

REGION IX 75 Hawthorne Street San Francisco, CA 94105-3901

JUL 2 6 2011

MEMORANDUM

- **SUBJECT:** Request for a Time-Critical Removal Action at the Iron King Mine-Humboldt Smelter Superfund Site, Dewey-Humboldt,, Yavapai County, Arizona.
- FROM: Craig Benson, On-Scene Coordinator Emergency Response Section (SFD-9-2)
- TO: Daniel Meer, Assistant Director
- THROUGH: Harry Allen, Chief Emergency Response Section (SFD-9-2)

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval to spend up to \$1,944,000 to direct extramural costs to mitigate threats to human health and the environment posed by the presence of high concentrations of arsenic and lead in soils and tailings on residential/public properties in the Town of Dewey-Humboldt, Yavapai County, Arizona. Under the proposed action, EPA will also provide for dust suppression of fine-grained ash and tailings at select source areas to limit the impact to the community from arsenic and lead contaminant deposition resulting from air particulate migration.

The Action Memorandum would serve as approval for the expenditures required for EPA to take the actions described herein to abate imminent and substantial endangerment to residents of properties contaminated by hazardous substances. The proposed removal of hazardous substances is consistent with removal activities authorized pursuant to Section 104(a)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9604(a)(1), and Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 C.F.R. § 300.415.

II. SITE CONDITIONS AND BACKGROUND

Site Status: NPL Category of Removal: Time-Critical CERCLIS ID: AZ0000309013 SITE ID: 09MX

A. <u>Site Description</u>

1. Physical location

The Iron King Mine-Humboldt Smelter Superfund Site (Site) is located in Dewey-Humboldt, Yavapai County, Arizona (Figure 1, Site Location Map). Dewey-Humboldt was incorporated on December 20, 2004 from the existing unincorporated towns of Dewey and Humboldt, located adjacent to one another in the Agua Fria River Valley, 15 miles east of Prescott. The estimated population of the town was 3,613 according to the 2005 census estimates. The geographic coordinates of Dewey-Humboldt are 34 degrees, 31.57 minutes North latitude and 112 degrees, 15.9 minutes West longitude.

The Site is a combination of sources and releases from two facilities, the Iron King Mine located west of Highway 69, and the Humboldt Smelter, located east of Highway 69 and south of the main portion of town. The majority of Dewey-Humboldt is situated between the mine and the smelter. Three waterways (Chaparral Gulch, Galena Gulch, and Agua Fria River) also transect the Site.

2. Site characteristics

The Site was listed on the National Priorities List (NPL) in 2008, EPA Remedial Program documentation accessed to provide summary site history and site characteristics information, as well as, assist in the development of specific removal program objectives are included in the Administrative Record.

The Site represents five specific Areas of Interest (AOIs) that are combined Into a single Operational Unit (Figure 2, Site Map):

- Iron King Mine Includes the Iron King Mine Proper Area, Iron King Mine operations Area, Former Fertilizer Plant Area, Salvage Yard, and ancillary associated properties.
- Humboldt Smelter Includes several abandoned buildings, a smelter stack, a tailings pile, a smelter ash pile, and a slag pile.
- Waterways Includes the Chaparral Gulch, Galenda Gulch, Agua Fria River, and adjoining drainage channels and outfalls.
- In-town Soil Includes residential, commercial/Industrial, and ancillary Properties (i.e., background soil areas, public spaces, etc.)
- Ground Water Includes shallow alluvium and deep bedrock ground water.

These five AOIs were combined into a single Operational Unit because: (1) migration of particulates from the Iron King Mine and Humboldt Smelter may have overlapping air-depositional areas; (2) mine tailings from the Iron King Mine have migrated onto the Humboldt Smelter property via the Chaparral Gulch; (3) the Agua Fria River and its contributing waterways (i.e., Chaparral Gulch and Galena Gulch) have impacts from both the Iron King Mine and Humboldt Smelter; and (4) ground water has been impacted from both the Iron King Mine and Humboldt Smelter.

The Iron King Mine AOI, located west of Highway 69, occupies approximately 153 acres. The Iron King Mine is bordered by Chaparral Gulch to the north, Galena Gulch to the south, Highway 69 to the east, and undeveloped land to the west. The Iron King Mine was a periodically active gold, silver, copper, lead, and zinc mine from 1906 until 1969. The present owner of the 85 acre portion of the Iron King Mine AOI referred to as the Iron King Mine Proper Area is North American Industries (NAI), which produces Hydromax fertilizers and soil supplements. NAI is the successor to Ironite Products Company, which made Ironite fertilizer from Iron King Mine Proper Area is a large (50 plus acre) tailings pile which contains high concentrations of arsenic and lead. This source material is subject to migration away from the pile mainly via air particulate migration and surface water transport.

The Humboldt Smelter AOI, located at the east end of Main Street, occupies approximately 189 acres. The smelter is situated less than one mile east of the Iron King Mine. The Humboldt Smelter is bordered by the Town of Dewey-Humboldt to the west and north, the Agua Fria River to the east, and the Chaparral Gulch to the south. The majority of the Humboldt Smelter AOI is owned by Greenfields Enterprises, LLC, which purchased the property in 2003. No businesses are currently operating on the property. The Humboldt Smelter AOI includes tailings and slag deposit areas and an approximate 10 acre ash pile (Figure 3, Humboldt Smelter Features). This source material is subject to migration mainly via air particulate migration and surface water transport.

The In-town Soil AOI includes residential, commercial/industrial, and ancillary properties (e.g., background soil areas, public spaces, etc.) in the vicinity of the Iron King Mine and Humboldt Smelter. Residential and commercial/industrial properties along with public spaces within the Town of Dewey-Humboldt are located immediately adjacent to and between the mine and smelter.

An approximate 12,000 to 20,000 cubic yard tailings pile containing high concentrations of arsenic and lead exists approximately 300 yards north of the Iron King Mine Proper Area on a residential parcel. This tailings pile, named the Small Tailings Pile (STP), is technically within the boundaries of the In-town Soil AOI, but is associated with historic mining activities at the Iron King Mine. Anecdotal information from NAI President S. Schuchardt suggests that the STP resulted from a short-lived gold and silver extraction processing attempt that was conducted in/around the 1960's. The same ore was used as resulted in the main tailings pile

on NAI property (primarily for zinc recovery), but a cyanide extraction process was used in the Iron King Operations Area and the slurry was either hydraulically conveyed or piped to a tailings pond at the current STP location.

The Chaparral Gulch borders the STP from the northwest to the southeast. Surface water readily flows in, around, and through this area into the Upper Chaparral Gulch. There are no storm water controls mitigating surface water migration from this area. In addition, much of this area is devoid of vegetation, so it is subject to particulate migration. The STP is considered source material because it continues to be a source of contamination to other media (e.g., sediments, surface water, ambient air, etc.). Also, because this material contains high concentrations of arsenic and lead, is readily mobile, and is within a primary migration pathway for the Iron King Mine AOI, it is considered a principal threat waste.

Over 190 residential and commercial properties located in the In-town Soil AOI have been sampled to date in an effort to evaluate metals (primarily arsenic and lead) contamination in shallow soils (0 to 12-inch depth interval). Sample locations have been selected from parcels that were suspected of being impacted by historic mining and smelting operations. In general, for those parcels found to exhibit arsenic and lead above background concentrations, the near surface soils (0 to 2inch depth interval of these parcels are impacted to a higher degree than the deeper surface soils (10 to 12-inch depth interval). Parcels with elevated arsenic and lead have been found to be located in closer proximity to the Mine and Smelter AOIs. Yards further away from these source areas are less likely to have been impacted from particulate migration or surface water transport.

The proposed interim removal activities described in this Action Memorandum specifically address the STP, the residential parcels found to contain the highest concentration of arsenic and lead in surface soils, and temporary dust mitigation efforts at the Mine and Smelter AOIs. A more complete summary of the operational history for the Iron King Mine and Humboldt Smelter and remedial investigation findings for each AOI can be found in the documents contained in the Administrative Record.

3. Removal site evaluation

In April 2002, sampling performed by the Arizona Department of Environmental Quality (ADEQ) during a Preliminary Assessment/Site Inspection (PA/SI) revealed that sediment samples collected from the Chaparral Gulch in the vicinity of the Iron King Mine AOI had elevated arsenic and lead concentrations. In 2005, the ADEQ requested that the EPA Region 9 Emergency Response Section (ERS) assess surface soils at residential properties in the vicinity of the Chaparral Gulch and Iron King Mine. The ERS assessed surface soils at a total of 17 parcels in proximity to the Chaparral Gulch, both northeast and east of the Iron King Mine AOI. In 2006, a removal of surface soils at four of the 17 properties (exhibiting the highest arsenic and lead concentrations) was completed under the terms of an Administrative Settlement Agreement and Order on Consent between EPA and the Ironite Products Company.

From 2008 to 2010, EPA conducted a Remedial Investigation (RI) at the Site that included sampling of 168 additional parcels within the In-Town Soil AOI. Sampled parcels were selected from areas within the In-Town Soil AOI suspected of being impacted by historic mining and smelting operations (wind patterns) and where homeowner sampling access agreements could be obtained. The objective of the RI sampling was to identify levels of metals contamination in soil resulting from the Site, and specifically to evaluate impacts on the community of Dewey-Humboldt. Nine discrete samples from the 0 to 2-inch depth interval and one discrete sample from the 10 to 12-inch depth interval were collected at each parcel. The deeper depth interval was selected at random from beneath one of the nine surface sample locations. The nine surface sample locations were selected on a parcel-by-parcel basis (judgmentally) with an attempt to be spatially representative considering physical barriers, homeowner preferences and targeted placement (i.e., near play structures or discolored or texturally different soil). The RI samples were analyzed for 23 metals on the TAL Metals list, including lead and arsenic. Arsenic and lead have been selected as the primary constituents of concern because these inorganics are the most prevalent and generally are co-located with other inorganic chemicals.

In general, parcels with elevated arsenic and lead concentrations were located in close proximity to the Iron King Mine and Humboldt Smelter AOIs, or the Middle Chaparral Gulch. Parcels further away from the Iron King Mine and Humboldt Smelter AOIs were less likely to be impacted from particulate migration or surface water transport.

EPA calculated the 95% upper confidence limit (UCL) on the mean concentration of arsenic and lead in all surface samples for each parcel. The 95% UCL on the mean evaluation provides a conservative estimate of the average concentration of a chemical across a property and provides reasonable confidence that the true site average will not be underestimated. Appendix A, "Arsenic and Lead in In-Town Soil", provides summary data including the 95% UCL value for each of the RI sampled parcels (designated OFS 101 through OFS 268) and the 17 removal assessment parcels from 2005 (designated 002 through 020).

Arsenic maximum concentrations in soil exceeded the EPA Residential Regional Screening Level (RSL) of 0.39 mg/kg in all of the parcels. However, most of the average concentrations are consistent with or are approximately one order of magnitude greater than the background arsenic 95% UCL concentration for the most common Site soil type, which is currently reported as 38 mg/kg - 41 mg/kg. Lead maximum concentrations in soil exceeded the EPA RSL of 150 mg/kg in approximately half the parcels. Most of the average lead concentrations are consistent with or one order of magnitude greater than the background lead 95% UCL concentration for the most common Site soil type, which is 23 mg/kg - 27 mg/kg. While EPA is considering a broader remedial action for parcels in the In-Town Soil AOI, this interim Removal Action is intended to immediately address those parcels that have the highest levels of arsenic and/or lead contamination in surface soils. To this end, EPA and the Superfund Technical Assessment and Response Team (START) reviewed the Appendix A data summary and placed each parcel in descending order of arsenic and lead 95% UCL concentrations. Properties in the top 10% of contamination values were then placed on an interim "hot list". Although several properties were listed for having top 10% of 95% UCLs for both arsenic and lead concentrations, the majority of the parcels were listed for having either arsenic. or lead concentrations in the upper 10% of 95% UCLs and no obvious correlation between lead and arsenic was identified.

In January 2011, EPA and START staff conducted a field evaluation of each parcel on the interim hot list. Each parcel was visually assessed and the property datasheet and geospatial sampling locations were reviewed for purposes of meeting removal data use objectives (excavation). Certain parcels were omitted from the interim hot list due to several factors including:

- A single outlier in a parcels dataset that raised the 95% UCL to a point where the property became one of the top 10% most contaminated properties in the investigation. Reasons for such outliers may have been sample location selection from an area in proximity to welding operations, scrap metal, automotive work or other processes that potentially could have created a biased sample.
- A parcel outlier sample may have been the 10-12 inch depth interval sample, while each of the 0-2 inch depth interval samples exhibited concentrations at or around background. Normal soil deposition, landscaping, grading, and other activities may have sufficiently segregated any depositional contamination to a deeper horizon, thus minimizing potential human exposure.
- The parcel was identified to not be used for residential purposes or human exposure was minimal. Properties in this group included, but were not limited to, livestock pastures, well vegetated parcels, or unimproved plots of land.

Certain parcels were added to the interim hot list including parcels in close proximity to interim hot list parcels that had not been sampled. Reasons for previously un-sampled parcels included an inability to contact the current property owner or a refusal for sampling access permission from the property owner.

EPA was subsequently able to secure sampling access agreements for eight previously un-sampled parcels and renewed sampling access agreements for 12 previously sampled parcels but for which supplemental arsenic and lead data was necessary to corroborate and/or further define the horizontal extent of contamination on a property. The Parcel designated OFS-002 was one of the four parcels addressed in the 2006 removal action. The approximate 1,000 cubic yards of contaminated surface soils excavated from OFS-002 were roughly centered on the home site location at the northeast portion of the parcel. The STP exists at the southwest corner of Parcel OFS-002. Additional sampling at the STP was also planned to supplement the previous RI data set and further define the horizontal and vertical extent of the STP.

In March and June 2011, the ERS and START performed the sampling under an approved Sampling and Analysis Plan (SAP). Samples were submitted to the EPA Region 9 Laboratory in Richmond California and an EPA approved subcontract laboratory for definitive lead and arsenic analysis by EPA Method 6010B. An EPA approved subcontract laboratory was utilized for cyanide analysis for a subset of the STP samples. For parcels not previously sampled, sample numbers and locations were selected in the same manner as was used for the RI data set. This involved nine discrete samples from the 0 to 2-inch depth interval and one discrete sample from the 10 to 12-inch depth interval for each parcel. The biased sample placement was designed to provide the most areal coverage of each parcel. Both grab and composite sampling methods were used for properties that had previously been sampled in an effort to increase the areal coverage or corroborate previously identified contamination hot spots on a parcel. Appendix A contains the ERS Data Summaries for the March and June 2011 sampling events.

The removal site evaluation included several EPA and contractor staff visits to the Iron King Mine Proper Area to evaluate potential temporary repository locations for contaminated residential soils and STP tailings. Consolidation on the Iron King Mine Proper Area in proximity to the main tailings pile is advantageous to the proposed long-term remedial strategy. Contaminated residential soils can be used as base for dust suppression on select areas of the main tailings pile and the STP tailings can be used as buttressing/berm material along the unstable east toe of the main tailing pile.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

The objective of the March and June 2011 ERS sampling events was to obtain an analytical data set meeting EPA Quality System guidelines that could be used to supplement the existing RI data set and help define parcels within the In-Town Soil AOI that represent the highest concentrations of arsenic and lead contamination.

Parcels shown to exhibit the highest arsenic and lead concentrations in the RI data set were evaluated in field surveys considering potential for human exposure and were also evaluated with the supplemental data obtained during the ERS sampling events. The table below lists summary data for each of the parcels included in the final list of parcels subject to the time-critical removal action. The START SAP and Final Removal Assessment Report (Administrative Record) provide

specific information on the selection of these parcels for the proposed removal action.

		Parcels Subj D	ect to Time∘ ewey-Humb	Critical Removal A oldt, Arizona	ction	· ·	
				Arsenic		Lead	
Site ID	Parcel No.	Physical Address	Acres	Average Concentration (mg/Kg)	95% UCL	Average Concentration (mg/Kg)	95% UCL
OFS-002	402-08-034A	12470 East Yavapai Road	(STP) ¹	556.4	727.2	706.2	986.8
OFS-103	402-07-002B	13030 East Main Street	0.46 ²	45.77	66.25	134.5	289.2
OFS 111	402-06-102L	2925 South Sweet Pea Lane	0.27	115.6	165.2	638.8	923.9
OFS 118	402-06-102K	2905 South Sweet Pea Lane	0.27	147.2	198.4	1148	1610
OFS 132	402-06-102P	2875 South Third Street	0.25	102.5	130.7	949.7	1792
OFS 133	402-07-006	13070 Main Street	0.23	284.6	383.3	1132	1584
OFS 148	402-06- 102M	2945 Sweet Pea Lane	0.27	106.1	133.1	577.5	692.9
OFS 208	402-09-016D	2565 Hill Street	0.21 ²	134.9	278.8	108.7	211.5
OFS 260	800-27-005T	Unsurfaced right- of-way behind Sweet Pea Lane	0.5 (approx.)	157.6	205.9	746.8	1025
OFS-301	402-06-102N	2965 Sweet Pea Lane	0.28	52.02	84.66	241	471.3
OFS-306	402-06-026 402-06-027B	13087 E. Main Street 13089 E. Main Street	0.19 ² 0.32 ²	70.8	103.1	187	259.7
		EPA Reside	ential RSL:	0.39		150	
		Arizona Reside	ential SRL:	10		400	
		Bac	kground: ³	38 – 41		23 – 27	
¹ - The ST ² - Site IDs ³ – Site-Sp RSL - Reg SPL Soil	P is located in the SOFS-103, 208, pecific Backgrou gional Screening	he southwest corner , 301, and 306 will be nd Soil Type 1 (Mean Level. Lead -calcula	of Parcel OF subjected to n / 95% Upp ated using th	S-002 ' o hot spot removals o er Confidence Limit o e Adult Lead Model	only. of the Mea	n [95% UCL]):	

The location of the 11 identified parcels is shown on Figure 4 (coded purple). Figure 5 shows the STP sampling locations.

