



***VIA ELECTRONIC MAIL***

January 11, 2012

Mr. Jack Yates  
Nevada Division of Environmental Protection  
901 South Steward Street, Suite 4001  
Carson City, NV 89701

Re: URS Project No. 14950362  
Phase II Environmental Site Investigation  
ESA102893 Michael Munoz  
2160 Verona Drive  
Fallon, NV 89510

Dear Mr. Yates:

URS Corporation (URS) is pleased to provide this report describing the Phase II Environmental Site Investigation (ESI) at the above-referenced property, which is located within the risk area boundaries of the Carson River Mercury Superfund Site (CRMS). The Phase II ESI was conducted according to the Sampling and Analysis Plan (SAP), dated September 27, 2011, and approved by the Nevada Division of Environmental Protection (NDEP) on September 27, 2011. The SAP was based on the Draft Long-Term Sampling and Response Plan (LTSRP), dated August 5, 2011, for the CRMS and conversations between URS and NDEP.

### **ENVIRONMENTAL ISSUES**

The Site consists of one parcel developed with a residence for the site owner (the Munoz residence), 47 parcels planned for single-family residences, and one parcel that contains two stormwater retention ponds. Verona Drive runs through the center of the Site from Coleman Road to the northern Site boundary. A water well and pump house are located on the northern portion of the Site, and were reportedly planned to be used for landscaping irrigation at the Site and on the adjacent Onda Verde site, once developed. The stormwater retention basins are located in the northwestern portion of the Site. Based on information from the Phase I Environmental Site Assessment (ESA) completed by Tetra Tech, the following recognized environmental condition (REC) was associated with the Site:

URS Corporation  
36 East 7<sup>th</sup> Street, Suite 2300  
Cincinnati, Ohio 45202  
Tel: 513.651.3440  
Fax: 877.660.7727



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 2

- The Site is located within the risk area of the CRMS, which is a National Priority Listing (NPL) Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Superfund Site. The CRMS was proposed as a NPL site in 1989 due to mercury-contaminated tailings from pre-1900 mining activities along the Carson River. Sediment, soil, and surface water have been found to be contaminated with mercury, arsenic, and lead at the CRMS site. The boundaries of the CRMS were not defined as part of the investigation/remediation activities conducted by the Environmental Protection Agency (EPA) in the 1990s.

According to information acquired from the U.S. EPA Region 9, Superfund, CRMS Overview internet website, surface water, sediment, soil, fish, and wildlife at the site are contaminated with mercury, arsenic, and lead. Human threats include children who are exposed long-term to contaminated soils from the tailings piles from the former mills and individuals who consume contaminated fish or wildlife. Some contaminated tailings were removed from the site in 1991, and remedial investigations were performed from 1993 to 1995. Remedial activities (which included additional tailings removals) were performed from 1998 to 1999. Since entire site cleanup is not economically feasible, institutional controls have been implemented and site investigations continue.

Tetra Tech contacted Ms. Jere Johnson, EPA CRMS Remedial Project Manager. According to Ms. Johnson, the majority of soil and surface water contamination associated with the CRMS is located west of the City of Fallon; however, sediments deposited on the Carson River floodplains are a concern. Mercury, arsenic, and lead, which represent the site Contaminants of Concern (CoCs), from the CRMS site have not been fully delineated. Based on the regulatory status of the CRMS, the lack of full delineation of CoCs associated with the CRMS, and the proximity of the Site to the Carson River, the inclusion of the Site in the CRMS is a REC.

### **SCOPE OF WORK**

The purpose of the investigation was to evaluate if impacts related to the CRMS are present on the one developed and 47 undeveloped residential lots at the Site. There are other areas of the Site that are not proposed for residential development (Figure 1). These areas were not included in this proposed scope of work. The LTSRP guidelines are required to be followed for any future development or construction activities that fall within the CRMS risk zones.



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 3

URS spoke with the NDEP on August 31, 2011 to clarify the scope of work required for the Site. NDEP indicated that the LTSRP had been updated on August 5, 2011. URS discussed the scope of work proposed for the Site in a subsequent email message, and NDEP confirmed that the sampling on the moderate risk lots could remain at four soil borings per lot, per the previous draft of the LTSRP. However, upon review of the Draft SAP for the Onda Verde LLC site on September 20, 2011, NDEP advised URS to select lots to sample as moderate risk per the new LTSRP, which requires 10 soil borings and eight soil samples per lot. The changes to the low-risk lots included collecting five samples from the ground surface to 6 inches in the front and back portions of each lot (for a total of ten 6-inch deep holes per lot) and analyzing two 5-point composite samples for Site CoCs. NDEP indicated that lots that are primarily outside of the mapped 100-year flood plain may be designated as low risk.

The approved SAP and letter from the NDEP are presented in Appendix A.

#### **HEALTH AND SAFETY AND GEOGRAPHIC INFORMATION SYSTEMS (GIS)**

Prior to mobilizing equipment to the Site, a health and safety plan was prepared and kept on Site during all field activities in accordance with Code of Federal Regulations (CFR) Title 29, Part 1910.120.

The local public utility identification service was contacted to mark utilities crossing the Site from the Site boundary to a metering point. URS assumed that utilities had been installed in the roads that were developed on the Site, but had not been extended onto the 47 vacant lots on the Site, as no houses had been constructed. However, natural gas and electrical utilities were marked by Southwest Gas in the front of each lot. As a result of these utilities being present on Site, URS met with Southwest Gas on October 24, 2011, to conduct a Site walk and clear the soil boring locations. URS did not advance the borings until these safety measures had been completed.

URS acquired the lot and parcel information for the Site from the Churchill County Assessor. URS used Geographic Information System (GIS) to outline the lot boundaries and identify sampling locations prior to mobilizing to the Site. These locations were programmed into a Trimble GeoXT Global Positioning System (GPS) unit, with an



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 4

accuracy of less than 1 meter horizontally, for use by field personnel. The field team used the GPS to navigate to the soil boring locations, which were marked in the field prior to the drilling activities. The sampling locations were pre-designated in the GPS, which including identifying the samples that were composited for analysis.

The soil borings were named with an A through E for the five borings completed in the front of each lot and with an F through J for the five borings completed in the back of each lot. The soil boring locations that were marked with the GPS unit are presented on Figure 2.

Soil boring locations F through J on Lots M42, M43, and M44 were re-located based on access issues in the back portion of the lots. These lots were observed to be overgrown, which prevented access with a drill rig, and a silt construction fence followed by a metal fence separated the back of the lot from the steep slope down to the Carson River. These borings were relocated in the back of each lot in accessible locations that could be accessed with either the Geoprobe rig or a hand auger. The locations actually sampled were surveyed using the GPS unit. The final boring locations on these lots are presented on Figure 2.

The GIS data that was collected as part of this investigation is included on a CD in Appendix B.

### **FIELD IMPLEMENTATION**

The LTSRP specified collecting composite samples from specific depth intervals down to 2 feet below grade in moderate risk areas and to 6 inches below grade in low risk areas. The floodplain sediments were anticipated to potentially include gravel or cobbles that would be difficult to penetrate with manual sampling tools. Therefore, the soil borings were proposed to be advanced with a direct push technology (DPT) drill rig. Any modifications to boring locations were resurveyed with the GPS, as discussed above.

NDEP provided a map that depicted the Site location relative to the low and moderate risk areas that are described in the LTSRP. The moderate risk areas corresponded to the extent of the mapped Federal Emergency Management Agency (FEMA) 100-year flood zone. URS used GIS to overlay the proposed lot locations onto the Site map and



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 5

determined that there were 43 lots to be assessed as low-risk and four lots to be assessed as moderate-risk, according to the definition in the LTSRP and based on comments provided by NDEP. The location of the lots relative to the moderate and low risk areas is presented on Figure 1.

