - 135
2-Methylnaphthalene	80.0	65.8		ug/L		82	56 - 135
2-Methylphenol	80.0	69.5		ug/L		87	62 - 135
4-Chloro-3-methylphenol	80.0	74.5		ug/L		93	65 - 135
4-Nitrophenol	160	157		ug/L		98	56 - 135
Acenaphthene	80.0	68.5		ug/L		86	61 - 135
Anthracene	80.0	68.7		ug/L		86	65 - 135
Carbazole	80.0	71.4		ug/L		89	65 - 135
N-Nitrosodi-n-propylamine	80.0	68.4		ug/L		86	65 - 135
Pentachlorophenol	160	137		ug/L		86	52 - 135
Phenol	80.0	68.1		ug/L		85	61 - 135
Pyrene	80.0	68.1		ug/L		85	65 - 135

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-314238/2-A
Matrix: Water
Analysis Batch: 315694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314238

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*90*		*48 - 135*
2-Fluorobiphenyl	*82*		*48 - 135*
2-Fluorophenol	*82*		*41 - 135*
Nitrobenzene-d5	*84*		*42 - 135*
Phenol-d5	*83*		*46 - 135*
Terphenyl-d14	*84*		*20 - 135*

Lab Sample ID: LCSD 280-314238/3-A
Matrix: Water
Analysis Batch: 315694

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 314238

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trichlorobenzene			80.0	58.4		ug/L		73	44 - 135	4	42
1,4-Dichlorobenzene			80.0	55.6		ug/L		69	40 - 135	6	50
2,4,5-Trichlorophenol			80.0	70.7		ug/L		88	64 - 135	2	30
2,4,6-Trichlorophenol			80.0	72.7		ug/L		91	62 - 135	2	30
2,4-Dinitrotoluene			80.0	71.4		ug/L		89	65 - 135	8	32
2-Chlorophenol			80.0	63.6		ug/L		80	58 - 135	10	46
2-Methylnaphthalene			80.0	64.8		ug/L		81	56 - 135	2	32
2-Methylphenol			80.0	68.7		ug/L		86	62 - 135	1	40
4-Chloro-3-methylphenol			80.0	70.4		ug/L		88	65 - 135	6	30
4-Nitrophenol			160	146		ug/L		91	56 - 135	7	50
Acenaphthene			80.0	66.4		ug/L		83	61 - 135	3	30
Anthracene			80.0	67.2		ug/L		84	65 - 135	2	30
Carbazole			80.0	69.5		ug/L		87	65 - 135	3	30
N-Nitrosodi-n-propylamine			80.0	65.6		ug/L		82	65 - 135	4	30
Pentachlorophenol			160	132		ug/L		83	52 - 135	4	30
Phenol			80.0	66.4		ug/L		83	61 - 135	3	37
Pyrene			80.0	65.3		ug/L		82	65 - 135	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*86*		*48 - 135*
2-Fluorobiphenyl	*79*		*48 - 135*
2-Fluorophenol	*79*		*41 - 135*
Nitrobenzene-d5	*82*		*42 - 135*
Phenol-d5	*81*		*46 - 135*
Terphenyl-d14	*81*		*20 - 135*

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 280-315213/3
Matrix: Water
Analysis Batch: 315213

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		25		ug/L			02/29/16 10:51	1

Method: 8015B - Gasoline Range Organics - (GC) (Continued)

Lab Sample ID: MB 280-315213/3
Matrix: Water
Analysis Batch: 315213

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		82 - 110		02/29/16 10:51	1

Lab Sample ID: LCS 280-315213/5
Matrix: Water
Analysis Batch: 315213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	101	94.3		ug/L		94	79 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene	101		82 - 110

Lab Sample ID: LCSD 280-315213/6
Matrix: Water
Analysis Batch: 315213

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	101	97.7		ug/L		97	79 - 149	4	27

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
a,a,a-Trifluorotoluene	103		82 - 110

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 280-315066/5
Matrix: Water
Analysis Batch: 315066

