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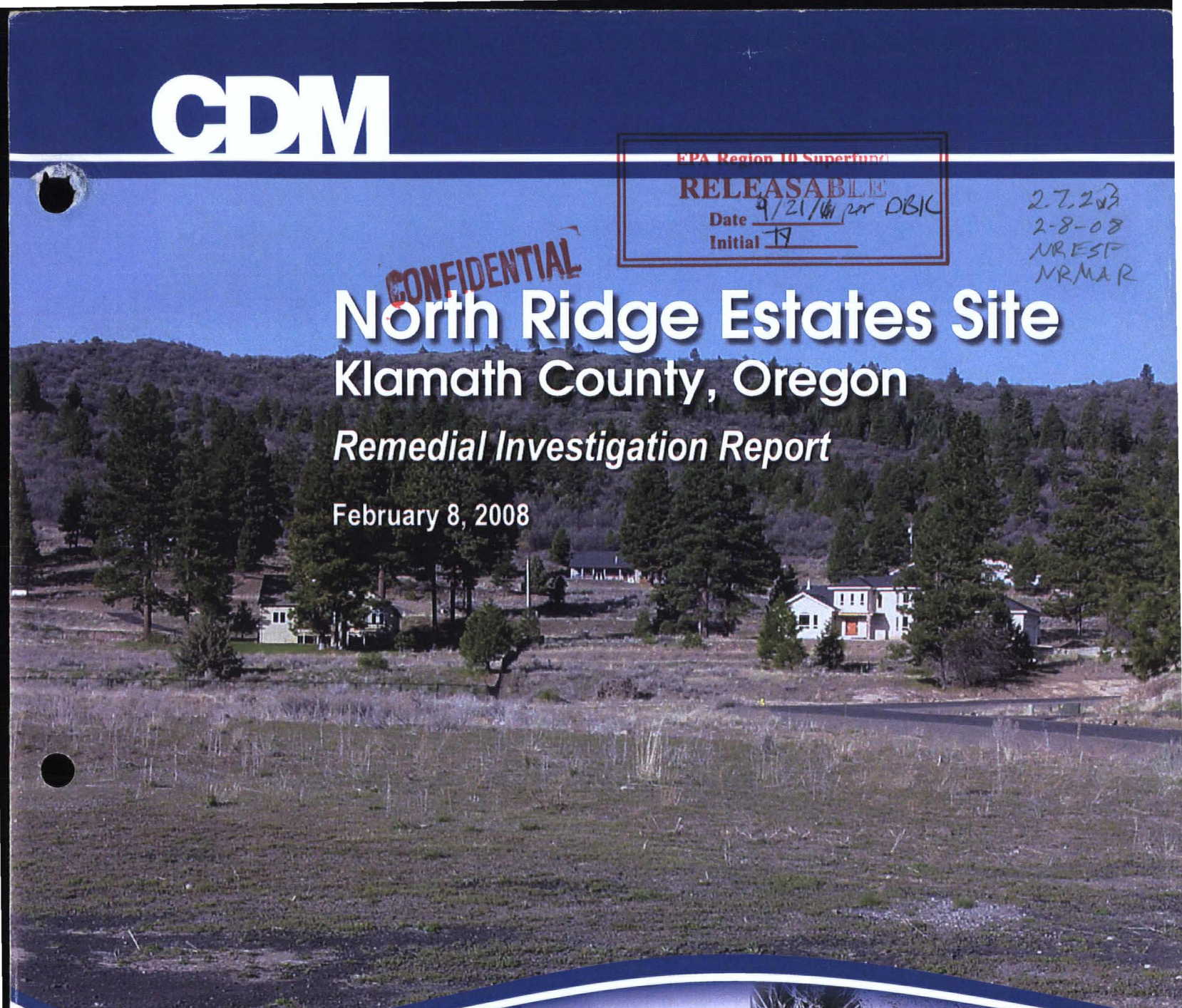
North Ridge Estates Site

Klamath County, Oregon

Remedial Investigation Report

February 8, 2008



Final Draft

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Response Action Contract
for Remedial, Enforcement Oversight, and Non-Time Critical Removal Activities at Sites of Release or Threatened Release of Hazardous Substances in EPA Region 8

U.S. EPA Contract No. EP-W-05-049

Final Draft Remedial Investigation Report
North Ridge Estates Site
Klamath County, Oregon

Work Assignment No. 217-RICO-10BT

February 8, 2008

Prepared for:

U.S. Environmental Protection Agency
Region 10
Seattle, Washington

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Denver, Colorado

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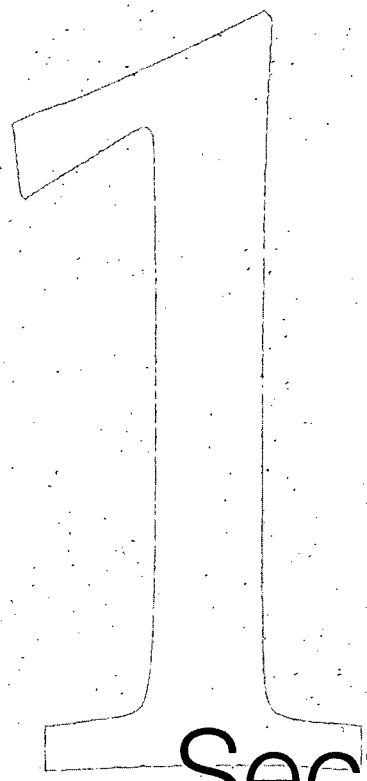
Acronyms and Abbreviations

ACM	asbestos containing material
ABS	activity-based sampling
AOC	Administrative Order on Consent
ASTM	American Society for Testing and Materials
BLRA	baseline risk assessment
bgs	below ground surface
CAB	cement asbestos board
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
cm^2	square centimeters
COC	contaminant of concern
COIs	contaminants of potential concern
cy	cubic yards
DEQ	Oregon Department of Environmental Quality
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DHS	Oregon Department of Human Services
DOD	United States Department of Defense
DPT	direct push technology
DQO	data quality objective
E&E	Ecology & Environment, Inc.
EDC	1,2-dichloroethane
EPA	United States Environmental Protection Agency
ERT	Emergency Response Team
f/cc	fibers per cubic centimeter
f/cm^2	fibers per square centimeter
FS	feasibility study
FSP	field sampling plan
ft^2	square feet
g/cm^2	grams per square centimeter
gpm	gallons per minute
GPS	global positioning system
GSA	General Services Administration
IRIS	Integrated Risk Information System
ISO	International Organization of Standards

L/min	liters per minute
lbs	pounds
MAO	Mutual Agreement Order
MBK	Melvin Bercot Kenneth Partnership
MET	meteorological
mg/kg	milligrams per kilogram
MRB	Marine Recuperation Barracks
Navy	United States Navy
NBEC	nitrate base explosive compounds
NRCS	Natural Resources Conservation Service
NRE	North Ridge Estates
NWTPH-Dx	Northwest Total Petroleum Hydrocarbons-diesel range
NWTPH-Gx	Northwest Total Petroleum Hydrocarbons-gasoline range
OCS	Oregon Climate Society
OIT	Oregon Institute of Technology
ORNHIC	Oregon Natural Heritage Information Center
OSC	on-scene coordinator
OTI	Oregon Technical Institute
OWRD	Oregon Water Resources Department
PBS	PBS Engineering and Environmental
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
PCME	phase contrast microscopy equivalent
PCM	phase contrast miscroscopy
PHC	Public Health Consultation
PLM	polarized light microscopy
ppm	parts per million
PRG	preliminary remediation goal
PRP	potentially responsible party
PX	post exchange
QAPP	Quality Assurance Project Plan
RBC	risk-based concentration
RI	remedial investigation
RP	responsible party
S/cc	structures per cubic centimeter
S/g	structures per gram
SAP	sampling and analysis plan
SHINE	Superfund Health Investigation and Education Program
SL	screening level
SLV	screening level value

SSL	soil screening level
START	Superfund Technical Assistance and Response Team
SVOC	semi-volatile organic compound
TCE	trichloroethylene
TEM	transmission electron microscopy
TPH	total petroleum hydrocarbons
TSI	thermal system insulation
UCL	upper confidence limit
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USGS	United States Geologic Survey
UST	underground storage tank
UXO	unexploded ordnances
VAT	vinyl asbestos tile
VOC	volatile organic compounds
WWII	World War II
WWTP	waste water treatment plant
XRF	x-ray fluorescence
%	percent
>	greater than
<	less than
°C	degrees Celsius
°F	degrees Fahrenheit
µm	micron



Section One

Section 1
Introduction

The purpose of this remedial investigation (RI) report is to present sufficient information to support a feasibility study (FS) and remedial action decisions for the North Ridge Estates (NRE) site near Klamath Falls, Oregon. This report documents the history of the site, summarizes remedial investigations, previous removal activities, describes physical characteristics of the site, characterizes nature and extent of contamination, and describes the fate and transport of contaminants.

The RI report includes a comprehensive description of the nature and extent of contamination at the site and, along with the risk assessments (provided as appendices), presents estimates of the risks to human health and the environment posed by the contamination. The subsequent FS report will use the information from the RI to perform a systematic analysis to determine the need for, and scope of, any required remedial action.

Contaminant of Concern

The main contaminant of concern (COC) at the NRE site is asbestos. The main source of asbestos at the site is from asbestos-containing building materials (ACM) that were used in the original construction of the Marine Recuperation Barracks (MRB). As was common at that time, a variety of different types of ACM were used, including cement asbestos board (CAB) used on exterior and interior walls, asphalt-asbestos roofing material, vinyl asbestos floor tiles, floor tile mastic, and several different types of asbestos steam pipe insulation. When buildings containing ACM were demolished, some of the ACM debris was consolidated into waste piles or burial pits, while some was dispersed in surface and subsurface soil in the vicinity of the demolition. During site development, most of this ACM was covered or buried with soil, but some was left exposed. Over time, some pieces of ACM in the shallow subsurface soil have been appearing at the surface. This is believed to be due to repeated cycles of frost heave and/or to surface soil erosion. Once at the surface, the pieces of ACM can serve as a continuing source of release of asbestos fibers to surface soil and/or air, especially when the ACM and soil is disturbed by human or mechanical forces.

The types of ACM present at NRE include: CAB, vinyl asbestos floor tile (VAT), floor tile mastic, roofing material, and steam pipe wrap consisting of insulation (AirCell and MAG) and tar paper. CAB was manufactured as a dense, rigid, noncombustible board containing a high proportion of chrysotile asbestos fibers bonded with Portland cement. Two of the lesser known types of ACM, AirCell and MAG, are discussed in the following text.

As mentioned above, the steam pipe wrap used at the site contains AirCell and MAG ACMs. AirCell is a type of thermal system insulation (TSI); it was manufactured in the form of a corrugated asbestos paper product for use as an outer coating for pipe insulation. The TSI material known as MAG, so called because the major asbestos

content in the product is a magnesium silicate, was used to insulate high temperature utilities such as steam or condensate lines. Bulk samples of ACM found at the NRE site indicate that chrysotile and amosite are the two main types of asbestos present in ACM at the site. Table 1-1 summarizes the asbestos concentrations observed in ACM at NRE (Oregon Department of Environmental Quality [DEQ] 2001 and Ecology and Environment, Inc. [E&E] 2006).

In addition to the ACM and asbestos concerns at the site, other contaminants of interest (COI) have been investigated. While the findings associated with non-ACM and asbestos investigations are discussed in this report and by necessity take up a large portion of the text, friable asbestos and sources of ACM are the main COC at the site.

Limitations of a Risk Based Decision Strategy for Asbestos

Potential exposure to asbestos at NRE exists due from both the ACM and asbestos currently at the surface and to ACM and asbestos that may become present at the surface in the future.

If the only concern at the site were risks from ACM and asbestos that were currently at the surface, then it would likely be possible to collect sufficient samples of soil, ACM, and air to distinguish locations that were above an acceptable level of concern from those that were below a level of concern.

However, any measurements performed under current site conditions are not likely to reflect the levels of exposure and risk that might occur in the future, for two reasons: 1) ACM that is already at the surface may continue to weather and break down, releasing fibers into soil and air that are not presently releasable, and 2) pieces of ACM that are presently beneath the surface may continue to become exposed at the surface, and these would then begin to weather and breakdown, adding additional risk that is not currently present.

For these reasons, the goals of any site investigation of ACM at the site would need to estimate the total amount of ACM present in both surface and subsurface soil, so that the assessment could evaluate both current as well as future risks. Any investigation designed for this purpose would require many hundreds (and perhaps even thousands) of boreholes in each decision unit at the site in order to locate and quantify pieces of ACM that might be of concern now or in the future (assuming all pieces of ACM can eventually come to the surface and break down) (See Appendix B for additional details). Considering that there are likely several hundred or more decision units at the site, the full investigation would require many thousands of boreholes.

Even if this sampling were performed, there are a number of technical difficulties in analyzing soil samples for ACM and free asbestos fibers, so even "non-detect" results for a soil sample do not necessarily provide confidence that the soil is entirely free of asbestos. The ability of current analytical methods to determine the presence of free asbestos fibers is limited. Fibers can be present, but analytical techniques are not

precise enough to confidently indicate if observed concentrations represent a level that would be considered below a level of concern. The analytical techniques used to determine the presence of asbestos fibers on air filters is much more sensitive and less subjective than asbestos techniques for soil analysis. So, while fibers are not observed in soil samples, it is not unusual to observe fibers in air samples collected at the same locations where soil results are non-detect for asbestos.

For these reasons, EPA adopted an alternative decision making strategy at the site, which is not sampling based. This strategy was based on the following presumptions:

1) Unless remedial actions are taken, ACM and or asbestos will always be present in areas where ACM and/or asbestos have been observed in the past or are currently present

2) Based on the disposal practices at the site and limitations in investigation and analytical methods, ACM and/or asbestos may be present in areas where is was not historically and/or currently observed

3) The ability to determine the nature and extent ACM and/or asbestos is technically impracticable (see Appendix B)

Because of these issues, the full extent (lateral and vertical) of ACM and/or asbestos contamination at the site is not be fully characterized and it will not be feasible to confidentially identify the location of all soil containing ACM and/or asbestos. Accordingly, EPA identified a non-sampling, alternate decisions making strategy that considers lines-of-evidence related to actual or potential ACM presence. This strategy is believed to be conservative with respect to management of potential exposure risk associated with asbestos fibers in build soil and ACM debris.

1.1 Report Organization

This RI report is organized according to the format suggested in the *Guidance for Conducting Remedial Investigations and Feasibility Studies under the Comprehensive Emergency Response Compensation and Liability Act* (CERCLA) (EPA 1988). It includes the following seven sections and appendices:

- Section 1, Introduction
- Section 2, Study Area Investigation
- Section 3, Physical Characteristics of the Study Area
- Section 4, Nature and Extent of Contamination
- Section 5, Contaminant Fate and Transport
- Section 6, Summary and Conclusions
- Section 7, References

- Appendix A, Baseline Risk Assessment
- Appendix B, NRE Asbestos and ACM Investigation Data Quality Objectives (DQO) Analysis
- Appendix C, Bin A Parcel Maps
- Appendix D, Bin B Parcel Maps
- Appendix E, Bin C Parcel Maps
- Appendix F , 2006 Air Analytical Data Packages
- Appendix G, 2006 Soil Analytical Data Packages
- Appendix H, 2006 Indoor Dust Analytical Data Packages

1.2 Site Background

This section includes a description of the site and a summary of past regulatory actions.

1.2.1 Site Description

The NRE site is located approximately 3 miles north of the City of Klamath Falls, in Klamath County, Oregon, on Old Fort Road and North Ridge Drive (Figure 1-1). NRE is sited on the former location of the MRB and the Oregon Technology Institute (OTI; now Oregon Institute of Technology [OIT]). While the City of Klamath Falls is at an elevation of 4,100 feet above mean sea level (amsl), the site is at an elevation of 4,800 feet amsl. Peaks surrounding NRE are as high as 5,360 feet amsl to the east and 5,460 feet amsl to the west.

According to Klamath County tax lot records, land purchased for the NRE subdivision includes parcels in Sections 14 and 15 Township 38 South, Range 9 East, and covers approximately 422 acres. The NRE parcels in Section 15 comprise approximately 250 acres and include properties along Old Fort Road, Hunter's Ridge Drive, North Ridge Drive, and Thicket Court, as well as several parcels on Scott Valley Road. In addition, parcels in Section 14 (14-500, 14-600, 14-700, 14-800, 14-801, and 14-900), described as "North Ridge Estates 3rd Addition," comprise 172 acres of the NRE subdivision. The current site boundary encompasses all areas where ACM and/or asbestos have been observed and parcels that contained buildings associated with the MRB (Figure 1-1) which is estimated to included approximately 251 acres.

1.2.2 Site History

1.2.2.1 Marine Recuperation Barracks (1944 to 1946)

The NRE site is the former location of the Klamath Falls MRB. The barracks were constructed by United States Department of Defense (DOD) to treat Marines suffering from tropical diseases contracted during World War II (WWII). The site was chosen as the location for the MRB because it was thought its elevation would act to moderate the effects of malaria. On June 24, 1944, the United States Navy (Navy) purchased approximately 745 acres of land for the MRB, including nearly 11 acres for utility easements, near Klamath Falls, Oregon, from private parties. Construction of the MRB was performed by a civilian general contractor and completed in accordance with standard plan books for the construction of posts, camps, and stations erected during WW II and immediately thereafter. Many of the plans were created by the United States Army Corps of Engineers (USACE) and were used by all US military departments. Military construction was standardized for ease in calculating bills of materials, given that a specified population was to be served. The MRB facility was designed by the Lighthouse and Price architectural firm in Spokane, Washington. After authorization by the Department of the Navy, construction on the facility began on January 27, 1945 (Lynch 2005).

The facility was composed of 82 buildings designed to accommodate 5,000 Marines (Figure 1-2). Most of the buildings were constructed between Old Fort Road and present day North Ridge Drive. The structures built on the MRB site included a sewage treatment plant, horse stables, warehouse, brig, medical officers quarters, animal hospital, dependent hospital, post exchange (PX), auditorium, gymnasium, swimming pool, fire house, mess hall, dispensary, laboratory, laundry, bakery, maintenance garage, bachelors quarters, central power plant, library, and 30 barracks.

The ACM used in construction of the barracks included CAB used on exterior walls as siding and on interior walls as "wainscoting," asphalt-asbestos roofing material, VAT, floor tile mastic, and steam pipe insulation. The amount of ACM used during the construction of the MRB has been estimated to be 1,522 tons. Table 1-2 shows the weight, per type of ACM, calculated to have been used in construction of the MRB (Kennedy/Jenks 2005).

Personnel staffed the base by April 30, 1945, and the first contingent of Marine casualties arrived on May 27, 1945. The barracks officially closed on February 28, 1946. The entire 745 acres were declared surplus property by the Navy on March 1, 1946, and the land was transferred to the War Assets Administration for distribution (Matthews 1992).

1.2.2.2 Oregon Technology Institute (1947 to 1964)

The State of Oregon acquired the property through a Quit Claim Deed on October 28, 1947, to be utilized for OTI, now known as the Oregon Institute of Technology, where vocational courses were offered in the fall of that year (Matthews 1992). OTI offered courses in medical and x-ray technology; automobile, truck, and diesel engine

maintenance; automobile body repair and painting; printing technology; metallurgy, welding, and machining; dry cleaning; and refrigeration service.

During OTI's occupancy of the site, six structures were demolished: the animal hospital, barrack building B-1, the fire hall's hose tower, gatehouse, dog kennel, and dependent hospital building. The dependent hospital was destroyed by snow load and removed. It is believed that material from the demolition of these structures was used by the OTI Superintendent of Facilities to repair and maintain other buildings on-site (Lynch 2005). In addition, two new buildings were constructed adjacent to the maintenance garage during OTI occupancy. OTI moved from the site in May 1964, having added seven new buildings and having acquired 40 additional acres of land.

1.2.2.3 General Service Administration (1964 to 1965)

Ownership of the site was transferred to the General Services Administration (GSA) in December 1964, when OTI left the property. An inspection conducted by GSA in July 1964 showed the site to be virtually intact; however, some buildings had fallen into disuse and were shuttered and boarded (Lynch 2005).

1.2.2.4 Private Ownership (1965 to 1977)

In 1965, a partnership of private individuals purchased the property from GSA. This private partnership owned the property until 1977. GSA reports that during this time, nothing was done to repair the buildings and signs of vandalism were noted. While this partnership owned the site, it is reported the owners stripped the vacant buildings of salvageable materials such as equipment, furnishings, copper, and wood. According to former site workers, asbestos insulation was stripped from piping and boilers; the stripped metal was sold, and the asbestos insulation remained at the site (Isom 2003). Based on historical aerial photographs, at least 22 buildings were demolished during the time this partnership owned the property.

1.2.2.5 MBK Ownership (1977 to 2005)

In December 1977, MBK (Melvin Bercot Kenneth Partnership) purchased the property. A former site worker has reported that at least 32 buildings were still standing at the site in 1978 (Isom 2003). Based on this statement and the 1979 aerial photograph, significant demolition occurred between 1978 and June 1979. Many of the site buildings were demolished before the June 1979 aerial photograph was taken. Buildings *not* demolished included the gymnasium, power house, warehouse, stables, brig, rifle range guard house, and the medical officer's quarters on Thicket Court. Based on records from MBK, 34 buildings were removed between 1978 and 1991.

The former site worker who reported at least 32 buildings were standing in 1978 also reported that substantial amounts of building materials were burned, that remaining unburnable materials were buried on-site, and that the boiler and gymnasium building were demolished between 1992 and 1995 without the removal of ACM (Isom 2003).

In 1989, one member left the partnership, and the remaining partners began planning for a subdivision. In 1993, Klamath County approved subdivision plans, and

construction of homes in the subdivision began later that year. According to the Public Health Consultation (PHC) report published by the Oregon Department of Human Services (Oregon DHS) Superfund Health Investigation and Education Program (SHINE), the present NRE subdivision developed by MBK encompasses 422 acres, although many of the lots have not been sold. Klamath County Public Health Division records related to test pits for septic system approval at the site occasionally noted the presence of asbestos debris in the soil. A test pit record dated June 27, 1996 for Township 38, Range 9, Section 15, Lot 6 indicated encountering "an old heat duct (cast iron pipe with asbestos & pipe sleeve around it)" at a depth of 0-6 inches below ground surface (bgs) (Kennedy/Jenks 2005).

MBK began selling properties in the subdivision in 1994, and continued to sell lots until 2002. As a result of the ACM contamination, a group of subdivision homeowners sued the MBK partnership and the partners in 2003. In 2004, MBK declared bankruptcy. In January 2005, a settlement between the subdivision homeowners and MBK was announced, whereby MBK agreed to compensate the homeowners to allow them to relocate to new, permanent residences. MBK also entered into a consent decree that provided for a receiver to hold title to the property and search for a purchaser willing to implement final cleanup measures to be selected by EPA (U.S. Department of Justice press release, January 23, 2005). The settling homeowners have relocated.

1.2.2.6 Unilateral Order

A unilateral order became effective on April 4, 2005, that directed the MBK to conduct RI/FS activities at the site under the oversight of EPA. Key documents to be delivered and activities to be performed, to be consistent with CERCLA guidance and subject to EPA review and approval, included:

- Prepare and submit to EPA an RI/FS work plan
- Prepare and submit a Sampling and Analysis Plan (SAP), which included a Field Sampling Plan and Quality Assurance Project Plan (QAPP)
- Prepare and submit a Site Health and Safety Plan
- Prepare and submit a Community Relations Plan and a Technical Assistance Plan
- Perform site characterization
- Develop a Draft Remedial Investigation Report
- Develop and submit to EPA a Baseline Risk Assessment
- Perform treatability studies unless such studies were shown by the potentially responsible parties (PRPs) to not be required
- Develop and screen remedial alternatives

- Perform a detailed analysis of remedial alternatives
- Develop and submit a Feasibility Study report

MBK was to also perform a number of other activities, such as progress reporting.

Per consent order, the MBK submitted several of the draft documents for EPA review. The subsequent legal settlement relieved the MBK of further responsibilities for the RI/FS; therefore, EPA issued a Stop Work Notice to MBK on July 18, 2005.

1.2.3 History of Site Regulatory Activities

DEQ responded to a complaint in 1978 of openly accumulated asbestos debris at the property owned and operated by MBK. DEQ staff observed a bulldozer being driven over 4 to 6 acres of demolition debris and described "a great amount of white, fluffy insulation materials being blown by strong winds." DEQ then directed the collection and on-site burial of some asbestos demolition material (DEQ 1978).

In September 1979, the EPA Region 10 issued Compliance Order No X79-08-14-113, regarding hazardous air pollutants, to MBK. The compliance order included findings that MBK engaged in demolition of structures that contained asbestos and worked in an area with asbestos debris causing release of asbestos. The asbestos release resulted from failing to remove ACM from buildings prior to their demolition as required by state and federal air quality regulations, and failing to contain ACM according to disposal practices in those regulations (EPA 1979). On October 4, 1979, Bercot, on behalf of MBK, indicated that they would comply with EPA's compliance order.

On July 29, 2001, DEQ received a complaint about asbestos pipe insulation exposed to the atmosphere on North Ridge Drive in the NRE development. On July 31, 2001, DEQ visited the site and observed two large piles of pipe on the surface of the ground that contained insulation (180 linear feet). In addition, white to pale brown-colored platy looking rock fragments (presumably CAB) were observed on the ground of the property and surrounding properties. During this visit, samples were taken from the pipe insulation and the assumed CAB. Analysis of the samples showed that the material removed from the piping, described as white insulation from pipe, was 90% asbestos (amosite and chrysotile). Other material sampled from the pipe insulation contained 40 to 70% chrysotile. The sample of CAB contained 10% chrysotile. Tomahawk Abatement removed 180 feet of piping in August of 2001. DEQ issued a Notice of Noncompliance to MBK in September 2001 regarding the asbestos violations discovered during the July incident (DEQ 2001).

In June 2002, MBK entered into a Mutual Agreement Order (MAO) with DEQ (Order No. AQ/AB-ER-01-250A), which required a survey of all properties currently or previously owned by the MBK partnership for the presence of ACM, and required the removal of openly accumulated ACM. Additional requirements for MBK included either removing buried ACM or placing a deed restriction on properties known to have buried ACM, pursuant to the 1979 EPA compliance order. Approximately 50

tons of ACM were collected from the NRE site and disposed of by Malot Environmental, Inc., an MBK contractor, in 2002 (E&E 2005).

In March 2003, DEQ and Oregon DHS determined that the friable asbestos not removed from the site in 2002 continued to pose a significant public health hazard. DEQ then began negotiations with MBK to prepare an RI/FS to include a site characterization, human health risk assessment, and remedy identification. MBK and DEQ were unable to agree on the scope of the RI/FS. DEQ requested a referral to EPA on April 14, 2003, for emergency removal and assessment. On May 20, 2003, MBK entered into an Administrative Order of Consent (AOC) with EPA (EPA 2003).

A unilateral order, as describe in Section 1.2.2.6, became effective on April 4, 2005, that directed the MBK to conduct RI/FS activities at the site under the oversight of EPA.

2 Section Two

Section 2
Site Study Area Investigation and Removal Actions

The study area investigations and removal actions conducted to date at the site are described in this section. These actions were either conducted under authority of the AOC between EPA and MBK, or by EPA and its contractors. The following table summarizes the investigation and removal activities discussed in detail in this section:

Investigation/Removal Description	Activity Lead
2003 Activities	
Baseline and Hot Spot Soil Sampling	MBK
Residential Air Sampling	MBK
Surficial and "Hot Spot" Removal Activities	MBK
Burial Pile Exploration	MBK
Burial Pile Stabilization	MBK
Steam Pipe Investigation	MBK
Residential Soil Sampling	EPA
Ambient Air Sampling	EPA
Lead Soil Sampling	EPA
PCB Soil Sampling	EPA
2004 Activities	
Activity-Based Sampling	EPA
Lead Contaminated Soil Removal	MBK
Firing Range Preliminary Assessment and Site Inspection	EPA
2005 Activities	
Collection of Soils Samples to Determine Free Asbestos Fibers	EPA
Fiber Distribution Study	EPA
Ambient Air Sampling	EPA
2006 Activities	
Non-ACM RI Investigation	EPA
ACM/Asbestos RI Investigation	EPA
ABS Sampling	EPA
2007 Activities	
Non-ACM UST and VOC Investigation	EPA

Notes: PCB - polychlorinated biphenyls; RI – remedial investigation; ACM – asbestos containing material; ABS – activity-based sampling; UST – underground storage tank; VOC – volatile organic compound

2.1 2003 Investigation and Removal Activities

Details regarding the investigation and removal activities conducted at the site in 2003 are described in detail in the following sections.

2.1.1 Baseline and "Hot Spot" Soil Sample Collection

To evaluate the ACM content in soils over a large portion of the site, MBK hired Aeolus, Inc. to develop a sampling and analysis plan. Samples collected to evaluate the baseline conditions at the site were collected in accordance with the *Preliminary Sampling and Analysis Plan* (Berman 2003a) and the *Sampling and Analysis Plan for a Fast-Track Sampling Program at the North Ridge Estates Site* (Berman 2003b). As described in these documents, baseline soil sampling was completed by subdividing an area of approximately 140 acres into 120 uniformly sized squares. This area represented the soils on which the highest concentration of military buildings was once situated. The 120 squares were then grouped into 10 sets with 12 subsamples being collected from each set. In total, 10 baseline samples were collected by PBS Engineering and Environmental (PBS) between June 17 and 20 (E&E 2005). Preparation of these samples was conducted on-site to reduce each sample's size from 20 to 25 kilograms to approximately 200 to 320 grams of soil. The preparation process is detailed in Berman 2003b.