Parcels OFS-111, 118, 132, 133, 148, and 260 represent lots where high arsenic and lead concentrations were found distributed across the entire parcel. The 95% UCL concentrations for these parcels exceed the corresponding residential

RSL and SRL values and currently established background UCL concentrations for arsenic and lead. Parcel OFS-002 is listed as it is the location of the STP.

Parcels OFS-103, 208, 301, and 306 will be subjected to only hot spot soil excavations in select areas represented by the highest contaminant concentrations. In most cases, these hot spot parcels are situated around the main corridor (Sweet Pea Lane) where the more highly contaminated parcels were identified. Additional parcels, not identified in the table above, may be subject to limited hot spot soil excavations pending further parcel and data evaluations.

Arsenic and lead are hazardous substances as defined by Section 101(14) of CERCLA. The elevated levels of arsenic and lead in the identified parcels constitute a release of hazardous substances to the environment. The STP is considered source material because it continues to be a source of contamination to other media (e.g., sediments, surface water, ambient air, etc.). Also, because this material contains high concentrations of arsenic and lead, is readily mobile, and is within a primary migration pathway for the Iron King Mine AOI, it is considered a principal threat waste.

5. National Priorities List ("NPL") status

The Site was listed on the NPL in 2008. In 2002, ADEQ conducted a PA/SI at the Iron King Mine. In 2004, ADEQ conducted a PA/SI at the Humboldt Smelter. These sites were combined under the name Iron King Mine-Humboldt Smelter Site for investigative purposes and future actions. In 2006, ADEQ conducted an Expanded Site Inspection of the combined Iron King Mine – Humboldt Smelter Site. The reports identified observed contamination and observed releases of hazardous substances at the Iron King Mine Site - Humboldt Smelter Site. In 2008, EPA began the Remedial Investigation of the Site.

The proposed interim time-critical removal activities described in this Action Memorandum specifically address the STP, the residential parcels found to contain the highest concentration of arsenic and lead in surface soils, and temporary dust mitigation efforts at the Mine and Smelter AOIs. These actions will complete all work at the identified parcels and STP, but will not complete other remedial actions at the Site.

B. Other Actions to Date

In 2005, the EPA Region 9 ERS assessed surface soils at 17 parcels in proximity to the Chaparral Gulch, both northeast and east of the Iron King Mine AOI. In 2006, EPA ordered the Ironite Products Company to undertake removal actions at four residential parcels under the terms of an Administrative Settlement Agreement and Order on Consent. This effort was completed in 2006.

In the summer of 2010, Greenfield Enterprises, LLC voluntarily applied a soil stabilizer and dust control agent to the approximate 10 acre ash pile located on the Humboldt Smelter AOI. This source material is subject to migration mainly via air particulate migration and surface water transport.

C. <u>State and Local Authorities' Roles</u>

1. State and local actions to date

The ADEQ Remedial Projects Section, PA/SI Section, and Voluntary Cleanup Program have participated in the Site Assessment, Remedial Investigation, and Removal Action planning activities. EPA and ADEQ have reached consensus that EPA will take the lead on enforcement and removal activities pertaining to this Site.

2. Potential for Continued State/Local Response

Neither state nor local agencies have committed the resources to undertake the required time-critical removal actions at this time. Nonetheless, EPA may request assistance from state and local response agencies for various services including water and power hook-ups, traffic control, community relations and other tasks that are necessary for an efficient, effective and safe operation. Assistance from the state and local agencies likely would be limited to technical support and services rather than direct financial contribution to the response.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Current Site conditions pose the threat of on-going and potential future releases of CERCLA hazardous substances, namely arsenic and lead. The likelihood of direct human exposure, via ingestion and/or inhalation of hazardous substances, and the threat of potential future releases and migration of those substances, pose an imminent and substantial endangerment to public health, and/or welfare, or the environment based on the factors set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415(b)(2). These factors include:

1. Actual or potential exposure to nearby populations, animals or the food chain from hazardous substances or pollutants or contaminants

As described in Sections II.A.2 and II.A.4, high concentrations of arsenic and lead have been detected in residential soils and in the STP in the In-Town AOI and in ash deposits in the Humboldt Smelter AOI. Persons living on or nearby these contaminated areas, or engaging in recreational activities in these areas are likely to come into contact (ingestion and inhalation exposure) with uncontrolled hazardous substances present. The World Health Organization and the EPA have determined that inorganic arsenic is a known human carcinogen. Exposure for shorter periods of up to a year can result in several non-cancer adverse health effects. Exposure can occur via airborne dust, drinking water, incidental ingestion of soil, and direct contact with contaminated soils. Low levels of arsenic can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet. When low levels of exposure are prolonged over time, discoloration of the skin and the appearance of small corns or warts may occur. At high levels, inorganic arsenic can cause death.

Exposure to lead can affect almost every organ and system in the body. Long-term exposure may cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production. The U.S. Department of Health and Human Services (DHHS) has determined that lead and lead compounds are reasonably anticipated to be human carcinogens and EPA has determined that lead is a probable human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic lead is probably carcinogenic to humans. Children are more vulnerable to lead poisoning than adults. A child who swallows large amounts of lead may develop blood anemia, severe stomachache, muscle weakness, and brain damage. If a child swallows smaller amounts of lead, much less severe effects on blood and brain function may occur. Even at much lower levels of exposure, lead can affect a child's mental and physical growth.

2. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released

During the monsoon, or summer thunderstorm season, Arizona experiences severe weather. High winds, dust and severe downpours resulting in flash floods are common monsoon occurrences. Moderate to high wind events that occur throughout the year carry fine-grained surface materials and particulates from source areas to adjoining AOIs. Contaminant transport of particulates and dissolved phase contaminants via surface water transport occurs primarily during periodic high rain events.

3. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate

Based on existing data, residential parcels further away from the Iron King Mine and Humboldt Smelter AOIs are less likely to be impacted from particulate migration or surface water transport from sources. Conversely, parcels closer to the Iron King Mine or Humboldt Smelter AOIs have a higher probability of being impacted. These assertions are supported by the distribution of arsenic and lead in shallow surface soil samples. In addition, the deeper surface soil samples have lower concentrations of arsenic and lead that are near or below background values. This also supports the assertion that lead and arsenic impacts very near the surface are likely due to particulate migration or surface water transport, rather than being attributable to background conditions.

The Chaparral Gulch borders the STP from the northwest to the southeast. Surface water readily flows in, around, and through this area into the Upper Chaparral Gulch. There are no storm water controls mitigating surface water migration from this area. In addition, much of this area is devoid of vegetation, so it is subject to particulate migration. The STP is considered source material because it continues to be a source of contamination to other media (e.g., sediments, surface water, ambient air, etc.). Also, because this material contains high concentrations of arsenic and lead, is readily mobile, and is within a primary migration pathway for the Iron King Mine AOI, it is considered a principal threat waste.

The Humboldt Smelter AOI ash deposit areas are very friable and subject to migration mainly via air particulate migration and surface water transport.

4. Availability of other appropriate federal or state response mechanisms to respond to the release

No other appropriate federal, local or state public funding source has been identified. The Site is on private land and is therefore not under the jurisdiction of any other Federal agency.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the time-critical removal action selected in this Action Memorandum, may continue to present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. **Proposed action description**

All of the actions to be taken during this interim time-critical removal action will comply with all applicable, relevant, or appropriate requirements (ARARs) to the extent practicable, considering the exigencies of the situation, and provide an effective mitigation of the imminent and substantial threats posed to the general public health and the environment. Objectives include:

Contaminated residential soil removal (In-Town Soil AOI)

- Obtain removal access agreements from each property owner.
- Document existing physical conditions of each parcel (initial survey) and develop specific restoration plans.
- Excavate surface soils in the designated areas of each parcel in a one-foot lift. Excavation may be extended to a maximum of two feet below ground surface if arsenic and lead concentrations remain above established background concentrations at the one-foot excavation face. Confirmation sampling and analysis will be performed in stages for each parcel subject to the removal.
- Transport excavated soils to the Iron King Mine Proper Area for use as a dust suppressant base in select areas on the main tailings pile and/or consolidate to designated repository.
- After excavation of properties where full excavation to depth has been performed, the excavated area will be backfilled with clean fill and compacted.
- Restore excavation areas such that the impacted areas of each parcel result in surface conditions that are equivalent to, or improved from, the original property characteristics.

STP Relocation

- Cut, grade and complete a temporary access road between the STP location and the temporary repository location at the east end the main tailings pile on the Iron King Mine Proper Area.
- Prepare temporary repository location including a base geosyntheticreinforced foundation pad.
- Excavate the STP and re-locate tailings to the temporary repository location.
- Restore the former STP excavation area and drainage areas (per approved plan) with clean backfill, riprap and filter bed material.
- Complete temporary repository location with a clean interim cover.

Dust Suppression

- Apply a temporary dust and erosion control agent to the ash deposit areas on the Humboldt Smelter AOI.
- To the extent practicable, utilize excavated residential soils as a base for dust suppression at select fine-grained surface areas subject to wind dispersion on the western portion of the main tailings pile (Iron King Mine Proper Area). The use of mulch, clean fill or dust control agent may be used in combination with the soils.

All activities will be performed in conformance with prescribed health and safety procedures. All sampling and analysis activities (removal confirmation and backfill soil certification) will conform to EPA approved methodologies and mandatory specifications for quality assurance and quality control and will be documented in an approved SAP. Specifications for parcel and STP restoration equipment and supplies, required utility clearances, dust suppression/ run-off control activities and other elements of the action will be documented in a Site-specific work plan. Off-site disposal is not required as all excavated residential soils and STP tailings materials will be consolidated and stabilized on-Site.

2. Contribution to remedial performance

The long-term cleanup plan for the Site:

The selected time-critical removal activities are not expected to impede future remedial activities on-Site.

Threats that will require attention prior to the start of a long-term cleanup:

The selected time-critical removal activities are intended to manage shortterm risk concerns while remedial actions to address long-term risk are planned and implemented.

The extent to which the removal will ensure that threats are adequately abated:

The selected time-critical removal activities will prevent direct human contact with contaminated surface soils at the sub-set of parcels in the In-Town Soil AOI shown to have the highest arsenic and lead concentrations. Removal and relocation of the STP and restoration of the surface water migration pathway will prevent a documented principal threat waste source from further impacting surrounding media. Providing for short-term dust suppression activities at the Humboldt Smelter AOI ash piles and Iron King Mine main tailings pile will reduce dispersion of contaminants into the community prior to implementation of the final remediation strategy.

Consistency with the long-term remedy:

EPA asserts that the selected time-critical removal activities are consistent with likely remedial alternatives for the Site. These alternatives include consolidation of Site-wide contamination to the Iron King Mine Proper Area for incorporation into a final main tailings pile containment and stabilization effort.

3. Applicable or relevant and appropriate requirements (ARARs)

Section 300.415(j) of the NCP provides that removal actions must attain ARARs to the extent practicable, considering the exigencies of the situation.

Section 300.5 of the NCP defines <u>applicable requirements</u> as cleanup standards, standards of control, and other substantive environmental protection requirements, criteria or limitations promulgated under Federal environmental or State environmental or facility siting laws that specifically address a hazardous substance, pollutant, contaminant, remedial action, location or other circumstances at a CERCLA site.

Section 300.5 of the NCP defines <u>relevant and appropriate</u> requirements as cleanup standards, standards of control and other substantive requirements, criteria, or limitations promulgated under Federal environmental or State environmental or facility siting laws that, while not "applicable" to a hazardous substance, pollutant, or contaminant, remedial action, location, or other circumstances at a CERCLA site, address problems or situations sufficiently similar to those encountered at the CERCLA site and are well-suited to the particular Site.

Because CERCLA on-site response actions do not require permitting, only substantive requirements are considered as possible ARARs. Administrative requirements such as approval of, or consultation with, administrative bodies, issuance of permits, documentation, reporting, recordkeeping, and enforcement are not ARARs for the CERCLA response actions confined to the Site.

The following ARARs have been identified for the proposed response action. All can be attained.

<u>Federal ARARs</u>: Potential Federal ARARs are the U.S. Department of Transportation Hazardous Materials Regulations, 49 C.F.R. Part 171, 172 and 173.

<u>State ARARs</u>: Potential state ARARs are the Arizona Soil Remediation Standards Rule, Pre-Determined Remediation Standards promulgated in Arizona Administrative Code § R18-7-205.

4. Project schedule

It is estimated that removal activities will take approximately 10 weeks to complete over one or more mobilizations.

B. Estimated Costs

Regional Removal Allowance Costs

Cleanup Contractor START Contractor SERAS Contractor \$ 1,450,000 \$ 120,000 \$ 50,000

Extramural Costs Not Funded from the Regional Allowance

\$ 0

Extramural Subtotal

\$ 1,620,000

Extramural Contingency (20%)

\$ 324,000

TOTAL, Removal Action Project Ceiling \$ 1,944,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Given the Site conditions, the nature of the hazardous substances documented on-Site and the potential exposure pathways to nearby populations described in Sections III and IV above, actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response actions selected in this Action Memorandum, will continue to present an imminent and substantial endangerment to public health or welfare, or the environment.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues with the Site identified at this time.

VIII. ENFORCEMENT

Please see the attached Confidential Enforcement Addendum for a discussion regarding PRPs and enforcement. In addition to the extramural costs estimated for the proposed action, a cost recovery enforcement action also may recover the following intramural costs:

Intramural Costs¹

U.S. EPA Direct Costs \$ 60,000

U.S. EPA Indirect Costs (47.71% of Spending \$1,944,000+ \$60,000) \$956,108

TOTAL Intramural Costs \$ 1,016,108

The total EPA extramural and intramural costs for this removal action, based on full-cost accounting practices that will be eligible for cost recovery, are estimated to be \$ 2,960,108. Of this, an estimated spending of \$ 1,944,000 comes from the Regional removal allowance.

¹ Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual costs from this estimate will affect the United States' right to cost recovery.

IX. RECOMMENDATION

This decision document represents the selected removal action for the Iron King Mine-Humboldt Smelter Superfund Site, Dewey-Humboldt, Yavapai County, Arizona as developed in accordance with CERCLA as amended and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Because conditions at the Site meet the NCP criteria for a time-critical removal, I recommend that you concur on the determination of imminent and substantial endangerment and the removal action proposed in this Action Memorandum. The total removal action project ceiling if approved will be \$ 2,960,108 of which an estimated \$ 1,944,000 comes from the Regional removal allowance. If you approve of this action, please indicate your decision by signing below.

Approved:

Daniel Meer, Assistant Director

Daniel Meer, Assistant Directo Superfund Division

Enforcement Addendum

Index to the Administrative Record

Figures

- 1. Site Location Map
- 2. Site Map
- 3. Humboldt Smelter Features
- 4. In-Town Parcel Assessment
- 5. STP Sampling Locations

Appendix A

Arsenic and Lead in Town-Soil – RI Data Spreadsheet March and June 2011 ERS Data Summary Consolidated STP Data Table

cc: Sherry Fielding, USEPA, OEM, HQ

bcc: Site File

H. Allen, SFD-9-2 M. O'Sullivan, SFD-6-2 S. Mueller, ORC-3 C. Temple, SFD-9-4

Index to the Administrative Record

- Superfund Lead-Contaminated Residential Sites Handbook, US EPA OSWER 9285.7-50, August 2003
- Removal Action Workplan, Iron King Mine Site, Brown and Caldwell, June 23, 2006
- Removal Action Completion Report (Volume 1), Brown and Caldwell, September 25, 2007
- Sampling and Analysis Plan, Revision 01) Iron King Mine-Humboldt Smelter Superfund Site, EA Engineering, Science, and Technology, Inc., September 13, 2008
- North American Industries Storm Water Pollution Prevention Plan, Brown and Caldwell, March 3, 2009
- Remedial Investigation Report (revision 01) Iron King Mine-Humboldt Smelter Superfund Site, EA Engineering, Science, and Technology, Inc., March 26, 2010
- Remedial Alternatives Evaluation Technical Memorandum (revision 01) Iron King Mine-Humboldt Smelter Superfund Site, EA Engineering, Science, and Technology, Inc., October 13, 2010
- Cover Alternatives Evaluation for Iron King Mine Main Tailings Pile, GEI Consultants, October 2010
- Draft Sampling and Analysis Plan, Iron King Mine-Humboldt Smelter Site, Ecology and Environment, Inc., March 2011
- Evaluation of Tailings Consolidation Options, Iron King Mine-Humboldt Smelter Superfund Site, GEI Consultants, April 4, 2011.
- Evaluation of Tailings Consolidation Options, Iron King Mine-Humboldt Smelter Superfund Site, GEI Consultants, June 30, 2011
- Removal Assessment Report, Iron King Mine-Humboldt Smelter Site, Ecology and Environment, Inc., (Pending)











LEGEND

- E&E Sample Location
 - EA Sample Location

200 Feet 100

Figure 5 Iron King Mine - Humboldt Smelter Assessment Small Tailings Pile Sample Locations Dewey-Humboldt, Yavapai County, AZ

ecology and environment, inc.