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	ug/L			02/26/16 14:05	1
Ethylbenzene	ND		0.50	ug/L			02/26/16 14:05	1
Toluene	ND		0.50	ug/L			02/26/16 14:05	1
m-Xylene & p-Xylene	ND		0.50	ug/L			02/26/16 14:05	1
o-Xylene	ND		0.50	ug/L			02/26/16 14:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	99		85 - 115		02/26/16 14:05	1

Lab Sample ID: LCS 280-315066/6
Matrix: Water
Analysis Batch: 315066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.0	20.6		ug/L		103	75 - 117
Ethylbenzene	20.0	21.3		ug/L		107	79 - 115

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCS 280-315066/6
Matrix: Water
Analysis Batch: 315066

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Toluene			20.0	21.2		ug/L		106	77 - 115		
m-Xylene & p-Xylene			40.0	42.1		ug/L		105	79 - 116		
o-Xylene			20.0	20.5		ug/L		102	79 - 116		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*103*		*85 - 115*

Lab Sample ID: LCSD 280-315066/7
Matrix: Water
Analysis Batch: 315066

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			20.0	19.5		ug/L		98	75 - 117	5	45
Ethylbenzene			20.0	20.6		ug/L		103	79 - 115	4	46
Toluene			20.0	20.4		ug/L		102	77 - 115	4	45
m-Xylene & p-Xylene			40.0	40.3		ug/L		101	79 - 116	4	46
o-Xylene			20.0	19.5		ug/L		98	79 - 116	5	46

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*99*		*85 - 115*

Lab Sample ID: 280-79907-B-1 MS
Matrix: Water
Analysis Batch: 315066

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	ND		20.0	20.4		ug/L		102	75 - 117		
Ethylbenzene	0.75		20.0	21.4		ug/L		103	79 - 115		
Toluene	2.5		20.0	23.2		ug/L		103	77 - 115		
m-Xylene & p-Xylene	6.6		40.0	47.5		ug/L		102	79 - 116		
o-Xylene	2.0		20.0	22.2		ug/L		101	79 - 116		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
a,a,a-Trifluorotoluene	*97*		*85 - 115*

Lab Sample ID: 280-79907-B-1 MSD
Matrix: Water
Analysis Batch: 315066

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		20.0	20.2		ug/L		101	75 - 117	1	45
Ethylbenzene	0.75		20.0	21.1		ug/L		102	79 - 115	1	46
Toluene	2.5		20.0	22.7		ug/L		101	77 - 115	2	45
m-Xylene & p-Xylene	6.6		40.0	46.8		ug/L		101	79 - 116	1	46
o-Xylene	2.0		20.0	21.8		ug/L		99	79 - 116	2	46

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 280-79907-B-1 MSD
Matrix: Water
Analysis Batch: 315066

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene	*98*		*85 - 115*

Method: RSK-175 - Dissolved Gases in Water

Lab Sample ID: MB 280-315046/9
Matrix: Water
Analysis Batch: 315046

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethane	ND		5.0		ug/L			02/29/16 17:33	1
Methane	ND		5.0		ug/L			02/29/16 17:33	1
Propane	ND		5.0		ug/L			02/29/16 17:33	1

Lab Sample ID: LCS 280-315046/10
Matrix: Water
Analysis Batch: 315046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethane			274	284		ug/L		104	75 - 125		
Methane			146	156		ug/L		107	75 - 125		
Propane			401	405		ug/L		101	75 - 125		

Lab Sample ID: 280-80176-Y-4 MS
Matrix: Water
Analysis Batch: 315046

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethane	ND		274	302		ug/L		111	75 - 125		
Methane	ND		146	156		ug/L		107	52 - 145		
Propane	ND		401	417		ug/L		104	50 - 150		

Lab Sample ID: 280-80176-Y-4 MSD
Matrix: Water
Analysis Batch: 315046

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethane	ND		274	279		ug/L		102	75 - 125	8	20
Methane	ND		146	147		ug/L		101	52 - 145	6	20
Propane	ND		401	391		ug/L		97	50 - 150	6	20

Lab Sample ID: 280-80176-V-4 DU
Matrix: Water
Analysis Batch: 315046

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ethane	ND			ND		ug/L				NC	20
Methane	ND			ND		ug/L				NC	20
Propane	ND			ND		ug/L				NC	20

