



**PHASE I ENVIRONMENTAL SITE ASSESSMENT
AND LIMITED ASBESTOS AND LEAD-BASED
PAINT SURVEYS
MOAPA SENIOR CENTER
MOAPA RIVER INDIAN RESERVATION
CLARK COUNTY, NEVADA**

PROJECT NO. 117225.02

June 28, 2011

Only the Client or its designated representatives may use this document and only for the specific project for which this report was prepared.

A report prepared for:



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June 28, 2011
File: 117225.02

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**Subject: Phase I Environmental Site Assessment and
Limited Asbestos and Lead-Based Paint Surveys
Moapa Senior Center
Moapa River Indian Reservation
Clark County, Nevada**

Dear Mr. Friedman:

Enclosed are two hard copies and one electronic copy on compact disc (CD) of the Phase I Environmental Site Assessment (ESA) for the above-referenced property. The ESA was conducted under an approved Brownfield Grant. In addition to the submittals provided to NDEP, we are providing two copies to the Moapa Band of Paiutes, the applicant of this funded grant.

An executive summary is provided; however, we recommend that the report be read in its entirety for a comprehensive understanding of the items contained therein.

We appreciate the opportunity to provide these services for you. Should you require additional information, have any questions regarding this report, or wish to discuss the recommendations provided, please contact us at 775-689-7800.

Respectfully submitted,

KLEINFELDER

Joshua P. Fortmann, CEM
Project Manager

JPF/DCB/js
Enclosures

Copies with attachments to:

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Kleinfelder Project No.: 117225.02

Prepared by:

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

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1 EXECUTIVE SUMMARY

A grant application was submitted by the Moapa Band of Paiutes (Moapa Indian Reservation), a Federal Tribal Organization, to the Nevada Division of Environmental Protection's (NDEP) Brownfields Program for Brownfields assessment funding. The grant application was submitted for conducting an assessment of the Moapa Senior Center (subject property). NDEP approved the application and requested that a scope of services for conducting a Phase I Environmental Site Assessment (Phase I ESA) and asbestos and lead-based paint survey be submitted by Kleinfelder. The scope of work also included an asbestos survey for a water tank located adjacent to the subject property. The water tank asbestos survey is provided in a separate report. The scope was submitted on March 14, 2011 and approved by the NDEP on April 26, 2011, under NDEP Contract 10-008.

A Phase I Environmental Site Assessment (Phase I ESA) was performed for NDEP (Client) for property located on the Moapa Indian Reservation, in Clark County, Nevada (Plate 1). This report was prepared using the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E1527-05.

The subject property consists of an approximately 2,700 square foot single story structure located at the southwest corner of Lincoln Street and Paqaroonsy Street on the Moapa Paiute Reservation in Moapa, Nevada. The subject property is known as the Moapa Senior Center.

An historical profile of the subject property was developed using information obtained during our review of regulatory databases and one or more of the following historical sources: aerial photographs, topographic maps, fire insurance maps, street directories, and previous investigations.

The subject property was listed in the Tribal Lands database.

The following *recognized environmental conditions* (REC, as defined in Section 2.1) was noted:

- Three 55-gallon steel drums were observed on the ground on the east side and near the northeast corner of the building. The drums were not labeled and the volume and type of contents are unknown. Since the drums are in poor condition and rusting, they represent the material threat of a release. Kleinfelder recommends that the contents of the 55-gallon steel drums be characterized, packaged, and disposed by a qualified professional.

The following environmental concerns may also warrant consideration:

- A 55-gallon high-density polyethylene (HDPE) drum was observed on the east side of the building. A faded label appeared to read "isopropyl alcohol". The drum appeared to be in good condition. Kleinfelder recommends that the contents of the 55-gallon HDPE drum should be characterized, packaged, and disposed by a qualified professional.
- A 5-gallon bucket of hydraulic oil and two buckets of paint were also observed on the east side of the building. Kleinfelder recommends that these 5-gallon buckets be appropriately stored inside the building to prevent a release.

There were no *historic recognized environmental conditions* noted for the subject property during the preparation of this Phase I ESA.

Asbestos

A limited asbestos survey (LAS) revealed the presence of approximately 500 square feet of asbestos-containing material (ACM) black mastic and approximately 320 square feet of tan ACM vinyl floor tile. A State of Nevada asbestos contractor should be contracted to remove the loose and damaged ACM vinyl floor tile observed within the building. Appropriate asbestos hazard warning signs should also be placed as a warning to employees, contractors, subcontractors and other parties having access to the area as to the presence of ACM. If removal of the undamaged tan ACM vinyl floor tile or the non-ACM, off-white tile (both underlain by the ACM black mastic) is to occur in the future, a State of Nevada asbestos contractor should also be contracted to

perform the work. Detailed recommendations are presented in Section 6.5 of this report, and should be read in their entirety.

Lead-Based Paint

The lead-based paint (LBP) survey revealed the presence of brown exterior trim LBP, applied to wood substrate, containing 54,000 parts per million (ppm) lead. This LBP should be addressed through abatement or interim controls. The options to abate the hazard from LBP are either to replace the painted wood trim or to remove the paint from the wood substrate. Of these two options, replacement of the painted wood trim, leaving to paint intact, is the preferred option as it reduces potential exposure to the public and to workers during removal. Detailed recommendations are presented in Section 6.6 of this report, and should be read in their entirety.

A full evaluation of this site including any deviations, historical environmental conditions, and *de minimis* findings are discussed in Chapter 8 of this report. This report is subject to the limitations in Section 2.5.

2 INTRODUCTION

The following report is a summary of work performed using the guidelines set forth in the ASTM Standard E-1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM Standard). This report generally conforms to the ASTM Standard's suggested table of contents. To assist in better reading and understanding of the report, Kleinfelder made minor format modifications to the ASTM Standard's suggested table of contents.

2.1. PURPOSE

The purpose of this Phase I ESA is to identify, to the extent feasible pursuant to the terms of our NDEP Contract 10-008, and limitations discussed in this report, RECs and other environmental issues related to the subject property. As defined in the ASTM Standard, a REC is:

The presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

The ASTM standard also requires the identification of Historical RECs (HRECs). As defined in the ASTM Standard, subsection 3.2.39, a HREC is:

An environmental condition which in the past would have been considered a REC, but which may or may not be considered a REC currently. The final decision rests with the EP and will be influenced by the current impact of the

HREC on the property. If a past release of any hazardous substance or petroleum products has occurred in connection with the property and has been remediated, with such remediation accepted by the responsible regulatory agency (for example, as evidence by the issuance of a no further action letter or equivalent), this condition shall be considered a HREC and included in the findings section of the Phase 1 ESA report... (EP opinion statement)... If this HREC is determined to be a REC at the time the Phase 1 ESA is conducted, the condition shall be identified as such and listed in the conclusions section of the report."

This report describes Kleinfelder's assessment methodology and documents our assessment findings, subject to the limitations presented in Section 2.5 of this report.

2.2. DETAILED SCOPE-OF-SERVICES

The following sections describe Kleinfelder's work scope:

- Section 2, **Introduction**, includes a discussion of the purpose/reason for performing the Phase I ESA, additional services requested by the Client (i.e., an evaluation of business environmental risk factors associated with the subject property), significant assumptions (i.e., property boundaries if not marked in the field), limitations, exceptions, and special terms and conditions (i.e., contractual), and user reliance parameters.
- Section 3, **Site Description**, is a compilation of information concerning the subject property location, legal description (if provided), current and proposed use of the subject property, a description of structures and improvements on site at the time of Kleinfelder's assessment, and adjoining property use.
- Section 4, **Records Review**, is a compilation of Kleinfelder's review of several databases available from Federal, State, and local regulatory agencies regarding hazardous substance use, storage, or disposal at the subject property; and for off-site facilities within the search distance specified in the ASTM Standard. Records provided by the Client are summarized and copies of relevant documents are included in the appendices of this report. Physical setting sources (including topography, soil and groundwater conditions) and typical

Client-provided information (i.e., title records, environmental liens, specialized knowledge, valuation reduction for environmental issues, and owner, property manager, and occupant information) are also summarized in this section. Other interviews with people knowledgeable about the subject property (including the client) are included in Section 7.

- Section 5, **History of the Site**, summarizes the history of the subject property and adjoining properties. This site history is based on various sources which may include: a review of historical aerial photographs, Sanborn Fire Insurance Maps, city or suburban directories, historical topographic maps, building department records, and results of previous site assessments.
- Section 6, **Site Reconnaissance**, describes Kleinfelder's observations during the site reconnaissance. The methodology used and limiting conditions are described.
- Section 7, **Interviews**, is a summary of telephone and personal interviews conducted with "Key Site Managers" that may include the owner/manager of the facility, occupants/tenants, local government officials, and the Client. Additional interview sources may be contacted if "Key Site Managers" are not available prior to production of this report, and may include adjoining landowners and people with historical knowledge of the area.
- Section 8, **Evaluation**, is a presentation of our findings and opinions regarding the information in Sections 3 through 7, and presents our conclusions regarding the presence of RECs connected with the subject property, and recommendations if required by the Client.
- Section 9, **References**, is a summary of some of the resources used to compile this report.

Pertinent documentation regarding the subject property is included in appendices of this report.

2.3. ADDITIONAL SERVICES

The scope of work for this Phase I ESA included a LAS, an LBP survey, and soil sample collection for total lead analysis. Other ASTM Standard non-scope considerations, such as radon, lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and high voltage power lines.

2.4. SIGNIFICANT ASSUMPTIONS

No significant assumptions were made regarding the subject property.

2.5. LIMITATIONS AND EXCEPTIONS

Phase I ESAs are non-comprehensive by nature and may not identify all environmental problems, and will not eliminate all risk. This report is a qualitative assessment. Kleinfelder offers a range of investigative and engineering services to suit the needs of our clients, including more quantitative investigations. Although risk can never be eliminated, more detailed and extensive investigations yield more information, which may help the Client understand and better manage risks. Since such detailed services involve greater expense, we ask our clients to participate in identifying the level of service, which will provide them with an acceptable level of risk. Please contact the signatories of this report if you would like to discuss this issue of risk further.

Kleinfelder performed this Phase I ESA in general accordance with the guidelines set forth in the ASTM Standard, and the proposed scope subsequently approved by our Client. No warranty, either express or implied, is made. Environmental issues not specifically addressed in this report were beyond the scope of our services and not included in our evaluation.

During our LAS, no attempt was made move equipment, furnishings or to uncover or observe below-ground systems or equipment. Areas that were not considered safely accessible were not evaluated. There remains the possibility that additional ACMs (e.g., in underground asbestos-containing cement pipes and/or ACM-wrapped utility pipes), or other hazardous materials may be encountered during future building demolition and/or below grade excavation activities.

2.6. SPECIAL TERMS AND CONDITIONS

No special terms and conditions in addition to those discussed previously were agreed to either by the Client and Kleinfelder.

2.7. USER RELIANCE

This report may be used only by the NDEP, and the Moapa Band of Paiutes and only for the purposes stated within a reasonable time from its issuance, *but in no event later than 1 year from the date of the report.* Land or facility use, on- and off-site conditions, regulations, or other factors may change over time, and additional work may be required with the passage of time. Since site activities and regulations beyond our control could change at any time after the completion of this report, our observations, findings, and opinions can be considered valid only as of the date of the site visit. This report should not be relied upon after 180 days from the date of its issuance (ASTM Standard, Section 4.6). Any party other than the Client who wishes to use this report shall notify Kleinfelder of such intended use.

3 SITE DESCRIPTION

The site description is presented in this section and describes the condition of the subject property at the time of the Phase I ESA. The subject property location is shown on Plate 1, and an aerial view of the subject property is shown on Plate 2. Tables 3-1 through 3-5 summarize the physical characteristics of the subject property and adjoining properties.

3.1. LOCATION AND LEGAL DESCRIPTION

The information presented in Table 3-1 describes the physical location and legal description of the subject property. This information was obtained from review of various maps (such as topographic maps and tax assessor maps), aerial photographs, public records at city and/or county offices, interviews, and/or information provided by the Client.

**TABLE 3-1
LOCATION AND LEGAL DESCRIPTION**

Parameter	Information/Comments
ADDRESS	Southwest corner of Paqaroonsy Street and Lincoln Street
LOCATION	USA Moapa Indian Reservation, Clark County Unincorporated 89025
SECTION, TOWNSHIP & RANGE	Section 31, Township 14 South, Range 66 East
ASSESSOR'S PARCEL NO.	A portion of 030-36-000-006
LEGAL DESCRIPTION	The site is a portion of SEC 31 TWP 14 RNG 66, of the Clark County Assessors Legal description for the Reservation, recorded as PT SECS 25,26,35,36 14 65 & SEC 31 14 66 & SEC 01 15 65 & SEC 06 15 66
SQUARE FOOTAGE	Approximately 2,700
ZONING	Rural Open Land [.5 Units per Acre] (R-U)

3.2. CURRENT/PROPOSED USE OF THE PROPERTY

At the time of Kleinfelder's assessment the land use for the subject property was the Moapa Senior Center for the Moapa Indian Reservation. Current and proposed uses are described in Table 3-2.

**TABLE 3-2
CURRENT/PROPOSED USES**

Parameter	General Observations
CURRENT USE	Moapa Senior Center
PROPOSED USE	Moapa Senior Center

3.3. DESCRIPTION OF STRUCTURES/IMPROVEMENTS

Structures and/or improvements observed on site at the time of Kleinfelder's site reconnaissance are described in Table 3-3.

**TABLE 3-3
STRUCTURES/IMPROVEMENTS**

Parameter	General Observations
STRUCTURES	Single story building
IMPROVEMENTS	None

3.4. CURRENT USES OF ADJOINING PROPERTIES

Kleinfelder performed a brief drive-by survey of the properties immediately adjoining to the subject property on June 8, 2011. A summary of the surrounding properties is presented in Table 3-4.

**TABLE 3-4
ADJOINING PROPERTIES**

Direction	Land Use Description
NORTH	Single story building (separated from the subject site by Lincoln Street) housing the Tribal Police, and the Moapa Indian Reservation Environmental Protection's Water Quality Group.
EAST	NV Energy air monitoring station and tribal residential housing
SOUTH	Vacant lot, with an abandoned water tank beyond.
WEST	Playground area, with tribal residential housing beyond.

There was a single, abandoned water aboveground storage tank (AST) observed on the south adjacent property. There were no underground storage tanks (USTs) or other environmental conditions visible, from either the subject property boundary or public right-of-way view, on the adjoining properties at the time of Kleinfelder's site reconnaissance. Based on our observations, the adjoining properties do not appear likely to adversely affect the subject property.

4 RECORDS REVIEW

4.1. STANDARD ENVIRONMENTAL RECORD SOURCES

The purpose of the records review is to obtain and review records that would help to evaluate RECs of potential concern in connection with the subject property and bordering properties.

Federal, state and local regulatory agencies publish databases or "lists" of businesses and properties that handle hazardous materials or hazardous waste, or are the known location of a release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. Kleinfelder contracted a commercial database service, TrackInfo Services of Montrose, California to perform the government database search for listings within the appropriate US Environmental Protection Agency (EPA) All Appropriate Inquiry (AAI) minimum search distance of the subject property. TrackInfo Services refer to their reports as the FirstSearch Environmental Report (FirstSearch). A description of the types of information contained in each of the databases reviewed and the agency responsible for compiling the data is also included in the FirstSearch Report. The FirstSearch database search results are presented in Appendix B, including the databases summarized in Table 4-1.

**TABLE 4-1
RECORDS REVIEW & SEARCH DISTANCE**

FEDERAL LIST	DISTANCE
National Priority List (NPL)	1 mile
Delisted NPL	½ mile
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	½ mile
CERCLIS-No Further Remedial Action Planned (NFRAP)	½ mile
Resource Conservation Recovery Act (RCRA)-CORRACTS facilities	1 mile
RCRA-non CORRACTS TSD facilities	½ mile
RCRA generators	¼ mile
Institutional Control/Engineering Control registries	¼ mile
Emergency Response Notification System (ERNS)	Site
NPL-equivalent lists of hazardous waste sites (SHWS)	1 mile
CERCLIS-equivalent lists of hazardous waste sites	½ mile
Landfills or Solid Waste Listing	½ mile
Leaking Underground Storage Tank (LUST)	½ mile
Registered Underground Storage Tanks (UST)	¼ mile
Institutional Control/Engineering Control-equivalent registries	¼ mile
Voluntary Cleanup Sites (VCP)	½ mile
Brownfields	½ mile

FirstSearch utilizes a geographical information system to plot the locations of business and properties listed in the regulatory databases listed in Table 4-1. Kleinfelder reviews this information to help establish if the subject property, or nearby properties, have been included in the noted databases and lists. The FirstSearch report includes radius maps that show the locations of the listed properties with respect to the subject property, and a summary of pertinent information for these properties. For each listed site, the summaries include the name of the responsible party, the property address, the distance and direction from the subject property, as well as the databases and lists on which the listed property appears. The dates that the databases were updated are also included in the FirstSearch report.

4.2. RESULTS OF DATABASE SEARCH

The following sections contain information on the results of FirstSearch's record search. Listed search distances are those specified in the ASTM Standard. The subject property was listed in the Tribal Lands database.

4.2.1. Federal Lists

Within their respective ASTM recommended minimum search distances, there were two geocoded sites found, including a Tribal Lands listing. The second geocoded site was a CERCLIS site for the "Moapa Pesticides Emergency Response". This site is located approximately 0.27 miles to the northwest of the subject property. Based on an interview with a Moapa Tribe representative (Mr. Ian Zabarte, Section 7.3), herbicides and pesticides were previously stored in a shed near the Paiute Farm workshop. The condition of storage bags and containers were deteriorating and some of the pesticides and herbicides may have been in contact with soil. Mr. Zabarte requested that the USEPA remove the herbicides and pesticides in 2009. Since the location of this listing is 0.27 miles away, it is unlikely to pose a risk to the subject property.

There were three nongeocoded sites, including a second Tribal Lands listing. There is a listing for a Solid Waste Landfill (SWL) for the "Moapa/Glendale Landfill". Although this facility is not mapped, it appears to be located at least two miles north of subject property based on the provided legal description. Based on its location it does not appear to pose a risk to the subject property.

The other nongeocoded listing is for a RCRA No Longer Regulated (NLR) site, listed at 1 Lincoln Street. This address appears to be located to the north of the subject property, across Lincoln Street, at the offices for the Moapa Paiute Reservation. Request for files from the NDEP and the Southern Nevada Health District (SNHD) did not produce files for either of these listings. None of the interviewed contacts (Section 7) had any knowledge of a reason for the RCRA NLR listing. The address given for the RCRA NLR is "1 Lincoln Street", which appears to be a generic address assigned for the Moapa Paiute Reservation. The Moapa Paiute Reservation may have been given a RCRA generator ID number during cleanup of the herbicides and pesticides discussed above, or due to occasional disposal events of large amounts of household chemicals

and wastes. Based on the available information, the RCRA NLR listing does not appear to pose a risk to the subject property.

4.2.2. State Lists

Within their respective ASTM recommended minimum search distances, there were no geocoded or nongeocoded sites found.

4.2.3. Supplemental Federal, State, and Local Lists

In addition to the ASTM Standard database search, Kleinfelder requested that FirstSearch provide information for the following supplemental databases: State Wells, Releases, Federal Wells, Coal Gasification, Oil & Gas Wells, Fire Insurance Map Coverage, Dry Cleaners, Meth Labs and Mines.

None of these supplemental databases had listings.

4.2.4. Orphan (nongeocoded) List

Sites not plotted by FirstSearch due to poor or inadequate address information are nongeocoded and are referred to as orphan sites. There were three orphan sites, which have been discussed in Section 4.2.1.

4.3. OTHER RECORDS REVIEWED/AGENCIES CONTACTED

Kleinfelder contacted Mr. Charles Moses, Environmental Scientist with the Nevada Department of Agriculture, to inquire about pesticide and/or herbicide use at the subject property. Mr. Moses indicated that the state does not maintain records or application on tribal land unless it is performed by a licensed applicator. No records are available at the tribal offices so it is not possible to determine whether a commercial applicator performed work at the subject property.

4.4. PHYSICAL SETTING SOURCE(S)

Table 4-2 presents information about the physical setting of the site. This information was obtained from published maps.

**TABLE 4-2
PHYSICAL SETTING**

Data	Source	General Information
USGS TOPOGRAPHIC QUADRANGLE	Moapa West Quadrangle, 7.5 Minute Series (Topographic), 1967, (photo-revised 1983).	The subject property is located at an approximate elevation of 1640 feet above mean sea level (msl) and the topographic relief slopes to the south and southeast. Roads are shown in the vicinity of the subject property, and a few structures are depicted.
SOIL TYPE	USDA-Natural Resources Conservation Service, Web Soil Survey (http://websoilsurvey.nrcs.usda.gov), accessed June 20, 2011.	Soils are classified as "Badland". The USDA Map Unit Symbol is "BD", described as Landform: Fan remnants, Downslope shape: linear, Across slope shape: convex.
OIL AND GAS FIELDS	NBMG, Bulletin 104 (Garr, et. al) and NBMG, Open-File Report 04-1 (Hess, et. al)	There are no oil and gas fields in the site vicinity. There are no oil or gas wells within a 1-mile radius of the subject property.

Information about the regional geology is presented on Table 4-3. This information was obtained from published data and maps, interviews with public agencies, and/or from previous investigations conducted by Kleinfelder or others in the vicinity of the site.

**TABLE 4-3
REGIONAL GEOLOGY AND HYDROGEOLOGY**

Physical Parameter	INFORMATION/COMMENTS
REGIONAL GEOLOGY (Source: Preliminary geologic map of the Moapa West Quadrangle, Clark County, Nevada, [Schmidt, Dwight L.; Page, William R.; Workman, Jeremiah B., USGS Open-File Report 96-521])	The subject property is underlain by Quaternary (Qr) age, recent terrace alluvium (Holocene). Mostly tan silt and sand, but includes sparse gray gravel in upper reach of Muddy River and mostly tan sandy gravel in side stream terraces.
DEPTH TO REGIONAL GROUNDWATER (Source: Nevada Bureau of Water Resources)	Based on the NDWR well log database, there are no wells within Township 14S, Range 66E, Section 31 (the Section in which the subject property lies). Within the adjacent Section to the west (Township 14S, Range 65E, Section 36), there are two irrigation wells listed, with the approximate depth to groundwater listed as being 12 feet below ground surface (bgs).
DIRECTION OF ANTICIPATED FLOW ¹ (Source: general local knowledge)	The inferred direction of regional groundwater flow is to the south and southeast towards the Muddy River.
REGIONAL GROUNDWATER QUALITY PROBLEMS	No information on the regional groundwater quality problems is known.
WATER SUPPLY (Source: Nevada Bureau of Water Resources and FirstSearch Report)	The well search revealed two irrigation wells in the northeast quarter of the northwest quarter of Section 36, the Section adjacent to the west of the subject property. The FirstSearch Report listed no Federal or State wells, within one-half mile of the Subject Property.
FLOOD ZONE DESIGNATION (Source: Clark County Regional Flood Control)	According to the Clark County Regional Flood Control database, the subject property is located within the 100-year flood zone.

¹ Groundwater flow direction is based on regional information sources. Site-specific conditions may vary due to a variety of factors including geologic anomalies, utilities, nearby pumping wells (if present), and other developments.

4.5. USER PROVIDED INFORMATION

According to Client, the purpose for performing this Phase I ESA is to satisfy due diligence requirements. Information regarding current owner/occupant is listed in Table 4-4.

**TABLE 4-4
OWNER/OCCUPANT INFORMATION**

Entity	Name
OWNER	Moapa Paiute Indian Reservation
PROPERTY MANAGER	Moapa Band of Paiutes
OCCUPANT	Moapa Band of Paiutes

Interviews of key individuals (“Key Site Managers”) are provided in Section 7. The following section presents information provided by the Client.

4.5.1. Title Records

A Preliminary Title Report or Chain-of-Title Report was not provided to Kleinfelder for review prior to production of this report. These documents may provide information about land including ownership and other interests in the land, easements, and liens. Not all liens, defects, and encumbrances affecting title to the land may be included on the Preliminary Title Report.

4.5.2. Environmental Liens and Activity Usage Limitations

As part of the ASTM E1527-05 process (ASTM E1527-05, Section 6.2), it is the User’s responsibility to provide Environmental Liens and Activity Usage Limitations (AULs) information to the environmental professional (Kleinfelder), unless the agreed scope of services provides otherwise. Our scope of services did not include researching Environmental Liens and Activity Usage Limitations for the subject property, nor was that information provided to Kleinfelder to review.

4.5.3. Value Reduction

As part of the ASTM E1527-05 process (ASTM E1527-05, Section 6.5), the User must provide information regarding the prospective purchase price of the property relative to the fair market value of the subject property. If there appears to be a value reduction, that reduction must be identified with respect to whether the difference could be attributed to environmental degradation of the property.

This Phase I ESA is not being done for purchase and therefore, this portion of the Phase I ESA does not apply.

4.5.4. Other Information/Documents Provided

Except has discussed in Section 7 (Interviews) of this Report, no other information/documents were provided to Kleinfelder.

5 HISTORY OF THE SITE

The history of the site was researched to identify obvious uses. Historical land use was researched to the first developed use, or back to 1940, whichever was earlier or readily available. For the subject property, the earliest readily ascertainable historical reference available was 1938. Table 5-1 summarizes the availability of information reviewed during this assessment.