In accordance with the requirements of the LTSRP and subsequent correspondence with NDEP, two sets of five samples each were collected from the ground surface to 6-inches below ground surface (bgs) on each lot proposed for residential development in areas that are defined as low risk. The sets of five soil borings were advanced in the front and back of the lot, respectively. Based on these requirements, URS collected 430 samples with a hand auger or trowel. The 10 discrete soil samples from each lot were composited by the laboratory into two 5-point composite samples for analysis; soil boring samples A through E from the front of the lot and soil boring samples F through J from the back of the lot made up the two 5-point composite samples on each Site. Two samples from each lot proposed for residential development in areas that are defined as low-risk, for a total of 86 samples, were analyzed. The general layout for the soil boring locations on the low and moderate risk sites is presented on Figure 2.

Ten soil borings were advanced to 2 feet bgs on each lot proposed for residential development in areas that are defined as moderate risk, five borings each in the front (A through E) and back (F through J) of the lot. Based on these requirements, URS advanced 40 soil borings at the Site with a DPT drill rig on Lots 41 through 44, based on the lots' proximity to the Carson River. Soil samples from these lots were collected in 6-inch intervals (0 to 6 inches, 6 inches to 12 inches, 12 inches to 18 inches, and 18 inches to 24 inches) to the total depth of 2 feet bgs. Samples from each discrete depth interval, from the front and back of the lot each, were composited by the laboratory into two 5-point composite samples and analyzed (e.g., two 5-point composites from 0 to 6 inches, two 5-point composites from 6 inches to 12 inches, two 5-point composites from 12 inches to 18 inches, and two 5-point composites from 18 inches to 24 inches). Eight samples were submitted for analysis from each lot, for a total of 32 samples from the moderate risk lots.

A total of 118 soil samples were collected for submittal to the laboratory for analysis from both the low and moderate risk lots.



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 6

Soil cores from the DPT drilling were collected continuously in 2-foot intervals to a maximum depth of 2 feet bgs for 40 soil borings with the DPT rig. These samples were collected in an acetate sleeve, which was cut in the field by the geologist to the desired 6-inch intervals. During the soil sampling activities, there was no visual or olfactory evidence of impacts observed.

The soil materials on Site were generally classified as sand, silt, and silty sand, sandy silt, and silt with minor sand from the ground surface to 2 feet bgs on the moderate risk lots. These observations were generally consistent across the Site. Some of the lots had sparse gravel across the surface, which resulted from prior grading of the lots at the Site.

#### **Decontamination and Investigation Derived Waste**

All reusable drilling and sampling tools that contacted subsurface materials were decontaminated between uses as appropriate by washing with a non-phosphate detergent solution, rinsing with potable water, and air drying.

Soil cuttings were not generated during this investigation, due to the nature of the soil sampling. The soil borings on the moderate risk lots were sealed with bentonite grout to the ground surface. The soil borings on the low risk lots were filled with native material present on Site.

Disposable sampling equipment and personal protective equipment was managed as solid waste in plastic garbage bags and placed in a receptacle for disposal.

#### **Laboratory Analysis**

In accordance with the LTSRP, dated August 5, 2011, all of the samples analyzed were laboratory sieved to 250 microns (60 mesh) prior to analysis.

The soil samples were analyzed for arsenic, lead, and mercury by EPA Method 6010B/7471 as specified in the LTSRP. The soil samples were analyzed by Pace Analytical of Lenexa, Kansas on standard turnaround.

URS directed the laboratory to analyze 12 field duplicate soil samples at a frequency of 10% of the total samples. The duplicate samples were analyzed for quality assurance



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 7

(QA)/quality control (QC) to evaluate the validity of the sample results for a total of 130 samples analyzed.

Based on the data quality evaluation, no systematic problems were detected and the overall data objectives for sample contamination, precision, accuracy, and sample integrity were met. These analytical data are of acceptable quality and may be used for their intended purposes with the qualifications noted.

The laboratory data validation, including the Data Validation Checklist provided by NDEP is presented in Appendix C.

### **ANALYTICAL RESULTS**

URS compared the soil sample results to the CRMS screening/action levels defined in the LTSRP. The screening/action levels defined for arsenic, lead, and mercury are as follows:

- Arsenic – 32 milligrams per kilogram (mg/kg)
- Lead – 400 mg/kg
- Mercury – 80 mg/kg

The individual lots were named in the field with an M (for Munoz) in front of the lot number in order to differentiate the lot sample results from the samples on the adjacent Onda Verde site. For example, if the lot number is Lot 41, it is identified on Table 1 and in the text as Lot M41. The soil analytical results compared to the CRMS screening/action levels are presented on Table 1. The mercury, arsenic, and lead analytical results are presented on Figures 3 through 8. The complete analytical laboratory reports are included as Appendix C.

#### **Moderate Risk Lots**

Four lots (Lots M41 through 44) on the Site were selected as moderate risk lots based on their proximity adjacent to the south of the Carson River. A total of eight 5-point composite samples were analyzed per lot in discrete 6-inch intervals from the ground surface to 24 inches bgs for a total of 32 samples from the moderate risk lots.



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 8

Mercury was detected above the laboratory reporting limits in all 32 of the samples analyzed at concentrations that ranged from 0.082 mg/kg (Lot M42 12-18 Front) to 22.7 mg/kg (Lot M42 18-24 Back). None of the mercury results from the moderate risk lots exceeded the CRMS screening/action level of 80 mg/kg.

Arsenic was detected above the laboratory reporting limits in all 32 of the samples analyzed. Concentrations ranged from 4.7 mg/kg (Lot M42 18-24 Back) to 14.9 mg/kg (Lot M44 0-6 Front). None of the arsenic results on the moderate risk lots exceeded the CRMS screening/action level of 32 mg/kg.

Lead was detected above the laboratory reporting limits in all 32 of the samples at concentrations that ranged from 2.5 mg/kg (Lot M43 12-18 Front) to 20 mg/kg (Lot 43 6-12 Back). None of the lead results on the moderate risk lots exceeded the CRMS screening/action level of 400 mg/kg.

The results of the duplicate samples analyzed were comparable to the original sample results, and none of these results exceeded their respective CRMS screening/action levels.

### **Low Risk Lots**

The remaining 43 lots on the Site (Lot M45 through Lot 60 and Lot 62 through Lot M88) were characterized as low risk. Lot 61 is not owned by BB&T; therefore, no sampling was conducted. These lots were identified as low risk based on the location of the lots relative to the Carson River 100-year floodplain and conversations with the NDEP. A total of two 5-point composite samples were analyzed from each lot, for a total of 86 samples analyzed. The discrete samples were collected from the ground surface to 6 inches bgs, as discussed above.

Mercury was detected above the laboratory reporting limit in 84 of the 86 samples analyzed, and the concentrations ranged from 0.036 mg/kg (Lot M59 Back) to 15.9 mg/kg (Lot 86 Front). None of the mercury results on the low risk lots exceeded the CRMS screening/action level of 80 mg/kg.





Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 9

Arsenic was detected above the laboratory reporting limits in all 86 of the samples analyzed. Concentrations ranged from 4.6 mg/kg (Lot M47 Front and Lot M81 Front) to 29.2 mg/kg (Lot M64 Front). None of the arsenic results on the low risk lots exceeded the CRMS screening/action level of 32 mg/kg.

Lead was detected above the laboratory reporting limits in all 86 of the samples analyzed at concentrations ranging from 2.8 mg/kg (Lot M54 Front) to 20.7 mg/kg (Lot 86 Front). None of the lead results on the low risk lots exceeded the CRMS screening/action level of 400 mg/kg.

The results of the duplicate samples analyzed were comparable to the original sample results, and none of these results exceeded their respective CRMS screening/action levels.

### **SUMMARY**

This investigation generally followed the scope of the SAP, dated September 27, 2011, and approved by the NDEP on September 27, 2011. The SAP was based on the Draft LTSRP, dated August 5, 2011, for the CRMS and conversations between URS and NDEP.