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 280-314015/1-A
Matrix: Water
Analysis Batch: 314515

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314015

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
C10-C36	ND		0.50		mg/L		02/18/16 21:54	02/23/16 14:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*50 - 115*	*02/18/16 21:54*	*02/23/16 14:36*	*1*

Lab Sample ID: LCS 280-314015/2-A
Matrix: Water
Analysis Batch: 314515

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314015

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C10-C36			2.00	1.88		mg/L		94	57 - 115		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*96*		*50 - 115*

Lab Sample ID: LCSD 280-314015/3-A
Matrix: Water
Analysis Batch: 314515

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 314015

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C10-C36			2.00	1.81		mg/L		91	57 - 115	4	31

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
o-Terphenyl	*97*		*50 - 115*

Method: 20B - Sodium Adsorption Ratio

Lab Sample ID: MB 280-315853/1
Matrix: Water
Analysis Batch: 315853

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	ND		0.40		No Unit			03/03/16 15:26	1

Lab Sample ID: 280-79843-1 DU
Matrix: Water
Analysis Batch: 315853

Client Sample ID: PETRAS WATER WELL
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sodium Adsorption Ratio	15			14.9		No Unit				2	20

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 280-314112/1-D
Matrix: Water
Analysis Batch: 315500

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 314423

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		200		ug/L		02/23/16 14:40	03/02/16 01:10	1
Iron	ND		100		ug/L		02/23/16 14:40	03/02/16 01:10	1
Potassium	ND		3000		ug/L		02/23/16 14:40	03/02/16 01:10	1
Barium	ND		10		ug/L		02/23/16 14:40	03/02/16 01:10	1
Arsenic	ND		15		ug/L		02/23/16 14:40	03/02/16 01:10	1
Lead	ND		9.0		ug/L		02/23/16 14:40	03/02/16 01:10	1
Selenium	ND		15		ug/L		02/23/16 14:40	03/02/16 01:10	1
Chromium	ND		10		ug/L		02/23/16 14:40	03/02/16 01:10	1

Lab Sample ID: MB 280-314112/1-D
Matrix: Water
Analysis Batch: 315820

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 314423

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		200		ug/L		02/23/16 14:40	03/03/16 21:05	1
Manganese	ND		10		ug/L		02/23/16 14:40	03/03/16 21:05	1

Lab Sample ID: MB 280-314112/1-D
Matrix: Water
Analysis Batch: 316079

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 314423

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Sodium	ND		1000		ug/L		02/23/16 14:40	03/07/16 20:28	1

Lab Sample ID: LCS 280-314112/2-D
Matrix: Water
Analysis Batch: 315500

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 314423

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Calcium			50000	47100		ug/L		94	90 - 111		
Iron			1000	961		ug/L		96	89 - 115		
Potassium			50000	50700		ug/L		101	89 - 114		
Barium			2000	1930		ug/L		97	90 - 112		
Arsenic			1000	1020		ug/L		102	88 - 110		
Lead			500	510		ug/L		102	89 - 110		
Selenium			2000	2050		ug/L		103	85 - 112		
Chromium			200	207		ug/L		104	90 - 113		

Lab Sample ID: LCS 280-314112/2-D
Matrix: Water
Analysis Batch: 315820

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 314423

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Magnesium			50000	49500		ug/L		99	90 - 113		
Manganese			500	463		ug/L		93	90 - 110		

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-314112/2-D
Matrix: Water
Analysis Batch: 316079

Client Sample ID: Lab Control Sample
Prep Type: Dissolved
Prep Batch: 314423

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	50000	50800		ug/L		102	90 - 115

Lab Sample ID: 280-79843-1 MS
Matrix: Water
Analysis Batch: 315500

Client Sample ID: PETRAS WATER WELL
Prep Type: Dissolved
Prep Batch: 314423

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	200000		50000	257000		ug/L		119	48 - 153
Iron	ND		1000	956		ug/L		96	52 - 155
Potassium	11000		50000	67900		ug/L		113	76 - 132
Barium	13		2000	1950		ug/L		97	85 - 120
Arsenic	ND		1000	1040		ug/L		104	84 - 124
Lead	ND		500	469		ug/L		94	89 - 121
Selenium	ND		2000	2070		ug/L		104	71 - 140
Chromium	ND		200	198		ug/L		99	73 - 135