APPENDIX A

ARSENIC AND LEAD IN IN-TOWN SOIL

1. 1. 1. 1. 1.		10.00	2 2 min 1	12.2	A Section of the section of the	And a serie for an a	Arse	nie	1.1.1.1.1.	20 F. S. S. S. S.	1. A.	v	Leas	1. 1. 1. 1.	a Barris	S. 1. 1. 1. 1. 1.		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1						
Residential	Physical Address	Guleb	Remediat	ed Units	Mean	Maximum Concentration	1.1	1.52	Medium EP(Exposure	Mean Concentratio	Maximum Concentration			Medium EPC	Exposure Point	Arsenic Only CIS	Lead Only	Lead and		Parcel	Percent	Area	Volume
Yard		1926		3	1.	(Qualifier)	95% UCL	Medium EPC	Rationale	Concentratio	1. 3 N 1. 2 M	(Qualifier)	95% UCL	Medium EPC	Rationale	Concentratio	Code -	GIS Code -	CIS Code	Acreage	Area (sf)	not	(af)	(ev)
	Sand the standard of and and the tag	S. Sameral	1. Caller		(44 mg/kg	(66 mg/kg	2 Part Sugar	1 Second to 2	Sec. 2. 52	Sec. Alter	(27 mg/kg	(58 mg/kg					and the second states	High	GIS Code			avallable	(81)	(cy)
B1	12420 East Valuanti Boad	v	v	mg/kg	37.79	66.3	40.79	95%UCLM-N	Regional	40.79	23.17	58.2	26.95	95%UCLM-L	Regional	20.93				19 80	1.733.822			
003	12514 East Yavanai Street	Y	Y	mg/kg	76.73	160	100.3	95%UCLM-N	Regional	100.3	37.09	79	46.81	95%UCLM-N	Regional	46.81		Statute Sectors	2	0.57	24,713			
004	12516 East Coreley Street	Y	Y	mg/kg	113.2	180	136.1	95%UCLM-N	Regional	136.1	76.45	130	93.95	95%UCLM-N	Regional	93.95			2	0.62	27,065		1. 1. 1. 1. 1.	12.2
006	12755 East Main Street	Sec. Sec.	and the stand	mg/kg	31.45	75	42.11	95%UCLM-G	Regional	42.11	43.43	85	56.06	95%UCLM-N	Regional	56.06	2	3	2	0.40	17,629	25%	13,221	979
007	12755 East Main Street	1. 1. 1. 1.	Y	mg/kg	86.91	570	297.9	95%UCLM-C	Regional	297.9	56.72	100	71.18	95%UCLM-N	Regional	71.18		Contract of the second	2	1.49	64,998	160/	22 622	3 417
008	2830 South First Street	Y		mg/kg	44.27	240	130.9	95%UCLM-C	Regional	130.9	39.67	280	280.8	Maximum	UCLM>=Max	280	2	2	2	0.88	32 741	15%	27 829	2,417
010	120/9 East Kichards Lane	v	1.2.11	mg/kg	41.55	57	48.24	95%UCLM-0	Regional	48.74	51.55	100	65.96	95%UCLM-0	Regional	65.96	2	3	2	0.24	10.481	30%	7,337	543
011	12690 Richards Lane	Y		marka	31.25	86	45.94	95%UCLM-G	Regional	45.94	191.2	1300	882.9	97.5%UCLM-	Regional	882.9	2		2	0.23	10,195	25%	7,646	566
012	12712 East Richards Lane	Y		mg/kg	46.83	64	52.85	95%UCEM-N	Regional	52.85	85.58	370	140	95%UCLM-G	Regional	140	2	3	2	0.47	20,349	25%	15,262	1,131
013	12689 East Richards Lane	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		mg/kg	33.09	48	39.65	95%UCLM-N	Regional	39.65	66.29	120	83.95	95%UCLM-N	Regional	83.95	3	3	3 1	0.25	10,686			
014	12701 East Richards Lane		-	mg/kg	31.55	53	38.21	95%UCLM-N	Regional	38.21	39.63	110	69.29	95%UCLM-G	Regional	69.29	3		-	0.32	13,837	2504	19 076	1 220
015	12721 East Richards Lane		1.1.1.1	mg/kg	40.36	76	49.5	93%UCLM-N	Regional	49.5	108.4	230	211.8	95%UCLM-G	Regional	211.8	2	2	2	0.35	37.613	25%	28,209	2.090
017	12752 East Richards Lane	Y		mo/ka	46.64	87	57.2	95%LXTM-N	Regional	57.2	55.18	100	69.54	95%UCLM-N	Regional	69.54	2	3	2	0.54	23,600	25%	17,700	1.311
019	2971 South Third Street	Y	1. 1. 1.	mg/kg	29.64	57	36.35	95%UCLM-N	Regional	36.35	46.36	87	60,12	95%UCLM-N	Regional	60.12	3	3	3	2.60	113,410			
O20	2973 South Third Street	Y	10.000	mg/kg	49.82	89	63.38	95%UCLM-N	Regional	63.38	31.82	93	47	95%UCLM-G	Regional	47	2	3	2	0.48	20,787	1.1.1.1	1.20	1.1.1
OFS101	2997 Sweet Pea Lane		-	mg/kg	53.25	318	133.5	95%UCLM-C	Regional	133.5	103.1	238	130.4	95%UCLM-N	Regional	130.4	A CONTRACTOR		2	0.18	7,627	5%	7,246	537
OFS102	2985 Sweet Pea Lane		1.1.1.1	mg/kg	28.71	61.2	37.87	95%UCLM-N	Regional	37.87	64.4	120	87.63	95%UCLM-N	Regional	87.63	2	-	2	0.25	11,043	3084	14 144	1 049
OFS103	13030 Main Street	and the second second	- increased	mg/kg	45.77	116	66.25	95%UCLM-G	Regional	23.53	134.5	65.8	1 54.26	95%UCLM-G	Regional	289.2	2	3	3	0.40	10.093	3076	14,144	1,040
OFS104	2875 Amurite Street			mg/kg	20.44	42.8	33.53	994UKIM-N	Regional	10.03	45.01	698	388.5	95%UCLM-C	Regional	388.5	3	2		7.36	320,726	20%	256,581	19.00
OFS106	13619 Agus Fris Lane	1 1 5 5 1 2	1.1.1.1.1	mg/kg	40.98	68.3	49.01	95%UCLM-N	Regional	49.01	35.1	81.7	48.06	95%UCLM-N	Regional	48.06	2	and a state	2	3.01	131,257	10%	118,131	8,750
OF\$107	13325 Prescott Street	B. Sameran	1	mg/kg	62.42	113	84.23	95%UCLM-N	Regional	84.23	204.9	429	282	95%UCLM-N	Regional	282	a second second	2	2	6.59	286,872	10%	258,185	19,12
OFS108	Parcel: 402-06-028S	1.1.1.1.1.	-	mg/kg	70.93	256	119.7	95%UCLM-G	Regional	119.7	268	1380	627.7	95%UCLM-G	Regional	627.7	and the second		2	1.99	86,835	10%	78,152	5,789
OFS109	Parcel: 402-06-028U			mg/kg	50.42	113	70.02	95%UCLM-N	Regional	70.02	224.5	464	297.7	95%UCLM-N	Regional	297.7	2	2	2	1.//	70,902	3%	/3,114	5,410
OFSILI	2881 Second Street			mg/kg	20.34	45.3	26.74	95%UCLM-G	Regional	26.74	51.23	148	923.9	95%UCLM-N	Regional	16.23		and the second second	2	0.02	11 035	30%	7 725	572
OFS112	2680 Colina Street	1. 1. 1. 1.	1	marka	24.04	36.3	28.33	95%UCLM-N	Regional	28.33	15.84	23	18.04	95%UCLM-N	Regional	18.04	3	3.	3	0.26	11,270			
OPS113	2655 Colina Street	15.57.52	15 6 7	make	23.86	41.2	29.87	95%UCLM-	Regional	29.87	17.57	30.8	23.42	95%UCLM-N	Regional	23.42	3	3.1.4	3	0.44	19,160			
OFS114	Parcel: 401-08-012E		1140	mg/kg	74.76	151	104.3	95%UCLM-N	Regional	104.3	51.42	117	72.49	95%UCLM-N	Regional	72.49		3	2	0.63	27,503	5%	26,127	1,935
OFS115	13605 Agua Fria Lane	1819 13	1. 18 . 2	mg/kg	23.92	56.6	34.51	95%UCLM-N	Regional	34.51	36.3	94.1	66.69	95%UCLM-G	Regional	66.69	3	3	3	1.84	80,327	0.044	0.000	
OFS116	2840 Dana Street			mg/kg	114.8	677	246.1	95%UCLM-C	Regional	246.1	52.82	201	111.2	95%UCLM-L	Regional	111.2		State State	2	0.25	11,058	25%	8,293	1 721
OPS117	2845 First Street	Y	1. 7 5	mg/kg	54.15	168	123	95%UCLM-L	Regional	109.4	49.15	2050	95.13	93%UCLM-G	Regional	95.13		Contraction of Contraction	2	0.71	11 007	40%	6.604	489
OFS119	13080 Main Street	1	1.5	marka	41.97	119	65.57	99%UCLM-R	Regional	65.57	156	543	312.2	95%UCLM-G	Regional	312.2	2	2	2	0.48	21.001	25%	15,751	1,167
OFS120	2832 Dana Street	1.1.2.2	1	meke	18.02	25.6	20.52	95%UCLM-N	Regional	20.52	1826	18100	19818	Maximum	UCLM>=Max	18100	3	0	and the second second	0.25	10,934	40%	6,560	486
OFS121	2660 Colina Street	1. 1 1 1 1	· ·*, · · ·	mg/kg	43.57	80	57.23	95%UCLM-N	Regional	57.23	51.79	167	95.3	95%UCLM-G	Regional	95.3	2	3	2	1.27	55,441	15%	47,125	3,491
OF\$122	13420 Prescott Street	1.45	1 6 2 2 .	mg/kg	21.05	33.1	25.07	95%UCLM-N	Regional	25.07	55.88	192	123.1	95%UCLM-L	Regional	123.1	3.11	3	3	0.44	19,225			
OFS123	2750 Corral Street	-	100.66	mg/kg	20.62	37.3	26.53	95%UCLM-N	Regional	26.53	29.28	65.5	41.21	95%UCLM-N	Regional	41.21	-	1	-	0.81	30,114			and with a
OF\$124	2750 Corral Street	-	-	mg/kg	21.97	37.2	26.73	95%UCLM-N	Regional	26.73	36.57	69.3	47.07	93%UCLM-N	Regional UCI MonMax	47.07	3	3	-	0.70	41.305			
OFS125	13645 Agus Fris Lane	1000 1 11 N	- L /	marka	53.22	84.9	64.09	95%EXCLM-N	Regional	64.09	36	70.1	47.08	95%UCLM-N	Regional	47.08	2	3	2	2.49	108,603	20%	86,883	6,436
OFS127	2973 Third Street	Y	A	mg/kg	75.24	313	435.6	Maximum	UCLM>-Max	313	120.2	409	327.7	95%UCLM-C	Regional	327.7	0	2	2	0.48	20,787	5%	19,748	1,463
OFS128	2973 Third Street	Y	C 1 1 1 1	mg/kg	113.9	633	737.4	Maximum	UCLM>-Man	633	178.5	871	397.9	95%UCLM-G	Regional	397.9	S	2	2	2.60	113,410	5%	107,739	7,981
OF\$129	13394 Prescott Street	1.5.5	1.1.1.	mg/kg	22.55	34.6	26.7	95%UCLM-N	Regional	26.7	42.75	101	57.46	95%UCLM-N	Regional	57.46			1	0.60	26,125	1.22.14	2183.	
OFSI30	2663 S. Old Black Canyon		C. C. S.	mg/kg	16.96	24.3	18.71	95%UCLM-G	Regional	18.71	39.37	65.8	47.86	95%UCLM-N	Regional	47.86	3	3		0.17	16 830	1 - St. 1		
OFS131	2820 Azurite Street			marka	102.5	41.0	130.7	9376ULLM-N	Regional	130.7	949 7	4090	1792	95%UCLM-R	Regional	1792			2	0.23	9.970	30%	6.979	517
OFS133	13070 Main Street	1 1 1 1		marka	246.9	679	368.2	95%UCLM-N	Regional	368.2	1051	3130	1655	95%UCLM-N	Regional	1655	ALC: NO DO		2	0.24	10,338	25%	7,753	574
OFS134	12835 Main Street	1.604	1 1 1 1 I	mg/kg	23.18	47.2	29.7	95%UCLM-G	Regional	29.7	38.19	67.3	47.08	95%UCLM-N	Regional	47.08	3	3	3	0.88	38,427			
OF\$135	13239 Phoenix Street	1.125.1	1. 1. 1.	mg/kg	28.17	73.5	42.99	95%UCLM-G	Regional	42.99	69.08	278	131.5	95%UCLM-G	Regional	131.5	2	3	2	0.23	10,231	30%	7,161	530
OF\$136	2820 Azurite Strret	5 12 23	3.5	mg/kg	26.2	40.1	31.3	95%UCLM-N	Regional	31.3	46.58	70.7	57.73	95%UCLM-N	Regional	57.73	3	3.05		0.38	16,439			
OFS137	12821 East Chaparral Road	1.1.1	12 8 2.3	mg/kg	15.58	19.6	17.39	95%UCLM-N	Regional	17.39	47.68	93.8	04.98	93%UCLM-N	Regional	211 7	2	2	2	1.47	63 830	20%	51.064	3 793
OFS138	13197 Prescrit Street	1 3 8	0.000.000	mg/kg	40.72	18.9	17.71	99611CEM-N	Regional	12.78	27.66	36.2	30.65	95%LICI M.N	Regional	30.65	-	3	-	0.30	12.914	20/0	51,004	3,70.
OFS140	13220 Prescott Street	1.11		make	25.24	29.2	26.95	95%UCLM-N	Regional	26.95	97.8	147	118.5	95%UCLM-N	Regional	118.5	3	Ball - 3 Tress	3	0.18	7,906			
OFS141	2790 Calumet Street	11000		mg/kg	48.99	115	64.82	95%UCLM-G	Regional	64.82	325.8	746	435.2	95%UCLM-N	Regional	435.2	2	and the state	2	0.31	13,409	25%	10,057	745
OFS142	13052 Main Street	and the set	a de galação	mg/kg	67.07	331	377.4	Maximum	UCLM>-Max	331	229.5	1150	\$06.9	95%UCLM-G	Regional	\$06.9	0		2	0.31	13,717	25%	10,288	762
OFS143	13030 Main Street	18.68.2	15.13	mg/kg	53.04	146	76.57	95%UCLM-N	Regional	76.57	239.4	m	371.6	95%UCLM-N	Regional	371.6	2	2	2	0.23	9,881	10%	8,893	659
OFS144	13185 Prescott Street	24.2.2	-	mg/kg	23.44	34.8	27.12	95%UCLM-N	Regional	27.12	66.55	119	81.99	95%UCLM-N	Regional	81.99		1		0.15	12 051	3044	8 436	625
OFS145	2875 Dana Street		10.00	make	33.59	97	30.37	9374UCLM-G	Regional	30.37	45.36	138	67.66	OTHLICIM-N	Regional	67.66	3	Constant State	3	0.29	12,618	3070	0,450	023
OFS147	2873 South First Street	Y	1 1 1 1 1	malka	55.01	259	155.3	95%UCLM-C	Regional	155.3	41.58	215	126	95%UCLM-C	Regional	126	States and	344	2	0.63	27.238	15%	23,152	1,715
OFS148	2945 Sweet Pea Lane	1. 1. 2.6		mg/kg	106.1	203	133.1	95%UCLM-N	Regional	133.1	557.5	1040	692.9	95%UCLM-N	Regional	692.9	1.2.10	the state of the second	2	0.25	11,001	40%	6,601	489
OFS149	2819 South Calumet	CALIFORT	a the second of	mg/kg	18.74	33.1	22.4	95%UCLM-G	Regional	22.4	130.4	362	314.5	95%UCLM-C	Regional	314.5	3	2	and the second	0.22	9,769	25%	7,327	543
OFS150	13530 E. Prescott Street	1.1.8.8	1.1.1	mg/kg	14.65	22.5	16.97	95%UCLM-N	Regional	16.97	14.88	17.7	16.1	95%UCLM-N	Regional	16.1	- 3	100	-	1.68	73,246	9001	15 0.51	1.17
OFS151	2951 S. Third Street	- A	Continue.	mg/kg	38.19	. 96.5	54.82	95%UCLM-G	Regional	54.82	111.3	207	138.4	95%UCLM-N	Regional	138.4	2		4	0.49	7 375	23%	15,851	1,17
OFSI52	2775 S. Butte St.	1000	1 2 2 4	mg/kg	12.74	18.1	14.37	95%UCLM-N	Regional	14.37	21.6	37.6	25.88	93%UCLM-N	Regional	25.88		boor and the		0.20	8.534	30%	5.974	442
OF\$153	2734 S Colina	1		mg/kg	24.83	31.0	40.07	OTHER AL	Regional	49.97	41.18	126	69.94	95%LICIM-G	Regional	68.84	2	STOCKED BUCKTON	2	0.77	33.340	5%	31.673	2.34
OFS155	13370 E. Presentt St.	an inter dans		make	32.1	84.9	44.09	95%UCLM-M	Regional	44.09	40.6	50.4	44.82	95%UCLM-N	Regional	44.82	2	3	2	0.26	11,448	30%	8,014	594
OFS156	2549 S. Parker	112112		mg/kg	39.17	177	108	95%UCLM-C	Regional	108	12.8	32	1 17.21	95%UCLM-M	Regional	17.21		3	2	0.38	16,571	30%	11,600	859
OF\$157	2560 Colina Lane	1.3.5.		mg/kg	90.57	538	616.8	Maximum	UCLM>=Max	538	51.55	208	275.3	Maximum	UCLM>-Max	208	a service O and a	2	2 .	0.76	33,181	40%	19,909	1,47
OFS158	2630 S. Parker		1.000	mg/kg	18.06	39.3	22.84	95%UCLM-M	Regional	22.84	13.9	34.9	18.8	95%UCLM-M	Regional	18.8	3	3		0.29	12,555			
OFS159	2555 S. Parker	1. 1. 1.		mg/kg	18.78	35,4	24.35	95%UCLM-L	Regional	24.35	15.62	28.6	19.64	95%UCLM-M	Regional	19.64				2 10	01 212			
OFS160	13151 E Third Aller		-	mg/kg	29.17	30.5	52.02	95%UCLM-N	Regional	32.02	40.33	50.2	32.61	99%IKTER M	Regional	32.61				0.23	9.856			3 R. J.
OFS167	13029 R. Phoenix St	-	Contraction of the	make	30.40	176	101.5	95%UCIMC	Regional	101.5	171.2	1350	668.5	99%UCLM-C	Regional	668.5		1	2	0.15	6,426	30%	4,498	333
STANLES A	ENTRY BO & EPUREMA SPA	and the second second second	and an inclusion of the second	A MARK AN				Prese Lance	and the second second					and the second se	the second se		1.	and the second se				ALC: NOT THE REAL PROPERTY OF		