The deviation from the SAP including re-locating soil boring locations F through J on Lots M42, M43, and M44 based on access issues in the back portion of the lots. These lots were observed to be overgrown, which prevented access with a drill rig, and a silt construction fence followed by a metal fence separated the back of the lot from the steep slope down to the Carson River. These borings were relocated in the back of each lot in accessible locations that could be accessed with either the Geoprobe rig or a hand auger. The locations actually sampled were surveyed using the GPS unit.

URS used GIS to overlay the proposed lot locations onto the Site map and determined that there were 43 lots to be assessed as low-risk and four lots to be assessed as moderate-risk, according to the definition in the LTSRP, the location of the lots relative to the 100-year FEMA floodplain, and based on comments provided by NDEP.



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 10

Lots 41 through 44 were evaluated as moderate risk lots, based on their location proximal to the Carson River. Ten soil borings were advanced to 2 feet bgs on each moderate risk lot, five borings each in the front (A through E) and back (F through J) of the lot. Soil samples from these lots were collected in 6-inch intervals (0 to 6 inches, 6 inches to 12 inches, 12 inches to 18 inches, and 18 inches to 24 inches) to the total depth of 2 feet bgs. Each discrete depth interval, from the front and back of the lot each, were composited by the laboratory into two 5-point composite samples and analyzed (e.g., two 5-point composites from 0 to 6 inches, two 5-point composites from 6 inches to 12 inches, two 5-point composites from 12 inches to 18 inches, and two 5-point composites from 18 inches to 24 inches). Eight samples were submitted for analysis from each lot for a total of 32 samples from the moderate risk lots.

The remaining lots were evaluated as low risk. URS collected 430 samples with a hand auger or trowel on these low risk lots, five from the front (A through E) and five from the back (F through J) of each lot. The 10 discrete soil samples from each lot were composited by the laboratory into two 5-point composite samples for analysis for a total of 86 soil samples analyzed.

No visual or olfactory evidence of impacts was observed in any of the soil borings.

A total of 118 soil samples and 12 field duplicate samples were submitted to the laboratory for analysis of mercury, arsenic, and lead by EPA Method 6010/7471.

On the moderate risk lots, mercury, arsenic, and lead were detected above the laboratory reporting limits in all 32 of the soil samples analyzed. None of the soil results exceeded the CRMS screening/action levels of 80 mg/kg for mercury, 32 mg/kg for arsenic, or 400 mg/kg for lead.

On the low risk lots, mercury was detected above the laboratory reporting limits in 84 of the 86 samples, and arsenic and lead were detected above the laboratory reporting limits in all 86 of the samples analyzed. None of the soil result exceeded the CRMS screening/action levels of 80 mg/kg for mercury, 32 mg/kg for arsenic, or 400 mg/kg for lead.



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 11

The results of the duplicate samples analyzed were comparable to the original sample results, and none of these results exceeded their respective CRMS screening/action levels.

Based on the results of this investigation, none of the soil results for arsenic, lead, or mercury exceeded the screening/action levels of the CRMS. The Site is acceptable for residential development with the implementation of institutional controls as described in the LTSRP. URS requests that NDEP issue a No Further Action letter for the Site.

— ooOoo —

If there are any questions or comments regarding this report or if you desire additional information regarding this project, please call the undersigned.

Very truly yours,  
**URS Corporation**

A handwritten signature in blue ink, appearing to read "Renee McFarlan".

Renee McFarlan  
Project Manager

A handwritten signature in blue ink, appearing to read "Donald Brice".

Donald Brice, C.P.G.  
Principal Geologist

Attachments

14950362



Mr. Jack Yates  
Nevada Division of Environmental Protection  
January 11, 2012  
Page 12

JURAT: I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state, and local statutes, regulations, and ordinances.

Earl James Leaver  
Signature

01-11-12  
Date

Earl James Leaver, P.E., C.E.M.

Environmental Engineer

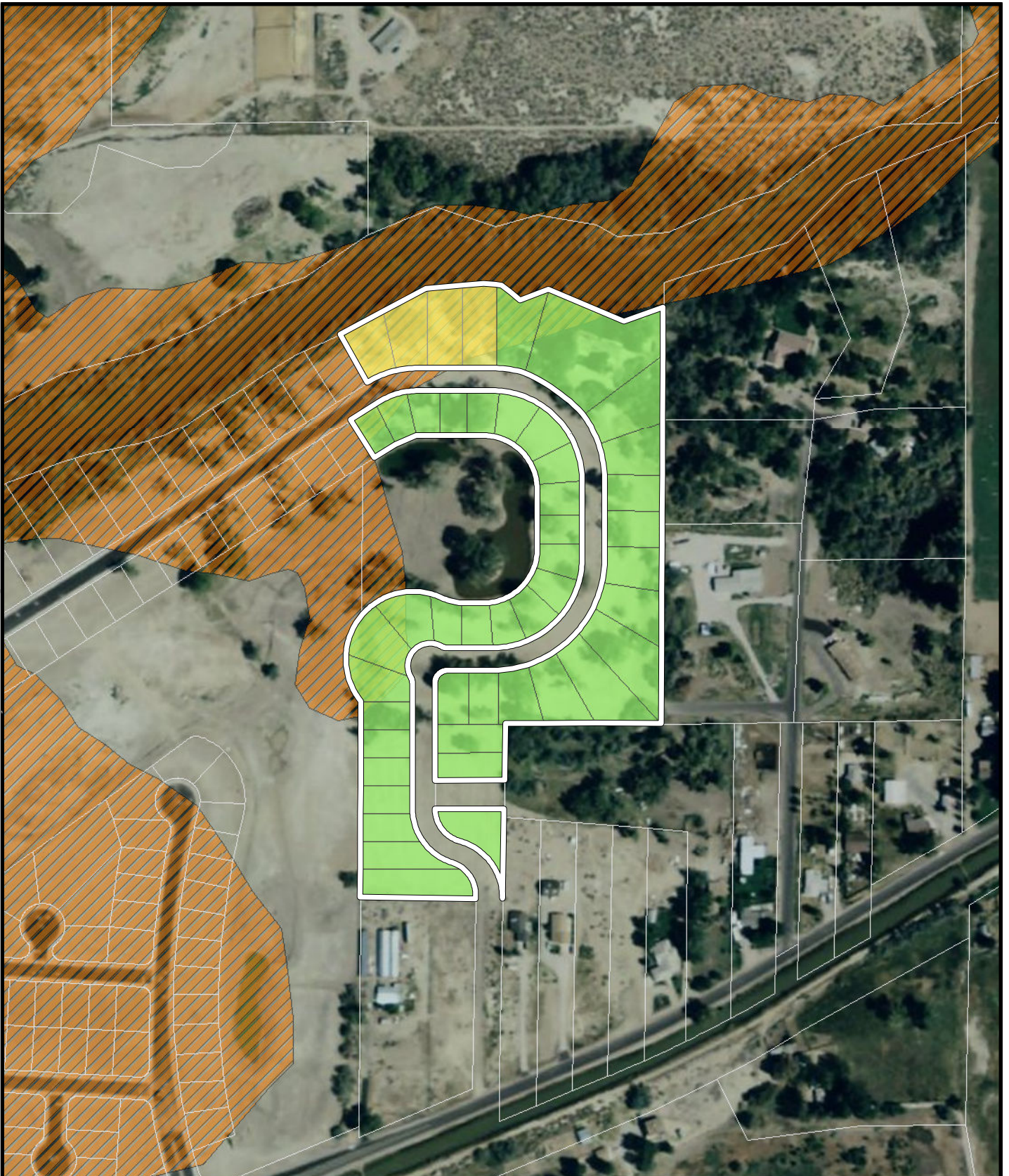
URS Corporation

EM Certification Number: 2282






EM Expiration Date: March 22, 2013

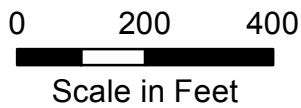


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**Legend**

-  Munoz Property Boundary
-  Lot within Low Risk Area
-  Lot within Moderate Risk Area
-  CRMS Boundary
-  Not Part of Assessment