**TABLE 5-1
HISTORICAL SOURCES**

	Years reviewed	Availability
AERIAL PHOTOGRAPHS	1938, 1967, 1973, 1981, 1994, 2006, 2010	Available, FirstSearch, Clark County Info Mapper Website
SANBORN FIRE INSURANCE MAPS	Not Applicable	No Coverage
LOCAL STREET DIRECTORIES	None available	No Coverage
HISTORICAL TOPOGRAPHIC MAPS	1958, 1965, 1983	Available, FirstSearch
BUILDING DEPARTMENT	None	None
PREVIOUS ASSESSMENT(S)	None	None
OTHER	None	None

5.1. AERIAL PHOTOGRAPHS

A review of historical aerial photography may indicate past activities at a site that may not be documented by other means, or observed during a site visit. The effectiveness of this technique depends on the scale and quality of the photographs and the available coverage. Aerial photographs were obtained from the historical photograph collection held by FirstSearch. Aerial photographs covering the years between 1938 and 2006 were available during the timeframe that this report was being prepared. The Clark County Info Mapper Website was reviewed for a current (Spring 2010) aerial photo review and is used for Plate 2. A tabulation of the aerial photographs reviewed is presented in Table 5-2.

**TABLE 5-2
HISTORICAL AERIAL PHOTOGRAPHS REVIEWED**

Date	Approximate Scale	Type	Source	Quality
1938	1 inch = 750 feet	Black and White Monoscopic	Environmental FirstSearch	Poor
1967	1 inch = 750 feet	Black and White Monoscopic	Environmental FirstSearch	Poor
1978	1 inch = 750 feet	Black and White Monoscopic	Environmental FirstSearch	Fair
1981	1 inch = 750 feet	Black and White Monoscopic	Environmental FirstSearch	Fair
1994	1 inch = 750 feet	Black and White Monoscopic	Environmental FirstSearch	Fair
2006	1 inch = 750 feet	Color Monoscopic	Environmental FirstSearch	Good
2010	Varies	Color Monoscopic	Clark County InfoMapper	Excellent

Note: Aerial photographs only provide information on indications of land use and no conclusions regarding the release of hazardous substances or petroleum products can be drawn from the review of photographs alone.

5.1.1. Subject property

The 1938 aerial photograph shows the subject property as undeveloped, but the photograph is very dark and features are hard to discern. The 1967 aerial photograph shows that the subject property may have been developed, but the darkness and poor quality of the photograph make features difficult to discern. The 1973 aerial photograph appears to show the subject property as developed with the current structure. The 1981, 1994, 2006, and 2010 aerial photographs continue to show the subject property as being developed with the same structure, and no significant changes are visible. The 2010 aerial photograph is provided as Plate 2.

5.1.2. Surrounding Areas

The 1938 aerial photograph is very dark and features are hard to discern, but it appears that some of the surrounding areas are used for agriculture. The 1967 photograph appears to show some development along Lincoln Street, adjacent to the subject property. The 1973 aerial photograph clearly shows the presence of small structures adjacent to the east and west of the subject property, and the lot directly behind (south) of the subject property has been graded. In the 1981 photograph, small structures are also present to the north across Lincoln Street, and the water AST (see Section 6.4) appears to be present to the south across the graded lot. No significant changes are apparent in the 1994 photograph. The 2006 photograph shows the expansion of an office complex to the north across Lincoln Street. No significant changes were observed in the 2010 photograph.

The aerial photographs do not suggest the existence of RECs.

5.2. FIRE INSURANCE MAPS

Fire insurance coverage maps, such as those maintained by The Sanborn Map Company, were produced for the purpose of assessing the potential fire hazard of a particular building or area. The maps generally show the type of building construction may show locations of stored chemicals, ASTs, USTs; and also often identify site uses and features not ordinarily available from other sources. These maps are generally available only for historically established urban and suburban areas. These historical fire insurance maps were maintained for various cities from 1867 through the 1950s.

Fire Insurance Maps provide historical land use information for some metropolitan areas and small established towns. The maps generally show the type of building construction, may show locations of stored chemicals, AST, USTs; and also often identify site uses and features not ordinarily available from other sources.

Kleinfelder requested a search of Fire Insurance Map Coverage by FirstSearch. FirstSearch indicated that coverage was not available for the site vicinity. A letter of no coverage is provided with the FirstSearch Report in Appendix B.

5.3. LOCAL STREET DIRECTORIES

Local Street Directories (City Directories) provide information regarding property occupants by address and are one means to evaluate past ownership and property usage. City Directories were not readily available during this assessment.

5.4. HISTORICAL TOPOGRAPHIC MAP REVIEW

Kleinfelder obtained information regarding historical topographic maps of the site vicinity from FirstSearch report. The topographic maps reviewed for this assessment are listed below in Table 5-3.

**TABLE 5-3
HISTORICAL TOPOGRAPHIC MAPS REVIEWED**

Year	Quadrangle	Series	Scale
1958	Moapa, NV	15 minute	1:62,500
1965	Moapa, NV	15 minute	1:62,500
1983	Moapa West, Nevada	7.5 minute	1:24,000

5.4.1. Subject property

The 1958, 1965 and 1983 historic topographic maps appear to show a small structure on, or in the immediate vicinity of the subject property.

5.4.2. Surrounding Areas

The 1958 historic topographic map shows the presence of roads (including Lincoln Street) and structures to the west of the subject property. Railroad tracks are visible approximately 1.5 miles to the southeast of the subject property. No significant changes are apparent in the 1965 topographic map. The 1983 topographic map shows additional structures along Lincoln Street to the east and west of the subject property, and "sewage disposal ponds" are also shown approximately 0.5 miles to the south.

5.5. BUILDING DEPARTMENT RECORDS

No Building Department records were reviewed. Clark County building records typically do not provide information related to environmental issues.

5.6. PREVIOUS ASSESSMENTS

No previous assessments were provided to Kleinfelder for review.

6 SITE RECONNAISSANCE

Kleinfelder's assessment activities included a site reconnaissance. This section summarizes the findings from the site reconnaissance.

6.1. METHODOLOGY AND LIMITING CONDITIONS

On June 8, 2011, Mr. Daniel Burns, a Kleinfelder employed State of Nevada Certified Environmental Manager (CEM), performed a site reconnaissance of the subject property and adjacent properties. During the visit, the weather was clear. There were no site access restrictions.

The site reconnaissance included a visual inspection of the subject property to assist in identifying the presence or likely presence of hazardous substances or petroleum hydrocarbons under conditions that indicate an existing release, a past release, or threat of release into structures, soil, groundwater, or surface water at the site. Observations of readily apparent environmental conditions are summarized in Table 6-1, and color photographs of the site are presented on Plates 3 through 5.

6.2. GENERAL SITE SETTING

The subject property consists of an approximately 2,700 square feet single story building, located in a portion of Clark County APN 030-36-000-006. The subject property is referred to by the Moapa Band of Paiutes as the Moapa Senior Center.

6.3. SITE OBSERVATIONS

General site observations are further described in Table 6-1, and Table 6-2 further describes the interior and exterior observations as well as observed environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.

**TABLE 6-1
SITE OBSERVATIONS**

GENERAL OBSERVATIONS	REMARKS	OBSERVED	NOT OBSERVED
Current use of Subject Property	Moapa Senior Center	X	
Current use of Subject Property likely to indicate RECs	Three 55-gallon drums in poor condition stored onsite	X	
Past use of Subject Property			X
Past use of Subject Property likely to indicate RECs			X
Current use of adjoining properties	<p><u>North</u> – Single story building (separated from the subject site by Lincoln Street) housing the Tribal Police, and the Tribe’s Environmental Protection’s Water Quality Group.</p> <p><u>East</u> – NV Energy air monitoring station and tribal residential housing.</p> <p><u>South</u> – Vacant lot, with the abandoned water AST beyond.</p> <p><u>West</u> – Playground area, with tribal residential housing beyond.</p>	X	
Current use of adjoining properties likely to indicate RECs			X
Past use of adjoining properties			X
Past use of adjoining properties likely to indicate RECs			X
Topography of site and surrounding area	Flat and sloping slightly to the south / southeast.	X	

**TABLE 6-1 (Continued)
SITE OBSERVATIONS**

GENERAL OBSERVATIONS	REMARKS	OBSERVED	NOT OBSERVED
Structures	Moapa Senior Center	X	
Roads		X	
Potable Water Supply			X
Sewage Disposal System	A septic system is reportedly used for sewage disposal.		X
Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		OBSERVED	NOT OBSERVED
AST			X
Air emissions			X
Asbestos and lead	Refer to Sections 6.5 (asbestos survey) and 6.6 (lead-based paint survey)	X	
Below grade vaults			X
Burned or buried debris			X
Chemical storage	5-gallon containers of hydraulic oil, engine oil and paint located the storage room used by Water Quality group	X	
Chemical mixing areas			X
Discolored soil or water			X
Ditches, streams			X
Drains and piping (<i>e.g. floor drains, floor trenches, bay drains, sand traps, grease traps</i>)			X
Drums	Exterior east side of building (three 55-gallon drums)	X	
Electrical or hydraulic equipment (polychlorinated biphenyls [PCBs])	Aboveground, pole mounted electrical service was observed. Refer to Section 7.3	X	

**TABLE 6-1 (Continued)
SITE OBSERVATIONS**

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		OBSERVED	NOT OBSERVED
Farm waste (e.g. feedlot spoils or manure stockpile)			X
Fill dirt from an unknown source.			X
Fill dirt from a known source			X
Hazardous chemical and petroleum products in connection with <i>known</i> use.			X
Hazardous chemical and petroleum products in connection with <i>unknown</i> use.			X
Non-hazardous containers with contents	5-gallon containers of hydraulic oil, engine oil and paint located the storage room used by Water Quality. One 5-gallon bucket of hydraulic oil and two buckets of paint were also stored outside the building.	X	
Hazardous waste storage			X
Heating and cooling system and fuel source	All conditioned space heating is reportedly by electricity. Cooling systems are listed as containing R-22 refrigerant.	X	
Industrial waste treatment equipment			X
Loading and unloading areas			X
Odors			X
Pits, ponds, or lagoons			X
Pools of liquid			X

**TABLE 6-1 (Continued)
SITE OBSERVATIONS**

Interior and exterior observations or environmental conditions that may involve the use, storage, disposal or generation of hazardous substances or petroleum products.		OBSERVED	NOT OBSERVED
Process waste water			X
Septic system (e.g. tank and leach fields)	Reported to be on the south side of the building	X	
Soil piles			X
Solid waste/evidence of Unauthorized Dumping			X
Stained pavement, soil or concrete			X
Stains or corrosion (interior, non-water)			X
Storm drains/catch basins			X
Stressed vegetation			X
Sumps and clarifiers			X
Surface water			X
Underground storage tank(s) (including heating oil tanks)			X
Unidentified substance containers	Three, unlabeled 55-gallon drums	X	
Waste water discharge			X
Water supplies (potable and process)			X
Wells (irrigation, monitoring, or domestic)			X
Wells (dry)			X
Wells (oil and gas)			X

6.4. RESULTS OF SITE RECONNAISSANCE

The structure on the subject property is a single-story, approximately 2,700 square foot structure, with concrete masonry unit (CMU) exterior walls. At the time of our site

reconnaissance, we observed 5-gallon containers of hydraulic oil, engine oil and paint stored on a shelf in the storage room used by the Moapa Paiute Reservation's Water Quality Department. Three 55-gallon steel drums were observed on the ground on the east side and near the northeast corner of the structure. They were in poor condition and were rusting. They were not labeled and were not verified for contents, as handling of rusted drums could have resulted in a release. A high-density polypropylene (HDPE) 55-gallon drum was also observed, and a faded label appeared to read "isopropyl alcohol". Two 5-gallon buckets of paint and a 5-gallon bucket of hydraulic oil were also observed on the ground in the same area. A PVC pipe protruding from the ground was also observed on the south side of the building. The pipe appeared to be a cleanout for the septic UST. A storage shed and two storage containers were observed adjacent to the onsite structure. The interior of the shed and storage containers were not observed since they were locked, but the contents reportedly do not include chemicals or petroleum products.

The site perimeter was walked and adjacent properties observed (as viewable from the subject property and public rights of way). No RECs or other environmental concerns were noted on adjacent properties.

6.5. LIMITED ASBESTOS SURVEY

On June 8, 2011, a LAS was conducted at the same time as the Phase I ESA site reconnaissance. The LAS was performed by a State of Nevada Licensed Asbestos Abatement Consultant accredited under the Asbestos Hazards Emergency Response Act (AHERA).

It is Kleinfelder's understanding that the purpose of this LAS was to evaluate the interior location, condition and quantity of potentially hazardous ACM with asbestos content greater than 1%, which may present a worker safety hazard and/or might require special handling and waste disposal as part of any interior remodeling/renovations. Appendix E provides an asbestos regulatory overview.

Mr. Daniel Burns, Nevada Asbestos Consultant-Inspector (I-0971) performed the LAS. All asbestos bulk samples were submitted to Fiberquant Analytical Services (Fiberquant) located in Phoenix, Arizona. Fiberquant is certified under the United

States Environmental Protection Agency's National Voluntary Laboratory Accreditation Program (NVLAP).

Kleinfelder collected a total of 18 bulk samples of suspect ACMs during the LAS. Most bulk samples contained various layers (up to six layers). Based on our observations and a review of the laboratory analytical reports, the following estimated quantities of ACMs are confirmed to be present:

- An estimated 500 square feet of black mastic adhered to the off-white and the tan 12-inch square resilient floorings with between 5% to 10% chrysotile asbestos, located in the kitchen (Sample ACM-03A), the kitchen storage rooms, the hall way, janitorial closet and entry foyer (samples ACM-04A through -04C). The black mastic ACM was observed to be in good condition and is classified as Category I non-friable ACM. Removal would be considered Class II asbestos work. Where carpet was lifted to view the underside, no black mastic was observed. However, if during carpet removal and replacement, black mastic is observed, it should be considered as ACM and handled accordingly.
- An estimated 320 square feet of tan colored vinyl floor tile samples with between 2-5% chrysotile asbestos, located in the kitchen storage rooms, the janitorial closet, the hallway and the entry foyer (samples ACM-04A through -04C). Areas of the tan vinyl floor tile ACM was observed to be in good condition and would be classified as Category I non-friable ACM. Removal would be considered Class II asbestos work. However, some of the vinyl floor tile ACM is in poor condition, which would classify the vinyl floor tile ACM as friable, Regulated Asbestos Containing Materials (RACM). Removal of this friable, hazardous RACM would be considered Class I asbestos work.

A summary of Kleinfelder's asbestos survey analytical results for the Senior Center is provided in Table 6-3. The asbestos sample location map is provided as Plate 6. A summary of the asbestos regulations are provided in Appendix E. Copies of the asbestos analytical laboratory report and chain-of-custody forms are provided in Appendix F.

**TABLE 6-3
SUMMARY OF ASBESTOS BULK SAMPLE RESULTS**

Sample No.	Sample Location	Sample Description	Asbestos Content (PLM)	Observed Condition /Friability	Estimated Material Amount
ACM-01A Layer #1	Ceiling - office	Off-white paint	ND	NA	NA
ACM-01A Layer #2	Ceiling- office	Acoustical tile	ND	NA	NA
ACM-01A Layer #3	Ceiling- office	Brown glue	ND	NA	NA
ACM-01B Layer #1	Ceiling- water quality storage room	Off-white paint	ND	NA	NA
ACM-01B Layer #2	Ceiling- water quality storage room	Tan acoustical tile	ND	NA	NA
ACM-01C Layer #1	Ceiling- hallway	Off-white paint	ND	NA	NA
ACM-01C Layer #2	Ceiling- hallway	Acoustical tile	ND	NA	NA
ACM-02A Layer #1	Ceiling- entry foyer	Smooth texture off-white paint	ND	NA	NA
ACM-02A Layer #2	Ceiling- entry foyer	Smooth texture white texture/joint compound	ND	NA	NA
ACM-02A Layer #3	Ceiling- entry foyer	Smooth texture off-white paper/cardboard	ND	NA	NA
ACM-02A Layer #4	Ceiling- entry foyer	Smooth texture white texture/joint compound	ND	NA	NA
ACM-02A Layer #5	Ceiling- entry foyer	Smooth texture tan paper/cardboard	ND	NA	NA
ACM-02A Layer #6	Ceiling- entry foyer	Smooth texture white drywall core	ND	NA	NA
ACM-02B Layer #1	Ceiling- entry foyer	Off-white paint	ND	NA	NA
ACM-02B Layer #2	Ceiling- entry foyer	Tan acoustical tile	ND	NA	NA
ACM-02B Layer #2	Ceiling- entry foyer	Off-white paint	ND	NA	NA
ACM-02B Layer #3	Ceiling- entry foyer	Smooth texture white texture/joint compound	ND	NA	NA
ACM-02B Layer #4	Ceiling- entry foyer	Smooth texture off-white paper/cardboard	ND	NA	NA

**TABLE 6-3 (Continued)
SUMMARY OF ASBESTOS BULK SAMPLE RESULTS**

Sample No.	Sample Location	Sample Description	Asbestos Content (PLM)	Observed Condition /Friability	Estimated Material Amount
ACM-02B Layer #5	Ceiling- entry foyer	Smooth texture white texture/joint compound	ND	NA	NA
ACM-02B Layer #6	Ceiling- entry foyer	Smooth texture tan paper/cardboard	ND	NA	NA
ACM-02C Layer #1	Ceiling- entry foyer	Smooth texture white texture/joint compound	ND	NA	NA
ACM-03A Layer #1	Floor tile- kitchen	Off-white tile	ND	NA	NA
ACM-03A Layer #2	Floor tile- kitchen	Clear mastic	ND	NA	NA
ACM-03A Layer #3	Floor tile- kitchen	Black mastic	5-10% chrysotile	Good / Category I non-friable	500 square feet (total, see text)
ACM-03B Layer #1	Floor tile- office	Off-white tile	ND	NA	NA
ACM-03B Layer #2	Floor tile- office	Clear mastic	ND	NA	NA
ACM-03C Layer #1	Floor tile- office	Off-white tile	ND	NA	NA
ACM-03C Layer #2	Floor tile- office	Clear mastic	ND	NA	NA
ACM-04A Layer #1	Floor tile- hall closet	Tan tile	2-5% chrysotile	Some is in poor condition / friable, RACM	320 square feet (total, see text)
ACM-04A Layer #2	Floor tile- hall closet	Black mastic	2-5% chrysotile	Some is in poor condition / friable, RACM	320 square feet (total, see text)
ACM-04B Layer #1	Floor tile- hallway	Tan tile	2-5% chrysotile	Some is in poor condition / friable, RACM	320 square feet (total, see text)
ACM-04B Layer #2	Floor tile- hallway	Black mastic	2-5% chrysotile	Some is in poor condition / friable, RACM	320 square feet (total, see text)
ACM-04C Layer #1	Floor tile- entry foyer	Tan tile	2-5% chrysotile	Some is in poor condition / friable, RACM	320 square feet (total, see text)

TABLE 6-3 (Continued)
SUMMARY OF ASBESTOS BULK SAMPLE RESULTS

Sample No.	Sample Location	Sample Description	Asbestos Content (PLM)	Observed Condition /Friability	Estimated Material Amount
ACM-04C Layer #2	Floor tile- entry foyer	Black mastic	2-5% chrysotile	Some is in poor condition / friable, RACM	320 square feet (total, see text)
ACM-05A Layer #1	Roof-penetration seal	White paint	ND	NA	NA
ACM-05A Layer #2	Roof-penetration seal	Black caulk	ND	NA	NA
ACM-05B Layer #1	Roof-penetration seal	White caulk	ND	NA	NA
ACM-05B Layer #2	Roof-penetration seal	Black caulk	ND	NA	NA
ACM-05C Layer #1	Roof-penetration seal	White paint	ND	NA	NA
ACM-05C Layer #2	Roof-penetration seal	Black caulk	ND	NA	NA
ACM-06A Layer #1	Roof- shingle and mastic	White paint	ND	NA	NA
ACM-06A Layer #2	Roof- shingle and mastic	Black caulk	ND	NA	NA
ACM-06A Layer #3	Roof- shingle and mastic	Black shingle	ND	NA	NA
ACM-06A Layer #4	Roof- shingle and mastic	Black shingle	ND	NA	NA
ACM-06A Layer #5	Roof- shingle and mastic	Black shingle	ND	NA	NA
ACM-06B Layer #1	Roof- shingle and mastic	Black shingle	ND	NA	NA
ACM-06B Layer #2	Roof- shingle and mastic	Black caulk	ND	NA	NA
ACM-06B Layer #3	Roof- shingle and mastic	Black shingle	ND	NA	NA
ACM-06C Layer #1	Roof- shingle and mastic	Black shingle	ND	NA	NA

ND = Not detected
NA = Not applicable

Applicable Regulations- Asbestos

On federal and tribal lands, enforcement of the asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP) regulation 40 CFR Part 61, Subpart M is overseen by US EPA Region 9, in San Francisco. The Asbestos NESHAP regulations must be followed for renovations of facilities with at least 160 square feet of RACM. Non-friable ACM that has been damaged during a renovation or demolition causing the material to be crumbled, pulverized or reduced to powder is covered by the NESHAP regulation for wetting and containment of the material during removal. After wetting, asbestos waste must be placed in leak-tight containers and labeled with the name of the waste generator and the location in which the waste was generated. An Occupational Safety and Health Administration (OSHA) warning label must also be used. The waste must be transported in covered vehicles to prevent visible emissions and deposited at an acceptable waste disposal site. A more complete regulatory overview is presented in Appendix E.

Recommendations- Asbestos

Due to the presence of damaged tan vinyl floor tile ACM observed within the building, a State of Nevada asbestos contractor should be contracted to remove the loose and damaged tiles. Appropriate asbestos hazard warning signs should also be placed as a warning to employees, contractors, subcontractors and other parties having access to the area as to the presence of ACM. If removal of the undamaged tan vinyl floor tile ACM or the non-ACM, off-white tile (both underlain by the black mastic ACM) is to occur in the future, a State of Nevada asbestos contractor should also be contracted to perform the work.

- At a minimum, Kleinfelder recommends that the damaged tan vinyl floor tiles be removed in accordance with NESHAP regulations and local applicable Nevada regulations governing asbestos related work prior to the installation of additional non-ACM flooring, if required.
- A State of Nevada licensed asbestos abatement contractor should be retained to perform the asbestos abatement of the ACM noted at the site. Removal of the

vinyl tiles should be conducted manually, typically using "Spud" bars. Mechanical chipping machines should not be used to remove the tiles.

- Removal of the mastic shall be removed only by wet methods or by approved solvent. Note: that mastic removal chemicals may require special respiratory protection and, thus, this protection must be implemented along with the proper notification and training. Regional and local regulatory agency regulations that restrict the use of mechanical buffing machines, mastic removal chemicals and/or bead blasting equipment shall be obeyed and adhered to.
- Notification should be made to Mr. Bob Trotter, the USEPA NESHAP coordinator, located in San Francisco, California about the renovation project at least 10 working days prior to the beginning of the project.
- Contractors performing work that disturbs ACM at the site should implement appropriate work practices in accordance with applicable Federal and Nevada worker exposure regulations.

6.6. LEAD-BASED PAINT SURVEY AND SOIL SAMPLING

On June 8, 2011, Kleinfelder personnel conducted a surface-by-surface visual inspection of all painted surfaces throughout accessible areas of the Senior Center building. Mr. Daniel Burns, who holds USEPA Lead Paint Risk Assessor certification in Nevada (NV-R-11723-3) and Region 9 Tribal Lands (T9-R-11723-1) performed the survey.

Paint chip samples were collected from painted surfaces and window caulking that was visually observed to be damaged (cracked, chipped, peeling, and/or delaminating). During the LBP survey, all accessible interior painted surfaces were observed to be in good condition. However, we did observe damaged exterior paint and window caulking as a result of moisture, wear, heat, and/or age. Exterior painted surfaces on wood substrate were observed to be in poor condition. Overall, the exterior painted surfaces on concrete masonry block substrate was observed to be in fair condition.

In addition, soil samples were collected along the drip line of the roof to assess the soil for the possible accumulation of lead in soil resulting from detached LBP from the structure. Performance of this survey allows for the Moapa Paiute Reservation to have

information for compliance with the OSHA construction regulations under CFR 1926.62, which require an employer to identify potential lead hazards for workers and meet requirements of the standard.

One paint chip sample was collected from each color of the exterior damaged paint and damaged window caulking and submitted the samples to Fiberquant for LBP analyses. The LBP samples were submitted for analysis using Flame Atomic Adsorption Spectroscopy (Flame AA) in accordance with the EPA's Standard Operating Procedures for Lead in Paint by Atomic Adsorption Spectroscopy (AAS). Fiberquant is accredited under the American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP), which is an approved lead laboratory accreditation program under the Environmental Protection Agency's (EPA) National Lead Laboratory Accreditation Program (NLLAP).

Soil samples were collected beneath the drip line of the roof from the ground surface to a depth of approximately six inches. Four part composite samples were collected from each side of the building. A total of four composite samples were submitted to Fiberquant for total lead analysis by first performing extraction/digestion (by method SW 3050b), followed by Flame AA for the detection of lead.

The LBP survey and soil sampling consisted of sample collection from the following specific media:

- a. Three paint chip samples were collected from exterior paint that was visually observed to be damaged and of a different color (LBP-01 through LBP-03).
- b. Three samples were collected from window caulking that was visually observed to be damaged (LBP-04 through LBP-06).
- c. Four composite soil samples were collected from the north, east, south and west facing sides of the building, from a depth of approximately ground surface to 6-inches beneath ground surface. All four samples were collected from locations beneath the roof drip line (Soil-01 through Soil-04).