Lab Sample ID: 280-79843-1 MS
Matrix: Water
Analysis Batch: 315820

Client Sample ID: PETRAS WATER WELL
Prep Type: Dissolved
Prep Batch: 314423

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Magnesium	56000		50000	103000		ug/L		96	62 - 146
Manganese	79		500	539		ug/L		92	79 - 121

Lab Sample ID: 280-79843-1 MS
Matrix: Water
Analysis Batch: 316079

Client Sample ID: PETRAS WATER WELL
Prep Type: Dissolved
Prep Batch: 314423

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	950000		50000	1010000	4	ug/L		121	70 - 203

Lab Sample ID: 280-79843-1 MSD
Matrix: Water
Analysis Batch: 315500

Client Sample ID: PETRAS WATER WELL
Prep Type: Dissolved
Prep Batch: 314423

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	200000		50000	255000		ug/L		114	48 - 153	1	20
Iron	ND		1000	964		ug/L		96	52 - 155	1	20
Potassium	11000		50000	68400		ug/L		114	76 - 132	1	20
Barium	13		2000	1950		ug/L		97	85 - 120	0	20
Arsenic	ND		1000	1030		ug/L		103	84 - 124	0	20
Lead	ND		500	465		ug/L		93	89 - 121	1	20
Selenium	ND		2000	2060		ug/L		103	71 - 140	1	20
Chromium	ND		200	198		ug/L		99	73 - 135	0	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 280-79843-1 MSD — **Client Sample ID: PETRAS WATER WELL**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 315820 — **Prep Batch: 314423**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Magnesium	56000		50000	102000		ug/L		92	62 - 146	2	20
Manganese	79		500	532		ug/L		91	79 - 121	1	20

Lab Sample ID: 280-79843-1 MSD — **Client Sample ID: PETRAS WATER WELL**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 316079 — **Prep Batch: 314423**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	950000		50000	1010000	4	ug/L		122	70 - 203	0	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 280-313725/53 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 313725

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.50		mg/L			02/18/16 02:50	1
Nitrite as N	ND		0.50		mg/L			02/18/16 02:50	1
Nitrate Nitrite as N	ND		0.50		mg/L			02/18/16 02:50	1

Lab Sample ID: MB 280-313725/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 313725

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.50		mg/L			02/17/16 12:01	1
Nitrite as N	ND		0.50		mg/L			02/17/16 12:01	1
Nitrate Nitrite as N	ND		0.50		mg/L			02/17/16 12:01	1

Lab Sample ID: LCS 280-313725/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 313725

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			5.00	4.98		mg/L		100	90 - 110		
Nitrite as N			5.00	5.05		mg/L		101	90 - 110		
Nitrate Nitrite as N			10.0	10.0		mg/L		100	90 - 110		

Lab Sample ID: LCS 280-313725/49 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 313725

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate as N			5.00	5.02		mg/L		100	90 - 110		
Nitrite as N			5.00	5.07		mg/L		101	90 - 110		
Nitrate Nitrite as N			10.0	10.1		mg/L		101	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 280-313725/5
Matrix: Water
Analysis Batch: 313725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	5.00	4.99		mg/L		100	90 - 110	0	10
Nitrite as N	5.00	5.07		mg/L		101	90 - 110	0	10
Nitrate Nitrite as N	10.0	10.1		mg/L		101	90 - 110	0	10

Lab Sample ID: LCSD 280-313725/50
Matrix: Water
Analysis Batch: 313725

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	5.00	5.00		mg/L		100	90 - 110	1	10
Nitrite as N	5.00	5.08		mg/L		102	90 - 110	0	10
Nitrate Nitrite as N	10.0	10.1		mg/L		101	90 - 110	0	10

Lab Sample ID: MRL 280-313725/3
Matrix: Water
Analysis Batch: 313725

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.200	ND		mg/L		102	50 - 150
Nitrite as N	0.200	ND		mg/L		87	50 - 150