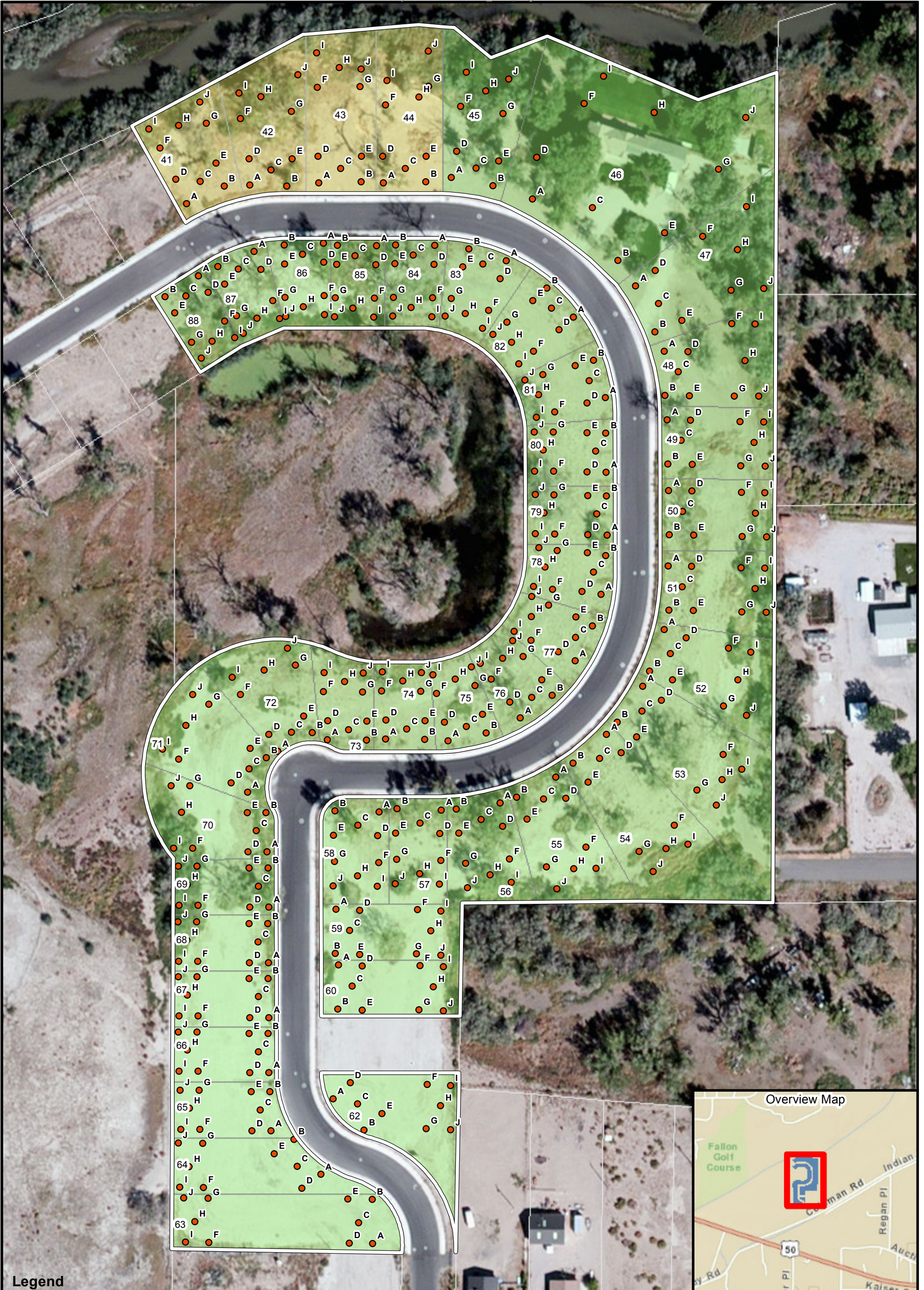
**BB&T**

*Munoz Property  
Fallon, Nevada*






FIGURE 1  
MUNOZ  
PROPERTY MAP

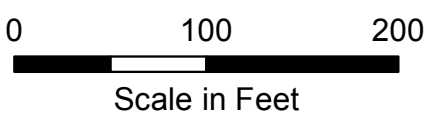
**URS**





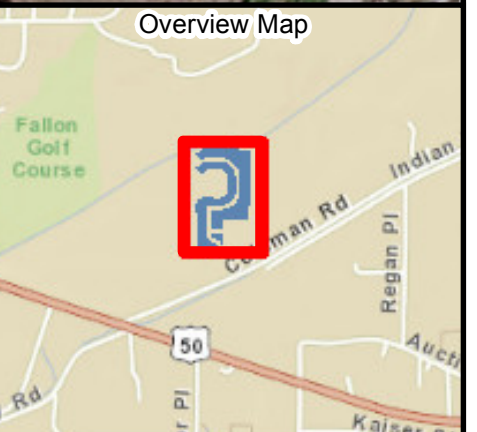
**Legend**

-  Munoz Property Boundary
-  Munoz Sampling Locations
-  Lot within Low Risk Area
-  Lot within Moderate Risk Area
-  Not Part of Assessment



Scale in Feet

BASE MAP SOURCE:  
ESRI, Bing Maps Aerial



**BB&T**

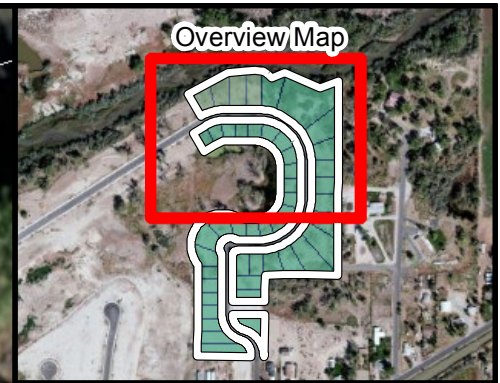
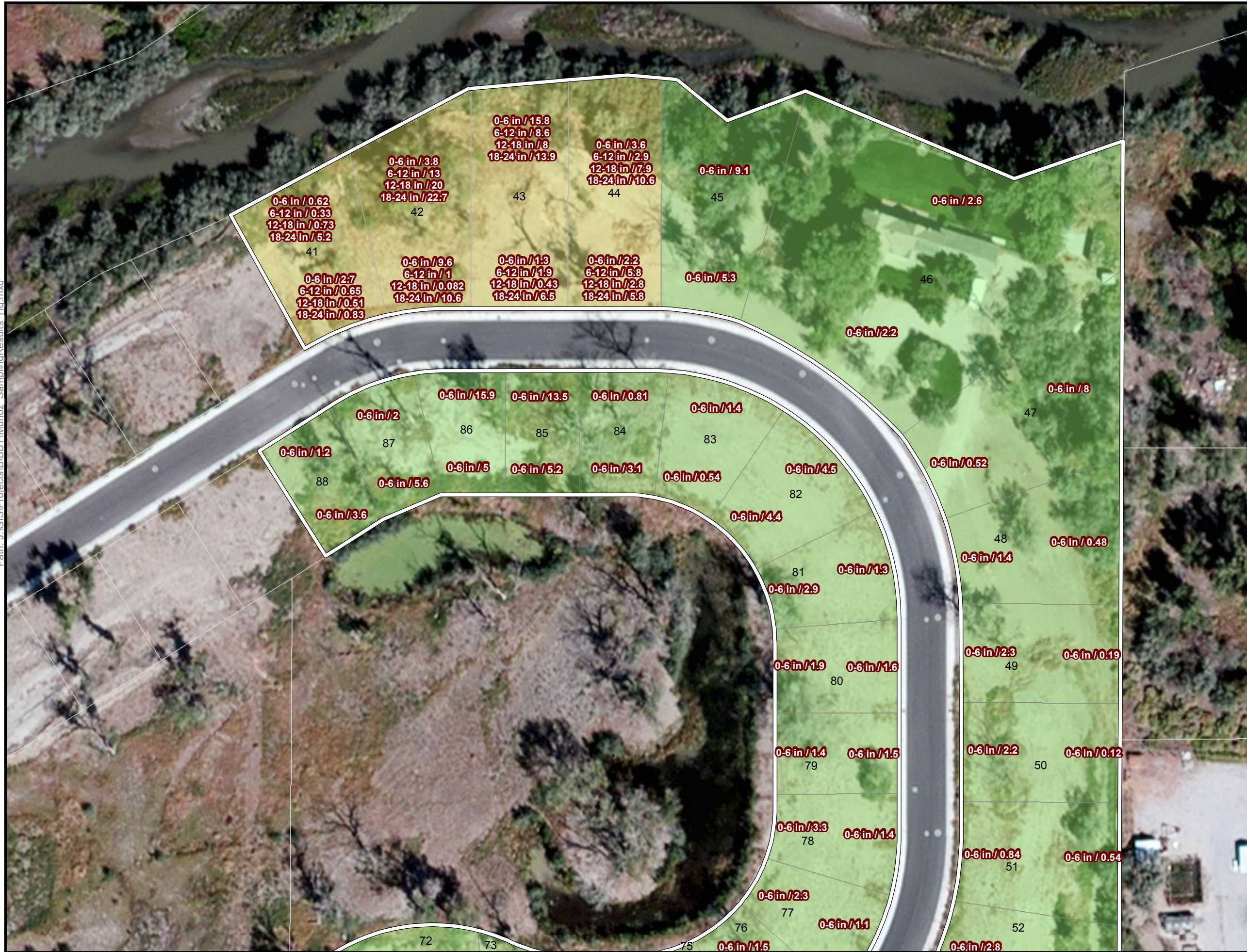
Munoz Property  
Fallon, Nevada

