Texas Department of State Health Services Laboratory
Environmental Sciences Branch
Quality Assurance Report

Laboratory Case Narrative: The water samples identified below as AC72074, AC72077 and AC72080 were collected on 11-13-14. A single cube container for each sample was received by the Texas Department of State Health Services Laboratory on 11-14-14. The sample submission forms indicated that total analysis was requested for all samples. The samples were acidified on 11-14-14 with 5 mL concentrated nitric acid. The pH < 2 verification was performed on 11-17-14.

The client requested analyses for arsenic, cadmium, chromium, iron, lead, mercury, molybdenum, selenium, sodium and uranium on all water samples. The samples were treated as a batch throughout the sample digestion and analysis procedures. For the analyses of arsenic, cadmium, chromium, iron, lead, molybdenum, selenium, sodium and uranium, the initial sample volume was 50 mL and the final volume was 50 mL for the samples prepared by EPA 3010A and EPA 3020A. For the mercury analysis, the initial sample volume was 50 mL and the final volume was 100 mL for the samples prepared by EPA 7470A. All analyses were completed within the required holding times.

In order to match the 1% HNO_3 matrix for the ICP-MS calibration solutions, the sample digestates and batch quality control samples including the method blank were diluted by a factor of 3 with deionized reagent water during instrument testing. Serial dilutions of samples, if required, were made using a 1% HNO_3 solution. The dilution factors reported with the results for all analytes indicate the total dilution from the sample preparation and the bench analysis. The reporting levels shown in the quality control tables do not include dilution factors. The reporting limit for a specific result can be determined by multiplying the reporting limit (RL) for the undiluted sample by the dilution factor indicated for the result. Sample and sample duplicate were analyzed and reported separately.

DSHS Sample Number	Operator/Facility	Sample Location
AC72074	URI, Kingsville Dome	PAA-3, MW-AA-25
AC72077	URI, Kingsville Dome	PAA-3, MW-AA-30
AC72080	URI, Kingsville Dome	PAA-3, MW-86

Sample Batch ID	Preparation Method	Preparation Date	Analytes Tested	Analytical Method	Analytical Technique	Analysis Date
11-24-14 (7470A)	EPA 7470A	11-24-14	Hg	EPA 7470A	CVAAS	11-24-14
11-18-14 (3010A)	EPA 3010A	11-18-14	Fe, Na	EPA 6010C	ICP	11-20-14
11-18-14 (3020A)	EPA 3020A	11-18-14	As, Cd, Cr, Mo, Pb, Se, U	EPA 6020A	ICPMS	11-20-14

Quality Control Results:

(1) Mercury Results for AC72074, AC72077 and AC72080
Analysis Date: 11-24-14

Analyte	Reporting Limit mg/L	Method Detection Limit mg/L	Initial Calibration Blank (ICB) mg/L	Final Calibration Blank (CCB) mg/L	Initial Calibration Verification (ICV) (2nd Source) % R	Final Calibration Verification (CCV) % R	Low Reporting Level (RL) Check % R
Mercury	0.000200	0.0000130	< 0.0000130	< 0.0000130	102	101	99
Acceptance Criteria			**< RL**	**< RL**	**90-110**	**80-120**	**70-130**

Analyte	Linear Dynamic Range (LDR) % R	Method Blank (M-BLK) mg/L	Laboratory Control Sample (LCS) % R	Matrix Duplicate (MD) AC72074 % RPD	Matrix Spike (MS) AC72074 % R	Matrix Spike Duplicate (MSD) AC72074 % R	MS/MSD % RPD	Spike Target Concentration Level mg/L
Mercury	101	< 0.0000130	101	NA	97	94	2.6	0.00200
Acceptance Criteria	**90-110**	**< RL**	**85-115**	**< 20**	**75-125**	**75-125**	**< 20**	

(2) Iron and Sodium Results for AC72074, AC72077 and AC72080
Analysis Date: 11-20-14