Lab Sample ID: 280-79846-A-1 MS
Matrix: Water
Analysis Batch: 313725

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	ND		5.00	5.41		mg/L		108	80 - 120
Nitrite as N	ND		5.00	5.09		mg/L		102	80 - 120
Nitrate Nitrite as N	ND		10.0	10.5		mg/L		105	80 - 120

Lab Sample ID: 280-79846-A-1 MSD
Matrix: Water
Analysis Batch: 313725

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		5.00	5.45		mg/L		109	80 - 120	1	20
Nitrite as N	ND		5.00	5.13		mg/L		103	80 - 120	1	20
Nitrate Nitrite as N	ND		10.0	10.6		mg/L		106	80 - 120	1	20

Lab Sample ID: 280-79846-A-2 MSD
Matrix: Water
Analysis Batch: 313725

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	ND		5.00	5.30		mg/L		106	80 - 120	1	20
Nitrite as N	ND		5.00	4.98		mg/L		100	80 - 120	2	20
Nitrate Nitrite as N	ND		10.0	10.3		mg/L		103	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-79846-A-1 DU
Matrix: Water
Analysis Batch: 313725

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate as N	ND		ND		mg/L		NC	15
Nitrite as N	ND		ND		mg/L		NC	15
Nitrate Nitrite as N	ND		ND		mg/L		NC	15

Lab Sample ID: MB 280-313726/53
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20	mg/L			02/18/16 02:50	1
Chloride	ND		3.0	mg/L			02/18/16 02:50	1
Fluoride	ND		0.50	mg/L			02/18/16 02:50	1
Sulfate	ND		5.0	mg/L			02/18/16 02:50	1

Lab Sample ID: MB 280-313726/6
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20	mg/L			02/17/16 12:01	1
Chloride	ND		3.0	mg/L			02/17/16 12:01	1
Fluoride	ND		0.50	mg/L			02/17/16 12:01	1
Sulfate	ND		5.0	mg/L			02/17/16 12:01	1

Lab Sample ID: LCS 280-313726/4
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	5.00	5.01		mg/L		100	90 - 110
Chloride	100	101		mg/L		101	90 - 110
Fluoride	5.00	5.14		mg/L		103	90 - 110
Sulfate	100	100		mg/L		100	90 - 110

Lab Sample ID: LCS 280-313726/49
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	5.00	5.05		mg/L		101	90 - 110
Chloride	100	102		mg/L		102	90 - 110
Fluoride	5.00	5.14		mg/L		103	90 - 110
Sulfate	100	101		mg/L		101	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 280-313726/5
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide	5.00	5.02		mg/L		100	90 - 110	0	10
Chloride	100	101		mg/L		101	90 - 110	0	10
Fluoride	5.00	5.18		mg/L		104	90 - 110	1	10
Sulfate	100	101		mg/L		101	90 - 110	0	10

Lab Sample ID: LCSD 280-313726/50
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide	5.00	5.02		mg/L		100	90 - 110	0	10
Chloride	100	101		mg/L		101	90 - 110	1	10
Fluoride	5.00	5.16		mg/L		103	90 - 110	1	10
Sulfate	100	101		mg/L		101	90 - 110	0	10

Lab Sample ID: MRL 280-313726/3
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	0.200	0.204		mg/L		102	50 - 150
Chloride	2.50	ND		mg/L		100	50 - 150
Fluoride	0.200	ND		mg/L		85	50 - 150
Sulfate	2.50	ND		mg/L		99	50 - 150

Lab Sample ID: 280-79846-A-1 MS
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromide	ND		5.00	5.31		mg/L		106	80 - 120
Chloride	12		25.0	39.6		mg/L		110	80 - 120
Fluoride	ND		5.00	5.16		mg/L		102	80 - 120
Sulfate	ND		25.0	27.5		mg/L		110	80 - 120

Lab Sample ID: 280-79846-A-1 MSD
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide	ND		5.00	5.35		mg/L		107	80 - 120	1	20
Chloride	12		25.0	39.8		mg/L		110	80 - 120	0	20
Fluoride	ND		5.00	5.33		mg/L		105	80 - 120	3	20
Sulfate	ND		25.0	27.7		mg/L		111	80 - 120	1	20

