1ST QUARTER 2014 GROUNDWATER MONITORING REPORT
FORMER WESTERN FORGE & FLANGE FACILITY
540 CLEVELAND AVENUE
ALBANY, CALIFORNIA
RO#3009

PREPARED FOR:
Mr. Walter R. Pierce
Western Forge & Flange
687 County Road 2201
Cleveland, Texas 77328

PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
1956 Webster Street, Suite 400
Oakland, California 94612

April 7, 2014
Project No. 401823001

April 7, 2014
Project No. 401823001

Mr. Walter R. Pierce
Western Forge & Flange
687 County Road 2201
Cleveland, Texas 77328

Subject: 1st Quarter 2014 Groundwater Monitoring Report
Former Western Forge & Flange Facility
540 Cleveland Avenue
Albany, California
RO#3009

Dear Mr. Pierce:

Ninyo & Moore is pleased to present this 1st Quarter 2014 Groundwater Monitoring Report for the property located at 540 Cleveland Avenue in Albany, California. This report documents the recent groundwater monitoring well sampling activities, laboratory analytical results, and our conclusions and recommendations regarding the environmental status of the site.

Should you have any questions regarding this report or need additional information, please contact the undersigned at your convenience.

Sincerely,
NINYO & MOORE

Professional Geologist
Kristopher M. Larson
No. 8059
State of California

Cem R. Atabek
Senior Project Environmental Engineer

Kris M. Larson, PG 8059
Principal Environmental Geologist

CRA/KML/caa

Distribution: (1) Addressee
(1) Mark E. Detterman, ACEH

April 7, 2014
Project No. 401823001

To: Mr. Mark E. Detterman
Alameda County Environmental Health Department
Health Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Perjury Statement
1st Quarter 2014 Groundwater Monitoring Report
540 Cleveland Avenue
Albany, California 94706

I declare, under penalty of perjury, that the information or recommendations contained in the attached report are true or correct to the best of my knowledge.

Walter R. Pierce
President and CEO
Western Forge & Flange Company

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1. INTRODUCTION

Ninyo & Moore has prepared this 1st Quarter 2014 Groundwater Monitoring Report to document the groundwater monitoring activities recently performed at the former Western Forge & Flange facility located at 540 Cleveland Avenue in Albany, California (site). The groundwater monitoring activities were performed in general accordance with the guidelines presented in Ninyo & Moore's Revised Data Gap Investigation Report and Corrective Action Plan (CAP) dated May 15, 2013, and CAP Addendum dated July 22, 2013, which were approved by Alameda County Environmental Health (ACEH) in an e-mail dated October 14, 2013.

2. SITE BACKGROUND

The following sections describe the location, description, and historical background of the site.

2.1. Site Description

The subject site is located at 540 Cleveland Avenue in Albany, California (Figure 1). The site is located in a commercial/industrial area of Albany between the Interstate 80 and 580 Freeways, and immediately east of a Union Pacific Rail Road (UPRR) right of way (Figure 2). The site is bordered to the north by a heavy industrial property (Albany Steel), to the south by a commercial building (currently occupied by the City of Albany and used as a maintenance yard), and to the east by Cleveland Avenue. The site is approximately 1.0 acre and recently consisted of an approximately 25,000 square-foot building with concrete and asphalt paved areas. Western Forge & Flange manufactured flanges at the site from 1944 until it moved operations to Texas in 2007. The site building and the majority of pavement surfaces were demolished and removed in June and July of 2013. Several subsurface concrete pits were also demolished during building demolition activities.

2.2. Site Geology and Hydrology

The site is located within the Coast Range Geologic Province. The San Francisco Bay and Bay margin geology was formed by a series of Mesozoic and Cenozoic aged oceanic crust

and volcanic arc terranes accreted to the continent. Uplift also occurred due to transpression along the Hayward Fault Zone during the Cenozoic. Bedrock geologic units include Jurassic Coast Range Ophiolite, Late Jurassic-Early Cretaceous Franciscan Complex and Knoxville Formation, and the Late Cretaceous Great Valley Sequence. Late Quaternary deposits consisting of Pleistocene to Holocene alluvial fan deposits overly the bedrock formations within the site area.

The ground surface elevation of the site ranges from approximately 12 to 16 feet above mean sea level (MSL), and ground surface is gently sloped towards the west-southwest. The site sedimentology observed during excavation activities consisted of approximately 2 to 6 feet of fill material over laying native silty clay (bay mud) deposits. The margin of the San Francisco Bay historically crossed through the site, with the western portion of the site historically being tidal wetlands. Fill material was observed to be thinner (extending to approximately 2 feet below ground surface [bgs]) in the central portion of the site, and thicker (extending to approximately 6 feet bgs) in the western portion of the site. The upper 1 to 2 feet of fill material was observed to generally consist of brown sand with gravel and clay, and the lower portion of fill was observed to generally consist of dark gray silt with sand and clay. Bricks, concrete rubble, and other debris were observed in areas throughout the fill material.

No natural surface water bodies, including ponds, streams, or other bodies of water, are present on the site. The San Francisco Bay is located approximately 500 feet west of the site. During the soil boring advancement conducted for during previous investigations, shallow groundwater was encountered between 2.5 and 5.5 feet bgs in all but one of the borings. Groundwater was encountered at 1 foot bgs in one boring in the northwestern portion of the site, which was attributed to a very shallow, perched groundwater zone that has been documented in previous environmental assessments. During excavation activities, groundwater was observed at approximately 4 feet bgs in the south-central portion of the site, and at approximately 6 feet bgs in the western portion of the site. Due to the site's proximity to the San Francisco Bay, tidal fluctuation may affect groundwater depth and flow direc-

tion/gradient. The depth and elevation of groundwater measured monitoring wells, and the inferred groundwater flow direction and gradient are described in Section 2.6 below.

2.3. Previous Environmental Assessments and Remedial Action

The site has been the subject of several environmental assessments dating back to 1984. Based on data generated during episodes of site assessment, the site was determined to be impacted with constituents of concern (COCs) including arsenic, chromium, copper, lead, molybdenum, nickel, zinc, polycyclic aromatic hydrocarbons (PAHs), and total petroleum hydrocarbons as hydraulic oil (TPHho) at elevated concentrations at various locations throughout the site. In order to protect human health and the environment, and allow the site to be redeveloped for future commercial/industrial land use, a CAP was prepared for the site by Ninyo & Moore. The CAP included an evaluation of remedial alternatives for the site, and excavation and off-site disposal of impacted soil was selected as the appropriate remedial alternative. The CAP was implemented between October 2013 and January 2014, as documented in Ninyo & Moore's Removal Action Completion Report (RACR) dated February 6, 2014, which has been submitted to ACEH for review.

Implementation of the CAP included removal of approximately 1,200 cubic yards (1,798 tons) of soil impacted with COCs and replacing the COCs impacted soil with clean imported backfill materials. Approximately 12.5 tons of groundwater impacted with COCs was also removed from the site. Excavation sidewall and bottom confirmation samples were collected and the results indicated that site soil was remediated to meet the requirements presented in the ACEH approved CAP and CAP Addendum. Three groundwater monitoring wells (MW-1 through MW-3) were also installed in the western portion of the site to evaluate post remediation groundwater quality (Figure 2).

An initial groundwater monitoring event was performed on December 5, 2013. A relatively minor concentration of TPHho (below the Cleanup Goal [CG]) was detected in monitoring well MW-1, and TPHho was not detected in monitoring wells MW-2 or MW-3. Only minor concentrations (below CGs) of the PAHs acenaphthene and naphthalene were detected

monitoring well MW-1, and no PAHs were detected in monitoring wells MW-2 or MW-3. Concentrations of several metals (cobalt, copper, lead, molybdenum, nickel, and mercury) exceeded CGs. The results of the initial groundwater monitoring event are also documented in the RACR.

2.4. Cleanup Goals (CGs)

The CGs established in the CAP Addendum for groundwater beneath the site are the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) for groundwater which is not a current or potential drinking water resource (May 2013 ESLs, Table F-1b). The selection of these CGs were based on results of the Data Gap Investigation which reported total dissolved solids (TDS) concentrations in several groundwater samples above than the San Francisco Bay Region Basin Plan (RWQCB 2007) guidelines of 3,000 milligrams per liter (mg/L) for a potential drinking water resource. Analytical results from groundwater monitoring well samples have indicated TDS concentrations ranging from 1,100 to 1,800 mg/L, therefore shallow groundwater beneath the site would qualify as a potential drinking water resource under the Basin Plan. Post remediation groundwater monitoring results are therefore also compared to ESLs for Drinking Water (December 2013 ESLs, Table F-3).

The established groundwater CGs are the lowest of the screening values listed in ESLs Table F-1b, which are based on aquatic habitat goals for all site COCs with the exception of benzo(k)flouranthene, which is based on gross contamination/ceiling value (odor, etc.). Although the site is located in relative close proximity to San Francisco Bay, the COCs which have impacted site groundwater (metals, TPHho, and PAHs) are not very mobile and easily adsorb to soil, therefore these COCs most likely are not migrating to the aquatic habitat of San Francisco Bay. Post remediation groundwater monitoring results have revealed relatively minor residual impacts, with concentrations of only some metals slightly exceeding CGs and/or drinking water ESLs, as discussed in Section 2.7.2 below. The impacts were generally lower at the site's western boundary (in monitoring well MW-3), indicating that

groundwater impacts from the site would most likely not be migrating all the way to San Francisco Bay. It is therefore proposed that site CGs for groundwater be revised to be based on ESLs for Drinking Water (December 2013 ESLs, Table F-3). Drinking Water ESLs are generally higher than the ESLs for aquatic habitat goals for most of the metals which have impacted site groundwater.