For paint chip sample LBP-01, lead was detected at a concentration of 54,000 ppm or 5.4 % by weight. The analytical results indicated this paint is classified as LBP. This

sample was collected from brown trim paint, observed to be in poor condition, applied to wood substrate. The quantity was estimated to more than 50 square feet.

For paint chip sample LBP-03, lead was detected at a concentration of 52 ppm or 0.0052% by weight, slightly above the laboratory reporting limit of 47 ppm. The analytical results indicate this paint is not considered LBP, but does contain lead. The remainder of the paint chip and window caulking samples were below laboratory reporting limits.

For composite soil samples (Soil-01 through Soil-04), lead was not detected above the laboratory reporting limit.

A summary of Kleinfelder's LBP survey and soil sampling analytical results is provided in Table 6-4. The LBP sample location map is provided as Plate 7. A summary of the LBP regulations are provided in Appendix G. Copies of the lead sample analytical laboratory report and chain-of-custody forms are provided in Appendix H.

**TABLE 6-4
SUMMARY OF LEAD SAMPLE RESULTS**

Sample No.	Sample Location and Description	Lead Content (ppm)
LBP-01	Brown exterior trim paint (wood substrate)	54,000
LBP-02	White exterior fascia paint (wood substrate)	<45
LBP-03	Yellow exterior paint (concrete substrate)	52
LBP-04	White window caulk- east	<49
LBP-05	White window caulk- west	<39
LBP-06	White window caulk- north	<49
Soil-01	East side exterior wall (soil- composite)	<24
Soil-02	West side exterior wall (soil- composite)	<25
Soil-03	South side exterior wall (soil- composite)	<24
Soil-04	North side exterior wall (soil- composite)	<25

Applicable Regulations- LBP

The EPA and US Department of Housing and Urban Development (HUD) define LBP as paints containing greater than 0.5 % by weight, which is equivalent to 5,000 ppm. Federal OSHA and Nevada OSHA regulations (Lead Construction Standard) do not provide a definition for “lead-based paint,” but refer to the EPA and HUD values discussed above. Federal and Nevada OSHA are primarily concerned with worker protection, and regulates any amount of lead contained within painted building components. A more detailed summary of LBP regulations is presented as Appendix G.

Recommendations- LBP

The brown LBP applied to the exterior wood should be addressed through abatement or interim controls. The options to abate the hazard from LBP are either to replace the painted wood trim or to remove the paint from the wood substrate. Of these two options, replacement of the painted wood trim, leaving the paint intact, is the preferred option as it reduces potential exposure to the public and to workers during removal.

As an interim control measure, paint film stabilization should be accomplished to those areas where the paint is damaged. This is a process of wet scraping, priming, and repainting surfaces that are coated with deteriorated LBP. This method should be done to ‘stabilize’ the brown LBP applied to exterior surfaces until the substrate is removed and replaced.

The above options must be performed by qualified lead abatement certified personnel, using proper equipment and disposal methods in accordance to the appropriate EPA and federal OSHA regulations.

7 INTERVIEWS

Key Site Managers are contacted to obtain current and historical environmental information concerning the subject property. The “Key Site Manager” of the subject property is Mr. Robert Volbert, Tribal Administrator/Business Manager for the Moapa Band of Paiute.

7.1. INTERVIEW WITH OWNER REPRESENTATIVE

Kleinfelder conducted an interview with Tribal Chairman Anderson during the site reconnaissance portion of this Phase I ESA.

Chairman Anderson indicated he had no knowledge of any environmental concerns, but that the Tribe was concerned about ACM and LBP.

7.2. INTERVIEW WITH CLIENT

Mr. Volpert was provided a User Questionnaire (included in Appendix C). According to the User Questionnaire, there are no known activity use limitations, environmental cleanup leans, or other environmental issues associated with the subject property, with the exception of the potential presence of ACM and LBP in the building.

7.3. INTERVIEW WITH OTHERS

Kleinfelder contacted Mr. Ian Zabarte, Environmental Coordinator, Moapa Band of Paiutes, Department of Environmental Protection, to conduct an interview regarding the two listings within the database (RCRANLR and CERCLIS) (refer to Section 4 of this report). Mr. Zabarte indicated he had no knowledge of the RCRANLR listing but the CERCLIS listing was a result of an action he requested of the USEPA in 2009 to remove stored herbicides and pesticides within an approximate 16 feet by 10 feet concrete block structure located near the Paiute Farm workshop. The condition of storage bags and containers were deteriorating and some of the pesticides and herbicides may have been in contact with soil. The cement block structure is located

near the Paiute Farm's administrative building at 12 Lincoln Street, approximately ¼ mile to the northwest of the subject property.

8 EVALUATION

Kleinfelder performed this ESA of the subject property in conformance with the scope and limitations of ASTM Standard Practice E1527-05. The following sections describe Kleinfelder's findings and provide general background information about the site. Findings include RECs, historical RECs, and notation of de minimis quantities, as applicable to the site. Business environmental risk issues are discussed in Section 8.3, Deviations. In summary, Kleinfelder's assessment revealed the following information about the site:

8.1. BACKGROUND

The subject property consists of approximately 2,700 square foot single story structure located at the southwest corner of Lincoln Street and Paqaroonsy Street on the Moapa Paiute Reservation in Moapa, Nevada. The subject property is referred to as the Senior Center.

8.2. FINDINGS AND OPINIONS

An historical profile of the subject property was developed using information obtained during our review of regulatory databases and one or more of the following historical sources: aerial photographs, topographic maps, fire insurance maps, and street directories.

The subject property does not appear on any of the federal, state, and/or local environmental databases reviewed, except for Tribal Land listings.

The following *recognized environmental conditions* (REC, as defined in Section 2.1) was noted for the subject property during the preparation of this Phase I ESA:

- Three 55-gallon steel drums were observed on the ground on the east side and near the northeast corner of the building. The drums were not labeled and the volume and type of contents are unknown. Since the drums are in poor condition and rusting, they represent the material threat of a release.

In addition, the following environmental concerns were also noted:

- A 55-gallon HDPE drum was observed on the east side of the building. A faded label appeared to read "isopropyl alcohol". The drum appeared to be in good condition.
- A 5-gallon bucket of hydraulic oil and two 5-gallon buckets of paint were also observed on the east side of the building.

There were no *historic recognized environmental conditions* (historic REC, as defined in Section 2.1) noted for the subject property during the preparation of this Phase I ESA.

Limited Asbestos Survey

Based on our observations and a review of the laboratory analytical reports, the following estimated quantities of ACMs are confirmed to be present:

- An estimated 500 square feet of black mastic ACM adhered to the off-white and the tan 12-inch square resilient floorings with between 5% to 10% chrysotile asbestos, located in the kitchen (Sample ACM-03A), the kitchen storage rooms, the hall way, janitorial closet and entry foyer (samples ACM-04A through -04C). The black mastic ACM was observed to be in good condition and is classified as Category I non-friable ACM. Removal would be considered Class II asbestos work. Where carpet was lifted to view the underside, no black mastic was observed. However, if during carpet removal and replacement, black mastic is observed, it should be considered as ACM and handled accordingly.
- An estimated 320 square feet of tan vinyl floor tile ACM with between 2-5% chrysotile asbestos, located in the kitchen storage rooms, the janitorial closet, the hallway and the entry foyer (samples ACM-04A through -04C). Areas of the vinyl floor tile ACM was observed to be in good condition and would be classified as Category I non-friable ACM. Removal would be considered Class II asbestos work. However, some of the vinyl floor tile ACM is in poor condition, which would classify the vinyl floor tile ACM as friable, RACM. Removal of this friable, hazardous RACM would be considered Class I asbestos work.

Lead Based Paint Survey and Soil Sampling

Kleinfelder observed no damaged paint on the accessible interior areas of the structure. Samples were collected from exterior paints and window caulking that were observed to be damaged. Based on the laboratory analytical reports, the following LBP is confirmed to be present:

- Brown exterior trim paint (sample LBP-01). Lead was detected at a concentration of 54,000 ppm or 5.4% by weight.

Soil samples collected beneath the drip line of the roof did not contain lead concentrations above the laboratory reporting limits.

8.3. DEVIATIONS AND ADDITIONAL SERVICES

An evaluation of business environmental risk associated with the parcel(s) was not included in Kleinfelder's scope of services. The ESA does not incorporate non-scope considerations, such as radon, lead in drinking water testing, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, and high voltage power lines.

8.4. CONCLUSIONS AND RECOMMENDATIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527 on a portion of Clark County Assessor Parcel 030-36-000-006. The subject property is located at the southwest corner of Lincoln Street and Paqaroonsy Street on the Moapa Paiute Reservation in Moapa, Nevada. It is referred to as the Moapa Senior Center. Any exceptions to, or deviations from, this practice are described in Section 8.3 of this report.

This assessment revealed the following REC in connection with the subject property:

- Three 55-gallon steel drums were observed on the ground on the east side and near the northeast corner of the building. The drums were not labeled and the volume and type of contents are unknown. Since the drums are in poor

condition and rusting, they represent the material threat of a release. Kleinfelder recommends that the contents of the 55-gallon steel drums be characterized, packaged, and disposed by a qualified professional.

The following environmental concerns may also warrant consideration:

- A 55-gallon HDPE drum was observed on the east side of the building. A faded label appeared to read "isopropyl alcohol". The drum appeared to be in good condition. Kleinfelder recommends that the contents of the 55-gallon HDPE drum should be characterized, packaged, and disposed by a qualified professional.
- A 5-gallon bucket of hydraulic oil and two 5-gallon buckets of paint were also observed on the east side of the building. Kleinfelder recommends that these 5-gallon buckets be appropriately stored inside the building to prevent a release onto soil.

Asbestos

The LAS revealed the presence of approximately 500 square feet of ACM black mastic and approximately 320 square feet of tan ACM vinyl floor tile. A State of Nevada asbestos contractor should be contracted to remove the loose and damaged vinyl floor tile ACM observed within the building. Appropriate asbestos hazard warning signs should also be placed as a warning to employees, contractors, subcontractors and other parties having access to the area as to the presence of ACM. If removal of the undamaged tan ACM vinyl floor tile or the non-ACM, off-white tile (both underlain by the black mastic ACM) is to occur in the future, a State of Nevada asbestos contractor should also be contracted to perform the work. Detailed recommendations are presented in Section 6.5, and should be read in their entirety.

Lead Based Paint

The LBP survey revealed the presence of brown exterior trim paint, applied to wood substrate, containing 54,000 ppm lead. This LBP should be addressed through abatement or interim controls. The options to abate the hazard from LBP are either to replace the painted wood trim or to remove the paint from the wood substrate. Of these

two options, replacement of the painted wood trim, leaving to paint intact, is the preferred option as it reduces potential exposure to the public and to workers during removal. Detailed recommendations are presented in Section 6.6 of this report, and should be read in their entirety.

8.4.1. Data Gaps

Consistent with ASTM Standard Practice E 1527-05 (Section 12.7), the following data failure (data gap) has been identified.

- No information was able to be obtained for the RCRANLR listing discussed in Section 4.2. The address given for the RCRANLR listing is “1 Lincoln Street”, which appears to be a generic address assigned for the Moapa Paiute Reservation. The Moapa Paiute Reservation may have been given a RCRA generator ID number during cleanup of the herbicides and pesticides discussed above, or due to occasional disposal of larger amounts of household chemicals and wastes. Based on the available information, the RCRANLR listing does not appear to pose a risk to the subject property.

9 REFERENCES

American Society for Testing and Materials (ASTM), 2005. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*; ASTM Designation E 1527-05, November 14, 2005.

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CERLCIS cleanup photographs, 2009, Moapa Band of Paiutes

Division of Water Resources, Department of Conservation & Natural Resources, State of Nevada. *Well Log Database Query Tool*. Accessed March 4, 2011.
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Garside, L.J., R.H. Hess, K.L. Fleming and B.S. Weimer, 1988. *Oil and Gas Developments in Nevada*, Nevada Bureau of Mines and Geology Bulletin 104.

Hess, R.H., S.P. Fitch, and S.N. Warren, 2004. *Nevada Oil and Gas Well Database (NVOILWEL)*. Nevada Bureau of Mines and Geology Open-File Report 04-1. June 1.

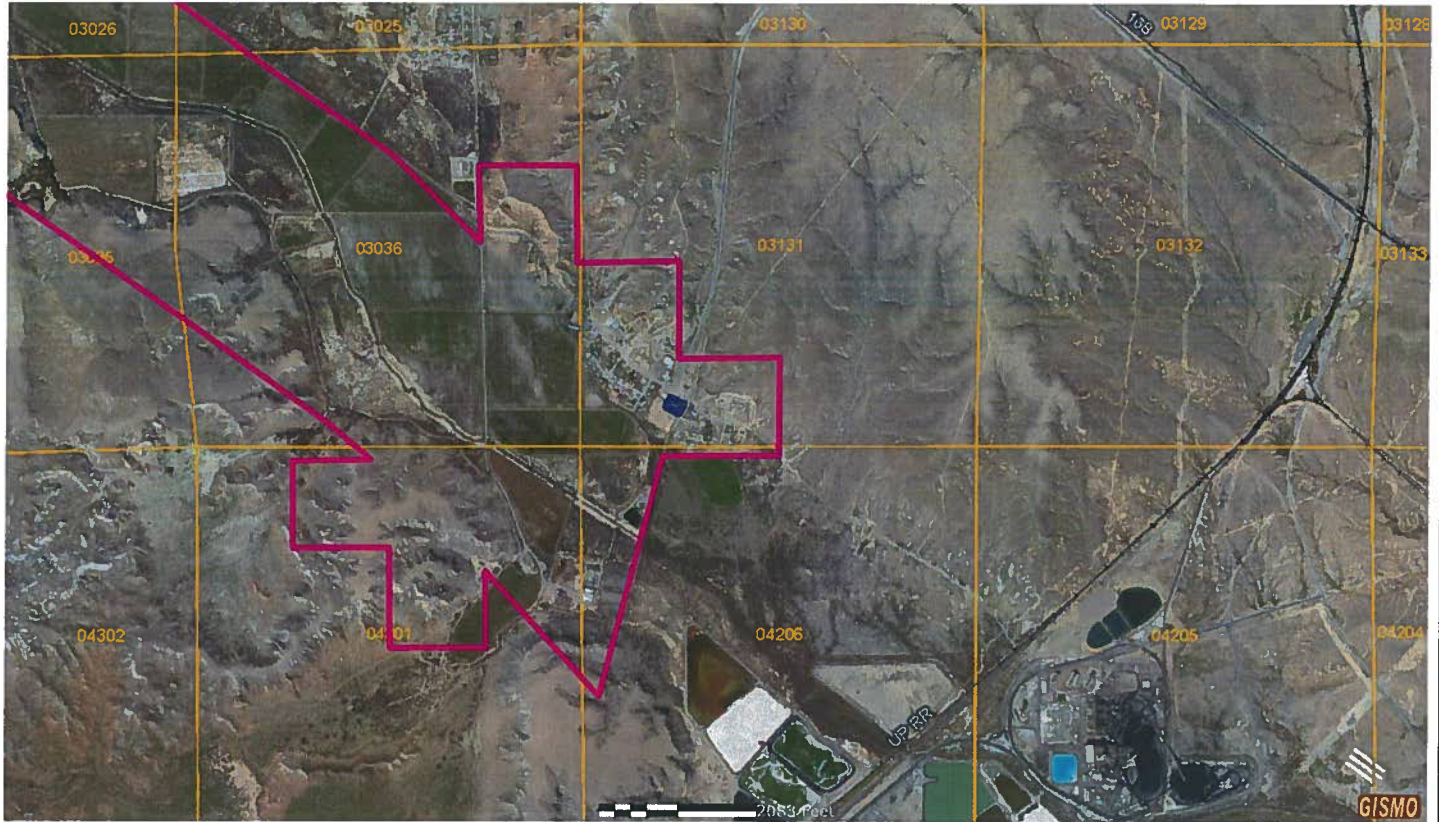
Track Info Services, Environmental FirstSearch™, 2011.

United States Geologic Survey, 1983. Moapa West, Nev. Quadrangle, 7.5 Minute Series (Topographic).

United States Geologic Survey, 1965. Moapa, Nev. Quadrangle, 15 Minute Series (Topographic).

Additional sources are provided in Appendix D and also may be referenced separately in the report text.

PLATES



Assessor's Parcel
Boundary



Subject Property
Location



Map Source:
Clark County, Nevada
County Assessor's Office
OpenWeb Info Mapper

Original in Color

KLEINFELDER
6380 South Polaris Avenue
Las Vegas, Nevada 89118
Ph. (702) 736-2936 Fax. (702) 361-9094

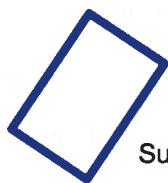
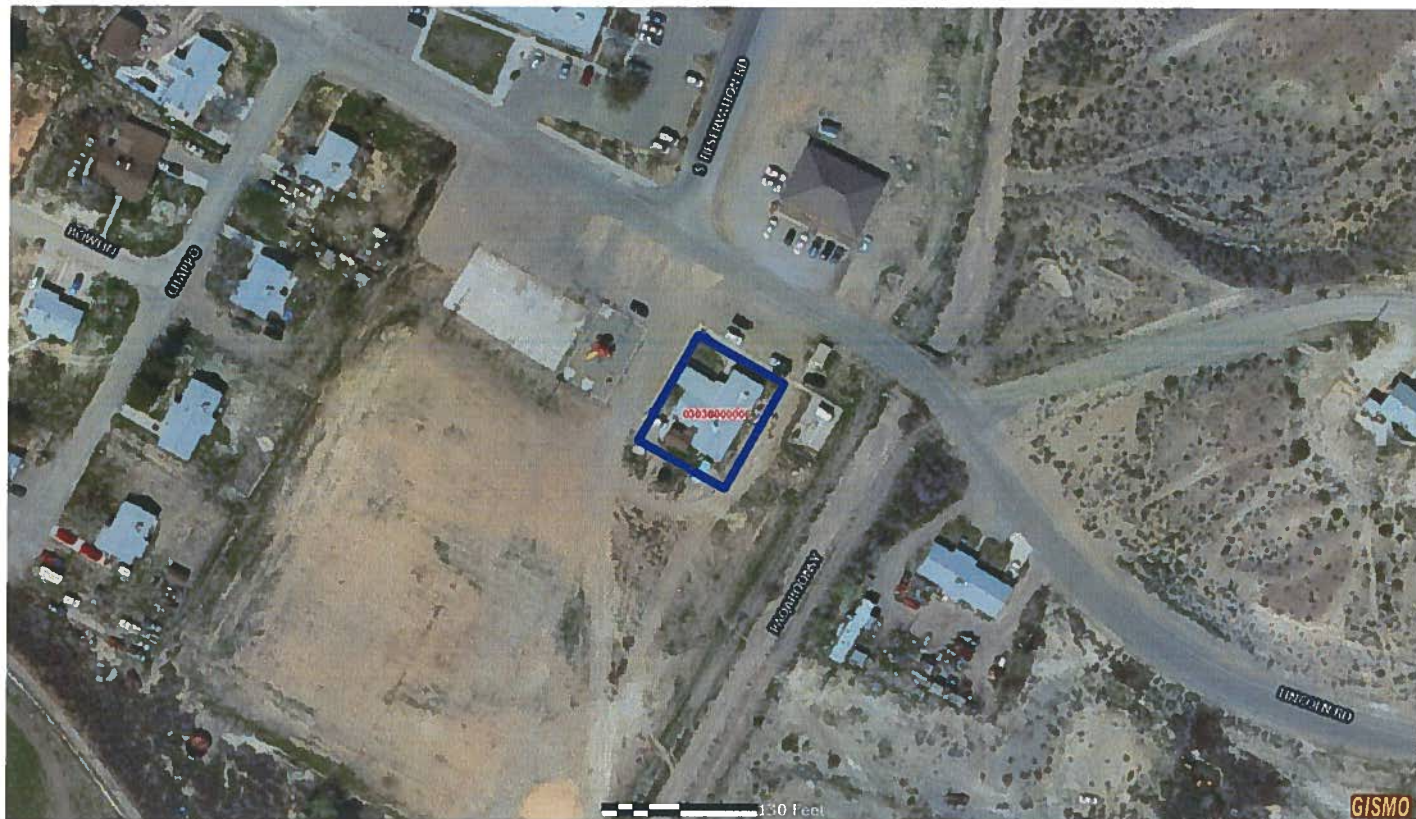
SUBJECT PROPERTY AND VICINITY MAP

MOAPA SENIOR CENTER
MOAPA PAIUTE RESERVATION
MOAPA, NEVADA

PLATE

1

Drawn by: PJT | Checked by: JPF | Date: 06-14-11 | PROJECT NO.: 117225.02




Subject Property



Map Source:
Clark County, Nevada
County Assessor's Office
OpenWeb Info Mapper

Original in Color

 KLEINFELDER 6380 South Polaris Avenue Las Vegas, Nevada 89118 Ph. (702) 736-2936 Fax. (702) 361-9094	AERIAL VIEW OF SUBJECT PROPERTY	
	MOAPA SENIOR CENTER MOAPA PAIUTE RESERVATION MOAPA, NEVADA	PLATE 2
Drawn by: PJT Checked by: JPF Date: 06-14-11	PROJECT NO.: 117225.02	



Looking west along north side of Senior Center building



Looking south along east side of Senior Center building



Looking west along south side of the Senior Center building



Looking north along west side of the Senior Center building



Senior Center Gathering Room



Interior of storage room, within Senior Center building, used by Senior Center kitchen

Original in Color

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 6380 South Polaris Avenue
 Las Vegas, Nevada 89118
 Ph. (702) 736-2936 Fax. (702) 361-9094

SITE PHOTOGRAPHS

MOAPA SENIOR CENTER
 MOAPA PAIUTE RESERVATION
 MOAPA, NEVADA

PLATE

3

Drawn by: DCB | Checked by: PJT | Date: 06/02/11 | PROJECT NO.: 117225.02



Interior of storage room, within Senior Center building, used by the Tribe's Water Quality Group



Chemicals stored in Water Quality Storage Room



Gasoline can stored in Water Quality Storage Room



55-gallon drums and 5-gallon paint containers on northeast corner of Senior Center building



Suspected septic system clean out on south side of Senior Center building



5-gallon container of hydraulic oil

Original in Color

KLEINFELDER
 6380 South Polaris Avenue
 Las Vegas, Nevada 89118
 Ph. (702) 736-2936 Fax. (702) 361-9094

SITE PHOTOGRAPHS

MOAPA SENIOR CENTER
MOAPA PAIUTE RESERVATION
MOAPA, NEVADA

PLATE

4

Drawn by: DCB | Checked by: PJT | Date: 06/02/11 | PROJECT NO.: 117225.02



North adjacent property (across Lincoln Street)



East adjacent property



South adjacent property



West adjacent property

Original in Color

KLEINFELDER
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 Las Vegas, Nevada 89118
 Ph. (702) 736-2936 Fax. (702) 361-9094