FIGURE 2  
MUNOZ  
SAMPLING MAP





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**Legend**

Mercury Concentrations in Soil Expressed in (mg/kg) at Sample Depths Ranging from 0-24 inches

- Lot within Low Risk Area
- Lot within Moderate Risk Area
- Munoz Property Boundary

N

0 50 100  
Scale in Feet

BASE MAP SOURCE:  
ESRI, Bing Maps Aerial

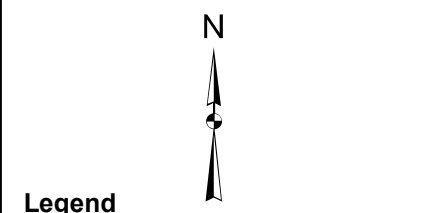
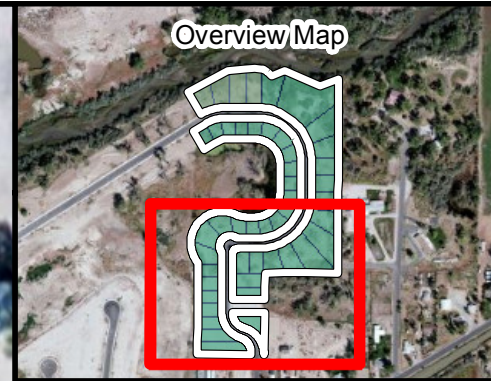
**BB&T** Munoz  
Fallon, Nevada

Figure 3  
MUNOZ SAMPLING  
RESULTS - MERCURY

JOB NO. 14950361 **URS**



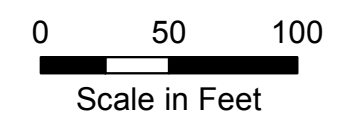
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**Legend**

Mercury Concentrations in Soil Expressed in (mg/kg) at Sample Depths Ranging from 0-24 inches

- Lot within Low Risk Area
- Lot within Moderate Risk Area
- Munoz Property Boundary



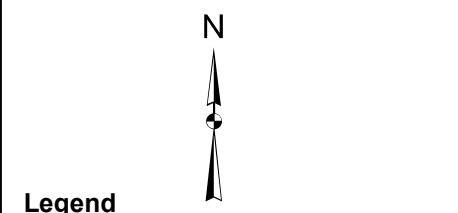
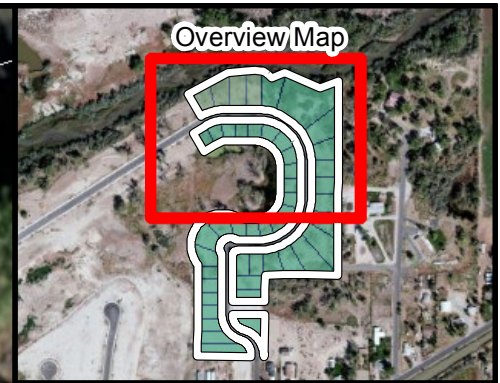
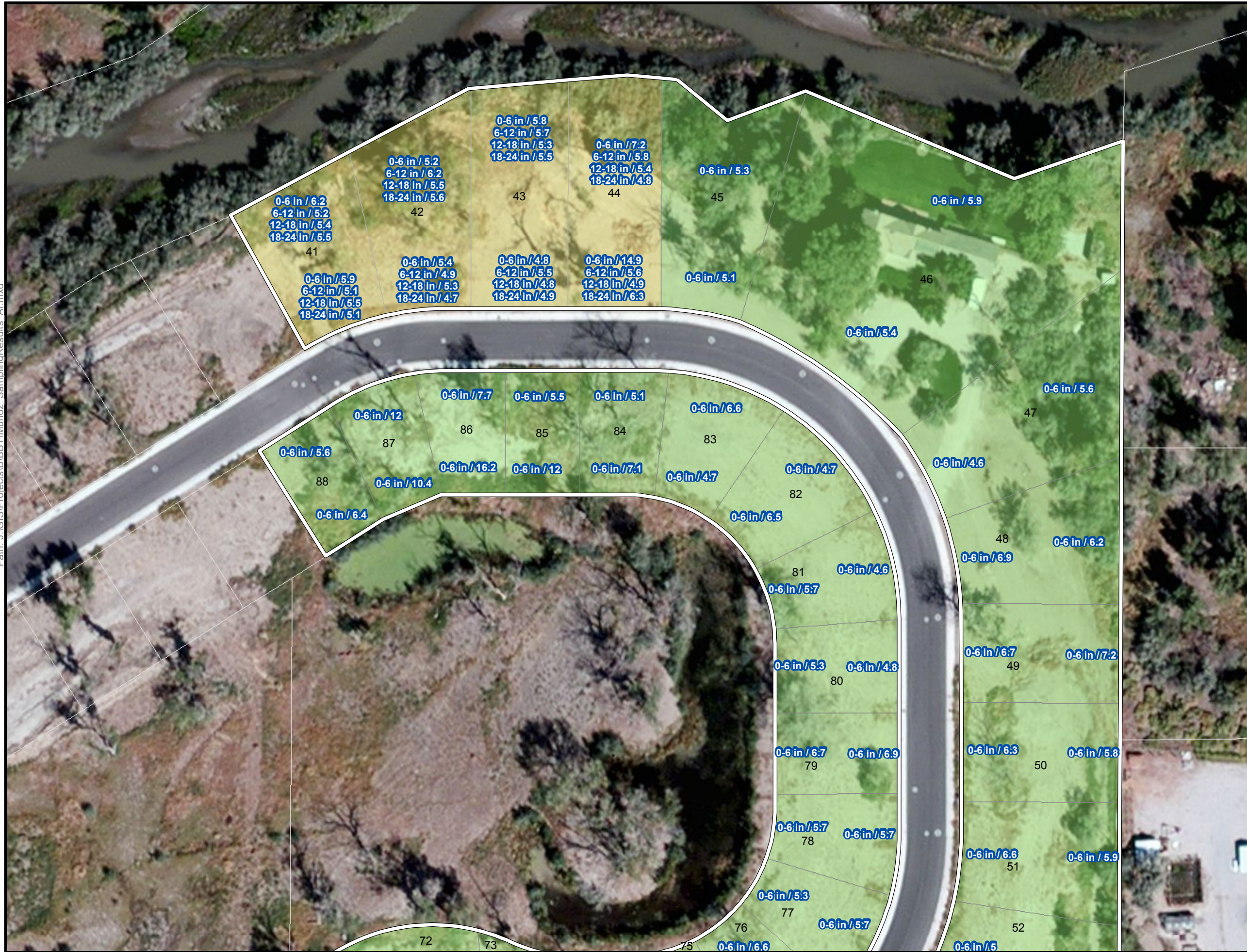
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ESRI, Bing Maps Aerial