2.5. Monitoring Well Sampling

On March 24, 2014, groundwater samples were collected from monitoring wells MW-1 through MW-3. The well caps were removed to allow the water level to equilibrate for approximately 20 minutes, at which time depth to groundwater was measured using a decontaminated water level meter accurate to 0.01 feet. Approximately three casing volumes of groundwater were purged using a peristaltic pump with dedicated tubing for each well prior to sample collection. Groundwater parameters, including pH, temperature, and electrical conductivity were measured during well purging and recorded on groundwater sampling field data sheets (Appendix A). Groundwater samples were collected in the appropriate containers using the peristaltic pump. The groundwater samples were not filtered or preserved during collection as the laboratory performed filtering and preservation of samples as necessary prior to analysis. The sample containers were labeled with the sample identification, project location, sampling date/time, and sampler's initials. The sample containers were stored in a cooler containing ice for transport to the analytical laboratory for analysis. Chain-of-custody documentation was completed and accompanied the groundwater samples to the laboratory.

2.5.1. Groundwater Sample Analysis

Groundwater samples were submitted to Test America for analysis of TDS using EPA Method SM 2540C, Title 22 Metals using EPA Method 6010B/7470A, hexavalent chromium using EPA Method 7199, TPHho using EPA Method 8015M with silica gel cleanup, and PAHs using EPA Method 8270-SIM.

2.6. Groundwater Depths, Elevations, Flow Direction, and Gradient

The depth to groundwater was measured in site monitoring wells on March 24, 2014. Groundwater depth and elevation data is presented in Table 1 and on Figure 2. The depth to groundwater ranged from 4.75 to 5.25 feet below the top of well casings, or approximately 1.9 to 2.4 feet bgs, as the top of well casings are approximately 3 feet above the ground surface. Based on the surveyed well elevations, the groundwater elevation in the western portion of the site ranged from approximately 10.42 to 10.52 feet MSL. Based on the groundwater elevations, the groundwater flow direction was inferred to be towards the west with a gradient of approximately 0.004 feet per foot. The groundwater flow direction is expected to typically trend towards the west-southwest towards San Francisco Bay, however because of the site's proximity to San Francisco Bay, groundwater elevations and flow directions may be tidally influenced.

2.7. Groundwater Monitoring Analytical Results

Analytical results for groundwater monitoring samples are summarized in Tables 2 and 3, and a copy of the analytical laboratory report is presented in Appendix B. Groundwater sample analytical results are compared to site CGs and Drinking Water ESLs. Groundwater sample results exceeding CGs or Drinking water ESLs are also presented on Figure 2. The following sections summarize the groundwater monitoring sample results.

2.7.1. TDS

Analytical results for TDS are presented in Table 2. TDS was detected at concentrations of 1,100 mg/L in monitoring wells MW-1 and MW-2, and 1,200 mg/L in MW-3. As discussed in Section 2.4 above, these concentrations are below the TDS limit of 3,000 mg/L established for drinking water in the Basin Plan, therefore groundwater beneath the site should be considered a potential drinking water resource.

2.7.2. Metals

Analytical results for metals are presented in Table 2. Groundwater monitoring results revealed concentrations of copper, lead, molybdenum, nickel, and vanadium which exceeded CGs, and concentrations of arsenic, lead, and molybdenum which exceeded Drinking Water ESLs. All other metals were either not detected, or were detected at concentrations below CGs and Drinking Water ESLs. Groundwater sample analytical results for metals which exceeded CGs or Drinking Water ESLs are discussed below.

2.7.2.1. Arsenic

Arsenic was not detected above the CG of 0.036 mg/L. Arsenic was detected at concentrations which exceed the Drinking Water ESL of 0.01 mg/L in samples MW-1 (0.018 mg/L) and MW-3 (0.014 mg/L), and was not detected in sample MW-2.

2.7.2.2. Copper

Copper was not detected above the Drinking Water ESL of 1.0 mg/L. Copper was detected at a concentration which exceeds the CG of 0.0031 mg/L in samples MW-1 (0.037 mg/L), and was not detected in samples MW-2 or MW-3.

2.7.2.3. Lead

Lead was detected at a concentration which exceeds the CG of 0.0025 mg/L and the Drinking Water ESL of 0.015 mg/L in samples MW-1 (0.019 mg/L). Lead was not detected in samples MW-2 or MW-3.

2.7.2.4. Molybdenum

Molybdenum was detected at concentrations which exceed the CG of 0.24 mg/L and Drinking Water ESL of 0.078 mg/L in samples MW-1 (0.67 mg/L) and MW-2 (0.55 mg/L), and was not detected in sample MW-3.

2.7.2.5. Nickel

Nickel was not detected above the Drinking Water ESL of 0.1 mg/L. Nickel was detected at concentrations which exceed the CG of 0.0082 mg/L in samples MW-1 (0.043 mg/L), MW-2 (0.018 mg/L), and MW-3 (0.019 mg/L).

2.7.2.6. Vanadium

Vanadium was not detected above the Drinking Water ESL of 0.050 mg/L. Vanadium was detected at a concentration which exceeds the CG of 0.019 mg/L in sample MW-1 (0.022 mg/L). Vanadium was detected below the CG in sample MW-2 (0.015 mg/L), and was not detected in sample MW-3.

2.7.3. TPHho

Analytical results for TPHho are presented in Table 3. TPHho was not detected in samples MW-1, MW-2, and MW-3.

2.7.4. PAHs

Analytical results for PAHs are presented in Table 3. Minor concentrations of acenaphthene (0.80 micrograms per liter [µg/L]), fluorene (0.26 µg/L), naphthalene (5.2 µg/L), and phenanthrene (0.24 µg/L) were detected in groundwater sample MW-1. These concentrations are below the CGs of 23 µg/L, 3.9 µg/L, 24 µg/L, and 4.6 µg/L, respectively, and below the Drinking Water ESLs of 20 µg/L, 630 µg/L, 6.1 µg/L, and 410 µg/L, respectively. A minor concentration of naphthalene was also detected in sample MW-2 (0.12 µg/L), which is well below the CG and the Drinking Water ESL. No other concentrations of PAHs were detected in the groundwater monitoring samples.

3. CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of post remediation groundwater monitoring activities, residual impacts from TPHho and PAHs in groundwater do not pose a significant threat to human health or the

environmental. Because metals do not biodegrade or readily naturally attenuate, the residual impacts from metals in groundwater may persist at levels which exceed CGs and/or Drinking Water ESLs for a significant period of time.

Impacted groundwater beneath the site is most likely not impacting the aquatic habitat of San Francisco Bay based on the relatively minor impacts detected in groundwater monitoring wells and the generally lower concentrations of COCs detected in monitoring well MW-3 which is closest to the site's western boundary and San Francisco Bay.

Based on the findings of previous site assessments and the results of site remediation and post remediation groundwater monitoring, Ninyo & Moore recommends the following:

- Site CGs for groundwater should be revised to be Drinking Water ESLs (ESLs Table F-3) based on groundwater monitoring results for TDS.
- Because concentrations of metals in site groundwater may continue to exceed Drinking Water ESLs for a significant period of time, a Land Use Restriction preventing the beneficial use of groundwater beneath the site should be established and recorded with the County Assessor Office.
- Groundwater monitoring at the site should be discontinued and ACEH should consider the site for case closure. Following completion of a public notice and comment period for the proposed case closure, monitoring wells MW-1 through MW-3 should be destroyed in accordance with state and local guidelines. Following the submittal of a report to ACEH documenting the monitoring well destruction activities, ACEH should provide a No Further Action letter for the site.

4. LIMITATIONS

The environmental services described in this report have been conducted in general accordance with current regulatory guidelines and the standard-of-care exercised by environmental consultants performing similar work in the project area. No other warranty, expressed or implied, is made regarding the professional opinions presented in this report. Variations in site conditions may exist and conditions not observed or described in this report may be encountered during subsequent activities. Please also note that this study did not include an evaluation of geotechnical conditions or potential geologic hazards.

This document is intended to be used only in its entirety. No portion of the document, by itself, is designed to completely represent any aspect of the project described herein. Ninyo & Moore should be contacted if the reader requires any additional information, or has questions regarding content, interpretations presented, or completeness of this document.

Ninyo & Moore's opinions and recommendations regarding environmental conditions, as presented in this report, are based on limited subsurface assessment and chemical analysis. Further assessment of potential adverse environmental impacts from past on-site and/or nearby use of hazardous materials may be accomplished by a more comprehensive assessment. The samples collected and used for testing, and the observations made, are believed to be representative of the area(s) evaluated; however, conditions can vary significantly between sampling locations. Variations in soil and/or groundwater conditions will exist beyond the points explored in this evaluation.

The environmental interpretations and opinions contained in this report are based on the results of laboratory tests and analyses intended to detect the presence and concentration of specific chemical or physical constituents in samples collected from the subject site. The testing and analyses have been conducted by an independent laboratory which is accredited by the EPA or certified by the State of California to conduct such tests. Ninyo & Moore has no involvement in, or control over, such testing and analysis. Ninyo & Moore, therefore, disclaims responsibility for any inaccuracy in such laboratory results.