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 280-79846-A-2 MSD
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromide	ND		5.00	5.19		mg/L		104	80 - 120	1	20
Chloride	ND		25.0	29.5		mg/L		107	80 - 120	1	20
Fluoride	ND		5.00	5.09		mg/L		102	80 - 120	2	20
Sulfate	54		25.0	80.2		mg/L		105	80 - 120	0	20

Lab Sample ID: 280-79846-A-1 DU
Matrix: Water
Analysis Batch: 313726

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Bromide	ND		ND		mg/L				NC	15
Chloride	12		12.2		mg/L				0.1	15
Fluoride	ND		ND		mg/L				NC	15
Sulfate	ND		ND		mg/L				NC	15

Method: SM 1030E - Cation Anion Balance

Lab Sample ID: MB 280-315883/1
Matrix: Water
Analysis Batch: 315883

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Anions	0.000				meq/L			03/04/16 14:58	1
Total Cations	0.000				meq/L			03/04/16 14:58	1
Percent Difference	0.000				%			03/04/16 14:58	1
Anion/Cation Balance	0.000				%			03/04/16 14:58	1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 280-313827/31
Matrix: Water
Analysis Batch: 313827

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity	ND		5.0		mg/L			02/17/16 16:07	1
Bicarbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/17/16 16:07	1
Carbonate Alkalinity as CaCO3	ND		5.0		mg/L			02/17/16 16:07	1
Hydroxide Alkalinity	ND		5.0		mg/L			02/17/16 16:07	1

Lab Sample ID: LCS 280-313827/30
Matrix: Water
Analysis Batch: 313827

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Alkalinity			200	199		mg/L		99	90 - 110		

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 280-79841-F-10 DU
Matrix: Water
Analysis Batch: 313827

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Alkalinity	ND			ND		mg/L				NC	10

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 280-314254/30
Matrix: Water
Analysis Batch: 314254

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		2.0		umhos/cm			02/21/16 11:38	1

Lab Sample ID: LCS 280-314254/29
Matrix: Water
Analysis Batch: 314254

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Conductance			1410	1420		umhos/cm		101	90 - 110		

Lab Sample ID: 280-79684-B-1 DU
Matrix: Water
Analysis Batch: 314254

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Conductance	ND			ND		umhos/cm				NC	10

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 280-313791/1
Matrix: Water
Analysis Batch: 313791

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			02/17/16 15:10	1

Lab Sample ID: LCS 280-313791/2
Matrix: Water
Analysis Batch: 313791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids			500	493		mg/L		99	86 - 110		

Lab Sample ID: 280-79855-A-1 DU
Matrix: Water
Analysis Batch: 313791

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	1000			1050		mg/L				0.2	10

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 280-314005/4
Matrix: Water
Analysis Batch: 314005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
pH			7.00	7.030		SU		100	99 - 101		

Lab Sample ID: 280-79896-G-1 DU
Matrix: Water
Analysis Batch: 314005

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
pH	8.01			8.060		SU				0.6	5

Lab Chronicle

Client: Colorado Oil&Gas Conservation Commision
Project/Site: COGCC - Petras WW #200438711