ARSENIC AND LEAD IN IN-TOWN SOIL

14 L 1		5 24		- 11	Man	Masimum	Are	enic		Francis	Man	Mashana	Len			Francisco	- Annala	1.141						
Residential Yard	Physical Address	Guich	Remediated ?	Units	Concentratio	Concentration (Onalidier)	95% UCL	Medium EPC	Medium EPC	Point	Concentratio	Concentration (Qualifier)	95% UCL	Medium EPC	Medium EPC	Point	Only GIS	Lead Only GIS Code	- Arsenic	Acreage	Parcel	Percent not	Area	Volum Cleane
		19.10	1.1.1	1.	(44 mg/kg	(66 mg/kg	4 11 - 21		KIUWIIK	R	(27 mg/kg	(58 mg/kg	1. je	-1977 I. I.	PARIONALIS		Code -	High	GIS Code	1.15	Area (si)	available	(sf)	(cy)
OF\$163	2691 S. Old Black Canyon	1	1.1.1.1.	mg/kg	20.82	35.5	25.07	95%UCLM-N	Regional	25.07	75.84	373 J	159.9	95%UCLM-L	Regional	159.9	3	2		0.17	7,466	25%	5,599	415
OFS164 OFS165	HWY 69 and Hill Street		in the second	mg/kg	24.7	44.1	99.2	95%UCLM-G	Regional	29.47	83.84	213	491.3	95%UCLM-G	Regional	118		COMPANY OF THE OWNER	2	0.04	11.147	23%	20,899	1,548
OF\$166	2707 S. Colina		N	mg/kg	24.22	43.5	29.46	95%UCLM-N	Regional	29.46	20.23	36.3)	35.63	95%UCLM-C	Regional	35.63	3	3	1	0.33	14,214			
OF\$167	3194 S. Green Valley Way	8	1	mg/kg	50.42	87.2	61.37	95%UCLM-N	Regional	61.37	74.74	166 1	107.3	95%UCLM-N	Regional	107.3	2	3	2	8.74	380,675	5%	361,641	26,788
OFS168	2745 S. Hecla St. 2810 Dana St	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		mg/kg	16.02	32.1	22.36	95%UCLM-N	Regional	22.36	85.73	135	144.6	95%UCLM-G	Regional	144.6	-			0.15	8,635			
OF\$109	2530 Parker	1. 1.1.1	1.1.1.1	mg/kg	21.78	34.1 J	- 25.55	95%UCLM-N	Regional	25.55	18.62	35	23.55	95%UCLM-N	Regional	23.55	3	3	3	2.51	109,538			
OF\$171	12516 Corley	4		mg/kg	59.31	97.6	73.43	95%UCLM-N	Regional	73.43	62.77	110	79.77	95%UCLM-N	Regional	79.77	2	3	2	0.62	27,065	10%	24,358	1,804
OFS172	2591 S. Colina		1.4.1	mg/kg	10.26	13.9	11.77	95%UCLM-N	Regional	11.77	9.66	11.8	10.72	95%UCLM-N	Regional	10.72	3		3	0.25	11,000			
OF\$173	2725 S. Jones Street 2701 S. Jones Street			mg/kg	30.05	55.1	36.4	95%UCLM-N 95%UCLM-N	Regional	36.4	51.3	84.9	63.76	95%UCLM-N 95%UCLM-N	Regional	63.76	3		1	0.39	6,808			신간하는
OFS175	2583 Colina	and the second	1. 1. 2. 1.	mg/kg	24.35	52.6	32,7	95%UCLM-N	Regional	32.7	20.94	52	32	95%UCLM-G	Regional	32	3	3	3	0.13	5,521			
OFS176	12972 Main Street			mg/kg	35.87	106	55.7	95%UCLM-G	Regional	55.7	365.9	760 J	502.8	95%UCLM-N	Regional	502.8	2	ALC: NO.	2	0.27	11,827	30%	8,279	613
OF\$177	12945 E. Prescott		5 5 1 1 1 1	mg/kg	15.28	22.3	17.73	95%UCLM-N	Regional	17.73	77.25	228	118.4	95%UCLM-G	Regional	118,4	-	2	2	0.45	19,676	1094	2016	216
OF5178	2816 S. Butte St.	1 1 1 1	1.11.1	mg/kg	22.99	39.1	28.31	95%UCLM-N	Regional	28.31	68.71	121	89.4	95%UCLM-N	Regional	89.4	3	3	3	0.07	3.017	1076	2,915	210
OFS180	2787 Hecla	in the second second	9.042	mg/kg	49.18	241	I 107.6	95%UCLM-C	Regional	107.6	113	368	207.7	95%UCLM-G	Regional	207.7	Sector County	2	2	0.56	24,522	10%	22,070	1,635
OFS181	2770 S. Butte	in states	1	mg/kg	53.48	102	69.85	95%UCLM-N	Regional	69.85	263.7	958	503.8	95%UCLM-G	Regional	503.8	2		2	0.16	7,071	30%	4,950	367
OF\$182	13650 E. Anna Fria			mg/kg	30.38	35.7	47.20	95%UCLM-G	Regional	32.69	316.2	30.8	35.03	95%UCLM-G	Regional	35.03	2			2.28	99 344	30%	5,198	385
OF\$184	2945 S. 3rd Street	1. 1. 1.		mg/kg	9.84	14.7	11.37	95%UCLM-N	Regional	11.37	21,96	48	29.83	95%UCLM-N	Regional	29.83	3	3	3	0.48	20,729			
OF\$185	3026 S. 3rd Street			mg/kg	29.56	121	82.25	95%UCLM-C	Regional	82.25	23.77	98.5	65.37	95%UCLM-C	Regional	65.37	Contraction of the local distance	3	2	1.94	84,299	25%	63,224	4,683
OFS186	2826 S. Butte St.	1		mg/kg	12.18	16.9	14.11	95%UCLM-N	Regional	- 14.11 -	33.93	83.5	45.95	95%UCLM-N	Regional	45.95	3			0.19	8,318			
OFS187	13059 E. Prescott		and the lot	mg/kg	37.12	72.6	47.1	95%UCLM-G	Regional	47.1	193.2	479	265.8	95%UCLM-N	Regional	265.8	2	2	2	0.57	24.803	5%	23.563	1.745
OF\$189	no address			mg/kg	20.59	32.8	24.41	95%UCLM-N	Regional	24.41	49.77	101	64.61	95%UCLM-N	Regional	64.61	3	3	3	0.24	10,402			
OF\$190	13003 Main Street	Sec. Cal		mg/kg	32.53	71.7	49.5	95%UCLM-L	Regional	49.5	89.76	228	164.5	95%UCLM-G	Regional	164.5	2	2	2	0.84	36,374	5%	34,555	2,560
OF\$191	13600 Lazy River Drive	1000		mg/kg	39.00	458	43.97	95%UCLM-N	Regional	27.14	10.7	172	76.94	95%UCLM-N	Regional	76 94	1			0.13	5 742	15%	125,914	9,327
OF\$193	1875 Dana	S		mg/kg	15.67	21.1	17.36	95%UCLM-N	Regional	17.36	31.46	58.7	38.4	95%UCLM-N	Regional	38.4	3	3	3	0.23	10,220			
OF\$194	13155 Prescott		· · · ·	mg/kg	15.8	25.9	18.35	95%UCLM-N	Regional	18.35	23.03	58.1	32.99	95%UCLM-G	Regional	32.99	THE STREET	3	3	0.16	7,101		1.1	
OF\$195	12967 E. Main Street	1 1 1	1.1.1	mg/kg	33.69	151	90.85	95%UCLM-C	Regional	90.85	112	350	199.4	95%UCLM-G	Regional	199.4		2	2	0.31	13,603	25%	10,202	756
OF\$190	2627 S. Reno Dr.		11.41.000	mg/kg	14.15	22.9	17.15	95%UCLM-N	Regional	17.15	10.76	15.2	12.39	95%UCLM-N	Regional	12.39	3	3	CONTRACTOR OF	0.34	15,000	30%	9,328	/00
OF\$198	12995 Main Street	2		mg/kg	14.1	21.9	17.32	95%UCLM-N	Regional	17.32	49.82	113	72.04	95%UCLM-N	Regional	72.04	3	3	3	0.50	21,987			
OF\$199	13611 E. Agua Fria La.		-	mg/kg	57.24	165	85.42	95%UCLM-G	Regional	85.42	91.35	253	137.2	95%UCLM-G	Regional	137.2	E TOPE NAME	3	2	1.75	76,339	25%	57,254	4,241
OF\$200	3300 Green Valley Way 3150 or 3250 Green Valley Way	-	-	mg/kg	30.88	69.8	51.78	95%UCLM-N	Regional	20.78	29.08	43.0	56.54	95%UCLM-N	Regional	56 54	2	-	2	1.61	70 271	10%	63 244	4 685
OF\$202	2971 S. Third Street	5	1 5 3	mg/kg	20.2	29.9	22.98	95%UCLM-N	Regional	22.98	40.79	134	72.74	95%UCLM-G	Regional	72.74	3	3	3	0.81	35,272	1070	05,677	4,005
OF\$203	13425 E. Prescott		1.1.1	mg/kg	80.74	237	120.3	95%UCLM-G	Regional	120.3	175.3	469	250.1	95%UCLM-N	Regional	250.1		2	2	4.77	207,826	5%	197,435	14,625
OF\$204	2737 Old Black Canyon		1	mg/kg	27.22	35.3	30.93	95%UCLM-N	Regional	27.13	43.09	76.6	50.5	95%UCLM-N	Regional	50.5			3	0.17	7,472			
OF\$205	13211 or 13215 Shawnee Lane	1		mg/kg	22.35	26.5	24.17	95%UCLM-N	Regional	24.17	42.47	64.2	49.69	95%UCLM-N	Regional	49.69	3	3	3	0.87	37.821			
OF\$207	2745 Jones St.	1	1. 6 . 6 .	mg/kg	18.33	35.6	23.57	95%UCLM-N	Regional	23,57	23.08	46.7	31.53	95%UCLM-G	Regional	31.53	3	3	3	0.26	11,141			
OF\$208	2565 Hill Street	1.1.1.1	1.1	mg/kg	101.4	817	893.1	Maximum	UCLM>=Max	817	81.58	576	629.1	Maximum	UCLM>=Max	576	0.00		2	0.24	10,388	25%	7,791	577
OF\$209	2858 Hill Street		1	mg/kg	22.24	42.9	27.3	95%UCLM-N	Regional	27.3	23.19	41	28.58	95%UCLM-0	Regional	28.58	3	3	3	0.24	10,388			
OF\$211	2557 S. Hill Street	1.1.1	1 1 1 1	mg/kg	21.62	35.7	25.65	95%UCLM-N	Regional	25.65	62.74	253	134.8	95%UCLM-L	Regional	134.8	3	3	3	0.24	10,367			
OF\$212	2578 Huron St.			mg/kg	12.31	16.1	1 13.44	95%UCLM-N	Regional	13.44	12.45	28.2 1	15.83	95%UCLM-G	Regional	15.83	3	3	3	0.21	9,255		12.11	8 F []]
OFS213	13190 Prescott St.	1.1	-	mg/kg	38.48	51.6	48.7	95%UCLM-N	Regional	48.7	147.0	343	199.1	95%UCLM-N	Regional	199.1	2	2	2	1.12	48 949	10%	7,814	3 263
OF8215	2918 S. Third	1.4.4	1 22.2	mg/kg	106.6	441	207.7	95%UCLM-G	Regional	207.7	111.6	515	218.5	95%UCLM-G	Regional	218.5	Contract Of Contract of	2	2	2.10	91,450	5%	86,878	6,435
OF\$216	2690 Butte St.	(1.2.1	1.2	mg/kg	16.21	31.9 1	19.94	95%UCLM-G	Regional	19.94	22.1	39 J	26.26	95%UCLM-N	Regional	26.26	3	3	3	0.32	13,979			
OFS217	13070 Phoenix St.	the second second		mg/kg	17.69	22.8	1 19.3	95%UCLM-N	Regional	19.3	22.01	35.3 J	26.08	95%UCLM-N	Regional	26.08		3		0.26	11,497			
OF\$219	2625 Hill Street		1	mg/kg	16.12	26.5	1 19.2	95%UCLM-N	Regional	19.2	18.17	28.5	22.52	95%UCLM-N	Regional	22.52	3	3	3	0.24	10,387			
OF\$220	2651 Hill Street	1. 1. 1. 1. 1.	61 B. S.	mg/kg	22.12	37	21	95%UCLM-N	Regional	27	27.12	48	33.43	95%UCLM-N	Regional	33.43	3	3	3	0.56	24,237			
OFS221	13475 E. Prescott			mg/kg	75.33	150	99.35	95%UCLM-N	Regional	99.35	136.7	307	192.7	95%UCLM-N	Regional	192.7	A SHEET COLORAD	2	2	8.09	352,464	5%	334,841	24,803
OF\$222 OF\$223	2820 Hecia 12743 Richards Lane			mg/kg	134.2	579	253.1	95%UCLM-G	Regional	85.53	219.3	456	296.2	95%ICLM-N	Regional	296.2	Statistics of the local division of the	2	2	0.44	23 437	5%	13,393	1 649
OF\$224	12770 E. Richards	P		mg/kg	36.99	78.7	48.51	95%UCLM-N	Regional	48.51	69.63	185	98.56	95%UCLM-N	Regional	98.56	2	3	2	1.43	62,151	5%	59,044	4,374
OF\$225	12752 E. Richards	1 S. S.		mg/kg	82.51	157	119.1	95%UCLM-G	Regional	119.1	153	351	209.6	95%UCLM-N	Regional	209.6	and the second second	2	2	1.36	59,256	5%	56,293	4,170
OFS226	12818 E. Richards	1.1.1	-	mg/kg	207	618	336.4	95%UCLM-G	Regional	336.4	312.5	904	462.8	95%UCLM-N	Regional	462.8			2	0.92	40,288	10%	36,259	2,686
OF\$228	2655 S JONES ST		-	mg/kg	17.88	36.6	22.99	99%LICEM-N	Regional	22.99	60.51	107 1	81.07	95%UCLM-0	Regional	81.07			3	0.23	9.648	2370	0,240	011
OF\$229	13336 E WELLS ST .	1000		mg/kg	130.5	652	299.3	95%UCLM-G	Regional	299.3	572.6	2360	1322	95%UCLM-G	Regional	1322	Part of the	0	2	0.37	16,102	30%	11,272	835
OFS230	2745 Calumet St.		-	mg/kg	31.39	135	54.93	95%UCLM-G	Regional	54.93	144.9	1060	1159	Maximum	UCLM>-Max	1060	2		2	0.24	10,465	25%	7,849	581
OF8231 OF8232	2778 Hecia St. 12908 Main St		1	mg/kg	16.78	28.1	25.65	95%UCLM-N	Regional	23.03	768.7	7310	95.73	Maximum	UCLM>=Max	7319	1	a standard		0.17	11,653	40%	6,992	518
OF\$233	2931 S. Third Street	1		mg/kg	44.32	64.2	51.92	95%UCLM-N	Regional	51.92	298.7	633 J	416.8	95%UCLM-N	Regional	416.8	2		2	0.24	10,420	25%	7,815	579
OF\$234	2645 S JONES ST .	1. 1.2. 1	1 2 2	mg/kg	27.33	40.7	31.07	95%UCLM-N	Regional	31.07	90.58	184 J	115.2	95%UCLM-N	Regional	115.2	3	3	3	0.22	9,683			
OFS235	13230 E THIRD ST .		1 1 1	mg/kg	29.62	37.9	32.81	95%UCLM-N	Regional	32.81	44.49	69.8 J	54.63	95%UCLM-N	Regional	54.63	-		3	0.21	9,360	250/	17 002	1 3 3 6
OF\$236 OF\$237	2083 Jones St. 2900 or 2930 Holiday Dr	1.1	1	mg/kg	40.58	73.7	43.44	95%UCLM-N	Regional	52.42	52.09	80.1	64.3	95%UCLM-N	Regional	64.3	2	3	2	4.46	194.114	10%	174.702	12.94
OF\$238	13150 Prescott St.		1.1	mg/kg	19.13	21.9	20.62	95%UCLM-N	Regional	20.62	43.09	63.4	50.66	95%UCLM-N	Regional	50.66	3	3	3	0.18	7,870	111		
000000	13215 Prescrit St	1.1.2	1	ma/ka	20 38	263	22.62	95%UCLM-N	Regional	22.62	42.15	87.3	55.23	95%UCLM-N	Regional	55.23	3	3	3	0.15	6.456			
OFS239	12012 1100000 00.	-	-	1110 0.0	20.30											10.01	and the second se			0.00	10 00/			
OFS239 OFS240	2874 Dana St.		1	mg/kg	21.94	34.2	27.11	95%UCLM-N	Regional	27.11	47.1	112	67.91	95%UCLM-N	Regional	67.91	3	3	3	0.37	16,294			