Our conclusions and recommendations are based on an analysis of the observed site conditions. It should be understood that the conditions of a site could change with time as a result of natural processes or human activities at the subject site or nearby sites. In addition, changes to the applicable laws, regulations, codes, and standards of practice may occur due to government action or the broadening of knowledge. The findings of this report may, therefore, be invalidated over time, in part or in whole, by changes over which Ninyo & Moore has no control.

This report is intended exclusively for use by the WF&F. Any use or reuse of the findings, conclusions, and/or recommendations of this report by parties other than the WF&F is undertaken at said parties' sole risk.

5. REFERENCES

California Regional Water Quality Control Board, San Francisco Bay Region, 2007 Water Quality Control Plan, dated January 18.

Ninyo & Moore, 2013, Revised Data Gap Investigation Report and Corrective Action Plan, Western Forge and Flange, 540 Cleveland Avenue, Albany, California, dated May 15.

Ninyo & Moore, 2013, Corrective Action Plan Addendum, Western Forge and Flange, 540 Cleveland Avenue, Albany, California, dated July 22.

Ninyo & Moore, 2014, Removal Action Completion Report, 540 Cleveland Avenue, Albany, California, dated February 6.

SFRWQCB, 2013, Environmental Screening Levels, dated May.

SFRWQCB, 2013, Environmental Screening Levels, dated December.

TABLE 1 - GROUNDWATER DEPTH AND ELEVATION DATA						
Monitoring Well ID	**TOC Elevation** (ft msl)	**Ground Surface Elevation** (ft msl)	**Measurement Date**	**Depth to Groundwater** (ft btoc)	**Depth to Groundwater** (ft bgs)	**Groundwater Elevation** (ft msl)
MW-1	15.76	12.9	12/3/2013	7.62	4.8	8.14
			12/5/2013	7.59	4.7	8.17
			3/24/2014	5.25	2.4	10.51
MW-2	15.47	12.6	12/3/2013	7.31	4.4	8.16
			12/5/2013	7.28	4.4	8.19
			3/24/2014	4.95	2.1	10.52
MW-3	15.17	12.3	12/3/2013	5.47	2.6	9.70
			12/5/2013	5.79	2.9	9.38
			3/24/2014	4.75	1.9	10.42

Notes:
TOC = top of casing
ft btoc= feet below top of casing
ft msl = feet above mean sea level
ft bgs = feet below ground surface

TABLE 2 - ANALYTICAL RESULTS FOR METALS AND TOTAL DISSOLVED SOLIDS

Sample ID	Date Collected	Antimony	Arsenic	Barium	Beryllium	Cadmium	Total Chromium	Hexavalent Chromium	Cobalt	Copper	Lead	Molybdenum	Nickel	Selenium	Silver	Thalium	Vanadium	Zinc	Mercury	Total Dissolved Solids
		Groundwater Sample Results (mg/L)																		
MW-1	12/5/13	<0.010	0.017	0.074	<0.0020	<0.0020	<0.010	<0.010*	<0.0020	**0.021**	**0.0094**	**0.99**	**0.033**	<0.020	<0.0050	<0.010	0.018	<0.020	**0.00022**	1,400
	3/24/2014	<0.010	0.018	0.032	<0.0020	<0.0020	<0.010	<0.0005	<0.0020	**0.037**	**0.019**	**0.67**	**0.043**	<0.020	<0.0050	<0.010	**0.022**	<0.020	<0.00020	1,100
MW-2	12/5/13	<0.010	0.011	0.11	<0.0020	<0.0020	<0.010	<0.010*	**0.0056**	**0.020**	<0.0050	**0.58**	**0.037**	<0.020	<0.0050	<0.010	0.012	0.047	**0.00027**	1,800
	3/24/2014	<0.010	<0.010	0.036	<0.0020	<0.0020	<0.010	<0.0005	<0.0020	<0.020	<0.0050	**0.55**	**0.018**	<0.020	<0.0050	<0.010	0.015	<0.020	<0.00020	1,100
MW-3	12/5/13	<0.010	<0.010	0.15	<0.0020	<0.0020	<0.010	<0.010*	0.0028	<0.020	**0.0099**	<0.010	**0.030**	<0.020	<0.0050	<0.010	<0.010	0.047	**0.00021**	1,800
	3/24/2014	<0.010	0.014	0.04	<0.0020	<0.0020	<0.010	<0.0005	0.0023	<0.020	<0.0050	<0.010	**0.019**	<0.020	<0.0050	<0.010	<0.010	<0.020	<0.00020	1,200
Cleanup Goals (mg/L)		0.030	0.036	1	0.00053	0.00025	0.18	0.011	0.003	0.0031	0.0025	0.24	0.0082	0.005	0.00019	0.004	0.019	0.081	0.000025	NA
Drinking Water ESLs (mg/L)		0.006	0.01	1	0.004	0.005	0.05	0.00002	0.0047	1.0	0.015	0.078	0.1	0.05	0.1	0.002	0.050	5	0.002	NA

Notes

Metals analyzed by EPA Methods 6010B, 7470A (mercury), and 7199 (hexavalent chromium)

* indicates samples analyzed for hexavalent chromium by EPA Method 7196A

Total Dissolved Solids analyzed by EPA Method SM 2540C

ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels

Cleanup Goals = ESLs Table F-1b, Groundwater is not a current or potential drinking water resource, dated May 2013

Drinking Water ESLs = ESLs Table F-3, dated December 2013

<x = less than laboratory reporting limit of x

mg/L= milligrams per liter

NA = not applicable

Bold indicates concentration equal to or exceeding Cleanup Goal

Grey Shading indicates concentration exceeding Drinking Water ESL

TABLE 3 - ANALYTICLA RESULTS FOR TPHho and PAHs

Sample ID	Date Collected	TPHho	PAHs															
			Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]flouranthene	Bonz[g, h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenz(a, h)anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene
		Analytical Results (µg/L)																
MW-1	12/5/13	230	0.28	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.99	<0.10	<0.10
	3/24/2014	<100	0.80	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.26	<0.10	5.2	0.24	<0.10
MW-2	12/5/13	<100	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	3/24/2014	<100	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	<0.10
MW-3	12/5/13	<100	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
	3/24/2014	<100	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cleanup Goals (µg/L)		640	23	30	0.73	0.027	0.014	0.056	0.10	0.40	0.35	0.25	8	3.9	0.056	24	4.6	2
Drinking Water ESLs (µg/L)		100	20	2,000	22	0.056	0.2	0.056	0.13	0.056	0.56	0.016	130	630	0.056	6.1	410	68

Notes

PAHs = polycyclic aromatic hydrocarbons analyzed by EPA Method 8270 SIM

TPHho = total petroleum hydrocarbons as hydraulic oil analyzed by EPA Method 8015B

ESLs = San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels

Cleanup Goals = ESLs Table F-1b, Groundwater is not a current or potential drinking water resource, dated May 2013

Drinking Water ESLs = ESLsTable F-3, dated December 2013

Grey Shading indicates concentration exceed Drinking Water ESLs

<x = not detected, concentration is less than laboratory reporting limit of x

µg/L = micrograms per Liter

REFERENCE: METRO AREAS OF ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO, AND SANTA CLARA COUNTIES, THOMAS GUIDE, 2008.