**BB&T** Munoz  
Fallon, Nevada

Figure 4  
MUNOZ SAMPLING  
RESULTS - MERCURY



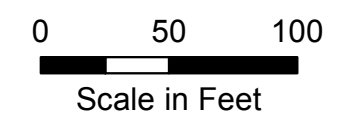
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**Legend**

**Arsenic Concentrations in Soil Expressed in (mg/kg) at Sample Depths Ranging from 0-24 inches**

- Lot within Low Risk Area
- Lot within Moderate Risk Area
- Munoz Property Boundary



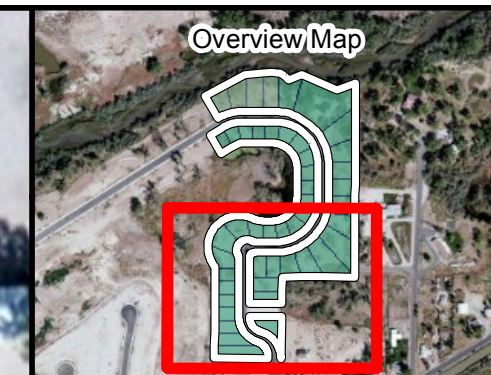
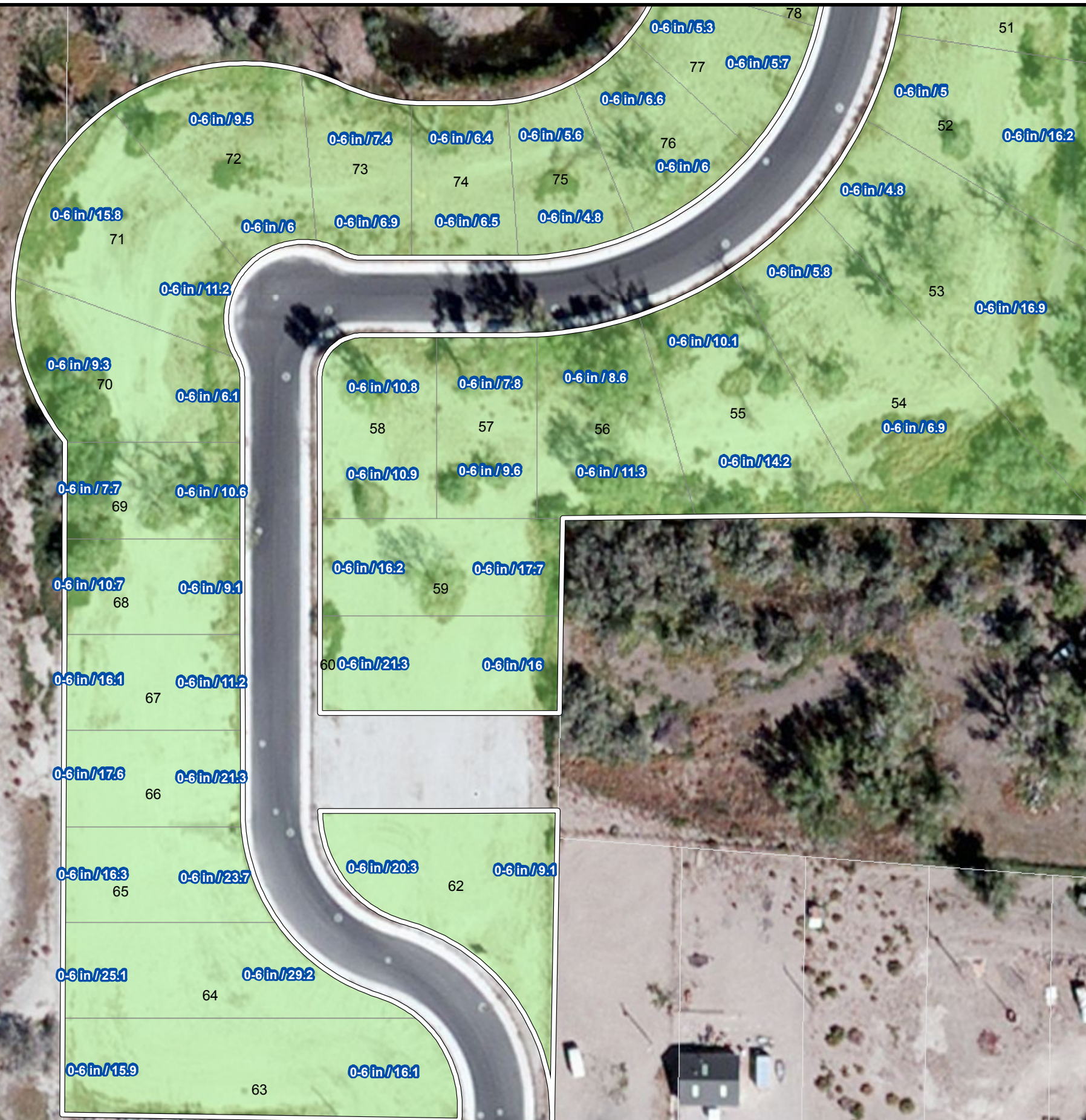
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ESRI, Bing Maps Aerial

**BB&T** Munoz  
Fallon, Nevada

Figure 5  
MUNOZ SAMPLING  
RESULTS - ARSENIC



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**Legend**

**Arsenic Concentrations in Soil Expressed in (mg/kg) at Sample Depths Ranging from 0-24 inches**

- Lot within Low Risk Area
- Lot within Moderate Risk Area
- Munoz Property Boundary