Analyte	Method Detection Limit mg/L	Reporting Limit mg/L	Initial Calibration Blank (ICB) mg/L	Continue Calibration Blank (CCB) mg/L	Final Calibration Blank (CCB) mg/L	Initial Low Level Calibration Verification (LL-ICV) % R	Continue Low Level Calibration Verification (LL-CCV) % R	Final Low Level Calibration Verification (LL-ICV) % R	Initial Calibration Verification (2nd Source) (ICV) % R	Continue Calibration Verification (CCV) % R
Iron	0.00251	0.0100	< 0.00251	< 0.00251	< 0.00251	97	89	95	103	96
Sodium	0.0159	0.500	< 0.0159	0.122	0.160	102	112	119	98	98
Acceptance Criteria			**< RL**	**< RL**	**< RL**	**70-130**	**70-130**	**70-130**	**90-110**	**90-110**

Analyte	Final Calibration Verification (CCV) % R	Interference Check Solution (ICS) %R	Method Blank (M-BLK) mg/L	Laboratory Control Sample (LCS) % R	Matrix Duplicate (MD) AC72074 % RPD	Matrix Spike (MS) AC72074 % R	Matrix Spike Duplicate (MSD) AC72074 % R	MS/MSD % RPD	Spike Target Concentration Level mg/L	Linear Dynamic Range (LDR) % R
Iron	93	97	< 0.00251	98	1.8	96	98	2.1	1.0	97
Sodium	95	98	0.0250	101	1.2	143	129	1.2	50	98
Acceptance Criteria	**90-110**	**80-120**	**< RL**	**80-120**	**< 20**	**75-125**	**75-125**	**< 20**		**90-110**

Note: Sample AC72074 matrix spike recovery for sodium was outside acceptance limit of 75-125. The sample was reanalyzed for sodium by dilution.

(3) Arsenic, Cadmium, Chromium, Lead, Molybdenum Selenium and Uranium Results for AC72074, AC72077 and AC72080
Analysis Date: 11-20-14

Analyte	Method Detection Limit mg/L	Reporting Limit mg/L	Initial Calibration Blank (ICB) mg/L	Final Calibration Blank (CCB) mg/L	Initial Low Level Calibration Verification (LL-ICV) % R	Final Low Level Calibration Verification (LL-ICV) % R	Initial Calibration Verification (2nd Source) (ICV) % R	Final Calibration Verification (CCV) % R	Interference Check Solution (ICS) AB %R
Arsenic	0.000177	0.00100	0.000210	< 0.000177	108	102	94	97	92
Cadmium	0.0000409	0.00100	< 0.0000409	< 0.0000409	109	110	104	102	100
Chromium	0.000113	0.00100	< 0.000113	< 0.000113	98	106	103	99	103
Lead	0.0000680	0.00100	< 0.0000680	< 0.0000680	98	98	101	98	100
Molybdenum	0.0000595	0.00100	0.0000620	< 0.0000595	96	95	99	97	98
Selenium	0.000471	0.00200	< 0.000471	< 0.000471	104	101	100	97	97
Uranium	0.0000177	0.00100	< 0.0000177	< 0.0000177	97	99	99	100	100
Acceptance Criteria			**< RL**	**< RL**	**70-130**	**70-130**	**90-110**	**90-110**	**80-120**

Analyte	Method Blank (M-BLK) mg/L	Laboratory Control Sample (LCS) % R	Matrix Duplicate (MD) AC72074 % RPD	Matrix Spike (MS) AC72074 % R	Matrix Spike Duplicate (MSD) AC72074 % R	MS/MSD % RPD	Spike Target Concentration Level mg/L	Linear Dynamic Range (LDR) % R
Arsenic	< 0.000177	95	NA	94	91	2.9	0.150	99
Cadmium	< 0.0000409	98	NA	95	95	0.2	0.150	101
Chromium	< 0.000113	101	NA	95	90	5.4	0.150	100
Lead	< 0.0000680	100	2.2	98	97	1.4	0.150	98
Molybdenum	< 0.0000595	98	0.3	101	103	1.1	0.150	98
Selenium	< 0.000471	93	NA	91	86	5.8	0.300	99
Uranium	< 0.0000177	99	NA	104	103	1.6	0.150	100
Acceptance Criteria	**< RL**	**80-120**	**< 20**	**75-125**	**75-125**	**< 20**		**90-110**