N

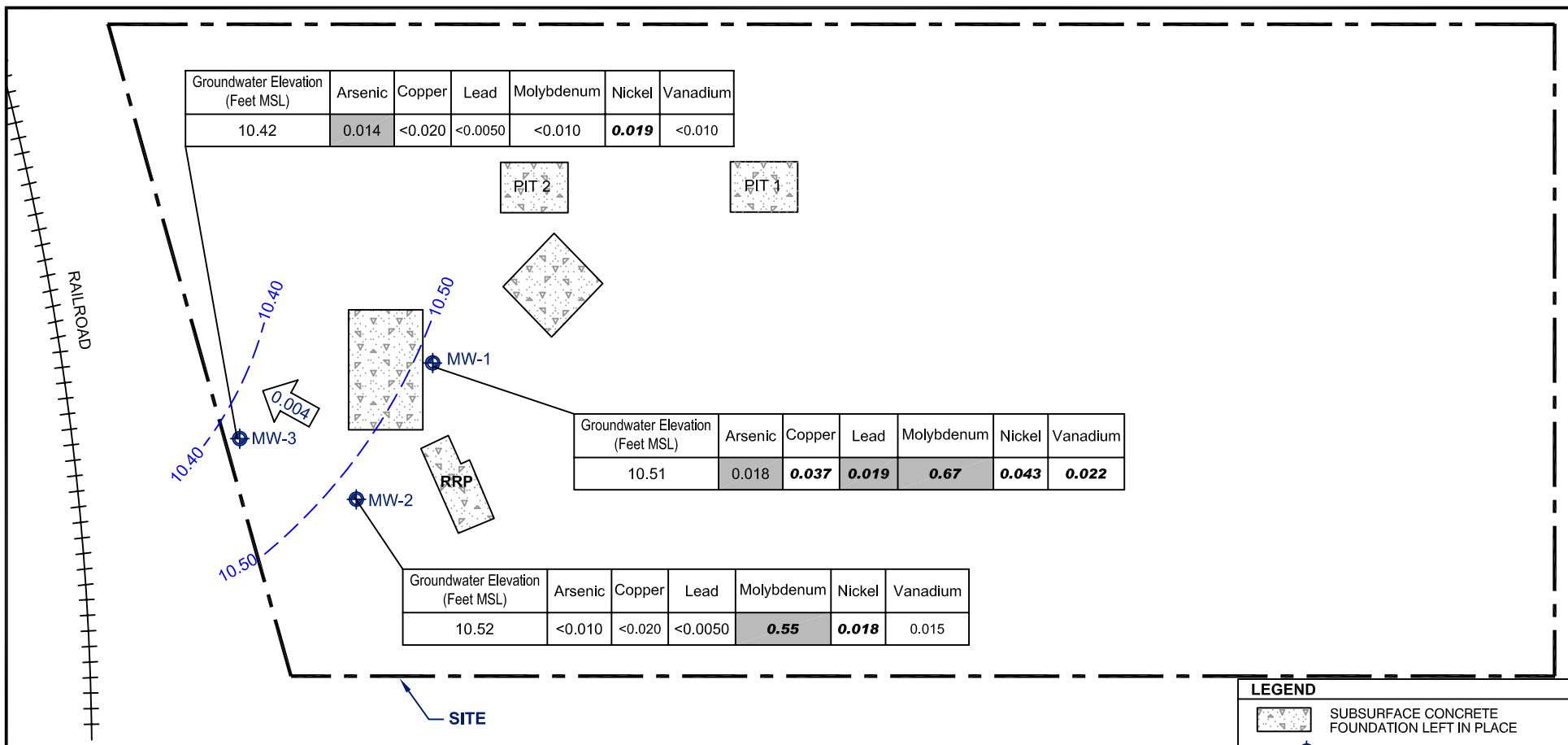
SCALE IN FEET

0 2,000 4,000

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore	SITE LOCATION	FIGURE
PROJECT NO. 401823001 / DATE 4/14	WESTERN FORGE & FLANGE 540 CLEVELAND AVENUE ALBANY, CALIFORNIA	1

401823001-SL.dwg, Apr 04, 2014, 9:32am, snguyen



Groundwater Elevation (Feet MSL)	Arsenic	Copper	Lead	Molybdenum	Nickel	Vanadium
10.42	0.014	<0.020	<0.0050	<0.010	***0.019***	<0.010

Groundwater Elevation (Feet MSL)	Arsenic	Copper	Lead	Molybdenum	Nickel	Vanadium
10.51	0.018	***0.037***	***0.019***	***0.67***	***0.043***	***0.022***

Groundwater Elevation (Feet MSL)	Arsenic	Copper	Lead	Molybdenum	Nickel	Vanadium
10.52	<0.010	<0.020	<0.0050	***0.55***	***0.018***	0.015

	Arsenic	Lead	Molybdenum	Nickel	Mercury	Vanadium
Cleanup Goals	0.036	0.0025	0.24	0.0082	0.000025	0.019
Drinking Water ESLs	0.01	0.015	0.078	0.1	0.002	0.050

LEGEND

- SUBSURFACE CONCRETE FOUNDATION LEFT IN PLACE
- MW-3 — MONITORING WELL
- RRP — RING ROLLING PIT
- 0.004 — GROUNDWATER FLOW DIRECTION AND GRADIENT IN FEET PER FOOT
- 10.50 — GROUNDWATER EQUIPOTENTIAL LINE ELEVATION IN FEET MSL
- TPHho — TOTAL PETROLEUM HYDROCARBONS AS HYDRAULIC OIL
- MSL — ABOVE MEAN SEAL LEVEL
- SHADING INDICATES CONCENTRATION EXCEEDING DRINKING WATER ESL
- ESLs — ENVIRONMENTAL SCREENING LEVELS
- < — INDICATES NOT DETECTED, BELOW LABORATORY REPORTING LIMIT
- **BOLD** — INDICATES CONCENTRATIONS EQUAL TO OR EXCEEDING CLEANUP GOALS

ANALYTICAL RESULTS, CLEANUP GOALS, AND ESLs IN MILLIGRAMS PER LITER

N

SCALE IN FEET

0 30 60

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

REFERENCE: MASTER LAYOUT FIGURE, CDMS, 1998, REV. 2008, NINYO & MOORE MEASUREMENTS OCTOBER 2011.

Ninyo & Moore

GROUNDWATER GRADIENT AND ANALYTICAL RESULTS FOR CONSTITUENTS EXCEEDING CLEANUP GOALS OR DRINKING WATER ESLs - MARCH 24, 2014

PROJECT NO.	DATE
401823001	4/14

WESTERN FORGE & FLANGE
540 CLEVELAND AVENUE
ALBANY, CALIFORNIA

FIGURE

2

401823001-FIG5.dwg, Apr 07, 2014, 2:13pm, snguyen

APPENDIX A
FIELD DATA SHEETS

Ninyo & Moore

GROUNDWATER SAMPLING FIELD DATA SHEET

Project Name: *WF&F/540 Cleveland Avenue*

Site:

Project No.: *401823001*

Monitoring Well ID: *MW-1*

Date: *3/24/2014* Sampler: *CRA*

Weather: *Sunny*

Vapor Monitoring Results (ppmv): *BZ=* *WH=*

Casing Diameter: ☑ 2" ☐ 4" ☐ 6" ☐ Other

Casing Material: ☑ SCH 40-PVC ☐ Other: S. Steel

Total Depth (ft-TOC): *13.3*

Depth to Water (ft-TOC): *5.25*

Floating Immiscible Layer Observed?: *NO*

Floating Immiscible Layer Thickness (feet): *NA*

Water Column Height (feet): *8.05* x 2" = 0.16, 4"=0.65, 6" = 1.47 gal/ft = *1.3* x 3 = *3.9* Min. Purge Volume (gallons)

Water Level Measurement Equip.: *Solinst Water Level Indicator* Cleaned: *yes*

Purging Method/Equipment: *Geopump Peristaltic Pump* Cleaned: *yes*

Pump Lines/Bailer Ropes-New or Cleaned?: *New - dedicated*

Temp./pH Meter: *Oakton* Calibration (date/time): *3/24/14 1300*

Conductivity Meter: *Oakton* Calibration (date/time):

Comments:

pH STND.	FIELD pH	FIELD TEMP. (°C)
4.0		
7.0	7.05	16.7

TIME	Purge Vol.(Gal)	Totalizer Reading (Gal)	TEMP. (°C)	ORP	DO (%)	pH	COND. (µS/cm)	COMMENTS (color, turbidity, odor, sheen, etc.):
1316	1		15.7			6.84	1406	Brown tint, Low turbidity, no odor / sheen
1320	2		15.8			8.65	1279	" "
1324	3		15.5			9.03	1223	" "
1328	4		15.5			9.05	1185	" "

Total Volume Purged (gallon): *4* Time Finished Purging: *1328*

Sampling Method/Equipment: *Geopump Peristaltic Pump*

Bailer Rope-New or Cleaned?:

Sample Time: *1330*

Sample ID: *MW-1*

Replicate ID (if appl.)

Laboratory:

Comments:

PARAMETER	USEPA METHOD	CONTAINERS/VOLUME/ TYPE (Voa/Glass/Plastic)	PRES.

Ninyo & Moore

GROUNDWATER SAMPLING FIELD DATA SHEET

Project Name: *WF&F/540 Cleveland Avenue*

Site:

Project No.: *401823001*

Monitoring Well ID: *MW-2*

Date: *3/24/2014* Sampler: *CRA*

Weather: *Sunny*

Vapor Monitoring Results (ppmv): *BZ=* *WH=*

Casing Diameter: ☑ 2" ☐ 4" ☐ 6" ☐ Other

Casing Material: ☑ SCH 40-PVC ☐ Other: S. Steel

Total Depth (ft-TOC): 13.16

Depth to Water (ft-TOC): 4.95

Floating Immiscible Layer Observed?: NO

Floating Immiscible Layer Thickness (feet): NA

Water Column Height (feet): 8.21 x (2" = 0.16, 4"=0.65, 6" = 1.47) gal/ft = 1.32 x 3 = 3.94 Min. Purge Volume (gallons)

Water Level Measurement Equip.: *Solinst Water Level Indicator* Cleaned: *yes*

Purging Method/Equipment: *Geopump Peristaltic Pump* Cleaned: *yes*

Pump Lines/Bailer Ropes-New or Cleaned?: *New - dedicated*

Temp./pH Meter: *Oakton* Calibration (date/time): 3/24/14 1300

Conductivity Meter: *Oakton* Calibration (date/time):

Comments:

pH STND.	FIELD pH	FIELD TEMP. (°C)
4.0		
7.0	7.05	16.7

TIME	Purge Vol.(Gal)	Totalizer Reading (Gal)	TEMP. (°C)	ORP	DO (%)	pH	COND. (µS/cm)	COMMENTS (color, turbidity, odor, sheen, etc.):
1353	1		15.8			7.98	1486	yellow tint, clear, no odor / sheen
1357	2		15.8			7.46	1059	" "
1401	3		15.8			7.38	909	" "
1405	4		15.8			7.41	900	" "

Total Volume Purged (gallon): 4 Time Finished Purging: 1405

Sampling Method/Equipment: *Geopump Peristaltic Pump*

Bailer Rope-New or Cleaned?:

Sample Time: 1405

Sample ID: MW-2

Replicate ID (if appl.)

Laboratory:

Comments:

PARAMETER	USEPA METHOD	CONTAINERS/VOLUME/ TYPE (Voa/Glass/Plastic)	PRES.