ARSENIC AND LEAD IN IN-TOWN SOIL

1. S. S. S. S.			1 2 2 1 23	3 1 1 1 Nov.	Arrenie						Lett.					191.55								
Residential Yard	Physical Address	Guich	Remediate ?	d Units	Mean Concentratio R (44 mg/kg	Maximum Concentration (Qualifier) (66 mg/kg	95% UCL	Medium EPC	Medium EPC Rationale	Exposure Point Concentration	Mean Concentratio a (27 mg/kg	Maximum Concentration (Qualifier) (58 mg/kg	95% UCL	Medium EPO	Medium EPC Rationale	Exposure Point Concentratio	Arsenic Only GIS Code -	Lead Only GIS Code High	Lead and Arsenic GIS Code	Acreage	Parcel Area (sf)	Percent not available	Area Cleaned (sf)	Volume Cleaned (cy)
OFS243	13165 Prescott St.	144-117	1.4.1.1	mg/kg	21.87	28.8 3	24.42	95%UCLM-N	Regional	24.42	40.7	89.6	60.17	95%UCLM-C	Regional	60.17	3	3	3	0.16	7,101		1.5.2.1	1.1
OFS244	2575 Hill Street	14 18 L	1.	maka	58.01	339 3	377.1	Maximum	UCLM>-Max	339	20.34	40.3	25.55	95%UCLM-N	i Regional	25.55	0	3	2	0.24	10,387	30%	7,271	539
OFS245	1660 S. Colina Lane	1. 9.15		mg/kg	11.75	18.2	13.68	95%UCLM-N	Regional	13.68	8.19	10.9	9.234	95%UCLM-N	Regional	9.234	3.15	3. 1. 3.	3	0.37	16,241	1. 2. 1. 1.	Sur ente	
OFS246	13330 E WELLS ST .		1.4.1	ma/kg	109.9	525	215.5	95%UCLM-G	Regional	215.5	349.6	2120	755.5	95%UCLM-0	Regional		0		2	0.37	16,086	30%	11,260	834
OFS247	13032 E. Prescott St.	1.12.1.1	1.8	mg/kg	105.2	785	858.8	Maximum	UCLM>-Max	785	173.4	1170	453.5	95%UCLM-C	Regional	453.5		Sec. 1	2	0.14	5,920	5%	5,624	417
OFS248	2797 Dana Street/1861 Dana	S. 25	1 a	mg/kg	27.47	38.1	31.56	95%UCLM-N	Regional	31.56	59.98	201	98.23	95%UCLM-0	Regional	98.23	1000 3	3	311	0.55	23,904			
OF\$249	2885 S. Omega	1.	12.7	mg/kg	12.54	15.4	13.63	95%UCLM-N	Regional	13.63	11.69	19.3	13.44	95%UCLM-N	A Regional	13.44	. 3	3	3	0.29	12,734			
OF\$250	2280 Edd's Sand Trail	19 1 L	A. 3.	mg/kg	21.03	35	24.7	95%UCLM-N	Regional	24.7	32.36	61.4 J	42.07	95%UCLM-N	Regional	42.07	3	3	19 1 1 - 3 - 1 - 1	5.41	235,632			
OF\$251	2735 S Corral St	2. 8.14		mg/kg	33.06	170	100.1	95%UCLM-C	Regional	100.1	10.64	15.3 J	12.08	95%UCLM-N	Regional	12.08	a second second	3	2	0.48	20,912	40%	12,547	929
OF\$252	3047 S. Third St.	· · · · ·	· :	mg/kg	37.45	48.9	43.39	95%UCLM-N	Regional	43.39	84.65	140	104.2	95%UCLM-N	Regional	104.2	2	1. H 3 190	2	20.72	902,373	5%	857,254	63,500
OF\$253	2846 S. Holiday Dr.	· · · · · · · · · · · · · · · · · · ·		mg/kg	58.01	77.8	65.25	95%UCLM-N	Regional	65.25	58.41	99.4	71.88	95%UCLM-N	Regional	71.88	2	3	2	2.19	95,227	15%	80,943	5,996
OFS254	2480 S. S.R. 69			mg/kg	53.13	119	71.06	95%UCLM-G	Regional	71.06	52.01	139	77.38	95%UCLM-0	Regional	77.38	2	3	2	1.41	61,318	10%	55,186	4,088
OFS255	2430 S. S.R. 69		1	mg/kg	30.4	51.8	37.96	95%UCLM-N	Regional	37.96	31.38	64	41.11	95%UCLM-N	Regional	41.11	3	3	3	2.04	89,047			
OF\$256	13220 E THIRD ST .	The second second		mg/kg	29.45	36.2	31.66	95%UCLM-N	Regional	31.66	31.8	46.8	38.68	95%UCLM-N	Regional	38.68	3	3	3	0.21	9,352			
OF\$257	2650 Butte St.	医肠周周		mg/kg	23.68	28.9	26.87	95%UCLM-N	Regional	26.87	47.98	69.9	58.96	95%UCLM-N	Regional	58.96	3	3	3	0.93	40,561	1.1.1.1.1.1	1.2.22	
OF\$258	13300 E WELLS ST .	100 B	1	mg/kg	39.47	89.9	52.69	95%UCLM-G	Regional	52.69	148	516	255.6	95%UCLM-0	Regional	255.6	2	2	2	0.74	32,345	40%	19,407	1,438
OF\$259	Third Alley and Sweet Pes Alley	1 1 2 3	1. S. C. A. A.	mg/kg	30.44	52.4	35.75	95%UCLM-G	Regional	35.75	56.14	119	111.3	95%UCLM-0	Regional	111.3	3	3 3	3	4.37	190,353	a that a	1. 1. 1. 1. 1. 1.	
OFS260	Third Alley and Sweet Pes Alley	Trans and the	1. 1. 1. 1. 1.	mg/kg	157.6	348	205.9	95%UCLM-N	Regional	205.9	746.8	1820	1025	95%UCLM-N	Regional		0		2	0.86	37,336	25%	28,002	2,074
OFS261	13625 E. Lazy River Dr.	1. 1. 1. 1.	12 1 2 1	mg/kg	53.82	70.8	58.24	95%UCLM-N	Regional	58.24	45	164	73.85	95%UCLM-0	Regional	73.85	2	3	2	1.19	51,984	10%	46,785	3,466
OF\$262	13040 E. Phoenix St.	1. 1. 1. 1.	E	mg/kg	27	44.7	33.29	95%UCLM-N	Regional	33.29	89.5	305	179.7	95%UCLM-0	Regional	179.7	3	2	State of the second	0.18	7,969	50%	3,984	295
OFS263	2792 Dana Street		10.05	mg/kg	20.86	30.7	23.33	95%UCLM-N	Regional	23.33	28.04	75.1	38.77	95%UCLM-N	Regional	38.77	3	3	3	0.25	10,795	. 7 A D.	1.1.1.2	i i na cha
OFS264	East of NAI Trailer		1104 E	mg/kg	307.7	741	417.9	95%UCLM-N	Regional	417.9	195.1	419	. 255.7	95%UCLM-N	Regional	255.7		2	2	22.72	989,818	- 5%	940,327	69,654
OFS265	2790 S. Azurite		1. 1. 1. 1.	mg/kg	34.25	66.4	43.32	95%UCLM-G	Regional	43.32	78.93	196	123.8	95%UCLM-0	Regional	123.8	2	3	2	0.17	7,438	40%	4,463	331
OFS266	Town Hall - Joel Berman	1999 B.	1.12.14.3	mg/kg	13.32	14.9	14.02	95%UCLM-N	Regional	14.02	12.32	18.4	14.43	95%UCLM-N	Regional	14.43	3	3	Contraction (Section)	2.76	120,194		1. 1. 1. 2. 31	
OFS267	2689 Hill Street	1	a	mg/kg	65.78	128	86.31	95%UCLM-N	Regional	86.31	139.7	285	193.1	95%UCLM-N	Regional	193.1		2	2	0.46	20,150	20%	16,120	1,194
OFS268	Lazy River Drive	1.00	1.1.1.1.1	mg/kg	67.49	124	90.58	95%UCLM-G	Regional	90.58	91.7	234	153.1	95%UCLM-0	Regional	153.1		2	2	2.19	95,520	20%	76,416	5,660
19	Street Street St.			1.11					110.11	4. 3.57			C 22	Dark Red	= Subject to	Remediation	10.18						5,764,966	427,034
													541 1 3	Red	= Subject to	Remediation	28	16		S. 10. 1	Total Are	a in Acres	132	Sec. 21
													1, 3, 3	Yellow	= Subject to	Remediation	47	32	93	New T	otals Includ	e Areas Fro	m GIS But	Do Not
84 A. A.													1. 2. 6. 7	Green = N	ot Subject to	Remediation	93	127	85	Reflect R	eduction In	Volumes A	ssociated Y	With Large

Definitions: 95%UCL = 95 percent upper confidence limit of the mean NA = Net Applicable mg/kg = milligrams per kilogram USEPA = United States Environmental Protection Agency

 Nate:

 Statistic calculated by the USEPA program. ProUCL 4.0. ProUCL outputs are presented in Appendix X.

 Low 95Detects indicates low percentage of detects.

 UCLAM-Maximum indicates that the recommended 95 UCL ecceeds the maximum detected value, therefore the maximum detected value is used.

 955UCLAM-indicates that the 95 percent upper confidence limit on the mean is based on the non-parametric Chebyther test.

 955UCLAM-C indicates that the 95 percent upper confidence limit on the mean is based on the non-parametric Chebyther test.

 955UCLAM-C indicates that the 95 percent upper confidence limit on the mean is based on the non-parametric Chebyther test.

 955UCLAM-C indicates that the 95 percent upper confidence limit on the mean is based on the non-parametric Chebyther test.

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 955UCLAM-C indicates that the 95 percent upper confidence limit on the mean is based on the non-parametric Schebyther test.

 955UCLAM-C indicates that the 95 percent upper confidence limit on the mean is based on the non-parametris Chebyther test.