N

0 50 100  
Scale in Feet

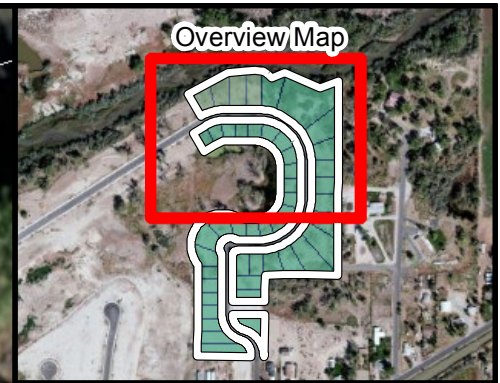
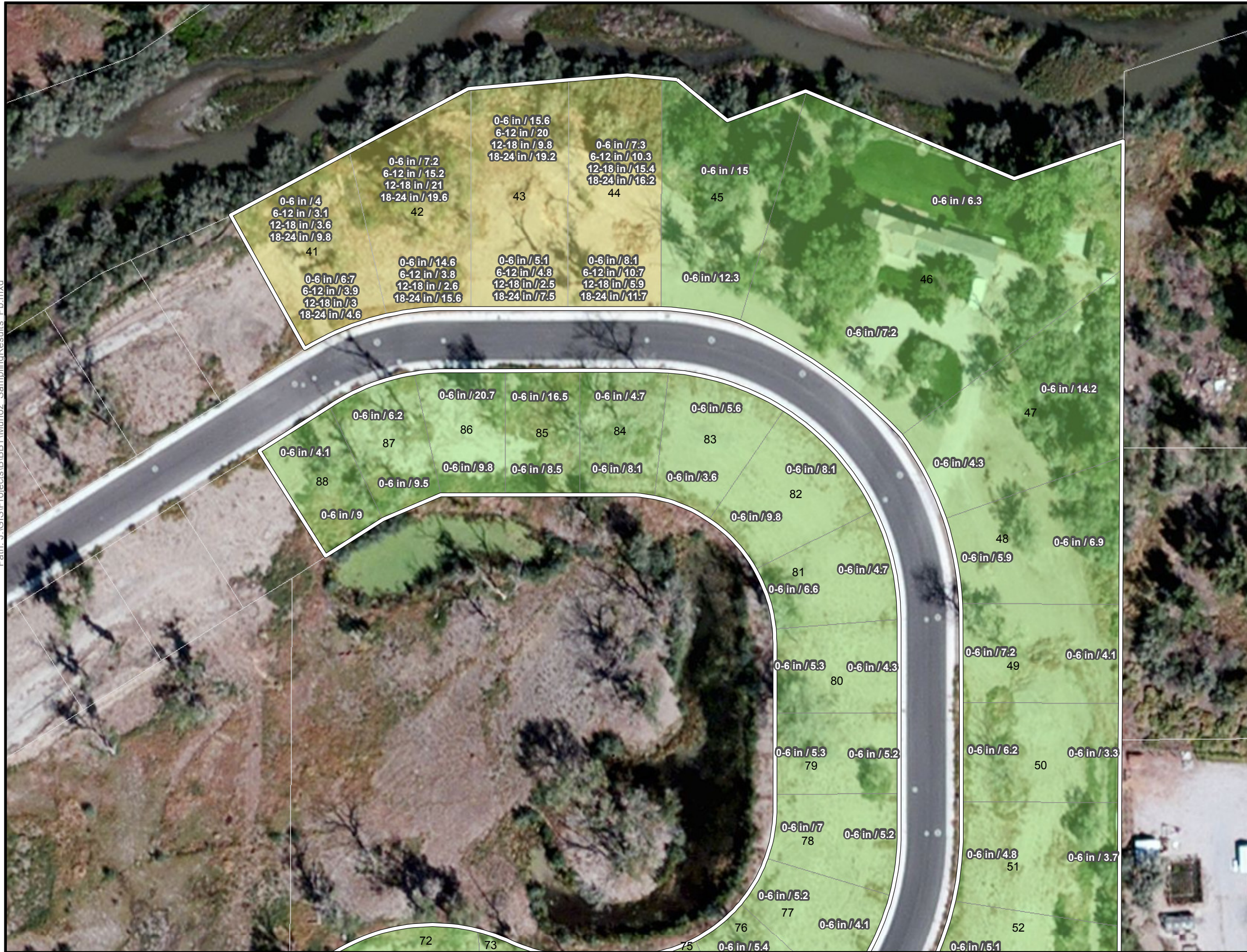
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**BB&T** Munoz  
Fallon, Nevada

Figure 6  
MUNOZ SAMPLING  
RESULTS - ARSENIC



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**Legend**

Lead Concentrations in Soil  
Expressed in (mg/kg) at Sample  
Depths Ranging from 0-24 inches

- Lot within Low Risk Area
- Lot within Moderate Risk Area
- Munoz Property Boundary

0 50 100



Scale in Feet

BASE MAP SOURCE:  
ESRI, Bing Maps Aerial

**BB&T**

Munoz  
Fallon, Nevada

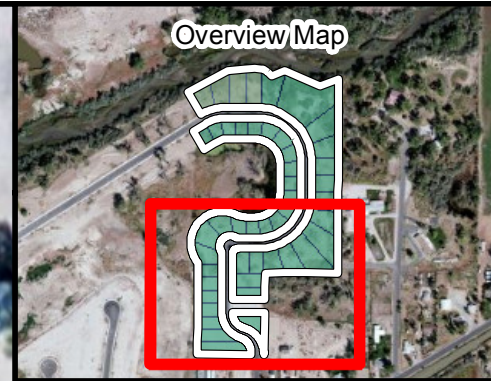
Figure 7  
MUNOZ SAMPLING  
RESULTS - LEAD

JOB NO. 14950361

**URS**



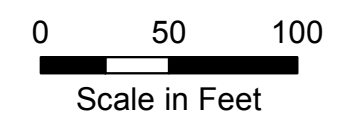
Path: J:\GIS\Projects\BIBBT\Munoz\_SamplingResults\_Pb.mxd



**Legend**

Lead Concentrations in Soil  
Expressed in (mg/kg) at Sample  
Depths Ranging from 0-24 inches

- Lot within Low Risk Area
- Lot within Moderate Risk Area
- Munoz Property Boundary



BASE MAP SOURCE:  
ESRI, Bing Maps Aerial

**BB&T** Munoz  
Fallon, Nevada

Figure 8  
MUNOZ SAMPLING  
RESULTS - LEAD



Table 1  
Total Metals in Soil Analytical Results  
Onda Verde LLC  
Fallon, Nevada

Sample ID	Date	Results (mg/kg)		
		Arsenic	Lead	Mercury
<b>CRMS Action Levels (mg/kg)</b>		<b>32</b>	<b>400</b>	<b>80</b>
Lot M41 0-6 Front	10/27/2011	5.9	6.7	2.7
Lot M41 6-12 Front	10/27/2011	5.1	3.9	0.65 J+
Lot M41 12-18 Front	10/27/2011	5.5	3.0	0.51 J+
Lot M41 18-24 Front	10/27/2011	5.1	4.6	0.83 J+
Lot M41 0-6 Back	10/27/2011	6.2	4.0	0.62
Lot M41 6-12 Back	10/27/2011	5.2	3.1	0.33
Lot M41 12-18 Back	10/27/2011	5.4	3.6	0.73 J+
Lot M41 18-24 Back	10/27/2011	5.5	9.8	5.2 J+
Lot M42 0-6 Front	10/27/2011	5.4	14.6	9.6 J+
Lot M42 6-12 Front	10/27/2011	4.9	3.8	1.0 J+
Lot M42 12-18 Front	10/27/2011	5.3	2.6	0.082 J+
Lot M42 18-24 Front	10/27/2011	4.7	15.6	10.6
Lot M42 0-6 Back	10/27/2011	5.2	7.2	3.8
Lot M42 6-12 Back	10/27/2011	6.2	15.2	13.0 J+
Lot M42 12-18 Back	10/27/2011	5.5	21.0	20.0 J+
Lot M42 18-24 Back	10/27/2011	5.6	19.6	22.7 J+
Lot M43 0-6 Front	10/26/2011	4.8	5.1	1.3
Lot M43 0-6 Front DUP	10/26/2011	4.3	4.9	1.6 J-
Lot M43 6-12 Front	10/26/2011	5.5	4.8	1.9 J+
Lot M43 12-18 Front	10/26/2011	4.8	2.5	0.43 J+
Lot M43 18-24 Front	10/26/2011	4.9	7.5	6.5 J+
Lot M43 0-6 Back	10/26/2011	5.8	15.6	15.8 J+
Lot M43 6-12 Back	10/26/2011	5.7	20.0	8.6
Lot M43 12-18 Back	10/26/2011	5.3	9.8	8.0 J+
Lot M43 18-24 Back	10/26/2011	5.5	19.2	13.9 J+
Lot M44 0-6 Front	10/27/2011	14.9	8.1	2.2 J+
Lot M44 6-12 Front	10/27/2011	5.6	10.7	5.8 J-
Lot M44 12-18 Front	10/27/2011	4.9	5.9	2.8
Lot M44 18-24 Front	10/27/2011	6.3	11.7	5.8 J-
Lot M44 0-6 Back	10/27/2011	7.2	7.3	3.6 J-
Lot M44 6-12 Back	10/27/2011	5.8	10.3	2.9 J-
Lot M44 12-18 Back	10/27/2011	5.4	15.4	7.9
Lot M44 18-24 Back	10/27/2011	4.8	16.2	10.6 J+
Lot M45 Front	11/1/2011	5.1	12.3	5.3 J-
Lot M45 Back	11/1/2011	5.3	15.0	9.1 J+
Lot M45 Back DUP	11/1/2011	4.4	13.7	8.4 J
Lot M46 Front	11/1/2011	5.4	7.2	2.2
Lot M46 Back	11/1/2011	5.9	6.3	2.6 J-
Lot M47 Front	11/1/2011	4.6	4.3 J	0.52 J-