Ninyo & Moore

GROUNDWATER SAMPLING FIELD DATA SHEET

Project Name: *WF&F/540 Cleveland Avenue*

Site:

Project No.: *401823001*

Monitoring Well ID: *MW-3*

Date: *3/24/2014* Sampler: *CRA*

Weather: *Sunny*

Vapor Monitoring Results (ppmv): *BZ=* *WH=*

Casing Diameter: ☑ 2" ☐ 4" ☐ 6" ☐ Other

Casing Material: ☑ SCH 40-PVC ☐ Other: S. Steel

Total Depth (ft-TOC): *13.05*

Depth to Water (ft-TOC): *4.75*

Floating Immiscible Layer Observed?: *NO*

Floating Immiscible Layer Thickness (feet): *NA*

Water Column Height (feet): *8.30* x 2" = 0.16, 4"=0.65, 6" = 1.47 gal/ft = *1.33* x 3 = *3.99* Min. Purge Volume (gallons)

Water Level Measurement Equip.: *Solinst Water Level Indicator* Cleaned: *yes*

Purging Method/Equipment: *Geopump Peristaltic Pump* Cleaned: *yes*

Pump Lines/Bailer Ropes-New or Cleaned?: *New - dedicated*

Temp./pH Meter: *Oakton* Calibration (date/time): *3/24/14 1300*

Conductivity Meter: *Oakton* Calibration (date/time):

Comments:

pH STND.	FIELD pH	FIELD TEMP. (°C)
4.0		
7.0	7.05	16.7

TIME	Purge Vol.(Gal)	Totalizer Reading (Gal)	TEMP. (°C)	ORP	DO (%)	pH	COND. (µS/cm)	COMMENTS (color, turbidity, odor, sheen, etc.):
1429	1		16.1			6.97	1007	Clear, no odor/sheen
1433	2		15.9			6.79	1033	" "
1437	3		16.1			6.71	1079	" "
1441	4		15.8			6.66	1097	" "

Total Volume Purged (gallon): *4* Time Finished Purging: *1441*

Sampling Method/Equipment: *Geopump Peristaltic Pump*

Bailer Rope-New or Cleaned?:

Sample Time: *1442*

Sample ID: *MW-3*

Replicate ID (if appl.)

Laboratory:

Comments:

PARAMETER	USEPA METHOD	CONTAINERS/VOLUME/ TYPE (Voa/Glass/Plastic)	PRES.

APPENDIX B

LABORATORY ANALYTICAL REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
Tel: (925)484-1919

TestAmerica Job ID: 720-56286-1
Client Project/Site: Western Forge & Flange

For:
Ninyo & Moore
1956 Webster Street
Suite 400
Oakland, California 94612

Attn: Mr. Cem Atabek

Authorized for release by:
3/31/2014 9:10:12 AM

Dimple Sharma, Senior Project Manager
(925)484-1919
dimple.sharma@testamericainc.com

Table of Contents

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 720-56286-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative
720-56286-1

Comments
No additional comments.

Receipt
The samples were received on 3/24/2014 5:35 PM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.5º C.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
No analytical or quality issues were noted.

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

General Chemistry
No analytical or quality issues were noted.

Organic Prep
No analytical or quality issues were noted.

Detection Summary

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

Client Sample ID: MW-1 — Lab Sample ID: 720-56286-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	5.2		0.10		ug/L	1		8270C SIM	Total/NA
Acenaphthene	0.80		0.10		ug/L	1		8270C SIM	Total/NA
Fluorene	0.26		0.10		ug/L	1		8270C SIM	Total/NA
Phenanthrene	0.24		0.10		ug/L	1		8270C SIM	Total/NA
Arsenic	0.018		0.010		mg/L	1		6010B	Dissolved
Barium	0.032		0.0050		mg/L	1		6010B	Dissolved
Copper	0.037		0.020		mg/L	1		6010B	Dissolved
Lead	0.019		0.0050		mg/L	1		6010B	Dissolved
Molybdenum	0.67		0.010		mg/L	1		6010B	Dissolved
Nickel	0.043		0.010		mg/L	1		6010B	Dissolved
Vanadium	0.022		0.010		mg/L	1		6010B	Dissolved
Total Dissolved Solids	1100		20		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 720-56286-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.12		0.10		ug/L	1		8270C SIM	Total/NA
Barium	0.036		0.0050		mg/L	1		6010B	Dissolved
Molybdenum	0.55		0.010		mg/L	1		6010B	Dissolved
Nickel	0.018		0.010		mg/L	1		6010B	Dissolved
Vanadium	0.015		0.010		mg/L	1		6010B	Dissolved
Total Dissolved Solids	1100		13		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-3 — Lab Sample ID: 720-56286-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.014		0.010		mg/L	1		6010B	Dissolved
Barium	0.040		0.0050		mg/L	1		6010B	Dissolved
Cobalt	0.0023		0.0020		mg/L	1		6010B	Dissolved
Nickel	0.019		0.010		mg/L	1		6010B	Dissolved
Total Dissolved Solids	1200		13		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-1
Date Collected: 03/24/14 13:30
Date Received: 03/24/14 17:35

Lab Sample ID: 720-56286-1
Matrix: Water

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**5.2**		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Acenaphthene	**0.80**		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Acenaphthylene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Fluorene	**0.26**		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Phenanthrene	**0.24**		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Anthracene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Benzo[a]anthracene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Chrysene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Benzo[a]pyrene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Benzo[b]fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Benzo[k]fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Pyrene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		03/25/14 10:13	03/25/14 23:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*43*		*29 - 120*	*03/25/14 10:13*	*03/25/14 23:46*	*1*
Terphenyl-d14	*54*		*45 - 120*	*03/25/14 10:13*	*03/25/14 23:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		100		ug/L		03/27/14 10:04	03/27/14 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*03/27/14 10:04*	*03/27/14 22:00*	*1*
p-Terphenyl	*79*		*31 - 150*	*03/27/14 10:04*	*03/27/14 22:00*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		03/25/14 15:38	03/26/14 15:42	1
Arsenic	**0.018**		0.010		mg/L		03/25/14 15:38	03/26/14 11:09	1
Barium	**0.032**		0.0050		mg/L		03/25/14 15:38	03/26/14 11:09	1
Beryllium	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 11:09	1
Cadmium	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 11:09	1
Chromium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:09	1
Cobalt	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 11:09	1
Copper	**0.037**		0.020		mg/L		03/25/14 15:38	03/26/14 11:09	1
Lead	**0.019**		0.0050		mg/L		03/25/14 15:38	03/26/14 11:09	1
Molybdenum	**0.67**		0.010		mg/L		03/25/14 15:38	03/26/14 11:09	1
Nickel	**0.043**		0.010		mg/L		03/25/14 15:38	03/26/14 11:09	1
Selenium	ND		0.020		mg/L		03/25/14 15:38	03/26/14 11:09	1
Silver	ND		0.0050		mg/L		03/25/14 15:38	03/26/14 11:09	1
Thallium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:09	1
Vanadium	**0.022**		0.010		mg/L		03/25/14 15:38	03/26/14 11:09	1
Zinc	ND		0.020		mg/L		03/25/14 15:38	03/26/14 11:09	1

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

Client Sample ID: MW-1
Date Collected: 03/24/14 13:30
Date Received: 03/24/14 17:35

Lab Sample ID: 720-56286-1
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/14 09:58	03/25/14 14:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		20		mg/L			03/28/14 10:37	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.50		ug/L			03/24/14 20:25	1

Client Sample ID: MW-2
Date Collected: 03/24/14 14:05
Date Received: 03/24/14 17:35

Lab Sample ID: 720-56286-2
Matrix: Water

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.12**		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Acenaphthene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Acenaphthylene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Fluorene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Phenanthrene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Anthracene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Benzo[a]anthracene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Chrysene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Benzo[a]pyrene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Benzo[b]fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Benzo[k]fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Pyrene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*29 - 120*	*03/25/14 10:13*	*03/26/14 00:07*	*1*
Terphenyl-d14	*67*		*45 - 120*	*03/25/14 10:13*	*03/26/14 00:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		100		ug/L		03/27/14 10:04	03/27/14 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*03/27/14 10:04*	*03/27/14 22:29*	*1*
p-Terphenyl	*81*		*31 - 150*	*03/27/14 10:04*	*03/27/14 22:29*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:18	1
Arsenic	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:18	1
Barium	**0.036**		0.0050		mg/L		03/25/14 15:38	03/26/14 11:18	1
Beryllium	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 11:18	1
Cadmium	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 11:18	1
Chromium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:18	1
Cobalt	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 11:18	1
Copper	ND		0.020		mg/L		03/25/14 15:38	03/26/14 11:18	1
Lead	ND		0.0050		mg/L		03/25/14 15:38	03/26/14 11:18	1
Molybdenum	**0.55**		0.010		mg/L		03/25/14 15:38	03/26/14 11:18	1
Nickel	**0.018**		0.010		mg/L		03/25/14 15:38	03/26/14 11:18	1
Selenium	ND		0.020		mg/L		03/25/14 15:38	03/26/14 11:18	1
Silver	ND		0.0050		mg/L		03/25/14 15:38	03/26/14 11:18	1
Thallium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:18	1
Vanadium	**0.015**		0.010		mg/L		03/25/14 15:38	03/26/14 11:18	1
Zinc	ND		0.020		mg/L		03/25/14 15:38	03/26/14 11:18	1

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

Client Sample ID: MW-2
Date Collected: 03/24/14 14:05
Date Received: 03/24/14 17:35

Lab Sample ID: 720-56286-2
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/14 09:58	03/25/14 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1100		13		mg/L			03/28/14 10:39	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.50		ug/L			03/24/14 20:51	1

Client Sample ID: MW-3
Date Collected: 03/24/14 14:42
Date Received: 03/24/14 17:35