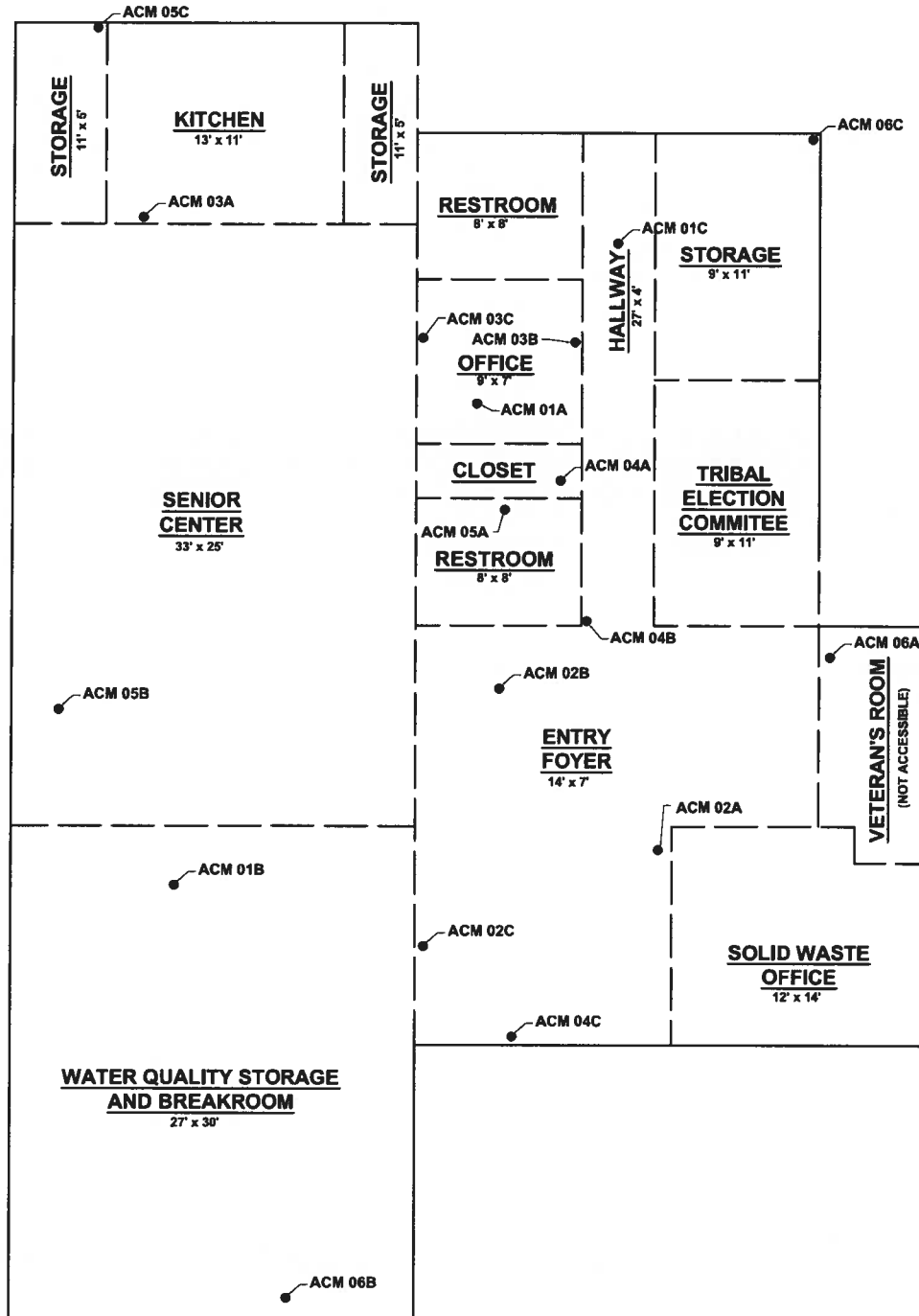
SITE PHOTOGRAPHS

MOAPA SENIOR CENTER
 MOAPA PAIUTE RESERVATION
 MOAPA, NEVADA

PLATE

5

Drawn by: DCB | Checked by: PJT | Date: 06/02/11 | PROJECT NO.: 117225.02



DRAWING NOT TO SCALE

LEGEND

● ACM 01A - APPROXIMATE ASBESTOS SAMPLE LOCATION

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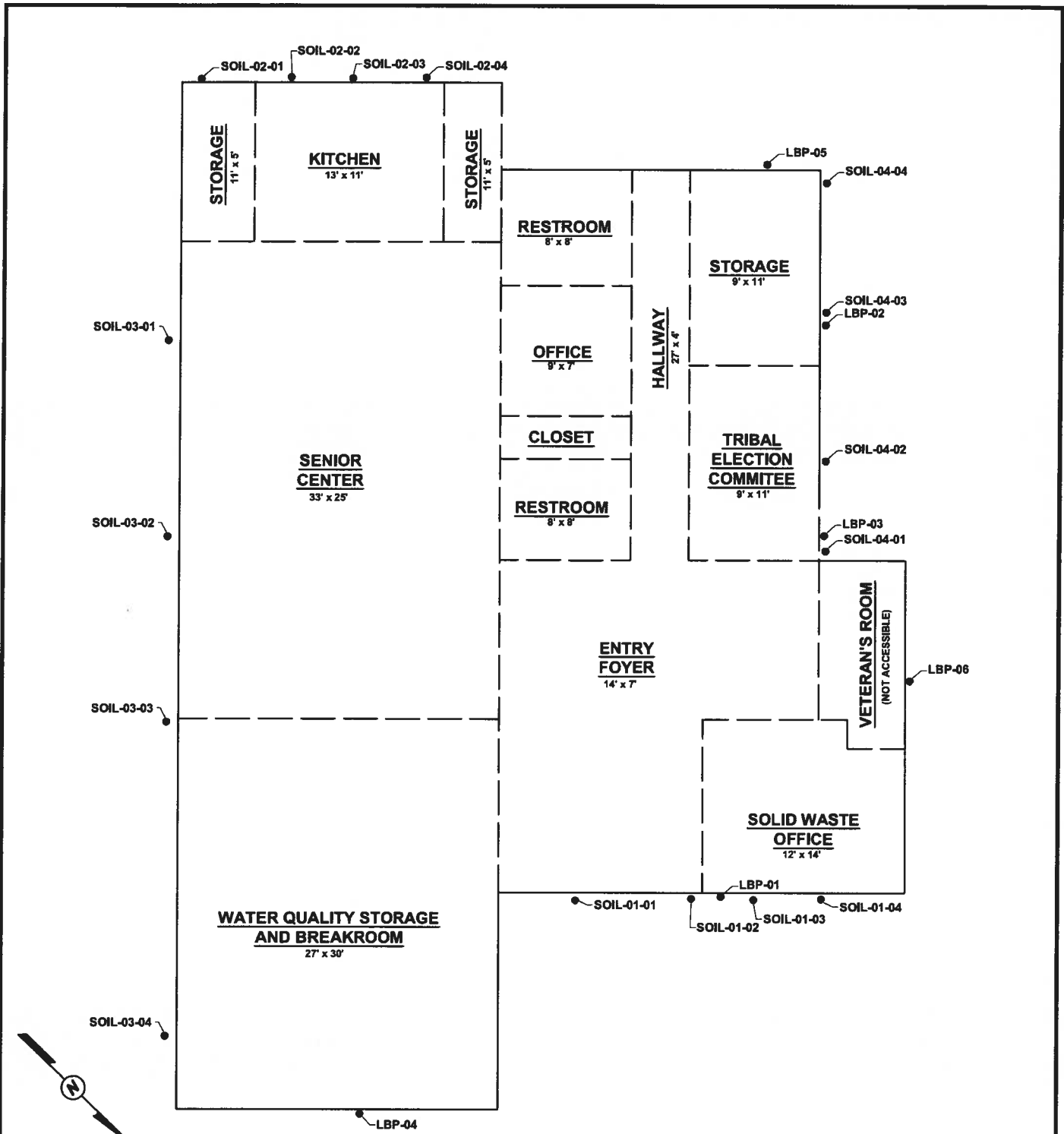
PROJECT NO.	117225.02
DRAWN:	6/23/2011
DRAWN BY:	DFR
CHECKED BY:	DB
6380 South Polaris Avenue Las Vegas, Nevada 89118 (P) 702-738-2936 (F) 702-361-9094	

APPROXIMATE ASBESTOS SAMPLE LOCATIONS

MOAPA SENIOR CENTER
MOAPA PAIUTE RESERVATION

MOAPA, NEVADA

PLATE
6



DRAWING NOT TO SCALE

LEGEND

- LBP-01 - APPROXIMATE LEAD BASED PAINT SAMPLE LOCATION
- SOIL-01-02 - APPROXIMATE LOCATION OF LEAD IN SOIL SUB-SAMPLE

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DRAWN:	6/23/2011
DRAWN BY:	DFR
CHECKED BY:	DB
6380 South Polaris Avenue Las Vegas, Nevada 89118 (P) 702-736-2936 (F) 702-361-9094	

APPROXIMATE LEAD SAMPLE LOCATIONS
MOAPA SENIOR CENTER MOAPA PAIUTE RESERVATION MOAPA, NEVADA

PLATE
7

APPENDIX A

**QUALIFICATIONS OF
ENVIRONMENTAL PROFESSIONALS**

STATEMENT OF QUALIFICATIONS

I declare that to the best of my [our] professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in CFR Part 312.



Daniel C. Burns, CEM
Project Geologist



FOR PJT

Phil J. Tousignant, CEM
Environmental Scientist



Joshua P. Fortmann, CEM
Project Manager

Employee Bios:

Daniel C. Burns, CEM

BS, Geology. University of Southern Colorado, Colorado, 1985

BS, Civil Engineering-Technology. Metropolitan State College of Denver, Colorado, 1989

Certified Environmental Manager (C.E.M.), No. 1692, NDEP, NV

Since 1989, Mr. Burns has conducted geologic engineering/environmental investigations for hazardous and non-hazardous wastes for commercial, municipal, public utilities, and DOD (USAF & USMC) projects in Arizona, California, Hawaii and Nevada. The projects involved exploration drilling, soil and groundwater sampling, monitor well installation and development, analytical laboratory analysis, underground storage tank removal, remediation, and final report preparation. He has provided remediation construction management oversight services for commercial development, shipping and transportation projects. The projects included preparation, submittal, review, and approvals of soils and groundwater management plans, contractor specifications, in addition to contractor oversight. He has conducted Property Condition Evaluations for residential and commercial properties, including Property Condition Assessments, Phase I Environmental Site Assessments, clandestine lab substance residue testing, asbestos evaluations for renovations and/or demolition projects, and lead-based paint sampling and assessments for OSHA Worker safety compliance.

Phil J. Tousignant, CEM

BS, Biology, University of Nevada, Reno, Nevada, 2000

Certified Environmental Manager (C.E.M.), No. 2001, NDEP, NV

Mr. Tousignant has 10 years of experience working in environmental, geotechnical, and biological fields. His project experience includes a broad spectrum of disciplines, including environmental and geotechnical drilling, soil and groundwater sampling, soil and groundwater remediation, Phase I/Phase II site assessments, borehole logging, and monitoring well installation.



Joshua P. Fortmann, CEM

BS, Geology. University of Nevada, Reno, Nevada, 1993
Certified Environmental Manager (C.E.M.), No.1730, NDEP, NV

Mr. Fortmann has over 15 years of experience and has a broad range of expertise in drinking water, surface water, groundwater, and surface and subsurface soils sampling for environmental testing. He is experienced with Phase I and II site assessments, and materials testing procedures. He has prepared ESA reports, groundwater, air and soils monitoring reports, and is familiar with permitting for soil disposal and well drilling. With a strong educational background in geology and four years experience, he is familiar with field sampling/testing of soils, concrete and asphalt. He has provided testing and field services for construction of underground storage tank fuel systems, roadways, parking lots, commercial and federal buildings, and curbs, gutters and sidewalks.

APPENDIX B

FirstSearch RADIUS MAP REPORT

TRACK ► INFO SERVICES, LLC

Environmental FirstSearch™ Report

Target Property: MOAPA SENIOR CENTER

MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION

MOAPA NV 89025

Job Number: 117225.02

PREPARED FOR:

Kleinfelder

6380 South Polaris Ave

Las Vegas, NV 89118

05-09-11



Tel: (866) 664-9981

Fax: (818) 249-4227

Environmental FirstSearch Search Summary Report

Target Site: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION
MOAPA NV 89025

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	04-01-11	1.00	0	0	0	0	0	0	0
NPL Delisted	Y	04-01-11	0.50	0	0	0	0	-	0	0
CERCLIS	Y	03-31-11	0.50	0	0	0	1	-	0	1
NFRAP	Y	03-31-11	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	03-10-11	1.00	0	0	0	0	0	0	0
RCRA TSD	Y	03-10-11	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	03-10-11	0.25	0	0	0	-	-	0	0
RCRA NLR	Y	03-10-11	0.12	0	0	-	-	-	1	1
Federal Brownfield	Y	03-01-11	0.50	0	0	0	0	-	0	0
ERNS	Y	04-18-11	0.12	0	0	-	-	-	0	0
Tribal Lands	Y	12-01-05	1.00	1	0	0	0	0	1	2
State/Tribal Sites	Y	01-06-11	1.00	0	0	0	0	0	0	0
State Spills 90	Y	01-06-11	0.12	0	0	-	-	-	0	0
State/Tribal SWL	Y	01-19-11	0.50	0	0	0	0	-	1	1
State/Tribal LUST	Y	01-06-11	0.50	0	0	0	0	-	0	0
State/Tribal UST/AST	Y	01-07-11	0.25	0	0	0	-	-	0	0
State/Tribal EC	Y	NA	0.50	0	0	0	0	-	0	0
State/Tribal IC	Y	NA	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	NA	0.50	0	0	0	0	-	0	0
State/Tribal Brownfields	Y	01-06-11	0.50	0	0	0	0	-	0	0
State Wells	Y	NA	0.50	0	0	0	0	-	0	0
Federal Wells	Y	03-04-08	0.50	0	0	0	0	-	0	0
Releases	Y	04-18-11	0.12	0	0	-	-	-	0	0
Coal Gasification	Y	12-31-05	0.25	0	0	0	-	-	0	0
Oil & Gas Wells	Y	01-08-01	0.25	0	0	0	-	-	0	0
FI Map Coverage	Y	04-22-10	0.12	0	0	-	-	-	0	0
Federal IC/EC	Y	02-07-11	0.50	0	0	0	0	-	0	0
Dry Cleaners	Y	NA	0.25	0	0	0	-	-	0	0
Meth Labs	Y	10-21-10	0.12	0	0	-	-	-	0	0

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to TRACK Info Services, certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in TRACK Info Services's databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although TRACK Info Services uses its best efforts to research the actual location of each site, TRACK Info Services does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of TRACK Info Services's services proceeding are signifying an understanding of TRACK Info Services's searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

- Continued on next page -

Environmental FirstSearch Search Summary Report

Target Site: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION
MOAPA NV 89025

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
Mines	Y	NA	0.25	0	0	0	-	-	0	0
Vapor Intrusion	Y	03-06-08	0.25	0	0	0	-	-	0	0
- TOTALS -				1	0	0	1	0	3	5

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to TRACK Info Services, certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in TRACK Info Services's databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

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**Environmental FirstSearch
Site Information Report**

Request Date: 05-09-11
Requestor Name: dan burns
Standard: AAI

Search Type: COORD
Job Number: 117225.02
Filtered Report

Target Site: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION
 MOAPA NV 89025

Demographics

Sites: 5	Non-Geocoded: 3	Population: NA
Radon: NA		

Site Location

	<u>Degrees (Decimal)</u>	<u>Degrees (Min/Sec)</u>		<u>UTMs</u>
Longitude:	-114.65273	-114:39:10	Easting:	709774.04
Latitude:	36.669243	36:40:9	Northing:	4060546.092
Elevation:	1623		Zone:	11

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes: 0 Mile(s)	Services:
--------------------------------------	------------------

<u>ZIP Code</u>	<u>City Name</u>	<u>ST</u>	<u>Dist/Dir</u>	<u>Sel</u>	<u>Requested?</u>	<u>Date</u>
					Fire Insurance Maps	No
					Aerial Photographs	Yes 05-09-11
					Historical Topos	Yes 05-09-11
					City Directories	No
					Title Search/Env Liens	No
					Municipal Reports	No
					Online Topos	Yes 05-09-11

***Environmental FirstSearch
Sites Summary Report***

Target Property: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION

MOAPA NV 89025

JOB: 117225.02

TOTAL: 5 **GEOCODED:** 2 **NON GEOCODED:** 3 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
1	TRIBALLAND	MOAPA RIVER INDIAN RESERVATION TL-319/TRIBAL LANDS	UNKNOWN NV	0.00 --	N/A	1
2	CERCLIS	MOAPA PESTICIDES EMERGENCY RES NVN000908771/NOT PROPOSED	MOAPA RIVER INDIAN RESERVAT MOAPA NV	0.27 NW	+7	2

***Environmental FirstSearch
Sites Summary Report***

Target Property: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION

MOAPA NV 89025

JOB: 117225.02

TOTAL: 5 **GEOCODED:** 2 **NON GEOCODED:** 3 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	ElevDiff	Page No.
TRIBALLAND		BUREAU OF INDIAN AFFAIRS CONTA BIA-89025	UNKNOWN NV 89025	NON GC	N/A	3
SWL		MOAPA/GLENDALE LANDFILL 17/CLOSED	UNKNOWN MOAPA NV	NON GC	N/A	3
RCRANLR		MOAPA BAND OF PAIUTES NVR000001198/NLR	1 LINCOLN ST MOAPA NV 89025	NON GC	N/A	4

**Environmental FirstSearch
Site Detail Report**

Target Property: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION

MOAPA NV 89025

JOB: 117225.02

TRIBALLAND

SEARCH ID: 1 **DIST/DIR:** 0.00 -- **ELEVATION:** **MAP ID:** 1

NAME: MOAPA RIVER INDIAN RESERVATION
ADDRESS: UNKNOWN
NV

REV: 12/1/05
ID1: TL-319
ID2:
STATUS: TRIBAL LANDS
PHONE:

CONTACT:
SOURCE:

FEDERAL LAND INFORMATION

NAME: MOAPA RIVER INDIAN RESERVATION
FEATURE: INDIAN RESERVATION
ADMINISTERING AGENCY: BIA
STATE FIPS: 32
AREA: 0.029367
PERIMETER: 0.926557

TRIBAL LEADER CONTACT INFORMATION

TRIBAL_NAME: MOAPA BUSINESS COUNCIL
BIA OFFICE: WESTERN REGION
CONTACT: PHIL SWAIN, CHAIRMAN
ADDRESS: PO BOX 340
MOAPA, NV 89025-0340
PHONE: 702-865-2787
FAX: 702-865-2875
EMAIL:
WEBSITE:
TERM EXPIRES: DEC 2005
SELF GOVERNED:

Please contact the following link for more details: <http://www.hanksville.org/sand/contacts/tribal/>

**Environmental FirstSearch
Site Detail Report**

Target Property: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION

MOAPA NV 89025

JOB: 117225.02

CERCLIS

SEARCH ID: 2 **DIST/DIR:** 0.27 NW **ELEVATION:** 1630 **MAP ID:** 2

NAME: MOAPA PESTICIDES EMERGENCY RESPONSE
ADDRESS: MOAPA RIVER INDIAN RESERVATION,
MOAPA, NV

REV: 3/31/11
ID1: NVN000908771
ID2: 0908771
STATUS: NOT PROPOSED
PHONE: 13002167

CONTACT: 13002167
SOURCE: EPA

ACTION/QUALITY	AGENCY/RPS	START/RAA	END
non-national priorities list potentially responsible party search		EPA In-House	6/16/2009 6/16/2009
removal Cleaned up	EPA Fund-Financed Primary	6/16/2009	6/16/2009

DESCRIPTION:

**Environmental FirstSearch
Site Detail Report**

Target Property: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION

JOB: 117225.02

MOAPA NV 89025

TRIBALLAND

SEARCH ID: 5 **DIST/DIR:** NON GC **ELEVATION:** **MAP ID:**

NAME:	BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION	REV:	01/15/08
ADDRESS:	UNKNOWN	ID1:	BIA-89025
	NV 89025	ID2:	
	CLARK	STATUS:	
CONTACT:		PHONE:	
SOURCE:	BIA		

BUREAU OF INDIAN AFFAIRS CONTACT INFORMATION

OFFICE:	Western Regional Office
CONTACT:	BRYAN BOWKER, REGIONAL DIRECTOR
ADDRESS:	PO Box 10 Phoenix AZ 85001
PHONE:	Phone: 602-379-6600
FAX:	Fax: 602-379-4413

The Native American Consultation Database (NACD) is a tool for identifying consultation contacts for Indian tribes, Alaska Native villages and corporations, and Native Hawaiian organizations. The database is not a comprehensive source of information, but it does provide a starting point for the consultation process by identifying tribal leaders and NAGPRA contacts. This database can be accessed online at the following web address <http://home.nps.gov/nacd/>

SWL

SEARCH ID: 4 **DIST/DIR:** NON GC **ELEVATION:** **MAP ID:**

NAME:	MOAPA/GLENDALE LANDFILL	REV:	06/27/02
ADDRESS:	UNKNOWN	ID1:	17
	MOAPA NV	ID2:	
CONTACT:		STATUS:	CLOSED
SOURCE:	NV DOC	PHONE:	

Permitted Facility:	No
Class:	II
Status:	Closed
Owner Type:	Government
Contact:	Clark Co. Health Dist., Glenn Savage, 383-1274; BLM 647-5000
Operator:	
Rate In Tons Per Day:	
Date Closed (only provided if actually closed):	10/9/93
Population:	0
Legal Description:	T14S R66E Sec.19 SWSE

**Environmental FirstSearch
Site Detail Report**

Target Property: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION

MOAPA NV 89025

JOB: 117225.02

RCRANLR

SEARCH ID: 3 **DIST/DIR:** NON GC **ELEVATION:** **MAP ID:**

NAME: MOAPA BAND OF PAIUTES
ADDRESS: 1 LINCOLN ST
MOAPA NV 89025

REV: 3/10/11
ID1: NVR000001198
ID2:
STATUS: NLR
PHONE:

CONTACT:
SOURCE: EPA

SITE INFORMATION

CONTACT INFORMATION: ROGER KNUDSON
PO BOX 340
MOAPA NV 89025

PHONE: 7028652787

UNIVERSE INFORMATION:

NAIC INFORMATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch Descriptions

NPL: EPA NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money.

A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.

FINAL - Currently on the Final NPL

PROPOSED - Proposed for NPL

NPL DELISTED: EPA NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

DELISTED - Deleted from the Final NPL

CERCLIS: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.

PART OF NPL- Site is part of NPL site

DELETED - Deleted from the Final NPL

FINAL - Currently on the Final NPL

NOT PROPOSED - Not on the NPL

NOT VALID - Not Valid Site or Incident

PROPOSED - Proposed for NPL

REMOVED - Removed from Proposed NPL

SCAN PLAN - Pre-proposal Site

WITHDRAWN - Withdrawn

NFRAP: EPA COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

NFRAP - No Further Remedial Action Plan

P - Site is part of NPL site

D - Deleted from the Final NPL

F - Currently on the Final NPL

N - Not on the NPL

O - Not Valid Site or Incident

P - Proposed for NPL

R - Removed from Proposed NPL

S - Pre-proposal Site

W - Withdrawn

RCRA COR ACT: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. RCRAInfo facilities that have reported violations and subject to corrective actions.

RCRA TSD: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.

Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: EPA/MA DEP/CT DEP RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.

Facilities that generate or transport hazardous waste or meet other RCRA requirements.

LGN - Large Quantity Generators

SGN - Small Quantity Generators

VGN - Conditionally Exempt Generator.

Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities.

CONNECTICUT HAZARDOUS WASTE MANIFEST - Database of all shipments of hazardous waste within, into or from Connecticut. The data includes date of shipment, transporter and TSD info, and material shipped and quantity. This data is appended to the details of existing generator records.

MASSACHUSETTES HAZARDOUS WASTE GENERATOR - database of generators that are regulated under the MA DEP.

VQN-MA = generates less than 220 pounds or 27 gallons per month of hazardous waste or waste oil.

SQN-MA = generates 220 to 2,200 pounds or 27 to 270 gallons per month of waste oil.

LQG-MA = generates greater than 2,200 lbs of hazardous waste or waste oil per month.

RCRA NLR: EPA RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.

Facilities not currently classified by the EPA but are still included in the RCRAInfo database. Reasons for non classification:

Failure to report in a timely matter.

No longer in business.

No longer in business at the listed address.

No longer generating hazardous waste materials in quantities which require reporting.

ERNS: EPA/NRC EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: DOI/BIA INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are

Federally-administered lands within a reservation which may or may not be considered part of the reservation.
BUREAU OF INDIAN AFFIARS CONTACT - Regional contact information for the Bureau of Indian Affairs offices.

State/Tribal Sites: NV DOC CORRECTIVE ACTION CASES- The Bureau of Corrective Actions maintains a list of clean-up evaluations and actions regarding sites with actual or potential contamination that could affect groundwater. This includes various types of sites including those regulated under Nevada State legislation described in detail in the Nevada State web site under legislation section NAC445.226-NAC445.2739.

State/Tribal SWL: NV DOC SOLID WASTE LANDFILLS-This division maintains an inventory of various solid waste facilities including open, closed, & permitted landfills, dumps, pesticide sites, and transfer stations. The inventory notes landfill class type and if the site is a private or government facility.

State/Tribal LUST: NV DOC LEAKING UNDERGROUND STORAGE TANKS- This division maintains an inventory of sites with leaking underground storagetanks. It includes sites with tanks under investigation for potentialleaks, confirmed leaks, and those to be closed.

WASHOE COUNTY LEAKING UNDERGROUND STORAGE TANKS- This department maintains a list of sites with leaking underground storagetanks. It includes sites with tanks under investigation for potentialleaks, confirmed leaks, and those to be closed or needing emergency action.

State/Tribal UST/AST: NV DOC/EPA 9 UNDERGROUND STORAGE TANKS- This division maintains an inventory of underground storage tanks.

INDIAN LANDS UST LIST-A listing of underground storage tanks currently on Indian lands under federal jurisdiction. Nevada Indian Lands USTs are administered by US EPA Region 9.

ABOVE GROUND STORAGE TANKS- This division maintains an inventory of sites with above ground storage tanks. For more information regarding specific sites, please call the number listed above.

Please Note: AST sites are listed within the UST area of the First Search reports. They can be identified as AST sites by the site ID number. The site ID number is located in the Site Summary or Site Details section of the report. The site ID notes "AST" before the agency id.

State/Tribal Brownfields: NV DOC/EPA BROWNFIELDS SITES- The Bureau of Corrective Actions maintains a list of brownfield sites as part of its listing of clean-up evaluations and actions regarding sites with actual or potential contamination that could affect groundwater. The NDEP defines a brownfield as an abandoned, idled, or underused industrial or commercial properties taken out of productive use because of real or perceived risks from environmental contamination.

Brownfields Management System (BMS) is an analytical database designed to assist EPA in collecting, tracking, and updating information, as well as reporting on the major activities and accomplishments of the various Brownfield grant Programs.

Federal Wells: USGS UNITED STATES GROUND-WATER SITES INVENTORY - Database of more than 850,000 records of wells, springs, test holes, tunnels, drains, and excavations in the United States.

RADON: NTIS NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

Coal Gasification: PROPRIETARY COAL GASIFICATION - database of sites that have been involved in coal gasification.

OIL & GAS WELLS: CNR Listing of completions, pluggings and permits. Data is obtained only from digital data provided by the Nevada Commission on Natural Resources - Division of Minerals.

FI Map Coverage: PROPRIETARY FIRE INSURANCE MAP AVAILABILITY - Database of historical fire insurance map availability.

Meth Labs: US DOJ NATIONAL CLANDESTINE LABORATORY REGISTER - Database of addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the U.S. Department of Justice ("the Department"), and the Department has not verified the entry and does not guarantee its accuracy. All sites that are included in this data set will have an id that starts with NCLR.



Environmental FirstSearch Database Sources

NPL: EPA Environmental Protection Agency

Updated quarterly

NPL DELISTED: EPA Environmental Protection Agency

Updated quarterly

CERCLIS: EPA Environmental Protection Agency

Updated quarterly

NFRAP: EPA Environmental Protection Agency.