Analyte	Internal Standard (Analyte)	Internal Standard AC72074 % R	Internal Standard AC72074 (Duplicate) % R	Internal Standard AC72077 % R	Internal Standard AC72080 % R
Arsenic	Y	97	102	99	110
Cadmium	In	94	95	90	106
Chromium	Sc	99	101	99	110
Lead	Bi	89	91	88	101
Molybdenum	Rh	89	91	86	102
Selenium	Y	97	102	99	110
Uranium	Bi	89	91	88	101
Acceptance Criteria		**> 70**	**> 70**	**> 70**	**> 70**

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. I affirm that this data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached deficiency reports. I further affirm to the best of my knowledge that all problems/anomalies observed by this laboratory, or if applicable, any and all subcontracted laboratories that might affect the quality of the data have been identified in the laboratory review checklist, and no information or data have been withheld that would affect the quality of the data.

Evelyn Boyer	Evelyn Boyer	1-8-2015	Team Leader
Name (printed)	Signature	Date	Official Title (printed)

JAN - 9 2015 nbp

date reported

URGENT Non-Potable Water

TCEQ CHEMICAL ANALYSIS LABORATORY REPORT

TEXAS COMMISSION on ENVIRONMENTAL QUALITY (TCEQ)

P. O. BOX 13087
AUSTIN, TEXAS 78711-3087

Handling Instructions: ☐ Routine ☒ Urgent ☐ Priority (short half-life)
Purpose: ☐ Close Out/Groundwater Restoration ☐ Baseline (Pre-Operation) ☒ Compliance
Sample Collected From: ☐ Unrestricted Area ☒ Restricted/Controlled Area
☒ Radiological Analysis Also Performed **PCA #** _____ **Index No** _____
Water only: ☐ Acidified ☒ Not Acidified ☐ Filtered ☒ Not Filtered

Contact: M. Abbaszade
Phone/MC: (512) 239-6078
Submitter No. M0000070
Suspected Radionuclides: uranium

Type: ☐ Soil ☐ Sediment ☐ Vegetation ☐ Wipe ☐ Other _____

Type: Water ☒ Monitor Well ☐ Baseline Well ☐ Surface Water ☐ Other _____

Facility Category: ☒ Uranium Recovery ☐ Waste Processing ☐ Low Level Radioactive Waste/Material ☐ Buried Radioactive Waste ☐ Mixed Waste Treatment Facility ☐ By-Product Waste/Material ☐ Other _____

Radiation Survey Results: BKG: 5-6 uR/hr Sample: BKG
Sample Number 2 of 9
Sample location PAA3, MW-AA-25
Operator / Facility URI, Kingsville Dome
Permit/License No URO2827
Notes _____

I certify this sample was collected by me at 10 : 28 AM
on 11/13/14 and remained in my custody until
transfer to DSHS Lab
at 11 : 14 AM on 11/14/14
Signature: M. Abbaszadeh

I certify this sample was constantly in my custody from the time of receipt listed hereon until transferred to Metals Lab
at 11 : 40 AM on 11/14/14
Signature: Anita Vadgama

I certify this sample was constantly in my custody from the time of receipt listed hereon until transferred to _____
at _____ : _____ M on _____
Signature: _____

FOR USE BY LABORATORY ONLY

Laboratory Identification No. AC72074 A
Date Received EU 11/14/2014
Condition of Seals ☐ Sa
Comments _____
MISC METALS
Wet (as received) Weight _____
Dry Weight _____ Ash Weight _____
Notes _____

I certify this sample was constantly in the laboratory custody from the time of receipt and after the report date listed below until transferred to the TCEQ staff.