Lab Sample ID: 720-56286-3
Matrix: Water

Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Acenaphthene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Acenaphthylene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Fluorene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Phenanthrene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Anthracene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Benzo[a]anthracene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Chrysene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Benzo[a]pyrene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Benzo[b]fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Benzo[k]fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Fluoranthene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Pyrene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		03/25/14 10:13	03/26/14 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*29 - 120*	*03/25/14 10:13*	*03/26/14 00:28*	*1*
Terphenyl-d14	*70*		*45 - 120*	*03/25/14 10:13*	*03/26/14 00:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		100		ug/L		03/27/14 10:04	03/27/14 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*03/27/14 10:04*	*03/27/14 22:58*	*1*
p-Terphenyl	*91*		*31 - 150*	*03/27/14 10:04*	*03/27/14 22:58*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:23	1
Arsenic	**0.014**		0.010		mg/L		03/25/14 15:38	03/26/14 11:23	1
Barium	**0.040**		0.0050		mg/L		03/25/14 15:38	03/26/14 11:23	1
Beryllium	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 11:23	1
Cadmium	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 11:23	1
Chromium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:23	1
Cobalt	**0.0023**		0.0020		mg/L		03/25/14 15:38	03/26/14 11:23	1
Copper	ND		0.020		mg/L		03/25/14 15:38	03/26/14 11:23	1
Lead	ND		0.0050		mg/L		03/25/14 15:38	03/26/14 11:23	1
Molybdenum	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:23	1
Nickel	**0.019**		0.010		mg/L		03/25/14 15:38	03/26/14 11:23	1
Selenium	ND		0.020		mg/L		03/25/14 15:38	03/26/14 11:23	1
Silver	ND		0.0050		mg/L		03/25/14 15:38	03/26/14 11:23	1
Thallium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:23	1
Vanadium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 11:23	1
Zinc	ND		0.020		mg/L		03/25/14 15:38	03/26/14 11:23	1

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

Client Sample ID: MW-3
Date Collected: 03/24/14 14:42
Date Received: 03/24/14 17:35

Lab Sample ID: 720-56286-3
Matrix: Water

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/14 09:59	03/25/14 14:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	1200		13		mg/L			03/28/14 10:40	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.50		ug/L			03/24/14 21:16	1

Method: 8270C SIM - PAHs by GCMS (SIM)

Lab Sample ID: MB 720-155886/1-C
Matrix: Water
Analysis Batch: 155929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 155919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Acenaphthene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Acenaphthylene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Fluorene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Phenanthrene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Anthracene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Benzo[a]anthracene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Chrysene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Benzo[a]pyrene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Benzo[b]fluoranthene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Benzo[k]fluoranthene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Fluoranthene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Pyrene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 19:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*29 - 120*	*03/25/14 08:31*	*03/25/14 19:38*	*1*
Terphenyl-d14	*74*		*45 - 120*	*03/25/14 08:31*	*03/25/14 19:38*	*1*

Lab Sample ID: MB 720-155919/1-A
Matrix: Water
Analysis Batch: 155929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 155919

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Acenaphthene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Acenaphthylene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Fluorene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Phenanthrene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Anthracene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Benzo[a]anthracene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Chrysene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Benzo[a]pyrene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Benzo[b]fluoranthene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Benzo[k]fluoranthene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Benzo[g,h,i]perylene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Indeno[1,2,3-cd]pyrene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Fluoranthene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Pyrene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1
Dibenz(a,h)anthracene	ND		0.10		ug/L		03/25/14 08:31	03/25/14 18:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*29 - 120*	*03/25/14 08:31*	*03/25/14 18:16*	*1*
Terphenyl-d14	*73*		*45 - 120*	*03/25/14 08:31*	*03/25/14 18:16*	*1*

Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

Lab Sample ID: LCS 720-155919/2-A
Matrix: Water
Analysis Batch: 155929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 155919

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	10.0	4.89		ug/L		49	19 - 120
Acenaphthene	10.0	5.34		ug/L		53	24 - 120
Acenaphthylene	10.0	5.87		ug/L		59	24 - 120
Fluorene	10.0	5.79		ug/L		58	27 - 120
Phenanthrene	10.0	5.78		ug/L		58	31 - 120
Anthracene	10.0	6.68		ug/L		67	44 - 120
Benzo[a]anthracene	10.0	7.13		ug/L		71	48 - 120
Chrysene	10.0	6.35		ug/L		63	47 - 120
Benzo[a]pyrene	10.0	6.64		ug/L		66	43 - 120
Benzo[b]fluoranthene	10.0	7.54		ug/L		75	42 - 120
Benzo[k]fluoranthene	10.0	6.31		ug/L		63	42 - 120
Benzo[g,h,i]perylene	10.0	5.30		ug/L		53	35 - 120
Indeno[1,2,3-cd]pyrene	10.0	5.57		ug/L		56	36 - 120
Fluoranthene	10.0	8.15		ug/L		82	43 - 120
Pyrene	10.0	6.83		ug/L		68	47 - 120
Dibenz(a,h)anthracene	10.0	5.45		ug/L		55	33 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*51*		*29 - 120*
Terphenyl-d14	*75*		*45 - 120*

Lab Sample ID: LCSD 720-155919/3-A
Matrix: Water
Analysis Batch: 155929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 155919

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	10.0	4.45		ug/L		44	19 - 120	9	35
Acenaphthene	10.0	4.87		ug/L		49	24 - 120	9	35
Acenaphthylene	10.0	5.21		ug/L		52	24 - 120	12	35
Fluorene	10.0	5.23		ug/L		52	27 - 120	10	35
Phenanthrene	10.0	5.18		ug/L		52	31 - 120	11	35
Anthracene	10.0	6.07		ug/L		61	44 - 120	9	35
Benzo[a]anthracene	10.0	6.76		ug/L		68	48 - 120	5	35
Chrysene	10.0	6.09		ug/L		61	47 - 120	4	35
Benzo[a]pyrene	10.0	6.39		ug/L		64	43 - 120	4	35
Benzo[b]fluoranthene	10.0	6.51		ug/L		65	42 - 120	15	35
Benzo[k]fluoranthene	10.0	6.64		ug/L		66	42 - 120	5	35
Benzo[g,h,i]perylene	10.0	5.23		ug/L		52	35 - 120	1	35
Indeno[1,2,3-cd]pyrene	10.0	5.40		ug/L		54	36 - 120	3	35
Fluoranthene	10.0	7.49		ug/L		75	43 - 120	9	35
Pyrene	10.0	6.22		ug/L		62	47 - 120	9	35
Dibenz(a,h)anthracene	10.0	5.39		ug/L		54	33 - 120	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*46*		*29 - 120*
Terphenyl-d14	*70*		*45 - 120*

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

Lab Sample ID: MB 720-156088/1-A
Matrix: Water
Analysis Batch: 156076

Client Sample ID: Method Blank
Prep Type: Silica Gel Cleanup
Prep Batch: 156088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		99		ug/L		03/27/14 10:04	03/28/14 02:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Capric Acid (Surr)	*0*		*0 - 5*	*03/27/14 10:04*	*03/28/14 02:22*	*1*
p-Terphenyl	*72*		*31 - 150*	*03/27/14 10:04*	*03/28/14 02:22*	*1*

Lab Sample ID: LCS 720-156088/2-A
Matrix: Water
Analysis Batch: 156076

Client Sample ID: Lab Control Sample
Prep Type: Silica Gel Cleanup
Prep Batch: 156088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	2500	2180		ug/L		87	32 - 119

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
p-Terphenyl	*131*		*31 - 150*

Lab Sample ID: LCSD 720-156088/3-A
Matrix: Water
Analysis Batch: 156076

Client Sample ID: Lab Control Sample Dup
Prep Type: Silica Gel Cleanup
Prep Batch: 156088

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	2500	1660		ug/L		66	32 - 119	27	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
p-Terphenyl	*121*		*31 - 150*

Method: 6010B - Metals (ICP)

Lab Sample ID: LCS 720-155958/2-A
Matrix: Water
Analysis Batch: 156012

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 155958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.971		mg/L		97	80 - 120
Arsenic	1.00	0.967		mg/L		97	80 - 120
Barium	1.00	0.999		mg/L		100	80 - 120
Beryllium	1.00	0.982		mg/L		98	80 - 120
Cadmium	1.00	1.00		mg/L		100	80 - 120
Chromium	1.00	0.989		mg/L		99	80 - 120
Cobalt	1.00	1.01		mg/L		101	80 - 120
Copper	1.00	0.991		mg/L		99	80 - 120
Lead	1.00	0.997		mg/L		100	80 - 120
Molybdenum	1.00	0.964		mg/L		96	80 - 120
Nickel	1.00	0.988		mg/L		99	80 - 120
Selenium	1.00	0.988		mg/L		99	80 - 120

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

Lab Sample ID: LCS 720-155958/2-A
Matrix: Water
Analysis Batch: 156012

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 155958

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	0.500	0.494		mg/L		99	80 - 120
Thallium	1.00	1.01		mg/L		101	80 - 120
Vanadium	1.00	0.978		mg/L		98	80 - 120
Zinc	1.00	0.989		mg/L		99	80 - 120