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Description Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>			Inc	on King Mir	ne - Humbo	Idt Smelter Assessment				
The 10:00:00:00:00:00:00:00:00:00:00:00:00:0	성 이 관계에 있는 것이		Sar	npies Colle	Results	i 5 - 10 and June 1, 2011 in mg/kg				
Sample D Instruct ^{ar} Versity Avenue Leed 078-002 07-002-Cmp 34.003196/17 (12.20024963 300 600 078-308.011-002-Cmp 34.00286400 11.22384481 64 170 078-002 070-002-Cmp 34.00286401 12.22845811 12.22845811 100 340 078-002 070-002-Cmp 34.00286401 12.22845814 61 320 078-002 070-002-Cmp 34.00284611 12.22845814 61 320 078-002 070-002-Cmp 34.00284711 12.22845814 61 320 100 67 34.0028461 12.22878918 44 300 078-002 070-070-Cmp 34.00018411 12.28878918 500 6100 075-380-607-062 mb 34.00018411 12.28878918 68 100 075-380-607-062 mb 34.00018411 12.28878918 100 100 075-380-607-062 mb 34.00018411 12.28878918 100 100 100 100 100 100 100 112.28878918 100 100 100 100 100 100 112.28878918	TDD No. 02-09-10-09-0004	 A. S. C. S. C. S. S.						E&E Pro	ect No.: 00269	3.2110.01RA
Bits 2020/01/202 Description Description Description Description 078-2020/01/202 078-302	Sample ID	Latitude*	Longitude*	Arsenic	Lead	Sample ID	Latitude*	Longitude* (West)	Arsenic	Lead
07:502:000:200:00:1 07:502:000:200:00:1 07:503:00:00:00:00:00:00:00:00:00:00:00:00:0	OFS-002-001-002-Comp	34.503319517	112,250249993	330	660	OFS-306-001-002-Grab	34.499854030	112.236344459	54	170
OFF_0002.000_Comp Macrossector 1200 CPF-308-000_Conc_BM Macrossector 1.800 OFF_0002_000_Conc_BM Macrossector	OFS-002-002-002-Comp	34.503358865	112.250138714	410	220	OFS-306-002-002-Grab	34.500047566	112.236345316	110	340
OFF_002_004-066_mb 34.5002018304 112_2284/8134 210 300 OFF_002_004-066_mb 34.500201810 112_2284/8134 84 300 OFF_002_004-066_mb 34.50021162 112_2284/81717 172_77 77 72 OFF_002_014-062_mb 34.50021162 112_2284/8174 17 72 72 75 74 74 75 74 74 75 74 74 75 74 74 77 72 75 74 74 77 72 75 74 74 77 72 75 74 74 74 77 72 75 74 74 77 72 75 74 74 77 73 74 74 74 77 73 34<	OFS-002-003-002-Comp	34.503382026	112.249935120	530	350	OFS-306-003-002-Grab	34.500196742	112.236334493	61	260
OFF-002-000-046-cmb 34.50027700 112.2002718 28 200 DFS-002-000-046-cmb 34.500271401 112.20027030 28 31 DFS-002-000-046-cmb 34.500271401 112.20027030 28 31 DFS-002-000-046-cmb 34.500271401 112.20027020 28 40 DFS-002-000-046-cmb 34.500271402 112.200270271 12 78 DFS-002-010-046-cmb 34.50027171 112.200270271 12 78 40 DFS-002-010-046-cmb 34.50027171 12.20087171 112.20087171	OFS-002-004-006-Grab	34.503295364	112.250959223	1000	930	OFS-306-004-002-Grab	34.500006418	112.236498134	210	300
Dr. 10.0000000000000000000000000000000000	OFS-002-005-048-Grab	34.503297700	112.250961850	650	580	OFS-306-005-002-Grab	34.500156656	112.236639183	20	360
Science Science <t< td=""><td>OFS-002-006-024-Grab</td><td>34.503211124</td><td>112.250848940</td><td>1500</td><td>2900</td><td>OFS-306-006-002-Grab</td><td>34.500356445</td><td>112.236700308</td><td>16</td><td>71</td></t<>	OFS-002-006-024-Grab	34.503211124	112.250848940	1500	2900	OFS-306-006-002-Grab	34.500356445	112.236700308	16	71
0F8-002-080-078-0mb 45.0303638 172.25080708 500 400 0F8-002-070-074-0mb 45.030449102 172.20087708 180 0F8-002-070-074 45.00049102 172.20087097 181 490 0F8-002-071-074-07mb 45.00049102 172.20087178 190 1500 0F8-007-070-072-07mb 45.000549102 172.27885493 28 83 0F8-002-071-072-07mb 45.00054917 172.200807047 172.200807047 172.20080704 172.7 172 0F8-002-071-070-070-070 45.000518001 172.20040724 18.12.20040744 33.3 4.5 0F8-100-071-002-07mp 44.0000888 172.20040744 33.3 34.000097666 27.1 165 0F8-07-00-070-070-070 45.0001807666 172.20190020 17.7 165 0F8-107-001-070-070 45.0001807666 172.20190020 17.7 165 0F8-107-001-070-070 45.000180766 172.201907676 172.201907020 172.201907020 172.201907020 172.20190702007 172.20190702007 172.20190702007 172.20190702007 172.20190702007 172.20190702007 172.20190702007 172.	OFS-002-008-060-Grab	34.503176677	112.250799624	1900	4100	OFS-306-007-002-Grab	34.500268035	112.236457170	37	82
OFE-002-01-04-2-mb 45.00391182 112.230301191 64 180 OFE-002-01-04-2-mb 45.00351701 112.230301194 14.230301194 17 27 OFE-002-01-04-2-mb 45.00352057 112.23080174 17 27 7 11 0 0 0 55.001-002-0-mb 45.0005201 112.23080174 17 27 OFE-002-011-04-0-mb 34.000520057 112.23000278 112.23000278 11 8.500578000 112.23000278 11 8.500578000 112.23000278 11 8.500578000 112.23000278 11 8.500578000 112.23000278 11 8.500578000 112.23000278 11 8.500578000 112.23000788 23.00075801 112.2300788 12.300788	OFS-002-009-018-Grab	34.503036338	112.250807296	500	400	OFS-306-008-002-Grab	34.500456151	112.236587057	53	140
CF8-002-011-042-orab 34.00244127 112.23983983 28 63 CF8-002-012-07-orab 34.002557 122.03981974 112.23983983 28 63 CF8-002-012-07-orab 34.0025571 122.03981974 112.23093054 34.00253022 112.23998744 31 34. CF8-002-011-002-orab 34.00025781 12.23094744 31 34.00 34.00053021 112.23998744 31 34.00 CF8-002-011-002-orab 34.00025001 12.23990202 12.33990202	OFS-002-010-042-Grab	34.503036192	112.250807013	85	35	OFS-306-009-002-Grab	34.500439106	112.236359154	54	180
OFB-00.2012-072-Orab 34.00820257 111 [OFB-307-004-002-Orab 34.0080230 112.23987744 17 27 OFB-00.2015-04-Orab 34.00302761 112.20068137 [IO0 2200 [OFB-307-040-02-Orab 34.00030287 112.23987788 34.4 OFB-00.2016-04-Orab 34.003020761 112.20068137 [IO0 2200 [OFB-307-040-02-Orab 34.000200611990 112.238170022 115 87.7 OFB-101-001-002-Oram 34.400006888 112.2380720861 [II2.238072087 112 112.83877886 [II2.33877886] [II2.33877886] [II2.33877886] [II2.33877887 [II2.238872878] [II2.2388728878] [II2.2388728878] [II2.238887288] [II2.238887288]	OFS-002-011-042-Grab	34.502848127	112.250677198	1600	1500	OFS-307-001-002-Grab	34.500577490	112.237883803	26	83
OPE-002-013-044-Orab 34.5027(20472) 112.2206(20354) 25 6.9 OPE-002-015-042-Orab 34.5007(302) 12.2206(20354) 22.01 0 OPE-002-015-042-Orab 34.5007(302) 12.2206(20354) 22.01 0 OPE-002-015-042-Orab 34.5007(302) 12.2206(20354) 22.01 0 OPE-012-0102-Oram 34.800012861 12.23007(348) 22.01 0 0 22.01 0 0 22.0007(340) 22.01 0 0 22.0007(340) 12.2306(7866) 12.2306(7866) 17 2.30 0 0 2.30 0 0 2.3007(360) 0.2206(7666) 12.2307(7666) 12.2307(7666) 17 2.30 0 0 2.3007(360) 0.22367(760) 12.2307(7666) 17 2.30 0 0 0 0.3007(377) 12.2306(766) 10 2.01 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 </td <td>OFS-002-012-072-Grab</td> <td>34.502852557</td> <td>112.250681276</td> <td>79</td> <td>11</td> <td>OFS-307-002-002-Grab</td> <td>34.500536220</td> <td>112.237965744</td> <td>17</td> <td>27</td>	OFS-002-012-072-Grab	34.502852557	112.250681276	79	11	OFS-307-002-002-Grab	34.500536220	112.237965744	17	27
Unstance 45.00302(16) 11.22805000 11.2 6.1 OFS-000-01-02-0rm 34.40006688 11.2380706 12.23810020 12 15 OFS-010-001-02-0rm 34.40006688 11.23807066 25 100 12.23810020 12 15 OFS-010-001-02-0rm 34.40006688 11.23807066 21.1 28.6 01.23807066 25 100 01.23807066 25 100 01.23807066 25 100 01.23807066 25 100 01.23807067 11.23807067 11.23807076 11.23807076 11.23807076 12.2380706 12.2380706 12.23807076 </td <td>OFS-002-013-084-Grab</td> <td>34.502752472</td> <td>112.250650354</td> <td>25</td> <td>8.9</td> <td>OFS-307-003-002-Grab</td> <td>34.500553865</td> <td>112.238047043</td> <td>31</td> <td>3.4</td>	OFS-002-013-084-Grab	34.502752472	112.250650354	25	8.9	OFS-307-003-002-Grab	34.500553865	112.238047043	31	3.4
Chi Chicken Line and Control 1, 14-00-000001 000	OFS-002-014-006-Grab	34.503303278	112.250568137	1000	2200	OFS-307-004-002-Grab	34.500591350	112 238100226	12	15
cords_stiscoti_col2_comp3_4_400000885 112_230270002 7.7 116:3 OFS-307-007-002-cmp_3_4_500044503 12_23027005 7 7 115:3 OFS-1102-002-00m_3_4_400220455 112_2302716652 21.2 28.8 DFS-307-000-002-cmp_3_4_50005152 112_230280707 7 34 OFS-1102-002-000-cmp_3_4_40022025 112_230216622 12.9 12.1 DFS-307-000-002-cmp_3_4_50005152 112_230280707 7 34 OFS-1102-001-002-cmp_3_4_40022002 34,40022002 112_220186 15 26 DFS-307-001-002-cmp_3_4_501320763 112_220180 32 10 OFS-110-001-002-cmp_3_4_50122 112_220186 16 26 DFS-308-001-002-cmp_3_4_501320263 112_220180 32 10 OFS-110-001-002-cmp_3_4_501416 112_241766 84 51 OFS-308-001-002-cmp_3_4_5013802267 420 420 76 76 306-001-002-cmp_3_4_501380267 112_2016662 440 44 76 76 306-001-002-cmp_3_4_501380727 112_20460140 64 480 76 76 306-001-002-cmp_3_4_501387727 112_20460140 64 49	OFS-101-001-002-Comp	34 499066588	112 236003748	32.8	43.3	OFS-307-006-002-Grab	34.500765904	112.238067868	25	160
OFE-102-001-002-Comp 34.490234468 112.23221662 21.2 28.8 OFE-307-0020-Comp 34.49038873 112.238138213 12.23813813 13.9 OFE-105-0020-Comp 34.49038873 112.238138213 12.9 12.1 OFE-307-0020-Comp 34.500578504 112.23885280 22.9 0.1 OFE-105-0020-Comp 34.50022 112.2222285 10 OFE-307-0020-Comp 34.501328271 112.23885280 22.9 0.1 OFE-110-0020-Comp 34.501518 112.2247768 62.57 OFE-300-002-Comp 34.5015282871 112.23885280 22.9 0.1 OFE-111-0020-Comp 34.501518 112.23465280 112.23865280 22.9 0.1 0.7 34.5015282871 112.23885280 22.9 0.1 0.7 34.5015282871 112.23885280 22.9 0.0 0.7 35.5012807 0.4 42.0 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 <	OFS-101-001-002-Comp	34.499008868	112.235720082	73.7	165	OFS-307-007-002-Grab	34.500441639	112.238275965	17	23
OFS-102-002-002-dmb 44.49024823 112.238020289 16.9 25.4 OFS-307-009-002-dmc 44.9005112 212.11 OFS-307-009-002-dmc 44.50055122 112.23802607 17 34 OFS-109-000-dmc 44.490941 112.2211883 15 26 OFS-307-009-002-dmc 34.500132276 112.238926107 112.238926107 42 00 OFS-109-002-dmc 34.500132276 112.228926 10 05 05 30.5002-dmc 34.50132276 112.238926107 44 2200 05 112.238926107 44 2200 06 112.238926107 44 2200 06 112.238926107 44 200 07 34.50132276 44 2200 07 57 30.6004-00.2-dmc 34.501322767 40 420 420 47 112.23865367 40 420	OFS-102-001-002-Comp	34.499236455	112.236216652	21.2	26.8	OFS-307-008-002-Grab	34.500500202	112.238319869	18	39
OFB-102-000-002-Camp 34.49838873 112.231013821 12.9 12.1 OFB-302-001-002-Camp 34.500765904 112.238067888 9.5 12 OFB-302-002-Camp 34.500737951 112.2387478 13.501737735 112.2387589101 44 230 OFB-3105-000-202-Camp 34.50158 112.238758 112.23875 112.2387589101 44 230 OFB-3105-000-202-Camp 34.50158 112.238758 112.238758 40 420 OFB-310-000-2Camp 34.50158 112.238758 51 .51 .51575771 112.23845898 44 180 OFB-313-600-2Camp 34.499568 112.237108 530 1400 OFB-338-600-602-Camp 34.690761 112.23845284 11 14 OFB-313-600-2Camp 34.499678 112.2384523 12.2384523 112.2384523 12.2384523 112.2384523 12.2484524 44 12.238450140 12.23845014016 16 14 OFB-338-600-2Camp 34.690618 112.2484524 44 44 12.238845112 12.2488585112.2344586	OFS-102-002-002-Grab	34.499268253	112.236202389	16.9	25.4	OFS-307-009-002-Grab	34.500551521	112.238362607	17	34
OFFS-105-002-002-Comp 34.499941 112.231863 15 28: OFFS-105-002-Occerp 34.500123 112.232896 16 26: 07FS-105-002-002-Camp 34.5013270351 112.2385520 62: 90 OFFS-105-002-002-Camp 34.501532001 112.238539101 44 230 OFFS-1112-001-002-Camp 34.401518 112.2344768 82: 07FS-303-000-002-Gmb 34.5013530514 112.23485086 24: 93 OFFS-1112-001-002-Camp 34.490562 112.2347086 530 1400 OFFS-303-000-002-Gmb 34.501387371 112.23486284 11 14 OFFS-303-000-002-Camp 34.499678 112.234062 1300 OFFS-303-000-002-Gmb 34.501387737 112.23486284 14 44 OFFS-303-000-002-Camp 34.49966142 14 45. OFFS-300-000-02-Camp 34.500626 112.230761 36 66 OFFS-303-000-002-Camp 34.499651423 112.23486284 16 6.9 OFFS-303-000-02-Camp 34.500571 112.230761 36 66 OFFS-303-000-002-Camp <td< td=""><td>OFS-102-003-002-Grab</td><td>34.499383673</td><td>112.236138213</td><td>12.9</td><td>12.1</td><td>OFS-307-010-012-Grab</td><td>34.500765904</td><td>112.238067868</td><td>9.5</td><td>12</td></td<>	OFS-102-003-002-Grab	34.499383673	112.236138213	12.9	12.1	OFS-307-010-012-Grab	34.500765904	112.238067868	9.5	12
OrFs-105-002-002-Comp 34.50082 112.232685 10 44 20 OFFS-105-003-02-Comp 34.500582 112.234768 82 57 OFFS-308-004-002-Comp 34.501528286 112.23655397 40 420 OFFS-117-002-02-Comp 34.501518 112.244778 82 57 OFFS-308-004-002-Comp 34.501518 112.2446508 42 93 OFFS-117-002-02-Comp 34.501518 112.241786 82 57 OFFS-308-004-002-Comp 34.501397737 112.236460190 54 190 OFFS-133-002-022-Comp 34.499562 112.237186 300 100 OFFS-308-006-002-Comp 34.50018773 112.23865308 24 92 OFFS-130-00102-Comp 34.500264 11.2230708 48 44 OFFS-308-008-002-Comp 34.5002661 112.4486344 46 67 530-001-002-Comp 34.500567 112.23066670 21 48 64 67 64 61 46 61 47 46 67 50 67 67 50 67 67 50 6	OFS-105-001-006-Comp	34.499941	112.231683	15	26	OFS-308-001-002-Grab	34.501377935	112.236742739	33	110
UPs-100-002-002-Comp 34.50052 112.234278 62 57 OPS-114-001-002-Comp 34.50152 112.244768 62 57 OPS-117-001-002-Comp 34.501518 112.244768 64 51 OPS-117-001-002-Comp 34.50118 112.241784 30 07 OPS-1330-00-002-Comp 34.409669 112.237068 530 1400 OPS-1330-00-002-Comp 34.409669 112.237068 530 1400 OPS-330-00-002-Comp 34.409669 112.237068 530 1400 OPS-308-007-002-cmb 34.50118773 112.236462384 11 14 OPS-308-000-20-Comp 34.409669 112.230641 64 16 16 14 16 16 14 14 14 14 14 14 14 14 14 16 12.24468345 19 6.5 112.23046130 16 14 14 15 67 12.244683425 112.24468345 19 6.5 112.24468345 19 6.5 11 12.24468345 </td <td>OFS-105-002-002-Comp</td> <td>34.500023</td> <td>112.232986</td> <td>16</td> <td>26</td> <td>OFS-308-002-002-Grab</td> <td>34.501382678</td> <td>112.236655280</td> <td>62</td> <td>90</td>	OFS-105-002-002-Comp	34.500023	112.232986	16	26	OFS-308-002-002-Grab	34.501382678	112.236655280	62	90
CFS-117-001-002-Comp 34.501516 11.2.244076 02 07 CFS-117-001-002-Comp 34.501516 11.2.244076 04 51 CFS-312-001-002-Comp 34.501516 11.2.244076 64 110 CFS-313-001-002-Comp 34.499661 11.2.237168 300 112.236402500 112.236402500 112.236402500 112.236402500 112.236402500 112.236402500 112.336402500 112.236402500 112.336400100 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.336402500 112.3464024401 112.3446424401 <	OFS-105-003-002-Comp	34.500882	112.233225	130	40	OFS-308-003-002-Grab	34.501530508	112.230031901	44	420
CPS-117-002-0202-Comp 34.501416 11.2.241894 30 30 CPS-313-001-002-Comp 34.499662 112.237086 380 1500 CPS-313-001-002-Comp 34.499669 112.237086 380 1500 CPS-313-001-002-Comp 34.499669 112.237086 380 1600 CPS-313-001-002-Comp 34.499669 112.2368007 21 48 CPS-303-001-002-Comp 34.6906870 12.2368007 21 48 CPS-303-001-002-Comp 34.500865 112.2368017 112.2486184485 18	OFS-114-001-002-Comp	34.504529	112 242076	64	51	OFS-308-005-002-Grab	34.501520205	112.230353957	24	420
OFFS-133_001-002-Comp 34.4995682 112.237186 380 1500 OFFS-133_002-02-Comp 34.499568 112.237186 380 1500 OFFS-133_002-02-Comp 34.499578 112.239482384 11 14 OFFS-133_002-02-Comp 34.499578 112.239482384 24 92 OFFS-130-00-002-Comp 34.50017607 112.239482384 24 92 OFFS-303-002-002-Comp 34.500266 112.230123 97 200 OFFS-309-001-002-Comp 34.49961801 12.244458234 18 6.9 OFFS-203-001-002-Comp 34.500567 112.230465 470 380 OFFS-309-003-002-Comp 34.499613811 12.244458248 18 6.5 OFFS-320-001-002-Comp 34.503577 112.230546 167 OFFS-309-000-002-Comp 34.49951861 12.244458443 18 6.8 OFFS-301-001-002-Comp 34.503577 112.230544 160 120 OFFS-309-000-002-Comp 34.49951871 12.24468444 18 6.8 OFFS-301-001-002-Comp 34.49951871 112.230548402	OFS-117-002-002-Comp	34.501416	112.241984	30	30	OFS-308-006-002-Grab	34.501387737	112,236460190	54	180
OFE-133-002-002-Comp 34.499669 112.237096 530 1400 OFE-133-002-002-Comp 34.499679 112.245642 320 1300 OFE-308-000-002-Grab 34.501168628 112.23865308 24 92 OFE-137-001-002-Comp 34.500664 112.24524 48 48 OFE-308-000-002-Grab 34.501168628 112.23865308 24 92 OFE-303-001-002-Comp 34.500667 112.237064 48 OFE-309-002-02-Grab 34.499612828 14 6.4 OFE-303-003-002-Comp 34.500567 112.237064 49 60 OFS-309-002-Orach 34.4996128284 14 6.4 OFE-303-003-002-Comp 34.505517 112.230541 39 66 OFS-309-005-02-Grab 34.49951865 112.24478710 24 5.8 OFE-3201-001-02-Comp 34.505517 112.230541 55 0 OFS-309-005-02-Grab 34.49954741 12.4448454 19 6.5 OFS-301-001-02-Comp 34.505517 112.2305489 23 67 OFS-309-005-02-Grab 34.49953071 112.4448454 </td <td>OFS-133-001-002-Comp</td> <td>34.499562</td> <td>112.237186</td> <td>380</td> <td>1500</td> <td>OFS-308-007-002-Grab</td> <td>34.501303134</td> <td>112.236482384</td> <td>11</td> <td>14</td>	OFS-133-001-002-Comp	34.499562	112.237186	380	1500	OFS-308-007-002-Grab	34.501303134	112.236482384	11	14
OFE-133-003-002-Comp 34.499679 112.236922 320 1300 OFE-137-001-002-Comp 34.500664 112.245234 48 44 OFE-303-001-002-Comp 34.500265 112.231023 97 200 OFE-303-001-002-Cranb 34.501287737 112.236686704 21 48 OFE-303-002-Comp 34.500265 112.231023 97 200 OFE-309-001-002-Cranb 34.499614233 112.244682425 19 6.9 OFE-303-002-Comp 34.50012657 112.2306687 49 90 OFE-309-003-02-Cranb 34.499614122 12.84468245 19 6.5 OFE-302-007-002-Comp 34.5003671 112.2306867 45 86 OFE-309-006-002-Granb 34.49945181 112.244687442 19 6.5 OFE-302-007-002-Comp 34.5003671 112.230648012 51 OFE-309-006-002-Granb 34.49954041 112.2465142454 19 6.5 OFE-301-002-Comp 34.49954112 112.23644802 28 67 OFE-309-006-002-Granb 34.4995404112 232624 16 7.6 7.6 </td <td>OFS-133-002-002-Comp</td> <td>34.499669</td> <td>112.237096</td> <td>530</td> <td>1400</td> <td>OFS-308-008-002-Grab</td> <td>34.501176705</td> <td>112.236553088</td> <td>24</td> <td>92</td>	OFS-133-002-002-Comp	34.499669	112.237096	530	1400	OFS-308-008-002-Grab	34.501176705	112.236553088	24	92
OFS-187-001-002-Comp 34.500604 112.28234 48 44 CFS-308-001-002-Crab 34.690187737 112.236460180 16 14 OFS-303-002-Comp 34.500265 112.230706 49 00 OFS-309-001-002-Crab 34.499651825 112.24462334 14 6.4 OFS-309-001-002-Comp 34.500889 112.2406214 39 66 OFS-309-001-002-Crab 34.499651605 112.244622349 18 8.5 OFS-2026-010-02-Comp 34.500517 112.220331 45 88 0FS-309-004-002-Crab 34.49994586 12.244587442 19 6.5 OFS-2026-010-02-Comp 34.505517 112.220634 61 87 0FS-309-000-002-Crab 34.4993489 18 8.5 OFS-301-001-002-Comp 34.499458 112.236449 28 67 0FS-309-009-002-Crab 34.499347718 112.244484454 19 6.5 OFS-301-002-Ocermb 34.4994572 112.236544802 25.2 54.8 0FS-310-001-002-Crab 34.49937718 112.24454434454 18 6.5 OFS-301-005-0	OFS-133-003-002-Comp	34.499679	112.236922	320	1300	OFS-308-009-002-Grab	34.501168828	112.236666704	21	48
OFS-203-001-002-Comp 34.60005 112.231023 97 200 OFS-303-001-002-Comp 34.499632865 112.244763425 19 6.9 OFS-203-002-Comp 34.6005167 112.2300641 39 66 OFS-303-002-Core 34.49951423 112.244638244 14 6.4 OFS-203-003-002-Comp 34.600517 112.230665 470 380 OFS-309-003-002-Core 34.49951423 112.244587442 19 6.5 OFS-227-001-002-Comp 34.600571 112.232754 61 87 OFS-309-005-002-Core 34.499531876 112.2444584434 19 6.5 OFS-301-002-Comp 34.4995465 112.236298 89 340 OFS-309-007-002-Core 34.499531876 112.2444584434 19 6.5 OFS-301-000-002-Comp 34.499544 112.236249 180 1200 OFS-309-000-002-Core 34.499331718 112.244712654 18 6.6 OFS-301-005-002-Core 34.449935718 112.2362492 142 180 0FS-310-000-002-Core 34.49913231718 112.244712654 15 3.3 OFS-301-005-002-Core 34.4499365702 112.23664602 25.2 54.8 0FS-310-000-002-Core 34.50071718165 112.24074866 17<	OFS-157-001-002-Comp	34.506064	112.245234	48	44	OFS-308-010-012-Grab	34.501387737	112.236460190	16	14
UFS-203-002-Comp 34.000805 112.2307.05 49 90 OFS-303-003-2002-Corab 34.499614233 112.244682381 14 6.4 OFS-203-003-2002-Comp 34.5005157 112.230641 39 66 OFS-303-003-002-Corab 34.49951696 112.244788710 24 5.8 OFS-203-002-Comp 34.500517 112.232631 45 88 OFS-303-005-002-Corab 34.49951165 112.244788710 24 5.8 OFS-203-002-Comp 34.500557 112.232634 18 7 OFS-303-007-002-Corab 34.49933176 112.244584335 16 7.4 OFS-301-002-022-Comp 34.499572 112.2306244 180 1200 OFS-303-000-012-Corab 34.499330472 112.244712654 18 6.6 OFS-301-003-022-Comp 34.4995672 112.2306244 180 1200 OFS-303-000-012-Corab 34.499337178 112.244712654 18 6.6 6 6 6 7 6 5.301-005-102-Corab 34.4993572 112.230648602 25.2 54.8 0FS-310-000-002-Corab 34.501145621<	OFS-203-001-002-Comp	34.500285	112.231023	97	200	OFS-309-001-002-Grab	34.499632885	112.244563425	19	6.9