Updated quarterly

RCRA CORACT: EPA Environmental Protection Agency.

Updated quarterly

RCRA TSD: EPA Environmental Protection Agency.

Updated quarterly

RCRA GEN: EPAMA DEP/CT DEP Environmental Protection Agency, Massachusetts Department of Environmental Protection, Connecticut Department of Environmental Protection

Updated quarterly

RCRA NLR: EPA Environmental Protection Agency

Updated quarterly

ERNS: EPA/NRC Environmental Protection Agency

Updated annually

Tribal Lands: DOI/BIA United States Department of the Interior

Updated annually

State/Tribal Sites: NV DOC The Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP), Bureau of Corrective Actions

Updated quarterly/when available

State/Tribal SWL: *NV DOC* The Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP), Bureau of Corrective Actions

Updated annually/when available

State/Tribal LUST: *NV DOC* The Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP), Bureau of Corrective Actions
Phone: (775) 687-4670
Washoe County Department of Environmental Health

Updated quarterly/when available

State/Tribal UST/AST: *NV DOC/EPA 9* The Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP), Bureau of Corrective Actions
Phone: (775) 687-4670
US EPA Region 9, Underground Storage Tank Program

Updated quarterly/when available

State/Tribal Brownfields: *NV DOC/EPA* The Nevada Department of Conservation and Natural Resources, Division of Environmental Protection (NDEP), Bureau of Corrective Actions
Phone: (775) 687-4670

Updated when available

Federal Wells: *USGS* United States Geographical Survey.

Updated annually

RADON: *NTIS* Environmental Protection Agency, National Technical Information Services

Updated periodically

Coal Gasification: *PROPRIETARY* Library of Congress
Catalogue of Maps Published by Sanborn Mapping and Geographic Information Service in February 1988

Updated when available

OIL & GAS WELLS: *CNR* Nevada Commission on Natural Resources - Division of Minerals

Updated semi-annually

FI Map Coverage: *PROPRIETARY* Library of Congress
Catalogue of Maps Published by Sanborn Mapping and Geographic Information Service in February 1988®
ProQuest
Other internally produced datasets

Updated quarterly

Meth Labs: *US DOJ* U.S. Department of Justice

Updated when available

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

Target Property: MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION

JOB: 117225.02

MOAPA NV 89025

Street Name	Dist/Dir	Street Name	Dist/Dir
Bowlin	0.14 NW		
Chappo	0.14 NW		
Chappo St	0.12 NW		
Dosak	0.22 NW		
Henry Rd	0.10 SE		
Lincoln St	0.01 SW		
Paqaroonsy	0.00 --		
Reservation Rd	0.06 NW		
Segmiller	0.11 SE		



HISTORICAL FIRE INSURANCE MAPS

NO MAPS AVAILABLE

05-09-11

117225.02

**MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION
MOAPA NV 89025**

A search of FirstSearch Technology Corporation's proprietary database of historical fire insurance map availability confirmed that there are NO MAPS AVAILABLE for the Subject Location as shown above.

FirstSearch Technology Corporation's proprietary database of historical fire insurance map availability represents abstracted information from the Sanborn® Map Company obtained through online access to the U.S. Library of Congress via local libraries.

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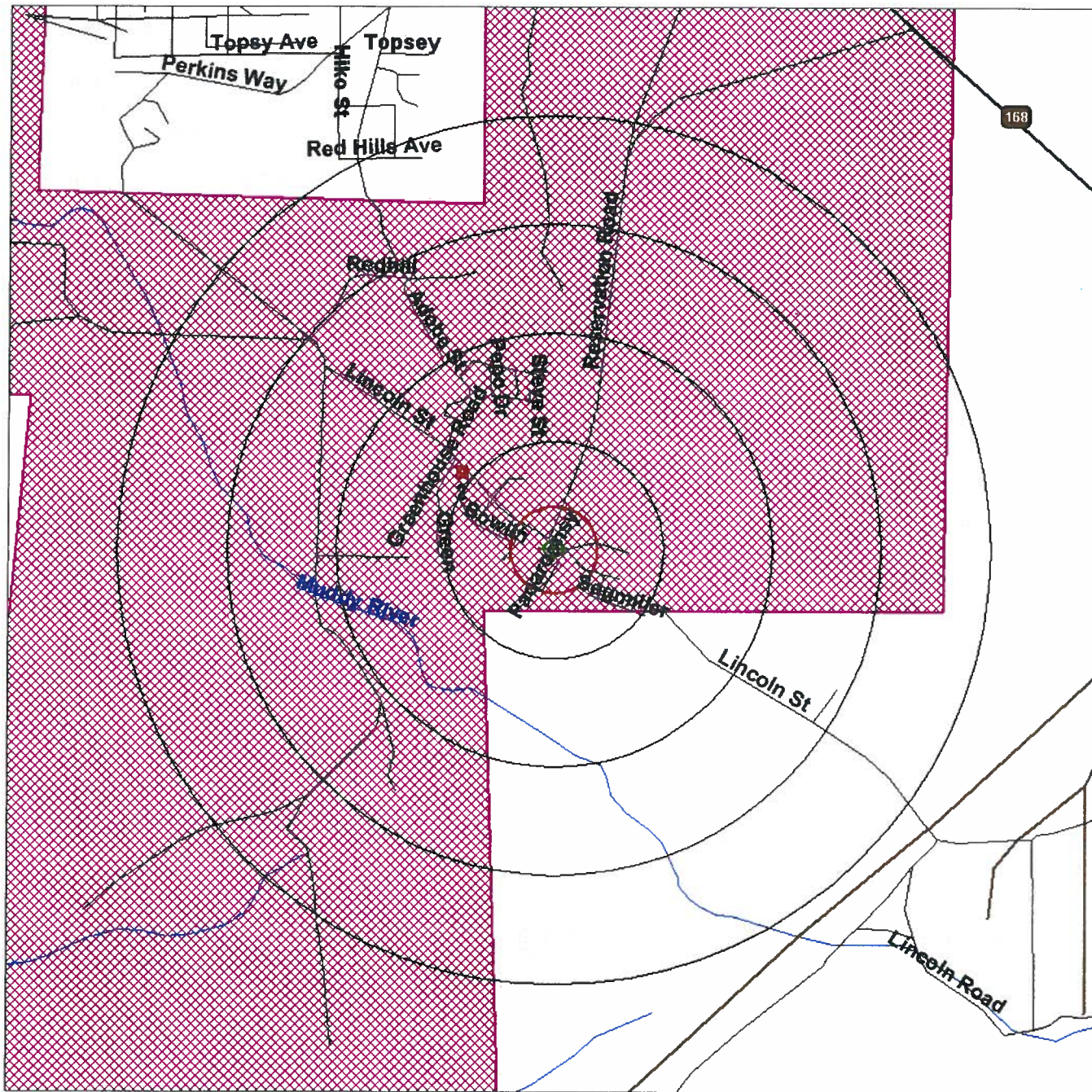


Environmental FirstSearch

1 Mile Radius
Single Map:



MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION, MOAPA NV



Source: U.S. Census TIGER Files

Target Site (Latitude: 36.669243 Longitude: -114.65273)		Public Water Supply, Zone II, Zone A, Interim Wellhead Protection Areas		
Identified Site, Multiple Sites, Receptor		Federal Wells		
NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste		Coal Gasification		
Triballand		Micro Gas Wells		
Railroads				

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

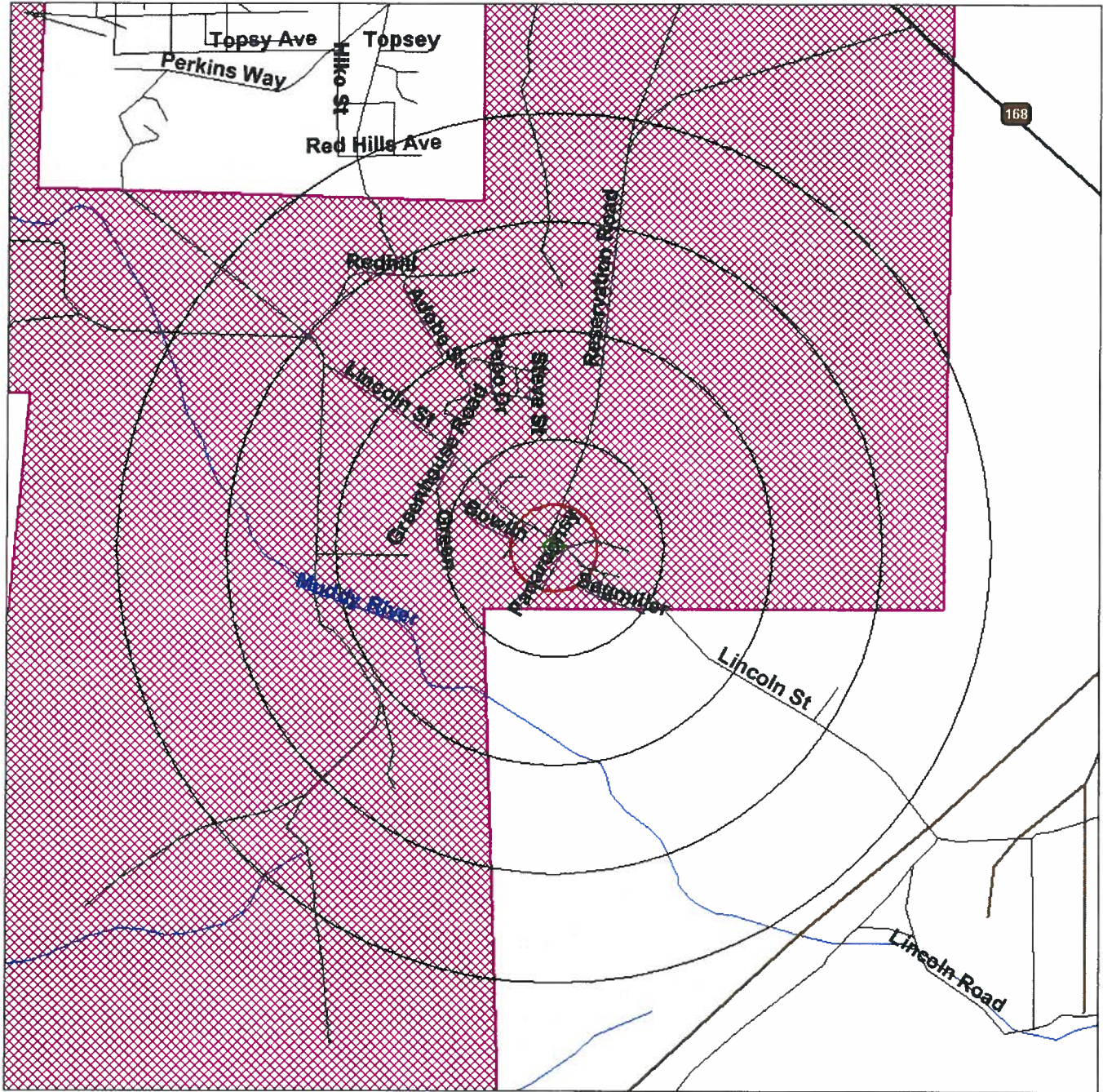


Environmental FirstSearch

1 Mile Radius
AAI: NPL, RCRACOR, STATE



MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION, MOAPA NV



Source: U.S. Census TIGER Files

- Target Site (Latitude: 36.669243 Longitude: -114.65273)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste Triballand
- Railroads
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

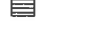
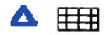


Public Water Supply, Zone II, Zone A, Interim Wellhead Protection Areas

Federal Wells

Coal Gasification

Oil Gas Wells





Environmental FirstSearch

.5 Mile Radius
AAI: Multiple Databases



MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION, MOAPA NV



Source: U.S. Census TIGER Files

Target Site (Latitude: 36.669243 Longitude: -114.65273)

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Railroads

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



Public Water Supply, Zone II, Zone A, Interim Wellhead Protection Areas

Federal Wells

Coal Gasification

Gas Wells





Environmental FirstSearch

.25 Mile Radius
AAI: Multiple Databases



MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION, MOAPA NV



Source: U.S. Census TIGER Files

- Target Site (Latitude: 36.669243 Longitude: -114.65273)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste
Triballand
- Railroads
- Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



Public Water Supply, Zone II, Zone A, Interim Wellhead Protection Areas

Federal Wells

Coal Gasification

Oil Gas Wells



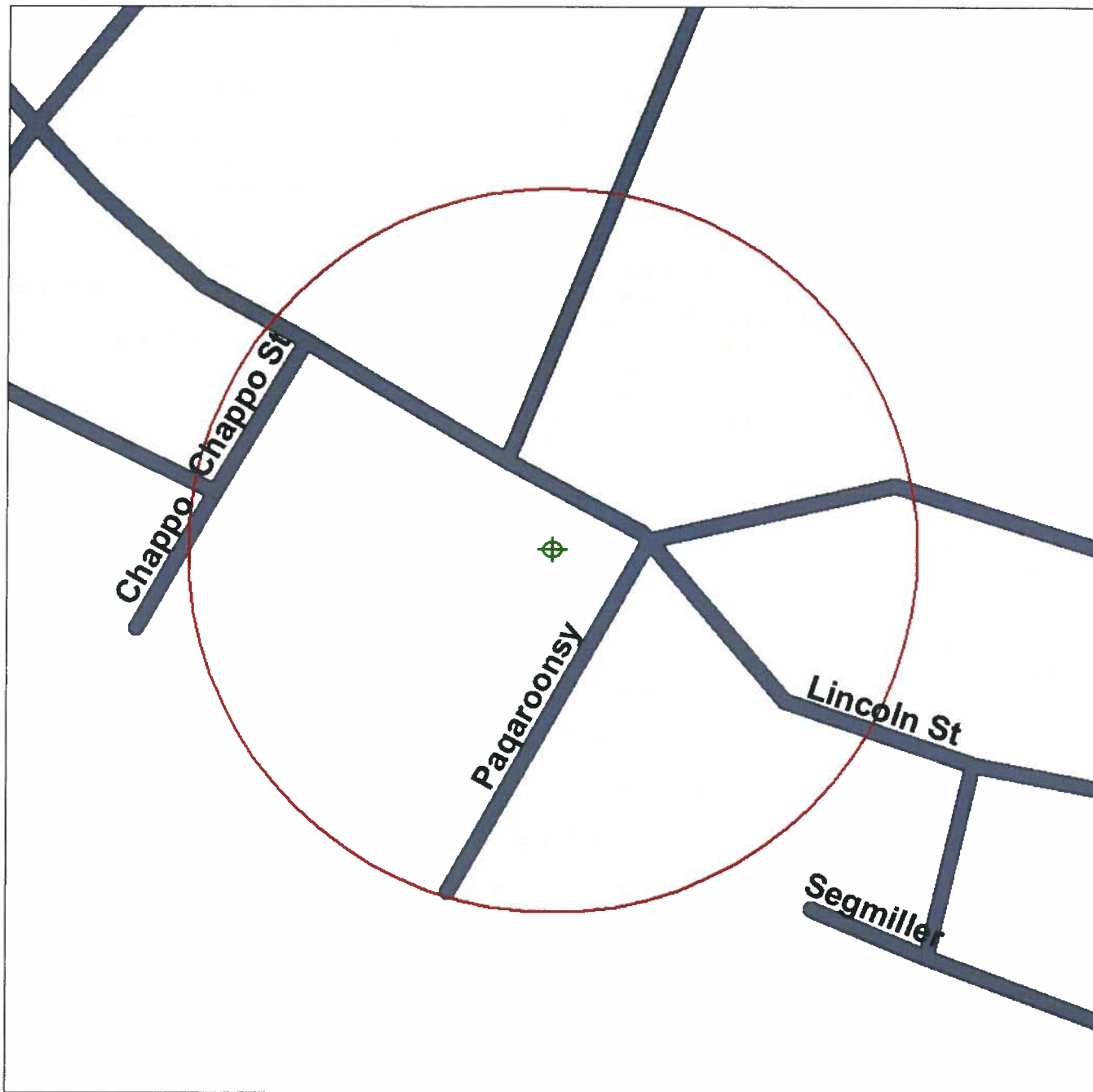


Environmental FirstSearch

.12 Mile Radius
AAI: Multiple Databases



MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION, MOAPA NV



Source: U.S. Census TIGER Files

Target Site (Latitude: 36.669243 Longitude: -114.65273)

Identified Site, Multiple Sites, Receptor

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Railroads

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius



Public Water Supply, Zone II, Zone A, Interim Wellhead Protection Areas

Federal Wells

Coal Gasification

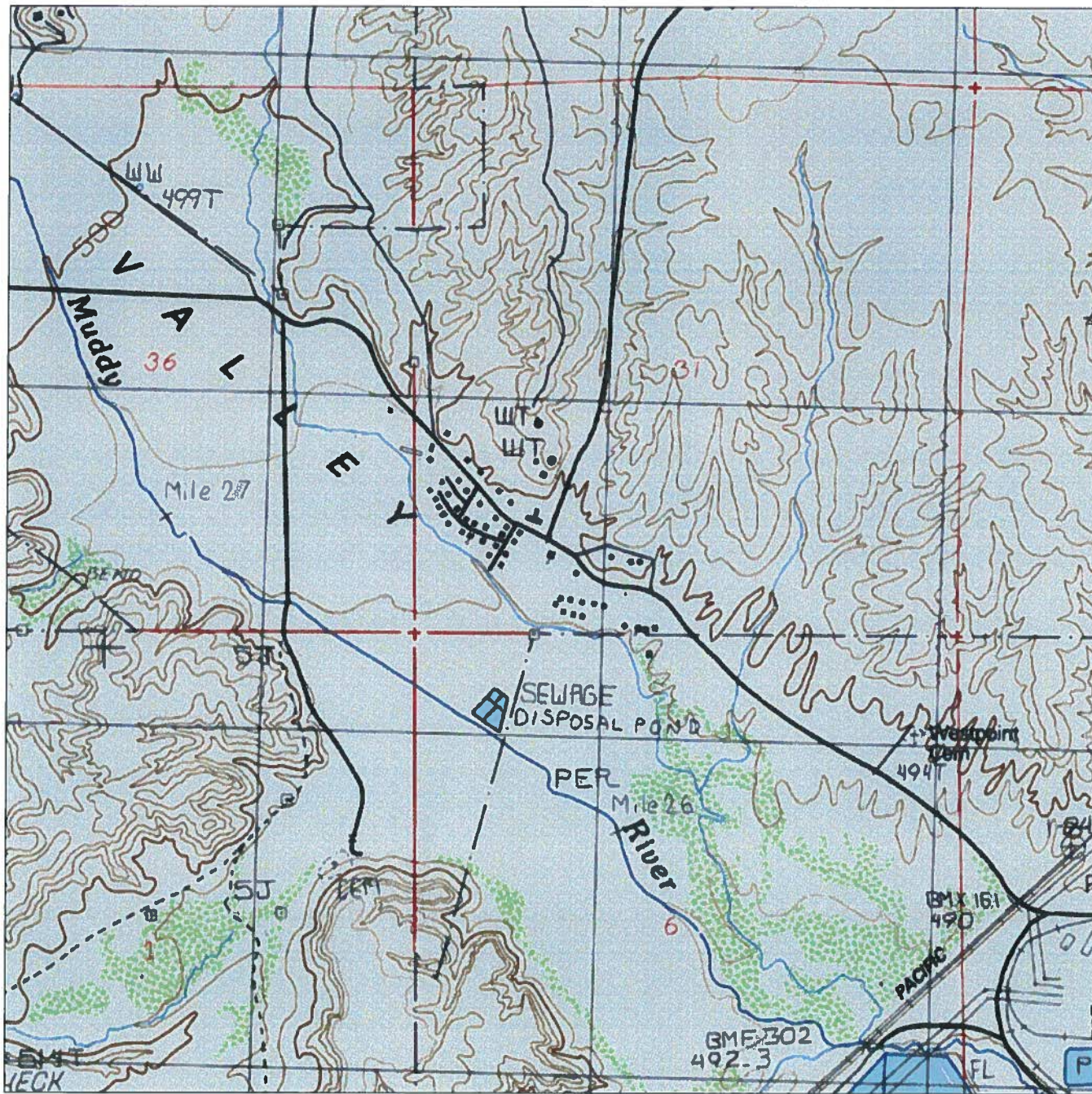
Oil/Gas Wells



Site Location Map

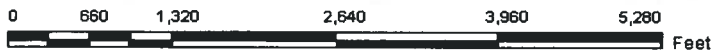
Topo : 1 Mile Radius

MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION, MOAPA NV 89025



SOURCE: SCANNED USGS TOPOGRAPHIC QUADRANGLES
SCANNED BY MAPTECH AND USGS
DISTRIBUTED AUGUST, 2005.

Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius



Data Supplied by:

Prepared by FirstSearch Technology Corporation 05-09-11

JOB NO.
117225.02

Map Name: MOAPA WEST
Map Reference Code: 36114-F6-TM-024

Date Created: 1983
Contour Interval: 10 meters

Date Revised: None
Elevation: 1623

FIGURE NO.
1





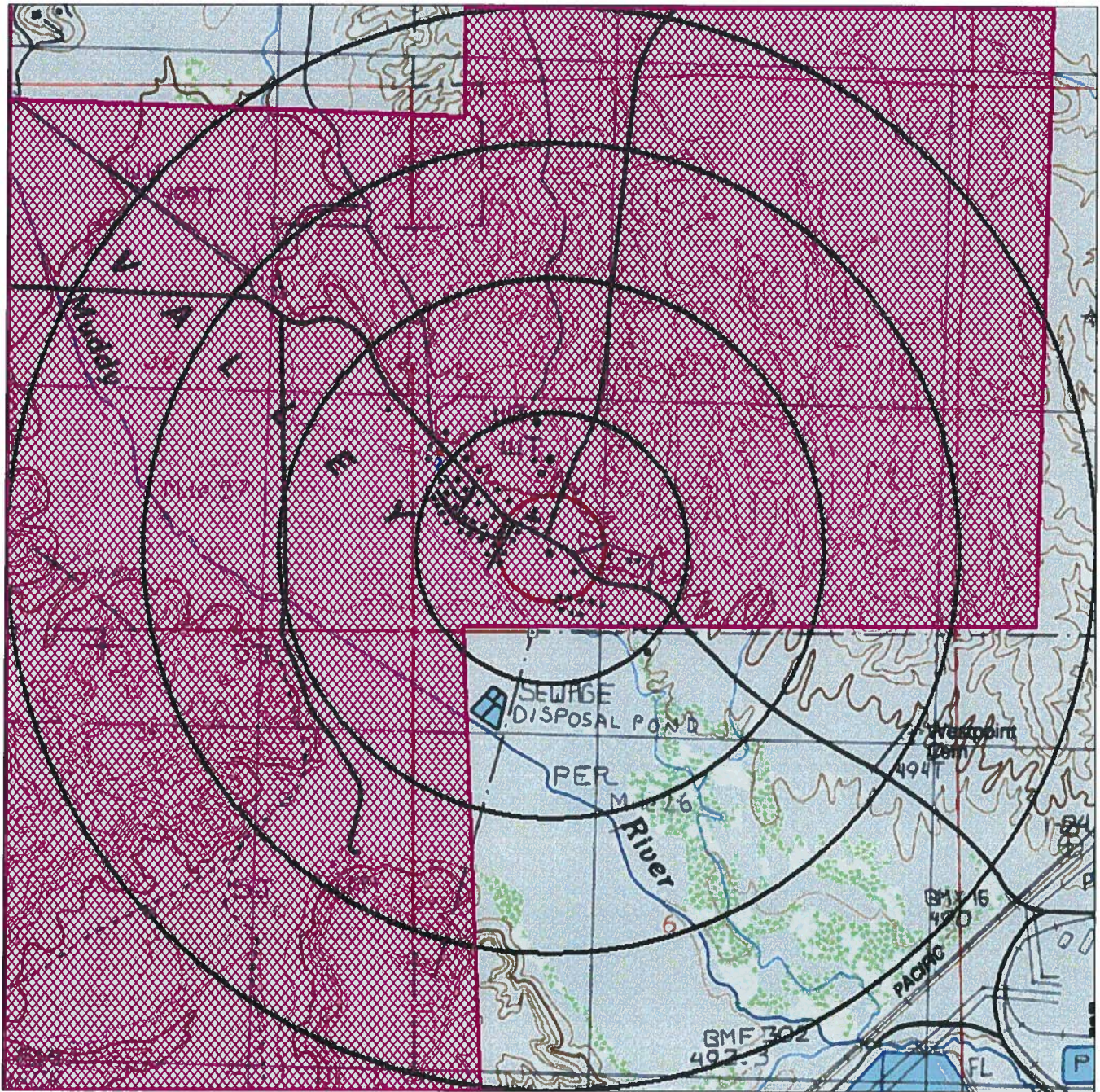
Environmental FirstSearch

Topo : Current Map 1 Mile Radius

Current Topo Map



MOAPA SENIOR CENTER, MOAPA PAIUTE RESERVATION, MOAPA NV 89025

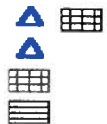


Source:

- Target Site (Latitude: 36.669243 Longitude: -114.65273)
- Identified Site, Multiple Sites, Receptor
- NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste
- Tribal Land
- Historical Fire Insurance Coverage Map
- Map Name: MOAPA WEST Date Created: 1983-- Date Revised: None-- Elevation: 1623
- Map Reference Code: 36114-F6-TM-024
- Black Rings Represent 1/4 Mile Radii; Red Ring Represents 500 ft. Radius



- Public Water Supply, Zone II, Zone A, Interim Wellhead Protection Areas
- Federal Wells
- Coal Gasification
- Mines



APPENDIX C

USER QUESTIONNAIRE INTERVIEW QUESTIONNAIRES

USER QUESTIONNAIRE

Project Location/Address: **Annex Building – Senior Center
Moapa, Nevada**

Note: In order to qualify for one of the *Landowner Liability Protections (LLPs)*¹ offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*")², the *User* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete.