During the same sampling event, PBS also collected seven soil samples from concentrated ACM hot spot locations at the site identified by the EPA On-Scene Coordinator (OSC). These samples were collected to determine if soils from these specific areas had a larger number of fibers than the areas that were being sampled according to Berman 2003a and 2003b (E&E 2005).

Both the baseline and "hot spot" soil samples were submitted by PBS to the responsible party (RP)-subcontracted laboratory, EMS Analytical in Pasadena, California, for asbestos analysis. Samples were prepared and analyzed as described in the modified elutriator method using TEM with ISO 10312 counting rules. Results of these analyses are presented in the *Final Soil Sampling Results and Preliminary Risk Assessment* (Berman 2004) These samples were analyzed for asbestos using the elutriator method (Berman and Kolk 2000), which provides values in units of PCME fibers per gram respirable dust released from soil. Although the elutriator method has not been validated for use by EPA, the data are considered to be acceptable for use in screening assessments and are further evaluated in the BLRA (Appendix A). The results from this investigation effort are summarized in Table 2-1.

2.1.2 Surficial and "Hot Spot" Removal Activities

Surficial ACM pickup and hot spot removal activities were completed by a contractor to PBS, Rose City Contracting. The contractors walked the site and removed ACM pieces 1 inch in diameter and larger by hand pickup. During this removal action a total of 7 tons of surficial ACM were removed from 25 developed residential properties and several MBK-owned lots. PBS reported that the majority of the material removed during the surficial pick up was CAB, with lesser amounts of roofing material, floor tile, and AirCell.

In addition to the surficial removal activities conducted in 2003, areas of concentrated ACM debris were identified on nine properties. According to PBS records, approximately 77 tons of excavated material was removed from the hot spot locations

for disposal as contaminated material at the Klamath County Landfill. Table 2-2 summarizes the amount of ACM removed from each of the properties (E&E 2005).

2.1.3 Burial Pile Exploration Activities

In October 2003, 13 suspected burial locations were investigated by PBS. In general, areas with unnatural topography such as mounds or areas with high concentrations of surfacing ACM debris were investigated as part of this investigation. As part of this investigation 32 test pits were excavated. According to PBS, the full horizontal and vertical extent of the piles was not determined (E&E 2005). Table 2-3 summarizes the burial piles investigated; those identified as containing ACM; as well as the quantities of any material removed during the exploration activities.

2.1.4 Burial Pile Stabilization Activities

Since several ACM burial locations identified during the October 2003 exploration activities were either concentrated ACM debris piles or areas where concentrated ACM was surfacing along a steep embankment, the EPA required stabilization in locations that were subject to rapid erosion. Stabilization methods included installation of water diversion piping and placement of topsoil, water permeable fabric, and 6-inch minus rock. The locations of all these burial locations were also formally documented for possible future site actions (E&E 2005). Table 2-4 summarizes the locations of the piles that were stabilized and the stabilization remedy used at each of the piles.

2.1.5 Steam Pipe Investigation

As part of the 2003 activities, a geophysical survey was conducted at the site to locate buried steam pipe. This investigation was conducted because of the expectation that buried steam pipe would be associated with asbestos containing insulation. Geopotential, a geophysical surveyor, conducted the buried steam pipe survey in July 2003. Several thousand feet of buried steam pipe were located with a magnetometer. Because of the construction activities that have occurred at the site, it is unknown if all buried asbestos-insulated pipe has been identified. To confirm the presence of buried steam pipe along the routes identified by Geopotential, several test pits were excavated. The presence of steam pipe was verified when corrugated steel, which wrapped the insulated piping, was observed at depths ranging from 2 to 6 feet bgs (E&E 2005). Figure 2-1 shows the locations where piping was identified.

2.1.6 Residential Soil Sampling

Because residents and the EPA were concerned with asbestos exposure from ACM on each residential property, EPA's Superfund Technical Assistance and Response Team-2 (START-2) contractor collected composite soil samples specific to each property. Twenty-two residential properties were sampled, with 10 subsamples collected from each property. The subsamples were then combined to yield one composite sample per property. The subsample locations were collected in targeted areas on each residence suspected of containing ACM and/or from areas on each property that were utilized frequently by residents. Samples were collected from 0 to 2 inches within an 8-inch by 8-inch template. As a result of collecting from this depth,

visible ACM was observed in many of the samples. Twelve of the 22 samples were randomly chosen and processed by the elutriator method. Interpretation of this data is detailed in the preliminary risk assessment report submitted by Dr. Berman (Berman 2004). The data as interpreted by Dr. Berman indicated that risk to residents was associated primarily with amosite asbestos (MAG), and at the time of Dr. Berman's risk assessment amosite was only rarely observed at the surface.

2.1.7 Residential Air Sampling

Air sampling was conducted by PBS at 22 residential properties (Figure 2-2) measure the concentration of asbestos in indoor and outdoor air (E&E 2005). A total of 46 samples were collected at 22 residences. In addition, PBS collected three background samples each week on a hillside south of the site. The samples were submitted for analysis by transmission electron microcopy (TEM) using ISO 10312 counting rules. Analytical results for phase-contrast microscopy equivalent (PCME) fibers observed in the 46 samples and nine background samples are summarized in Table 2-5 (E&E 2005).

2.1.8 Ambient Air Sampling

Ambient air sampling was conducted at the site over several weeks in the fall of 2003 and spring of 2004 to assess general levels of airborne asbestos particles. Six high-volume air pumps were placed throughout the site to create an air sampling network. Samples were collected between August 20, 2003, and September 23, 2003, and on April 28 and 29, 2004. A total of 90 air samples were collected and submitted for analysis by transmission electron microscopy (TEM) using the Modified EPA-II Method. Figure 2-3 shows the location of the sampling stations. Most of the ambient air samples yielded no asbestos structures counted. Sampling results are summarized in Table 2-6 (Berman 2004). The only asbestos detected was one actinolite structure at a concentration of 0.001 structures per cubic centimeter (S/cc) detected in sample 04040205, which was collected from sample location Ff on September 3, 2003.

2.1.9 Lead Soil Sampling

One of the secondary concerns at the site during the 2003 investigations was the potential presence of lead in soils resulting from lead-based paint that coated most of the buildings. Lead-based paint can contaminate soils through either demolition activities or by chipping and peeling as a result of exposure to the elements. The START-2 contractor conducted soil sampling and analytical screening for lead in July 2003 to assess the extent of lead contamination in the site soils. A biased sampling approach was employed to identify potentially contaminated areas. Soil samples were collected from a total of 150 locations on 35 properties, targeting areas of visual soil staining, exposed soils, and areas where debris was visible. Thirteen duplicate split samples were collected as well. Field screening with x-ray fluorescence (XRF) was performed on-site by the START-2 contractor; approximately 12% of the samples field-screened by XRF were submitted to an analytical laboratory for analysis using EPA Method 7420 for lead by atomic absorption/direct aspiration. Confirmation analytical results from the analytical laboratory indicated that only one sample exceeded the EPA Region 9 preliminary remediation goal (PRG) for lead in

residential soil (400 milligrams per kilogram [mg/kg]). This sample was collected from one of the MBK properties, specifically the property identified as MBK-C, and contained 1,500 mg/kg lead (E&E 2005).

To delineate the extent of contamination at the MBK-C property, a concentrated soil sampling grid was established and an additional 49 samples were collected for lead screening. Based on this second sampling effort, it was determined that the area of soil with lead concentrations greater than the EPA Region 9 residential lead PRG was approximately 25 feet in diameter (E&E 2005). These soils were removed in a 2004 removal action, see Section 2.2.3.

2.1.10 PCB Soil Sampling

The use of polychlorinated biphenyls (PCBs) in transformers located at the site has been suspected. On July 12, 2003, samples were collected at a site suspected to be the location of a PCB spill. The samples were analyzed in the field using the Clor-N-Soil PCB screening kit. PCB screening results for the transformer site were less than 50 ppm (E&E 2005). Additional PCB sampling was conducted during the 2007 investigations as described in Section 2.4.

2.2 2004 Investigation and Removal Activities

Details regarding the investigation and removal activities conducted at the site in 2004 are described in detail in the following sections.

2.2.1 Activity-Based Sampling

EPA conducted "activity-based sampling" (ABS) in July 2004 to assess the exposure risk associated with physical disturbance of asbestos contaminated soils. A range of soil disturbances activities were conducted, including weed-trimming with an electric trimmer, tilling soil with a gas-powered rototiller, and a child plain in ACM contain soil. For each activity, the levels of airborne asbestos in the breathing zone and ambient air were measured using TEM. Details regarding the sample collection procedures are documented in the 2005 RP Removal Action Report (E&E 2005)The results of the ABS sampling event are presented in the following table:

Summary of 2004 ABS Personal Air Sample Results

Activity	PCME Asbestos Results		
	Count	Sensitivity	Concentration
Child Play	7	UNK	0.047
	4	UNK	0.058
Weed Trimming	4	UNK	0.012
	2	UNK	0.018
	5	UNK	0.019
Soil Tilling	3	UNK	0.026
	3	UNK	0.021

Notes: ABS – activity-based sampling; S/cc – structures per cubic centimeter; PXME – phase contract microscopy equivalent; UNK - unknown

As shown in the above table the PCME asbestos structures were detected in all ABS air samples at concentrations ranging from 0.012 to 0.047 s/cc, with the highest concentrations observed in the samples collected during the child play activities. Further interpretations of the results regarding site-specific exposures are provided in the BLRA (Appendix A).

2.2.2 Firing Range Preliminary Assessment and Site Inspection

In 2004, EPA and its START-2 contractor conducted a preliminary assessment and site inspection of the Kingsley Firing Range. Seven soil samples were collected from the horseshoe berm ordinance burn/disposal area, flat ordinance burn/disposal area, small arms impact berm, and rifle range and 3.5-inch rocket impact berm at the rifle range for nitrate base explosive compounds (NBECs) and/or metals analyses. NBECs were not detected. Lead and arsenic were reportedly detected at maximum concentrations of 1,220 mg/kg and 2.8 mg/kg, respectively. No significant concentrations of other metals were detected.

This firing range is not currently considered part of the NRE site and any required remedial actions will be addressed by the USACE or other DOD agency.

2.2.3 Lead Contaminated Soil Removal

Based on the results of the delineation sampling conducted by the START-2 contractor in 2003, the RP agreed to conduct a removal of the lead-contaminated soil identified at the MBK-C property. On October 6, 2004, soils were excavated to depths ranging from 1.5 to 2 feet, in an area measuring 28 feet by 30 feet by 40 feet (Figure 2-4). Approximately 26.5 tons of material were removed and disposed of as lead-contaminated soil at the Klamath County Landfill (E&E 2005).

2.3 2005 Investigation and Removal Activities

Details regarding the investigation and removal activities conducted at the site in 2005 are described in detail in the following sections.

2.3.1 Collection of Soils Samples to Determine Free Asbestos Fiber Content

EPA's START-2 contractor collected 16 surface soil samples from areas where ACM was observed on the surface. The samples were submitted for polarized light microscopy (PLM) analysis to determine if asbestos fibers are present in surface soils at the Site. Asbestos and ACM were detected in all 16 of the surface soil samples. PLM analysis detected chrysotile and amosite fibers in the surface soil samples. Chrysotile was observed at concentrations ranging from 0.002 to 0.21 percent (%) and amosite was observed at concentrations ranging from non-detect to 0.05% (E&E 2006). Low levels of asbestos were able to be observed using PLM due to a detailed sample preparation technique involving several separations and weighing steps for each sample. Details of the preparation technique can be found in Appendix D of the 2006 E&E removal action report (E&E 2006). Conclusions drawn from these findings

indicate concentrations of chrysotile in soils were higher in samples collected in areas near weathered CAB versus non-weathered CAB. The highest concentrations of chrysotile were observed in a sample collected near a piece of MAG with a tar paper layer (E&E 2006).

2.3.2 Fiber Size Distribution Study

Six types of ACM found at the site were collected and submitted for a fiber size distribution study. The fiber size distribution study was conducted according to a project-specific protocol that involved heating each type of ACM to 485 degrees Celsius (°C) until it was reduced to ash, then grinding the ash with a mortar and pestle for intervals of 1, 2, 5, and 10 minutes. The dust from each grinding interval was analyzed by PCM and the number of structures counted and dimensions were recorded. TEM analysis was also performed on the 1 minute grind samples of CAB and MAG. Results of the fiber size distribution study are summarized in Appendix D of E&E's 2005 Removal Action Report (E&E 2006).

2.3.3 Ambient Air Sampling

EPA's START-2 contractor collected at total of 96 ambient air samples in June, July, August, and September 2005 from the 6 sample locations shown in Figure 2-3. In addition, 12 air samples were collected to assess ambient air conditions during excavation and surface clean-up activities. All samples were analyzed for asbestos by the TEM International Organization of Standards (ISO) 10312 method. Concentrations of phase contrast microscopy equivalent (PCME) asbestos fibers in the 108 ambient air samples ranged from 0.0000984 fibers per cubic centimeter (f/cc) to 0.0002 f/cc. The highest concentration was observed in a sample collected during excavation activities. Table 2-7 summarizes the results of the ambient air samples collected during this effort (E&E 2006).

2.3.4 Removal Activities

In 2005 removal actions were conducted by the RP and EPA in response to the large amount of AirCell and MAG that had surfaced at the site. EPA completed a site-wide pick-up of the AirCell and MAG material. EPA contractors removed approximately 350 lbs of AirCell and MAG from 24 site properties. Figure 2-5 shows the locations where AirCell and MAG were observed and was picked-up during the 2005 EPA removal action.

2.3.5 Residential Relocations

On April 26, 2005, EPA signed an action memorandum to request approval for a temporary relocation action for the NRE site. The relocation was voluntary, because EPA felt it was appropriate for immediate reduction of the risk to the public from uncontrolled release of asbestos at the site. In June and July of 2005, PBS, the contractor for the RP, completed the removal of 330 pounds (lbs) of MAG material from three properties at NRE.

2.4 2006 Investigation Activities

The investigation activities conducted during 2006 were performed to collect information required to support the completion of an RI and FS for the site. Each of these investigations is described in this section.

2.4.1 ACM Investigation Activities

Based on previous asbestos investigations at NRE, objectives were developed as part of the ACM/asbestos June 2006 field program. The main objectives of this sampling effort were to:

- Determine the lateral and vertical extent of ACM contamination at residential properties at the site
- Determine the lateral and vertical extent of ACM contamination at three large land units located at the site: the former landfill, clarifiers at the former wastewater treatment plant (WWTP), and the former swimming pool

In accord with standard EPA practice, EPA performed a data quality objectives (DQO) analysis to develop and guide the strategy for collection of data on ACM during the 2006 investigation. The details of this DQO evaluation are presented in Appendix B. In brief, the DQO evaluation indicated the following:

- If the only concern at the site were risks from ACM and asbestos that were currently at the surface, then it would likely be possible to collect sufficient samples of soil, ACM, and air to distinguish locations that were above an acceptable level of concern from those that were below an level of concern.
- However, any measurements performed under current site conditions are not likely to reflect the levels of exposure and risk that might occur in the future, for two reasons: 1) ACM that is already at the surface may continue to weather and break down, releasing fibers into soil and air that are not presently releasable, and 2) pieces of ACM that are presently beneath the surface may continue to become exposed at the surface, and these would then begin to weather and breakdown, adding additional risk that is not currently present.
- For these reasons, the goals of any site investigation of ACM at the site would need to estimate the total amount of ACM present in both surface and subsurface soil, so that the assessment could evaluate both current as well as future risks.
- ACM that is present in subsurface soil may be thought of as occurring in two categories: 1) ACM debris that was consolidated following building demolition and placed into piles or pits, and 2) pieces of ACM debris that were not consolidated, but were spread about into surface soil at random locations and depths. While piles and pits can be investigated using traditional approaches (test pits, borings, etc.), investigating the amount of ACM in subsurface soil that is not consolidate but is spread out at random is very difficult. Based on the normal decision-making approach that EPA uses at Superfund sites, the DQO process

indicated that it would be necessary to place many hundreds (and perhaps even thousands) of boreholes in each decision unit at the site in order to locate and quantify pieces of ACM that might be of concern now or in the future (assuming all pieces of ACM can eventually come to the surface and break down). Considering that there are likely several hundred or more decision units at the site, the full investigation would require many thousands of boreholes.

- Even if this sampling were performed, there are a number of technical difficulties in analyzing soil samples for ACM and free asbestos fibers, so even "non-detect" results for a soil sample do not necessarily provide confidence that the soil is entirely free of asbestos.

EPA considered the results of the DQO analysis for ACM in soil and determined that it was not reasonable to pursue a study design that called for such an extreme number of samples. Rather, EPA developed a modified sampling strategy that was based on a classification of all properties at the site into four categories, as follows:

- ***Bin A properties*** are properties that are within the footprint of the former MRB. The expectation is that ACM debris is likely to be present at random locations in surface and subsurface soil at all such properties, and may also be present in randomly distributed piles and pits of consolidated material.

- ***Bin B properties*** are properties that are not located within the footprint of the former MRB, but where surficial ACM has been observed, most likely as a consequence of limited hauling and surficial dumping of ACM.

- ***Bin C properties*** are properties that are not within the footprint of the former MRB and where no ACM has been observed to date.

- ***Large land units*** are locations where available information is sufficient to indicate that substantial amounts of ACM, building debris and other wastes have been consolidated into large waste piles.

Based on this classification scheme, EPA developed a sampling strategy intended to achieve the following objectives:

- At Bin A properties, sampling to attempt to locate randomly distributed pieces of ACM in subsurface soil was not attempted. As noted above, this is because even extensive sampling is very unlikely to provide sufficient data to demonstrate with adequate confidence that any Bin-A property may be declared "safe" from randomly distributed pieces of ACM, even if the sampling were to come back "negative". However, sampling was performed at Bin A properties to collect soil borings and install test pits at locations that are suspected to be burial mounds or pits, or have an especially dense deposit of surficial ACM. The purpose of this sampling was to characterize the lateral and vertical extent of any concentrated deposits, which in turn allows an estimation of the volume of consolidated wastes that might warrant removal. Note that, even if consolidated ACM debris in a pile or pit were identified and removed, the remainder of the Bin A property would

continue to be of concern due to the likely presence of randomly distributed pieces of ACM.

- At Bin B properties, because the presence of ACM is suspected to be the result of limited surficial dumping, it is considered likely that the extent of the contamination can be characterized using traditional sampling strategies. For this reason, at Bin B properties, soil borings and/or test pits were installed at and around the perimeters of areas of visible surficial ACM in order to define the lateral and vertical extent of contamination that could require removal.

- At Bin C properties, soil borings were installed at random or selected locations in order to validate that no ACM could be detected. As discussed above, negative results for soil sampling at Bin C properties can never prove the property is uncontaminated, but the presence of a number of non-detected samples helps increase confidence that a Bin C property does not require further evaluation.

- At Large Land Units, soil borings and/or test pits were installed in and around the area of waste disposal in order to define the lateral and vertical extent of consolidated waste that could require removal.

These ACM investigations were conducted in accordance with the Final North Ridge Estates - Asbestos Sampling and Analysis Plan (SAP) (CDM 2006), hereafter referred to as the Asbestos SAP (CDM 2006), unless otherwise noted in the deviation section. The following sections provide a more detailed description of each of the sampling activities.

2.4.1.1 Large Land Units

To characterize the three large land units, area-specific ACM investigations were used. Characterization techniques included excavation of test pits and advancement of boreholes using direct-push technology (DPT). Field observations were recorded for each test pit and boring regarding the depth at which ACM was observed. All borehole cores were visually examined in the field for the presence or absence of bulk ACM. When ACM was not observed, the borehole cores were archived and 10% were sent for analysis by the site-specific PLM point-count protocol. This protocol allows for lower than normal sensitivities than for standard PLM preparation methods. These procedures were used to determine the presence or absence of ACM, as well as to delineate and quantify the horizontal and vertical extent of ACM (discussed in Section 4).

An additional large land unit present at the site is the former rifle range. Due to the suspected presence of unexploded ordnances (UXOs) in this area of the site, investigation efforts were not completed in this area. However, this area will be addressed by a separate investigation activity to be conducted by the United States Army Corps of Engineers (USACE) and is not currently considered par of the NRE site.

Wastewater Treatment Plant

One test pit was completed in each of two clarifiers located at the former WWTP. These test pits were each completed to a depth of 4 feet. The two other clarifier structures were not investigated because one still contains rock media from the trickling filter system, and the other is a sealed sludge digester. The remedial boundary investigation included advancing 12 boreholes around the perimeter of the area to 5 feet bgs. Figure 2-6 illustrates the location of each test pit excavated and boreholes advanced at the former WWTP.

Landfill

In the vicinity of the former landfill, 10 test pits were excavated and inspected for presence of ACM. These test pits, located mainly through the center of the former landfill, were completed to depths ranging from 2.5 to 4 feet bgs. The perimeter of the landfill was investigated by completing 31 boreholes advanced to 5 feet bgs. Figure 2-7 illustrates the location of each test pit excavated and borehole advanced at the former landfill.

Swimming Pool

Five test pits were completed, primarily along a line the length of the former swimming pool, located such that excavation could occur in both the deep and shallow sections of the former swimming pool. These test pits were completed to depths ranging from 3 to 5 feet bgs. In addition, seven boreholes were completed around the perimeter of this area to depths of 4 to 5 feet bgs. Figure 2-8 illustrates the location of each test pit excavated and borehole advanced at the former swimming pool area. Previous information from workers involved in the demolition of the site building suggested that the entire footprint of the former pool area contained ACM. Investigation activities conducted in 2006 could not confirm this assertion.

2.4.1.2 Parcel Contamination Classification

Investigation activities conducted at each property were dependent on the parcel contamination classification. Investigations at Bin A and Bin B properties were conducted to determine the area or amount of material that will require remedial actions. Actions were conducted at Bin C properties to determine if they were properly classified. The following table summarizes the types of investigative activities completed at each property and how information collected from that activity will be used:

Summary of Investigation Activities		
Parcel Contamination Classification	**Investigation Activities**	**Use of Information**
Bin A	Burial Pile Investigations	Determine the vertical and lateral extent of ACM and associated soils for the purpose of estimating quantities requiring remediation.
	Surficial Visual Inspection	Determine the locations of the burial areas that require investigation.

Summary of Investigation Activities		
Parcel Contamination Classification	**Investigation Activities**	**Use of Information**
	Remedial Boundary Investigations	Determine the lateral boundary to which remedial actions will be required.
Bin B	Burial Pile Investigations	Determine the vertical and lateral extent of ACM and associated soils for the purpose of estimating quantities requiring remediation.
	Surficial Visual Inspection	Determine the locations of the burial areas that require investigation.
	Remedial Boundary Investigations	Determine the lateral boundary to which remedial actions will be required.
Bin C	Surficial Visual Inspection	Determine if the property was properly classified, and if ACM remediation or additional investigations are required. If ACM was observed, the property was reclassified to Bin B. If ACM is not observed, the property will remain classified as a Bin C property.
	Bulk Soil Sampling	Determine if free asbestos fibers are present in areas where ACM is not observed.

Indoor characterization activities were not conducted at vacated properties because available RI data did not indicate a current unacceptable risk to residents from exposures to indoor air.

2.4.1.3 Residential Parcel Investigations (Bins A, B, and C)

Prior to arriving at NRE in June 2006, each parcel was given an initial category, or "bin" classification. During the June 2006 field investigation, the contamination classification category was modified for two parcels based on visual inspection at that time. Prior to field investigations, parcel MBK-F was included in Bin B; however, due to the presence of a former building foundation, this parcel was re-classified as Bin A. Additionally, parcel BL was previously classified as a Bin C property, but due to visual ACM apparent during the June 2006 investigation, this parcel was re-classified as Bin B. Final contamination classification categories for each parcel are shown in Figure 2-9. Figure 2-9 also shows development status for each parcel and indicates properties where access for investigations was not obtained.

Investigation Activities at Bin A Properties

Investigations at Bin A properties consisted of the use of techniques to define the extent of ACM already known to exist over a large portion of these properties. These investigations were conducted to supplement the information gained during investigation actions described in Section 1 and included additional surficial visual inspections, burial pile investigations, and remedial boundary investigations occurred at Bin A properties. Only surficial visual inspections and burial pile investigations were conducted at parcels located between Old Fort Road and North Ridge Drive, due to the extensive nature of ACM in this area.

A total of 176 test pits were excavated and 224 boreholes were advanced at Bin A properties (Table 2-8). The locations of these boreholes and test pits are shown in Figure 2-10. For various reasons, investigations at four of the properties were limited to surficial inspection in June 2006, as indicated in Table 2-8. Appendix C contains individual parcel maps of Bin A properties showing all data collected as part of the June 2006 activities and previous investigations.

Investigation Activities at Bin B Properties
Activities for Bin B properties were the same as for Bin A properties and included surficial visual inspections, remedial boundary investigations, and burial pile investigations. These investigations were conducted to supplement the information gained during investigation actions described in Section 1.

Table 2-9 summarizes the number of test pits excavated and boreholes advanced at each of the Bin B properties. The locations of these boreholes and test pits are shown in Figure 2-11. For various reasons, six properties were given only surficial inspection in June 2006, as indicated in Table 2-9. Appendix D contains individual parcel maps of Bin B properties showing all data collected as part of the June 2006 activities and previous investigations.

Investigation Activities at Bin C Properties
Surficial visual inspections were conducted and bulk soil samples were collected at Bin C properties. These investigations were conducted to supplement the information gained during investigation actions described in Section 1. Investigations at Bin C properties were conducted to determine if properties were properly classified. As mentioned above, one property previously classified as a Bin C property; parcel BL, was re-classified as a Bin B property due to ACM observed during the investigation activities.

A total of 31 bulk soil samples were collected at eight Bin C properties, with between 1 and 5 samples collected at each property. The remaining properties did not have samples collected due to lack of owner permission to perform investigation activities. Based on the results of available soil samples collected from Bin C properties, it would not be expected for asbestos to be observed in soil samples from the Bin C properties not sampled; however without samples from these properties this cannot be confirmed. The 15 Bin C properties are listed in Table 2-10, along with their associated number of bulk soil samples and development status. Figure 2-12 presents locations of the bulk soil samples; Appendix E contains individual parcel maps of Bin C properties showing all data collected as part of the June 2006 activities and previous investigations.

2.4.2 Activity-Based Sampling

The ABS QAPP included the following activities: activity-based sampling, indoor air, stationary air, and indoor dust sampling. The purpose of this investigation was to:

- Measure asbestos levels in the breathing zone of individuals engaged in activities such as yard maintenance and gardening around homes at NRE

- Investigate the relative importance of ACM and free asbestos to airborne releases during active soil disturbance

- Measure indoor dust asbestos concentrations and personal breathing zone air concentrations for residents who remain in their homes at the site.

These activities were conducted at selected properties that remain occupied. Each component is discussed in the following sections and was conducted in accordance with *QAPP for Activity-Based Sampling, Soil Sampling, Indoor Air Sampling, and Indoor Dust Sampling* (EPA 2006), hereafter referred to as the ABS QAPP.

2.4.2.1 Outdoor Activity-Based Sampling

ABS in an investigation technique used to simulate routine activities in order to measure exposure from disturbance of potentially contaminated materials; in the case of NRE, the material is various types of ACM contained within the surface soils at the site. The ABS conducted at NRE included three activities conducted with standard scripts to simulate adults and children participating in trimming weeds, raking, and playing. ABS was conducted at four occupied properties where surficial ACM was observed. Specific locations where ABS was conducted are shown in Figures 2-13 to 2-16. These locations were biased to be co-located with visible MAG ACM where possible.

Sampling was conducted by members of EPA Environmental Response Team (ERT) and EPA Region 10 between June 20 and 22, 2006 wearing appropriate Level C PPE. Each of the activities was first conducted in each of the four areas where ACM was left at the surface or had accumulated via erosion/frost heave. During each activity, two stationary and two personal air samples were collected. Stationary samples were collected both upwind and downwind from each activity at a flow rate of 10 liters/minute (L/min). Two personal air samples were also collected during each activity, one at 3.0 L/min and the second at 10 L/min. The personal air sample collected at the lower flow rate was collected as a backup sample to be analyzed if the sample collected at the higher flow rate was overloaded and could not be analyzed by the required method. A meteorological (MET) weather station was used to collect data on wind speed, wind direction, relative humidity, temperature, and barometric pressure during each activity. Table 2-11 summarizes the activity-based air samples collected at each property.

In total, 36 stationary air and 32 personal air samples were collected during the ABS sampling activities from locations where ACM was left at the surface. Preliminary PCM analysis was conducted by the EPA Region 10 mobile PCM laboratory for four samples during the initial execution of ABS sampling to ensure that the sampling techniques in use were producing samples that were not overloaded and could be analyzed by direct TEM methods according to ISO 10312:1995(E). When the air samples were received at the fixed based laboratory, loading issues were discovered on the majority of the samples and were required to be prepared using indirect methods according to ISO 13794:1999(E). Table 2-11 summarizes which samples were prepared by indirect and direct methods prior to analysis.