Report Date/Signature 1-8-2015 [signature]

INDICATE THE REQUIRED ANALYSIS BELOW
☒ Total Analysis ☐ TCLP ☐ Dissolved Analysis
Detection Limit Requested _____

Arsenic		mg/
Barium		mg/
Boron		mg/
Cadmium		mg/
Calcium		mg/
Chromium		mg/
Copper		mg/
Iron		mg/
Lead		mg/
Magnesium		mg/
Manganese		mg/
Mercury		mg/
Molybdenum		mg/
Nickel		mg/
Potassium		mg/
Selenium		mg/
Silver		mg/
Sodium		mg/
Vanadium		mg/
Zinc		mg/
Uranium		mg/
TDS		mg/
Alkalinity		mg/
Ammonia-N		mg/
Bicarbonate		mg/
Carbonate		mg/
Chloride		mg/
Fluoride		mg/
Nitrate-N		mg/
Silica		mg/
Sulfate		mg/
		mg/
		mg/
		mg/
		mg/
Conductivity		µS/cm
Specific Conductance		µS/cm
pH		Std. Unit

MC 1947
1100 West 49th Street
PO Box 149347
Austin, Texas 78714-9347

Texas Department of State Health Services
Laboratory Services Section
Metals Analysis Report

Tel. (512) 776-7587
FAX (512) 776-7757

DSHS Lab Sample Number: AC72074
Submitter: TCEQ
Date Collected: 11/13/2014
Digestion Method: EPA 3010A (ICP Minerals)
EPA 3020A (ICP-MS Metals)
EPA 7470A (Hg)

Sample Type: Water
Sample Location: PAA-3, MW-AA-25
Date Received: 11/14/2014
Analytical Method: EPA 6010C (ICP Minerals)
EPA 6020A (ICP-MS Metals)
EPA 7470A (Hg)

Report ID#: 20150108METALAC72074

Analyte	Results (mg/L)	Dilution Factor	Reporting Limit (mg/L)	Analysis Date	Analyst
Arsenic	< 0.00300	3	0.00100	11/20/2014	PG
Cadmium	< 0.00300	3	0.00100	11/20/2014	PG
Chromium	< 0.00300	3	0.00100	11/20/2014	PG
Iron	0.345	1	0.0100	11/20/2014	JK
Lead	0.0207	3	0.00100	11/20/2014	PG
Mercury	< 0.000400	2	0.000200	11-24/2014	HN
Molybdenum	0.0330	3	0.00100	11/20/2014	PG
Selenium	< 0.00600	3	0.00200	11/20/2014	PG
Sodium	501	10	0.500	11/20/2014	JK
Uranium	< 0.00300	3	0.00100	11/20/2014	PG

Comments:

The test results on this report relate only to the sample identified on this report.

Team Leader Approval: Evelyn Boyer

Date Approved: 01-08-2015

Date Reported: JAN - 9 2015

MC 1947
1100 West 49th Street
PO Box 149347
Austin, Texas 78714-9347

Texas Department of State Health Services
Laboratory Services Section
Metals Analysis Report

Tel. (512) 776-7587
FAX (512) 776-7757

DSHS Lab Sample Number: AC72074 (Duplicate)
Submitter: TCEQ
Date Collected: 11/13/2014
Digestion Method: EPA 3010A (ICP Minerals)
EPA 3020A (ICP-MS Metals)
EPA 7470A (Hg)

Sample Type: Water
Sample Location: PAA-3, MW-AA-25
Date Received: 11/14/2014
Analytical Method: EPA 6010C (ICP Minerals)
EPA 6020A (ICP-MS Metals)
EPA 7470A (Hg)

Report ID#: 20150108METALAC72074

Analyte	Results (mg/L)	Dilution Factor	Reporting Limit (mg/L)	Analysis Date	Analyst
Arsenic	< 0.00300	3	0.00100	11/20/2014	PG
Cadmium	< 0.00300	3	0.00100	11/20/2014	PG
Chromium	< 0.00300	3	0.00100	11/20/2014	PG
Iron	0.351	1	0.0100	11/20/2014	JK
Lead	0.0202	3	0.00100	11/20/2014	PG
Mercury	< 0.000400	2	0.000200	11-24/2014	HN
Molybdenum	0.0331	3	0.00100	11/20/2014	PG
Selenium	< 0.00600	3	0.00200	11/20/2014	PG
Sodium	507	10	0.500	11/20/2014	JK
Uranium	< 0.00300	3	0.00100	11/20/2014	PG

Comments:

The test results on this report relate only to the sample identified on this report.

Team Leader Approval: Evelyn Boyd

Date Approved: 01-08-2015

Date Reported: JAN - 9 2015

URGENT Non-Potable Water

TCEQ CHEMICAL ANALYSIS LABORATORY REPORT

TEXAS COMMISSION on ENVIRONMENTAL QUALITY (TCEQ)

P. O. BOX 13087
AUSTIN, TEXAS 78711-3087

Handling Instructions: ☐ Routine ☒ Urgent ☐ Priority (short half-life)
Purpose: ☐ Close Out/Groundwater Restoration ☐ Baseline (Pre-Operation) ☒ Compliance
Sample Collected From: ☐ Unrestricted Area ☒ Restricted/Controlled Area
☒ Radiological Analysis Also Performed **PCA #** _____ **Index No** _____
Water only: ☐ Acidified ☒ Not Acidified ☐ Filtered ☒ Not Filtered

Contact: M. Abbaszadeh
Phone/MC: (512) 239-6078/17
Submitter No. M0000070
Suspected Radionuclides: uranium

Type: ☐ Soil ☐ Sediment ☐ Vegetation ☐ Wipe ☐ Other _____

Type: Water ☒ Monitor Well ☐ Baseline Well ☐ Surface Water ☐ Other _____

Facility Category: ☒ Uranium Recovery ☐ Waste Processing ☐ Low Level Radioactive Waste/Material ☐ Buried Radioactive Waste ☐ Mixed Waste Treatment Facility ☐ By-Product Waste/Material ☐ Other _____

Radiation Survey Results: BKG: 5-6 uR/hr Sample: BKG
Sample Number 5 of 9
Sample location PAA3, MW-AA-30
Operator / Facility URI, Kingsville Dome
Permit/License No UR02827
Notes _____

I certify this sample was collected by me at 11 : 59 AM
on 11/13/14 and remained in my custody until
transfer to DSHS Lab
at 11 : 14 AM on 11/14/14
Signature: M. Abbaszadeh

I certify this sample was constantly in my custody from the time of receipt listed hereon until transferred to Metals Lab
at 11 : 40 AM on 11-14-14
Signature: Anita Vadgama

I certify this sample was constantly in my custody from the time of receipt listed hereon until transferred to _____
at _____ : _____ M on _____
Signature: _____

FOR USE BY LABORATORY ONLY

Laboratory Identification No AC72077 A EU
Date Received 11/14/2014
Condition of Seals ☐
Comments _____
Wet (as received) Weight _____
Dry Weight _____ Ash Weight _____
Notes _____

MISC METALS

I certify this sample was constantly in the laboratory custody from the time of receipt and after the report date listed below until transferred to the TCEQ staff.

Report Date/Signature 1-8-2015 Emily Bayer

INDICATE THE REQUIRED ANALYSIS BELOW
☒ **Total Analysis** ☐ **TCLP** ☐ **Dissolved Analysis**
Detection Limit Requested _____

Arsenic		mg/
Barium		mg/
Boron		mg/
Cadmium		mg/
Calcium		mg/
Chromium		mg/
Copper		mg/
Iron		mg/
Lead		mg/
Magnesium		mg/
Manganese		mg/
Mercury		mg/
Molybdenum		mg/
Nickel		mg/
Potassium		mg/
Selenium		mg/
Silver		mg/
Sodium		mg/
Vanadium		mg/
Zinc		mg/
uranium		mg/
TDS		mg/
Alkalinity		mg/
Ammonia-N		mg/
Bicarbonate		mg/
Carbonate		mg/
Chloride		mg/
Fluoride		mg/
Nitrate-N		mg/
Silica		mg/
Sulfate		mg/
		mg/
		mg/
		mg/
Conductivity		µS/cm
Specific Conductance		µS/cm
pH		Std. Unit

MC 1947
1100 West 49th Street
PO Box 149347
Austin, Texas 78714-9347

Texas Department of State Health Services
Laboratory Services Section
Metals Analysis Report

Tel. (512) 776-7587
FAX (512) 776-7757

DSHS Lab Sample Number: AC72077
Submitter: TCEQ
Date Collected: 11/13/2014
Digestion Method: EPA 3010A (ICP Minerals)
EPA 3020A (ICP-MS Metals)
EPA 7470A (Hg)

Sample Type: Water
Sample Location: PAA-3, MW-AA-30
Date Received: 11/14/2014
Analytical Method: EPA 6010C (ICP Minerals)
EPA 6020A (ICP-MS Metals)
EPA 7470A (Hg)

Report ID#: 20150108METALAC72077

Analyte	Results (mg/L)	Dilution Factor	Reporting Limit (mg/L)	Analysis Date	Analyst
Arsenic	< 0.00300	3	0.00100	11/20/2014	PG
Cadmium	< 0.00300	3	0.00100	11/20/2014	PG
Chromium	0.00313	3	0.00100	11/20/2014	PG
Iron	1.65	1	0.0100	11/20/2014	JK
Lead	0.00615	3	0.00100	11/20/2014	PG
Mercury	< 0.000400	2	0.000200	11-24/2014	HN
Molybdenum	0.0308	3	0.00100	11/20/2014	PG
Selenium	0.00619	3	0.00200	11/20/2014	PG
Sodium	520	10	0.500	11/20/2014	JK
Uranium	< 0.00300	3	0.00100	11/20/2014	PG

Comments:

The test results on this report relate only to the sample identified on this report.

Team Leader Approval: Evelyn Boyer

Date Approved: 01-08-2015

Date Reported: JAN - 9 2015

① URGENT Non-Potable Water

TCEQ CHEMICAL ANALYSIS LABORATORY REPORT

TEXAS COMMISSION on ENVIRONMENTAL QUALITY (TCEQ)

P. O. BOX 13087
AUSTIN, TEXAS 78711-3087

Handling Instructions: [ ] Routine [X] Urgent [ ] Priority (short half-life)
Purpose: [ ] Close Out/Groundwater Restoration [ ] Baseline (Pre-Operation) [X] Compliance
Sample Collected From: [ ] Unrestricted Area [X] Restricted/Controlled Area
[X] Radiological Analysis Also Performed **PCA #** _____ **Index No** _____
Water only: [ ] Acidified [X] Not Acidified [ ] Filtered [X] Not Filtered

Contact: M. Abbaszade
Phone/MC: (512) 239-6078
Submitter No. M0000070
Suspected Radionuclides: Uranium

Type: [ ] Soil [ ] Sediment [ ] Vegetation [ ] Wipe [ ] Other _____
Type: Water [X] Monitor Well [ ] Baseline Well [ ] Surface Water [ ] Other _____
Facility Category: [X] Uranium Recovery [ ] Waste Processing [ ] Low Level Radioactive Waste/Material [ ] Buried Radioactive Waste [ ] Mixed Waste Treatment Facility [ ] By-Product Waste/Material [ ] Other _____

Radiation Survey Results: BKG: 5-6 uR/hr Sample: BKG
Sample Number 8 of 9
Sample location PAA3, MW-86
Operator / Facility URI, Kingsville Dome
Permit/License No UR02827
Notes _____

I certify this sample was collected by me at 2:24 PM
on 11/13/14 and remained in my custody until
transfer to DSHS Lab
at 11:14 AM on 11/14/14
Signature: M. Abbaszadeh

I certify this sample was constantly in my custody from the time of receipt listed hereon until transferred to Metals Lab
at 11:40 AM on 11-14-14
Signature: Anita Vadgama

I certify this sample was constantly in my custody from the time of receipt listed hereon until transferred to _____
at _____ : _____ M on _____
Signature: _____

INDICATE THE REQUIRED ANALYSIS BELOW
[ ] **Total Analysis** [ ] **TCLP** [ ] **Dissolved Analysis**
Detection Limit Requested _____

Arsenic		mg/
Barium		mg/
Boron		mg/
Cadmium		mg/
Calcium		mg/
Chromium		mg/
Copper		mg/
Iron		mg/
Lead		mg/
Magnesium		mg/
Manganese		mg/
Mercury		mg/
Molybdenum		mg/
Nickel		mg/
Potassium		mg/
Selenium		mg/
Silver		mg/
Sodium		mg/
Vanadium		mg/
Zinc		mg/
Uranium		mg/
TDS		mg/
Alkalinity		mg/
Ammonia-N		mg/
Bicarbonate		mg/
Carbonate		mg/
Chloride		mg/
Fluoride		mg/
Nitrate-N		mg/
Silica		mg/
Sulfate		mg/
		mg/
		mg/
		mg/
Conductivity		µS/cm
Specific Conductance		µS/cm
pH		Std. Uni

FOR USE BY LABORATORY ONLY

Laboratory Identification No. AC72080 EU A
Date Received 11/14/2014
Condition of Seals [ ] S
MISC METALS
Comments _____
Wet (as received) Weight _____
Dry Weight _____ Ash Weight _____
Notes _____

I certify this sample was constantly in the laboratory custody from the time of receipt and after the report date listed below until transferred to the TCEQ staff.

Report Date/Signature 1-8-2015 Evelyn Borja

MC 1947
1100 West 49th Street
PO Box 149347
Austin, Texas 78714-9347

Texas Department of State Health Services
Laboratory Services Section
Metals Analysis Report

Tel. (512) 776-7587
FAX (512) 776-7757

DSHS Lab Sample Number: AC72080
Submitter: TCEQ
Date Collected: 11/13/2014
Digestion Method: EPA 3010A (ICP Minerals)
EPA 3020A (ICP-MS Metals)
EPA 7470A (Hg)

Sample Type: Water
Sample Location: PAA-3, MW-86
Date Received: 11/14/2014
Analytical Method: EPA 6010C (ICP Minerals)
EPA 6020A (ICP-MS Metals)
EPA 7470A (Hg)

Report ID#: 20150108METALAC72080

Analyte	Results (mg/L)	Dilution Factor	Reporting Limit (mg/L)	Analysis Date	Analyst
Arsenic	0.00402	3	0.00100	11/20/2014	PG
Cadmium	< 0.00300	3	0.00100	11/20/2014	PG
Chromium	0.00503	3	0.00100	11/20/2014	PG
Iron	0.0135	1	0.0100	11/20/2014	JK
Lead	< 0.00300	3	0.00100	11/20/2014	PG
Mercury	< 0.000400	2	0.000200	11-24/2014	HN
Molybdenum	0.0138	3	0.00100	11/20/2014	PG
Selenium	0.0148	3	0.00200	11/20/2014	PG
Sodium	363	10	0.500	11/20/2014	JK
Uranium	0.0109	3	0.00100	11/20/2014	PG

Comments:

The test results on this report relate only to the sample identified on this report.

Team Leader Approval: Evelyn Boyer

Date Approved: 01-08-2015

Date Reported: JAN - 9 2015 NKD