<p>(1.) Environmental cleanup liens that are filed or recorded against the site (40CFR312.25). Are you aware of any environmental cleanup liens against the <i>property</i> that are filed or recorded under federal, tribal, state or local law?</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input checked="" type="checkbox"/></p>	<p>Unknown <input type="checkbox"/></p>
<p>(2.) Activity and land use imitations that are in place on the site or that have been filed or recorded in a registry (40CFR312.26). Are you aware of any AULs,³ such as <i>engineering controls</i>, land use restrictions or <i>institutional controls</i> that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input checked="" type="checkbox"/></p>	<p>Unknown <input type="checkbox"/></p>
<p>(3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40CFR312.28). As the <i>user</i> of this ESA do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input checked="" type="checkbox"/></p>	<p>Unknown <input type="checkbox"/></p>
<p>(4.) Relationship of the purchase price to the fair market value of the <i>property</i> if it were not contaminated (40CFR312.29). Does the purchase price being paid for this <i>property</i> reasonably reflect the fair market value of the <i>property</i>? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the <i>property</i>?</p>	<p>Yes <input type="checkbox"/> <input type="checkbox"/></p>	<p>No <input type="checkbox"/> <input type="checkbox"/></p>	<p>Unknown <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></p>
<p>(5.) Commonly known or reasonably ascertainable information about the <i>property</i> (40CFR312.30). (a.) Do you know the past uses of the <i>property</i>? (b.) Do you know of specific chemicals that are present or once were present at the <i>property</i>? (c.) Do you know of spills or other chemical releases that have taken place at the <i>property</i>? (d.) Do you know of any environmental cleanups that have taken place at the <i>property</i>?</p>	<p>Yes <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>No <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/></p>	<p>Unknown <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>(6.) The degree of obviousness of the presence of likely presence of contamination at the <i>property</i>, and the ability to detect the contamination by appropriate investigation (40CFR312.31). As the <i>user</i> of this ESA, based on your knowledge and experience related to the <i>property</i> are there any obvious indicators that point to the presence or likely presence of contamination at the <i>property</i>?</p>	<p>Yes <input type="checkbox"/></p>	<p>No <input type="checkbox"/></p>	<p>Unknown <input checked="" type="checkbox"/></p>

USER QUESTIONNAIRE (Continued)

In addition to the above 6 required questions, the following additional information is intended to assist the *environmental professional* but is not necessarily required to qualify for one of the *LLPs*:

- (a) The reason why the Phase I is required,
Age of building suggests that there may be asbestos or lead paint.
- (b) The type of property and type of property transaction, for example, sale, purchase, exchange, etc.,
Building used as the Tribes Senior Center.
- (c) The complete and correct address for the property (a map or other documentation showing property location and boundaries is helpful),
Map and location provided with earlier applications.
- (d) The scope of services desired for the Phase I (including whether any parties to the property transaction may have a required standard scope of services on whether any considerations beyond the requirements of Practice E1527 are to be considered),
Identify and correct if asbestos and lead paint is found.
- (e) Identification of all parties who will rely on the Phase I report,
William Anderson, Chairman. Moapa Band of Paiutes.
Robert Volpert, Tribal Administrator. Moapa Band of Paiutes.
- f) Identification of the site contact and how the contact can be reached,
wanderson@mvdsl.com
rvolpert@mvdsl.com
- (g) Any special terms and conditions which must be agreed upon by the environmental professional, and
Unknown.
- (h) Any other knowledge or experience with the property that may be pertinent to the environmental professional (for example, copies of any available prior environmental site assessment reports, documents, correspondence, etc., concerning the property and its environmental condition).
None.

User Name/Company: Moapa Band of Paiutes

Address: PO Box 340, One Lincoln Street, Moapa, NV 89025 Tel. 702-865-2787

Signature:  Date: 5/12/11

¹Landowner Liability Protections, or *LLPs*, is the term used to describe the three types of potential defenses to Superfund liability in EPA's *Interim Guidance Regarding Criteria Landowners Must Meet in Order to Qualify for Bona Fide Prospective Purchaser, Contiguous Property Owner, or Innocent Landowner Limitations on CERCLA Liability* ("Common Elements" Guide) issued on March 6, 2003.

²P.L. 107-118.

³Activity and Use Limitations.

APPENDIX D

**HISTORICAL RESEARCH
DOCUMENTATION**



Historical Aerial Photo
2006

MOAPA, NV 89025

Target Site: 36.669243 -114.65273; Job Number: 117225_02



COPYRIGHT: MICRODOT, LLC



1 inch equals 750 feet



Historical Aerial Photo
1994

MOAPA, NV 89025

Target Site: 36.669243 -114.65273; Job Number: 117225_02



1 inch equals 750 feet



COPYRIGHT: MICRODOT, LLC



Historical Aerial Photo
1981

MOAPA, NV 89025

Target Site: 36.669243 -114.65273; Job Number: 117225_02



COPYRIGHT: AERODOT, LLC



1 inch equals 750 feet



Historical Aerial Photo
1973

MOAPA, NV 89025

Target Site: 36.669243 -114.65273; Job Number: 117225_02



COPYRIGHT: MICRODOT, LLC



1 inch equals 750 feet



Historical Aerial Photo
1967

MOAPA, NV 89025

Target Site: 36.669243 -114.65273; Job Number: 117225_02



1 inch equals 750 feet



COPYRIGHT: MICRODOT, LLC



Historical Aerial Photo
1938

MOAPA, NV 89025

Target Site: 36.669243 -114.65273; Job Number: 117225_02



COPYRIGHT: MICRODOT, LLC



1 inch equals 750 feet



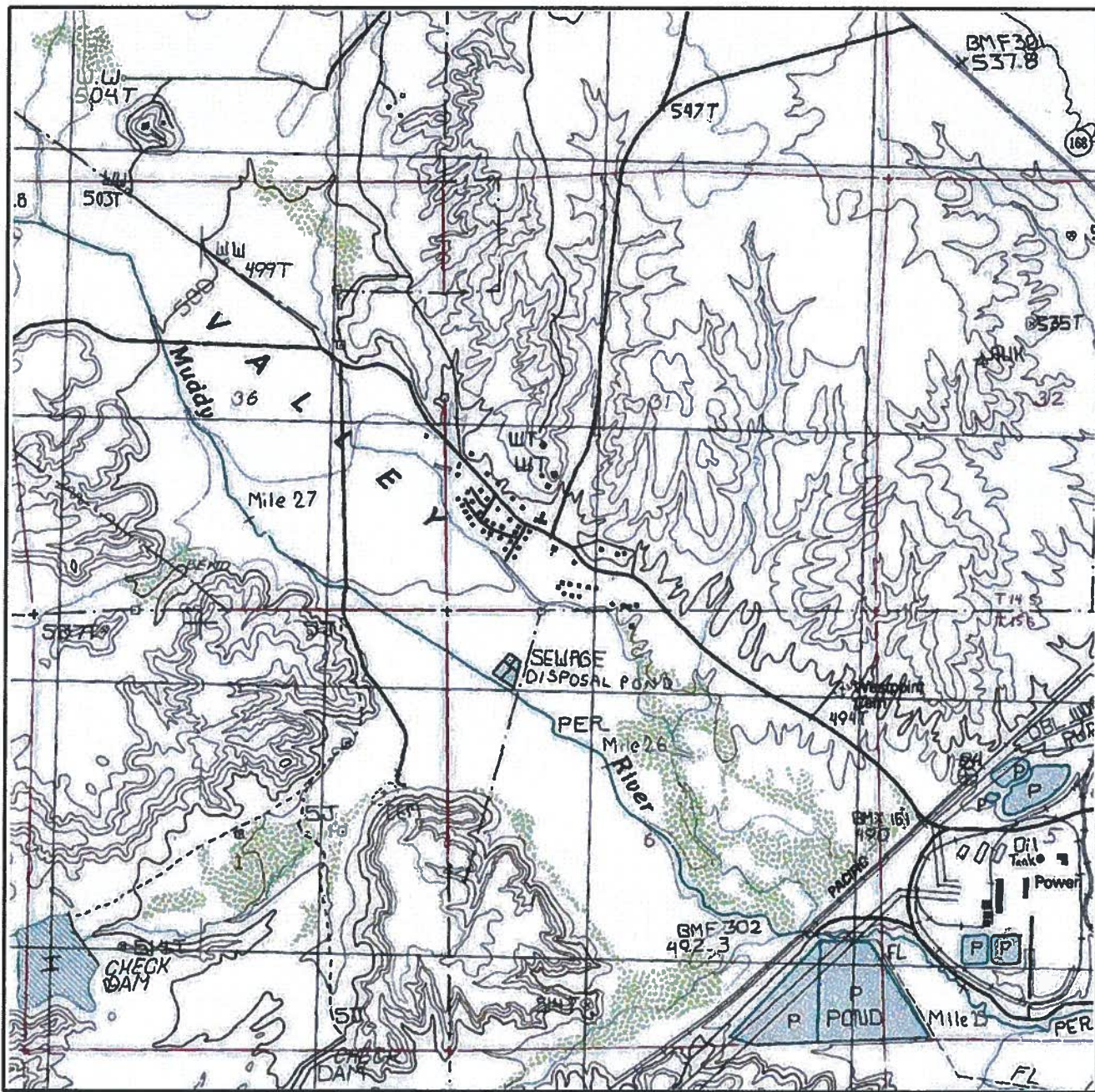
Environmental FirstSearch

Historical Topographic Map



Quad Name: Moapa West, NV
Year: 1983 Original Map Scale: 1:24,000

Moapa, NV 89025



Job Number: 117225.02
Target Site: 36.669243, -114.652730



Building	---■---■	Railroad	—+—+—+—
Topo Contour	—6000—	Tanks	●●●●
Depression	○	Primary Highway	—+—+—+—
Quarry or Open Pit Mine	×	Trail	- - - - -



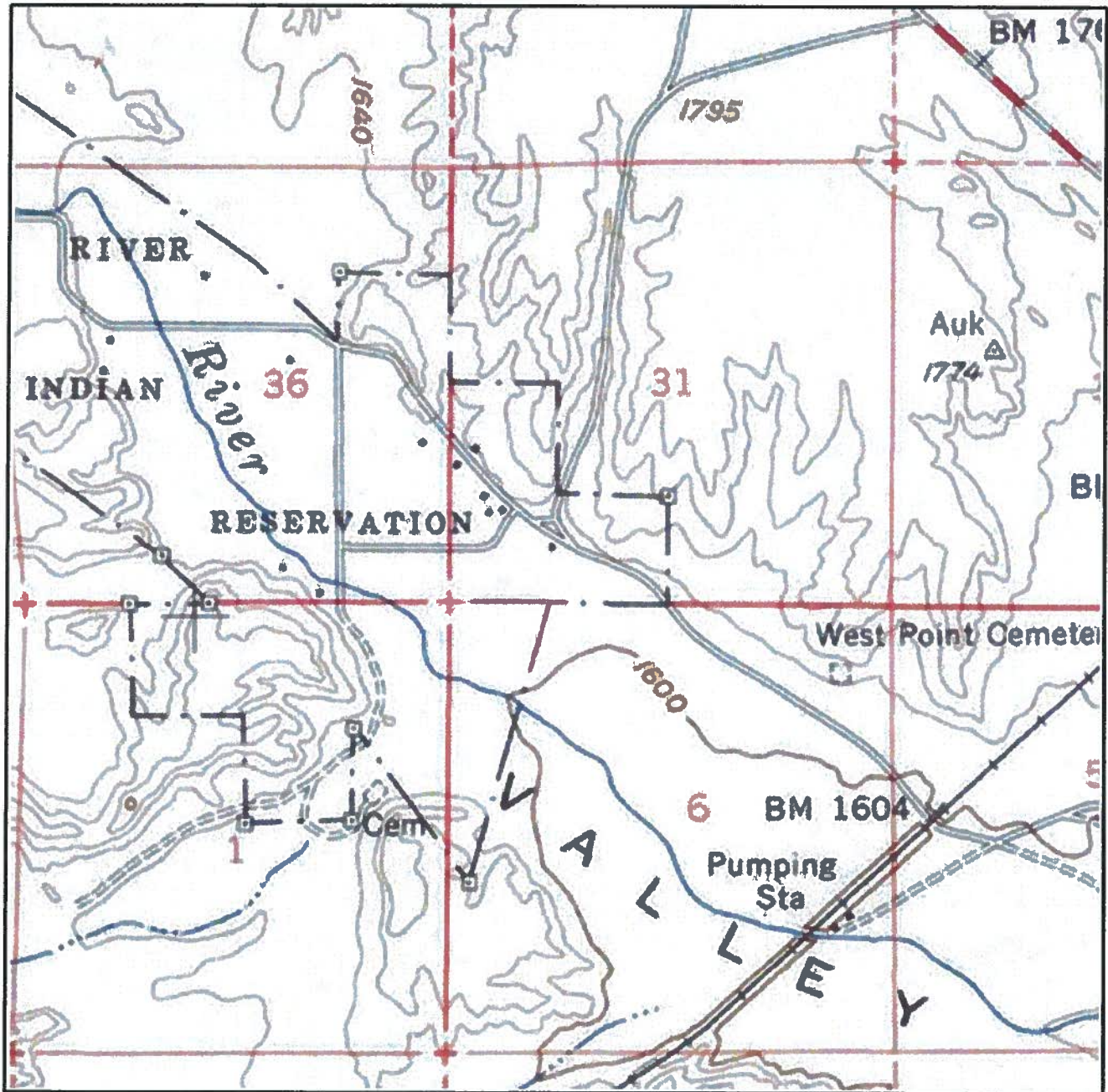
Environmental FirstSearch

Historical Topographic Map



Quad Name: Moapa, NV
Year: 1965 Original Map Scale: 1:62,500

Moapa, NV 89025



Job Number: 117225.02
Target Site: 36.669243, -114.652730

0 miles 0.5 1

Building	---■---	Railroad	—+—+—+—
Topo Contour	—6000—	Tanks	●●●●
Depression	○	Primary Highway	—+—+—+—
Quarry or Open Pit Mine	×	Trail	---+---



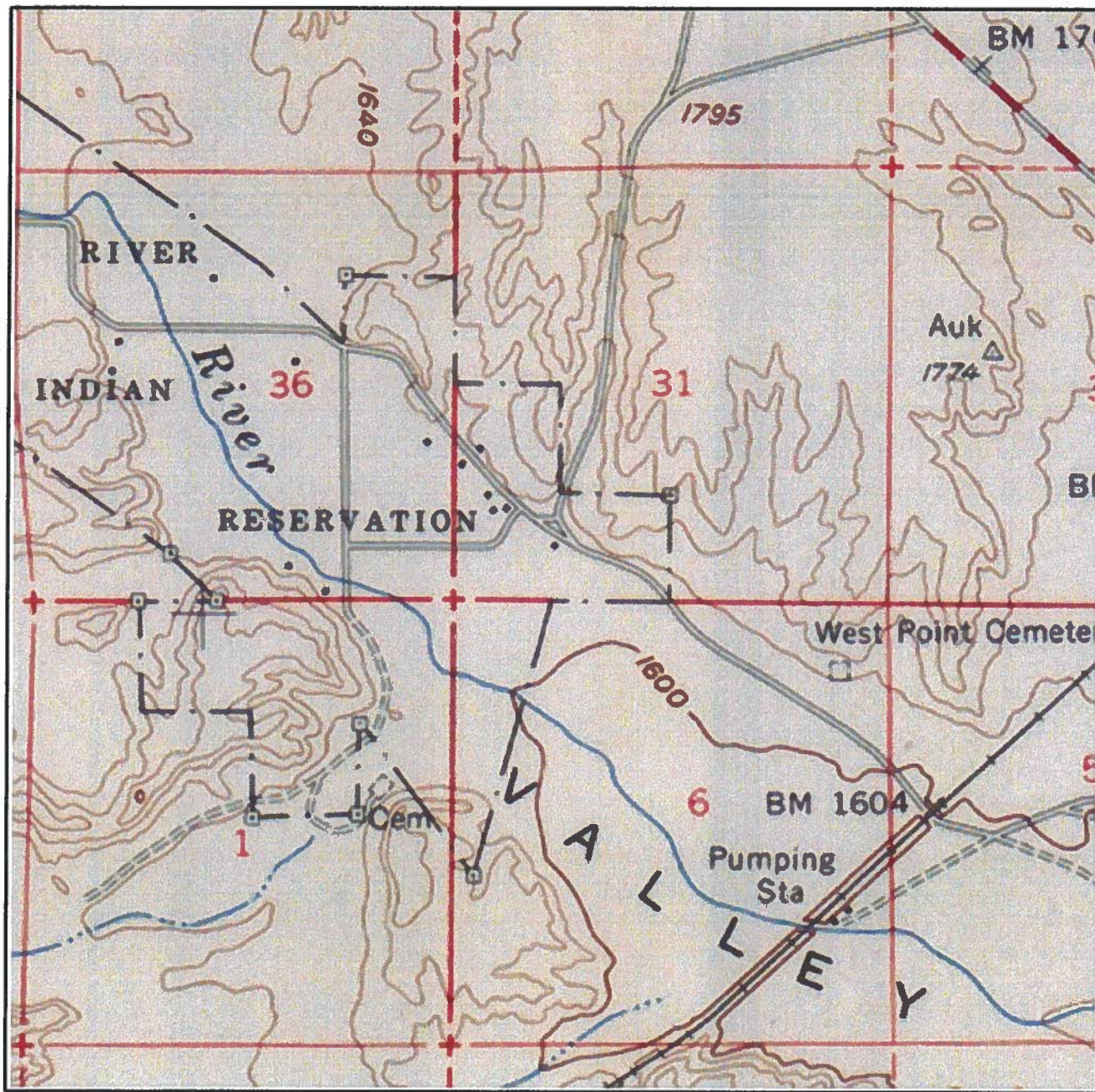
Environmental FirstSearch

Historical Topographic Map



Quad Name: Moapa, NV
Year: 1958 Original Map Scale: 1:62,500

Moapa, NV 89025



Job Number: 117225.02
Target Site: 36.669243, -114.652730



Building		Railroad	
Topo Contour		Tanks	
Depression		Primary Highway	
Quarry or Open Pit Mine		Trail	

APPENDIX E

ASBESTOS

REGULATORY OVERVIEW

REGULATORY OVERVIEW FOR ASBESTOS

Regulatory oversight for the management, removal, and disposal of asbestos-containing materials (ACMs) is provided by a variety of Federal, State, and local agencies.

The three primary regulations enforced by regulatory agencies that govern various activities (e.g., inspection, assessment, abatement, etc.) relating to ACMs include the following: AHERA, National Emission Standards for Hazardous Air Pollutants (NESHAP), and the Asbestos Construction Safety Standard (as codified in Federal OSHA and Nevada OSHA regulations, EPA regulations concerning the identification, handling, management, and abatement of ACMs (as found in the AHERA and NESHAP) are implemented locally by the Clark County Department of Air Quality and Environmental Management Division (CCDAQEM) and the State of Nevada Department of Business and Industry – Asbestos Control Program (NDBIACP). Both Federal OSHA and Nevada OSHA regulate asbestos as a worker health and safety issue. The Federal OSHA, EPA, and CCDAQEM define ACMs as materials containing greater than one-percent asbestos.

The following is a brief description of the three major regulations relating to ACMs.

AHERA

AHERA (40 CFR part 763), as implemented by the EPA, primarily pertains to the assessment and management of ACMs in Kindergarten (K) through 12th grade non-profit schools. However, many of the procedures, training requirements, and certifications defined by AHERA have become the industry standard for all other facilities.

NESHAP

NESHAP (40 CFR Part 61) is an asbestos standard that protects the general public from asbestos exposure due to renovation or demolition activities. NESHAP requires surveying for suspect materials (as defined above), notifying of intent to renovate or demolish, removal of regulated ACM (RACM) prior to renovation or demolition, and proper management of asbestos-containing wastes. A RACM is defined by NESHAP as follows:

- Any friable ACM;

- A Category I non-friable ACM (such as floor tiles and asphalt roofing products) that has become friable or will be subject to sanding, grinding, cutting, or abrading during renovation or demolition activities; or
- A Category II non-friable ACM (all other non-friable ACMs) that has a high probability of becoming friable during demolition or renovation activities.

NESHAP requires that demolition activities be conducted with no visible emissions using wet methods. It should be noted that while NESHAP regulates renovation and demolition activities, it does not protect individual workers conducting asbestos abatement or provide instructions for how asbestos abatement projects should be conducted.

Asbestos Standard for the Construction Industry

The Asbestos Standard for the Construction Industry (Federal OSHA, 29 CFR 1926.1101) regulates asbestos exposure in the work place. This includes both persons working in a building containing ACMs and asbestos abatement workers/contractors. For abatement workers and contractors, the Asbestos Standard for Construction (Construction Standard) regulates the following:

- Protection of workers and the public during the removal;
- Medical surveillance requirements for workers;
- Detailed requirements for how asbestos is to be removed; and
- Training requirements for abatement personnel.

As previously noted, building materials containing greater than one percent asbestos are considered ACMs, and should be managed accordingly. Friable ACMs (RACMs) are regulated as Class I asbestos work and subject to the State of Nevada licensing regulations. The NESHAP regulations mandate the removal of RACMs prior to building demolition or renovation and also Category I or II non-friable materials that may become friable. In addition, any disturbance of a RACM caused by renovation or demolition activities, whether it is removing/replacing interior building components, repairing building components, or painting a friable asbestos-containing surface, is also governed by NESHAP regulations.

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APPENDIX F

ASBESTOS

ANALYTICAL LABORATORY REPORT



Polarized Light Microscope (PLM) Analysis for Asbestos

JobNumber: 201105803

Client: KLEINFELDER INC
6380 S POLARIS AVE

LAS VEGAS, NV 89118-3821
Office Phone: (702) 736-2936
FAX: (702) 361-9094

Preliminary Data (Unreviewed)
Note: Preliminary data are not covered by accreditation.

Samples: 18 PLM Rec: 6/10/2011 Method: EPA 600/R-93/116

PLM analysis for asbestos in bulk smp

Client Job: 117225.02/Moapa Senior Center

PO Number: 117225.02

Report Date: 6/16/2011 Date Analyzed: 6/15/2011

Routing Number: -

Method and Analysis Information: Fiberquant Internal SOP: PLMn

Each bulk sample is first dissected under a 7-30x magnification stereo-microscope. This examination is used to determine the general type of sample, how many and what type of layers it has, and initial estimates of fiber types and quantities. Second, liquid media mounts are made of each layer - such mounts may be of selected fibers (used solely for identification purposes) or may be representative of the layer as a whole (used for quantitation purposes). The mounts may be made in a synthetic Canadian balsam, one of several solvents, or in refractive index oils (media of known refractive index). Generally, a variety of different mounts are made: some optimized for fiber visibility, some optimized for fiber identification, and some optimized for fiber quantitation. The mounted slides are then examined at 50-400x magnification on a Nikon Labphot-pol microscope. Optical characteristics are used to identify each observed fiber type; the optical data are contained for each sample on its detail analysis sheet, attached.

Current EPA and NESHAP regulations designate a result of $\leq 1\%$ asbestos as "negative" and $> 1\%$ asbestos as "positive". Samples containing layers that have been determined to be "positive" may have to be handled differently during a renovation or demolition than samples whose layers have been determined to be "negative."

The method of fiber analysis and identification is the EPA Method 600/R-93/116. The method of fiber quantitation is an estimation technique in which the analysts quantitation is routinely calibrated by reference quantitation standards, and which has been shown to be equivalent in precision and accuracy to point counting. Friability is estimated for the purposes of deciding when to point count. Friabilities determined in the field take precedence over those determined in the laboratory. Those sample layers which are friable and estimated by the analyst to contain $\leq 1\%$ asbestos are point counted using 400 points. Such point counting is required by NESHAP (National Emission Standards for Hazardous Air Pollutants, Nov. 1990) in order to rely on analytical results that are $\leq 1\%$. The coefficient of variation for the estimation quantitation technique is 100% in the range 0-5%. This means that PLM analysis is not capable of conclusively determining whether a layer containing close to 1% asbestos is actually "positive" or "negative". For this reason, Fiberquant refers to results where asbestos was detected but $\leq 1\%$ as "borderline negative", and results where asbestos was $> 1\%$ but $\leq 2\%$ as "borderline positive" to indicate the uncertainty in assigning a "positive" or "negative" label. In the sample summary, "ND" means that no asbestos was detected during the analysis. A "Tr" or "Trace" of asbestos reported is defined for our purposes as the detection of several asbestos fibers during the analysis; this level would be right at the limit of detection for the method. Trace is only reported on the analysis detail - in the summary a trace would be reported as $\leq 1\%$. The limit of detection (the smallest % of asbestos that can be detected) varies greatly depending on the matrix in which the asbestos is found. As little as 0.001% asbestos can be detected in favorable samples, while detection in unfavorable samples may approach the detection limit of 1% stated in the method. During the analysis, the analyst, for Fiberquant identification purposes only, determines the "apparent sample type" and "apparent layer types." It must be emphasized that these types are only what is apparent. Often, different materials appear similar or identical after sampling, so the analyst may assign a type other than what was sampled.