On June 22, 2006, an asbestos abatement contractor removed all visible surface ACM from a secondary smaller area at three of the properties (see Figures 2-13, 2-15, and 2-16). The raking activity was then conducted in the area were ACM had been removed. The additional raking activity from an area where ACM had been removed did not occur at Parcel N, because of the proximity of the area to the home at this location. The amount of ACM removed by the abatement contractor at each property is summarized in Table 2-12. It is assumed that the contractor did not accurately measure the amount of CAB removed from these areas because CAB was observed on the surface prior to the pick-up activities, but was not reported as a type of ACM when the weight measurements were reported.

After the scenario sampling was completed, soil samples were collected from each ABS area. The samples were collected as interleaved-composite samples. Each ABS area was subdivided into nine equivalent subsections. Within each subsection, a random sample was collected from an area measuring 8 inches by 8 inches and from 0 to 2 inches in depth. The nine subsamples were composited, homogenized, and submitted as one sample for analysis. A second composite sample was collected over the same study area following this procedure, with different random locations sampled within the subsections. Table 2-13 summarizes the soil samples collected at each property. Sixteen soil samples were collected. Each soil sample was prepared and analyzed according to the site-specific analytical protocol for ACM-contaminated soil.

The results for the air and soil samples are summarized in Tables 2-11 and 2-13. Conclusions regarding interpretation of these results are presented in the BLRA provided in Appendix A.

Copies of the analytical results packages for all air and soil samples collected as part of ABS sampling are provided in Appendices F and G, respectively.

2.4.2.2 Indoor Air Sampling

Indoor stationary air sampling was conducted at four site properties that remain occupied. One sample was collected at each of the four properties over a period of 8 continuous hours at a flow rate of 10 L/min from the main living floor of the home in a centralized location.

In total, four indoor stationary air samples were collected and submitted for TEM analysis via ISO 10312:1995(E). Table 2-14 summarizes which samples were prepared by indirect and direct methods prior to analysis. Indirect analysis was required for two samples that the laboratory reported as overloaded and could not be prepared using direct methods. Asbestos fibers were not observed in any of the indoor air samples collected. Results for the air samples are summarized in Table 2-14; conclusions regarding interpretation of these results are presented in the BLRA provided in Appendix A. Copies of the analytical results packages for indoor air samples are provided in Appendix F.

Personal air samples were not collected as described in the ABS QAPP, as all residents declined to wear the sampling pump.

2.4.2.3 Indoor Dust Sampling

Indoor dust sampling was completed at the same four properties where indoor air sampling was conducted. Two samples, one from horizontal surfaces and one from high traffic areas, were collected per floor from the main living structure at each of these properties. Each sample was collected as a three-point composite sample from three unique 100 square centimeter (cm^2) sublocations, in accordance with American Society for Testing and Materials (ASTM) D 5755-03 and the site-specific dust sampling protocol.

In total, 10 dust samples were collected and submitted for TEM analysis via ISO 10312. The results for the dust samples are summarized in Table 2-15. As can been seen, the only asbestos structure observed was one non-PCME chrysotile fiber. Conclusions regarding interpretation of these results are presented in the BRA (Appendix A). Copies of the analytical results packages for all dust samples are provided in Appendix H.

2.4.3 Non-ACM Investigation

Historic use of the site included activities that might have caused the release of non-ACM contaminants of interest (COIs) to the environment. Although there is no indication that such releases occurred at NRE, several areas of potential concern were investigated in the RI to determine the presence of COIs and to rule out their presence where these constituents do not exist.

The non-ACM investigation activities at the site were conducted in accordance with the *Quality Assurance Project Plan (QAPP), Non-ACM Soil Sampling, North Ridge Estates* (Parametrix 2006), hereafter referred to as the Non-ACM QAPP.

The main objectives of the non-ACM soil investigation activities described in the non-ACM QAPP were to:

- Determine the types of suspected materials that were potentially used at the site and whether they exist above levels of concern.
- Determine those areas, based on previous site use and the types of materials that might have been handled, where potential releases of non-ACM COIs could have impacted site soils.

In order to determine the types of suspected materials that were potentially used at the site, the following steps were used:

1. Existing documents were reviewed to determine potential areas of non-ACM contamination and COIs. Background information on the site and its historical use was evaluated to determine if the historical activities might have led to non-asbestos COIs being released to the environment. Based on

background information, a number of historical areas of potential non-asbestos COI releases were possible. These areas and the related potential non-asbestos COIs are summarized as follows:

Former Use Area	COIs	Potential Sources of COI
Power Plant	VOC	Use of degreasing and cleaning solvents
	TPH	Oil and grease compounds associated with historical mechanical operations
	PCBs	Typically associated with electrical equipment that would be suspected as used at the former power station, but also with a relatively broad array of uses as stabilizers.
	SVOCs	Coal firing operations and coal storage
	Metals	Coal firing operations and coal storage
Maintenance Shop	VOCs	Use of degreasing and cleaning solvents
	TPH	Use and storage of petroleum products, machining, and other operations
	Metals	Use and storage of petroleum products, machining, and other operations
Laundry Building	VOCs	Mechanical or parts cleaning and laundry services
	SVOCs	Mechanical or parts cleaning and laundry services
Landfill	VOCs	Past disposal practices and waste from past medical laboratory disposal
	SVOCs	
	TPH	
	PCBs	
	Pesticides	
	Metals	
OTI Maintenance Shop	VOCs	Use of degreasing and cleaning solvents
	TPH	Use and storage of petroleum products, machining, and other operations
	Metals	Use and storage of petroleum products, machining, and other operations
Paint Shops	VOCs	Use cleaning solvents, storage of paint, and past disposal practices
	SVOCs	Use cleaning solvents, storage of paint, and past disposal practices
	TPH	Past disposal practices
	PCBs	Past disposal practices
	Metals	Past disposal practices
	Pesticides	Use of pesticides to control pests
Service Station	VOCs	Use and storage of diesel, gasoline, motor oil and/or used oil. Use of degreasing and cleaning solvents.

Former Use Area	COIs	Potential Sources of COI
	SVOCs	Use and storage of diesel, gasoline, motor oil and/or used oil. Use of degreasing and cleaning solvents.
	TPH	Use and storage of diesel, gasoline, motor oil and/or used oil
	PCBs	Use and storage of diesel, gasoline, motor oil and/or used oil
	Metals	Use and storage of diesel, gasoline, motor oil and/or used oil
	Pesticides	Use of pesticides to control pests
Fire Station	TPH	Use of petroleum fuels and/or motor oil from fire engine and equipment maintenance

Notes: COIs – contaminants of interest; VOCs – volatile organic compounds; SVOCs – semi-volatile organic compounds; TPH – total petroleum hydrocarbons; PCBs - polychlorinated biphenyls

Figure 2-17 illustrates the location of each of the former use areas listed in the table above.

2. Prior to developing a SAP, a site survey was conducted to locate areas of concern based on historical maps of the MRB and OTI facilities. During the site visit, biased and random sampling locations were selected based on current and former building locations and suspected or known past practices. This approach was used to support the collection of data at areas of concern considered to have a higher probability of contamination while allowing for detection of contamination resulting from unknown conditions. During the site survey, two surface water samples were collected from the seasonal creek that extends through the former landfill (one collected directly upstream and one directly downstream of the landfill).

3. Areas that were investigated prior to 2006 and had detectable concentrations of a contaminant, or where samples were not analyzed to detection limits below a screening level value (SLV), were re-sampled or sampled more intensively.

4. Chemical analyses were selected based on past practices and on analytical methods that provided sufficient detection limits to insure that the initial screening steps were sufficient to allow for accurate assessment of contaminants. Given the limited understanding of past site conditions, analytical methods that detect a broad range of chemicals were selected, when available.

All soil samples collected for gasoline-range and diesel and oil-range petroleum hydrocarbons were analyzed using Northwest Methods NWTPH-Gx and NWTPH-Dx by EPA's laboratory in Manchester, Washington. All other analysis was performed by an EPA Contract Laboratory Program (CLP) laboratory using the following EPA CLP methods:

- SOM01.1 was used for the analysis for PCBs, SVOCs, and VOCs
- ILM05.3 was used for the analysis of metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver)

The sections that follow summarize non-ACM investigation activities performed in the areas of potential non-ACM releases. Details regarding the analytical results are presented in Section 4.

2.4.3.1 Central Power Plant

Eight borings, identified as sample locations PP-01 through PP-08, were completed in the vicinity of the former power plant (Figure 2-18). The borings were drilled to a maximum depth of 10 feet bgs. A total of 24 soil samples (3 from each boring) were collected at the surface, 2 feet bgs, and 10 feet bgs for laboratory analysis. The following table summarizes the laboratory analysis performed on each sample collected from this use area:

Sample Location	TPH			PCBs			Metals			SVOCs			VOCs		
	0	2	10	0	2	10	0	2	10	0	2	10	0	2	10
PP-01	+	+	+	+	+	+	+	+	+	+	+	X	X	X	+
PP-02	+	+	+	+	+	+	+	+	+	+	+	X	X	X	+
PP-03	+	+	+	+	+	+	+	+	+	+	+	+	X	X	+
PP-04	+	+	+	+	+	+	+	+	+	+	+	X	X	X	+
PP-05	+	+	+	+	+	+	+	+	+	+	+	X	X	X	+
PP-06	+	+	+	+	+	+	+	+	+	+	+	X	X	X	+
PP-07	+	+	+	+	+	+	+	+	+	+	+	X	X	X	+
PP-08	+	+	+	+	+	+	+	+	+	X	+	+	X	X	+

Notes: + - sample from this sample interval was collected and analyzed for the indicated parameter; X – sample from this interval was NOT collected. Sample depths are in units of feet below ground surface.

2.4.3.2 Maintenance/Repair Shop

Nine borings, identified as sample locations MS-01 through MS-09, were completed in the vicinity of the former Marine barracks maintenance shop (Figure 2-19). The borings were drilled to a maximum depth of 10 feet bgs. A total of 26 soil samples (2 from boring MS-05 and 3 each from the remaining borings) were collected for laboratory analysis. The following table summarizes the laboratory analysis performed on each sample collected from this use area:

Sample Location	TPH			Metals			VOCs		
	0	2	10	0	2	10	0	2	10
MS-01	+	+	+	+	+	+	X	X	+
MS-02	+	+	+	+	+	+	X	X	+
MS-03	+	+	+	+	+	+	X	X	+
MS-04	+	+	+	+	+	+	X	X	+

Sample Location	TPH			Metals			VOCs		
	0	2	10	0	2	10	0	2	10
MS-05	X	+	+	X	+	+	X	X	+
MS-06	+	+	+	+	+	+	X	X	+
MS-07	+	+	+	+	+	+	X	X	+
MS-08	+	+	+	+	+	+	X	X	+
MS-09	+	+	+	+	+	+	X	X	+

Notes: + - sample from this sample interval was collected and analyzed for the indicated parameter; X – sample from this interval was NOT collected. Sample depths are in units of feet below ground surface.

2.4.3.3 Laundry Building

Six borings, identified as sample locations LB-01 through LB-06, were completed in the vicinity of the former laundry building (Figure 2-20). The borings were drilled to a maximum depth of 10 feet bgs. A total of 18 soil samples (3 from each boring) were collected at the surface, 2 feet bgs, and 10 feet bgs for laboratory analysis. The following table summarizes the laboratory analysis performed on each sample collected from this use area:

Sample Location	SVOCs			VOCs		
	0	2	10	0	2	10
LB-01	+	+	+	X	X	+
LB-02	+	+	+	X	X	+
LB-03	+	+	+	X	X	+
LB-04	+	+	+	X	X	+
LB-05	+	+	+	X	X	+
LB-06	+	+	+	X	X	+

Notes: + - sample from this sample interval was collected and analyzed for the indicated parameter; X – sample from this interval was NOT collected. Sample depths are in units of feet below ground surface.

2.4.3.4 Landfill

Three borings, identified as sample locations LF-01through LF-03, were completed within the former landfill area (Figure 2-21). The borings were drilled to a maximum depth of 10 feet bgs. A total of 9 soil samples (3 from each boring) were collected at the surface, 2 feet bgs, and 10 feet bgs for laboratory analysis. The following table summarizes the laboratory analysis performed on each sample collected from this use area:

Sample Location	TPH			PCBs			Pesticides			Metals			SVOCs			VOCs		
	0	2	10	0	2	10	0	2	10	0	2	10	0	2	10	0	2	10
LF-01	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	X	+
LF-02	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	X	+
LF-03	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	X	+

Notes: + - sample from this sample interval was collected and analyzed for the indicated parameter; X – sample from this interval was NOT collected. Sample depths are in units of feet below ground surface.

2.4.3.5 Paint Shops

Six borings, identified as sample locations PS-01 through PS-06, were completed in the vicinity of the former paint shops (Figure 2-22). The borings were drilled to a maximum depth of 10 feet bgs. A total of 14 soil samples were collected for laboratory analysis. Two soil samples were collected from each of borings PS-01, PS-02, PS-04, and PS-05 at the surface and 2 feet bgs, and three samples were collected from each of borings PS-03 and PS-06 at the surface, 2 feet bgs, and 10 feet bgs. The following table summarizes the laboratory analysis performed on each sample collected from this use area:

Sample Location	TPH			PCBs			Pesticides			Metals			SVOCs			VOCs		
	0	2	10	0	2	10	0	2	10	0	2	10	0	2	10	0	2	10
PS-01	+	+	X	+	+	X	+	+	X	+	+	X	+	+	X	X	+	X
PS-02	+	+	X	+	+	X	+	+	X	+	+	X	+	+	X	X	+	X
PS-03	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	X	+
PS-04	+	+	X	+	+	X	+	+	X	+	+	X	+	+	X	X	+	X
PS-05	+	+	X	+	+	X	+	+	X	+	+	X	+	+	X	X	+	X
PS-06	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	X	X	+

Notes: + - sample from this sample interval was collected and analyzed for the indicated parameter; X – sample from this interval was NOT collected. Sample depths are in units of feet below ground surface.

2.4.3.6 Fire Station

Five borings, identified as sample locations FS-01 through FS-05, were completed in the vicinity of the former fire station (Figure 2-23). The borings were drilled to a maximum depth of 10 feet bgs. A total of nine soil samples were collected for laboratory analysis. Two soil samples were collected from each of borings FS-01, FS-02, FS-04, and FS-05 at 2 feet and 10 feet bgs, and one soil sample was collected from boring FS-03 at 2 feet bgs. All soil samples were analyzed for gasoline-range and diesel and oil-range petroleum hydrocarbons using Northwest Methods NWTPH-Gx and NWTPH-Dx. The following table summarizes the laboratory analysis performed on each sample collected from this use area:

Sample Location	TPH	
	2	10
FS-01	+	+
FS-02	+	X
FS-03	+	X
FS-04	+	+
FS-05	+	+

Notes: + - sample from this sample interval was collected and analyzed for the indicated parameter; X – sample from this interval was NOT collected. Sample depths are in units of feet below ground surface.

2.4.3.7 OTI Maintenance Shop

Three borings, identified as sample locations OTI-01 through OTI-03, were completed in the vicinity of the former OTI maintenance shop (Figure 2-24). The borings were drilled to a maximum depth of 10 feet bgs. A total of nine soil samples were collected (three from each boring) at the surface, 2 feet bgs, and 10 feet bgs. The following table summarizes the laboratory analysis performed on each sample collected from this use area:

Sample Location	TPH			Metals			VOCs		
	0	2	10	0	2	10	0	2	10
OTI-1	+	+	+	+	+	+	X	X	+
OTI-02	+	+	+	+	+	+	X	X	+
OTI-03	+	+	+	+	+	+	X	X	+

Notes: + - sample from this sample interval was collected and analyzed for the indicated parameter; X – sample from this interval was NOT collected. Sample depths are in units of feet below ground surface.

2.4.3.8 Service Station

Four borings, identified as sample locations GS-01 through GS-04, were completed in the vicinity of the former service station (Figure 2-25). The borings were drilled to depths ranging from 3 feet to 10 feet bgs. A total of eight soil samples were collected for laboratory analysis (two each from borings GS-01 and GS-04, three from GS-02, and one from GS-03). Four soil samples were collected at the surface, three at 2 feet bgs, and one at 5 feet bgs. The following table summarizes the laboratory analysis performed on each sample collected from this use area:

Sample Location	TPH			PCBs			Pesticides			Metals			SVOCs			VOCs		
	0	2	5	0	2	5	0	2	5	0	2	5	0	2	5	0	2	5
GS-01	+	+	X	+	+	X	+	+	X	+	+	X	+	+	X	X	+	X
GS-02	+	+	X	+	+	X	+	+	X	+	+	X	+	+	X	X	+	+
GS-03	+	X	X	+	X	X	+	X	X	+	X	X	+	X	X	+	X	X
GS-04	+	+	X	+	+	X	+	+	X	+	+	X	+	+	X	X	+	X

Notes: + - sample from this sample interval was collected and analyzed for the indicated parameter; X – sample from this interval was NOT collected. Sample depths are in units of feet below ground surface.

During the investigation activities conducted in this area, an underground storage tank (UST) was discovered and it is believed this tank contained diesel. The tank was found to be empty at the time of the 2006 investigation activities.

2.5 2007 Investigation Activities

Once the results of the 2006 non-ACM investigation activities were evaluated, it was determined that additional investigation was required to further delineate the extent

to VOC impacts in soil, soil gas, and indoor air the NRE site. The former use areas requiring further investigation included the following:

- Former power plant
- Former maintenance shop
- Former laundry building
- Former OTI maintenance shop
- Former service station area

In addition to the investigation to delineate further VOC impacts in these areas, an effort was conducted to determine the exact orientation of the diesel UST discovered during the 2006 investigation activities (Section 2.4.3.8) and investigate the possibility of additional USTs in the area of the former service station.

2.5.1 VOC Delineation Sampling

To support the further delineation of potential VOC impacts at the site the following media were sampled in the areas of concern mentioned above: soil, soil gas, indoor air, and outdoor air. Details regarding the sample collection procedures and analytical results are provided in the *North Ridge Estates – Additional Non-ACM Investigation Summary Technical Memorandum* (Parametrix 2007).

At the time of this report, EPA is evaluating the usability of the analytical results collected during this investigation. If the results from this investigation are determined to be usable, the RI will be amended to present this information. If the results are determined to be unusable, additional investigation into the potential impacts of VOCs in the areas of concern will be warranted.

2.5.2 Former Service Station UST Investigation

The UST investigation at the former service station area was conducted to determine the orientation of the tank discovered during the 2006 investigation and locate any additional USTs in the area. For this effort a mini-excavator was used to excavate around the perimeter of the known UST and in locations where an additional UST would be expected to be found. The orientation of the UST was verified to be perpendicular to, without extending under, North Ridge Drive (Figure 2-25). No additional USTs, were discovered in the area. Soil impacted with petroleum products was encountered during this investigation. Soil removed during the excavation process was returned as backfill to the excavation areas at the conclusion of the trenching activities.

2.5.3 Deviations to Sampling Plans

This section describes deviations to the sampling plans that were used during the 2006 and 2007 investigation activities. For each deviation identified an explanation is given for why the deviation occurred as well as an assessment on the impact on any of the DOQs that were identified for each specific SAP.

2.5.3.1 Deviations to ACM SAP

This section describes any deviations to the ACM investigation techniques described in the ACM SAP.

General Deviations

(1) Eight properties within the site boundary were not investigated due to homeowner refusals of access or being unable to contact the homeowner. Seven of these properties are characterized as Bin C properties and one property is characterized as Bin B.

Implication of deviation: This deviation has a minimal effect of data quality objectives because the majority of properties where access was denied were Bin C properties. The collection of bulk soil samples would be expected to have confirmed the absence of free asbestos fibers at these properties; however this can not be confirmed without the collection of soil samples from these properties.

(2) Bedrock was encountered at several locations across the site during both burial pit/pile inspections and remedial boundary investigations, preventing full characterization to the prescribed depth.

Implication of deviation: This deviation has no negative effect on project/data quality objectives because buried materials could not be present below the shallow bedrock.

(3) Two property owners adjacent to the landfill believed that the locations of several eastern test pits and remedial boundary investigation points shown on Figure 4-5 of the Asbestos SAP crossed their property boundaries. These test pits and their adjacent remedial boundary investigation points were not explored as a result of these refusals to allow equipment and personnel on the properties.

Implication of deviation: This deviation has a minimal effect on project/data quality objectives because although the eastern boundary of the former landfill was not characterized, ACM was only observed at depth in two of the test pits located on the eastern side of the former landfill. However, unaccounted for ACM may be located in the portion of the landfill that was not investigated.

(4) The utility locator would not identify all utilities within the 425-acre site boundary without specific instructions on the areas of interest. The utility locates were completed prior to burial pit/pile identification on several properties, and consequently these test pits and potential boreholes were not explored in the interest of health and safety and the potential of encountering an unknown utility.

Implication of deviation: This deviation will affect the ability to delineate the extent of ACM on the properties affected any may impact the ability to design and implement a remedial action in these portions of the site.

(5) Due to an oversight, field duplicates were collected at a rate of approximately 4% of all non-QC samples, instead of the 5% rate as prescribed in the SAP.

Implication of deviation: This deviation has a minimal effect on project/data quality, as free asbestos fibers were not observed in any of samples that were analyzed (approximately 10% of the total number of field samples collected were sent for analysis).

Deviations Related to Burial Pit/Pile Inspection

(1) During investigations at parcel N (a Bin A property) the property owner disagreed with the placement of several test pits and would not allow field team members to explore all test pits on his property.

Implication of deviation: There is a minimal impact to data quality due to the fact that the test pits which were not excavated were in areas of known contamination. However, the data collected at depth would have been used to determine the vertical extent of buried material.

(2) While excavating test pits, native soils were reached at shallower depths than anticipated, and the final depth of each test pit was increased to a minimum of 3 feet bgs, 1.5 feet below the last occurrence of ACM, or to a total depth of 10 feet bgs, which ever was reached first. Three feet bgs was chosen due to the estimated average frost line in this region of 2 feet bgs.

Implication of deviation: This deviation has a positive effect on the accuracy of the data set, as the minimum depth of each test pit was extended and more data were collected than originally anticipated.

Deviations Related to Surficial Visual Inspection

(1) Each individual piece of ACM was not flagged when the ACM appeared to be an isolated occurrence. The isolated pieces of ACM were noted per parcel but were not individually recorded with a GPS unit. Instead, only instances where ACM was protruding from the ground or areas with higher concentrations of surficial ACM were measured and recorded.

Implication of deviation: This deviation has no negative effect on project/data quality objectives because isolated occurrences of ACM were deemed inconsequential to the characterization of each parcel.

Deviations Related to Remedial Boundary Investigation:

(1) During the first day of remedial boundary investigations, field personnel did not assign individual index identification numbers to each borehole advanced during the step-out procedures identified in the Asbestos SAP.

Implication of deviation: This deviation has no negative effect on project/data quality objectives, because the subsequent borehole advancements are differentiated with an alpha suffix and the data regarding presence or absence of ACM at depth were still recorded.

(2) Remedial boundary investigations were not possible at four locations due to inaccessibility of several areas of ACM identified during the surficial visual inspections.

Implication of deviation: This deviation has a minimal effect on project/data quality objectives, as these four areas of surficial ACM were isolated on steeply sloped hills where the presence of burial piles or former Marine barrack buildings was unlikely.

(3) Instead of performing remedial boundary investigations around only newly identified areas of surficial ACM, boreholes were also advanced every 50 feet along the known extent of previously identified areas of surficial ACM. Information gathered from these boreholes was required to delineate the extent of ACM contamination.

Implication of deviation: This deviation has a positive effect on project data/quality objectives, as more data were collected than prescribed in the SAP that is useful in delineating areas that could require remediation.

(4) After several days of remedial boundary investigations, field personnel requested to discontinue use of the mixing bowl as means of homogenizing the soil retrieved from the acetate sleeve. Instead, field personnel homogenized the soil on plastic sheeting which was disposed of between each borehole.

Implication of deviation: This deviation has no effect on project data/quality objectives, as each sample was still homogenized and cross-contamination between samples was prevented by using disposable equipment.

Deviations Related to Bulk Soil Sample Collection:

(1) The soil was too consolidated to collect bulk soil samples using hand methods to a depth of 5 feet bgs. Where the DPT equipment was able to enter and exit the property without damage, this equipment was utilized to collect samples to a minimum depth of 5 feet bgs. Where hand coring was the only possibility, the minimum depth was reduced to 2 ½ feet bgs. Even with this concession, some hand coring was not able to advance beyond 20 to 24 inches bgs and the depths that samples were collected using the DPT ranged from 36 to 60 inches bgs.

Implication of deviation: This deviation has a minimal effect on project data/quality objectives, as the soil encountered at the Bin C properties was native at shallow depths, and each sample was collected as close in proximity to the frost line as possible. The presence of free asbestos fibers was unlikely

to a depth of 5 feet bgs, and was confirmed to be absent in each bulk soil sample.

2.5.3.2 Deviations to ABS QAPP

This section summarizes deviations in methods/procedures used during sampling collection from those described in the ABS QAPP and estimates the potential impact on data quality for each.

Collection of Indoor Personal Air Samples

(1) Personal air samples were not collected during the investigation. All residents declined to wear the required sampling equipment when asked to participate in the event. As a result, stationary air samples were collected from a central location at each of the four properties. All stationary air samples were non-detect for PCME asbestos structures.

Implication of deviation: The collection of stationary air samples instead of personal air samples will not provide a true measurement of breathing zone exposures to residents at NRE. Stationary air samples tend to underestimate exposures. However, dust samples collected from the same homes indicate that indoor dust is not contaminated with asbestos.

Collection of Composite Bulk Soil Samples

(1) Bulk soil samples were collected after activity-based scenarios were conducted, not before the activity as described in the QAPP.

Implication of deviation: Collecting soil samples after the scenario could show an increase in free asbestos fibers versus collecting the sample prior to the scenario activity. However, all soil samples collected from scenario areas were non-detect for free asbestos fibers. This result indicates that the detection of free asbestos fiber in soils from scenario areas was not caused by collecting the samples after scenarios were conducted; therefore, this deviation has no impact on the quality of data collected.

In addition, the ability of PLM-VE to determine the presence of free asbestos fibers is limited. Fibers can be present, but the analytical technique is not a quantitative enough tool to observe each fiber. The analytical technique used to determine the presence of asbestos fibers on air filters is much more sensitive and less subjective than asbestos techniques for soil analysis. So, while fibers are not observed in soil samples, it is not unusual to observe fibers in air samples collected at the same locations where soil results are non-detect for asbestos.

ACM was observed in bulk samples collected after scenario activities in areas where ACM had been removed. After pickup occurred, all areas were visibly free of ACM. After the scenario events were completed, ACM was again visible at the surface, indicating that ACM was in the top 1 to 2 inches of soil. ACM would have been present in the bulk soil samples regardless of when

the samples were collected, given the observation of ACM on the surface after the scenario was completed. Therefore this deviation has no impact on the quality of data collected.

Collection of ABS Personal Air Samples

(1) Due to time constraints caused by availability of the abatement contractor and ERT, most scenario events were less than 2 hours in duration. The flow rates used in sample collection and the requested analytical sensitivity remained the same. The shortened event durations were between 88 and 96 minutes in duration.

Implication of deviation: Collection of ABS personal air samples from a shortened event resulted in a smaller volume being collected than originally anticipated. The reduction in volume resulted in an increased number of grid openings requiring analysis to reach the required analytical sensitivity. A total of 13 samples were not analyzed to the required analytical sensitivity of 0.001 S/cc. The sensitivities for these samples ranged from 0.00110 to 0.050 S/cc. However, in all of the samples analyzed to a sensitivity of greater than 0.001 S/cc, asbestos structures were detected. Therefore this deviation has no impact on the quality of the data collected.

Analysis of ABS Personal Air Samples

(1) Due to loading issues with the air samples collected during ABS activities, a total of 21 of the 46 samples analyzed required indirect preparation methods.

Implication of deviation: Indirect preparation method can result in the detection of more asbestos fibers than direct preparation methods. As a result, the asbestos concentrations reported by the laboratory for samples prepared by indirect methods may result in higher estimation of risk associated with outdoor ABS activities. The risk calculated from samples prepared by indirect methods results in conservative risk calculations; as a result, the risk assessment will be more protective when applying these results. Therefore this deviation has only a minor impact on the quality of the data collected, and this impact does not reduce the ability of the risk assessment to calculate levels of risk at the site.

Analysis of Bulk Soil Samples

(1) Soil samples were analyzed by PLM as described in the site-specific protocol detailed in the ABS QAPP. Ten percent of the soil samples collected were not analyzed by TEM, as prescribed in Section 2.4 of the ABS QAPP.

Implication of deviation: TEM methods for soil analysis are used as a confirmation of the presence/absence of asbestos and also to determine mineralogy and fiber length. A total of 16 soil samples were collected from each scenario area and analyzed via PLM. A total of two samples should have been sent for TEM analysis. These samples were not sent for analysis due to an oversight during the planning stages of the project. A laboratory was not

procured that could complete TEM analysis of soil samples. Not having these two samples analyzed by TEM methods results in the lack of confirmation of the presence/absence of free asbestos fibers in soil. All soil samples remain in archive; if it is determined that TEM analysis is required, this can be completed. The impact of this deviation is considered unknown because a total of 81 samples from the site were analyzed by PLM, and all were non-detect for free asbestos fibers, but the detection limit for PLM is much higher than TEM.

2.5.3.3 Deviations to 2006 Non-ACM QAPP

This section summarizes deviations in methods/procedures used during sampling collection from those described in the non-ACM QAPP and estimates the potential impact on data quality for each.

(1) Borings (MS-1 through MS-10) were to be drilled at 10 locations in the vicinity of the maintenance shop. Borings MS-01 through MS-09 were completed around the perimeter of the shop's concrete slab, and soil samples were collected in accordance with the SAP. Boring MS-10 was to be located near the middle of the maintenance shop concrete slab in what was initially thought to be a catch basin open to the subsurface soil below the slab. However, when the boring installation was attempted, it was discovered that the suspected catch basin contained a concrete bottom at about 1.5 feet bgs. Therefore, boring MS-10 could not be completed.

Implication of deviation: This deviation has a minimal effect on project/data quality objectives, as the main focus of the investigation in the vicinity of the maintenance shop was to determine if contaminants are present near the shop. Data obtained from the completion and collection of soil samples from borings MS-01 through MS-09 were sufficient to characterize the area for contaminants of concern. Therefore, this deviation has no impact on the quality of data collected.

(2) Borings FS-01 through FS-05 were drilled in the vicinity of the fire station and were to be completed to a maximum depth of 10 feet bgs. Three soil samples were to be collected from each boring – at the surface, near surface (2 feet bgs), and deeper (5 to 10 feet bgs) – for petroleum hydrocarbon analysis. Bedrock was encountered before the depth of 10 feet bgs was reached in the five borings (FS-01 at 7 feet bgs, FS-02 at 8 feet bgs, FS-03 at 3 feet bgs, FS-04 at 8 feet bgs, and FS-05 at 7.5 feet bgs); consequently, the borings could not be advanced further. Surface material in the boring locations was primarily construction debris, including concrete and asphalt. Therefore, surface samples were not collected from any of the borings. Soil samples were collected from the borings at the near surface in boring FS-03 and at the near surface and deeper in borings FS-01, FS-02, FS-04, and FS-05.

Implication of deviations: These deviations have a minimal effect on project/data quality objectives, as the main focus of the investigation in the

vicinity of the fire station was to initially characterize the area for both lithology and petroleum hydrocarbons. Sufficient soil samples were collected to characterize the area for the presence of petroleum hydrocarbons in soil above the bedrock. Therefore, these deviations have no impact on the quality of data collected.

(3) Borings PS-01 through PS-06 were drilled in the vicinity of the paint shops and were to be completed to a maximum depth of 10 feet bgs. Three soil samples were to be collected from each boring - at the surface, near surface (2 feet bgs), and deeper (10 feet bgs) - for petroleum hydrocarbons, VOCs, SVOCs, PCBs, pesticides, and metals analyses. Bedrock was encountered before the depth of 10 feet bgs was reached in four of the borings (PS-01 at 4 feet bgs, PS-02 at 3 feet bgs, PS-04 at 4 feet bgs, and PS-05 at 5 feet bgs); consequently, the borings could not be advanced further. Soil samples were collected from these four borings at the surface and near surface, only. Borings PS-03 and PS-06 were completed to 10 feet bgs and surface, near surface, and deeper soil samples were collected.

Implication of deviations: These deviations have minimal effect on project/data quality objectives, as the main focus of the investigation in the vicinity of the paint shops was to initially characterize the area for lithology and COIs in soil, including petroleum hydrocarbons, VOCs, SVOCs, PCBs, pesticides, and metals. Sufficient soil samples were collected to characterize the area for the presence of the above contaminants of concern in soil. Therefore, these deviations have no impact on the quality of data collected.

(4) Borings GS-01 through GS-04 were drilled in the vicinity of the service station and were to be completed to a maximum depth of 10 feet bgs. Three soil samples were to be collected from each boring - at the surface, near surface (2 feet bgs), and deeper (5 to 10 feet bgs) - for petroleum hydrocarbons, VOCs, SVOCs, PCBs, pesticides, and metals analyses. When the first boring was drilled (GS-03), bedrock was encountered at 2.5 feet bgs and the boring could not be advanced further. Based on the depth to bedrock in boring GS-03 and the similar locations of borings GS-01 and GS-02 (all located within a drainage ditch), borings GS-01 and GS-02 were moved to new locations that were considered to be representative of the service station area but where bedrock was possibly deeper. Boring GS-01 was drilled to a depth of 3 feet bgs before bedrock was encountered. Boring GS-02 was drilled to 5 feet bgs, where a void was encountered to a depth of 10 feet bgs; it was later determined that the void in GS-02 was an empty underground storage tank (UST). Boring GS-04 was drilled to a depth of 5 feet bgs, where bedrock was encountered; the boring could not be advanced further. Soil samples were collected from boring GS-03 at the surface, from borings GS-01 and GS-04 at the surface and near surface (2 feet bgs), and from boring GS-02 at the surface, near surface (2 feet bgs), and deeper (5 feet bgs).

Implication of deviations: These deviations have a minimal effect on project/data quality objectives, as the main focus of the investigation in the vicinity of the service station was to initially characterize the area for lithology and COIs in soil, including petroleum hydrocarbons, VOCs, SVOCs, PCBs, pesticides, and metals. Sufficient soil samples were collected to characterize the area for the presence of the above contaminants of concern in soil. Therefore, this deviation has no impact on the quality of data collected. However, discovery of the UST will require decommissioning.

2.5.3.4 Deviations to 2007 Non-ACM QAPP Addendum

This section summarizes deviations in methods/procedures used during sampling collection from those described in the 2007 non-ACM QAPP Addendum and presented in the 2007 Non-ACM Technical Memorandum (Parametrix 2007) and estimates the potential impact on data quality for each.

Former Power Plant

(1) Borings PP-09 through PP-11 were drilled in the vicinity of the former power plant and were completed to a maximum depth of 10 feet bgs. Two soil samples were to be collected from each boring - at the near surface (3 feet bgs) and deeper (5 to 10 feet bgs) - for VOC analysis. Based on field observations and near surface soil conditions, a near surface soil sample was collected from boring PP-11 at the 1 foot bgs sample interval instead of the 3 feet bgs stated in the QAPP.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation in the vicinity of the former power plant was to further characterize the area for VOCs in soil. Sufficient soil samples were collected to further characterize the area of the presence of VOCs in soil. Therefore, these deviations do not impact the quality of the data collected.

(2) Soil gas sample points PP-09-SG through PP-12-SG were advanced in the vicinity of the former power plant area and were completed to a maximum depth of 5 feet bgs. One soil gas sample was collected from each sample point at 5 feet bgs for VOC analysis. Soil gas samples were to be collected at a rate of 0.5 L/min. Due to subsurface soil conditions (i.e. highly dense soils and/or presence of weathered bedrock) , the actual soil gas sample rates ranged from 0.13 to 0.15 L/min.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation in the vicinity of the former power plant area was to further characterize soil in the area for VOCs in soil gas. Although sample collection rates were less than stated in the QSPP, sufficient sample volumes were collected into each sample canister. Therefore, these deviations do not impact the quality of the data collected.

Former Maintenance Shop

(1) Borings MS-10 through MS-12 were drilled in the vicinity of the former maintenance shop and were completed to a maximum depth of 10 feet bgs. Two soil samples were to be collected from each boring - at the near surface (3 feet bgs) and deeper (5 to 10 feet bgs) - for VOC analysis. Based on field observations and near surface soil conditions (high soil moisture content), near surface soil samples were collected from borings MS-10 through MS-12 from 1.5 to 2 feet bgs instead of the 3 feet bgs stated in the QAPP. Soil samples were collected from the borings at the near surface and deeper in borings MS-10 through MS-12.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation was to further characterize the area for VOCs in soil. Sufficient soil samples were collected to further characterize the area of the presence of VOCs in soil. Therefore, these deviations do not impact the quality of the data collected.

(2) Soil gas sample points MS-10-SG through MS-12-SG were advanced in the vicinity of the former maintenance shop and were completed to a maximum depth of 5 feet bgs. One soil gas sample was collected from each sample point at 5 feet bgs for VOC analysis. Soil gas samples were to be collected at a rate of 0.5 L/min. Due to subsurface soil conditions (i.e. highly dense soils and/or presence of weathered bedrock), the actual soil gas sample rates ranged from 0.13 to 0.22 L/min.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation in the vicinity of the former power plant area was to further characterize soil in the area for VOCs in soil gas. Although sample collection rates were less than stated in the QSPP, sufficient sample volumes were collected into each sample canister. Therefore, these deviations do not impact the quality of the data collected.

Former Laundry Building

(1) Borings LB-11 through LB-14 were drilled in the vicinity of the former maintenance shop and were completed to a maximum depth of 10 feet bgs. Two soil samples were to be collected from each boring - at the near surface (3 feet bgs) and deeper (5 to 10 feet bgs) - for VOC analysis. Based on field observations and near surface soil conditions (high soil moisture content), near surface soil samples were collected from borings LB-11 through LB-14 from 1 to 2.5 feet bgs instead of the 3 feet bgs stated in the QAPP. Soil samples were collected from the borings at the near surface and deeper in borings LB-11 through LB-14.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation was to further characterize the area for VOCs in soil. Sufficient soil samples were

collected to further characterize the area of the presence of VOCs in soil. Therefore, these deviations do not impact the quality of the data collected.

(2) Soil gas sample points LB-07-SG through LB-10-SG were advanced in the vicinity of the former laundry building and were completed to a maximum depth of 5 feet bgs. One soil gas sample was collected from each sample point at 5 feet bgs for VOC analysis. Soil gas samples were to be collected at a rate of 0.5 L/min. Due to subsurface soil conditions (i.e. highly dense soils and/or presence of weathered bedrock), the actual soil gas sample rates ranged from 0.11 to 0.13 L/min.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation was to further characterize soil in the area for VOCs in soil gas. Although sample collection rates were less than stated in the QAPP, sufficient sample volumes were collected into each sample canister. Therefore, these deviations do not impact the quality of the data collected.

Former OTI Maintenance Shop

(1) Borings OTI-04 through OTI-09 were drilled in the vicinity of the former maintenance shop and were completed to a maximum depth of 10 feet bgs. Two soil samples were to be collected from each boring - at the near surface (3 feet bgs) and deeper (5 to 10 feet bgs) - for VOC analysis. Based on field observations and near surface soil conditions (high soil moisture content), near surface soil samples were collected from borings OTI-04, OTI-05, and OTI-07 from 1 to 2.5 feet bgs instead of the 3 feet bgs stated in the QAPP. Two near surface soil samples were collected from boring OTI-09 instead of the one sample stated in the QAPP. Soil samples were collected from the borings at the near surface and deeper in borings OTI-04 and OTI-09.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation was to further characterize the area for VOCs in soil. Sufficient soil samples were collected to further characterize the area of the presence of VOCs in soil. Therefore, these deviations do not impact the quality of the data collected.

(2) Soil gas sample points OTI-09-SG through OTI-12-SF were advanced in the vicinity of the former OTI maintenance shop and were completed to a maximum depth of 5 feet bgs. One soil gas sample was collected from each sample point at 5 feet bgs for VOC analysis. Soil gas samples were to be collected at a rate of 0.5 L/min for a total sampling time of 12 minutes. Due to subsurface soil conditions (i.e. highly dense soils and/or presence of weathered bedrock), the actual soil gas sample rates ranged from 0.05 to 0.08 L/min at total sampling times ranges from 1 to 2 hours.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation was to

further characterize soil in the area for VOCs in soil gas. Although sample collection rates were less than stated in the QAPP, sufficient sample volumes were collected into each sample canister. Therefore, these deviations do not impact the quality of the data collected.

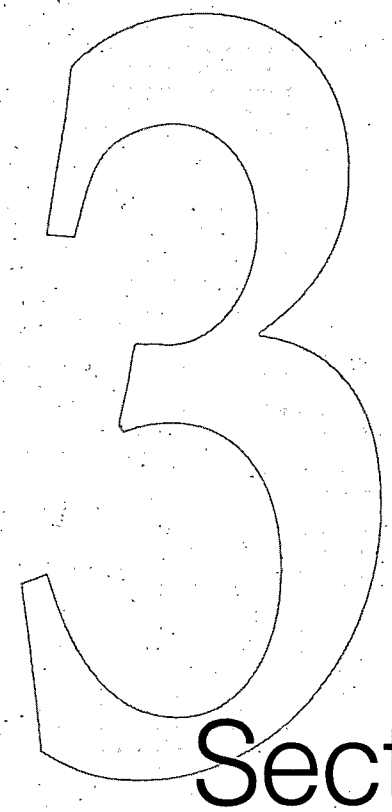
Former Service Station

(1) Borings GS-05 through GS-07 were drilled in the vicinity of the former maintenance shop and were completed to a maximum depth of 10 feet bgs. Two soil samples were to be collected from each boring - at the near surface (3 feet bgs) and deeper (5 to 10 feet bgs) - for VOC analysis. Bedrock was encountered before the depth of 10 feet bgs was reached in three borings (GS-05 at 2 fet bgs, GS-06 at 4 feet bgs, and GS-07 at 7 feet bgs); consequently, the borings could not be advanced further. So deeper soil samples could not be collected from borings GS-05 and GS-06 due to shallow bedrock. Based on field observations and near surface soil conditions (high soil moisture content), near surface soil samples were collected from 2 to 2.5 feet bgs instead of the 3 feet bgs stated in the QAPP. These are still considered near surface soil samples. Soil samples were collected from the borings at the near surface borings GS-05 through GS-07 deeper in boring GS-07.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation was to further characterize the area for VOCs in soil. Since bedrock is close to the surface, sufficient soil samples were collected to characterize the area for the presence of VOCs. Therefore, these deviations do not impact the quality of the data collected.

(2) Soil gas sample points GS-07-SG through GS-15-SG were advanced in the vicinity of two residences located across North Ridge Drive from the former service station area and were to be completed to a maximum depth of 5 feet bgs. One soil gas sample was collected from each sample point at 5 feet bgs for VOC analysis. Shallow bedrock was encountered at sample points GS-07-SG, GS-09-SG, and GS-10-SG; consequently, these sample points could not be advanced and soil gas samples were not collected from these locations. Soil gas samples were to be collected at a rate of 0.5 L/min. Due to subsurface soil conditions (i.e. highly dense soils and/or presence of weathered bedrock), the actual soil gas sample rates ranged from 0.09 to 0.13 L/min. Soil gas samples were collected from sample points GS-08, GS-11, and GS-13 through GS-15 at 5 feet bgs and GS-12 at 4 feet bgs.

Implication of deviation: These deviations have minimal effect on project/data quality objectives, as the main focus of this portion of the investigation was to further characterize soil in the area for VOCs in soil gas. Although sample collection rates were less than stated in the QAPP, sufficient sample volumes were collected into each sample canister. Therefore, these deviations do not impact the quality of the data collected.



Section Three

Section 3
Physical Characteristics of the Study Area

The NRE site is located in the southwestern portion of the Klamath Basin. The Klamath Basin lies in a transitional zone between the Cascade Mountains and the Basin and Range provinces, specifically, the Great Basin and East Cascade physiographic provinces. These provinces are dramatically different in climate, geology, and ecology, and both play an important role in the physical setting of the site.

3.1 Physical Setting

3.1.1 Surface Features

The MRB buildings remaining today include a warehouse, the former brig (renovated into a five-unit apartment building), and several residences on Thicket Court used as officers' quarters during the time the military used the property and as faculty housing during OTI occupation. A guard shack for the military base shooting range also remains standing east of the subdivision.

Although the other former military base structures at the site have been demolished, the concrete foundations for many of the buildings remain intact. Some of the old roads from the base are also still visible, although they are cracked and vegetation is growing through them. At the site, Old Fort Road and North Ridge Drive appear to follow approximately the same route they did when the base was operating (Oregon DHS 2004).

3.1.2 Meteorology

Prevailing air masses move across Klamath County from the Pacific Ocean, but are greatly modified as they move over the Coast Range and Cascade Mountains. Continental air masses that move down from the interior of western Canada are also a major weather factor. The resulting climate in Klamath County is much drier than that of western Oregon, which has more variable but generally warmer temperatures than Klamath County, particularly in winter months (NRCS 1985).

Winter rainfall in the area is characterized by a secondary peak in May, just prior to the dry summers. Seasonal characteristics are well defined, and changes between seasons are generally gradual. Average annual precipitation ranges from 10 to 15 inches in the valleys, 16 to 25 inches in nearby hills, and 30 to 40 inches at the lower levels in the Cascades to the west. About 44 percent of the moisture in the area occurs in winter, 22 percent in spring, 8 percent in summer, and 26 percent in fall. Wet days with at least 0.10 inch of moisture vary from 43 days annually in the valleys to 105 days in the mountains (NRCS 1985).

Snowfall accounts for 30 percent of the moisture in the valleys and as much as 50 percent of the moisture in the mountains. Annual snowfall averages 15 to 45 inches in the valleys, 60 to 125 inches in the foothills, and over 160 inches in some places at

more than 4,500 feet. Maximum snow depths have varied from 2 to 3 feet in the valleys and from 5 to 6 feet in the hills and mountains (NRCS 1985).

At Klamath Falls prevailing winds are southerly for November through February; westerly from March through July; and northerly during August, September, and October. Monthly speeds average from 4.4 miles per hour in September to 7.3 miles per hour in March. Wind conditions are calm 17 to 33 percent of the time. Early morning values of relative humidity average 74 to 83 percent year-round, and the afternoon low values range from 26 to 33 percent in the summer to 62 to 74 percent in the winter (NRCS 1985).

The site is located in the largest of Oregon's climatic divisions, South Central Oregon, known to the Oregon Climate Society (OCS) as climate zone 7. This climate zone is characterized by a vast area of high desert prairie punctuated by a number of mountain ranges and isolated peaks. Most of this region receives relatively low amounts of precipitation. Most areas in this climate zone receive their highest monthly precipitation in the winter months, with a secondary maximum during late spring or early summer. Klamath Falls has received an average of 13.95 inches of precipitation annually from 1971 to 2000, with most precipitation falling in January and December. The driest months in Klamath Falls have historically been July, August, and September (OCS 2005).

3.1.3 Surface Water Hydrology

The site is located within the Upper Klamath Lake subbasin of the Upper Klamath Basin. Klamath Lake, the largest freshwater lake in Oregon and one of the largest in the United States, is located in the Upper Klamath Lake watershed. The Upper Klamath Basin covers 5.6 million acres, with the Upper Klamath Lake subbasin comprising nearly 500,000 acres (USGS 1999a).

In the arid to semi-arid locations of Klamath County, most precipitation-replenished soil moisture evaporates or is transpired by vegetation. Little is left to maintain stream flow or recharge aquifers. Precipitation that falls as snow generally does not become runoff until spring thaws begin (USGS 1999b).

The occurrence of surface water at the site is limited to an intermittent stream that flows north from the site, roughly following Old Fort Road. The stream ultimately terminates at a canal for Upper Klamath Lake that is used to irrigate lands in the Lost River Basin of Oregon and California.

3.1.4 Geology

The location of the site, in an area of transition between the Cascade Mountains and the Basin and Range provinces, results in complex geology. The Klamath Basin is primarily composed of volcanic deposits with lowland fluviolacustrian deposits that have been described as consolidated volcanic rocks consisting largely of lava; unconsolidated to semi-consolidated volcanic ejecta deposited around eruptive

centers; and lowland fluviolacustrian deposits consisting of dolomite, water-lain volcanic sediment, tephra, and lava (USGS 1999b).

The Klamath Basin is, in part, a composite graben formed by north and northwest trending normal faults. Vertical displacements are generally less than 330 feet, but locally exceed 1,000 feet (USGS 1999b). The Klamath graben fault system confines the Klamath Lake Basin at the intersection of the northwestern Basin and Range and Cascade Mountains in southern Oregon. The slip rate along this fault system is between 0.2 and 1.0 millimeter per year (mm/year). The Klamath graben fault system is divided into three sections: the West Klamath Lake section, the East Klamath Lake section, and the South Klamath Lake section. Faults in the South Klamath Lake section form composite grabens in the vicinity of Klamath Falls. To the north, large escarpments on Miocene and Pliocene bedrock define a graben that confines Upper Klamath Lake; fault scarps are formed on Holocene and Pleistocene talus deposits along these escarpments. The lack of extensive alluvial fans at the mouths of canyons that empty into Upper Klamath Lake may indicate late Quaternary subsidence along the margins of the Upper Klamath Basin. South of Klamath Falls, the graben system widens into a series of fault blocks and grabens (USGS 2002).

3.1.5 Soils

According to the NRCS soil survey of Klamath County (NRCS 1985), three main soil types are present at the site: Royst stony loam, 5 to 40 percent north slopes; Royst stony loam, 5 to 40 percent south slopes; and Woodcock association, north.

The majority of soil at the site is classified as Royst stony loam. All the area south of Old Fort Road and roughly north of Hunter's Ridge Road is described as Royst stony loam, 5 to 40 percent north slopes. The area north of Old Fort Road, including Thicket Court, is described at Royst stony loam, 5 to 40 percent south slopes. NRCS (1985) describes Royst stony loam as a well drained soil found on timbered escarpments. It is formed in very gravelly material weathered from tuff, basalt, andesite, and a small amount of pumiceous ash. Tuffaceous bedrock is found at a depth of 25 to 40 inches. This soil type is found at elevations ranging from 4,300 to 5,500 feet, and an average annual precipitation of 15 to 18 inches. In areas of Royst stony loam, the average annual air temperature is 43 to 45 degrees Fahrenheit (°F). Permeability in these soils is slow. In unprotected or bare areas, runoff is rapid following snowmelt in spring and the hazard of erosion is high. Available water capacity is as low as 2.5 inches where depth to bedrock is 25 inches and the soil is extremely gravelly; it is as high as 6 inches where depth to bedrock is 40 inches and the soil is less gravely. The water-supplying capacity for natural vegetation is about 8 to 13 inches.

Soils directly to the north of Thicket Court and continuing north to Old Fort Road are classified by NRCS as belonging to the Woodcock association, north (NRCS 1985). These soils are well drained and are found on escarpments of fault block mountains. They formed in extremely gravelly colluvium weathered from andesite, basalt, and a small amount of cinders and ash. These soils are underlain by bedrock at a depth of more than 60 inches. Slopes are concave and vary from 500 feet to more than 3,000

feet in length. The average slope is about 20 percent. This soil type is found at elevations ranging from 4,200 to 5,900 feet, and an average annual precipitation of 18 to 22 inches. In areas of Woodcock association soils, the average annual air temperature is 43 to 45 °F. Permeability in these soils is moderate. Runoff is medium, and the hazard of erosion is moderate. Available water capacity is 4 to 7 inches. The water-supplying capacity for natural vegetation is 11 to 16 inches (NRCS 1985).

3.1.6 Hydrogeology

The primary hydrogeologic units in Klamath County were described in 1958, 1970, and 1974, as: 1) a highly permeable lower (older) basalt unit which serves as the principal aquifer in the area; (2) the Yonna Formation (a medial zone of stratified lacustrine deposits consisting of tuff, agglomerate, shale, diatomite, sandstone, and volcanic ash with some volcanic intrusives or interbeds of thin lava flows) which primarily confines groundwater; and 3) upper, younger units (lava flow forming cap rock in place, eruptive deposits, and alluvium) which occur above the water table or yield small quantities of perched water (USGS 1999a).

The USGS has worked to improve the earlier descriptions of the aquifer system in Klamath County. The USGS classifies the aquifer system underlying much of Klamath County, including the area covered by the site, as a volcanic and sedimentary rock aquifer. Volcanic and sedimentary rock aquifers consist of a variety of volcanic and sedimentary rocks. The volcanic rocks that compose the aquifers consist primarily of Pliocene and younger basaltic rocks; unconsolidated volcanic deposits included in the aquifers are ash and cinders. The sedimentary rocks that compose the aquifers consist primarily of semi-consolidated sand and gravel eroded mostly from volcanic rocks. In some places, the aquifer might consist of a single rock type; in other places, the aquifers might consist of several interbedded rock types (USGS 1999b).

The permeability of the various rocks that compose the volcanic and sedimentary rock aquifers is extremely variable. Interflow zones and faults in basaltic lava flows; fractures in tuffaceous, welded silicic volcanic rocks; and interstices in coarse ash, sand, and gravel mostly yield less than 100 gallons per minute of water to wells. Rarely, wells will yield several thousand gallons per minute. Where major faults are present, the rocks commonly contain geothermal water under confined conditions (USGS 1999b).

The hydrogeologic characteristics of the volcanic and sedimentary rock aquifers are largely unknown. Also, the subsurface extent of these aquifers is largely unknown because of limited outcrop areas where they are shown overlaying older rocks or because they are too deep for many wells to reach economically. In Klamath and Lake Counties the volcanic and sedimentary rock aquifers are extremely permeable in places, and large quantities of water are withdrawn by wells for public supply, domestic, commercial, agricultural, and industrial purposes (USGS 1999a).

Basin and Range style faulting has divided the Klamath Basin into a series of small subbasins. It has been indicated that geologic structures generally impact groundwater flow locally rather than having basin-wide impacts, and that groundwater moves freely across fault zones in most areas. In addition it has been found that regional, intermediate, and local groundwater flow occurs within the Klamath Basin. Groundwater flow between subbasins has been speculated to occur, although supporting data is limited. Earlier work has identified uplands as the primary groundwater recharge areas for all the flow systems because of greater precipitation and permeability. Discharge occurs locally in mountain slope springs and nearby lowlands, and regionally at the lowest basin elevations, via upward seepage and springs (USGS 1999a).

Flowing artesian wells in the vicinity of Upper Klamath Lake and a large number of springs indicate that strong upward components of groundwater flow occur in many parts of the Klamath Basin. The groundwater discharge plays an important role in providing discharge to Upper Klamath Lake and base flow to streams in the basin (USGS 1999a).

A geothermal system within the Klamath Basin is indicated by the occurrence of hot springs and hundreds of warm water wells in the vicinity of the City of Klamath Falls and areas to the south near Olene Gap and Klamath Hills. Klamath Falls has developed geothermal water in the volcanic and sedimentary rock aquifers into a system for heating homes and public buildings. As many as 500 wells supply geothermal water and generally yield from 100 to 3,000 gallons per minute (gpm). A conceptual model of the geothermal system was developed in which meteoric waters in a deep regional flow system circulate to depths of up to 10,000 feet by way of interconnected fracture zones. The waters are heated to 130°C before they move upward into the shallow groundwater system along basin and range faults. Most of the thermal discharge does not reach the surface, but moves outward from the fault conduits into permeable zones in basalts where it mixes with cooler, shallow groundwater. The relation of the thermal groundwater system to the shallow non-thermal system is not well understood (USGS 1999a).

A domestic supply well (Well ID L42727) was installed in August of 2000, approximately 0.8 miles north of the NRE site at a residence on Old Fort Road. Groundwater was first encountered at 518 feet bgs during drilling; the static water level of this well is 378 feet bgs. The water-bearing units in this well were described as gray clay with streaks of black sand (518 to 536 feet bgs), gray clay (536 to 571 feet bgs), cemented gravel (571 to 590 feet bgs), gray claystone (590 to 672 feet bgs), black sandstone (672 to 698 feet bgs), and gray claystone (698 to 843 feet bgs). Above the water bearing units materials were described as clays, sandstone, and claystone (OWRD 2000).

3.1.7 Demography and Land Use

According to Klamath County tax lot records, land purchased for the NRE subdivision includes land in tax lots of Section 14 and 15, Township 38 South, Range 9 East, and covers approximately 422 acres. The tax lots in Section 15 comprise approximately 250 acres and include properties along Old Fort Road, Hunter's Ridge Drive, North Ridge Drive, and Thicket Court, as well as several parcels on Scott Valley Road. In addition, tax parcels in Section 14 (14-500, 14-600, 14-700, 14-800, 14-801, and 14-900), described as "North Ridge Estates 3rd Addition," comprise 172.44 acres of the NRE subdivision.

The developed area of the subdivision along Old Fort Road and North Ridge Drive currently includes 23 single-family homes, 8 undeveloped vacant lots, a warehouse, and a memorial park. Oregon DHS (2004) indicated that in 2002 there were 77 residents, including 35 children, in the developed area of the site. East of Old Fort Road are several homes, a five-unit apartment building (the former MRB brig), the Thicket Court residential homes, and additional vacant lots. According to the 2000 US Census, there are 98 residents within one-half mile of NRE. Land to the west, east, and north of the site is zoned for forestry, animal husbandry, and agriculture.

Within the developed area of the subdivision along Old Fort Road and North Ridge Drive, only four homes remain occupied. These include parcels F, P, N, and AQ. The total number of people living full time at these four properties is between 8 and 10. The properties east of Old Fort Road remain occupied.

3.2 Ecology

3.2.1 Terrestrial Animals

According to range maps produced by the US Forest Service and Bureau of Land Management (USDA 2003), terrestrial species with ranges that include the area of NRE include numerous invertebrates, amphibians, reptiles, birds, and mammals.

Range maps were only available for a selected number of invertebrates. Invertebrates with ranges overlapping with the location of NRE include carpenter ant (*Camponotus modoc*), jumping spider (*Metaphidippus aeneolus*), thatch ant (*Formica obscuripes*), and Western yellow jacket (*Vespula pensylvanica*).

Amphibians with ranges overlapping the location of NRE include bullfrog (*Ranta catesbeiana*), Great Basin spadefoot (*Spea intermontana*), long-toed salamander (*Ambystoma macrodoctylum*), Pacific chorus frog (*Pseudacris regilla*), and Western toad (*Bufo boreas*).

Reptiles with ranges overlapping with the location of NRE include common garter snake (*Thamnophis sirtalis*), racer (*Coluber constrictor*), rubber boa (*Charina bottae*), sagebrush lizard (*Sceloporus gracious graciosus*), short-horned lizard (*Phrynosoma douglassii*), western rattlesnake (*Crotalus viridis*), western skink (*Eumeces skiltoniau*), gopher snake (*Pituophis catenifer*), striped whipsnake (*Masticophis taeniatus*), western

fence lizard (*Sceloporus occidentalis*), western pond turtle (*Clemmys marmorata*), and western terrestrial garter snake (*Thamnophis elegans*).

The ranges of over 220 birds and 70 mammals overlap the portion of Klamath County where NRE is located.

3.2.2 Terrestrial Plants

The NRE site exhibits plant species that are dominant in the Great Basin shrub steep ecoregion. Dominant plant species of the shrub steep include cold-temperature species: sagebrushes (*Artemisia*), saltbushes (*Atriplex*), and winterfat (*Ceratoide*). These scrub species are much-branched, non-sprouting, aromatic semibrushes with soft wood and evergreen leaves. Species tied to warmer climates are also found in the Great Basin shrub steep: rabbitbrush (*Chrysothamuns*), blackrush (*Coleogyne*), hopsage (*grayia*), and horsebrush (*Tetradymia*) (WWF 2001).

Because of the NRE site's location in an area of transition between the Great Basin and the Cascade Mountains, plant species at the site also include plants of the southern Cascade forests, such as scattered junipers and ponderosa pines.

3.2.3 Presence of Threatened and Endangered Species

According to the United States Fish and Wildlife Service, there are 41 threatened or endangered animal species and 15 threatened or endangered plant species in the state of Oregon. The Oregon Natural Heritage Information Center (ORNHIC) Institute for Natural Resource (ORNHIC 2004) has indicated that one of the endangered or threatened plants and ten of the endangered or threatened animal species are present in Klamath County:

Shortnose sucker
(*Chasmistes brevirostris*)

Lost River sucker
(*Deltistes luxatus*)

Bull trout
(*Salvelinus confluentus*)

Klamath River population
Bull trout
(*Salvelinus confluentus*)
Columbia River population

Western snowy plover
(*Charadrium alexandrinus nivosus*)

Bald eagle
(*Haliaeetus leucocephalus*)

Northern spotted owl
(*Strix occidentalis caurina*)

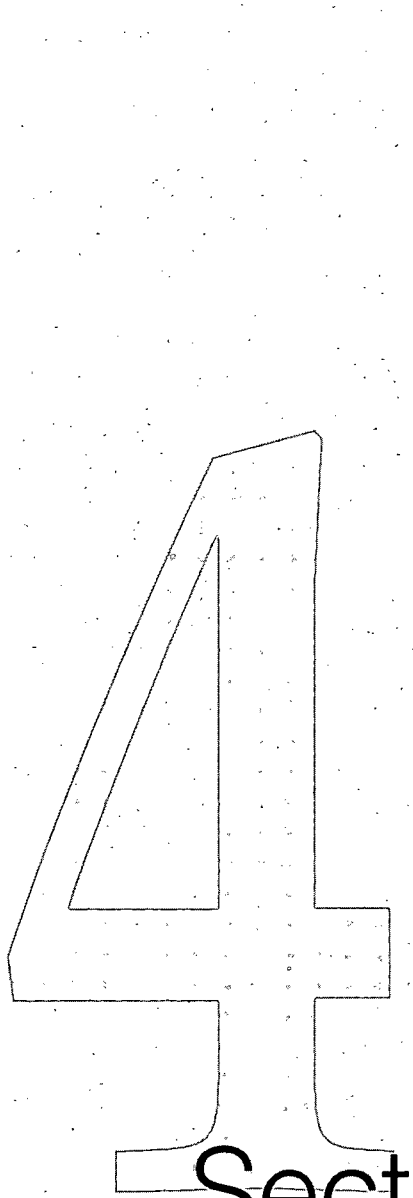
Gray wolf
(*Canis lupus*)

Canada lynx
(*Lynx canadensis*)

Grizzly bear
(*Ursus arctos horribilis*)

Applegate's milk-vetch
(*Astragalus applegatei*)

By comparing the above list with terrestrial range maps (USDA 2003), it would be expected that NRE is within the range of the western snowy plover, bald eagle, northern spotted owl, and the gray wolf. Because of the lack of surface water at NRE, it would be expected that none of the fish species listed above would occur at NRE. Although Klamath County is within the historical range of the Canada lynx and grizzly bear, it is highly unlikely that NRE would represent current habitat for these animals. According to the United States Forest Service, there have been 12 verified lynx sightings in Oregon since 1897, and DNA testing has confirmed the lynx in northern Oregon in 1999. According to the Oregon Department of Fish and Wildlife, the last grizzly bear in Oregon was sighted and shot in 1937. In addition, because Applegate's milk-vetch grows at an elevation of approximately 4,100 feet and does not grow in disturbed soil; it is unlikely this plant species is present at NRE.



Section Four

Section 4
Nature and Extent of Contamination

This section summarizes the nature and extent of ACM and asbestos as well as non-ACM COIs detected at NRE during all previous site investigations described in Section 2.

4.1 ACM and Asbestos

This section describes the nature and extent of ACM and asbestos contamination observed at the NRE site, based on investigation activities described in Section 2.

The types of ACM present at NRE include CAB, VAT, floor tile mastic, roofing material, and insulation (AirCell and MAG) and tar paper used in steam piping. The types of asbestos contained in these materials are chrysotile and amosite. The asbestos content of these materials varies from <1% to 90%, depending on the material (DEQ 2001; E&E 2006). The following table, reproduced from Table 1-1 in Section 1, summarizes the different types and concentration of asbestos observed in each type of building material at the site:

Material Type	Asbestos Type	% Asbestos
CAB	Chrysotile	3 - 25
Roofing Material	Chrysotile	30 - 45
VAT	Chrysotile	<1 - 10
AirCell	Chrysotile	35 - 40
MAG Insulation	Chrysotile	3 - 70
	Amosite	20-55
Tar Paper	Chrysotile	35 - 40

Notes: CAB – cement asbestos board; VAT – vinyl asbestos tile; % - percent; < - less than

ACM is present at NRE in insulation and tar paper associated with buried steam piping, in burial piles created during demolition activities, as surficial debris, and as fibers released during the migration of ACM to the surface or through degradation of surficial ACM by physical forces. ACM in at least one of these forms had been observed on 40 parcels in the NRE subdivision. The following sections summarize the extent of each source of ACM at the site.

4.1.1 ACM in Steam Piping

ACM in the form of AirCell and MAG was used to insulate buried steam piping at the site. The steam pipe is constructed out of corrugated metal, typically 8 inches in diameter, wrapped in black felt paper that contains chrysotile. The inside of the corrugated pipe is lined with a black felt paper that contains chrysotile, with approximately 2 inches of wooly material (amosite and chrysotile) (DEQ 2004).

Based on a geophysical survey and investigations by Kennedy/Jenks (Kennedy/Jenks 2005), 14,666 feet of buried piping exists at the site from 2 to 6 ft bgs. Additional comments by Kennedy/Jenks suggest that 2,463 feet of this piping may actually be potable water service lines. It is estimated that total length of asbestos containing steam pipe remaining at the site is 12,203 linear feet, at depths ranging from 2 to 6 feet bgs; however, due to extensive construction on the site, it is unlikely that all piping has been located. Figure 4-1 illustrates the location of the steam and water piping identified to date across the site.

4.1.2 ACM in Burial Areas

Potential ACM burial areas have been investigated during several events, from 2003 to 2006 as described in Section 2. The findings of these investigations indicate the total volume of buried ACM and associated soil is approximately 39,328 cubic yards (cy). The volume of each known ACM burial area is detailed by parcel ID in Table 4-1. Based on the findings presented in Table 4-1, the average depth of buried ACM is 2.6 ft bgs, but ACM has been observed at depths of up to 10 feet bgs in isolated areas. Figure 4-2 illustrates the locations of identified burial areas across the site; and individual parcel figures can be found in Appendices D, E and F.

4.1.3 ACM as Surficial Debris

Each spring since 2002, ACM has emerged at the NRE site as surficial debris, presumably due to the action of the subsurface freeze-thaw cycle and surface erosion. Removal events in 2002, 2003, 2004, and 2005 have removed a total of 115,114 lbs, or 57.6 tons, of surficial debris 1 inch or greater in diameter and disposed of at the Klamath County Landfill. Debris removed in 2003 and 2004 was described as mostly CAB, with lesser amounts of roofing material. Beginning in 2005, more exposed MAG and AirCell migrated to the surfacethan in previous years. The areas identified as having ACM present at the surface from 2002 and 2005 are shown in Figure 4-3.

In 2006, areas of surficial ACM were again characterized, although no material was removed. The areas containing surficial ACM identified in 2006 are also shown in Figure 4-3. The total area of surficial ACM at the site is estimated to be 54.65 acres located on 37 different parcels. The area of each occurrence of surficial ACM is detailed by parcel ID in Table 4-2. Figure 4-3 illustrates the locations of ACM observed at the surface across the site; and individual parcel figures can be found in Appendices D, E and F.

ACM building debris continues to emerge at the surface each spring by mechanisms discussed in Section 5. The amounts and distribution of various types of ACM observed on the surface has changed over time, but the types of materials generally observed are CAB, VAT, floor tile, roofing material, AirCell, and MAG. The locations where MAG has been observed across the site do not appear to correspond to locations of buried piping and due to the limitations of conventional sampling techniques described in Section 2, the exact locations of buried MAG remaining at the site cannot be effectively identified.

4.1.4 Asbestos in Indoor Air

A total of 27 indoor air samples have been collected at the site, 23 from 22 homes during the 2003 PBS sampling event, and 4 samples from 4 homes during the 2006 Parametrix Team activities. Asbestos structures were observed on 6 of the samples collected by PBS. PCME structures were observed in only two samples. Asbestos concentrations of 0.0001 structures per cubic centimeter (S/cc) were observed for PCME amosite and chrysotile structures. All samples collected during the 2006 Parametrix Team activities were non-detect for asbestos to analytical sensitivities ranging from 0.0000987 S/cc to 0.0000996 S/cc.

4.1.5 Asbestos in Outdoor Air

The section summarizes the results of air samples collected from outdoor ambient air monitoring and ABS sampling conducted at the site. For the purposes of this discussion, outdoor ambient air samples will refer to samples collected during normal or routine activities and do not include samples collected as part of perimeter monitoring during removal actions.

Outdoor Ambient Air Results

A total of 218 outdoor ambient air samples have been collected to assess the asbestos concentrations in outdoor ambient air at the site. These samples were collected during various investigations described in Section 2 and summarized in the following table:

Investigation	Number of Samples Collected	Number Samples with PCME Asbestos Structures	Range of Asbestos Concentrations for PCME Structures (S/cc)	Range of Analytical Sensitivities for PCME Structures (S/cc)
2003 PBS Residential Air Sampling	32	2	Non-detect to 1.00E-04	8.00E-05 to 1.00E-04
2003, 2004 EPA Ambient Air Network	90	9	Non-detect to1.0E-03	1.0E-03 to 2.0E-03
2005 EPA Ambient Air Network	96	19	Non-detect to1.0E-4	9.84E-05 to 3.03E-04
Total	**218**	**30**	-	-

As shown in the above table, the concentrations of PCME asbestos structures detected in outdoor ambient air range from 0.0000984 S/cc to 0.001 S/cc. The types of asbestos observed in these samples include actinolite, amosite, chrysotile, and tremolite. Actinolite PCME structures were detected at concentrations ranging from 0.0000984 S/cc to 0.001 S/cc; amosite PCME structures at concentrations of 0.0000986 S/cc to 0.0001 S/cc; chrysotile PCME structures at concentrations of 0.0000988 S/cc to 0.001 S/cc; and tremolite PCME structures at concentrations of 0.0000999 S/cc to 0.000103 S/cc. Actinolite and tremolite asbestos have not been

identified in the types of ACBM used at the site, these specific detections are attributed to background (ambient) sources. (E&E 2006).

ABS Air Results

Two rounds of activity-based sampling (ABS) have been conducted at the site to determine the concentrations of asbestos structures present in personal breathing zones when soils containing ACM are disturbed to determine current risk. The concentrations of PCME asbestos structures detected in outdoor ABS personal air samples ranged from non-detect to 1.35 S/cc. The types of asbestos observed in these samples include actinolite, amosite, chrysotile, and tremolite. As mentioned above, actinolite and tremolite asbestos have not been identified in the types of ACBM used at the site, and it is believed these specific detections are attributed to background (ambient) sources. The concentrations of each type of asbestos observed are listed below:

- Actinolite - one actinolite PCME structure was detected at a concentration of 0.001 S/cc
- Amosite - PCME structures were detected at concentrations ranging from 0.00192 S/cc to 1.35 S/cc
- Chrysotile - PCME structures were detected at concentrations ranging from 0.001 S/cc to 0.0162 S/cc
- Tremolite - PCME structures were detected at concentrations of 0.0029 S/cc to 0.0031 S/cc.

Further interpretation of these sample results is presented in the BLRA provided in Appendix A.

4.1.6 Asbestos in Indoor Dust

A total of 12 indoor dust samples and 4 field blanks were collected from 4 homes as part of the 2006 investigation activities. One chrysotile fiber with the dimensions 0.9 by 0.006 µm was detected in the sample collected at the property identified as parcel BO. All dust samples were non-detect for PCME asbestos fibers at analytical sensitivities ranging from 60 f/cm^2 to 225 f/cm^2. Further interpretation of these sample results is presented in the BLRA (Appendix A).

4.1.7 Asbestos in Surface Soils

A total of 291 soil samples have been collected from the site between 2005 and 2006 from various investigation activities. Figure 4-4 shows the locations of the samples that were submitted for analysis. The following table summarizes the number of soil samples collected during each investigation:

Investigation	Number of Samples Collected	Number of Samples Analyzed	Number of Samples with Asbestos Fibers Detected
2005 Residential Soil Sampling	16	16	16
2006 Bulk Soil Sampling at Bin C Properties	31	31	0
2006 Activity Based Area Soil Sampling	16	16	1
2006 Bulk Soil Sampling from Random Boreholes	228	25	0
Total	**291**	**60**	17

All samples were analyzed using a site-specific protocol of ACM-contaminated soil based on EPA Method 600/R-93/116 and were analyzed using PLM point count methods. The preparation method specified in the site-specific protocol combined with the use of the point count method allows for a sensitivity that is lower than standard PLM methods. It should be noted that soil samples collected from the 2006 ABS areas and the 2005 EPA START-2 residential sampling activities are more representative of the surface conditions across the site, relative to the amount of ACM observed, than the Bin C bulk soil samples, or the hot spot and baseline soil sampling activities. Results of these investigations are discussed in the following sections.

4.1.7.1 2005 Residential Soil Sampling

In 2005 a total of 16 surface soil samples collected by the START-2 contractor were submitted for PLM analysis to determine if free asbestos fibers were present in surface soil. The results of these samples indicate that both amosite and chrysotile fibers are present in surface soils at the site. The concentration of asbestos observed in these samples range from 0.0002 to 0.05% amosite and 0.0005 to 0.21% chrysotile. The concentrations reported in the analysis of these samples are lower than the typically concentrations that PLM analysis can provided. More sensitive reporting was achieved through an extensive sample preparation technique at the laboratory that involved sifting through each sample and weighing of each portion to quantitate small amounts of ACM.

4.1.7.2 2006 Bulk Soil Sampling at Bin C Properties

As part of the 2006 field investigations, 31 bulk samples were collected from 8 Bin C properties. All samples were non-detect for ACM and free asbestos fibers as analyzed by the site-specific protocol based on EPA 600/R-93/116 PLM Point Count. In one sample, NR-00435, collected at Parcel "AW," an asbestiform amphibole was detected but did not land under the cross-hair during point counting and therefore the results for this was reported as non-detect as required by the analytical method.

4.1.7.3 2006 ABS Area Soil Sampling

Of the 16 samples collected from the 2006 ABS areas, only one had a detectable amount of free asbestos fibers. Sample NR-00532, collected at Parcel "AR," contained free amosite fibers at a concentration of 0.75%. Bulk ACM was observed in 14 of the 16 samples. Chrysotile was the most frequent type of asbestos observed and was detected in 13 of the samples collected. Amosite was observed in all 4 samples collected from Parcel "AR", and actinolite was observed in 1 sample collected from Parcel "P". ACM was found to comprise between 0.01 and 11% by weight of the samples.

4.1.7.4 2006 Bulk Soil Samples from Random Boreholes

Boreholes were advanced during the 2006 investigation activities to determine the vertical and lateral extent of ACM in burial areas and large land units. Of the boreholes advanced, 228 that did not contain bulk ACM based on visual field observations were archived. Of the 228 boreholes, 25 were randomly chosen to be submitted for analysis using the site-specific protocol based on EPA 600/R-93/116 PLM Point Count. All sample results were non-detect for free asbestos fibers. During the laboratory analysis bulk ACM, containing 60% chrysotile, was observed in two of the 25 samples, NR-00402 and NR-00782. The ACM contained in these samples comprise 0.15% of the sample from NR-000402 and less than 0.1% of the sample from NR-00782.

4.1.8 Large Land Units

Based on anecdotal information from workers involved with the demolition of the original buildings at the site, it was believed that a large amount of ACM was buried in the clarifiers at the former WWTP, the former landfill area, and the former swimming pool. Investigations were performed at each of these locations to identify any buried material in these areas. The following sections describe the findings of the investigations completed at each of these areas.

4.1.8.1 Wastewater Treatment Plant

ACM was not observed in 12 borings advanced around the perimeter of the former WWTP or in 2 test pits excavated in two clarifiers at the former WWTP (Figure 4-5). One of the cores from the 12 boreholes was submitted for asbestos analysis; this sample was non-detect for free asbestos fibers and bulk ACM. The only ACM and/or asbestos observed in this area of the site are present at the surface as building debris. Figure 4-5 represents the areas where ACM has been observed at the surface; these areas total approximately 5,000 square feet. Table 4-3 summarizes the field-based visual observations and analytical results for the former WWTP.

4.1.8.2 Landfill

ACM was found buried in a central location at the former landfill. Figure 4-6 illustrates the location of the burial area, which contains approximately 8,890 cubic yards of material (ACM, soil, and other construction debris); this material is buried

below the existing grade to an average depth of 4 feet bgs. The extent of surficial ACM is also shown in Figure 4-6; this area covers approximately 311,893 square feet.

At test pit location NR-00065, CAB and roofing material were observed through the entire excavation to a depth of 3 feet bgs. Excavation could not continue past 3 feet due to the presence of large boulders and concrete blocks.

Samples from two of the 31 boreholes advanced at the former landfill were submitted for asbestos analysis. Both samples were non-detect for free asbestos fibers and bulk ACM. Table 4-4 summarizes the field-based visual observations and analytical results from the former landfill.

4.1.8.3 Swimming Pool

Figure 4-7 illustrates the location where ACM was observed during the 2006 investigation activities. ACM was observed in a limited area at depth in the former swimming pool area. Previous information suggested that the entire footprint of the former pool area contained ACM. Investigation activities conducted in 2006 could not confirm this assertion.

During the investigation activities the following observations were made during the test pit excavation activities:

- Test pit location NR-00077 - Large boulders were encountered 4 feet bgs at test pit location; as a result, this pit could not be excavated further. However, large amounts of CAB and roofing material were observed throughout the entire depth of this test pit.

- Test pit location NR-00079 - The bottom of the swimming pool was encountered at 3 feet bgs with large amounts of CAB and roofing material observed throughout the entire depth of the excavation.

- Test pit location NR-00208 - Construction debris was encountered in this test pit from 0 to 5 feet bgs, but ACM was not observed in the excavation.

Based on the 2006 investigation activities, the area found to contain buried ACM in the location of the former pool is estimated to include approximately 270 cubic yards of material, including ACM, soil, and construction debris, all below the existing grade. ACM at the surface has been observed over an area of approximately 65,240 square feet in and around the area of the former swimming pool. Figure 4-7 shows the areas where surficial ACM has been observed. Table 4-5 summarizes the field-based visual observations and analytical results.

4.2 Non-ACM

Investigations to determine the nature and extent of non-ACM COIs at the site prior to June 2006 are described in Section 2 and were limited to:

- Preliminary soil investigation for metals and small rocket propellant at the rifle range
- Site-wide soil sampling event to determine the content of lead from lead paint in soils at the site
- Soil sampling at former electrical transformer areas to determine if PCBs were present in soil at these areas

Additional investigations were conducted in 2006, and included the collection of surface and subsurface soil samples in 8 areas of the site. These areas are discussed in Section 2.3 and include the:

- former power plant
- former maintenance shop
- former laundry building
- former landfill
- former OTI maintenance shop
- former paint shops
- former service station
- former fire station

This section presents all analytical data available for non-ACM COIs for the site. All analytical results are compared to the following screening level values (SLVs):

- Oregon DEQ Risk-Based Concentrations (RBCs) for TPH
- EPA Region 6 screening levels (SLs) were used as SLVs for VOCs, SVOCs, PCBs, pesticides, and metals

While these values do not determine whether the potential site-specific exposures are of concern, they do give an indication as to whether results are above levels the state and/or EPA would consider protective at most residential sites. A site specific BLRA has been developed for determining if any of the analytes detected at this site are above a level of concern for site-specific exposures. The BLRA is provided in Appendix A.

For compounds without established SLVs no comparisons can be made in the following sections, but detections will be discussed.

Arsenic was detected in the majority of soil samples collected from the former use areas above the EPA Region 6 SLs. In an Oregon DEQ memorandum, the suggested default background soil concentration for arsenic is 7 mg/kg (DEQ Memorandum, 2002b). This value was obtained from the 90th percentile value from Washington (WDOE 1994) and is below the 95th percentile regional soil arsenic level of 10 mg/kg in British Columbia (BCE 1999). Discussions regarding the concentrations of arsenic are compared to both the EPA Region 6 SL and the background soil concentration expected in the area.

4.2.1 Preliminary Rifle Range Soil Investigation

Soil samples collected from the rifle range were analyzed for NBECs and metals. Two metals were detected at concentrations exceeding the SLVs: lead and arsenic. Lead was detected at a maximum concentration of 1,200 mg/kg and arsenic was detected at a maximum concentration of 2.8 mg/kg. The EPA Region 6 SL for these metals in residential soil is 400 mg/kg for lead and 0.39 mg/kg for arsenic. While the maximum arsenic concentration observed is above the SLV for arsenic, the concentration is below the Oregon-defined background level (7 mg/kg).

While the nature and extent of metals contamination at the rifle range has been characterized, there is still a lack of characterization related to the extent of ACM and other COIs at this portion of the site. Additional investigations in this area have not occurred for ACM due to concerns of the potential presence of unexploded ordnances (UXOs) at the site. Additional investigations in this area are currently being planned by the United States Army Corps of Engineers (USACE). Any remedial activities required in this portion of the site for asbestos, ACM, metals, and/or UXOs will not be addressed by EPA; instead these activities will be conducted by the USACE or other DOD entities.

4.2.2 Site-Wide Soil Investigation for Lead

A site-wide investigation into the content of lead in site soils was conducted in 2003 due to concerns that lead-based paint was used on the former buildings at the site. Soil samples were collected from 150 locations throughout the NRE subdivision and screened in the field for lead using an XRF Spectrometer. XRF readings indicated concentrations of lead above the SLV for residential soils (400 mg/kg) in two of the samples, one collected from parcel "P" with a concentration of 444 parts per million (ppm) and one collected from MBK-C with a result of 1,030 ppm. To confirm these findings, these two samples were submitted to a laboratory for further lead analysis using EPA Method 7000B. At the laboratory, lead was detected at concentrations of 320 mg/kg and 1,500 mg/kg in the samples from parcel "P" and MBK-C, respectively. All soils within the footprint of the subdivision containing lead above 400 mg/kg were subsequently removed. The location of these soils was limited to one area on the MBK-C property.

Based on the sampling completed at the site, the nature and extent of lead contamination in soils within the site boundary has been determined and remedial actions have already occurred. Additional investigations to determine the nature and extent of lead contamination in surface soils at the site are not required.

4.2.3 Transformer Site PCBs

Soil samples collected at transformer sites were reportedly screened in the field for PCBs using a Clor-N-Soil screening kit. All samples were less than the detection limit for the screening kit of 50 mg/kg. However, this detection limit is above EPA Region 6 SLs for PCBs. The EPA Region 6 SLs for residential sites are between 0.22 mg/kg and 3.9 mg/kg, depending on the specific Aroclor.

Additional sampling for PCBs was conducted during the 2006 investigation activities, though not at the sample sampling locations as the 2003 investigations. All results indicated PCBs are not present at the site. Further discussion of the 2006 investigation activities appears in the following sections.

Based on the sampling events, the nature and extent of PCBs in soils at the site may not be fully determined. The sampling activities conducted as part of the 2006 actions, did not include collection of samples in area identified with PCB staining that were sampled 2003. As mentioned above, the 2003 sampling investigation used a soil screening kit with a detection limit higher than the SLs for PCBs. Additional efforts should be considered to characterize the areas of PCB staining using an analytical method that can detect PCBs at levels at or below the SLs for PCBs.

4.2.4 Former Power Plant

A total of 24 soil samples were collected from 8 sampling locations within this area of the site. Soil samples collected in this area were analyzed for NWTPH-Gx, NWTPH-Dx, VOCs, SVOCs, PCBs, and/or metals. Analytical results are summarized in Table 4-6 and discussed in this section.

TPH

Gasoline-range petroleum hydrocarbons were detected in surface and subsurface soils collected in the area of the former power plant. Gasoline-range petroleum hydrocarbons were detected in two surface soil samples (PP-06 and PP-07). Surface concentrations range from 17 mg/kg at PP-07 to an estimated value of 41 mg/kg at PP-06. Subsurface detections of gasoline-range petroleum hydrocarbons occurred in two samples collected from the 10 ft bgs sample interval at sampling locations PP-01 and PP-03. Subsurface concentrations range from estimated values of 25 mg/kg at PP-03 to 51 mg/kg at PP-01. As indicated in Table 4-6, all detected concentrations of gasoline-range petroleum hydrocarbons are below the Oregon DEQ RBC of 140 mg/kg for soil at residential sites.

Diesel-range petroleum hydrocarbons were also detected in surface and subsurface soils collected in the area of the former power plant. Diesel-range petroleum hydrocarbons were detected in surface soil samples collected at locations PP-04, PP-05, PP-06, PP-07, and PP-08. Surface concentrations detected in these samples ranged from 16 mg/kg at PP-05 to 150 mg/kg at PP-06. Subsurface detections of diesel-range petroleum hydrocarbons occurred in boring collected from sample locations PP-01, PP-02, PP-03, and PP-08. Most of the subsurface detections occurred in the sample collected from the 10 ft bgs sample interval with the exception of the subsurface observations at PP-08. At this location diesel-range petroleum hydrocarbons were detected in both the 2 ft bgs and 10 ft bgs sample interval. Subsurface concentrations of diesel-range petroleum hydrocarbons ranged from 24 mg/kg at the 10 ft sampling interval from location PP-08 to 220 mg/kg at the 2 ft sampling interval, also from location PP-08. The levels of diesel-range petroleum hydrocarbons observed indicate the most likely source of hydrocarbons at this location is from number 2 diesel and unknown organic compounds. As indicated in

Table 4-6, all detected concentrations of diesel-range petroleum hydrocarbons are below the Oregon DEQ RBC of 3,900 mg/kg for soil at residential sites.

Oil-range petroleum hydrocarbons were detected in surface and subsurface soil samples collected from the power plant area samples. Oil-range petroleum hydrocarbons were detected in surface soil samples from sample locations PP-02, PP-06, PP-07, and PP-08. Surface concentrations detected at these locations ranged from 43 mg/kg at PP-02 to 170 mg/kg at PP-06. Subsurface detections of oil-range petroleum hydrocarbons occurred in borings collected from sample locations PP-01, PP-02, PP-03, PP-05, and PP-08. Subsurface concentrations in the 2 ft bgs sampling interval range from 240 mg/kg at PP-03 to 600 mg/kg at PP-01. Concentrations in the 10 ft bgs sampling interval range from 82 mg/kg at PP-02 to 490 mg/kg at PP-01.The results indicate the detected concentrations of oil-range petroleum hydrocarbons are similar to asphalt, unknown organics, or both. When comparing an asphalt mixture to a SLV it is most appropriate to use the diesel-range RBCs. All detected concentrations are below the Oregon DEQ RBC of 3,900 mg/kg for diesel in soil at residential sites.

Figure 4-8 shows the TPH results, relative to SLVs, from the samples collected across the site. Based on the investigations completed in this area the nature and extent of TPH contamination has been determined in this area and no additional investigation activities are required.

VOCs

Samples for VOCs were collected only from the 10 ft bgs sampling interval for the borings advanced in the area of the former power plant. VOCs were not detected in the samples collected from two of the sample locations: PP-05 and PP-08. VOCs were detected in all other sampling locations in this area. Each of the following compounds was observed in at least one of the subsurface samples collected from the former power plant area:

- Trichlorofluoromethane
- Acetone
- Carbon disulfide
- Cis-1,2-dichloroethene
- 2-Butanone
- Benzene
- Trichloroethene (TCE)
- Methylcyclohexane
- Tetrachloroethene (PCE)
- Bis(2-ethylhexyl)-phthalate
- Ethylbenzene
- o-Xylenes
- m,p-Xylenes
- 1,2,4-Trichlorobenzene

As indicated in Table 4-6, all detected concentrations of VOCs are below the EPA Region 6 SLs for soil at residential sites. Figure 4-9 shows the VOC results, relative to SLVs, from the samples collected across the site.

Additional investigations may be required to determine if the concentrations of VOCs observed in this area of the site are of concern in indoor air. EPA is currently evaluating the usability of the data collected for this purpose during the 2007 investigation. If the data is determined to be usable the nature and extent of VOCs in this area will be able to be determined.

SVOCs

Samples for SVOCs were collected from the surface and 2 ft bgs sampling interval for each of the 8 borings advanced in this area. SVOCs were detected in each sample location. Each of the following SVOCs were observed in at least one of the surface or subsurface samples collected from the power plant area:

- Naphthalene
- 2-Methylnaphthalene
- Fluorene
- Pentachlorophenol
- Phenanthrene
- Anthracene
- Fluoranthene
- Pyrene
- Benzo(a)anthracene
- Chrysene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(a)pyrene
- Dibenzo(a,h)anthracene
- Benzo(g,h,i)perylene

All detected concentrations of SVOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-6). Figure 4-10 shows the SVOC results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of SVOC contamination has been determined in this area and no additional investigation activities are required.

PCBs

Samples for PCBs were collected and analyzed from the surface of each sampling location as well as the 2 ft bgs and 10 ft bgs sampling interval.

No PCBs were detected above the detection limits in the 24 soil samples collected for PCB analysis from the power plant area borings (Table 4-6). All detection limits were below the SLV for Aroclors with established SLs. Figure 4-11 shows the PCB results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of PCBs contamination has been determined in this area and no additional investigation activities are required.

Metals

Samples for metals were collected and analyzed from the surface of each sampling location as well as the 2 ft bgs and 10 ft bgs sampling interval. Each of the following metals was observed in at least one of the samples collected from the power plant area:

- Arsenic
- Barium
- Chromium
- Lead
- Mercury
- Cadmium
- Silver
- Selenium

All detected concentrations of metals are below the EPA Region 6 SLs for soil at residential sites, except for arsenic. Arsenic was detected in all of the soil samples at concentrations ranging from 0.58 mg/kg to 27.2 mg/kg; these are above the EPA Region 6 PRG of 0.39 mg/kg for soil at residential sites (Table 4-6). However, the detected concentration of arsenic in 17 of the samples ranged from 0.58 mg/kg to 5.4 mg/kg; within the range of naturally occurring background concentrations (7 mg/kg) observed at other sites in the Northwest, as described earlier in this section.

Concentrations of arsenic detected in the remaining 7 samples ranged from 10 mg/kg to 27.2 mg/kg. These concentrations were detected from 0 to 2 feet (surface and near surface soils) in borings PP-01 through PP-05, which were collected within the approximate former power plant footprint. Coal is known to contain low levels of metals such as arsenic. Thus, the higher than background concentrations of arsenic in the 7 shallow soil samples could have accumulated as a byproduct of coal combustion during the operation of the power plant. Figure 4-12 shows the metals results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of metals contamination has been determined in this area and no additional investigation activities are required.

Evaluation of this data set in the risk assessment (Appendix A) indicates that the levels of arsenic observed in this area do not pose a potential risk and remedial alternatives will not be required during the FS.

4.2.5 Former Maintenance Shop

A total of 26 soil samples were collected from 9 sampling locations within this area of the site. Soil samples collected in this area were analyzed for NWTPH-Gx,

NWTPH-Dx, VOCs, and/or metals. Analytical results are summarized in Table 4-7 and discussed below.

TPH

Gasoline and diesel-range petroleum hydrocarbons were not detected in any of the surface or subsurface soil samples collected from the former maintenance shop area borings (Table 4-7).

Oil-range petroleum hydrocarbons were detected in 1 of the 26 soil samples collected from the former maintenance shop area borings. The detection occurred at sampling location MS-01 in the sample collected from the surface soils. Oil-range petroleum hydrocarbons were detected at a concentration of 43 mg/kg. The laboratory results indicate that the detected concentration of oil is similar to that found in asphalt. When comparing an asphalt mixture to a SLV it is most appropriate to use the diesel-range RBCs. The detected concentration is below the Oregon DEQ RBC of 3,900 mg/kg for diesel in soil at residential sites.

Figure 4-8 shows the TPH results, relative to SLVs, from the samples collected across the site. Based on the investigations completed in this area the nature and extent of TPH contamination has been determined in this area and no additional investigation activities are required.

VOCs

Samples for VOCs were collected only from the 10 ft bgs sampling interval for the borings advanced in this area of the site. VOCs were detected in all of the 10 ft bgs interval samples, except for the samples collected from locations MS-08 and MS-09. In the other borings advanced in this area, the following VOCs were detected in one or more sample:

- Carbon disulfide
- Cis-1,2-dichloroethene
- Benzene
- 1,2-Dichloroethane (EDC)
- TCE
- Toluene
- PCE
- Chlorobenzene
- Ethylbenzene
- o-Xylenes
- m,p-Xylenes
- 1,2,4-Trichlorobenzene

The detected concentrations of all VOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-7). Figure 4-9 shows the VOC results, relative to SLVs, from the samples collected across the site.

Additional investigations may be required to determine if the concentrations of VOCs observed in this area of the site are of concern in indoor air. EPA is currently evaluating the usability of the data collected for this purpose during the 2007 investigation. If the data is determined to be usable the nature and extent of VOCs in this area will be able to be determined.

Metals

Samples were collected from the surface as well as the 2 ft bgs and 10f ft bgs sampling interval from each sample location, except at MS-05. A surface sample was not collected at MS-05. Each of the following metals was observed in one or more of the samples collected in the former power plant area:

- Arsenic
- Barium
- Chromium
- Lead
- Mercury
- Cadmium
- Silver
- Selenium

All detected concentrations of metals are below the EPA Region 6 SLs for soil at residential sites, except for arsenic. Arsenic was detected in all of the soil samples at concentrations ranging from 0.39 mg/kg to 1.6 mg/kg. The detected concentrations of arsenic are at or above the EPA Region 6 PRG of 0.39 mg/kg for soil at residential sites (Table 4-7); however, all detected levels of arsenic in this portion of the site are within the range of naturally occurring background concentrations (7 mg/kg) observed at other sites in the Northwest, as described earlier in this section. Figure 4-12 shows the metals results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of metals contamination has been determined in this area and no additional investigation activities are required.

4.2.6 Laundry Building

A total of 18 soil samples were collected from 6 sampling locations within this area of the site. Soil samples collected in this area were analyzed for VOCs and/or SVOCs. Analytical results are summarized in Table 4-8 and discussed below.

VOCs

Samples for VOCs were collected only from the 10 ft bgs sampling interval for the borings advanced in the area of the site. VOCs were observed in the samples collected from sampling locations LB-03, LB-04, and LB-05. The following VOCs were observed in one or more samples collected from this area:

- Acetone
- Carbon disulfide
- 2-Butanone
- Chloroform
- 1,1,1-Trichloroethane
- EDC
- TCE
- Toluene
- PCE
- Ethylbenzene
- o-Xylenes
- m,p-Xylene

The detected concentrations of VOCs are below the EPA Region 6 SLs for soil at residential sites, except for EDC and TCE. EDC and TCE were detected at maximum concentrations of 0.34 mg/kg (estimated) and 0.063 mg/kg, respectively, in the soil sample collected at 10 feet bgs from boring LB-05. These concentrations are above the EDC and TCE Region 6 SLs of 0.28 mg/kg and 0.043 mg/kg, respectively, for soil at residential sites (Table 4-8). Figure 4-9 shows the VOC results, relative to SLVs, from the samples collected across the site.

Additional investigations may be required to determine if the concentrations of VOCs observed in this area of the site are of concern in indoor air. EPA is currently evaluating the usability of the data collected for this purpose during the 2007 investigation. If the data is determined to be usable the nature and extent of VOCs in this area will be able to be determined.

SVOCs

Samples for SVOCs were collected from the surface, the 2 ft bgs sampling interval and the 10ft bgs sampling interval for each sampling location in this area. SVOCs were observed in two surface sampling locations: LB-01 and LB-04. Benzo(a)pyrene was observed at an estimated concentration of 0.0019 mg/kg in the surface sample collected from sampling location LB-01. The second surface observation of a SVOC was from sampling location LB-04 where pentachlorophenol was observed at an estimated concentration of 0.0029 mg/kg. Pentachlorophenol was also detected in two subsurface samples: LB-02 from the 10 ft bgs sampling interval at an estimated concentration of 0.0077 mg/kg, and LB-03 from the 2 ft bgs sampling interval at 0.00377 mg/kg. The detected concentrations of all SVOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-8). Figure 4-10 shows the SVOC results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of SVOCs contamination has been determined in this area and no additional investigation activities are required.

4.2.7 Landfill

A total 9 soil samples were collected from 3 sampling locations within this area of the site. Soil samples collected in this area were analyzed for TPH, VOCs, SVOCs, PCBs,

pesticides, and/or metals. Analytical results are summarized in Table 4-9 and discussed below.

TPH

Gasoline and diesel-range petroleum hydrocarbons were not detected above detection limits in surface or subsurface soil samples collected from the former landfill borings (Table 4-9).

Oil-range petroleum hydrocarbons were detected in surface and subsurface samples collected from the former landfill area at the site. Oil-range petroleum hydrocarbons were detected in two surface soil samples (LF-01 and LF-03). Surface concentrations range from 120 mg/kg at LF-01 to 660 mg/kg at LF-03. Subsurface detections of oil-range petroleum hydrocarbons occurred in all three sampling locations from the 2 ft bgs sampling interval. Subsurface concentrations observed ranged from 57 mg/kg at LF-03 to 280 mg/kg at LF-02. The laboratory results indicated that all detected concentrations of oil are similar to asphalt, except for the concentration of oil detected in the soil sample collected from boring LF-03 at 2 feet bgs (57 mg/kg), which is similar to motor oil. There were no detections for oil-range petroleum hydrocarbons in the samples collected at the 10 ft bgs sampling interval.

When comparing an asphalt mixture to a SLV it is most appropriate to use the diesel-range RBCs. All detected concentrations are below the Oregon DEQ RBC of 3,900 mg/kg for diesel in soil at residential sites. The sample results for LB-03 at the 2 ft bgs sampling interval was compared to the DEQ RBC of 3,900 mg/kg for diesel-range petroleum hydrocarbons. As indicated in Table 4-9, the detected concentration of observations of TPH is below the SLV.

Figure 4-8 shows the TPH results, relative to SLVs, from the samples collected across the site. Based on the investigations completed in this area the nature and extent of TPH contamination has been determined in this area and no additional investigation activities are required.

VOCs

Samples for VOCs were collected only from the 10 ft bgs sampling interval for the borings advanced in the area of the site. VOCs were observed only in samples collected from locations LF-01 and LF-03. The only compound observed in the sample collected from sampling location LF-03 was m,p-xylenes at an estimated concentration of 0.00015 mg/kg. The compounds detected in the sample from LF-01 include the following:

- Cis-1,2-dichloroethene
- 1,1,1-Trichloroethane
- EDC
- TCE
- Toluene
- PCE
- Ethylbenzene
- o-Xylenes

- m,p-Xylenes,
- 1,2,4-Trichlorobenzene

The concentrations of all detected VOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-9). Figure 4-9 shows the VOC results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of VOCs contamination has been determined in this area and no additional investigation activities are required.

SVOCs

Samples for SVOCs were collected from the surface, the 2 ft bgs sampling interval and the 10 ft bgs sampling interval from each of the three sampling locations in this area. The following compounds were observed in at least one of the surface and/or subsurface samples collected from this area:

- Naphthalene
- Pentachlorophenol
- Phenanthrene
- Fluoranthene
- Pyrene
- Benzo(a)anthracene
- Chrysene
- Bis(2-ethylhexyl)phthalate
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Benzo(a)pyrene
- Ideno(1,2,3-cd)pyrene
- Dibenz(a,h)anthracene
- Benzo(g,h,i)perylene

The detected concentrations of all SVOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-9). Figure 4-10 shows the SVOC results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of SVOCs contamination has been determined in this area and no additional investigation activities are required.

PCBs

Samples for PCBs were collected and analyzed from the surface of each sampling location as well as the 2 ft bgs and 10 ft bgs sampling interval. No PCBs were detected above the detection limits in the 9 soil samples collected for PCB analysis from the landfill area (Table 4-9). All detection limits were below the SLV for Aroclors with established SLs. Figure 4-11 shows the PCB results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of PCBs contamination has been determined in this area and no additional investigation activities are required.

Pesticides

Pesticides were detected in both surface and subsurface samples collected from sampling locations LF-01 and LF-02. Pesticides detected in surface soil samples include DDE, DDD, and DDT. DDD was observed in one surface soil sample, LF-01, at an estimated concentration of 0.0066 mg/kg. The concentration of DDE observed in the surface samples collected from both LF-01 and LF-02 was 0.045 mg/kg. DDT was observed in surface soils at concentrations ranging from 0.053 to 0.12 mg/kg. Pesticides observed in subsurface samples were DDE and DDT. DDE was observed at concentrations ranging from 0.039 mg/kg to an estimated value of 0.16 mg/kg. DDT was observed in subsurface soils at concentrations ranging from 0.026 to 1.6 mg/kg. All detected concentrations of pesticides are below the EPA Region 6 SLs for soil at residential sites (Table 4-9). Figure 4-13 shows the pesticide results, relative to SLVs, from the samples collected across the site.

It should be noted that the reporting limits for the surface sample collected at LF-03 was above the SLV for the following pesticides: alpha-BH, heptachlor, aldrin, heptachlor epoxide, dieldrin, and toxaphene. However, all results were non-detect for these pesticides.

Based on the investigations completed in this area the nature and extent of pesticides contamination has been determined in this area and no additional investigation activities are required.

Metals

Samples for metals were collected and analyzed from the surface of each sampling location as well as the 2 ft bgs and 10f ft bgs sampling intervals. Each of the following metals was observed in one or more of the surface and subsurface samples collected from this area of the site:

- Arsenic
- Barium
- Chromium
- Lead
- Cadmium
- Mercury
- Selenium
- Silver

The detected concentrations of metals are below the EPA Region 6 SLs for soil at residential sites, except for arsenic. Arsenic was detected in 8 of the 9 soil samples at concentrations below background (7mg/kg) for soils in the Northwest, with concentrations ranging from 0.94 mg/kg to 4.0 mg/kg. The concentration of arsenic in the remaining soil sample was 16.6 mg/kg, which is above the concentration expected as background for the area (7 mg/kg).

The highest concentration of arsenic (16.6 mg/kg), detected in one of the landfill soil samples at 2 feet bgs, may be due to material containing elevated concentrations disposed of in that area of the landfill or could be contributed to from background levels of arsenic. The detected concentrations of arsenic in all of the soil samples are above the EPA Region 6 SL of 0.39 mg/kg for soil at residential sites (Table 4-9). Figure 4-12 shows the metals results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of metals contamination has been determined in this area and no additional investigation activities are required.

4.2.8 Former OTI Maintenance Shop

A total of 9 soil samples were collected from 3 sampling locations within this area of the site. Soil samples collected in this area were analyzed for TPH, VOCs, and/or metals. Analytical results are summarized in Table 4-10 and discussed below.

TPH

Gasoline-range petroleum hydrocarbons were detected only in one surface sample, OTI-02, collected from this area of the site. Gasoline-range petroleum hydrocarbons were detected at a concentration of 26 mg/kg in this sample. Subsurface sample results did not identify gasoline-range petroleum hydrocarbons in any of the subsurface samples. The concentration of gasoline-range petroleum hydrocarbons detected is below the Oregon DEQ RBC of 140 mg/kg for soil at residential sites (Table 4-10).

Diesel-range petroleum hydrocarbons were detected only in one surface sample, OTI-02, collected from this area of the site. Diesel-range petroleum hydrocarbons were detected at a concentration of 29 mg/kg in this sample. Subsurface sample results did not identify diesel-range petroleum hydrocarbons in any of the subsurface samples collected in this area. The detected concentration of diesel-range petroleum hydrocarbons is below the DEQ RBC of 3,900 mg/kg for soil at residential sites (Table 4-10).

Oil-range petroleum hydrocarbons were detected in two surface and one subsurface sample collected in this area of the site. Oil-range petroleum hydrocarbons were observed in the surface samples collected from sampling locations OTI-02 and OTI-03. The concentration of oil-range petroleum hydrocarbons observed in surface soils was 47 mg/kg at OTI-02 and 74 mg/kg at OTI-03. Oil-range petroleum hydrocarbons was detected in only one subsurface sample collected from the 10 ft bgs sample interval at OTI-03, and observed at a concentration of 62 m/kg. The laboratory results indicate that all detected concentrations of hydrocarbons are similar to those in asphalt or asphalt and unknown organics. When comparing an asphalt mixture to a SLV it is most appropriate to use the diesel-range RBCs. All detected concentrations are below the Oregon DEQ RBC of 3,900 mg/kg for diesel in soil at residential sites (Table 4-10).

Figure 4-8 shows the TPH results, relative to SLVs, from the samples collected across the site. Based on the investigations completed in this area the nature and extent of TPH contamination has been determined in this area and no additional investigation activities are required.

VOCs

Samples for VOCs were collected only from the 10 ft bgs sampling interval for the borings advanced in the area of the site. VOCs were only observed in the samples collected from sampling locations OTI-02 and OTI-03. The compounds observed in the sample from OTI-02 were cis-1,2-dichloroethene at 0.036 mg/kg and TCE at an estimated concentration of 0.0015 mg/kg. Both of these sample results are below the SLVs for these compounds. The compounds observed in the sample collected from sampling location OTI-03 included the following:

- Trichlorofluoromethane
- cis-1,2-Dichloroethene
- Chloroform
- 1,1,1-Trichloroethane
- EDC
- TCE
- Toluene
- PCE
- m,p-Xylenes

All detected concentrations of VOCs are below the EPA Region 6 SLs for soil at residential sites, except for EDC and TCE in the sample from OTI-03. EDC and TCE were detected at concentrations of 0.62 mg/kg (estimated) and 0.075 mg/kg, respectively. As indicated in Table 4-10 these values are above the EPA Region 6 SLs for these compounds. The SLV for EDC is 0.35 mg/kg and 0.043 mg/kg for TCE. Figure 4-9 shows the VOC results, relative to SLVs, from the samples collected across the site.

Additional investigations may be required to determine if the concentrations of VOCs observed in this area of the site are of concern in indoor air. EPA is currently evaluating the usability of the data collected for this purpose during the 2007 investigation. If the data is determined to be usable the nature and extent of VOCs in this area will be able to be determined.

Metals

Samples for metals were collected and analyzed from the surface of each sampling location as well as the 2 ft bgs and 10 ft bgs sampling intervals. Each of the following metals was detected in one or more samples collected in this area of the site:

- Barium
- Chromium
- Lead
- Arsenic

- Cadmium
- Selenium
- Mercury

All detected concentrations of metals are below the EPA Region 6 SLs for soil at residential sites, except for arsenic. Arsenic was detected in 8 of the 9 soil samples at concentrations below the background concentration (7 mg/kg) expected for the site but above the SVL (0.39 mg/kg), and range from 0.91 mg/kg to 1.5 mg/kg. Figure 4-12 shows the metals results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of metals contamination has been determined in this area and no additional investigation activities are required.

4.2.9 Former Paint Shops

A total of 14 soil samples collected from 6 sampling locations within this area of the site. Soil samples collected in this area were analyzed for TPH, VOCs, SVOCs, PCBs, pesticides, and/or metals. Analytical results are summarized in Table 4-11 and discussed below.

TPH

Gasoline and diesel-range petroleum hydrocarbons were not detected above detection limits in the 14 soil samples collected from the former paint shops area borings (Table 4-11).

Oil-range petroleum hydrocarbons were detected in only one surface soil sample location, PS-02, at a concentration of 42 mg/kg. All other surface and subsurface samples were non-detect for oil-range petroleum hydrocarbons. The laboratory results indicate that the detected concentration of oil-range petroleum hydrocarbons is similar to asphalt and unknown organics. As mentioned earlier in this section, when comparing an asphalt mixture to a SLV it is most appropriate to use the diesel-range RBCs. All detected concentrations are below the Oregon DEQ RBC of 3,900 mg/kg for diesel-range petroleum hydrocarbons in soil at residential sites.

Figure 4-8 shows the TPH results, relative to SLVs, from the samples collected across the site. Based on the investigations completed in this area the nature and extent of TPH contamination has been determined in this area and no additional investigation activities are required.

VOCs

Samples for VOCs were collected only from the bottom of each borehole advanced in this area; no surface or intermediate depth samples were collected from these sampling locations. The depths of each sample are indicated on Table 4-11. VOCs were detected in 3 of the 6 samples collected in this area; PS-01, PS-02, and PS-03. The following compounds were detected in one or more of these three samples:

- TCE
- Toluene
- Ethylbenzene
- Benzo(a)-anthracene
- 2-Methyl-naphthalene
- o-Xylenes
- m,p-Xylenes

The detected concentrations of all VOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-11). Figure 4-9 shows the VOC results, relative to SLVs, from the samples collected across the site.

Additional investigations may be required to determine if the concentrations of VOCs observed in this area of the site are of concern in indoor air. EPA is currently evaluating the usability of the data collected for this purpose during the 2007 investigation. If the data is determined to be usable the nature and extent of VOCs in this area will be able to be determined.

SVOCs

Both surface and subsurface samples were collected and analyzed for SVOCs for this portion of the site. SVOCs were observed in 3 surface samples collected from sampling locations, PS-02, PS-04, and PS-6. The following SVOCs were observed in one or more of these surface samples:

- Naphthalene
- Pentachlorophenol
- Pyrene
- Chrysene
- Benzo(a)pyrene
- Ideno(1,2,3-cd)pyrene
- Benzo(g,h,i)perylene

SVOCs were observed in subsurface samples collected from sampling locations PS-01 and PS-02. Benzo(g,h,i)perylene was reported in the sample collected from PS-01, at an estimated concentration of 0.012 mg/kg from the 2 ft bgs sample interval. The only SVOC observed in the sample collected from PS-02, was chrysene at an estimated concentration of 0.0036 mg/kg from the 2 ft bgs sample interval. SVOCs were not observed in the surface or subsurface samples collected from the remaining sampling locations: PS-03 and PS-05. All detected concentrations of SVOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-11). Figure 4-10 shows the SVOC results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of SVOCs contamination has been determined in this area and no additional investigation activities are required.

PCBs

Samples for PCBs were collected and analyzed from the surface of each sampling location as well as the 2 ft bgs and 10 ft bgs sampling interval. No PCBs were detected above the detection limits in the 14 soil samples collected for PCB analysis from the paint shop area borings (Table 4-11). All detection limits were below the SLV for Aroclors with established SLs. Figure 4-11 shows the PCB results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of PCBs contamination has been determined in this area and no additional investigation activities are required.

Pesticides

Samples for pesticides were collected and analyzed from the surface of each sampling location as well as the 2 ft bgs and 10f ft bgs sampling interval. No PCBs were detected above the detection limits in the 14 soil samples collected for PCB analysis from the paint shop area borings (Table 4-11). All detection limits were below the SLV for pesticides with established SLs. Figure 4-13 shows the pesticide results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of pesticides contamination has been determined in this area and no additional investigation activities are required.

Metals

Both surface and subsurface samples were collected for metals analysis from each sampling location in this area of the site. The following metals were detected in one or more of the samples collected from this area:

- Arsenic
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Silver

The detected concentrations of metals are below the EPA Region 6 SLs for soil at residential sites except for arsenic. Arsenic was detected in all of the soil samples, at concentrations ranging from 0.52 mg/kg to 1.5 mg/kg, above the EPA Region 6 SL of 0.39 mg/kg for soil at residential sites (Table 4-11) but below the level that is considered background (7 mg/kg) for concentrations observed at other sites in the Northwest, as described in Section 4.2.1. Figure 4-12 shows the metals results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of metals contamination has been determined in this area and no additional investigation activities are required.

4.2.10 Former Service Station

A total of 7 soil samples were collected from 4 sampling locations within this area of the site. Soil samples collected in this area were analyzed for TPH, VOCs, SVOCs, PCBs, pesticides, and/or metals. Analytical results are summarized in Table 4-12 and discussed in this section.

TPH

Gasoline and diesel-range petroleum hydrocarbons were not detected above detection limits in the soil samples collected from the former service station area borings (Table 4-12).

Oil-range petroleum hydrocarbons were detected in two surface and one subsurface sample from the sampling locations in this area of the site. Oil-range petroleum hydrocarbons were observed in surface soil samples collected at sampling locations GS-02 at 81 mg/kg and GS-04 at 150 mg/kg. The only detection of oil-range petroleum hydrocarbons in the subsurface samples in this area was in a sample from the 2 ft bgs sampling interval at a concentration of 78 mg/kg at sampling location GS-01. The laboratory results indicate that all detected concentrations of oil-range petroleum hydrocarbons are similar to those in asphalt. In asphalt mixtures, it is most appropriate to use TPH-diesel RBCs as an SLV. The detected concentrations are below the Oregon DEQ RBC of 3,900 mg/kg for diesel-range petroleum hydrocarbons in soil at residential sites (Table 4-12).

Figure 4-8 shows the TPH results, relative to SLVs, from the samples collected across the site. Based on the investigations completed in this area the nature and extent of TPH contamination has been determined in this area and no additional investigation activities are required.

VOCs

A total of 5 samples were collected and analyzed for VOCs in this area of the site. The depths sampled at each location are indicated in Table 4-12. VOCs were detected in one surface and one subsurface sample. One surface sample was collected for VOCs in this area from sampling location GS-03, and the following compounds were detected:

- TCE
- PCE
- o-Xylenes
- m,p-Xylenes
- 1,2,4-Trichlorobenzene

TCE was the only compound detected in the subsurface samples collected in this area. TCE, at an estimated concentration of 0.00060 mg/kg, was detected only in the 2 ft bgs sampling interval from sampling location GS-02.

All detected concentrations of VOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-12). Figure 4-9 shows the VOC results, relative to SLVs, from the samples collected across the site.

It should be noted that the reporting limits for the sample collected from the 5 ft bgs interval at sampling location GS-02 surface sample was above the SLV for the following compounds: chloroform, EDC, TCE, and PCE.

Additional investigations may be required to determine if the concentrations of VOCs observed in this area of the site are of concern in indoor air. EPA is currently evaluating the usability of the data collected for this purpose during the 2007 investigation. If the data is determined to be usable the nature and extent of VOCs in this area will be able to be determined.

SVOCs

Both surface and subsurface samples were collected and analyzed for SVOCs for this portion of the site. The SVOCs pentachlorophenol, pyrene, and chrysene were observed in at least one surface sample collected from locations GS-01, GS-02, and GS-03. SVOCs were observed in subsurface samples collected from the 2 ft bgs interval in both sampling locations GS-01 and GS-04. The following compounds were observed in one or more of these subsurface samples: 2-methylnaphthalene, pyrene, chrysene, and/or benzo(b)fluoranthene.

All detected concentrations of SVOCs are below the EPA Region 6 SLs for soil at residential sites (Table 4-12). Figure 4-10 shows the SVOC results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of SVOCs contamination has been determined in this area and no additional investigation activities are required.

PCBs

No PCBs were detected above the detection limits in the 7 soil samples collected for PCB analysis from the former service station area borings (Table 4-12). All detection limits were below the SLV for Aroclors with established SLs. Figure 4-11 shows the PCB results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of PCBs contamination has been determined in this area and no additional investigation activities are required.

Pesticides

No pesticides were detected above the detection limits in the 7 soil samples collected from former service station area borings (Table 4-12). All detection limits were below the SLV for pesticides with established SLs. Figure 4-13 shows the pesticide results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of pesticides contamination has been determined in this area and no additional investigation activities are required.

Metals

Both surface and subsurface samples were collected for metals analysis from each sampling location in this area of the site. The following metals were detected in one or more of the samples collected from this area:

- Arsenic
- Barium
- Cadmium
- Chromium
- Lead
- Mercury
- Selenium
- Silver

The detected concentrations of metals are below the EPA Region 6 SLs for soil at residential sites, except for arsenic. Arsenic was detected in all of the soil samples, at concentrations ranging from 0.47 mg/kg to 1.4 mg/kg, above the EPA Region 6 PRG of 0.39 mg/kg for soil at residential sites (Table 4-12). Concentrations of arsenic detected in the soil samples are within the range of naturally occurring background concentrations observed at other sites in the Northwest, as described in Section 4.2.1. Figure 4-12 shows the metals results, relative to SLVs, from the samples collected across the site.

Based on the investigations completed in this area the nature and extent of metals contamination has been determined in this area and no additional investigation activities are required.

4.2.11 Former Fire Station

A total of 8 soil samples were collected from the 5 sampling locations within this area of the site. Soil samples collected in this area were analyzed for TPH. Analytical results are summarized in Table 4-13 and discussed below.

TPH

Gasoline-range petroleum hydrocarbons were not detected above detection limits in the 9 soil samples collected from the former fire station area borings (Table 4-13).

Diesel-range petroleum hydrocarbons were detected in 2 subsurface soil samples collected from the 10 ft bgs sample interval at sampling locations FS-01 and FS-05 in

this area of the site. The concentration reported for the sample collected from FS-05 was 19 mg/kg, and the result for the sample collected from FS-01 was 25 mg/kg. The laboratory report indicates the diesel-range petroleum hydrocarbons observed in these samples is similar to number 2 diesel. The detected concentrations of diesel-range petroleum hydrocarbons in these samples are below the DEQ RBC of 140 mg/kg for soil at residential sites (Table 4-13).

Oil-range petroleum hydrocarbons were detected in one of the subsurface samples collected from the former fire station area borings, at a concentration of 110 mg/kg in the sample from the 2 ft bgs interval at sampling location FS-05. The laboratory results indicate that the detected concentration of oil-range petroleum hydrocarbons is similar to that found in asphalt. In asphalt mixtures, it is most appropriate to use TPH-diesel RBCs for comparison to an SLV. The detected concentration is below the DEQ RBC for diesel in soil at residential sites (Table 4-13).

Figure 4-8 shows the TPH results, relative to SLVs, from the samples collected across the site. Based on the investigations completed in this area the nature and extent of TPH contamination has been determined in this area and no additional investigation activities are required.

4.3 Summary

This section summarizes the nature and extent of ACM, asbestos, and non-ACM COIs observed at the site.

4.3.1 ACM

ACM is present at the site as both dispersed material at the surface scattered across the site and concentrated in burial areas. The findings presented earlier in this section are summarized below:

General Location	Specific Location	Surficial ACM	Subsurface ACM
Large Land Units	WWTP	App. 5,000 ft^2 as building debris	None observed
	Landfill	App. 311,893[2] as building debris	App. 8,890 cy in a centralized location
	Swimming Pool	App. 65,240 ft^2 as building debris	App. 270 cy
Buried Steam Piping	Pipe runs across the site	Included as surficial debris	Est. 12,203 lf of ACM-wrapped pipe
Surface Area of Site	Random dispersal across site	App. 54.65 acres (2,380,637 ft^2) as dispersed debris	N/A
Burial Areas	See Figure 4-2	Most, but not all, of the burial areas are associated with ACM observed at the surface.	Est. 39,328 cy of material, generally shallow depth (2.6 ft deep) but occasionally up to 10-feet deep

Notes: WWTP – waste water treatment plant; ACM – asbestos containing material; cy – cubic yards; ft^2 – square feet; ft – feet; lf – linear feet

Key findings from the ACM investigation included the following:

- Surficial ACM, meaning visually present at the surface and observed by field personnel, is present across 54.65 acres of the site.
- Discrete burial areas, at an average depth of 2.6 feet, but ranging from 4-inches to 10-feet, are present in many areas of the site. The total amount of buried material in discrete locations across the site has been estimated to be approximately 39,328 cy.
- MAG and AirCell is randomly distributed in most general areas containing ACM. The specific location of surficial MAG or AirCell follows no pattern and cannot be predicted.
- Although some of the ACM areas are near still-visible floor slabs, many of the burial areas do not appear to be connected to any specific historic building location. Surficial ACM is present in some, but not all, burial areas and thus, cannot reliably be used as an indicator of burial.
- There are a number of areas where neither buried ACM nor surficial ACM have been observed. Most of the areas where the presence of ACM could not be investigate are areas where access was not granted, or are steeply sloping and heavily vegetated slopes where safe access is impossible.
- As noted in Section 2, even with access to all areas of the site and intensive investigations, it would not be possible to establish that any Bin C areas are completely free of ACM or asbestos fibers.

4.3.2 Asbestos Fibers in Dust, Air, and Soil

Key findings from media sampling and activity-based sampling include the following:

- Asbestos fibers were not detected in indoor dust at homes remaining occupied in the former footprint of the former MRB facility.
- Asbestos fibers have been observed in indoor and outdoor ambient air below levels believed to be of concern
- ABS sampling showed the concentration of asbestos fibers observed in outdoor air is elevated when the soil is disturbed even when surficial ACM has been removed and the soil is non-detect by PLM analysis for free asbestos fibers.
- Free amosite asbestos fibers have only been observed in one soil sample collected at the site at a concentration of 0.75% by PLM analysis indicating that free amosite fibers are not detected at a high frequency in surface soils at the site at sensitivities evaluated.

- ACM has been observed to make up between 0.01 and 11% by weight of soil at the site.

The BLRA (Appendix A) provided information regarding the interpretation of these results for site-specific exposures.

4.3.3 Non-ACM Contamination

Historical uses at the NRE site, including operation of the MRB and the college campus, included activities associated with the potential releases of non-ACM COIs. Several non-ACM COIs were detected during the non-ACM soil investigation completed in June 2006, which indicated that such releases have occurred in the past. The COIs that were detected above SLVs are summarized in the table below:

Analyte/Location	Power Plant	Maintenance Shop	Laundry Building	Landfill	OTI Maintenance Shop	Paint Shops	Service Station	Fire Station	Rifle Range
TPH									
Gasoline-Range	X	X	NC	X	X	X	X	X	NC
Diesel-Range	X	X		X	X	X	X	X	
Motor-Oil Range	X	X		X	X	X	X	X	
VOCs									
EDC	X	X	o	X	o	X	X	NC	NC
TCE	X	X	o	X	o	X	X		
SVOCs	X	NC	X	X	NC	X	X	NC	NC
PCBs	X	NC	NC	X	NC	X	X	NC	NC
Pesticides	NC	NC	NC	X	NC	X	X	NC	NC
Metals									
Arsenic*	o	X	NC	o	X	X	X	NC	X
Lead	X	X	X	X	X	X	X	X	o

Notes: X – all results are below established SLVs for the listed compound; o - at least one sample result is above the established SLV; NC – samples for this parameter were not collected at this location; *- The summary for arsenic concentrations only indicates locations where observed levels are above the SLV and the expected background levels; EDC – 1,2-dichloroethane; TCE – trichloroethene

Based on results from the June 2006 non-ACM soil investigation, additional non-ACM investigation activities, including soil, soil gas, and indoor air sampling, was performed as described in Section 2. EPA is currently evaluating the usability of this data.

5 Section Five

Section 5
Contaminant Fate and Transport

Evaluation of fate and transport of contaminants is based on results of site physical characteristics, source characteristics, and extent of contamination investigations. This section provides a discussion of the important factors involved in fate and transport of asbestos and non-asbestos contamination at the site.

5.1 ACM and Asbestos

This section discusses the potential routes of migration, contaminant persistence, and contaminant migration of ACM and asbestos at the NRE site.

5.1.1 Potential Routes of Migration

ACM and asbestos are present at the NRE site due to the on-site disposal of building debris that contains ACM. The disposal practices believed to be used at this site consisted of burying building debris in proximity to the original location of buildings and transporting the debris to other areas of the site for burial, with potential spillage of the material as it was being transported.

Observations at the site suggest that buried ACM migrates to the surface over time. Asbestos fibers may be released into the atmosphere during the breakdown of the ACM at the surface. Asbestos fibers found in the surface soils can be transported across the site or to indoor areas on clothes, shoes, and pets as a result of contact with the fibers. Fibers may also become airborne and dispersed across the site due to wind and ground disturbance. Surface soil erosion due to surface water movement may transport ACM and asbestos fibers across the site.

5.1.2 Contaminant Persistence

The source of asbestos at the site is ACM present as CAB, VAT, roofing material, and steam pipe insulation (MAG and AirCell). Because of the physical properties of asbestos, especially when included in a building material matrix, it is resistant to heat, cold, and weathering. Asbestos is an inert mineral; once released from ACM, it does not break down chemically into other minerals, only into smaller fibers. However, these smaller fibers can persist for an indefinite period of time. Therefore, without physical removal of ACM, asbestos will persist at the site.

5.1.3 Contaminant Migration

The ACM was brought to the site in the form of building materials used to construct nearly 80 buildings in 1944. Over the last 60 years, the buildings were demolished and the ACM was left on-site. Most of the ACM at the site is buried. The depth of burial varies throughout the site from 0 feet to 12 feet bgs. Most of the ACM at the site was non-friable at the time of construction. However, the ACM may become friable due to a number of processes and actions at the site. These include:

- Above-ground weathering of the ACM binders, resulting in the release of asbestos fibers.

- Fracturing and pulverizing of ACM binders, resulting in the release of asbestos fibers during building demolition, bulldozing, and burial.

- Fracturing, degradation or destruction of the ACM binders when burned. Cement binders would have been degraded and fractured when burned; organic binders contained in roofing, tar paper, tile flooring, and mastic would have been destroyed when burned.

- Below-ground chemical and physical weathering of the buried ACM binders. Chemical weathering could result from exposure to organic acids and enzymes. Physical weathering could result from fracturing due to freezing and thawing, root penetration, and digging or chewing by animals.

There are a number of processes that result in the movement of ACM and asbestos fibers found below and at the ground surface. These include the following:

- Migration to the ground surface. It has been observed that ACM pieces migrate to the ground surface over time. Areas cleared of ACM during one summer were found to have visible amounts of ACM at the ground surface the following summer. This upward migration is considered to be driven primarily by freeze/thaw cycles. Given weather and soil conditions at the site, the specific mechanism that causes the movement is likely to be "frost jacking." This natural process has been researched and is well understood (Anderson 1988). Frost jacking of buried items occurs in moist silty soils exposed to repeated freeze/thaw cycles. As the soil freezes, ice lenses form and the soil heaves up vertically. Depending on the rate of downward movement of the freezing front and the availability of soil moisture, frost heave can lift the soil several inches in a single freezing cycle Buried items are lifted up by the frost heaving soil during the freezing part of the cycle. As the soil thaws from the ground surface downward, the ice lenses in the soil melt and the soil settles down and around the lifted item, so that it cannot settle back to its original position. This process of lifting buried items occurs with every freeze/thaw cycle. The depth of ground freezing is reported to be no greater than 24 inches below the ground surface in the Klamath Falls area (Oregon Codes 2003) and is highly dependent on soil type, moisture, ground cover, and exposure to sunlight. Frost jacking is likely not a mechanism that transports buried ACM to the ground surface if the ACM is buried at a depth greater than 24 inches. Freeze/thaw cycles would be expected to be more frequent in the top 12 inches than at greater depths, causing a higher rate of frost jacking near the ground surface than at greater depths.

- Erosion of surficial soil. Erosion of surface soils by wind and water can cause buried ACM and asbestos fibers to be exposed at the ground surface, as well as result in transport of surface ACM and asbestos fibers. Erosion rates will be higher

in areas with steep slopes, in areas without vegetative cover, and in areas of surface water flow.

- Transport to the ground surface by burrowing animals. Burrowing animals can transport buried ACM and asbestos fibers to the ground surface while removing soil for tunnels and dens. Excavated soil containing ACM and asbestos fibers have been observed spread on the ground surface near the openings to these tunnels.

- Mechanical wedging and jacking by plant roots. Soil containing ACM and asbestos fibers can be moved by root growth. Large pieces of ACM can be fractured as root growth expands into cracks in the ACM. Root growth near the ground surface may wedge and lift the lighter and larger pieces of ACM, driving them upwards toward the surface.

- Wind transport. Asbestos fibers in the surface soil are released from weathered ACM and may be transported by wind. The average half-life and lifetime for asbestos fibers in the atmosphere is estimated to be about 3.5 to 10 days and 5 to 15 days, respectively (Balkanski et al. 1993; Atkinson 1995). Asbestos fibers could be re-entrained into the atmosphere if soils are disturbed by man-made or natural activities (Air Resource Board [ARB] 1986).

- Soil disturbing activities. Asbestos fibers in the surface soils can be transported by activities related to gardening, landscape improvement or maintenance, recreation, or any other activity that disturbs the ground surface.

- Site development. The soils at a site are typically disturbed during construction of buried utilities, roadways, building foundations, and landscaping. Transport of shallow soils for these purposes can cause buried ACM and asbestos fibers to be exposed at the ground surface.

In summary, the migration of ACM and asbestos across the site can be caused either by anthropogenic activities or naturally occurring actions. The following list summarizes the activities influencing migration of ACM and asbestos at the site and indicated whether the activities are related to human activities or naturally occurring actions:

Human Based Activity	Naturally Occurring Actions
Soil disturbing activities: gardening, landscaping, recreation	Migration to the ground surface through "frost jacking"
Site development	Wind and water erosion of surface soils
	Mechanical wedging and jacking by plant roots
	Wind transport
	Burrowing animals

5.2 Non-ACM

The fate and transport of non-ACM contaminants specific to the site is discussed in this section.

5.2.1 Potential Release and Routes of Migration

Non-ACM volatile organic compounds (VOCs) are present at the site due to past on-site releases of dry cleaning solvents and solvents used for parts cleaning and/or degreasers in the vicinity of the former power plant, maintenance shop, laundry building, OTI maintenance shop, paint shops, and service station. The disposal practices used in these areas may have consisted of dumping the solvents onto the ground and possible storage of leaking solvent containers in the areas of concern.

VOC migration can result from volatilization of contaminants contained in soil and groundwater. Groundwater flow and fluctuation is typically the primary means by which contaminants migrate in the subsurface. However, groundwater is well below the contamination areas and, thus, is not a factor at the site. VOCs can partition to soil gas from contaminated soils via diffusion processes in the vadose zone. The soil gas can then migrate due to barometric pumping. Contaminant vapors may be found in outdoor and indoor settings. Contaminants found in the surface soils can be transported across the site or indoors on clothes, shoes, and pets as a result of contact with the contaminants. Surface soil erosion due to surface water movement may transport contaminants across the site.

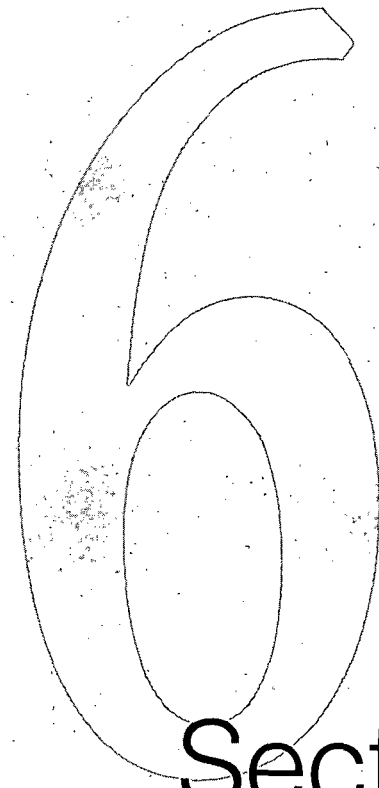
Contamination in the subsurface at the site is transported vertically by gravity and laterally by following preferential pathways in soil. Since groundwater is not a factor at the site, the magnitude of the vertical and lateral extent of contamination will be based primarily on the volume of the releases in the areas of concern.

5.2.2 Contaminant Persistence

The source of VOCs in the areas of concern at the site is solvents released during previous operations. Other than small quantities of household chemicals used and stored by area residents, there are no significant sources of VOC solvents remaining at the NRE site. VOCs typically volatilize rapidly when exposed to air. VOCs found in a subsurface setting may degrade due to abiotic and biotic processes.

5.2.3 Contaminant Migration

VOCs in the subsurface can migrate to the surface in soil gas. The rate of migration of VOCs to the subsurface at the site is influenced by the soil type and depth and magnitude of contamination. Results from the June 2006 non-ACM soil investigation indicate that detected VOCs were slightly above EPA Region 6 SLs, and that contaminants appear to be between 5 and 10 feet below ground surface (bgs) in the areas of concern. Atmospheric pressure can also affect the migration of soil gas to the surface. As atmospheric pressure rises, the rate of soil gas rising to the surface decreases and as the pressure lowers, soil gas rises at a faster rate.



Section Six

Section 6
Summary and Conclusions

6.1 Summary

6.1.1 ACM and Asbestos

This section summarizes the findings of previous investigations and summarizes the findings of the human health risk assessment related to ACM and asbestos at the site.

Investigation Findings and Observations

Due to former demolition practices at the site, ACM was scattered and buried throughout the site. The ACM used in construction of the MRB included CAB used on exterior walls as siding and on interior walls as "wainscoting," asphalt-asbestos roofing material, VAT, floor tile mastic, and steam pipe insulation.

The amount of ACM used during the construction of the MRB has been estimated to be 1,522 tons. During EPA and/or Oregon DEQ actions in 2002, 2003, 2004, and 2005, 115,114 lbs, or 57.6 tons, of surficial ACM debris were removed from the site. The amount of ACM remaining at the site is estimated to be approximately 1,465 tons, or 96% of the original quantity used in construction of the barracks (Kennedy/Jenks 2005).

ACM is present at the site as both dispersed material scattered across many areas of the site and concentrated portions located at specific areas (Figure 6-1). The table below summarizes the findings as presented earlier.

General Location	Specific Location	Subsurface ACM	Surficial ACM
Large Land Units	WWTP	Investigated and none found	App. 5,000 ft^2 as building debris
	Landfill	App. 8,890 cy of material at one location in landfill	App. 311,893 ft^2 as building debris
	Swimming Pool	App. 270 cy of material at one location in the former pool	App. 65,240 ft^2 as building debris
Buried Steam Piping	Pipe runs across the site	Est. 12,203 lf of ACM-wrapped pipe	Noted below for general surface debris
General Ground Surface Area of Site	Random dispersal across site	N/A	App. 54.65 acres (2,380,637 ft^2) as dispersed debris
Burial Areas	48 discrete areas identified in 2006 investigation	Est. 39,328 cy of material, generally shallow depth (2.6 ft deep) but occasionally up to 10-feet deep	Most, but not all, of the burial areas are associated with ACM observed at the surface.

Most of the burial areas appear to be the result of localized dumping. This is supported by the observation that many of the burial areas do not appear to be connected to any specific historic building location. Surficial ACM is present at some, but not all, burial areas and thus, cannot reliably be used as an indicator of burial. As can be seen the distribution of MAG and AirCell follows no pattern and cannot accurately be predicted.

It has been observed that even when surficial ACM is removed it reappears at the surface. Mechanisms that could be causing the re-appearance of previously buried ACM include migration to the ground surface as a result of frost jacking, transport to the ground surface by burrowing animals, mechanical wedging and jacking by plant roots, erosion of surficial soil, human activities (e.g., recreational activities, gardening/yard work and site development).

Once ACM is exposed at the surface, ACM may be subjected to the following processes that can result in the release of free asbestos fibers to soil and/or outdoor air:

- Above-ground weathering of the ACM binders
- Fracturing and pulverizing of ACM binders during building demolition, bulldozing, burial, or burning
- Below-ground chemical and physical weathering of the buried ACM binders

Because of the physical properties of asbestos, especially when included in a building material matrix, it is resistant to heat, cold, and weathering. Once released from ACM, asbestos does not break down chemically into other minerals, only into smaller fibers. However, these smaller fibers can persist for an indefinite period of time. Therefore, without physical removal of ACM or eliminating weathering of ACM, asbestos will persist at the site.

Risk Assessment Summary

The BLRA is presented in Appendix A. The following summarizes the findings of the BLRA related to human exposures for current and future residential land uses. As additional land uses are evaluated and an ecological exposure assessment is completed, conclusions regarding the risk assessment will be expanded in future versions of the RI report.

Current or future residents at NRE may be exposed to asbestos in air by three main pathways:

- Inhalation of fibers released during active soil disturbance activities
- Inhalation of fibers in indoor air
- Inhalation of fibers in outdoor (ambient) air

Risks to residents from indoor air and ambient air appear to be low under current site conditions. Likewise, risks from soil disturbances under current site conditions are generally low, except in cases where friable asbestos (e.g., MAG insulation) is present. This relatively low level of risk under current site conditions is likely due to the fact that much of the ACM in soil has not yet emerged at the surface, and most ACM that is at the surface has not yet broken down to release free fibers into soil. Risks from direct handling of ACM can not be quantified, but this could be a pathway of concern in some circumstances.

Risks to excavation/construction workers under current site conditions can not be evaluated quantitatively with the data that are presently available, but it is considered that this type of activity could be of concern in some cases, especially where friable asbestos is present in the subsurface soil.

In the future, it is expected that risk levels from asbestos will increase because of continuing transport of ACM from the subsurface to surface soil, and continuing breakdown of ACM at the surface to yield free asbestos fibers in soil. The time course of future increases in free asbestos levels in surface soil is not known, but is likely to require many years. Screening level calculations suggest the ultimate magnitude of the increase in free fibers (and hence in risk) is likely to be on the order of 100-1000 fold. If so, then future risks for all of the three exposure pathways are likely to approach or exceed the level of 1E-04 that EPA considers to be the maximum excess risk that is acceptable. In particular, the soil disturbance pathway would be of special concern, with predicted future risks ranging into the 1E-03 to 1E-02 range.

It is important to emphasize that these quantitative estimates of risk are uncertain due to a number of factors, including uncertainty in measured asbestos levels in air and soil under current site conditions, uncertainty in future exposure levels, and uncertainties in the best cancer risk model to use. However, these uncertainties do not substantially alter the key conclusions that risks are likely to be below EPA's usual level of concern (1E-06 to 1E-04) under current site conditions except when MAG or other readily friable ACM is present, and that risks are likely to be much higher in the future if no steps are taken to prevent future migration and breakdown of ACM and release of fibers into surface soil.

As detailed in the BLRA (Appendix A), methods for the measurement of the amount of free asbestos fibers that is present in soil have not been well developed. Two techniques have been used at this site: polarized light microscopy (PLM) and soil elutriation. PLM is a semi-quantitative method that yields results expressed in units of area fraction (often interpreted as if it were mass fraction). In general, values lower than about 1% are highly uncertain, and it is expected that application of this technique to soils with relatively low concentrations of free asbestos fibers is more likely to underestimate than overestimate the true concentration.

6.1.2 Non-ACM

This section summaries the findings of previous investigations and summarizes the findings of the human health risk assessment related to ACM and asbestos at the site.

Investigation Findings and Observations

Historical uses at the NRE site included activities associated with the release of non-ACM COIs. Investigations of non-ACM COIs at the site prior to June 2006 were limited to: a preliminary soil investigation for lead and other metals and small rocket propellant at the rifle range; a soil investigation for lead and arsenic throughout the site because of possible lead-based paint used on former facility buildings and the possible use of arsenic as a pesticide; and, a soil investigation for polychlorinated biphenyls (PCBs) in electrical transformer areas. Non-ACM volatile organic compounds (VOCs) are present at the site due to past on-site releases of dry cleaning solvents and solvents used for parts cleaning and/or degreasers in the vicinity of the former power plant, maintenance shop, laundry building, OTI maintenance shop, paint shops, and service station.

The UST known to exist in the area of the former service station will require decommissioning in compliance with DEQ regulations.

Risk Assessment Summary

The BLRA is presented in Appendix A. The following summarizes the findings of the BLRA related to human exposures for current and future residential land uses. As additional land uses are evaluated and an ecological exposure assessment is completed, conclusions regarding the risk assessment will be expanded in future versions of the RI report.

Risks from non-asbestos chemicals to current and future residents and workers at NRE appear to be below a level of concern except for potential intrusion of VOCs from soil into indoor air of homes. Based on a mathematical model to predict concentrations in indoor air based on concentration values measured in soil, risks from 1,2-dichloroethane, trichloroethylene, and chloroform could be of potential concern in several locations (gas station, landfill, laundry, MRB maintenance shop, OTI maintenance shop, power plant). Except for one location (the location of the former laundry), none of these areas presently have buildings located above the contaminated soil. Thus, these risk estimates apply to previous (in the case of the laundry building) and hypothetical future residents of buildings constructed above the area of contamination. Because the risk calculations are based on predicted rather than measured indoor air concentrations, confidence in the predictions is medium to low. EPA is presently evaluating whether additional collection of data is necessary to further evaluate this pathway and improve the accuracy of the risk estimates.

Quantitative evaluation of the risks to humans from environmental contamination is frequently limited by uncertainty regarding a number of key data items, including concentration levels in the environment, the true level of human contact with contaminated media, and the true dose-response curves for non-cancer and cancer

effects in humans. This uncertainty is usually addressed by making assumptions or estimates for uncertain parameters based on whatever limited data are available. Because of these assumptions and estimates, the results of risk calculations are themselves uncertain, and it is important for risk managers and the public to keep this in mind when interpreting the results of a risk assessment. Additional details regarding uncertainties related to the non-asbestos risk assessment can be found in the BLRA (Appendix A).

6.2 Conclusions

Based on the information currently available and presented in this RI the following conclusions have been drawn regarding the site:

- Current site conditions are such that friable amosite and chrysotile containing ACM, MAG and AirCell, presents a current risk to residents when soil containing this type of ACM is disturbed by routine outdoor activities. Given the current risk and the wide spread distribution of MAG and AirCell at the site, remedial actions are required at the site to mitigate current exposures. The FS will further evaluate the appropriate remedial actions for the site to meet this goal.

- Due to the potential for future increased risk to residents at the site from ACM/asbestos from ACM that is yet to breakdown, remedial actions should also include alternatives that reduce future exposures to residents and/or can prevent further emergence of ACM to the surface that results in weathering causing the release of asbestos fibers to site soils.

- Non-ACM COI that exceeded SLs include: arsenic, lead, EDC and TCE. Based on the risk assessment, levels of lead and arsenic currently at the site do not pose a risk to human health and do not require remediation. Conclusions regarding risk related to EDC, TCE, and other potential VOCs identified during soil gas, indoor/outdoor air sampling are pending the evaluation of soil gas results collected in 2007.

Additional information or actions may also be required to complete the FS process for this site and include:

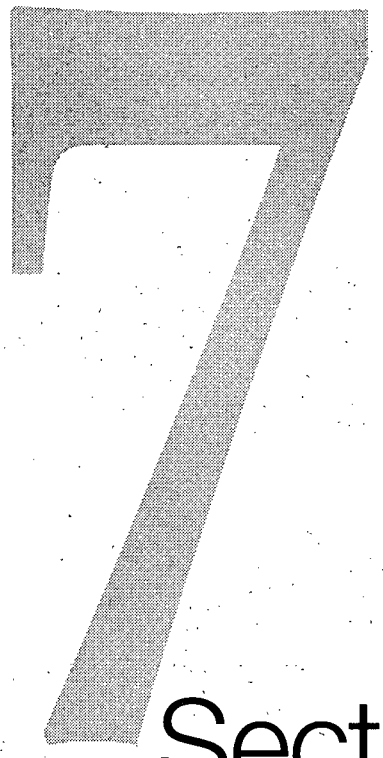
- Decommissioning of the UST identified in the area of the former service station.

- Investigation activities should be completed at the former rifle range. The extent of asbestos contamination in this area has not been investigated due the potential presence of UXOs. The area should be investigated for UXOs followed by investigations to determine the nature and extent of ACM in this area. EPA is currently planning for investigations to be completed in this area by the United States Army Corps of Engineers.

- Additional non-ACM investigation activities, including soil, soil gas, and indoor air sampling, may be required in the areas of the former power plant, maintenance shop, laundry building, OTI maintenance shop, paint shops, and service station if

EPA determines the samples collected in 2007 are not usable. The objective of any additional the soil, soil gas, and indoor air sampling would be to delineate the nature and extent of VOCs in those areas of concern (OTI maintenance shop and laundry building,) so that sufficient information is obtained to perform a risk assessment for the areas and support the FS.

As additional information become available during the public review and comment period, other investigation needs may be required.