Cr Dr. 2000/002-Comp 34.505157 112.2465145 122.24652489 18 5.5 OFS-208-001-002-Comp 34.505157 112.23651 45 88 05 05-309-001-002-Comp 34.499548 112.244651489 18 8.5 OFS-208-001-002-Comp 34.505157 112.23651 45 88 05-309-000-002-Crab 34.4995147 112.244514887442 19 6.5 OFS-309-001-002-Comp 34.50511 112.236459 23 87 05-309-000-002-Crab 34.499534185 112.24451484034 19 6.5 OFS-301-000-002-Comp 34.499544 112.236298 89 340 05-309-000-002-Crab 34.49937178 112.244714854 18 6.6 OFS-301-000-002-Comp 34.499547 112.23654802 25.5 54.8 0FS-310-000-002-Crab 34.49937178 112.2400718624 18 6.6 OFS-301-005-002-Crab 34.49955602 112.236642802 25.9 68.7 0FS-310-000-002-Crab 34.501145621 112.24007186 190 35 OFS-301-005-002-Crab 34.499387916 112.236642862 25.9 68.7 0FS-310-005-002-Crab 34.501145621 112.240148163 21 38 97	OFS-203-002-002-Comp	34.500605	112.230706	49	90	OFS-309-002-002-Grab	34.499614233	112.244692834	14	6.4
CFS-227-002-Comp 34.503671 112.232631 45 88 OFS-227-002-Comp 34.50357 112.232631 45 88 OFS-227-002-Comp 34.50357 112.2326459 23 67 OFS-300-002-Comp 34.49953147 112.244584135 16 7.4 OFS-301-002-Comp 34.4995441 112.236459 23 87 OFS-300-000-002-Crab 34.49933472 112.244584034 19 6.5 OFS-301-002-Comp 34.499572 112.236459 23 87 OFS-300-000-002-Crab 34.4993347718 112.244712654 18 6.6 OFS-301-002-Comp 34.499572 112.23645802 25.2 54.8 0FS-310-000-002-Grab 34.501149779 112.2401844013 21 38 OFS-301-005-010-Grab 34.499387718 112.240544650 19.2 34.0 0FS-310-000-002-Grab 34.501145621 112.2401844051 71 19 OFS-301-005-010-Grab 34.499387718 112.2401844561 19.0 35 0FS-310-000-002-Grab 34.5001032067 112.240184061 17	OFS-203-003-002-Comp	34.500889	112.230841	470	280	OFS-309-003-002-Grab	34.499551695	112.244/88/10	24	5.8
Circle Circle<	OFS-227-001-002-Comp	34,503671	112 232634	470	89	OFS-309-004-002-Grab	34.4994013/2	112.244652489	10	6.5
OFS-244-001-002-Comp 34.805011 112.240691 55 10 OFS-301-001-002-Comp 34.499458 112.236459 23 87 OFS-301-003-002-Comp 34.499458 112.236298 89 340 OFS-301-003-002-Comp 34.4994572 112.236297 112.236297 18 6.5 OFS-301-004-002-Comp 34.4995572 112.236297 48 180 100 100 0FS-301-000-002-Grab 34.499371718 112.244712654 15 8.3 OFS-301-000-002-Grab 34.49935702 112.236427 48 180 0FS-310-001-002-Grab 34.501191779 112.240184913 21 38 OFS-301-005-002-Grab 34.499387918 112.23648502 25.9 68.7 0FS-310-000-002-Grab 34.501191670 112.240042056 17 19 OFS-301-000-002-Grab 34.499436801 112.23644502 24.9 67.1 0FS-310-000-002-Grab 34.501016170 112.2400346205 17 19 OFS-301-000-002-Grab 34.50013102 112.240344205 17 66 130	OFS-227-002-002-Comp	34.503557	112,232754	61	87	OFS-309-006-002-Grab	34,499531856	112.244448454	19	6.8
OFS-301-001-002-Comp 34.499458 112.236459 23 87 OFS-301-002-Comp 34.499572 112.236298 89 340 OFS-301-002-Comp 34.499572 112.236294 180 1200 OFS-301-004-002-Comp 34.499572 112.236244 180 1200 OFS-301-005-002-Grab 34.49955029 112.23648502 25.2 54.8 OFS-301-005-002-Grab 34.49955029 112.236448502 25.9 68.7 OFS-301-005-002-Grab 34.499367718 112.240344205 17 19 OFS-301-005-002-Grab 34.499387718 112.236414586 19.2 35.0 OFS-301-007-002-Grab 34.499387718 112.236414586 19.2 35.0 OFS-301-007-002-Grab 34.501194778 112.240344025 17 19 OFS-310-006-002-Grab 34.50119478 112.240344025 17 19 OFS-310-007-002-Grab 34.50119478 112.240344025 17 19 OFS-310-006-002-Grab 34.500930221 112.240139662 18 43	OFS-244-001-002-Comp	34.505011	112.240691	55	10	OFS-309-007-002-Grab	34.499432479	112.244554135	16	7.4
OFS-301-002-002-Comp 34.499544 112.236298 89 340 OFS-301-003-002-Comp 34.499572 112.236284 180 1200 OFS-309-009-012-Grab 34.499371718 112.244712654 15 8.3 OFS-301-004-002-Comp 34.49955029 112.236648502 25.2 5.4.8 OFS-310-002-Grab 34.501145621 112.240144913 21 38 OFS-301-005-010-Grab 34.49955029 112.236648502 25.9 68.7 OFS-310-002-Oratb 34.501131155 112.240042056 17 19 OFS-301-007-002-Grab 34.4999575 112.236513222 24.9 67.1 OFS-310-004-002-Grab 34.501031405 112.240344205 17 19 OFS-301-007-002-Grab 34.501032400 112.233751134 33.0 137 OFS-310-006-002-Grab 34.500980222 112.240361465 17 66 OFS-303-000-002-Grab 34.500980225 112.240149064 18 43 0FS-310-006-002-Grab 34.500980222 112.24018064 18 43 OFS-303-000-002-Grab 34.500739801 112.233703863	OFS-301-001-002-Comp	34.499458	112.236459	23	87	OFS-309-008-002-Grab	34.499330472	112.244584034	19	6.5
OFS-301-003-002-Comp 34.499572 112.2362427 48 180 CFS-309-009-012-Grab 34.499371718 112.244712654 15 8.3 OFS-301-004-002-Comp 34.4995502 112.236544502 25.2 54.8 0FS-310-001-002-Grab 34.50114577 112.240014913 21 38 OFS-301-005-002-Grab 34.49935502 112.236544502 25.2 54.8 0FS-310-002-Grab 34.5011311155 112.24034205 17 19 0FS-310-004-002-Grab 34.501013400 112.24034205 17 19 0FS-310-006-002-Grab 34.501031400 112.24034205 17 19 0FS-310-006-002-Grab 34.501031400 112.240396627 21 37 OFS-301-008-002-Grab 34.501032490 112.236512322 24.9 67.1 0FS-310-006-002-Grab 34.500930222 112.24019606 18 43 OFS-303-001-002-Grab 34.500910425 112.23377339378 35 14 0FS-310-006-002-Grab 34.500930222 112.240139624 18 43 OFS-303-004-002-Grab 34.500877286 112.23377739 33 19<	OFS-301-002-002-Comp	34.499544	112.236298	89	340	OFS-309-009-002-Grab	34.499371718	112.244712654	18	6.6
OFE-301-004-002-Comp 34.489637 112.236427 48 180 OFE-301-005-002-Grab 34.501194778 112.240184913 21 38 OFE-301-005-002-Grab 34.499555029 112.236548502 25.9 68.7 OFE-301-002-Orab 34.501194778 112.240607662 43 97 OFE-301-005-002-Grab 34.499555029 112.236548502 25.9 68.7 OFE-310-002-O02-Grab 34.50119476 112.240304662 43 97 OFE-301-007-002-Grab 34.499386751 112.233654711 92 34.0 07E-310-005-002-Grab 34.50113400 112.24036165 17 19 OFE-301-007-002-Grab 34.500190420 112.233854711 93 94 97 34.50030022 112.24036165 17 66 OFS-303-002-002-Grab 34.500910425 112.233703378 35 14 0FS-310-005-002-Grab 34.500930221 112.24036165 17 66 OFS-303-004-002-Grab 34.50087126 112.23370363 34 40 0FS-310-005-002-Grab 34.500930221 112.240361650 112.237019656 <	OFS-301-003-002-Comp	34.499572	112.236264	180	1200	OFS-309-009-012-Grab	34.499371718	112.244712654	15	8.3
UTC-SQT-LUC-UUC-UG2-Grab 34.499555029 112.2365485022 25.2 54.8 OFS-301-005-010-Grab 34.499555029 112.236548502 25.9 68.7 OFS-301-006-002-Grab 34.499367918 112.236548502 25.9 68.7 OFS-301-006-002-Grab 34.499367918 112.236548502 25.9 68.7 OFS-301-006-002-Grab 34.499367918 112.236548502 24.9 67.1 OFS-301-008-002-Grab 34.49936801 112.236512322 24.9 67.1 OFS-301-000-002-Grab 34.500930251 112.240381465 17 68 OFS-303-001-002-Grab 34.5009830221 112.240381465 17 68 OFS-303-003-002-Grab 34.5009830251 112.233761054 25 22.8 0FS-310-008-002-Grab 34.5009305251 112.240381465 18 43 OFS-303-004-002-Grab 34.5009773081 112.23370636 34 34 0FS-310-008-002-Grab 34.500930223 112.240381465 21 8.1 OFS-303-007-002-Grab 34.500773898 112.233703527 23 18	OFS-301-004-002-Comp	34.488637	112.236427	48	180	OFS-310-001-002-Grab	34.501194779	112.240184913	21	38
Srt Stat Hours of the sub-sample 94.499305002 112.230610004.002 112.23061111105 112.240242306 190 35 OFS-301-0006-002-Grab 34.4993367918 112.236313349 33.0 137 OFS-310-0004-002-Grab 34.501051670 112.240344205 17 19 OFS-301-008-002-Crab 34.499336575 112.236512322 24.9 67.1 OFS-310-0006-002-Grab 34.501013400 112.240396627 21 37 OFS-303-001-002-Grab 34.500930225 112.240361465 17 66 OFS-303-002-Orab 34.500930225 112.240215906 18 43 OFS-303-002-Orab 34.500970329 112.23377337 52 14 OFS-310-000-002-Grab 34.501019059 112.240139624 18 43 OFS-303-004-002-Grab 34.500871226 112.233777339 33 19 OFS-310-000-002-Grab 34.501019059 112.240139645 21 8.1 OFS-303-006-002-Grab 34.500734350 112.233832572 23 18 OFS-311-001-002-Grab 34.502661207 112.237175185 20 32	OFS-301-005-002-Grab	34.499555029	112.236548502	25.2	54.8	OFS-310-002-002-Grab	34.501145621	112.240067682	43	97
CFS-301-007-002-Grab 34.49936575 112.236113349 33.0 137 CFS-310-005-002-Grab 34.501013400 112.236512322 24.9 67.1 OFS-301-007-002-Grab 34.501032490 112.233854711 19 34 34 36 34.500103400 112.240396627 21 37 OFS-303-002-02-Grab 34.501032490 112.233761054 25 22 37 0FS-310-006-002-Grab 34.500930222 112.240361465 17 66 OFS-303-002-02-Grab 34.500910425 112.23379378 35 14 0FS-310-006-002-Grab 34.5001013400 112.240016010 46 130 OFS-303-004-002-Grab 34.500872286 112.233703636 34 34 0FS-310-010-012-Grab 34.50019340222 112.240361465 21 8.1 OFS-303-007-002-Grab 34.50087638 112.233703636 34 34 0FS-311-001-012-Grab 34.500266323 112.237019866 15 32 OFS-303-007-002-Grab 34.500876638 112.23382572 23 18 0FS-311-004-002-Grab 34.502764233 112.23	OFS-301-006-002-Grab	34 499387019	112.230346502	19.2	34.0	OFS-310-003-002-Grab	34.501051670	112.240242366	190	35
OFS-301-008-002-Comp 34.499435801 112.236512322 24.9 67.1 OFS-310-006-002-Grab 34.500930222 112.240361465 17 66 OFS-303-001-002-Grab 34.501032490 112.233854711 19 34 34 500930222 112.240361465 17 66 OFS-303-002-Orab 34.500930529 112.23370361654 25 22 36 0FS-310-008-002-Grab 34.500930525 112.240361465 21 84 43 0FS-310-008-002-Grab 34.500930525 112.240016010 46 130 0FS-310-009-002-Grab 34.500930222 112.240016010 46 130 0FS-310-001-012-Grab 34.500830222 112.240016010 46 130 0FS-310-001-012-Grab 34.500830222 112.240016105 112.230101506 15 32 0FS-311-001-002-Grab 34.50063023 112.237019566 15 32 0FS-311-002-002-Grab 34.50064142 112.23715238 21 60 60 53 16 0FS-311-002-002-Grab 34.502661207 112.237315238 20 32 0FS-311-002-002-Grab 34.502734823 <t< td=""><td>OFS-301-007-002-Grab</td><td>34,499396575</td><td>112.236313349</td><td>33.0</td><td>137</td><td>OFS-310-005-002-Grab</td><td>34.501013400</td><td>112.240396627</td><td>21</td><td>37</td></t<>	OFS-301-007-002-Grab	34,499396575	112.236313349	33.0	137	OFS-310-005-002-Grab	34.501013400	112.240396627	21	37
OFS-303-001-002-Grab 34.501032490 112.233854711 19 34 OFS-310-007-002-Grab 34.500930525 112.240215906 18 43 OFS-303-002-Orab 34.500983529 112.233761054 25 22 0FS-310-008-002-Grab 34.500958701 112.240139624 18 43 OFS-303-002-Grab 34.500872266 112.233703378 35 14 0FS-310-009-002-Grab 34.50019059 112.240016010 46 130 OFS-303-005-002-Grab 34.500872266 112.2337073663 34 34 0FS-310-010-012-Grab 34.500266323 112.23061465 21 8.1 OFS-303-005-002-Grab 34.500773898 112.233832572 23 18 0FS-311-001-002-Grab 34.5026661207 112.23715238 21 50 OFS-303-009-002-Grab 34.500773898 112.233832572 32 8.8 0FS-311-004-002-Grab 34.502748233 112.23715385 20 32 0FS-311-004-002-Grab 34.502748233 112.237315385 20 32 0FS-311-004-002-Grab 34.5027802185 112.237016790 13 19	OFS-301-008-002-Comp	34.499435801	112.236512322	24.9	67.1	OFS-310-006-002-Grab	34.500930222	112.240361465	17	66
OFS-303-002-Grab 34.500983529 112.233761054 25 22 OFS-310-008-002-Grab 34.500958701 112.240139624 18 43 OFS-303-002-Grab 34.500910425 112.23379378 35 14 OFS-310-008-002-Grab 34.501019059 112.240016010 46 130 OFS-303-004-002-Grab 34.500872266 112.23377339 33 19 OFS-310-010-012-Grab 34.500930222 112.240361465 21 8.1 OFS-303-006-002-Grab 34.500773898 112.23387277339 33 19 OFS-311-001-002-Grab 34.502663523 112.237014566 15 32 OFS-303-007-002-Grab 34.500773498 112.233832572 23 18 OFS-311-002-002-Grab 34.5026641207 112.237315238 21 50 OFS-303-009-002-Grab 34.500773898 112.233832572 32 8.8 OFS-311-004-002-Grab 34.502748233 112.237315385 20 32 OFS-303-010-012-Grab 34.500773898 112.233832572 32 8.8 OFS-311-000-002-Grab 34.502748233 112.23715385 20 32 OFS-311-000-012-Grab 34.502783642 112.237018805 <td>OFS-303-001-002-Grab</td> <td>34.501032490</td> <td>112.233854711</td> <td>19</td> <td>34</td> <td>OFS-310-007-002-Grab</td> <td>34.500930525</td> <td>112.240215906</td> <td>18</td> <td>43</td>	OFS-303-001-002-Grab	34.501032490	112.233854711	19	34	OFS-310-007-002-Grab	34.500930525	112.240215906	18	43
OFS-303-002-Grab 34.500910425 112.233739378 35 14 OFS-310-009-002-Grab 34.501019059 112.240016010 46 130 OFS-303-004-002-Grab 34.500872286 112.233703636 34 34 0FS-310-010-012-Grab 34.500930222 112.240361465 21 8.1 OFS-303-005-002-Grab 34.500773898 112.23377739 33 19 0FS-311-001-002-Grab 34.502663523 112.237019566 15 32 OFS-303-006-002-Grab 34.500773898 112.233892572 23 18 0FS-311-001-002-Grab 34.502661207 112.237174518 19 57 OFS-303-009-002-Grab 34.500773898 112.233892682 27 15 0FS-311-004-002-Grab 34.502661207 112.23715238 21 50 OFS-303-009-002-Grab 34.500773898 112.233892682 27 15 0FS-311-004-002-Grab 34.502748233 112.23715238 20 32 OFS-303-010-012-Grab 34.500773898 112.233832572 32 8.8 0FS-311-004-002-Grab 34.502894124 112.23715385 20 32 Notes: *for composite samples, lationg information marks the appro	OFS-303-002-002-Grab	34.500983529	112.233761054	25	22	OFS-310-008-002-Grab	34.500958701	112.240139624	18	43
OFS-303-004-002-Grab 34.50087/228b 112.2337/03636 34 34 GPS-310-010-012-Grab 34.500930222 112.240361465 21 8.1 OFS-303-005-002-Grab 34.500857125 112.233777339 33 19 OFS-311-001-002-Grab 34.502663523 112.237019566 15 32 OFS-303-006-002-Grab 34.500773898 112.233892682 27 15 OFS-311-002-02-Grab 34.502664142 112.237174518 19 57 OFS-303-009-002-Grab 34.500876638 112.233892682 27 15 OFS-311-004-002-Grab 34.502661207 112.23715238 21 50 OFS-303-009-002-Grab 34.500977700 112.233892752 32 8.8 OFS-311-004-002-Grab 34.502748233 112.23715385 20 32 OFS-303-010-012-Grab 34.500773898 112.233832572 32 8.8 OFS-311-000-002-Grab 34.502894124 112.237315385 20 32 Notes: "for composite samples, tationg information marks the approximate center of the sub-sample Sections. SPL-001-002-Grab 34.502878642 112.23701805 <td>OFS-303-003-002-Grab</td> <td>34.500910425</td> <td>112.233739378</td> <td>35</td> <td>14</td> <td>OFS-310-009-002-Grab</td> <td>34.501019059</td> <td>112.240016010</td> <td>46</td> <td>130</td>	OFS-303-003-002-Grab	34.500910425	112.233739378	35	14	OFS-310-009-002-Grab	34.501019059	112.240016010	46	130
OFS-303-006-002-Grab 34.500773898 112.233717338 35 19 OFS-303-006-002-Grab 34.500773898 112.233832572 23 18 OFS-311-001-002-Grab 34.502664142 112.237174518 19 57 OFS-303-006-002-Grab 34.500773898 112.233892682 27 15 OFS-311-004-002-Grab 34.502664142 112.237174518 19 57 OFS-303-009-002-Grab 34.500876638 112.233892682 27 15 OFS-311-004-002-Grab 34.502661207 112.23715238 21 50 OFS-303-009-002-Grab 34.500876638 112.23382572 32 8.8 OFS-311-004-002-Grab 34.502748233 112.23715385 20 32 OFS-303-010-012-Grab 34.500773898 112.233832572 32 8.8 OFS-311-004-002-Grab 34.502862185 112.23715385 20 32 Notes: ** ** ** ** ** ** ** 0FS-311-007-002-Grab 34.502862185 112.237070862 12 27 05 Notes: ** ** ** ** ** 0FS-311-009-002-Grab 34.502878642	OFS-303-004-002-Grab	34.500872286	112.233703636	34	34	OFS-310-010-012-Grab	34.500930222	112.240361465	21	8.1
OFS-303-007-002-Grab 34.500734350 112.233892682 27 15 OFS-303-008-002-Grab 34.500876638 112.233892682 27 15 OFS-303-009-002-Grab 34.500876638 112.2338927544 29 25 OFS-303-010-012-Grab 34.50077700 112.233832572 32 8.8 Notes: "for composite samples, lat/ong information marks the approximate center of the sub-sample locations. 34.502761207 112.237017349 19 26 OFS-311-000-002-Grab 34.502861207 112.237177349 19 26 075-311-007-002-Grab 34.502862185 112.237020828 17 33 OFS-311-009-002-Grab 34.502878642 112.237018805 14 7.1 SPL - Sweet Pea Lane Differences in significant figures are due to two laboratories being used. 0FS-311-009-002-Grab 34.502783642 112.237018805 14 7.1 SPL-002-002-Comp 34.499454624 112.2370718805 14 7.1 125 SPL-002-002-Comp 34.500318605 112.237097291 40.7 125 SPL-002-002-Comp 34.500318605 112.23708085 18.9 46.0	OFS-303-006-002-Grab	34.500857125	112.233777339	33	19	OFS-311-007-002-Grab	34.502663523	112.237019566	15	32
OFS-303-008-002-Grab 34.500876638 112.233927544 29 25 OFS-303-009-002-Grab 34.500876638 112.233927544 29 25 OFS-303-009-002-Grab 34.50077700 112.233854711 45 22 OFS-303-010-012-Grab 34.500773898 112.233832572 32 8.8 Notes: "for composite samples, lat/ong information marks the approximate center of the sub-sample locations. 34.502786421 112.237020828 17 33 OFS-311-009-002-Grab 34.502783642 112.237018805 23 55 OFS-311-009-002-Grab 34.502783642 112.237018805 14 7.1 SPL - Sweet Pea Lane Differences in significant figures are due to two laboratories being used. SPL-001-002-Comp 34.499454624 112.237018805 14 7.1 SPL-002-002-Comp 34.499454624 112.237018805 14 7.1 25 OFS-311-009-002-Crap 34.50027864624 112.237018805 14 7.1 25 SPL-002-002-Comp 34.499454624 112.237098085 14 7.1 25	OFS-303-007-002-Grab	34,500734350	112.233892682	23	15	OFS-311-003-002-Grab	34.502661207	112 237315238	21	50
OFS-303-009-002-Grab 34.500977700 112.233854711 45 22 OFS-303-010-012-Grab 34.500773898 112.233832572 32 8.8 Notes: "for composite samples, lat/ong information marks the approximate center of the sub-sample locations. 34.502894124 112.237315385 20 32 Notes: "for composite samples, lat/ong information marks the approximate center of the sub-sample 0FS-311-007-002-Grab 34.502890250 112.237020828 17 33 OFS-311-009-002-Grab 34.502783642 112.237018805 23 55 OFS-311-009-002-Grab 34.502783642 112.237018805 14 7.1 SPL - Sweet Pea Lane Differences in significant figures are due to two laboratories being used. SPL-001-002-Comp 34.499454624 112.237018805 14 7.1 SPL-002-002-Comp 34.499454624 112.237018805 14 7.1 125 SPL-002-002-Comp 34.500318605 112.23708281 33.6 89.9 125 SPL-002-002-Comp 34.500318605 112.23708085 18.9 46.0	OFS-303-008-002-Grab	34.500876638	112.233927544	29	25	OFS-311-004-002-Grab	34.502748233	112.237166790	13	19
OFS-303-010-012-Grab 34.500773898 112.233832572 32 8.8 OFS-311-006-002-Grab 34.502894124 112.237323767 20 26 Notes: *for composite samples, let/ong information marks the approximate center of the sub-sample locations. SPL - Sweet Pea Lane 0FS-311-009-002-Grab 34.502890250 112.237020828 17 33 Differences in significant figures are due to two laboratories being used. 0FS-311-009-002-Grab 34.502783642 112.237018805 23 55 OFS-311-009-012-Grab 34.502783642 112.237018805 14 7.1 SPL-001-002-Comp 34.499454624 112.237018805 14 7.1 SPL-002-Ocomp 34.499454624 112.237098085 18.9 46.0	OFS-303-009-002-Grab	34.500977700	112.233854711	45	22	OFS-311-005-002-Grab	34.502799491	112.237315385	20	32
Notes: OFS-311-007-002-Grab 34.502862185 112.237177349 19 26 OFS-311-008-002-Grab 34.502890250 112.237020828 17 33 OFS-311-009-002-Grab 34.502890250 112.237018805 23 55 OFS-311-009-012-Grab 34.502783642 112.237018805 14 7.1 Differences in significant figures are due to two laboratories being used. SPL-001-002-Comp 34.499454624 112.237018805 14 7.1 SPL-002-002-Comp 34.50280650 112.237018805 14 7.1 SPL-002-002-Comp 34.50280650 112.237018805 14 7.1 SPL-002-002-Comp 34.499454624 112.237018805 14 7.1 SPL-002-002-Comp 34.500318605 112.237018805 14 7.1	OFS-303-010-012-Grab	34.500773898	112.233832572	32	8.8	OFS-311-006-002-Grab	34.502894124	112.237323767	20	26
OFS-311-008-002-Grab 34.502890250 112.237020828 17 33 Vocations. OFS-311-009-002-Grab 34.502890250 112.237018805 23 55 OFS-311-009-012-Grab 34.502783642 112.237018805 23 55 OFS-311-009-012-Grab 34.502783642 112.237018805 14 7.1 Differences in significant figures are due to two laboratories being used. SPL-001-002-Comp 34.499454624 112.237018805 14 7.1 SPL-002-002-Comp 34.50286565 112.237018805 14 7.1 SPL-002-002-Comp 34.50926656 112.237018805 14 7.1 SPL-002-002-Comp 34.499454624 112.237018805 14 7.1 SPL-002-002-Comp 34.500318605 112.237018805 14 7.1	Notes					OFS-311-007-002-Grab	34.502862185	112.237177349	19	26
Interferences in significant figures are due to two laboratories being used. IOFS-311-009-012-Grab 34.502783642 112.237018805 23 55 OFS-311-009-012-Grab 34.502783642 112.237018805 14 7.1 Differences in significant figures are due to two laboratories being used. SPL-001-002-Comp 34.499454624 112.237018805 14 7.1 SPL-002-002-Comp 34.500318605 112.237018805 14 7.1	for composite samples, lat/long	information marks th	ne approximate center	of the sub-sam	ple	OFS-311-008-002-Grab	34.502890250	112.237020828	17	33
SPL-03-012-012-012 34.302/03042 112.23/018005 14 7.1 Differences in significant figures are due to two laboratories being used. SPL-001-002-Comp 34.499454624 112.236592181 33.6 89.9 SPL-002-002-Comp 34.499926656 112.237097291 40.7 125 SPL-003-002-Comp 34.500318605 112.237508085 18.9 46.0	locations.	per en ante	and an end of the	a an sala i	i pi esta	OFS-311-009-002-Grab	34.502783642	112.237018805	23	55
SPL-002-002-Comp 34.499926656 112.237097291 40.7 125 SPL-003-002-Comp 34.500318605 112.237508085 18.9 46.0	Differences in significant figures	are due to two isho	ratories being used			SPI_001_002_Comp	34 400454624	112 236502194	32.6	80.0
SPL-003-002-Comp 34.500318605 112.237508085 18.9 46.0						SPL-002-002-Comp	34,499926656	112,237097291	40.7	125
						SPL-003-002-Comp	34.500318605	112.237508085	18.9	46.0