Floor tiles present a special problem for PLM asbestos analysis. Floor tile can contain chrysotile fibers so thin that they cannot be resolved by optical methods. In such a case, we may observe a percentage of asbestos which is lower than the actual percentage, or not observe asbestos at all when some is present. For this reason, floor tiles reported as negative should be confirmed to be negative using transmission electron microscope (TEM) analysis. Likewise, vermiculite insulation materials containing traces of asbestiform asbestos present a problem for routine PLM analysis - the amphiboles are sometimes present in trace amounts inhomogeneously distributed. We recommend a hydro-separation technique for such samples.

Vermiculite-containing samples may contain trace amounts of asbestiform amphibole that may or may not be detected during routine PLM analysis. For this reason, loose vermiculite samples reported as negative should be confirmed to contain no amphibole using hydroseparation techniques.

The samples were analyzed under the following ongoing quality assurance program: Blank samples are routinely analyzed to maintain contamination-free materials. Each analyst has at least a bachelor's degree in physical science, and has also completed extensive training specific to asbestos analysis for 1-3 months before being allowed to analyze client samples. Qualitative reference samples are routinely analyzed to assure that analysts can identify asbestos and asbestos-look-alike fibers. Quantitative reference samples are routinely analyzed to calibrate and characterize the estimation procedure. Microscope alignment is checked each day. Refractive index oils are calibrated at least quarterly. At least 10% of client samples are re-analyzed from scratch by a different analyst than the original, and any discrepancies are resolved for the sample and similar sample types before the results are reported. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. All analysts participate in interlab round robins and proficiency testing to assure competence. Fiberquant is accredited by NVLAP (Lab #101031) for the analysis of bulk samples for asbestos using PLM. Accreditation does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling

process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

PLM Analysis Summary: Job Number: **201105803** 117225.02/Moapa Senior Center

Sample Number	Lab Number	Apparent Sample Type *	Positive Layer Yes or No
Layer Color Apparent Layer Type *	Asbestos Results		
Sample # ACM-01A	2011-05803- 1	Acoustical Tile	Positive Layer? No
Layer # 1 off-white	paint	<i>no asbestos detected</i>	
Layer # 2 tan	acoustical tile	<i>no asbestos detected</i>	
Layer # 3 brown	glue	<i>no asbestos detected</i>	
Sample # ACM-01B	2011-05803- 2	Acoustical Tile	Positive Layer? No
Layer # 1 off-white	paint	<i>no asbestos detected</i>	
Layer # 2 tan	acoustical tile	<i>no asbestos detected</i>	
Sample # ACM-01C	2011-05803- 3	Acoustical Tile	Positive Layer? No
Layer # 1 off-white	paint	<i>no asbestos detected</i>	
Layer # 2 tan	acoustical tile	<i>no asbestos detected</i>	
Sample # ACM-02A	2011-05803- 4	Wall System	Positive Layer? No
Layer # 1 off-white	paint	<i>no asbestos detected</i>	
Layer # 2 white	texture/joint compound	<i>no asbestos detected</i>	
Layer # 3 off-white	paper/cardboard	<i>no asbestos detected</i>	
Layer # 4 white	texture/joint compound	<i>no asbestos detected</i>	
Layer # 5 tan	paper/cardboard	<i>no asbestos detected</i>	
Layer # 6 white	drywall core	<i>no asbestos detected</i>	
Sample # ACM-02B	2011-05803- 5	Wall System	Positive Layer? No
Layer # 1 off-white	paint	<i>no asbestos detected</i>	
Layer # 2 white	texture/joint compound	<i>no asbestos detected</i>	
Layer # 3 off-white	paper/cardboard	<i>no asbestos detected</i>	
Layer # 4 white	texture/joint compound	<i>no asbestos detected</i>	
Layer # 5 tan	paper/cardboard	<i>no asbestos detected</i>	
Layer # 6 white	drywall core	<i>no asbestos detected</i>	
Sample # ACM-02C	2011-05803- 6	Wall System	Positive Layer? No
Layer # 1 white	texture/joint compound	<i>no asbestos detected</i>	
Sample # ACM-03A	2011-05803- 7	Flooring	Positive Layer? Yes
Layer # 1 off-white	floor tile	<i>no asbestos detected</i>	
Layer # 2 clear	mastic	<i>no asbestos detected</i>	
Layer # 3 black	mastic	<i>5-10% chrysotile asbestos</i>	
Sample # ACM-03B	2011-05803- 8	Flooring	Positive Layer? No
Layer # 1 off-white	floor tile	<i>no asbestos detected</i>	
Layer # 2 clear	mastic	<i>no asbestos detected</i>	
Sample # ACM-03C	2011-05803- 9	Flooring	Positive Layer? No
Layer # 1 off-white	floor tile	<i>no asbestos detected</i>	
Layer # 2 clear	mastic	<i>no asbestos detected</i>	
Sample # ACM-04A	2011-05803- 10	Flooring	Positive Layer? Yes
Layer # 1 tan	floor tile	<i>2-5% chrysotile asbestos</i>	
Layer # 2 black	mastic	<i>2-5% chrysotile asbestos</i>	
Sample # ACM-04B	2011-05803- 11	Flooring	Positive Layer? Yes
Layer # 1 tan	floor tile	<i>2-5% chrysotile asbestos</i>	
Layer # 2 black	mastic	<i>5-10% chrysotile asbestos</i>	
Sample # ACM-04C	2011-05803- 12	Flooring	Positive Layer? Yes
Layer # 1 tan	floor tile	<i>2-5% chrysotile asbestos</i>	
Layer # 2 black	mastic	<i>2-5% chrysotile asbestos</i>	
Sample # ACM-05A	2011-05803- 13	Roofing	Positive Layer? No
Layer # 1 white	paint	<i>no asbestos detected</i>	
Layer # 2 black	caulk	<i>no asbestos detected</i>	
Sample # ACM-05B	2011-05803- 14	Roofing	Positive Layer? No
Layer # 1 white	caulk	<i>no asbestos detected</i>	
Layer # 2 black	caulk	<i>no asbestos detected</i>	
Sample # ACM-05C	2011-05803- 15	Roofing	Positive Layer? No
Layer # 1 white	paint	<i>no asbestos detected</i>	
Layer # 2 black	caulk	<i>no asbestos detected</i>	
Sample # ACM-06A	2011-05803- 16	Roofing	Positive Layer? No
Layer # 1 white	paint	<i>no asbestos detected</i>	
Layer # 2 black	caulk	<i>no asbestos detected</i>	
Layer # 3 black	roofing roll/shingle	<i>no asbestos detected</i>	
Layer # 4 black	roofing roll/shingle	<i>no asbestos detected</i>	
Layer # 5 black	roofing roll/shingle	<i>no asbestos detected</i>	

Sample #	ACM-06B		2011-05803- 17	Roofing	Positive Layer? No
Layer # 1	black	roofing roll/shingle		<i>no asbestos detected</i>	
Layer # 2	black	caulk		<i>no asbestos detected</i>	
Layer # 3	black	roofing roll/shingle		<i>no asbestos detected</i>	
Sample #	ACM-06C		2011-05803- 18	Roofing	Positive Layer? No
Layer # 1	black	roofing roll/shingle		<i>no asbestos detected</i>	

* Apparent Sample Types and Apparent Layer Types are as they appeared to the analyst. Since many types of materials appear similar after sampling damage, the apparent type of material may not be the actual type of material.

PLM Analysis Details

Job Number: 201105803 117225.02/Moapa Senior Center

Sample ACM-01A **Lab Number** 2011-05803- 1 **Sampled:** 6/8/2011 8:30 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Acoustical Tile **Fibrous Solid**
Homogeneous No **# Layers** 3 **Pos Layer?** No **# Sub-Samples** 8
Non-Fibrous Components (in approx. decreasing order): polymer, binder,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	2	off-white	1	n.d.	-	-	-	-	-
2	acoustical tile	95	tan	3	90-100%	-	-	-	-	-
3	glue	3	brown	1	n.d.	-	-	-	-	-
Total %		100	Overall %		90-100%	-	-	-	-	-

Fiber Identification: cellulose fiber

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	cellulose fiber	W	F	N	N	H	+	U					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample ACM-01B **Lab Number** 2011-05803- 2 **Sampled:** 6/8/2011 8:34 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Acoustical Tile **Fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): polymer, binder,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	4	off-white	1	n.d.	-	-	-	-	-
2	acoustical tile	96	tan	3	90-100%	-	-	-	-	-
Total %		100	Overall %		90-100%	-	-	-	-	-

Fiber Identification: cellulose fiber

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	cellulose fiber	W	F	N	N	H	+	U					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of paint matrix using solvent.

PLM Analysis Details

Job Number: 201105803 117225.02/Moapa Senior Center

Sample ACM-01C **Lab Number** 2011-05803- 3 **Sampled:** 6/8/2011 8:38 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Acoustical Tile **Fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): polymer, binder,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	5	off-white	1	n.d.	-	-	-	-	-
2	acoustical tile	95	tan	3	90-100%	-	-	-	-	-
Total %		100	Overall %		90-100%	-	-	-	-	-

Fiber Identification: cellulose fiber

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	cellulose fiber	W	F	N	N	H	+	U					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of paint matrix using solvent.

Sample ACM-02A **Lab Number** 2011-05803- 4 **Sampled:** 6/8/2011 8:45 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Wall System **Fibrous Solid**
Homogeneous No **# Layers** 6 **Pos Layer?** No **# Sub-Samples** 16
Non-Fibrous Components (in approx. decreasing order): powder, binder,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	1	off-white	1	n.d.	-	-	-	-	-
2	texture/joint compound	1	white	3	n.d.	-	-	-	-	-
3	paper/cardboard	1	off-white	2	90-100%	-	-	-	-	-
4	texture/joint compound	1	white	3	n.d.	-	-	-	-	-
5	paper/cardboard	5	tan	2	90-100%	-	-	-	-	-
6	drywall core	91	white	3	<=1%	-	-	-	-	-
Total %		100	Overall %		5-10%	-	-	-	-	-

Fiber Identification: cellulose fiber

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	cellulose fiber	W	F	N	N	H	+	U					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of paint matrix using solvent. Procedure: dissolution of joint compound/texture matrix using acid.

PLM Analysis Details

Job Number: 201105803 117225.02/Moapa Senior Center

Sample ACM-02B **Lab Number** 2011-05803- 5 **Sampled:** 6/8/2011 8:47 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Wall System **Fibrous Solid**
Homogeneous No **# Layers** 6 **Pos Layer?** No **# Sub-Samples** 16
Non-Fibrous Components (in approx. decreasing order): powder, binder,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	1	off-white	1	n.d.	-	-	-	-	-
2	texture/joint compound	1	white	3	n.d.	-	-	-	-	-
3	paper/cardboard	2	off-white	2	90-100%	-	-	-	-	-
4	texture/joint compound	1	white	3	n.d.	-	-	-	-	-
5	paper/cardboard	25	tan	2	90-100%	-	-	-	-	-
6	drywall core	70	white	3	<=1%	-	-	-	-	-
Total %		100	Overall %		20-30%	-	-	-	-	-

Fiber Identification: cellulose fiber

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	W	F	N	N	H	+	U	cellulose fiber					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of paint matrix using solvent. Procedure: dissolution of joint compound/texture matrix using acid.

Sample ACM-02C **Lab Number** 2011-05803- 6 **Sampled:** 6/8/2011 8:49 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Wall System **Non-fibrous Solid**
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): powder, ,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	texture/joint compound	100	white	3	n.d.	-	-	-	-	-
Total %		100	Overall %		n.d.	-	-	-	-	-

Fiber Identification: none

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1								none					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of joint compound/texture matrix using acid.

PLM Analysis Details

Job Number: 201105803 117225.02/Moapa Senior Center

Sample ACM-03A **Lab Number** 2011-05803- 7 **Sampled:** 6/8/2011 9:30 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Flooring **Non-fibrous Solid**
Homogeneous No **# Layers** 3 **Pos Layer?** Yes **# Sub-Samples** 8
Non-Fibrous Components (in approx. decreasing order): polymer, filler,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	floor tile	96	off-white	1	n.d.	-	-	-	-	-
2	mastic	2	clear	1	n.d.	-	-	-	-	-
3	mastic	2	black	1	5-10%	-	-	-	-	-
Total %		100	Overall %		<=1%	-	-	-	-	-
Fiber Identification:					chrysotile asbestos					

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Oil	Col Par	Col Per	RI Par	RI Per	
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of floor tile matrix and mastic using solvent. Note: surface is brown patterned.

Sample ACM-03B **Lab Number** 2011-05803- 8 **Sampled:** 6/8/2011 8:32 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Flooring **Non-fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): polymer, filler,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	floor tile	98	off-white	1	n.d.	-	-	-	-	-
2	mastic	2	clear	1	n.d.	-	-	-	-	-
Total %		100	Overall %		n.d.	-	-	-	-	-
Fiber Identification:					none					

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Oil	Col Par	Col Per	RI Par	RI Per	
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of floor tile matrix and mastic using solvent. Note: surface is brown patterned.

PLM Analysis Details

Job Number: 201105803 117225.02/Moapa Senior Center

Sample ACM-03C **Lab Number** 2011-05803- 9 **Sampled:** 6/8/2011 9:35 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Flooring **Non-fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): polymer, filler,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	floor tile	98	off-white	1	n.d.	-	-	-	-	-
2	mastic	2	clear	1	n.d.	-	-	-	-	-
Total %		100	Overall %		n.d.	-	-	-	-	-

Fiber Identification: none

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Oil	Col Par	Col Per	RI Par	RI Per	
1	none												
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of floor tile matrix and mastic using solvent. Note: surface is brown patterned.

Sample ACM-04A **Lab Number** 2011-05803- 10 **Sampled:** 6/8/2011 9:40 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Flooring **Non-fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** Yes **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): polymer, filler,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	floor tile	99	tan	1	2-5%	-	-	-	-	-
2	mastic	1	black	1	2-5%	-	-	-	-	-
Total %		100	Overall %		2-5%	-	-	-	-	-

Fiber Identification: chrysotile asbestos

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Oil	Col Par	Col Per	RI Par	RI Per	
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561 1.553	
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of floor tile matrix and mastic using solvent.

Sample ACM-04B **Lab Number** 2011-05803- 11 **Sampled:** 6/8/2011 9:43 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Flooring **Non-fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** Yes **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): polymer, filler,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	floor tile	98	tan	1	2-5%	-	-	-	-	-
2	mastic	2	black	1	5-10%	-	-	-	-	-
Total %		100	Overall %		2-5%	-	-	-	-	-

Fiber Identification: chrysotile asbestos

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Oil	Col Par	Col Per	RI Par	RI Per	
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561 1.553	
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of floor tile matrix and mastic using solvent.

PLM Analysis Details

Job Number: 201105803 117225.02/Moapa Senior Center

Sample ACM-04C **Lab Number** 2011-05803- 12 **Sampled:** 6/8/2011 9:45 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Flooring **Non-fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** Yes **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): polymer, filler,

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	floor tile	98	tan	1	2-5%	-	-	-	-	-
2	mastic	2	black	1	2-5%	-	-	-	-	-
Total %		100	Overall %		2-5%	-	-	-	-	-

Fiber Identification: chrysotile asbestos

Fibers									Refractive Index Determinations				
	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	chrysotile asbestos	W	A	N	N	L	+	P	1.550	db/ly	sb/o	1.561	1.553
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of floor tile matrix and mastic using solvent.

Sample ACM-05A **Lab Number** 2011-05803- 13 **Sampled:** 6/8/2011 10:15 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Roofing **Non-fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): bitumen, polymer, filler

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	6	white	1	n.d.	-	-	-	-	-
2	caulk	94	black	1	5-10%	-	-	-	-	-
Total %		100	Overall %		5-10%	-	-	-	-	-

Fiber Identification: cellulose fiber

Fibers									Refractive Index Determinations				
	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	cellulose fiber	W	F	N	N	H	+	U					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of polymer matrix using solvent.

Sample ACM-05B **Lab Number** 2011-05803- 14 **Sampled:** 6/8/2011 10:20 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Roofing **Non-fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): bitumen, polymer, filler

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	caulk	15	white	1	n.d.	-	-	-	-	-
2	caulk	85	black	1	5-10%	-	-	-	-	-
Total %		100	Overall %		5-10%	-	-	-	-	-

Fiber Identification: cellulose fiber

Fibers									Refractive Index Determinations				
	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	cellulose fiber	W	F	N	N	H	+	U					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of polymer matrix using solvent.

PLM Analysis Details

Job Number: 201105803 117225.02/Moapa Senior Center

Sample ACM-05C **Lab Number** 2011-05803- 15 **Sampled:** 6/8/2011 10:25 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Roofing **Non-fibrous Solid**
Homogeneous No **# Layers** 2 **Pos Layer?** No **# Sub-Samples** 5
Non-Fibrous Components (in approx. decreasing order): bitumen, polymer, filler

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	7	white	1	n.d.	-	-	-	-	-
2	caulk	93	black	1	5-10%	-	-	-	-	-
Total %		100	Overall %		5-10%	-	-	-	-	-

Fiber Identification: cellulose fiber

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	W	F	N	N	H	+	U	cellulose fiber					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of polymer matrix using solvent.

Sample ACM-06A **Lab Number** 2011-05803- 16 **Sampled:** 6/8/2011 10:18 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Roofing **Fibrous Solid**
Homogeneous No **# Layers** 5 **Pos Layer?** No **# Sub-Samples** 10
Non-Fibrous Components (in approx. decreasing order): bitumen, rock, polymer

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	paint	5	white	1	n.d.	-	-	-	-	-
2	caulk	10	black	1	n.d.	-	-	-	-	-
3	roofing roll/shingle	35	black	1	5-10%	-	-	-	-	-
4	roofing roll/shingle	30	black	1	5-10%	-	-	-	-	-
5	roofing roll/shingle	20	black	1	5-10%	-	-	-	-	-
Total %		100	Overall %		5-10%	-	-	-	-	-

Fiber Identification: glass fiber

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext		Oil	Col Par	Col Per	RI Par	RI Per
1	CL	D	Y					glass fiber					
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

PLM Analysis Details

Job Number: 201105803 117225.02/Moapa Senior Center

Sample ACM-06B **Lab Number** 2011-05803- 17 **Sampled:** 6/8/2011 10:23 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Roofing **Fibrous Solid**
Homogeneous No **# Layers** 3 **Pos Layer?** No **# Sub-Samples** 6
Non-Fibrous Components (in approx. decreasing order): bitumen, rock, polymer

Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	roofing roll/shingle	35	black	1	5-10%	-	-	-	-	-
2	caulk	10	black	1	n.d.	-	-	-	-	-
3	roofing roll/shingle	55	black	1	5-10%	-	-	-	-	-
Total %		100	Overall %		5-10%	-	-	-	-	-

Fiber Identification: glass fiber

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Oil	Col Par	Col Per	RI Par	RI Per	
1	CL	D	Y										
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Sample ACM-06C **Lab Number** 2011-05803- 18 **Sampled:** 6/8/2011 10:30 **Condition:** acceptable
Analyzed By MAC 6/15/2011 **An?** OK **Apparent Smp Type** Roofing **Fibrous Solid**
Homogeneous Yes **# Layers** 1 **Pos Layer?** No **# Sub-Samples** 3
Non-Fibrous Components (in approx. decreasing order): bitumen, rock,

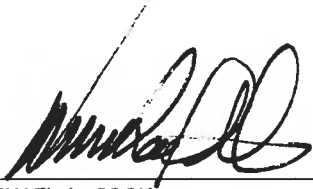
Layers					Percents of Each Fiber					
#	Layer Type	%	Color	Friability	Fib 1	Fib 2	Fib 3	Fib 4	Fib 5	Fib 6
1	roofing roll/shingle	100	black	1	5-10%	-	-	-	-	-
Total %		100	Overall %		5-10%	-	-	-	-	-

Fiber Identification: Synthetic fiber (extr

Fibers									Refractive Index Determinations				
#	Color	Mrph	Iso	Pleo	Bi	Elg	Ext	Oil	Col Par	Col Per	RI Par	RI Per	
1	W	E	N	N	H	+	P						
2													
3													
4													
5													
6													

Sample Analytical Note
 Procedure: tweased apart using forceps. Procedure: dissolution of matrix using solvent.

Fr=Friability: 1=very non-friable; 2= non-friable; 3=friable; 4=highly friable
 Colors: B=black;BL=blue;BR=brown;CL=clear;G=Green;GY=gray;OR=orange;OW=off-white;PN=pink;PU=purple;R=red;TN=tan;W=white;Y=yellow;V=various
 Fiber Morphology: A=fine fibers/bundles, white, sinewy, flexible; B=fine fibers/bundles, w-br, straight, broomed ends; C=fine fibers/bundles, blue, straight, broomed ends;
 D=fine to coarse fibers, CL-B, brittle; E=coarse fibers,CL or dyed, striated; F=coarse fibers or splinters, W-BR, ribbon-like; G=lath-like or shards, low aspect ratio, may taper
 Iso=isotropism - may be yes or no; Pleo=pleochroism - may be yes or no; Bi=birefringence - may be None, Low, Medium or High
 Elg=sign of elongation - may be +, - or B (both); Ext=extinction - may be Parallel, Oblique, None or Undulating; Oil=medium used to for dispersion staining
 Col Par=dispersion staining colors parallel to the fiber (fiber/halo): b/w=black/white; dg/py=dark gray/pale yellow; vg/y=violet gray/yellow; db/ly=dark blue/lemon yellow;
 vb/g= vivid blue/gold; sb/o=sky blue/orange; pb/r=pale blue/red; gb/dr=gray blue/dark red; w/b=white/black. Col Perp=same only perpendicular to fiber.
 RI Par=refractive index parallel to fiber; RI Perp=refractive index perpendicular to fiber



Analyst: MICHAEL A. COOK

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Larry S. Pierce, Approved Accreditation Signatory

FIBERQUANT

ANALYTICAL SERVICES

Fiberquant Analytical Services 5025 S 33rd St.,
Phoenix, AZ 85040, Phone: 602-276-6139; FAX: 602-276-4558,
info@fiberquant.com

Analysis Request/Chain-of-Custody Form

Submitted by (Company) Kleinfelder	
Address 6380 S. Polaris Avenue	
City, State, Zip Code Las Vegas, NV 89118	
Phone 702-736-2936	FAX 702-361-9094
Email dburns@kleinfelder.com	

Invoice to (Company) Kleinfelder	
Address 6380 S. Polaris Avenue	
City, State, Zip Code Las Vegas, NV 89118	
Phone 702-260-5603	FAX 702-361-9094

Contact (print) Daniel Burns	
Sampled by (signature) <i>Daniel Burns</i>	
Job Number or Project Name 117225.02/ Moapa Senior Center	
PO Number 117225.02	

Analysis Method Requested ONLY ONE METHOD per COC		Turn-around-time (circle one)		
		Rush	Norm	Ext
Asbestos by PLM	Improved <input checked="" type="checkbox"/> Interim <input type="checkbox"/>	<6 hrs	1-3 days	15-30 days
	Analyze <input checked="" type="checkbox"/> LAR <input type="checkbox"/> ATPF	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	If so then by Layer <input type="checkbox"/> or Sample <input type="checkbox"/> Single Layer Protocol: Yes <input type="checkbox"/> No <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fibers by PCM	7400(Area) <input type="checkbox"/> ORM (Personal) <input type="checkbox"/>	<4 hr	24hr	3-5d
Asbestos by TEM	AIR: AHERA <input type="checkbox"/> Mod AHERA <input type="checkbox"/>	<6hr	24 hr	3-5d
	Water: Water <input type="checkbox"/> Sludge <input type="checkbox"/>	1-2d	3-5d	N/A
	Annex2: Chatfield <input type="checkbox"/> Full <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Vacuum Dust (ASTM)	3-5d	5-10d	N/A
Pb by FLAA	Analyte: Pb Other	<6 hrs	2-3 days	N/A
	Matrix: Filter MCE <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Paint by Area <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Soil <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Wipe <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Initial here covering wires used are ASTM E1792 compliant: <input type="checkbox"/>				
Fungi	Air Sample: Zet <input type="checkbox"/> Alter <input type="checkbox"/> Oth <input type="checkbox"/>	<6 hrs	1-2 days	N/A
	ID/Count: Bulk <input type="checkbox"/> Swab <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Tape: Qual (%) <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Tape: Quant (cm2) <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other				
Dust	NIOSH 500 <input type="checkbox"/>	<4hr	24h	N/A
Other		Call	Call	

Sample Number	Description/Location (include age type/number/exp. Date)	Sample Date	Sample Time	Location
1) ACM-01A	white, 9'x9' ceiling tile w/circles/office	6/8/11	0830	office
2) ACM-01B	white, 9'x9' ceiling tile w/circles, room	↓	0834	W.A. room
3) ACM-01C	white 9'x9' ceiling tile w/circles	6/8/11	0838	hallway
4) ACM-02A	white smooth-text. ceiling panel w/integral	6/8/11	0845	entry center m.
5) ACM-02B	white smooth-text ceiling panel w/integral	6/8/11	0847	entry west
6) ACM-02C	white, smooth-text. ceiling joint comp.	6/8/11	0849	entry east
7) ACM-03A	brown mottled 12'x12" floor tile w/mastic	6/8/11	0930	kitchen
8) ACM-03B	brown mottled 12'x12" floor tile w/mastic	6/8/11	0932	kitchen office
9) ACM-03C	brown mottled 12'x12" floor tile w/mastic	6/8/11	0935	kitchen office
10) ACM-04A	brown mottled floor tile w/BLK mastic	6/8/11	0940	Hall closet
11) ACM-04B	tan mottled 12'x12" floor tile w/BLK mastic	6/8/11	0943	Hall
12) ACM-04C	tan mottled 12'x12" floor tile w/BLK mastic	6/8/11	0945	foyer/entry
13) ACM-05A	white painted, black roof penetration seal	6/8/11	1015	vent pipe
14) ACM-05B	white painted, BLK roof penet. seal/mastic	6/8/11	1020	HVAC elec. room
15) ACM-05C	white painted, BLK roof penet. seal.	6/8/11	1025	elec. room
16) ACM-06A	roof composite shingle & mastic	↓	1018	north side
17) ACM-06B	roof composite shingle & mastic	↓	1023	east side
18) ACM-06C	roof composite shingle & mastic	6/8/11	1030	south west edge
19)				
20)				

1) Relinquished by: <i>DBurns</i>	Date: 6/9/11	Time: 0800	3) Relinquished by: UPS Airbill	Date: 6/10/11	Time: 9:50A
2) Received by: UPS Airbill	Date: 6/9/11	Time: 0800	4) Received by: <i>[Signature]</i>	Date: 6/10/11	Time: 9:50A

Review of Analysis Request (Initials) _____

Note: Data completed by client (including number and identity of samples) is assumed to be correct until it is verified at time of sample preparation.