Lab Sample ID: LCSD 720-155958/3-A
Matrix: Water
Analysis Batch: 156012

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 155958

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.00	0.982		mg/L		98	80 - 120	1	20
Arsenic	1.00	0.976		mg/L		98	80 - 120	1	20
Barium	1.00	1.01		mg/L		101	80 - 120	1	20
Beryllium	1.00	0.988		mg/L		99	80 - 120	1	20
Cadmium	1.00	1.01		mg/L		101	80 - 120	1	20
Chromium	1.00	0.987		mg/L		99	80 - 120	0	20
Cobalt	1.00	1.02		mg/L		102	80 - 120	1	20
Copper	1.00	0.991		mg/L		99	80 - 120	0	20
Lead	1.00	1.00		mg/L		100	80 - 120	1	20
Molybdenum	1.00	0.981		mg/L		98	80 - 120	2	20
Nickel	1.00	0.991		mg/L		99	80 - 120	0	20
Selenium	1.00	0.993		mg/L		99	80 - 120	1	20
Silver	0.500	0.499		mg/L		100	80 - 120	1	20
Thallium	1.00	1.02		mg/L		102	80 - 120	1	20
Vanadium	1.00	0.984		mg/L		98	80 - 120	1	20
Zinc	1.00	0.993		mg/L		99	80 - 120	0	20

Lab Sample ID: MB 720-155917/1-C
Matrix: Water
Analysis Batch: 156048

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 155958

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		03/25/14 15:38	03/26/14 15:38	1
Arsenic	ND		0.010		mg/L		03/25/14 15:38	03/26/14 15:38	1
Barium	ND		0.0050		mg/L		03/25/14 15:38	03/26/14 15:38	1
Beryllium	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 15:38	1
Cadmium	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 15:38	1
Chromium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 15:38	1
Cobalt	ND		0.0020		mg/L		03/25/14 15:38	03/26/14 15:38	1
Copper	ND		0.020		mg/L		03/25/14 15:38	03/26/14 15:38	1
Lead	ND		0.0050		mg/L		03/25/14 15:38	03/26/14 15:38	1
Molybdenum	ND		0.010		mg/L		03/25/14 15:38	03/26/14 15:38	1
Nickel	ND		0.010		mg/L		03/25/14 15:38	03/26/14 15:38	1
Selenium	ND		0.020		mg/L		03/25/14 15:38	03/26/14 15:38	1
Silver	ND		0.0050		mg/L		03/25/14 15:38	03/26/14 15:38	1
Thallium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 15:38	1
Vanadium	ND		0.010		mg/L		03/25/14 15:38	03/26/14 15:38	1
Zinc	ND		0.020		mg/L		03/25/14 15:38	03/26/14 15:38	1

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

Lab Sample ID: 720-56286-1 MS
Matrix: Water
Analysis Batch: 156012

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 155958

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		1.00	0.974		mg/L		97	75 - 125
Arsenic	0.015		1.00	1.02		mg/L		101	75 - 125
Barium	0.033		1.00	1.04		mg/L		101	75 - 125
Beryllium	ND		1.00	0.982		mg/L		98	75 - 125
Cadmium	ND		1.00	1.00		mg/L		100	75 - 125
Chromium	ND		1.00	0.974		mg/L		97	75 - 125
Cobalt	ND		1.00	0.987		mg/L		99	75 - 125
Copper	0.032		1.00	1.00		mg/L		97	75 - 125
Lead	0.019		1.00	0.968		mg/L		95	75 - 125
Molybdenum	0.63		1.00	1.63		mg/L		100	75 - 125
Nickel	0.042		1.00	0.996		mg/L		95	75 - 125
Selenium	ND		1.00	0.984		mg/L		98	75 - 125
Silver	ND		0.500	0.498		mg/L		100	75 - 125
Thallium	ND		1.00	0.903		mg/L		90	75 - 125
Vanadium	0.018		1.00	1.02		mg/L		101	75 - 125
Zinc	ND		1.00	1.01		mg/L		101	75 - 125

Lab Sample ID: 720-56286-1 MSD
Matrix: Water
Analysis Batch: 156012

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 155958

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		1.00	0.974		mg/L		97	75 - 125	0	20
Arsenic	0.015		1.00	1.02		mg/L		101	75 - 125	0	20
Barium	0.033		1.00	1.03		mg/L		100	75 - 125	1	20
Beryllium	ND		1.00	0.994		mg/L		99	75 - 125	1	20
Cadmium	ND		1.00	0.996		mg/L		100	75 - 125	1	20
Chromium	ND		1.00	0.991		mg/L		99	75 - 125	2	20
Cobalt	ND		1.00	0.982		mg/L		98	75 - 125	0	20
Copper	0.032		1.00	1.01		mg/L		98	75 - 125	1	20
Lead	0.019		1.00	0.970		mg/L		95	75 - 125	0	20
Molybdenum	0.63		1.00	1.65		mg/L		101	75 - 125	1	20
Nickel	0.042		1.00	1.00		mg/L		96	75 - 125	1	20
Selenium	ND		1.00	0.992		mg/L		99	75 - 125	1	20
Silver	ND		0.500	0.493		mg/L		99	75 - 125	1	20
Thallium	ND		1.00	0.902		mg/L		90	75 - 125	0	20
Vanadium	0.018		1.00	1.03		mg/L		101	75 - 125	0	20
Zinc	ND		1.00	1.01		mg/L		101	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LCS 720-155926/2-A
Matrix: Water
Analysis Batch: 155944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 155926

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0100	0.0107		mg/L		107	85 - 115

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSD 720-155926/3-A
Matrix: Water
Analysis Batch: 155944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 155926

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0100	0.0106		mg/L		106	85 - 115	1	20

Lab Sample ID: MB 720-155917/1-B
Matrix: Water
Analysis Batch: 155944

Client Sample ID: Method Blank
Prep Type: Dissolved
Prep Batch: 155926

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		03/25/14 09:58	03/25/14 14:09	1

Method: 7199 - Chromium, Hexavalent (IC)

Lab Sample ID: MB 720-155959/1-A
Matrix: Water
Analysis Batch: 155872

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	ND		0.50		ug/L			03/24/14 14:33	1

Lab Sample ID: LCS 720-155959/2-A
Matrix: Water
Analysis Batch: 155872

Client Sample ID: Lab Control Sample
Prep Type: Dissolved

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	2.00	2.17		ug/L		109	90 - 110

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

Lab Sample ID: MB 500-229122/1
Matrix: Water
Analysis Batch: 229122

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10		mg/L			03/28/14 10:35	1

Lab Sample ID: LCS 500-229122/2
Matrix: Water
Analysis Batch: 229122

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	286		mg/L		114	80 - 120

GC/MS Semi VOA

Filtration Batch: 155886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-155886/1-C	Method Blank	Total/NA	Water	FILTRATION	

Prep Batch: 155919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Total/NA	Water	3510C	
720-56286-2	MW-2	Total/NA	Water	3510C	
720-56286-3	MW-3	Total/NA	Water	3510C	
LCS 720-155919/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 720-155919/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 720-155886/1-C	Method Blank	Total/NA	Water	3510C	155886
MB 720-155919/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 155929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Total/NA	Water	8270C SIM	155919
720-56286-2	MW-2	Total/NA	Water	8270C SIM	155919
720-56286-3	MW-3	Total/NA	Water	8270C SIM	155919
LCS 720-155919/2-A	Lab Control Sample	Total/NA	Water	8270C SIM	155919
LCSD 720-155919/3-A	Lab Control Sample Dup	Total/NA	Water	8270C SIM	155919
MB 720-155886/1-C	Method Blank	Total/NA	Water	8270C SIM	155919
MB 720-155919/1-A	Method Blank	Total/NA	Water	8270C SIM	155919

GC Semi VOA

Analysis Batch: 156075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Silica Gel Cleanup	Water	8015B	156088
720-56286-2	MW-2	Silica Gel Cleanup	Water	8015B	156088
720-56286-3	MW-3	Silica Gel Cleanup	Water	8015B	156088

Analysis Batch: 156076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-156088/2-A	Lab Control Sample	Silica Gel Cleanup	Water	8015B	156088
LCSD 720-156088/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	8015B	156088
MB 720-156088/1-A	Method Blank	Silica Gel Cleanup	Water	8015B	156088

Prep Batch: 156088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Silica Gel Cleanup	Water	3510C SGC	
720-56286-2	MW-2	Silica Gel Cleanup	Water	3510C SGC	
720-56286-3	MW-3	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-156088/2-A	Lab Control Sample	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-156088/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Water	3510C SGC	
MB 720-156088/1-A	Method Blank	Silica Gel Cleanup	Water	3510C SGC	

Metals

Filtration Batch: 155917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Dissolved	Water	FILTRATION	

Metals (Continued)

Filtration Batch: 155917 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1 MS	MW-1	Dissolved	Water	FILTRATION	
720-56286-1 MSD	MW-1	Dissolved	Water	FILTRATION	
720-56286-2	MW-2	Dissolved	Water	FILTRATION	
720-56286-3	MW-3	Dissolved	Water	FILTRATION	
MB 720-155917/1-B	Method Blank	Dissolved	Water	FILTRATION	
MB 720-155917/1-C	Method Blank	Dissolved	Water	FILTRATION	

Prep Batch: 155926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Dissolved	Water	7470A	155917
720-56286-2	MW-2	Dissolved	Water	7470A	155917
720-56286-3	MW-3	Dissolved	Water	7470A	155917
LCS 720-155926/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 720-155926/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 720-155917/1-B	Method Blank	Dissolved	Water	7470A	155917

Analysis Batch: 155944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Dissolved	Water	7470A	155926
720-56286-2	MW-2	Dissolved	Water	7470A	155926
720-56286-3	MW-3	Dissolved	Water	7470A	155926
LCS 720-155926/2-A	Lab Control Sample	Total/NA	Water	7470A	155926
LCSD 720-155926/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	155926
MB 720-155917/1-B	Method Blank	Dissolved	Water	7470A	155926