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<b>CRMS Action Levels (mg/kg)</b>		<b>32</b>	<b>400</b>	<b>80</b>
Lot M47 Front DUP	11/1/2011	4.7	5.5 J	0.64 J-
Lot M47 Back	11/1/2011	5.6	14.2	8.0 J+
Lot M48 Front	11/1/2011	6.9	5.9	1.4
Lot M48 Back	11/1/2011	6.2	6.9	0.48
Lot M49 Front	10/31/2011	6.7	7.2	2.3 J-
Lot M49 Back	10/31/2011	7.2	4.1	0.19 J-
Lot M50 Front	10/31/2011	6.3	6.2	2.2
Lot M50 Back	10/31/2011	5.8	3.3	0.12
Lot M51 Front	10/31/2011	6.6	4.8	0.84
Lot M51 Back	10/31/2011	5.9	3.7	0.54
Lot M51 Back DUP	10/31/2011	5.5	3.6	0.36 J-
Lot M52 Front	10/31/2011	5.0	5.1	2.8 J-
Lot M52 Back	10/31/2011	16.2	5.5	0.15
Lot M53 Front	10/31/2011	4.8	3.3	0.99 J-
Lot M53 Back	10/31/2011	16.9	5.9	0.35
Lot M54 Front	10/28/2011	5.8	2.8	0.26
Lot M54 Back	10/28/2011	6.9	3.6	0.17
Lot M55 Front	10/28/2011	10.1	3.8	0.27
Lot M55 Front DUP	10/28/2011	9.9	4.5	0.24 J-
Lot M55 Back	10/28/2011	14.2	4.6	0.20
Lot M56 Front	10/28/2011	8.6	4.1	0.31
Lot M56 Back	10/28/2011	11.3	4.1	0.13
Lot M57 Front	10/28/2011	7.8	4.0	0.25
Lot M57 Back	10/28/2011	9.6	3.5	0.059
Lot M58 Front	10/28/2011	10.8	4.3	0.15
Lot M58 Back	10/28/2011	10.9	4.2	0.15
Lot M59 Front	10/28/2011	16.2	5.3	0.12
Lot M59 Back	10/28/2011	17.7	5.4	0.036
Lot M60 Front	10/28/2011	21.3	7.1	0.064 J+
Lot M60 Back	10/28/2011	16.0	5.6	<0.032
Lot M60 Back DUP	10/28/2011	13.9	5.2	<0.044 UJ
Lot M62 Front	10/28/2011	20.3	5.5	<0.041
Lot M62 Back	10/28/2011	9.1	3.9	0.06
Lot M63 Front	10/28/2011	16.1	4.6	0.05
Lot M63 Back	10/28/2011	15.9	9.1	0.22
Lot M64 Front	10/28/2011	29.2	6.6	0.061 J
Lot M64 Front DUP	10/28/2011	27.9	6.9	0.082 J-
Lot M64 Back	10/28/2011	25.1	6.3	0.21
Lot M65 Front	10/28/2011	23.7	5.8	0.09

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		Arsenic	Lead	Mercury
<b>CRMS Action Levels (mg/kg)</b>		<b>32</b>	<b>400</b>	<b>80</b>
Lot M65 Back	10/28/2011	16.3	5.5	0.31
Lot M66 Front	10/28/2011	21.3	5.6	0.10
Lot M66 Back	10/28/2011	17.6	6.2	0.38
Lot M67 Front	10/28/2011	11.2	4.7	0.082
Lot M67 Back	10/28/2011	16.1	5.3	0.18
Lot M68 Front	10/28/2011	9.1	4.2	0.41
Lot M68 Back	10/28/2011	10.7	3.6	0.076
Lot M69 Front	11/1/2011	10.6	5.7	0.60 J+
Lot M69 Back	11/1/2011	7.7	13.6	8.1 J+
Lot M69 Back DUP	11/1/2011	6.6	12.1	5.0 J-
Lot M70 Front	11/1/2011	6.1	4.6	0.23 J+
Lot M70 Back	11/1/2011	9.3	7.5	1.2
Lot M71 Front	10/28/2011	11.2	5.2	0.13 J-
Lot M71 Back	10/28/2011	15.8	5.6	0.20
Lot M72 Front	10/28/2011	6.0	4.5	0.26
Lot M72 Back	10/28/2011	9.5	4.9	0.29
Lot M73 Front	10/31/2011	6.9	4.8	0.57 J+
Lot M73 Front DUP	10/31/2011	6.0	4.9	0.62 J
Lot M73 Back	10/31/2011	7.4	4.9	0.83 J+
Lot M74 Front	10/31/2011	6.5	4.9	0.79 J+
Lot M74 Back	10/31/2011	6.4	4.7	1.0 J+
Lot M75 Front	10/31/2011	4.8	3.6	0.36 J-
Lot M75 Back	10/31/2011	5.6	4.8	2.0 J-
Lot M76 Front	10/31/2011	6.0	5.0	1.5 J-
Lot M76 Back	10/31/2011	6.6	5.4	1.5 J+
Lot M77 Front	10/31/2011	5.7	4.1	1.1 J-
Lot M77 Back	10/31/2011	5.3	5.2	2.3 J-
Lot M78 Front	10/31/2011	5.7	5.2	1.4 J-
Lot M78 Back	10/31/2011	5.7	7.0	3.3 J+
Lot M78 Back DUP	10/31/2011	4.8	6.2	2.7 J
Lot M79 Front	10/31/2011	6.9	5.2	1.5 J-
Lot M79 Back	10/31/2011	6.7	5.3	1.4 J+
Lot M80 Front	10/31/2011	4.8	4.3	1.6 J-
Lot M80 Back	10/31/2011	5.3	5.3	1.9 J+
Lot M81 Front	10/31/2011	4.6	4.7	1.3 J+
Lot M81 Back	10/31/2011	5.7	6.6	2.9 J+
Lot M82 Front	10/31/2011	4.7	8.1	4.5 J+
Lot M82 Back	10/31/2011	6.5	9.8	4.4
Lot M83 Front	10/31/2011	6.6	5.6	1.4 J-

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Sample ID	Date	Results (mg/kg)		
		Arsenic	Lead	Mercury
<b>CRMS Action Levels (mg/kg)</b>		<b>32</b>	<b>400</b>	<b>80</b>
Lot M83 Back	10/31/2011	4.7	3.6	0.54
Lot M84 Front	10/31/2011	5.1	4.7	0.81 J-
Lot M84 Back	10/31/2011	7.1 J	8.1	3.1 J-
Lot M84 Back DUP	10/31/2011	5.6 J	6.7	3.0 J
Lot M85 Front	10/31/2011	5.5	16.5	13.5 J-
Lot M85 Back	10/31/2011	12.0	8.5	5.2 J-
Lot M86 Front	10/31/2011	7.7	20.7	15.9
Lot M86 Back	10/31/2011	16.2	9.8	5.0



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Sample ID	Date	Results (mg/kg)		
		Arsenic	Lead	Mercury
<b>CRMS Action Levels (mg/kg)</b>		<b>32</b>	<b>400</b>	<b>80</b>
Lot M87 Front	10/31/2011	12.0	6.2	2.0
Lot M87 Back	10/31/2011	10.4	9.5	5.6
Lot M88 Front	10/31/2011	5.6	4.1 J	1.2 J-
Lot M88 Front DUP	10/31/2011	5.5	5.2 J	1.1 J
Lot M88 Back	10/31/2011	6.4	9.0	3.6 J-

**Notes:**

mg/kg - milligrams per kilogram or parts per million (ppm)

CRMS - Carson River Mercury Superfund Site

J - Estimated result

J+ - Result estimated high

J- - Result estimated low