TestAmerica Job ID: 280-79843-1

Client Sample ID: PETRAS WATER WELL

Lab Sample ID: 280-79843-1

Date Collected: 02/16/16 12:20

Matrix: Water

Date Received: 02/16/16 14:26

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1059 mL	1 mL	314238	02/21/16 10:50	JDW	TAL DEN
Total/NA	Analysis	8270C		1	1059 mL	1 mL	315694	03/03/16 15:46	DCK	TAL DEN
Total/NA	Analysis	8015B		1	5 mL	5 mL	315213	02/29/16 21:43	EER	TAL DEN
Total/NA	Analysis	8021B		1	5 mL	5 mL	315066	02/26/16 19:31	TEM	TAL DEN
Total/NA	Analysis	RSK-175		1	18 mL	18 mL	315046	02/29/16 19:28	MPS	TAL DEN
Total/NA	Prep	3510C			1056.8 mL	1 mL	314015	02/18/16 21:54	EJP	TAL DEN
Total/NA	Analysis	8015B		1	1056.8 mL	1 mL	314515	02/23/16 21:57	TEM	TAL DEN
Total/NA	Analysis	20B		1			315853	03/03/16 15:29	SJS	TAL DEN
Dissolved	Filtration	FILTRATION			200 mL	200 mL	314112	02/19/16 12:30	TEB	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	314423	02/23/16 14:40	SEJ	TAL DEN
Dissolved	Analysis	6010B		1	50 mL	50 mL	316079	03/07/16 20:33	CMK	TAL DEN
Dissolved	Filtration	FILTRATION			200 mL	200 mL	314112	02/19/16 12:30	TEB	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	314423	02/23/16 14:40	SEJ	TAL DEN
Dissolved	Analysis	6010B		1	50 mL	50 mL	315500	03/02/16 01:15	SJS	TAL DEN
Dissolved	Filtration	FILTRATION			200 mL	200 mL	314112	02/19/16 12:30	TEB	TAL DEN
Dissolved	Prep	3005A			50 mL	50 mL	314423	02/23/16 14:40	SEJ	TAL DEN
Dissolved	Analysis	6010B		1	50 mL	50 mL	315820	03/03/16 21:10	SJS	TAL DEN
Total/NA	Analysis	300.0		2	5 mL	5 mL	313725	02/17/16 14:46	TLP	TAL DEN
Total/NA	Analysis	300.0		2	5 mL	5 mL	313726	02/17/16 14:46	TLP	TAL DEN
Total/NA	Analysis	300.0		20	5 mL	5 mL	313726	02/18/16 05:29	TLP	TAL DEN
Total/NA	Analysis	SM 1030E		1			315883	03/04/16 14:58	CML	TAL DEN
Total/NA	Analysis	SM 2320B		1			313827	02/17/16 17:14	NAS	TAL DEN
Total/NA	Analysis	SM 2510B		1		25 mL	314254	02/21/16 11:39	WTW	TAL DEN
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	313791	02/17/16 15:10	RSM	TAL DEN
Total/NA	Analysis	SM 4500 H+ B		1			314005	02/18/16 19:15	MAS	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Login Sample Receipt Checklist

Client: Colorado Oil&Gas Conservation Commision

Job Number: 280-79843-1

Login Number: 79843
List Number: 1
Creator: Muniz, Ashley T

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Denver
4955 Yarrow Street
Arvada, CO 80002
phone 303.736.0100 fax 303.431.7171

Chain of Custody Record

3,6127-0.2 16Feb16 Transfer (tw)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact	Project Manager: Steven Arauza	Site Contact: Steven Arauza	Date: 2/12/2016	COC No:
Colorado Oil & Gas Conservation Commission	Tel/Fax: 303-894-2100, ext. 5136	Lab Contact: Donna Rydberg	Carrier: NA	1 of 1 COCs
1120 Lincoln Street, Suite 801	Analysis Turnaround Time			Job No.
Denver, CO 80203	Calendar (C) or Work Days (W) _____			
303-894-2100	TAT if different from Below ___Standard__X___			SDG No.
	☐ 2 weeks			
Project Name: Petras WW #200438711	☐ 1 week			
	☐ 2 days			
P O # CT 2016-146	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Filtered Sample	VOCs 8021 -BTEX	TEPH 8015-M - GRO & DRO	Dissolved Metals - see list below	Major Anions/Cations - see list below	Methane, Ethane, Propane RSK_175	Alkaline Group	TDS	Conductivity	pH	SAR	Semi-volatile organics 8270	Sample Specific Notes:
Petras Water Well	2/16/2016	12:20	GW	Aqueous	16		X	X	X	X	X	X	X	X	X	X	X	Dissolved metals - filter by lab

280-79843 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments: Remit pdf of lab report, EDD and invoice to Steven Arauza @ Steven.Arauza@state.co.us . Analyze for the following metals/anions/cations: Ca, Fe, Mn, K, Mg, Na, Cl, NO2, NO3, Br, SO4, CO3, HCO3, F, Se, Pb, Ba, Cr & As. Provide anion/cation balance report.

Relinquished by:	Company: COGCC	Date/Time: 2/16 2:26	Received by: Reid RMA	Company: TAD	Date/Time: 2-16-2016 1426
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time: