NV

El Paso Natural Gas Company, L.L.C.
a Kinder Morgan company

June 21, 2022
Submitted via NMOCD E-Permitting

Mr. Bradford Billings
New Mexico Oil Conservation Division
1220 South St. Francis Drive, #3
Santa Fe, New Mexico 87505

RE: 2021 Sampling Summary Report
Lordsburg Station
NMOCD Incident # nAPP2217233972

Mr. Billings:

Attached is a Memorandum completed on behalf of El Paso Natural Gas Company, LLC (EPNG) documenting the results of 2021 Quarterly Groundwater Sampling activities at the above-referenced site. Quarterly groundwater sampling is to continue in 2022. The results will be summarized in a report to be submitted to NMOCD by July 1, 2023.

Please feel free to contact me at 713-420-5150 if you have further questions.

Sincerely,

Doug Stavinoha, P.G.
Remediation Project Manager

Enclosure

cc: Steve Varsa, Stantec Environmental Services

AECOM

Memorandum

Date: February 2, 2022

To: Doug Stavinoha, P.G, Kinder Morgan, Inc.

From: Andrew Messer, P.G., AECOM Technical Services, Inc.

Subject: **2021 Quarterly Groundwater Sampling Results**
Lordsburg Compressor Station
Lordsburg, New Mexico

INTRODUCTION

At the request of El Paso Natural Gas Company (EPNG), a subsidiary of Kinder Morgan, Inc., AECOM Technical Services Inc. (AECOM) conducted quarterly groundwater sampling at the Lordsburg Compressor Station (the Site) in 2021. Groundwater samples were collected from the station water supply well EPWW1 (New Mexico well record #69807) and analyzed for dissolved chromium. Groundwater monitoring results for 2021 are summarized in this technical memorandum.

BACKGROUND

The Lordsburg Compressor Station began operation in 1952. Water supply wells EPWW1 and EPWW2 were constructed in 1951. Chromate was reportedly used at the site until the mid-1970's, and chromate-bearing solutions were discharged to unlined ponds on the east side of the Site. EPNG conducted screening investigations for chromium in soil and groundwater at the Site in 2006. Production well EPWW1 was sampled. Production well EPWW2 had collapsed and was not available for sampling. In 2009 EPNG sampled regional groundwater from six residential and stock wells west of the site and one stock well east of the site that were available for sampling. Concentrations of dissolved chromium exceeded the New Mexico groundwater standard for dissolved chromium in the stock well approximately one mile east from the site and indicates the stock well is or was down-hydraulic-gradient and the general groundwater flow direction is or was to the southeast. Dissolved chromium was detected in four of the six wells to the west of the site that were available for sampling at concentrations that were less than 0.01 milligrams per liter (mg/L). Remnants of large capacity pumping equipment, including diesel engines and wells are located to the southeast of the site, that appear to have been used to fill shallow lakes. Historical pumping from these wells may have influenced groundwater flow direction in the past.

Following the 2009 investigation, EPNG began annual groundwater sampling of well EPWW1 and an offsite windmill well and stock tank located on private property approximately 0.9 mile to the east-southeast from the Site. The windmill well was last sampled in 2013 and was found to be inoperable after that time. During the period from 2009 to 2013, concentrations of dissolved chromium ranged from less than the laboratory reporting limit of 0.005mg/L to 0.062 mg/L in the windmill well. Quarterly groundwater sampling of EPWW1 was initiated in 2019 and continued through 2021. Historical and recent data for dissolved chromium in groundwater in production well EPWW1 and the windmill well are summarized in Table 1.

LORDSBURG COMPRESSOR STATION WELL

The Lordsburg Compressor Station water supply well EPWW1 serves as the non-potable water supply well for the compressor station and is equipped with an electric submersible pump that pumps at a rate of approximately 50 gallons per minute. Site records indicated water levels for unknown dates of 115 and 82 feet below ground surface in wells EPWW1 and EPWW2, respectively. Pre-pumping depth to water in EPWW1 was measured at approximately 92 feet below ground surface in April 2014 and April 2015. Depth to water is not routinely measured because the well is not equipped with a sounder access tube to prevent entanglement. Based on a depth to water of 92 feet, the reported total depth of 440 feet, and an inside diameter of 12 inches, one well casing volume is approximately 2,044 gallons. Prior to sampling, the well is pumped for a minimum of three well casing volumes, and until water quality parameters have stabilized. Pumped water was discharged to the station water storage tank and is used for site operations. Records indicate the well screen interval is from 195 to 440 feet below ground surface, starting 103 feet below the estimated groundwater level.

Quarterly groundwater sampling activities were performed on March 23, 2021, June 7, 2021, August 25, 2021 and December 15, 2021. Field parameters of temperature, specific conductance, pH, and oxidation reduction potential were monitored during pumping. Each groundwater sample was collected after passing the sample through a 0.45-micron filter into laboratory-provided, pre-preserved containers, and placed on ice for transportation to the analytical laboratory, under chain of custody.

SAMPLING RESULTS

Laboratory samples were submitted for analyses to Test America Laboratories, Inc., in Phoenix, Arizona. Dissolved chromium results are summarized in Table 1, and the laboratory reports for the four quarters of 2021 are attached to this report. AECOM conducted a data review of the

laboratory report and the results are summarized in the attached Data Review Memorandum. All data were found to be suitable for their intended purpose.

New Mexico has established a standard for maximum allowable concentration of chromium in groundwater, which includes trivalent and hexavalent chromium, at 0.05 mg/L, which applies to the dissolved portion of the contaminants (New Mexico Administrative Code 20.6.2.3103). Standards for total recoverable chromium or for hexavalent chromium have not been established by the state of New Mexico. Kinder Morgan reports that a site-specific action level for dissolved chromium of 0.055 mg/L has been established for the Lordsburg Station by New Mexico regulators.

The following trends in dissolved chromium concentrations were noted:

- During the period of annual groundwater sampling from 2009 to 2018, dissolved chromium concentrations in well EPWW1 ranged from 0.0459 mg/L to 0.0554 mg/L. The site-specific standard of 0.055 mg/L was exceeded one time at a concentration of 0.0554 mg/L in the groundwater sample collected from well EPWW1 on March 13, 2013.
- During 2019 quarterly groundwater sampling, dissolved chromium concentrations ranged from 0.052 mg/L to 0.053 mg/L, and the site-specific standard for dissolved chromium in groundwater was not exceeded.
- During 2020 quarterly groundwater sampling, dissolved chromium concentrations ranged from 0.045 mg/L to 0.056 mg/L. The site-specific standard of 0.055 mg/L for dissolved chromium in groundwater was exceeded slightly at a concentration of 0.056 mg/L in the groundwater sample collected from well EPWW1 on August 19, 2020.
- During 2021 quarterly groundwater sampling, dissolved chromium concentrations ranged from 0.054 mg/L to 0.056 mg/L. The site-specific action level of 0.055 mg/L for dissolved chromium in groundwater was exceeded at a concentration of 0.056 mg/L in the groundwater sample collected from well EPWW1 on June 4, 2021.

LIMITATIONS

This memorandum summarizes results of a limited investigation and is not intended to be used as the sole basis for final design, construction, or remedial action, or as a basis for major capital decisions.

Attachments:

- Table 1. Summary of Dissolved Chromium Results for Groundwater Samples
- Data Review Memorandum
- Laboratory Reports
- Field Notes

TABLE

AECOM

Table 1.
Summary of Dissolved Chromium Results for Groundwater Samples
Lordsburg Compressor Station
El Paso Natural Gas Company

Groundwater Samples					Primary Sample	Field Duplicate
Description	Well ID	Sample ID	Lab ID	Sample Date	Dissolved[1] Chromium mg/L	
Windmill	70331	L6543-STA-02-70331-120209	09120087-01	12/2/2009	**0.0549**	
Windmill	70331	L6543-STA-02-70331-021010	10020401-02	2/10/2010	0.0202	0.0205
Windmill	70331	04114NM-04-70331-030211	11030077-02	3/2/2011	0.006	0.0078
Windmill	70331	04114NM-05-70331-030112	TC-2033-2	3/1/2012	**0.0612**	**0.0605**
Windmill	70331	04114NM-06-70331-031313	TC26940-2	3/13/2013	**0.0620**	**0.0612**
Windmill	70331Pond	L6543-STA-02-70331-POND-021010	10020401-04	2/10/2010	0.005	
EPNG Well	EPWW1	L6543-STA-02-EPWW1-120309	09120150-03	12/3/2009	0.0500	0.0489
EPNG Well	EPWW1	L6543-STA-02-EPWW1-021010	10020401-01	2/10/2010	0.0459	
EPNG Well	EPWW1	04114NM-04-EPWW1-030211	11030077-01	3/2/2011	0.0503	
EPNG Well	EPWW1	04114NM-05-EPWW1-030112	TC-2033-1	3/1/2012	0.0481	
EPNG Well	EPWW1	04114NM-06-EPWW1-031313	TC26940-1	3/13/2013	**0.0554**	
EPNG Well	EPWW1	04114NM-07-EPWW1-04 14	TC-45930-1	4/1/2014	0.0545	0.0548
EPNG Well	EPWW1	04114NM-08-EPWW1-040915	TC-65279-1	4/9/2015	0.0525	0.0521
EPNG Well	EPWW1	EPWW-1	550-64294-2	6/2/2016	0.050	0.051
EPNG Well	EPWW1	EPWW-1	550-84722-2	6/20/2017	0.050	0.049
EPNG Well	EPWW1	EPWW-1	550-101393-5	4/17/2018	0.048	0.049
EPNG Well	EPWW1	EPWW-1-022119	550-118406-1	2/21/2019	0.053	
EPNG Well	EPWW1	EPWW-1-05-14-2019	550-122908-1	5/14/2019	0.052	
EPNG Well	EPWW1	EPWW-1-081319	550-127927-1	8/13/2019	0.053	
EPNG Well	EPWW1	EPWW-1-110719	550-133016-1	11/7/2019	0.052	
EPNG Well	EPWW1	EPWW-1-021920	550-138265-1	2/19/2020	0.05	
EPNG Well	EPWW1	EPWW-1-06192020	550-143737-1	6/19/2020	0.045	
EPNG Well	EPWW1	EPWW-1-08192020	550-147678-1	8/19/2020	**0.056**	
EPNG Well	EPWW1	EPWW-1	550-154995-1	12/11/2020	0.053	
EPNG Well	EPWW1	EPWW1-03-23-21	550-160580-1	3/23/2021	0.055	
EPNG Well	EPWW1	EPWW1-060421	550-165277-1	6/4/2021	**0.056**	
EPNG Well	EPWW1	EPWW1-08-25-21	550-169691-1	8/25/2021	0.054	
EPNG Well	EPWW1	EPWW1	550-175978-1	12/15/2021	0.055	

[1] Sample filtered using 0.045 micro filter
mg/L - milligrams per liter
FD - Field duplicate sample
BOLD = exceeds the site-specific action level of 0.055 mg/L dissolved chromium

DATA REVIEW MEMORANDUM

El Paso Natural Gas/Kinder Morgan
Lordsburg
2021 Data Validation Report

Sample Delivery Group: 550-160580-1, 550-165277-1, 550-169691-1, 550-175978-1
Sampling Date: March 23, 2021, June 10, 2021, August 26, 2021, December 15, 2021
Data Reviewer: Katie Abbott **Date Completed:** January 25, 2022
Peer Reviewer: Brian Rothmeyer **Date Completed:** January 27, 2022

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Laboratory ID	Matrix	Analyses: Dissolved Chromium
550-160580-1 (March 2021)				
EPWW1-03-23-21	SA	550-160580-1	Water	X
550-165277-1 (June 2021)				
EPWW1-060421	SA	550-165277-1	Water	X
550-169691-1 (August 2021)				
EPWW1-08-25-21	SA	550-169691-1	Water	X
550-175978-1 (December 2021)				
EPWW-1	SA	550-175978-1	Water	X

Sample Type: SA – Sample

Analyses: Dissolved Chromium (200.8)

This report contains the final result of the data validation conducted for the quarterly sampling for 2021. The sample results were presented in four data packages for the data analysis. The data review was performed using guidance set forth in *United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) National Functional Guidelines for Inorganic Superfund Methods Data Review* (November 2020); method requirements, and laboratory criteria.

General Overall Assessment:

__X__ Data are usable without qualification.
_____ Data are usable with qualification (noted below and summarized in Attachment A).
_____ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any case narrative comments concerning data qualification were noted in the table below. The other exceptions are covered in the following table.

Review Parameter	Criteria Met?	Comments
Chain of Custody & Sample Receipt	Yes	The samples were received by Eurofins Phoenix in good condition and accompanied by a chain of custody (COC). The cooler temperatures upon receipt were within the acceptable criterion of ≤6°C. Data qualification was not necessary.
Holding Times	Yes	The samples were received and analyzed within holding time.
Laboratory Blanks • **Method Blank** • **Filter Blank**	Yes	Target analytes were not detected within the method or calibration blanks.
Matrix Quality Control • **Matrix Spike/ Matrix Spike Duplicate** None	NA	**Matrix Spike/Matrix Spike Duplicate (MS/MSD)** An MS/MSD was not performed on the sample in these data packages.
Laboratory Performance • **Laboratory Control Sample**	Yes	One laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) per method per analytical batch was prepared and analyzed. The LCS recoveries and LCS/LCSD relative percent differences (RPDs) were within the laboratory acceptance limits. These results are indicative of an acceptable level of accuracy and precision with respect to the analytical method.
Field Quality Control • **Field Blank** None • **Field Duplicate** None	NA	**Field Blank/Equipment Blank** A field blank and equipment blank were not submitted in these data packages. **Field Duplicate** A field duplicate was not performed on the sample in this data package.
Method Quantitation Limits Met?	Yes	No results were reproted as non-detect at elevated reporting limits.
Package Completeness	Yes	The results are usable as qualified for the project objective. The data are 100% complete.

% – Percent
°C – Degrees Celsius
≤ – Less Than or Equal To
COC – Chain of Custody
LCS – Laboratory Control Sample
LCSD – Laboratory Control Sample Duplicate
MS/MSD – Matrix Spike/Matrix Spike Duplicate
NA – Not Applicable
RPDs – Relative Percent Differences

LABORATORY REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

Laboratory Job ID: 550-160580-1
Laboratory Sample Delivery Group: 60597666
Client Project/Site: Lordsburg

For:
AECOM Technical Services Inc.
333 East Wetmore
Suite 400
Tucson, Arizona 85705

Attn: Andrew Messer

Authorized for release by:
4/2/2021 5:03:25 PM

Carlene McCutcheon, Project Manager II
(602)659-7612
Carlene.McCutcheon@Eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Laboratory Job ID: 550-160580-1
SDG: 60597666

Table of Contents

Definitions/Glossary

Client: AECOM Technical Services Inc. Job ID: 550-160580-1
Project/Site: Lordsburg SDG: 60597666

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-160580-1
SDG: 60597666

Job ID: 550-160580-1

Laboratory: Eurofins TestAmerica, Phoenix

Narrative

Job Narrative
550-160580-1

Comments
No additional comments.

Receipt
The sample was received on 3/24/2021 8:37 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.8º C.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-160580-1
SDG: 60597666

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
550-160580-1	EPWW1-03-23-21	Water	03/23/21 12:30	03/24/21 08:37	

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-160580-1
SDG: 60597666

Client Sample ID: EPWW1-03-23-21

Lab Sample ID: 550-160580-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium, Dissolved	55		1.0		ug/L	1		200.8 LL	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Phoenix

4/2/2021

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-160580-1
SDG: 60597666

Client Sample ID: EPWW1-03-23-21

Date Collected: 03/23/21 12:30
Date Received: 03/24/21 08:37

Lab Sample ID: 550-160580-1

Matrix: Water

Method: 200.8 LL - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, Dissolved	55		1.0		ug/L		03/24/21 19:00	03/25/21 23:54	1

QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-160580-1
SDG: 60597666

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-237172/1-A
Matrix: Water
Analysis Batch: 237396

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 237172

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, Dissolved	ND		1.0		ug/L		03/24/21 19:00	03/25/21 23:42	1

Lab Sample ID: LCS 550-237172/2-A
Matrix: Water
Analysis Batch: 237396

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 237172

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, Dissolved			100	95.9		ug/L		96	85 - 115		

Lab Sample ID: LCSD 550-237172/3-A
Matrix: Water
Analysis Batch: 237396

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 237172

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, Dissolved			100	95.3		ug/L		95	85 - 115	1	20

Lab Sample ID: 550-160583-E-1-A MS
Matrix: Water
Analysis Batch: 237396

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 237172

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium, Dissolved	6.4		100	98.6		ug/L		92	70 - 130		

Lab Sample ID: 550-160583-E-1-B MSD
Matrix: Water
Analysis Batch: 237396

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 237172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, Dissolved	6.4		100	101		ug/L		95	70 - 130	3	20

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-160580-1
SDG: 60597666

Metals

Prep Batch: 237172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-160580-1	EPWW1-03-23-21	Dissolved	Water	200.8	
MB 550-237172/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-237172/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-237172/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-160583-E-1-A MS	Matrix Spike	Total/NA	Water	200.8	
550-160583-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 237396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-160580-1	EPWW1-03-23-21	Dissolved	Water	200.8 LL	237172
MB 550-237172/1-A	Method Blank	Total/NA	Water	200.8 LL	237172
LCS 550-237172/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	237172
LCSD 550-237172/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	237172
550-160583-E-1-A MS	Matrix Spike	Total/NA	Water	200.8 LL	237172
550-160583-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	237172

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-160580-1
SDG: 60597666

Client Sample ID: EPWW1-03-23-21

Date Collected: 03/23/21 12:30
Date Received: 03/24/21 08:37

Lab Sample ID: 550-160580-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			237172	03/24/21 19:00	SXF	TAL PHX
Dissolved	Analysis	200.8 LL		1	237396	03/25/21 23:54	ARE	TAL PHX

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 550-160580-1
Project/Site: Lordsburg
SDG: 60597666

Laboratory: Eurofins TestAmerica, Phoenix

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-08-21

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-160580-1
SDG: 60597666

Method	Method Description	Protocol	Laboratory
200.8 LL	Metals (ICP/MS)	EPA	TAL PHX
200.8	Preparation, Total Metals	EPA	TAL PHX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

160580

TestAmerica Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
Phone (602) 437-3340 Fax (602) 454-9303

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: RACHEL TUCCI	Lab PM: Carlene McCutcheon	Carrier Tracking No(s):	COC No:
Client Contact: Andrew Messer	Phone: 520.331.1295	E-Mail: Carlene.McCutcheon@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 333 E. Wetmore Rd. Suite 400	Due Date Requested:			
City: Tucson	TAT Requested (days): STANDARD			
State, Zip: AZ 85705				
Phone: 520-247-7210	PO #:			
Email: andrew.messer@aecom.com	WO #:			
Project Name: Lordsburg	Project #: 60597666			
Site: Lordsburg Compressor Station	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8 Cr - dissolved	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EPWW1-03-23-21	03/23/2021	1230	G	W	Y	Y	D	1	500 ml poly (FIELD FILTERED)

550-160580 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements: See Analysis Request Form

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	[signature]	03/24/2021 0837	AECOM	[signature]		
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 3/24/21 8:37	Company AECOM

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.8 - ETA

GPO

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 550-160580-1
SDG Number: 60597666

Login Number: 160580
List Number: 1
Creator: Maycock, Lisa

List Source: Eurofins TestAmerica, Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	True	
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	

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

Laboratory Job ID: 550-165277-1
Client Project/Site: EPNG/KM

For:
AECOM Technical Services Inc.
333 East Wetmore
Suite 400
Tucson, Arizona 85705

Attn: Andrew Messer

Carlene McCutcheon

Authorized for release by:
6/21/2021 5:07:39 PM

Carlene McCutcheon, Project Manager II
(602)659-7612
Carlene.McCutcheon@Eurofinset.com

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Laboratory Job ID: 550-165277-1

Table of Contents

Definitions/Glossary

Client: AECOM Technical Services Inc. Job ID: 550-165277-1
Project/Site: EPNG/KM

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-165277-1

Job ID: 550-165277-1

Laboratory: Eurofins TestAmerica, Phoenix

Narrative

Job Narrative
550-165277-1

Comments
No additional comments.

Receipt
The sample was received on 6/10/2021 3:03 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.8º C.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-165277-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
550-165277-1	EPWW1-060421	Water	06/09/21 12:14	06/10/21 15:03	

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-165277-1

Client Sample ID: EPWW1-060421

Lab Sample ID: 550-165277-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	56		1.0		ug/L	1		200.8 LL	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-165277-1

Client Sample ID: EPWW1-060421
Date Collected: 06/09/21 12:14
Date Received: 06/10/21 15:03

Lab Sample ID: 550-165277-1
Matrix: Water

Method: 200.8 LL - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	56		1.0		ug/L		06/15/21 10:25	06/16/21 16:30	1

QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-165277-1

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-245305/1-A
Matrix: Water
Analysis Batch: 245549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		1.0		ug/L		06/15/21 10:25	06/16/21 15:50	1

Lab Sample ID: LCS 550-245305/2-A
Matrix: Water
Analysis Batch: 245549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245305

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium			100	99.7		ug/L		100	85 - 115		

Lab Sample ID: LCSD 550-245305/3-A
Matrix: Water
Analysis Batch: 245549

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 245305

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium			100	102		ug/L		102	85 - 115	2	20

Lab Sample ID: 550-165373-A-2-B MS
Matrix: Water
Analysis Batch: 245549

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 245305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium	4.9		100	103		ug/L		98	70 - 130		

Lab Sample ID: 550-165373-A-2-C MSD
Matrix: Water
Analysis Batch: 245549

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 245305

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	4.9		100	103		ug/L		98	70 - 130	0	20

QC Association Summary

Client: AECOM Technical Services Inc. Job ID: 550-165277-1
Project/Site: EPNG/KM

Metals

Prep Batch: 245305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-165277-1	EPWW1-060421	Dissolved	Water	200.8	
MB 550-245305/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-245305/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-245305/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-165373-A-2-B MS	Matrix Spike	Total/NA	Water	200.8	
550-165373-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 245549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-165277-1	EPWW1-060421	Dissolved	Water	200.8 LL	245305
MB 550-245305/1-A	Method Blank	Total/NA	Water	200.8 LL	245305
LCS 550-245305/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	245305
LCSD 550-245305/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	245305
550-165373-A-2-B MS	Matrix Spike	Total/NA	Water	200.8 LL	245305
550-165373-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	245305

Lab Chronicle

Client: AECOM Technical Services Inc.
Job ID: 550-165277-1
Project/Site: EPNG/KM

Client Sample ID: EPWW1-060421
Date Collected: 06/09/21 12:14
Date Received: 06/10/21 15:03

Lab Sample ID: 550-165277-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			245305	06/15/21 10:25	SGO	TAL PHX
Dissolved	Analysis	200.8 LL		1	245549	06/16/21 16:30	MGM	TAL PHX

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 550-165277-1
Project/Site: EPNG/KM

Laboratory: Eurofins TestAmerica, Phoenix

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-165277-1

Method	Method Description	Protocol	Laboratory
200.8 LL	Metals (ICP/MS)	EPA	TAL PHX
200.8	Preparation, Total Metals	EPA	TAL PHX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
Phone (602) 437-3340 Fax (602) 454-9303

Chain of Custody Record

165277

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/21/2021

Client Information	Sampler: RACHEL TUCCI	Lab PM: Carlene McCutcheon	Carrier Tracking No(s):	COC No:
Client Contact: Andrew Messer	Phone: 520.331.1295	E-Mail: Carlene.McCutcheon@testamericainc.com		Page: Page 1 of 1
Company: AECOM				Job #:
Address: 333 E. Wetmore Rd. Suite 400	Due Date Requested:			
City: Tucson	TAT Requested (days): STANDARD			
State, Zip: AZ 85705				
Phone: 520-247-7210	PO #:			
Email: andrew.messer@aecom.com	WO #:			
Project Name: Lordsburg	Project #:			
Site: Lordsburg Compressor Station	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8 Cr - dissolved	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EPWW1-066021	06/09/2021	1219	G	W	Y	Y	D	1	500 ml poly FIELD FILTERED

550-165277 Chain of Custody

Possible Hazard Identification Unconfirmed	**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)** ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements: See Analysis Request Form

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	06/09/2021 1209	AECOM		6/10/21 1209	TA
Relinquished by:	Date/Time: 6/10/21 1503	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 6.10.21 1503	Company TAPHX

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: (3.8°C) PC

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 550-165277-1

Login Number: 165277 **List Source: Eurofins TestAmerica, Phoenix**
List Number: 1
Creator: Doerr, Bret C

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	True	
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.	False	Check done at department level as required.

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

Laboratory Job ID: 550-169691-1
Laboratory SDG: Lordsburg Compressor Station
Client Project/Site: Lordsburg

For:
AECOM Technical Services Inc.
333 East Wetmore
Suite 400
Tucson, Arizona 85705

Attn: Andrew Messer

Authorized for release by:
9/2/2021 1:06:28 PM
Rachelle Ferguson, Project Manager I
(602)437-3340
fergusonr@eurofinset.com

Designee for

Carlene McCutcheon, Project Manager II
(602)659-7612
Carlene.McCutcheon@Eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Laboratory Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Table of Contents

Definitions/Glossary

Client: AECOM Technical Services Inc. Job ID: 550-169691-1
Project/Site: Lordsburg SDG: Lordsburg Compressor Station

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Job ID: 550-169691-1

Laboratory: Eurofins TestAmerica, Phoenix

Narrative

Job Narrative
550-169691-1

Comments
No additional comments.

Receipt
The sample was received on 8/26/2021 2:30 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.7º C.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-169691-1	EPWW1-08-25-21	Water	08/25/21 13:06	08/26/21 14:30

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Client Sample ID: EPWW1-08-25-21

Lab Sample ID: 550-169691-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	54		1.0		ug/L	1		200.8 LL	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Phoenix

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Client Sample ID: EPWW1-08-25-21

Date Collected: 08/25/21 13:06
Date Received: 08/26/21 14:30

Lab Sample ID: 550-169691-1

Matrix: Water

Method: 200.8 LL - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	54		1.0		ug/L		08/30/21 06:35	09/01/21 11:24	1

QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-251846/1-A
Matrix: Water
Analysis Batch: 252188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 251846

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		1.0		ug/L		08/30/21 06:35	09/01/21 11:08	1

Lab Sample ID: LCS 550-251846/2-A
Matrix: Water
Analysis Batch: 252188

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 251846

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium			100	102		ug/L		102	85 - 115		

Lab Sample ID: LCSD 550-251846/3-A
Matrix: Water
Analysis Batch: 252188

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 251846

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium			100	105		ug/L		105	85 - 115	2	20

Lab Sample ID: 550-169660-E-1-A MS
Matrix: Water
Analysis Batch: 252188

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 251846

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium	2.8		100	103		ug/L		101	70 - 130		

Lab Sample ID: 550-169660-E-1-B MSD
Matrix: Water
Analysis Batch: 252188

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 251846

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	2.8		100	103		ug/L		101	70 - 130	0	20

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Metals

Prep Batch: 251846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-169691-1	EPWW1-08-25-21	Dissolved	Water	200.8	
MB 550-251846/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-251846/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-251846/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-169660-E-1-A MS	Matrix Spike	Total/NA	Water	200.8	
550-169660-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 252188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-169691-1	EPWW1-08-25-21	Dissolved	Water	200.8 LL	251846
MB 550-251846/1-A	Method Blank	Total/NA	Water	200.8 LL	251846
LCS 550-251846/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	251846
LCSD 550-251846/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	251846
550-169660-E-1-A MS	Matrix Spike	Total/NA	Water	200.8 LL	251846
550-169660-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	251846

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Client Sample ID: EPWW1-08-25-21

Date Collected: 08/25/21 13:06
Date Received: 08/26/21 14:30

Lab Sample ID: 550-169691-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			251846	08/30/21 06:35	SGO	TAL PHX
Dissolved	Analysis	200.8 LL		1	252188	09/01/21 11:24	ARE	TAL PHX

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 550-169691-1
Project/Site: Lordsburg
SDG: Lordsburg Compressor Station

Laboratory: Eurofins TestAmerica, Phoenix

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: Lordsburg

Job ID: 550-169691-1
SDG: Lordsburg Compressor Station

Method	Method Description	Protocol	Laboratory
200.8 LL	Metals (ICP/MS)	EPA	TAL PHX
200.8	Preparation, Total Metals	EPA	TAL PHX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Eurofins Tes erica Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
Phone (602) 437-3340 Fax (602) 454-9303

169691

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler:	Lab PM: Carlene McCutcheon	Carrier Tracking No(s):	COC No:
Client Contact: Andrew Messer	Phone:	E-Mail: Carlene.McCutcheon@testamericainc.com		Page: Page ___ of ___
Company: AECOM				Job #:
Address: 333 E. Wetmore Rd. Suite 400	Due Date Requested:			
City: Tucson	TAT Requested (days):			
State, Zip: AZ 85705				
Phone: 520-247-7210	PO #:			
Email: andrew.messer@aecom.com	WO #:			
Project Name: Lordsburg	Project #:			
Site: Lordsburg Compressor Station	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	200.8 Cr - dissolved	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EPWW1-08-25-21	8-25-21	13:06	G	W	Y	Y	D	2	500 ml poly, w HNO3 FIELD FILTERED

550-169691 Chain of Custody

Possible Hazard Identification
Unconfirmed
Deliverable Requested: I, II, III, IV, Other (specify)

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: See Analysis Request Form

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by:	08-26-21 11:00	AECOM	Received by:	8/26/21 11:00	TA
Relinquished by:	8/26/21 1430		Received by:		
Relinquished by:			Received by:	8-26-21 1430	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.7°C) BC

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 550-169691-1
SDG Number: Lordsburg Compressor Station

Login Number: 169691
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins TestAmerica, Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	True	
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	

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ANALYTICAL REPORT

Eurofins Phoenix
4625 East Cotton Center Boulevard
Building #3 Suite #189
Phoenix, AZ 85040
Tel: (866)772-5227

Laboratory Job ID: 550-175978-1
Client Project/Site: EPNG/KM

For:
AECOM Technical Services Inc.
333 East Wetmore
Suite 400
Tucson, Arizona 85705

Attn: Andrew Messer

Authorized for release by:
1/17/2022 3:37:50 PM

Carlene McCutcheon, Project Manager II
(602)659-7612
Carlene.McCutcheon@Eurofinset.com

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Laboratory Job ID: 550-175978-1

Table of Contents

Definitions/Glossary

Client: AECOM Technical Services Inc. Job ID: 550-175978-1
Project/Site: EPNG/KM

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
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
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)
TNTC	Too Numerous To Count

Case Narrative

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-175978-1

Job ID: 550-175978-1

Laboratory: Eurofins Phoenix

Narrative

Job Narrative
550-175978-1

Comments
No additional comments.

Receipt
The sample was received on 12/16/2021 3:30 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.3º C.

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

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-175978-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-175978-1	EPWW-1	Water	12/15/21 13:35	12/16/21 15:30

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-175978-1

Client Sample ID: EPWW-1

Lab Sample ID: 550-175978-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	55		1.0		ug/L	1		200.8 LL	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Phoenix

1/17/2022

Client Sample Results

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-175978-1

Client Sample ID: EPWW-1

Date Collected: 12/15/21 13:35
Date Received: 12/16/21 15:30

Lab Sample ID: 550-175978-1

Matrix: Water

Method: 200.8 LL - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	55		1.0		ug/L		12/17/21 09:01	01/13/22 18:20	1

QC Sample Results

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-175978-1

Method: 200.8 LL - Metals (ICP/MS)

Lab Sample ID: MB 550-261443/1-A
Matrix: Water
Analysis Batch: 263539

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 261443

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		1.0		ug/L		12/17/21 09:01	01/13/22 18:03	1

Lab Sample ID: LCS 550-261443/2-A
Matrix: Water
Analysis Batch: 263539

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 261443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium			100	108		ug/L		108	85 - 115		

Lab Sample ID: LCSD 550-261443/3-A
Matrix: Water
Analysis Batch: 263539

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 261443

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium			100	109		ug/L		109	85 - 115	1	20

Lab Sample ID: 550-175956-E-1-A MS ^100
Matrix: Water
Analysis Batch: 263539

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 261443

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chromium	ND		100	109		ug/L		109	70 - 130		

Lab Sample ID: 550-175956-E-1-B MSD ^100
Matrix: Water
Analysis Batch: 263539

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 261443

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	ND		100	109		ug/L		109	70 - 130	1	20

Lab Sample ID: MB 550-261300/1-B
Matrix: Water
Analysis Batch: 263539

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 261443

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		1.0		ug/L		12/17/21 09:01	01/13/22 18:22	1

QC Association Summary

Client: AECOM Technical Services Inc. Job ID: 550-175978-1
Project/Site: EPNG/KM

Metals

Filtration Batch: 261300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 550-261300/1-B	Method Blank	Dissolved	Water	Filtration	

Prep Batch: 261443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-175978-1	EPWW-1	Dissolved	Water	200.8	
MB 550-261300/1-B	Method Blank	Dissolved	Water	200.8	261300
MB 550-261443/1-A	Method Blank	Total/NA	Water	200.8	
LCS 550-261443/2-A	Lab Control Sample	Total/NA	Water	200.8	
LCSD 550-261443/3-A	Lab Control Sample Dup	Total/NA	Water	200.8	
550-175956-E-1-A MS ^100	Matrix Spike	Total/NA	Water	200.8	
550-175956-E-1-B MSD ^10(	Matrix Spike Duplicate	Total/NA	Water	200.8	

Analysis Batch: 263539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-175978-1	EPWW-1	Dissolved	Water	200.8 LL	261443
MB 550-261300/1-B	Method Blank	Dissolved	Water	200.8 LL	261443
MB 550-261443/1-A	Method Blank	Total/NA	Water	200.8 LL	261443
LCS 550-261443/2-A	Lab Control Sample	Total/NA	Water	200.8 LL	261443
LCSD 550-261443/3-A	Lab Control Sample Dup	Total/NA	Water	200.8 LL	261443
550-175956-E-1-A MS ^100	Matrix Spike	Total/NA	Water	200.8 LL	261443
550-175956-E-1-B MSD ^10(	Matrix Spike Duplicate	Total/NA	Water	200.8 LL	261443

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-175978-1

Client Sample ID: EPWW-1
Date Collected: 12/15/21 13:35
Date Received: 12/16/21 15:30

Lab Sample ID: 550-175978-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	200.8			261443	12/17/21 09:01	SGO	TAL PHX
Dissolved	Analysis	200.8 LL		1	263539	01/13/22 18:20	ARE	TAL PHX

Laboratory References:

TAL PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Building #3 Suite #189, Phoenix, AZ 85040, TEL (866)772-5227

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 550-175978-1
Project/Site: EPNG/KM

Laboratory: Eurofins Phoenix

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0728	06-10-22

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: EPNG/KM

Job ID: 550-175978-1

Method	Method Description	Protocol	Laboratory
200.8 LL	Metals (ICP/MS)	EPA	TAL PHX
200.8	Preparation, Total Metals	EPA	TAL PHX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL PHX = Eurofins Phoenix, 4625 East Cotton Center Boulevard, Building #3 Suite #189, Phoenix, AZ 85040, TEL (866)772-5227

175978

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

CHAIN OF CUSTODY FORM

17461 Derian Ave., #100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
4645 E. Cotton Center Blvd, Bldg 3, Ste 189, Phoenix, AZ 85040 (602) 437-3340 FAX (602) 454-9303
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

1/17/2022

AECOM - ANDREW.MESSER@AECOM.COM

Page _____ of _____

Client Name / Address:	Project / PO Number:
~~Arizona Engineering Co.~~ KINDER MORGAN ~~706 E. Bell Rd, Ste 201~~ ~~Phoenix, AZ 85022~~ DOUG_STAVINOHA@KINDERMORGAN.COM 713-420-5150	
Project Manager ~~Charlie Boyle~~ ANDREW.MESSER@AECOM.COM	**Phone Number:** ~~602-438-1009~~ 520-247-7210
Sampler:	**Fax Number:** ~~602-438-0099~~

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Analysis Required: DISSOLVED CHROMIUM 200.8	Special Instructions
EPWW-1	W	250 mL	2	12-15-21	13:35	HNO3	X	FIELD FILTERED ARF 16 DEC 2021

550-175978 Chain of Custody

Relinquished By:	Date / Time:	Received By:	Date / Time:	Turnaround Time: (Check)	
A. Messer	12-12-2021 10:45			same day _____	72 hours _____
Relinquished By:	Date / Time:	Received By:	Date / Time:	24 hours _____	5 days _____
12-16-21 3:30pm		12-16-21 10:45AM		48 hours _____	normal _____
Relinquished By:	Date / Time:	Received in Lab By:	Date / Time:	Sample Integrity: (Check)	
		WPX	12/16/21 1550	Intact _____	on ice X

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

TAL-0013-AEC (0708)

R 0.3°C

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc. Job Number: 550-175978-1

Login Number: 175978 **List Source: Eurofins Phoenix**
List Number: 1
Creator: Maycock, Lisa

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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.	True	
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	

FIELD NOTES

EPNG GROUNDWATER SAMPLING

WELL EPWW-1

GROUNDWATER SAMPLING INFORMATION SHEET

Date: 03/23/2021	Measuring Point: NA
Owner/Site: KM EL PASO NATURAL GAS	Depth To Water (Ft): DTW= NM
Job Number: 60597666	Depth To Well Bottom (ft): TD= NM
Sampler(s): RACHEL TUCCI	Well Diameter (in): D=
Weather: BLUE SKY MINIMAL CLOUDS TO NORTH	3 Casing Volumes (Gal)=D^2*(TD-DTW)*0.12=
Comments:	Drawdown (ft):=

INSTRUMENTATION

YSI Sonde Multi-Parameter Meter

Calibration Completed Date/Time: 03/19/2021		03/23/2021 FIELD CHECKED T=21.50
Conductivity Meter: (1,413 µS/cm = 1.413 mS/cm)		Calibration Std/Reading: 1116 µS/cm
pH Meter: 7.0		Calibration Std/Reading: 7.40
ORP Meter: Platinum Electrode		Calibration Std/Reading:
DO Meter:	DO Charge:	Calibration Std/Reading:
Temperature Meter:		Water Level Meter:

PURGE WATER MEASUREMENTS

Purge Method: (Dedicated Pump) Bailer Other:_____ Pump on: 1005 (NM TIME) Pump off: 1238

Disposal of Purge Water: Portable tank GAC Baker Tank Other: TANK ON SITE

Time	Purge Rate (gpm)	Gallons Purged	Temp °C	Cond µS/cm	DO mg/L	pH	ORP mV (field meter)	Turbidity (NTU)	Remarks (color, clarity, odor)
1217		9800	24.00	457	3.74	9.66	65.4	189	NO COLOR, NO ODOR
1221		10100	24.10	454	3.54	9.67	64.0	121	
1226		10300	24.00	455	3.52	9.66	63.7	106	
1230		10500	~~23.70~~	~~413~~	~~3.60~~	~~9.68~~	~~64.7~~	~~21.4~~	COLLECTED SAMPLE
1235		10700	23.70	413	3.60	9.68	64.7	21.4	AFTER SAMPLE

SAMPLING INFORMATION

Sampling Method (Circle Selection): Bailer Sampling Pump (Dedicated Pump) Other:_____

Sample ID	Time	Container	Pres.[1]	Analysis	Remarks
EPWW-1-03-23-21	1230	2x250mL poly	HNO_3	DIS Cr.	FIELD FILTERED

[1]Samples taken in pre-preserved bottles (as needed) and immediately chilled on ice.

URS

FIELD ENVIRONMENTAL INSTRUMENTS, INC.

www.fieldenvironmental.com

301 Brushton Ave
Suite A
Pittsburgh, PA 15221
Toll Free (800) 393-4009
Local (412) 436-2600
Fax (412) 436-2616

AquaRead Calibration Certificate

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 7 @ 25^{C}	8009698	10/14/2022	7.02	7.00	(6.86 to 7.14)
			pH mV value	-13.4	(0 mV +/- 25mV)

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 4 @ 25^{C}	8009373	9/3/2022	3.67	4.00	(3.92 to 4.08)
			PH Slope (mV)	53.00	> 45 mV

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
PH 10 @ 25^{C}	7008154	8/21/2022	10.12	10.00	(9.80 to 10.20)
			PH Slope (mV)	53.40	> 45 mV

Cal Standard	Lot #	Expiration	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
Conductivity	8011203	11/24/2022	1.315	1.409	(1.338 to 1.479)

Dissolved Oxygen	Pre-Cal Reading	Post-Cal Reading	
100% Saturation	9.57	9.31	mg/L
			Acceptable Range
Gain		1.10	> 20 (0.8-1.5 ODO)

Check Standard	Temp °C	Relative Reading	Acceptable Range
ORP	17.8	244.0	(+/- 20mV)
	mV Offset	24.0	

Turbidity	Pre-Cal Reading	Post-Cal Reading	Acceptable Range
0 NTU	20.0	0.0	+/- 10%
1000 NTU	1011.0	1000.0	+/- 10%

Model	AquaRead AP2000D
Cable Length	3 Meter
Sonde SN	U119090220X
Handheld SN	U118891727X
Barcode	U93612X
Order #	451486

Calibrated By: Paolo Francisco

Date of Calibration: 3/19/2021

*Solutions provided by LabChem (412-826-5230)

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.
All calibration solutions used are traceable to NIST. Additional documentation is available upon request.

EPNG GROUNDWATER SAMPLING

WELL EPWW-1-060921

GROUNDWATER SAMPLING INFORMATION SHEET

Date: 06/09/2021	Measuring Point: NA
Owner/Site: KM EL PASO NATURAL GAS	Depth To Water (Ft): DTW= NOT MEASURED
Job Number: 605977666	Depth To Well Bottom (ft): TD= NOT MEASURED
Sampler(s): RACHEL TUCCI	Well Diameter (in): D=
Weather: WARM, HIGH CLOUDS, SLIGHT	3 Casing Volumes (Gal)=D^2*(TD-DTW)*0.12=
Comments: BREEZE	Drawdown (ft):=

INSTRUMENTATION

MYRON L ULTRAMETER
~~YSI Sonde Multi-Parameter Meter~~ FROM RENTAL CERTIFICATE

Calibration Completed Date/Time: 06/07/2021	
Conductivity Meter: (1,413 µS/cm = 1.413 mS/cm)	Calibration Std/Reading: 1409
pH Meter:	Calibration Std/Reading: 4.00 / 7.00 / 10.00
ORP Meter: Platinum Electrode	Calibration Std/Reading: 236
DO Meter: DO Charge:	Calibration Std/Reading:
Temperature Meter: 21.2 °C	Water Level Meter: NA

PURGE WATER MEASUREMENTS

Purge Method: (Dedicated Pump) Bailer Other:_____ Pump on: 1000 Pump off: _____

Disposal of Purge Water: Portable tank GAC Baker Tank Other: TANK ON SITE NM TIME

Time	Purge Rate (gpm)	Gallons Purged	Temp °C	Cond µS/cm	DO mg/L	pH	ORP mV (field meter)	Turbidity (NTU)	Remarks (color, clarity, odor)
1133		8100	25.7	~~440.7~~		6.28	182	313.0	NO COLOR / NO ODOR
1138		8300	24.7	441.9		7.18	177	307.5	
1143		8600	24.7	439.7		7.29	169	306.9	
1148		8800	24.4	442.8		7.51	161	308.5	
1153		9100	24.5	442.3		7.63	153	307.6	
1158		9300	24.4	442.6		7.76	145	308.3	
1203		9600	24.4	442.7		7.78	143	308.9	
1208		9800	24.4	442.9		7.78	141	308.4	
1213		10000	24.4	442.5		7.78	139	308.3	COLLECT SAMPLE
1219		10400	24.9	443.0		7.89	132	308.1	POST SAMPLE

SAMPLING INFORMATION

Sampling Method (Circle Selection): Bailer Sampling Pump (Dedicated Pump) Other:_____

Sample ID	Time	Container	Pres.[1]	Analysis	Remarks
EPWW-1-060921	1213	500mL POLY	HNO_3	DIS Cr.	FIELD FILTERED

[1]Samples taken in pre-preserved bottles (as needed) and immediately chilled on ice.

URS

FIELD ENVIRONMENTAL INSTRUMENTS, INC.
www.fieldenvironmental.com

301 Brushton Ave
Suite A
Pittsburgh, PA 15221
Toll Free (800) 393-4009
Local (412) 436-2600
Fax (412) 436-2616

pH/Con/Temp Meter Calibration Certificate

Cal Standard	Lot #	Expiration	Pre Cal Reading	Acceptable Range
PH 4 @ 25C	8009590	10/9/2022	4.13	
		Post-Cal	4.00	(3.85 - 4.15)

Cal Standard	Lot #	Expiration	Pre Cal Reading	Acceptable Range
PH 7 @ 25C	8009698	10/14/2022	7.81	
		Post-Cal	7.00	*(6.85 - 7.15)*

Cal Standard	Lot #	Expiration	Pre Cal Reading	Acceptable Range
PH 10 @ 25C	7008154	8/12/2022	10.34	
		Post-Cal	10.00	(9.85 - 10.15)

Cal Standard	Lot #	Expiration	Reading umho/cm	Acceptable Range
Conductivity	8011203	11/24/2022	1477	
		Post-Cal	1409.00	(1394 - 1423)

Check Standard	Temp ©	Relative Reading	Acceptable Range
ORP	21.2	236.0	(+/- 20mV)

*Solutions provided by LabChem (412-826-5230)

Model	Myron L Ultrameter
Cable Length	
S/N	6237933
Barcode	U83412X
Order #	457846

Calibrated By: Allan Miller

Date of Calibration: 6/7/2021 PF

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.
All calibration solutions used are traceable to NIST. Additional documentation is available upon request.

EPNG GROUNDWATER SAMPLING

WELL EPWW 1

GROUNDWATER SAMPLING INFORMATION SHEET

Date: 3-25-2021	Measuring Point:
Owner/Site: LORDSBURG STATION	Depth To Water (Ft): DTW=
Job Number:	Depth To Well Bottom (ft): TD= NA
Sampler(s):	Well Diameter (in): D=
Weather: CLEAR, HOT	3 Casing Volumes (Gal)=D²*(TD-DTW)*0.12=
Comments:	Drawdown (ft):=

INSTRUMENTATION

MYRON ULTIMETER
~~YSI Sonde Multi-Parameter Meter~~

4.0/3.64 POST CAL = 4.00
7.0/7.13 " " = 7.01
10/10.14 " " = 10.00

Calibration Completed Date/Time:		
Conductivity Meter: (1,413 µS/cm = 1.413 mS/cm)		Calibration Std/Reading: 1409/1217 POST CAL = 1402
pH Meter:		Calibration Std/Reading:
ORP Meter: Platinum Electrode		Calibration Std/Reading:
DO Meter:	DO Charge:	Calibration Std/Reading:
Temperature Meter:		Water Level Meter:

PURGE WATER MEASUREMENTS

10:00 18219 76

Purge Method: Dedicated Pump Bailer Other:_____ Pump on:_____ Pump off: _____

Disposal of Purge Water: Portable tank GAC Baker Tank Other: SITE TANK

MDT Time	Purge Rate (gpm)	Gallons Purged	Temp °C	Cond µS/cm	DO mg/L	pH	ORP mV (field meter)	Turbidity (NTU)	Remarks (color, clarity, odor)
10:00									
12:40	50	3294	23.3	468.6		9.12	79		CLEAR
12:50			26.6	458.3		9.03	91		"
12:55			26.4	457.7		8.98	100		"
13:00			26.3	459.9		9.02	103		"
13:05			26.1	459.3		9.00	108		
13:06									SAMPLE

18219 76
18302 70
18308 90

18316 00

SAMPLING INFORMATION

Sampling Method (Circle Selection): Bailer Sampling Pump Dedicated Pump Other:_____

Sample ID	Time	Container	Pres.[1]	Analysis	Remarks
EPWW-1 ~~3/25~~	13:06	2x250 ml	NO_3	Diss CR 200.8	FIELD FILTERED
EPWW-03-25-21					

[1]Samples taken in pre-preserved bottles (as needed) and immediately chilled on ice.

URS

FIELD ENVIRONMENTAL INSTRUMENTS, INC.
www.fieldenvironmental.com

301 Brushton Ave
Suite A
Pittsburgh, PA 15221
Toll Free (800) 393-4009
Local (412) 436-2600
Fax (412) 436-2616

pH/Con/Temp Meter Calibration Certificate

Cal Standard	Lot #	Expiration	Pre Cal Reading	Acceptable Range
PH 4 @ 25C	8009373	10/9/2022	3.94	
		Post-Cal	4.00	(3.85 - 4.15)
Cal Standard	**Lot #**	**Expiration**	**Pre Cal Reading**	**Acceptable Range**
PH 7 @ 25C	8009698	10/14/2022	7.10	
		Post-Cal	7.00	(6.85 - 7.15)
Cal Standard	**Lot #**	**Expiration**	**Pre Cal Reading**	**Acceptable Range**
PH 10 @ 25C	7008154	8/21/2022	10.00	
		Post-Cal	10.00	(9.85 - 10.15)
Cal Standard	**Lot #**	**Expiration**	**Reading umho/cm**	**Acceptable Range**
Conductivity	8011203	11/24/2022	1562	
		Post-Cal	1409.00	(1394 - 1423)
Check Standard		**Temp ©**	**Relative Reading**	**Acceptable Range**
ORP		16.3	7.0	(+/- 20mV)

*Solutions provided by LabChem (412-826-5230)

Model	Myron L Ultrameter
Cable Length	
S/N	6233525
Barcode	U81120X
Order #	464088

Calibrated By: Paolo Francisco

Date of Calibration: 8/23/2021

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.
All calibration solutions used are traceable to NIST. Additional documentation is available upon request.

EPNG GROUNDWATER SAMPLING

WELL EPNW-1

LORDSBURG STATION

GROUNDWATER SAMPLING INFORMATION SHEET

Date: 12-15-2021	Measuring Point: NOT MEASURED NO ACCESS TUBE
Owner/Site: LORDSBURG STATION	Depth To Water (Ft): DTW=
Job Number:	Depth To Well Bottom (ft): TD=
Sampler(s):	Well Diameter (in): D=
Weather: PTLY CLOUDY, WINDY 40s	3 Casing Volumes (Gal)=D²*(TD-DTW)*0.12=
Comments:	Drawdown (ft):=

INSTRUMENTATION

~~YSI Sonde~~ MYRON L ULTRAMETER II Multi-Parameter Meter

Calibration Completed Date/Time:		
Conductivity Meter: (1,413 µS/cm = 1.413 mS/cm)		Calibration Std/Reading: 1397 → 1409 uS/cm
pH Meter:		Calibration Std/Reading: 7.04 → 7.0 ~~4.0~~ 10.1/10.0 4.0/4.0
ORP Meter: Platinum Electrode		Calibration Std/Reading:
DO Meter:	DO Charge:	Calibration Std/Reading:
Temperature Meter:		Water Level Meter:

PURGE WATER MEASUREMENTS

MST

Purge Method: Dedicated Pump Bailer Other:_____ Pump on: 10:15 Pump off: _____

Disposal of Purge Water: Portable tank GAC Baker Tank Other: SITE STORAGE TANK

18324.28

MST Time	Purge Rate (gpm)	Gallons Purged	Temp °C	Cond µS/cm	DO mg/L	pH	ORP mV (field meter)	Turbidity (NTU)	Remarks (color, clarity, odor)
11:43	45		22.0	462.0		8.15	81		
12:00			21.9	~~472468.3~~		8.77	68		18378.00
12:15	~44		22.8	462.0		8.45	52		TOTALIZER STOPPED 18378.00
12:30			23.4	461.5		8.70	58		METER IN CONTINUOUS STREAM
12:45			23.4	460.8		8.78	48		"
13:00			23.4	461.2		8.77	52		"
13:15			23.5	460.9		8.90	39		"
13:30			23.5	461.0		8.88	38		"
13:35									SAMPLE

9000 GAL / 45 GPM = 200 MIN

SAMPLING INFORMATION

Sampling Method (Circle Selection): Bailer Sampling Pump Dedicated Pump Other:_____

Sample ID	Time	Container	Pres.[1]	Analysis	Remarks
		250 ML X 2	HNO_3	DISSCR 200.8	FIELD FILTERED

[1]Samples taken in pre-preserved bottles (as needed) and immediately chilled on ice.

URS

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Fax (412) 436-2616

pH/Con/Temp Meter Calibration Certificate

Cal Standard	Lot #	Expiration	Pre Cal Reading	Acceptable Range
PH 4 @ 25C	8009590	10/9/2022	4.11	
		Post-Cal	4.00	(3.85 - 4.15)
Cal Standard	**Lot #**	**Expiration**	**Pre Cal Reading**	**Acceptable Range**
PH 7 @ 25C	8009698	10/14/2022	7.06	
		Post-Cal	7.00	(6.85 - 7.15)
Cal Standard	**Lot #**	**Expiration**	**Pre Cal Reading**	**Acceptable Range**
PH 10 @ 25C	7008154	8/21/2022	11.02	
		Post-Cal	10.00	(9.85 - 10.15)
Cal Standard	**Lot #**	**Expiration**	**Reading umho/cm**	**Acceptable Range**
Conductivity	8011203	11/24/2022	1463	
		Post-Cal	1409.00	(1394 - 1423)
Check Standard		**Temp ©**	**Relative Reading**	**Acceptable Range**
ORP		18.5	236.0	(+/- 20mV)

*Solutions provided by LabChem (412-826-5230)

Model	Myron L Ultrameter
Cable Length	
S/N	6245752
Barcode	U86306X
Order #	473437

Calibrated By: Paolo Francisco

Date of Calibration: 12/13/2021

All calibrations performed by FEI conform to manufacturer's specifications. Please report any issues within 24 hours of receiving equipment.

All calibration solutions used are traceable to NIST. Additional documentation is available upon request.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 119097

CONDITIONS

Operator:	OGRID:
El Paso Natural Gas Company, L.L.C 1001 Louisiana Street Houston, TX 77002	7046
	Action Number: 119097
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. Please see App ID 202436 for most updated status.	5/22/2023