	Date	Sample	Arsenic	Cyanide	Lead	
Sample ID	Sampled	Depth (feet)	(mg/kg)	(mg/kg)	(mg/kg)	
IKJ-537	8/21/2008	0 to 2	65.6	NR	36.8	
		4 to 7	24.7	NR	9.6	
IKJ-538	8/21/2008	0 to 2	.35	NR	16.1	
		4 to 7	42.9	NR	22.9	
IKJ-539	8/21/2008	0 to 2	22		13.8	
114 570	4/20/2000	4 to 7	57.3		35.8	·
1KJ-578	4/28/2009	0 to 0.5	1960		2470 J	
IKJ-579	5/3/2009		965 J		1400	
IKJ-580	4/28/2009	0100.5	1510		1100	
INJ-201	4/20/2009		1020	0.55	400	
IKJ-582	4/28/2009	2 to 3	1160	0.00	000	
			144		100	
IKV-113	8/21/2008	4 to 7	37 3		26.1	
IK\/-114	8/21/2008	0 to 2	54.8	NR	36.4	
IKV-115	8/21/2008	0 to 2	99	NR	105	
	0/21/2000	0 to 2	66.4	NR	34.7	
IKV-116	8/21/2008	4 to 7	141	NR	64.2	
		0 to 2	167	NR	161	
IKV-117	8/21/2008	4 to 7	79.5	NR	82.9	
OFS-002-001-002-Comp	3/8/2011	0 to 0.2	330	NA	660	
OFS-002-002-002-Comp	3/8/2011	0 to 0.2	410	NA	220	
OFS-002-003-002-Comp	3/8/2011	0 to 0.2	530	NA	350	
OFS-002-004-006-Grab	3/8/2011	0.25 to 0.5	1000	NA	930	
OFS-002-005-048-Grab	3/8/2011	3.5 to 4	650	NA	580	
OFS-002-006-024-Grab	3/8/2011	1.75 to 2	1500	NA	2900	
OFS-002-007-006-Grab	3/8/2011	0.25 to 0.5	930	2.17	1600	
OFS-002-008-060-Grab	3/8/2011	4.5 to 5	1900	NA	4100	
OFS-002-009-018-Grab	3/8/2011	1.25 to 1.5	500	NA	400	
OFS-002-010-042-Grab	3/8/2011	3.25 to 3.5	85	<0.270	35	
OFS-002-011-042-Grab	3/8/2011	3.25 to 3.5	1600	NA	1500	
OFS-002-012-072-Grab	3/8/2011	5.75 to 6	79	28.7	11	
OFS-002-013-084-Grab	3/8/2011	6.75 to 7	25	<0.252	8.9	
OFS-002-014-006-Grab	3/8/2011	0.25 to 0.5	1000 -	NA	2200	
OFS-002-015-042-Grab	3/8/2011	3.25 to 3.5	650	0.272 J	.360	
NR - Not reported					i i	
NA - Not analyzed						

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