1-1 201105803 & UPS

APPENDIX G

**LEAD BASED PAINT
REGULATORY OVERVIEW**

REGULATORY OVERVIEW FOR LEAD BASED PAINT

The USEPA and US Department of Housing and Urban Development (HUD) define lead based paint (LBP) as paints containing greater than 1.0 milligrams per square centimeter (mg/cm^2) lead, or 0.5 percent lead by weight (% by weight), which is equivalent to 5,000 milligrams per kilogram (mg/kg) and 5,000 parts per million (ppm). Federal OSHA and Nevada OSHA regulations (Lead Construction Standard) do not provide a definition for “lead-based paint,” but refer to the US EPA and HUD values discussed above. Nevada OSHA is primarily concerned with worker protection, and regulates any amount of lead contained within painted building components.

There are two OSHA lead standards. The OSHA Construction Lead Standard (29 CFR 1926.62) applies to new construction or renovation, demolition or salvage, installation of products that contain lead, and maintenance activities. The General Industry Standard (29 CFR 1910.1025) applies to non-construction activities.

The permissible exposure limit (PEL) for lead is 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) of air averaged over an 8-hour time period. In addition to the PEL, there is also an action level of 30 $\mu\text{g}/\text{m}^3$ of air averaged over an 8-hour time period. Employees who work in an area at or above the action level must receive medical surveillance and training on the hazards of working with lead. Therefore, demolition activities that include materials coated with lead paint in any concentration could, under certain circumstances, trigger Federal OSHA and Nevada OSHA regulations. Determination of airborne lead concentrations would require air monitoring by a trained lead professional during building material disturbance.

Results of the LBP survey should be provided to contractors and subcontractors performing work at the Site that may disturb lead-containing components that could generate airborne lead concentrations so that they can determine the OSHA Class category (I, II, or III) they need to plan for. The OSHA Classes are defined as follows.

Class I assumes exposure over the PEL (50 $\mu\text{g}/\text{m}^3$). Class I tasks include manual scraping or sanding, using a heat gun, and spray painting with lead paint.

Class II assumes exposure is at least ten times the PEL (500 $\mu\text{g}/\text{m}^3$). Class II tasks include using lead containing mortar, burning lead, rivet busting, power tool cleaning without dust collection systems, and removal of an abrasive blasting enclosure.

Class III assumes exposure is at least fifty times the PEL (2,500 $\mu\text{g}/\text{m}^3$). Class III tasks include abrasive blasting, cutting, welding, and torch burning.

APPENDIX H

**LEAD BASED PAINT
AND SOIL SAMPLING
ANALYTICAL LABORATORY REPORTS**



Atomic Absorption Spectrometer (AAS) Analysis of Paint

JobNumber: 201105805

Client: KLEINFELDER INC
6380 S POLARIS AVE

LAS VEGAS, NV 89118-3821
Office Phone: (702) 736-2936
FAX: (702) 361-9094

Samples: 6 AA Rec: 6/10/2011 Method: Modified SW 846 3050b/7420 Pb in paint by weight AA Analysis
Client Job: 117225.02/Moapa Senior Center PO Number: 117225.02
Report Date: 6/14/2011 Date Analyzed: 6/14/2011 Routing Number: -

Method and Analysis Information: Fiberquant Internal SOP: AApw

The received samples were analyzed for Pb (total) using "Test Methods for Evaluating Solid Waste" (SW 846, December 1996 updates). The extraction/digestion method was SW 3050b. The analytical method is "flame atomic absorption, direct aspiration", SW 7420.. Briefly the procedures are as follows. The incoming paint samples are first homogenized by mixing and crushing. A sub-sample is weighed to 0.0001 gm into a 50ml centrifuge tube. To the run stream are added the quality assurance samples described below. Six mls of concentrated HNO3 and one ml of 30% H2O2 are added to each container. The tubes are capped and heated for 1 hour at 95 deg. C. After cooling, the contents of the centrifuge tube are brought up to exactly 25 mls, completing the digestion/extraction.

The sample and quality assurance extractions are then analyzed on a TJA M5 flame atomic absorption spectrometer. The wavelengths and other instrumental settings are set according to the manufacturer's recommendations, or as otherwise specified in the published method. Absorptions are recorded from sample and standard solutions. A calibration curve is fitted to at least three standard solutions, and the concentrations of the sample extracts are calculated from the curve. The ppm (ug/gm) and weight percent for each sample is calculated from the sub-sample weight, extract volume, and extract concentration.

The results from this analysis is generally compared to either the HUD guidelines, in which a sample is positive if it contains >0.5% (5000 ppm) Pb, or the Consumer Products Safety Commission (CPSC) limit, in which a paint pr surface coating containing greater than 90 ppm is defined as lead-containing. The expected coefficient of variation for this method is approximately 20-30%. The results are reported to two significant figures. The Sample Reporting Limit (RL) listed below is twice the Sample Detection Limit, which is calculated for each sample from the experimentally determined Method Detection Limit. The limit of reliable quantitation is generally regarded as five to ten times the limit of detection. Therefore, samples smaller than 0.1 gm may give results too near the CPSC standard to be reliable. Problems in analysis or other information is provided in the "Analytical Notes" below. Blanks, if analyzed, are treated the same as samples and are not used for correcting non-blank results.

The following on-going quality assurance program was followed to ensure reproducible and dependable results: All analysts are degreed chemists trained extensively in-house for at least six months prior to un-supervised runs. Blank matrix samples are analyzed at a rate of 5% (at least one per run). Reference standards are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. Spiked matrix samples are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. Duplicate samples are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. For each instrumental run, the spectrometer is checked for sensitivity and stability. The calibration standards are made fresh weekly, and checked each run against a calibration verification standard from another source. All calculations are performed twice - once in a calibration spreadsheet, and once during the report generation, and also checked by hand. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. Fiberquant participates in the Environmental Lead Proficiency Analytical Testing (ELPAT) program, is accredited by AIHA-LAP, LLC for environmental lead in paint (Lab # 101593), and is recognized by the National Lead Laboratory Accreditation Program (NLLAP) for the analysis of Pb in paint. Accreditation does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

Calibration Curve:

Pb

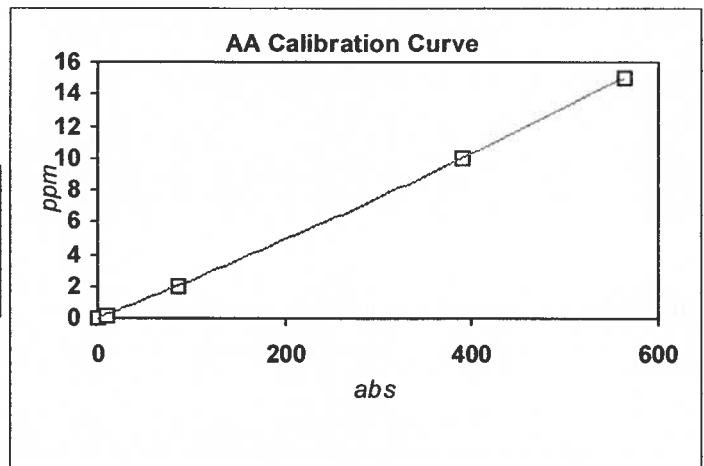
Run # 7899

Instrument: M5-2

6/10/2011

Standards:	ppm	avg. mAbs.
1	0.2	9
2	2	85
3	10	390
4	15	563

ax2 0.00000593
 bx 0.02333226
 c -0.01042522
 R2 0.99999746



Analysis Results:

Job Number: 201105805

AApw

Lab Number	Client Number	Date	Condition	Weight (gm)	ug/ml	ml	Dil	Analyte	wt %	ppm	RL(ppm)
2011-05805- 1	LBP-01	6/8/2011	acceptable	0.1009	4.35605	25	50	Pb	5.4	54000	50
2011-05805- 2	LBP-02	6/8/2011	acceptable	0.1117	-0.0104	25	1	Pb	<0.0045	<45	45
2011-05805- 3	LBP-03	6/8/2011	acceptable	0.1073	0.22349	25	1	Pb	0.0052	52	47
2011-05805- 4	LBP-04	6/8/2011	acceptable	0.1011	0.03626	25	1	Pb	<0.0049	<49	49
2011-05805- 5	LBP-05	6/8/2011	acceptable	0.1279	-0.0104	25	1	Pb	<0.0039	<39	39
2011-05805- 6	LBP-06	6/8/2011	acceptable	0.1192	-0.0104	25	1	Pb	<0.0042	<42	42

Martin Esquer

Analyst: MARTIN A. ESQUER

Printed: 14-Jun-11

Original Print Date: 14-Jun-11

Larry S. Pierce

Larry S. Pierce, Approved Accreditation Signatory

FIBERQUANT

ANALYTICAL SERVICES

Fiberquant Analytical Services 5025 S. 33rd St.,
Phoenix, AZ 85040, Phone: 602 276 6139, FAX: 602 276 1358,
info@fiberquant.com

Analysis Request/Chain-of-Custody Form

Submitted by (Company) Kleinfelder	
Address 6380 S. Polaris Avenue	
City State Zip Code Las Vegas, NV 89118	
Phone 702-736-2936	FAX 702-361-9094
Email dburns@kleinfelder.com	
Invoice to (Company) Kleinfelder	
Address 6380 S. Polaris Avenue	
City State Zip Code Las Vegas, NV 89118	
Phone 702-260-5603	FAX 702-361-9094
Contact (print) Daniel Burns	
Sampled by (signature) <i>[Signature]</i>	
Job Number or Project Name 117225.02/ Moapa Senior Center	
PO Number 117225.02	

Analysis Method Requested ONLY ONE METHOD per COC		Turn-around-time (Circle one)		
		Rush	Norm	Ext
Asbestos by PLM	Improved <input type="checkbox"/> Intern <input type="checkbox"/>	<6 hrs	1-3 days	15-30 days
	Analyze <input type="checkbox"/> All <input type="checkbox"/> ATPF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	If so then by Layer: <input type="checkbox"/> or <input type="checkbox"/> Sample <input type="checkbox"/>			
	Single Layer Protocol Yes <input type="checkbox"/> No <input type="checkbox"/>			
Fibers by PCM	7400(Area) <input type="checkbox"/> ORM (Personal) <input type="checkbox"/>	<4 hr	24hr	3-5d
Asbestos by TEM	AIR: AHERA <input type="checkbox"/> Mod AHERA <input type="checkbox"/>	<6hr	24 hr	3-5d
	Water: Water <input type="checkbox"/> Sludge <input type="checkbox"/>	1-2d	3-5d	N/A
	Annex 2: Chatfield <input type="checkbox"/> Full <input type="checkbox"/>			
	Vacuum Dust (ASTM)	3-5d	5-10d	N/A
Ph by ELAA	Analyte: Pb <input checked="" type="checkbox"/> Other <input type="checkbox"/>	<6 hrs	2-3 days	N/A
	Matrix: Filter <input type="checkbox"/> MCE <input type="checkbox"/>		<input checked="" type="checkbox"/>	
	Paint by Area <input type="checkbox"/>			
	Soil <input type="checkbox"/>			
	Wipe <input type="checkbox"/>			
	Initial here certifying labs used are ASTM E1732 compliant <input type="checkbox"/>			
Fungi	Air Sample: Zet <input type="checkbox"/> Aher <input type="checkbox"/> Oth <input type="checkbox"/>	<6 hrs	1-2 days	N/A
	ID/Count: Bulk <input type="checkbox"/> Swab <input type="checkbox"/>			
	Tape Qual (%) <input type="checkbox"/>			
	Tape Quant (cm2) <input type="checkbox"/>			
Other				
Dust	NIOSH 500 <input type="checkbox"/>	<4hr	24h	N/A
Other		Call	Call	

Sample Number	Description/Location (include area, by what surface, Date)	Sample Date	Sample Time	Vol/Area
1) LBP-01	Brown exterior paint - trim	6/8/11	1200	
2) LBP-02	white exterior paint - fascia	6/8/11	1205	
3) LBP-03	yellow exterior paint - curb wall	6/8/11	1210	
4) LBP-04	white window caulk - east	6/8/11	1225	
5) LBP-05	white window caulk - west	6/8/11	1228	
6) LBP-06	white window caulk - north	6/8/11	1230	
7) soil-01-01		6/8/11	1245	
8) soil-01-02	East side - exterior soil beneath roof drip line ~ surface - 6 inches depth		1247	Composite analyze
9) soil-01-03			1249	
10) soil-01-04			6/8/11 1251	
11) soil-02-01		6/8/11	1255	
12) soil-02-02	west side - exterior soil beneath roof drip line ~ surface - 6 inches depth		1257	Composite analyze
13) soil-02-03			1259	
14) soil-02-04			6/8/11 1301	
15) soil-03-01		6/8/11	1305	
16) soil-03-02	south side - exterior soil beneath roof drip line ~ surface - 6 inches depth		1307	Composite analyze
17) soil-03-03			1308	
18) soil-03-04			6/8/11 1310	
19) soil-04-01, 02	north side - exterior soil beneath roof drip line - 0-6"	6/8/11	1312, 1317	Composite analyze
20) soil-04-03, 04		6/8/11	1316, 1318	

1) Relinquished by: <i>[Signature]</i>	Date: 6/9/11	Time: 0800	3) Relinquished by: UPS Airbill	Date: 6/10/11	Time: 10:10
2) Received by: UPS Airbill	Date: 6/9/11	Time: 0800	4) Received by: <i>[Signature]</i>	Date: 6/10/11	Time: 10:10

Review of Analysis Request (Initials) _____

1-1 201105805 65
UPS



Atomic Absorption Spectrometer (AAS) Analysis of Soil

JobNumber: 201105806

Client: KLEINFELDER INC

6380 S POLARIS AVE

LAS VEGAS, NV 89118-3821

Office Phone: (702) 736-2936

FAX: (702) 361-9094

Samples: 4 **AA Rec:** 6/10/2011 **Method:** Modified SW 846 3050b/7420 **AA digestion/analysis of soil**

Client Job: 117225.02/Moapa Senior Center

PO Number: 117225.02

Report Date: 6/15/2011

Date Analyzed: 6/15/2011

Routing Number: -

Method and Analysis Information: **Fiberquant Internal SOP:** AAs

The received samples were analyzed for metals (total) using "Test Methods for Evaluating Solid Waste" (SW 846, December 1996 updates). The extraction/digestion method was SW 3050b. The analytical method is "flame atomic absorption, direct aspiration", SW 7420. Briefly the procedures are as follows. The incoming samples are first dried at 95 degrees C, then passed through 10 and 60 mesh sieves. A sub-sample is weighed to 0.0001 gm into a 50ml centrifuge tube. To the run stream are added the quality assurance samples described below. Six mls of concentrated HNO₃ and one ml of 30% H₂O₂ are added to each container. The tubes are capped and heated for 1 hour at 95 deg. C. After cooling, the contents of the centrifuge tube are brought up to exactly 25 mls, completing the digestion/extraction.

The sample and quality assurance extractions are then analyzed on a TJA M5 flame atomic absorption spectrometer. The wavelengths and other instrumental settings are set according to the manufacturer's recommendations, or as otherwise specified in the published method. Absorptions are recorded from sample and standard solutions. A calibration curve is fitted to at least three standard solutions, and the concentrations of the sample extracts are calculated from the curve. The ppm (ug/gm) for each sample is calculated from the sub-sample weight, extract volume, and extract concentration.

The results from this analysis is generally compared to either a 400 (high contact) or 1200 (non-high contact) ppm consensus standard as lead-containing. The expected coefficient of variation for this method is approximately 20%. The results are reported to two significant figures. The Sample Reporting Limit (RL) listed below is twice the Sample Detection Limit, which is calculated for each sample from the experimentally determined Method Detection Limit. The limit of reliable quantitation is generally regarded as five to ten times the limit of detection. Therefore, samples significantly smaller than 0.2 gm may give results too near the 400 ppm standard to be reliable. Problems in analysis or other information is provided in the "Analytical Notes" below. Blanks, if analyzed, are treated the same as samples and are not used for correcting non-blank results.

The following on-going quality assurance program was followed to ensure reproducible and dependable results: All analysts are degreed chemists trained extensively in-house for at least six months prior to un-supervised runs. Blank matrix samples are analyzed at a rate of 5% (at least one per run). Reference standards are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. Spiked matrix samples are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. Duplicate samples are analyzed at a rate of 5% (at least one per run), and compared to statistical records via control charts. For each instrumental run, the spectrometer is checked for sensitivity and stability. The calibration standards are made fresh weekly, and checked each run against a calibration verification standard from another source. All calculations are performed twice - once in a calibration spreadsheet, and once during the report generation and also checked by hand. All quality checks performed for these samples were in control except as detailed in the "Analytical Notes" below. Fiberquant participates in the Environmental Lead Proficiency Analytical Testing (ELPAT) program, is accredited by AIHA-LAP, LLC for environmental lead in soil (Lab # 101593), and is recognized by the National Lead Laboratory Accreditation Program (NLLAP) for the analysis of Pb in soil. Results for any other metals, if reported, are not covered by accreditation. Accreditation does not imply endorsement by the EPA, any other United States governmental agency or any private agency or association. Each lab analysis refers only to the sample tested, and may not, due to the sampling process, be representative of the material sampled. This report may not be reproduced except in full, without the approval of Fiberquant Analytical Services.

Some results may have been calculated using client supplied data, such as volume or area sampled, for which Fiberquant assumes no liability for accuracy.

Job Analysis Notes:

Calibration Curve:

Pb

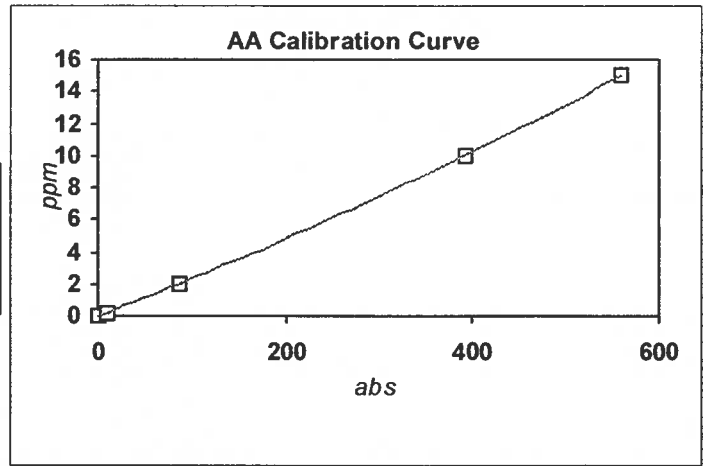
Run # 7904

Instrument: M5-2

6/15/2011

Standards:	ppm	avg. mAbs.
1	0.2	10
2	2	87
3	10	391
4	15	559

ax2 0.00000756
 bx 0.0226434
 c -0.01678882
 R2 0.99999688



Analysis Results:

Job Number: 201105806

AAs

Lab Number	Client Number	Date	Condition	Weight (gm)	ug/ml	ml	Dil	Analyte	ppm	-	RL(ppm)
2011-05806-1	Soil-01-01,02,03,04	6/1/2011	acceptable	0.2098	0.07391	25	1	Pb	<24	-	24
2011-05806-2	Soil-02-01,02,03,04	6/1/2011	acceptable	0.2026	0.00586	25	1	Pb	<25	-	25
2011-05806-3	Soil-03-01,02,03,04	6/1/2011	acceptable	0.2041	0.14209	25	1	Pb	<24	-	24
2011-05806-4	Soil-04-01,02,03,04	6/1/2011	acceptable	0.2021	0.11934	25	1	Pb	<25	-	25

Martin Esquer

Analyst: MARTIN A. ESQUER

Printed: 15-Jun-11

Original Print Date: 15-Jun-11


Larry S. Pierce

Larry S. Pierce, Approved Accreditation Signatory

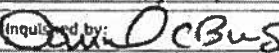
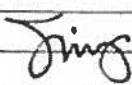
FIBERQUANT ANALYTICAL SERVICES

Fiberquant Analytical Services 5025 S. 33rd St.,
Phoenix, AZ 85040; Phone: 602-276-6139; FAX: 602-276-4558;
info@fiberquant.com

Analysis Request/Chain-of-Custody Form

Submitted by (Company) Kleinfelder	
Address 6380 S. Polaris Avenue	
City, State, Zip Code Las Vegas, NV 89118	
Phone 702-736-2936	FAX 702-361-9094
Email dburns@kleinfelder.com	
Invoice to (Company) Kleinfelder	
Address 6380 S. Polaris Avenue	
City, State, Zip Code Las Vegas, NV 89118	
Phone 702-260-5603	FAX 702-361-9094
Contact (name) Daniel Burns	
Sampled by (signature) 	
Job Number or Project Name 117225.02/ Moapa Senior Center	
PO Number 117225.02	

Analysis Method Requested ONLY ONE METHOD per COC		Turn-around-time (circle one)		
		Rush	Norm	Ext
Asbestos by PLM	Improved <input type="checkbox"/> Interim <input type="checkbox"/>	<6 hrs	1-3 days	15-30 days
	Analyze <input type="checkbox"/> All <input type="checkbox"/> ATPF	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	If so then by Layer <input type="checkbox"/> or Sample <input type="checkbox"/>			
	Single Layer Protocol: Yes <input type="checkbox"/> No <input type="checkbox"/>			
Fibers by PCM	7400(Area) <input type="checkbox"/> ORM (Personal) <input type="checkbox"/>	<4 hr	24hr	3-5d
Asbestos by TEM	AIR: AHERA <input type="checkbox"/> Mod. AHERA <input type="checkbox"/>	<6hr	24 hr	3-5d
	Water: Water <input type="checkbox"/> Sludge <input type="checkbox"/>	1-2d	3-5d	N/A
	Annex 2: Chatfield <input type="checkbox"/> Full <input type="checkbox"/>			
	Vacuum Dust (ASTM)	3-5d	5-10d	N/A
Ph by ELAA	Analyte: <u>PE</u> Other	<5 hrs	2-5 days	N/A
	Matrix: Filter: MCE <input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Point: by Area <input type="checkbox"/>			
	by Weight <input checked="" type="checkbox"/>			
	Soil <input type="checkbox"/>			
	Wipe <input type="checkbox"/>			
	(Initial here certifying wipes used are ASTM E1792 compliant <input type="checkbox"/>)			
Fungi	Air Sample: Zel <input type="checkbox"/> Aller <input type="checkbox"/> Oth <input type="checkbox"/>	<5 hrs	1-2 days	N/A
	ID/Count: Bulk <input type="checkbox"/> Swab <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Type: Qual (%) <input type="checkbox"/>			
	Type: Quant (cm2) <input type="checkbox"/>			
	Other			
Dust	NIOSH 500 <input type="checkbox"/>	<4hr	24h	N/A
Other		Call	Call	

Sample Number	Description/Location (include unit type/make/etc., Date)	Sample Date	Sample Time	Vol/Area	
1) LBP-01	Brown exterior paint - Trim	6/8/11	1200		
2) LBP-02	white exterior paint - fascia	6/8/11	1205		
3) LBP-03	yellow exterior paint - cmu wall	6/8/11	1210		
4) LBP-04	white window caulk - east	6/8/11	1225		
5) LBP-05	white window caulk - west	6/8/11	1228		
6) LBP-06	white window caulk - north	6/8/11	1230		
7) soil-01-01	East side - exterior soil beneath roof drip line ~ surface - 6 inches depth.	6/8/11	1245	Composite Analyze	
8) soil-01-02		↓	1247		
9) soil-01-03		↓	1249		
10) soil-01-04		6/8/11	1251		
11) soil-02-01	west side - exterior soil beneath roof drip line ~ surface - 6 inches depth	6/8/11	1255	Composite Analyze	
12) soil-02-02		↓	1257		
13) soil-02-03		↓	1259		
14) soil-02-04		6/8/11	1301		
15) soil-03-01	south side - exterior soil beneath roof drip line ~ surface - 6 inches depth	6/8/11	1305	Composite Analyze	
16) soil-03-02		↓	1307		
17) soil-03-03		↓	1308		
18) soil-03-04		6/8/11	1310		
19) soil 04-01, 02	north side - exterior soil beneath roof drip line - 0-6"	6/8/11	1312, 1317	Composite Analyze	
20) soil 04-03, 04		6/8/11	1316, 1318		
1) Reinquished by: 	Date: 6/9/11	Time: 0800	3) Reinquished by: UPS Airbill	Date: 6/10/11	Time:
2) Received by: UPS Airbill	Date: 6/9/11	Time: 0800	4) Received by: 	Date: 6/10/11	Time: 10:10
• TEM Water Sampler's name Required by State of Arizona		Print Name	1-1 201105806 \$		

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