Prep Batch: 155958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Dissolved	Water	3005A	155917
720-56286-1 MS	MW-1	Dissolved	Water	3005A	155917
720-56286-1 MSD	MW-1	Dissolved	Water	3005A	155917
720-56286-2	MW-2	Dissolved	Water	3005A	155917
720-56286-3	MW-3	Dissolved	Water	3005A	155917
LCS 720-155958/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 720-155958/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
MB 720-155917/1-C	Method Blank	Dissolved	Water	3005A	155917

Analysis Batch: 156012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Dissolved	Water	6010B	155958
720-56286-1 MS	MW-1	Dissolved	Water	6010B	155958
720-56286-1 MSD	MW-1	Dissolved	Water	6010B	155958
720-56286-2	MW-2	Dissolved	Water	6010B	155958
720-56286-3	MW-3	Dissolved	Water	6010B	155958
LCS 720-155958/2-A	Lab Control Sample	Total Recoverable	Water	6010B	155958
LCSD 720-155958/3-A	Lab Control Sample Dup	Total Recoverable	Water	6010B	155958

Analysis Batch: 156048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Dissolved	Water	6010B	155958
MB 720-155917/1-C	Method Blank	Dissolved	Water	6010B	155958

QC Association Summary

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

General Chemistry

Analysis Batch: 155872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Dissolved	Water	7199	155959
720-56286-2	MW-2	Dissolved	Water	7199	155959
720-56286-3	MW-3	Dissolved	Water	7199	155959
LCS 720-155959/2-A	Lab Control Sample	Dissolved	Water	7199	155959
MB 720-155959/1-A	Method Blank	Dissolved	Water	7199	155959

Filtration Batch: 155959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Dissolved	Water	FILTRATION	
720-56286-2	MW-2	Dissolved	Water	FILTRATION	
720-56286-3	MW-3	Dissolved	Water	FILTRATION	
LCS 720-155959/2-A	Lab Control Sample	Dissolved	Water	FILTRATION	
MB 720-155959/1-A	Method Blank	Dissolved	Water	FILTRATION	

Analysis Batch: 229122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-56286-1	MW-1	Total/NA	Water	SM 2540C	
720-56286-2	MW-2	Total/NA	Water	SM 2540C	
720-56286-3	MW-3	Total/NA	Water	SM 2540C	
LCS 500-229122/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 500-229122/1	Method Blank	Total/NA	Water	SM 2540C	

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

Client Sample ID: MW-1

Lab Sample ID: 720-56286-1

Date Collected: 03/24/14 13:30

Matrix: Water

Date Received: 03/24/14 17:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			155919	03/25/14 10:13	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	155929	03/25/14 23:46	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			156088	03/27/14 10:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	156075	03/27/14 22:00	JL	TAL PLS
Dissolved	Filtration	FILTRATION			155917	03/25/14 07:46	ECT	TAL PLS
Dissolved	Prep	3005A			155958	03/25/14 15:38	ASB	TAL PLS
Dissolved	Analysis	6010B		1	156048	03/26/14 15:42	SLK	TAL PLS
Dissolved	Filtration	FILTRATION			155917	03/25/14 07:46	ECT	TAL PLS
Dissolved	Prep	3005A			155958	03/25/14 15:38	ASB	TAL PLS
Dissolved	Analysis	6010B		1	156012	03/26/14 11:09	EFH	TAL PLS
Dissolved	Filtration	FILTRATION			155917	03/25/14 07:46	ECT	TAL PLS
Dissolved	Prep	7470A			155926	03/25/14 09:58	ECT	TAL PLS
Dissolved	Analysis	7470A		1	155944	03/25/14 14:11	CAM	TAL PLS
Dissolved	Filtration	FILTRATION			155959	03/24/14 19:00	MJK	TAL PLS
Dissolved	Analysis	7199		1	155872	03/24/14 20:25	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	229122	03/28/14 10:37	CCK	TAL CHI

Client Sample ID: MW-2

Lab Sample ID: 720-56286-2

Date Collected: 03/24/14 14:05

Matrix: Water

Date Received: 03/24/14 17:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			155919	03/25/14 10:13	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	155929	03/26/14 00:07	MQL	TAL PLS
Silica Gel Cleanup	Prep	3510C SGC			156088	03/27/14 10:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	156075	03/27/14 22:29	JL	TAL PLS
Dissolved	Filtration	FILTRATION			155917	03/25/14 07:46	ECT	TAL PLS
Dissolved	Prep	3005A			155958	03/25/14 15:38	ASB	TAL PLS
Dissolved	Analysis	6010B		1	156012	03/26/14 11:18	EFH	TAL PLS
Dissolved	Filtration	FILTRATION			155917	03/25/14 07:46	ECT	TAL PLS
Dissolved	Prep	7470A			155926	03/25/14 09:58	ECT	TAL PLS
Dissolved	Analysis	7470A		1	155944	03/25/14 14:13	CAM	TAL PLS
Dissolved	Filtration	FILTRATION			155959	03/24/14 19:00	MJK	TAL PLS
Dissolved	Analysis	7199		1	155872	03/24/14 20:51	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	229122	03/28/14 10:39	CCK	TAL CHI

Client Sample ID: MW-3

Lab Sample ID: 720-56286-3

Date Collected: 03/24/14 14:42

Matrix: Water

Date Received: 03/24/14 17:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			155919	03/25/14 10:13	NDU	TAL PLS
Total/NA	Analysis	8270C SIM		1	155929	03/26/14 00:28	MQL	TAL PLS

Lab Chronicle

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

Client Sample ID: MW-3

Date Collected: 03/24/14 14:42
Date Received: 03/24/14 17:35

Lab Sample ID: 720-56286-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3510C SGC			156088	03/27/14 10:04	NDU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	156075	03/27/14 22:58	JL	TAL PLS
Dissolved	Filtration	FILTRATION			155917	03/25/14 07:46	ECT	TAL PLS
Dissolved	Prep	3005A			155958	03/25/14 15:38	ASB	TAL PLS
Dissolved	Analysis	6010B		1	156012	03/26/14 11:23	EFH	TAL PLS
Dissolved	Filtration	FILTRATION			155917	03/25/14 07:46	ECT	TAL PLS
Dissolved	Prep	7470A			155926	03/25/14 09:59	ECT	TAL PLS
Dissolved	Analysis	7470A		1	155944	03/25/14 14:15	CAM	TAL PLS
Dissolved	Filtration	FILTRATION			155959	03/24/14 19:00	MJK	TAL PLS
Dissolved	Analysis	7199		1	155872	03/24/14 21:16	MJK	TAL PLS
Total/NA	Analysis	SM 2540C		1	229122	03/28/14 10:40	CCK	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Method Summary

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

Method	Method Description	Protocol	Laboratory
8270C SIM	PAHs by GCMS (SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7470A	Mercury (CVAA)	SW846	TAL PLS
7199	Chromium, Hexavalent (IC)	SW846	TAL PLS
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI

Protocol References:

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

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

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Ninyo & Moore
Project/Site: Western Forge & Flange

TestAmerica Job ID: 720-56286-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-56286-1	MW-1	Water	03/24/14 13:30	03/24/14 17:35
720-56286-2	MW-2	Water	03/24/14 14:05	03/24/14 17:35
720-56286-3	MW-3	Water	03/24/14 14:42	03/24/14 17:35

TestAmerica Pleasanton
1220 Quarry Lane
Pleasanton, CA 94566
phone 925.484.1919 fax 925.600.3002

720-56286

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
152606
TestAmerica Laboratories, Inc.

3/31/2014

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Cem Atabek	Site Contact: Cem Atabek	Date: 3/24/2014	COC No: 1
Cem Atabek	Tel/Fax: 510-343-3000/510-343-3001	Lab Contact: Dimple Sharma	Carrier:	1 of 1 COCs
1956 Webster Street	**Analysis Turnaround Time**			Sampler: Cem Atabek
Oakland, CA 94612	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
(510) 343-3000 Phone	TAT if different from Below _____			Walk-in Client:
(510) 343-3001 FAX	☐ 2 weeks			Lab Sampling:
Project Name: Western Forge & Flange	☑ 1 week			
Site: 540 Cleveland Avenue, Albany	☐ 2 days			Job / SDG No.:
P O # 401823001	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	TPHfo (8015M w/ silica gel)	Title 22 Metals (6010B/7470A)	Hexavalent Chromium (7196A)	Total Dissolved Solids (SM2540C)	PAHs (8270-SIM)	Sample Specific Notes:
MW-1	3/24/2014	1330	G	water	6	x	x	x	x	x	Lab filter for Title 22 Metals/TDS
MW-2	3/24/2014	1405	G	water	6	x	x	x	x	x	Lab filter for Title 22 Metals/TDS
MW-3	3/24/2014	1442	G	water	6	x	x	x	x	x	Lab filter for Title 22 Metals/TDS
						1	1	1	1	1	

720-56286 Chain of Custody

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

2.5°C

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Cem Atabek	Ninyo & Moore	3/24/14 1542		TAP	3-24-14 1542
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TAP	3-24-14 1735		TAP	3/24/14 1735
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-56286-1

Login Number: 56286

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Bullock, Tracy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Ninyo & Moore

Job Number: 720-56286-1

Login Number: 56286
List Number: 1
Creator: Kelsey, Shawn M

List Source: TestAmerica Chicago
List Creation: 03/26/14 11:29 AM

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.	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.	True	