Section Seven

Section 7
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Figures

Legend

- Site Boundary
- Parcels
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

N

0 200 400 600 800

Feet

1 inch equals 450 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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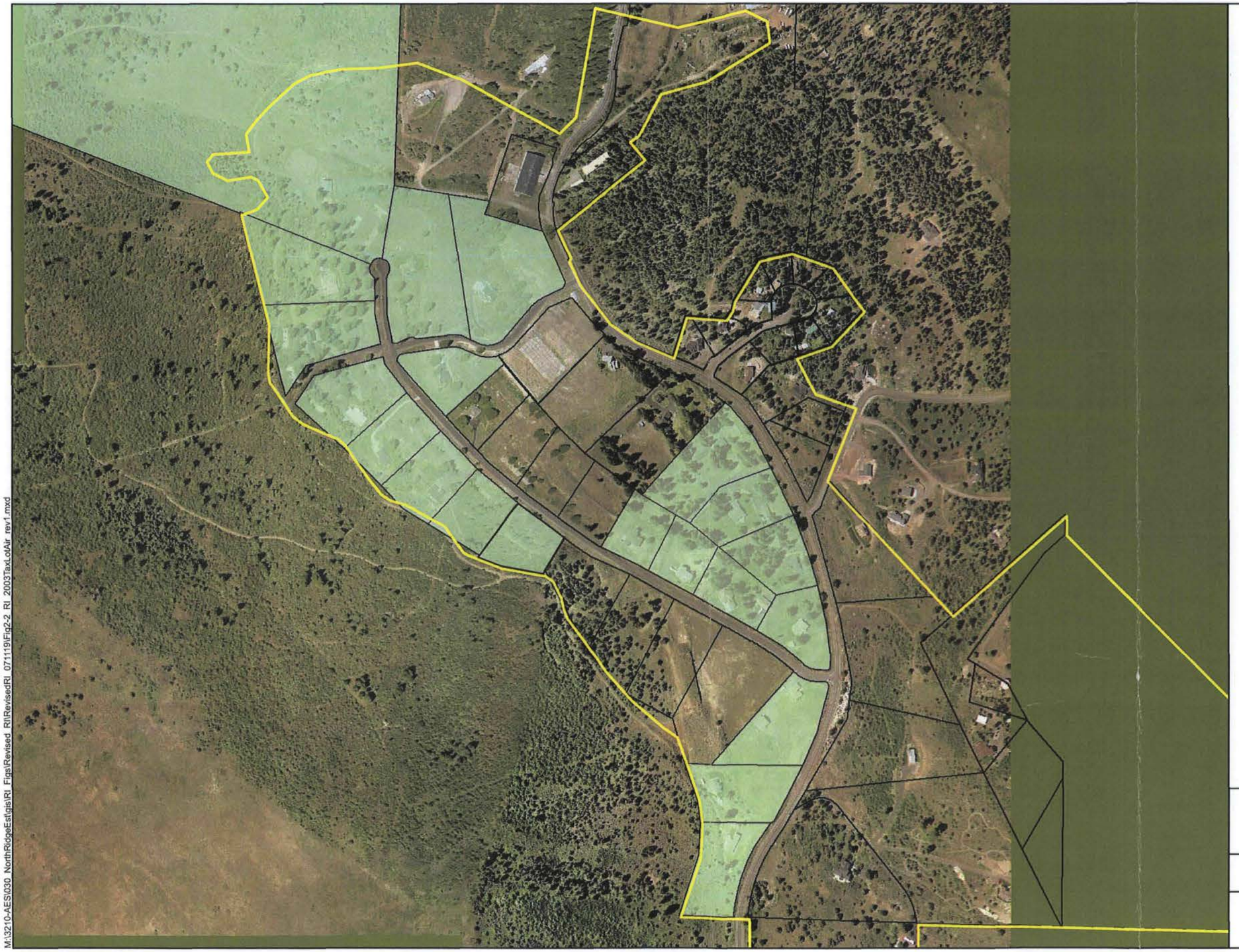
Buried Piping

Figure 2-1

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-1_RI_BuriedPiping_rev1.mxd



Legend

- Site Boundary
- Parcels
- 2003 Residential Air Sampling Locations

N

0 200 400 600 800

Feet

1 inch equals 450 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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2003 Tax Lot Air Sampling Locations

Figure 2-2

CDM

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Legend

- Site Boundary
- Parcels

2005 EPA START-2

- Ambient Air Sampling Locations

N

0 200 400 600 800

Feet

1 inch equals 450 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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EPA START-2 Ambient Air Sampling Locations

Figure 2-3

CDM

Legend

- Parcels
- Parcel MBK-C
- Lead Contaminated Soil Removal Area

N

0 25 50 75 100
Feet

1 inch equals 75 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon
South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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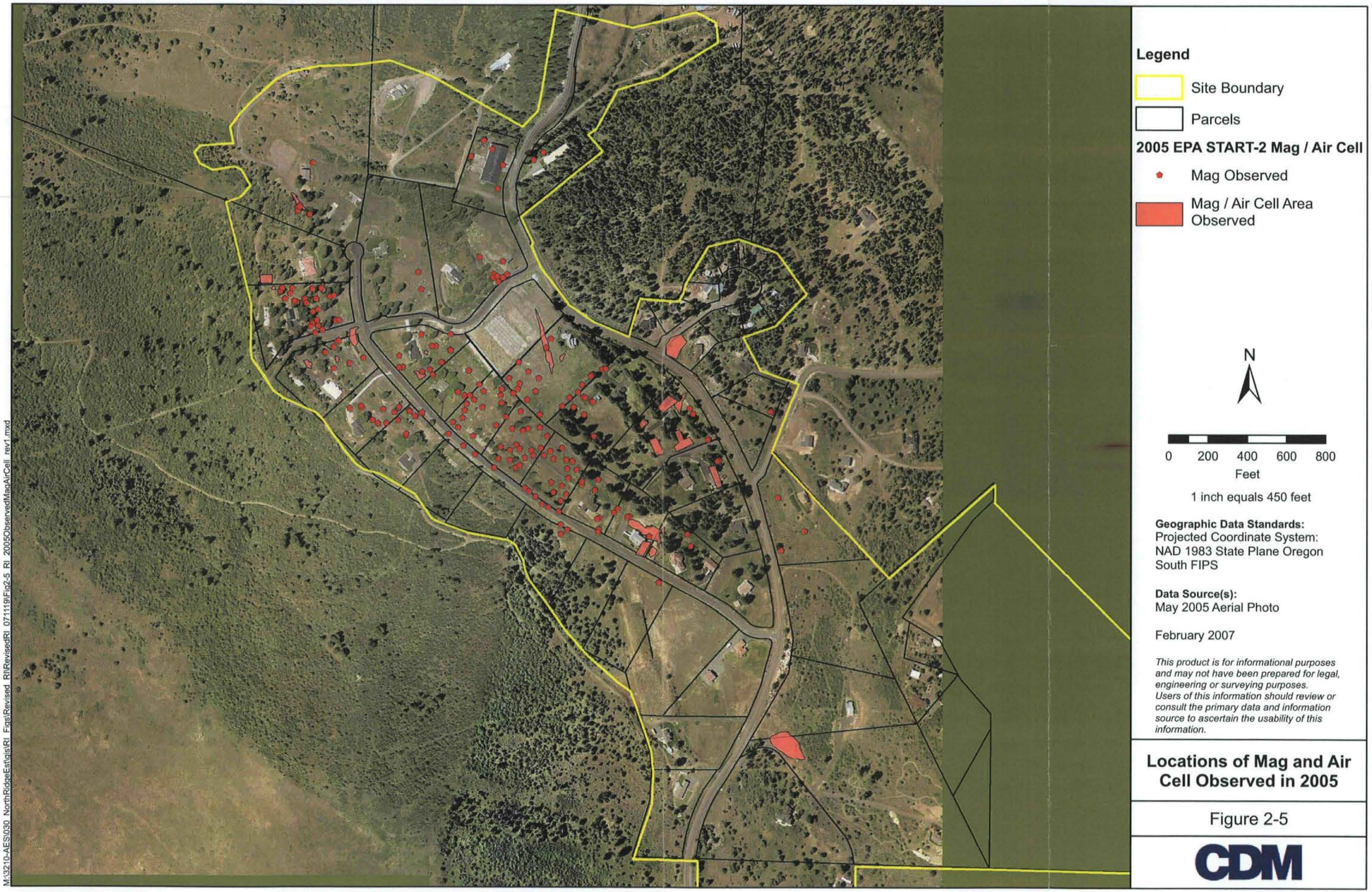
Lead Contaminated Soil Removal Area

Figure 2-4

CDM


Legend
Site Boundary
Parcels
2005 EPA START-2 Mag / Air Cell
Mag Observed
Mag / Air Cell Area Observed
N
0 200 400 600 800
Feet
1 inch equals 450 feet
Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS
Data Source(s):
May 2005 Aerial Photo
February 2007
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Locations of Mag and Air Cell Observed in 2005
Figure 2-5
CDM
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Legend

- Borehole Locations
- Test Pit Locations

N

0 25 50 75
Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon
South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Wastewater Treatment Plant Test Pit and Borehole Locations

Figure 2-6

CDM

Legend

- Borehole Locations
- Test Pit Locations

N

0 50 100 150 200
Feet

1 inch equals 125 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon
South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Landfill Test Pits and Borehole Locations

Figure 2-7

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-7_RI_Landfill_testpits_DPTs_rev2.mxd

Legend

- Borehole Locations
- Test Pit Locations

N

0 25 50 75

Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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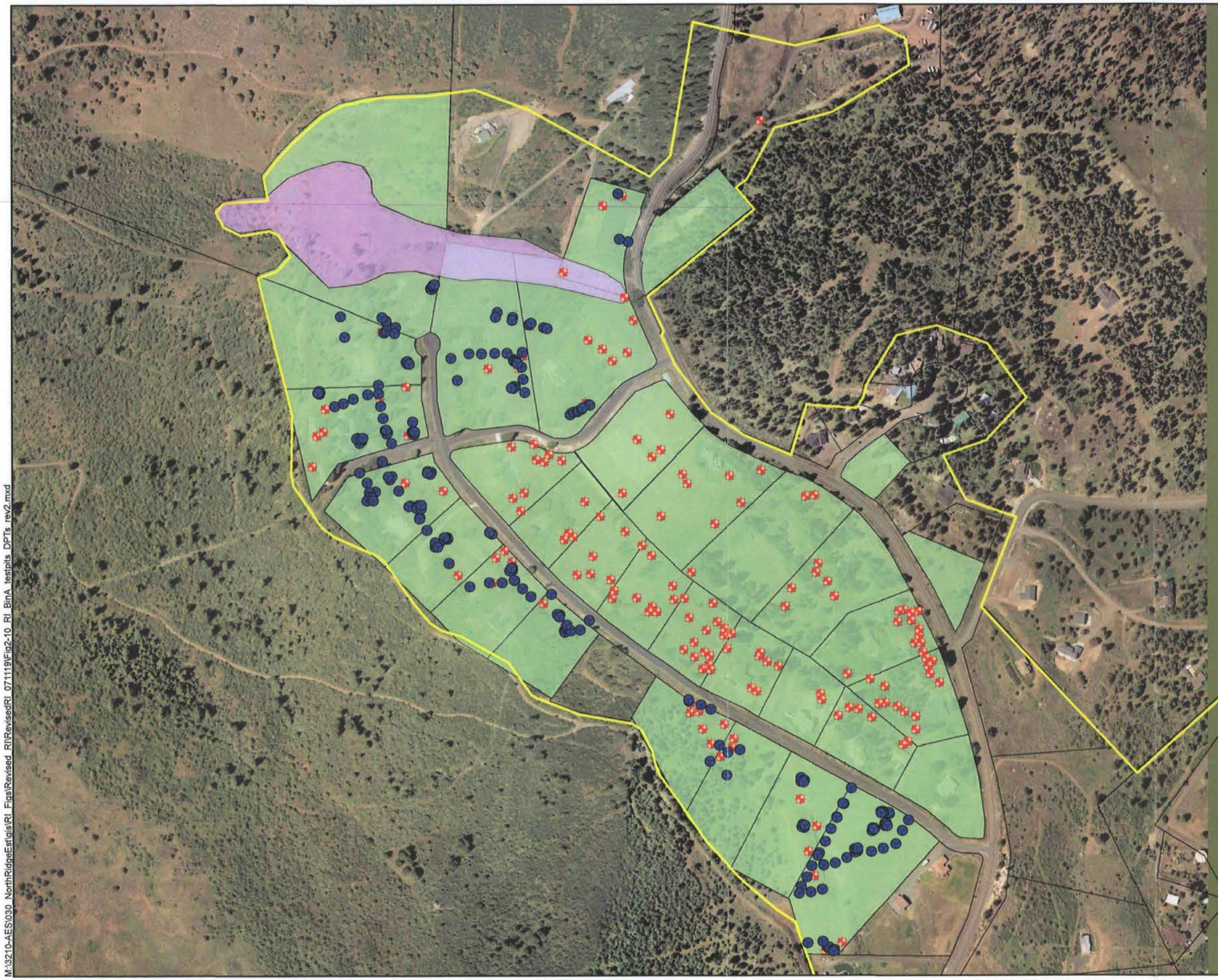
Swimming Pool Test Pit and Borehole Locations

Figure 2-8

CDM

M:\321GAES\030_NorthRidge\Exhibits\RI_FinalRevised_RIRevisedRI_071119\Fig2-8_RI_SwimmingPool_testpits_DPTs_rev1.mxd



Legend

- Site Boundary
- Borehole Locations
- Test Pit Locations
- Bin A - 32 properties
- Bin B - Large Land Units

N

0 200 400 600 800

Feet

1 inch equals 375 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Bin A Properties Test Pit and Borehole Locations

Figure 2-10

CDM

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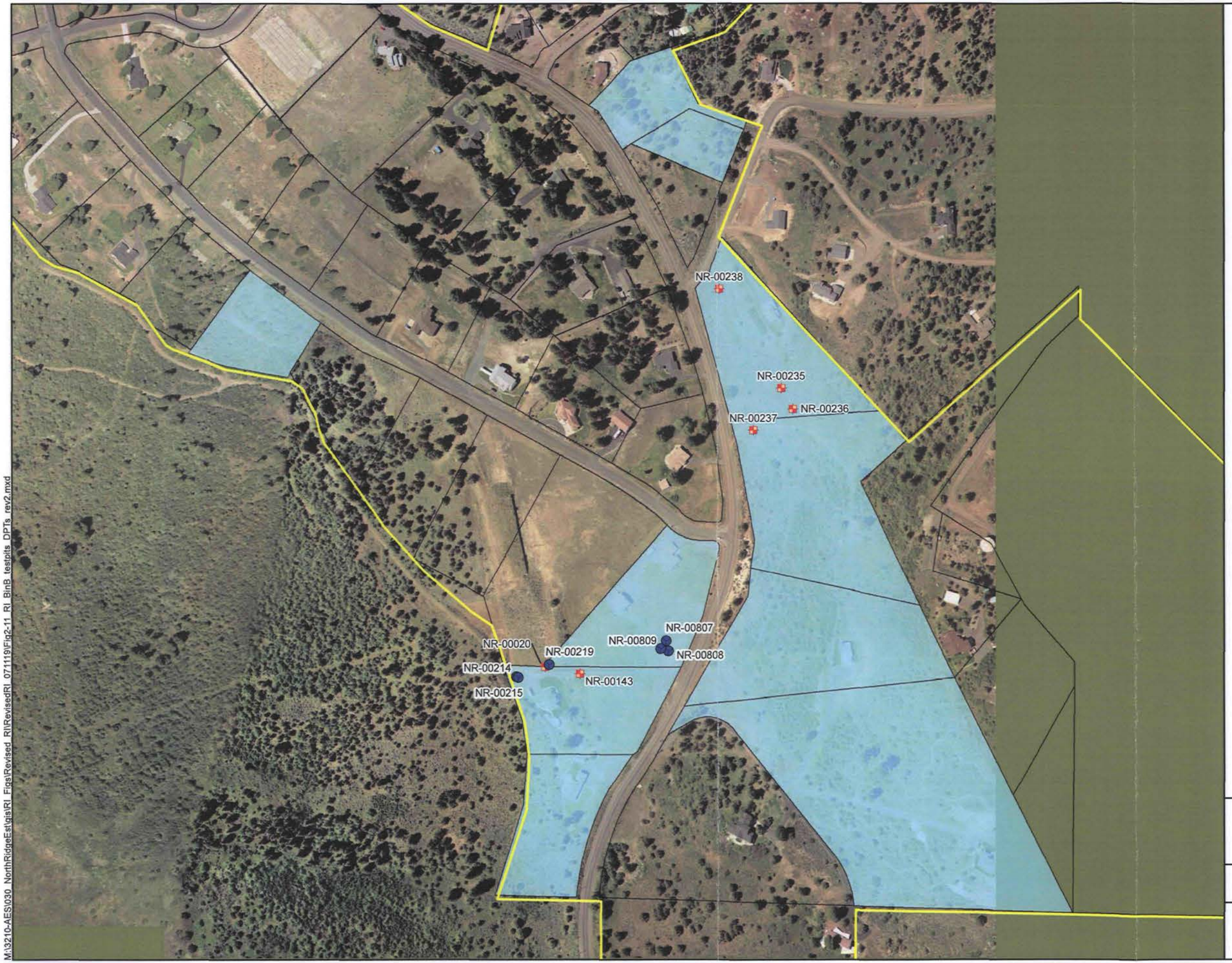

Legend

- Borehole Locations
- Test Pit Locations
- Bin B - 10 properties
- Site Boundary

N

0 200 400 600

Feet

1 inch equals 300 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Bin B Properties Test Pit and Borehole Locations

Figure 2-11

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-11_RI_BinB_testpits_DPTs_rev2.mxd

Legend

- Bulk Soil Locations
- Bin C - 15 properties
- Site Boundary

N

0 200 400 600

Feet

1 inch equals 325 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Bin C Properties
Bulk Soil Locations

Figure 2-12

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-12_RI_BinC_bulksoil_rev1.mxd

Legend

Parcels

Parcel F

Activity Based Sampling - Soil

Non-pick up

Pick up

Activity Based Sampling - Air

Downwind pick up/non-pick up

Upwind pick up/non-pick up

N

0 50 100 150

Feet

1 inch equals 100 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Parcel F Activity Based Sampling Air and Soil

Figure 2-13

CDM

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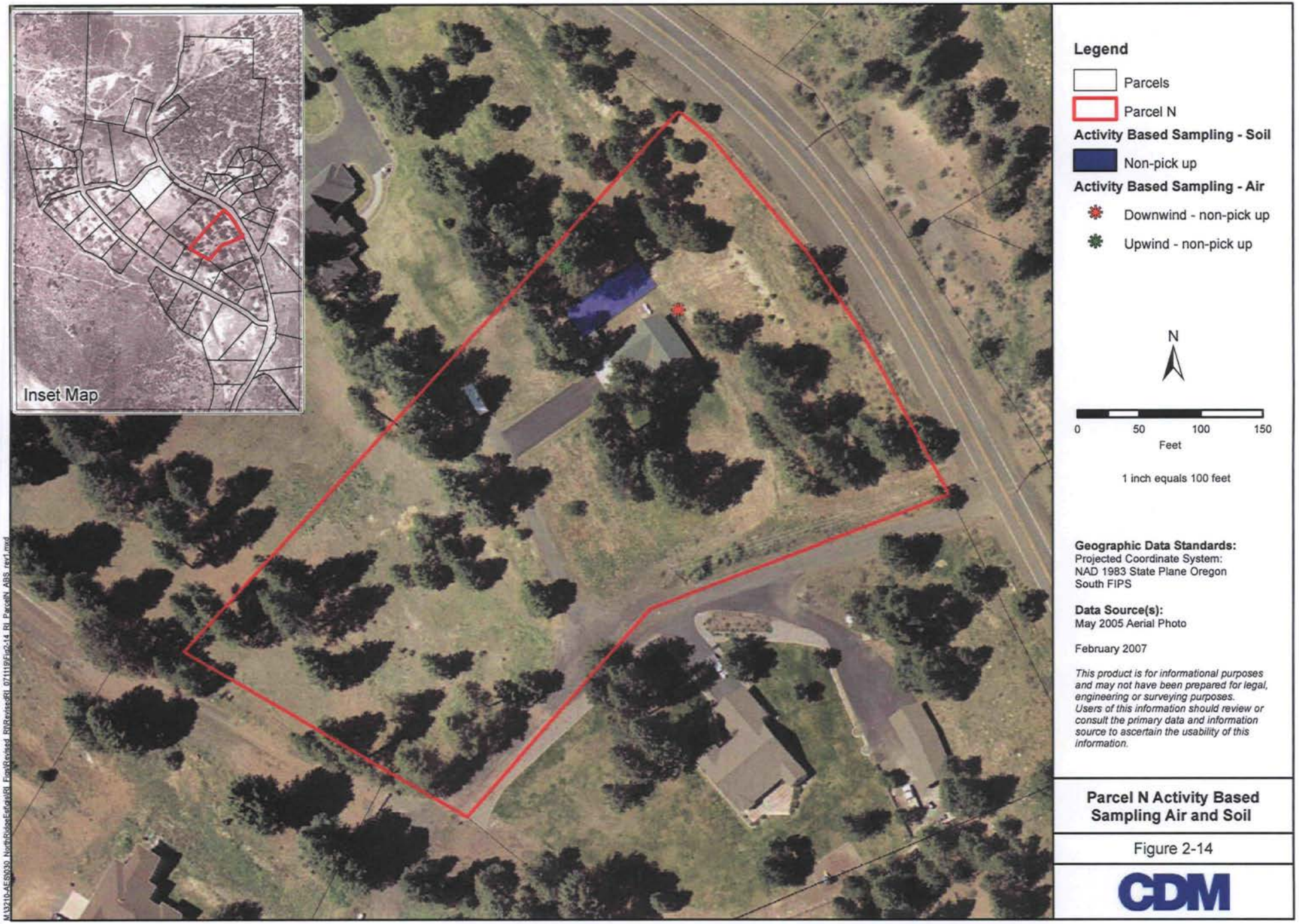
Inset Map
Legend
Parcels
Parcel N
Activity Based Sampling - Soil
Non-pick up
Activity Based Sampling - Air
Downwind - non-pick up
Upwind - non-pick up
N
0
50
100
150
Feet
1 inch equals 100 feet
Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon
South FIPS
Data Source(s):
May 2005 Aerial Photo
February 2007
This product is for informational purposes and may not have been prepared for legal, engineering or surveying purposes. Users of this information should review or consult the primary data and information source to ascertain the usability of this information.
Parcel N Activity Based Sampling Air and Soil
Figure 2-14
CDM
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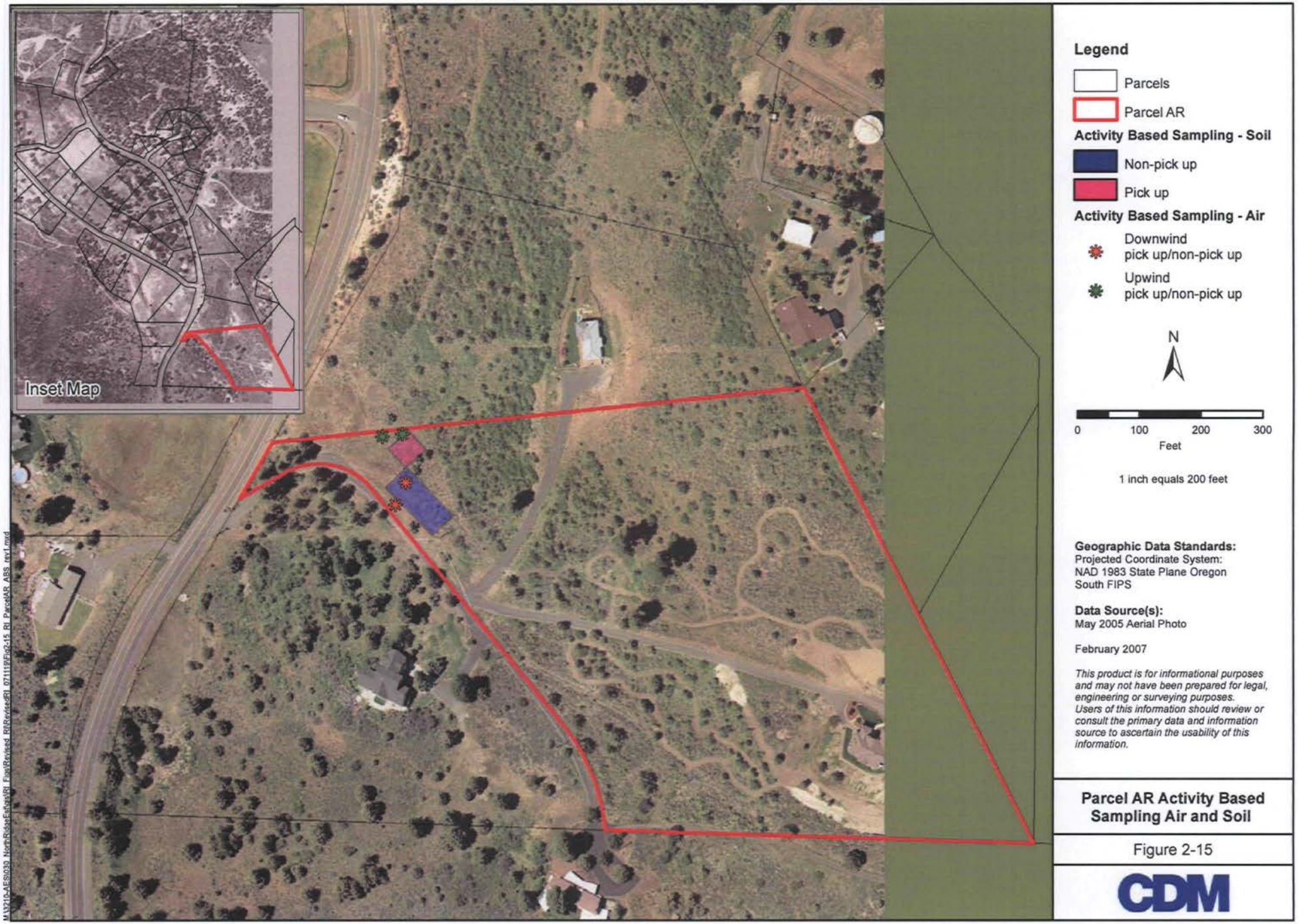

Inset Map
Legend
Parcels
Parcel AR
Activity Based Sampling - Soil
Non-pick up
Pick up
Activity Based Sampling - Air
Downwind
pick up/non-pick up
Upwind
pick up/non-pick up
N
0
100
200
300
Feet
1 inch equals 200 feet
Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon
South FIPS
Data Source(s):
May 2005 Aerial Photo
February 2007
This product is for informational purposes and may not have been prepared for legal, engineering or surveying purposes. Users of this information should review or consult the primary data and information source to ascertain the usability of this information.
Parcel AR Activity Based Sampling Air and Soil
Figure 2-15
CDM

Legend

Parcels

Parcel P

Activity Based Sampling - Soil

Non-pick up

Pick up

Activity Based Sampling - Air

Downwind pick up/non-pick up

Upwind pick up/non-pick up

N

0 25 50 75 100

Feet

1 inch equals 75 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

This product is for informational purposes and may not have been prepared for legal, engineering or surveying purposes. Users of this information should review or consult the primary data and information source to ascertain the usability of this information.

Parcel P Activity Based Sampling Air and Soil

Figure 2-16

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-16_RI_ParcelP_ABS_rev1.mxd

Legend

- Site Boundary
- Parcels

Former Use Areas

- Fire Station
- Landfill
- Laundry Building
- Maintenance Repair Shop
- OTI Maintenance Shop
- Paint Shop
- Power Plant
- Service Station

N

0 200 400 600

Feet

1 inch equals 325 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

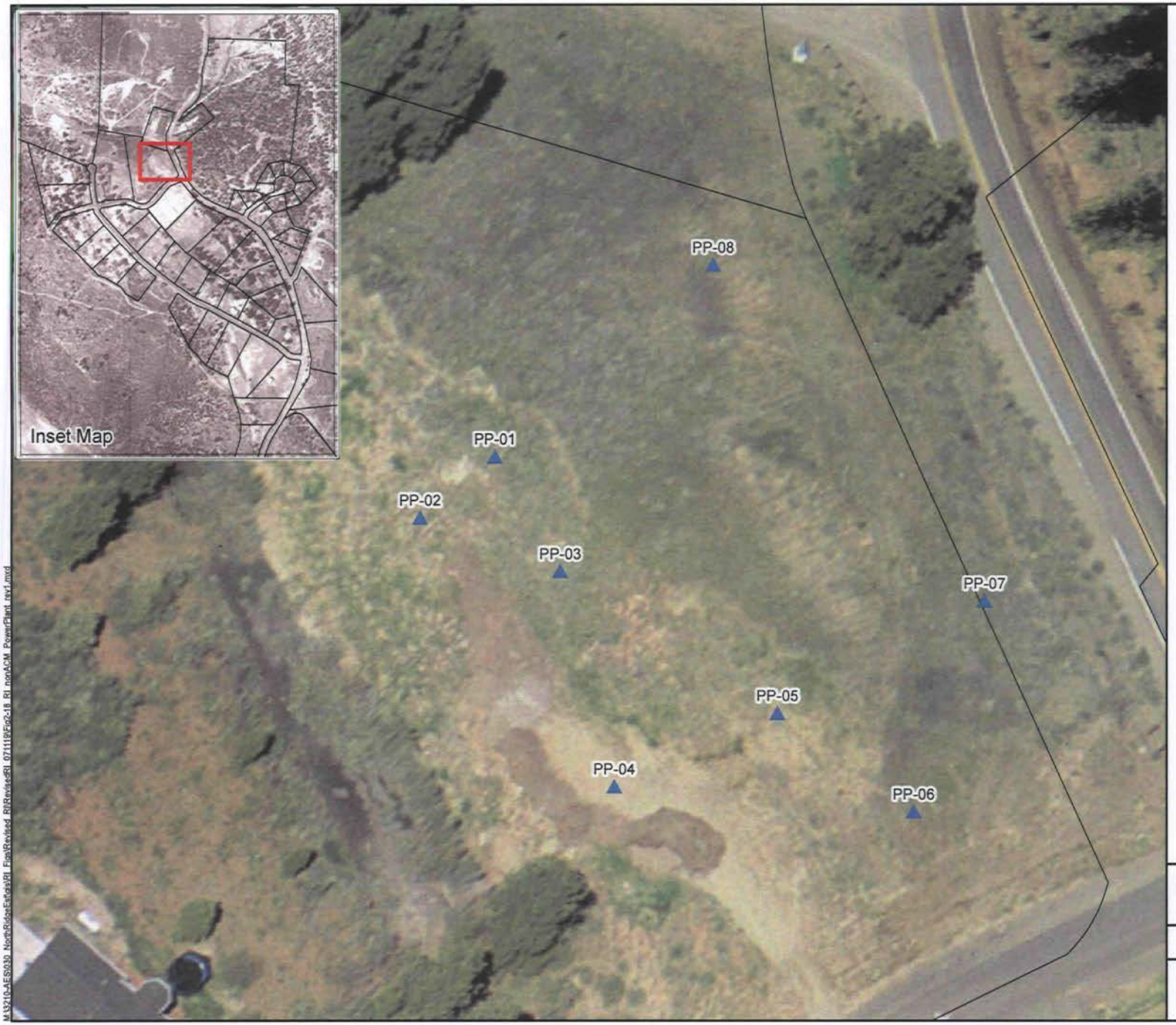
This product is for informational purposes and may not have been prepared for legal, engineering or surveying purposes. Users of this information should review or consult the primary data and information source to ascertain the usability of this information.

Former Use Areas

Figure 2-17

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-17_FormerLandUseAreas.mxd



Legend

Parcels

Non-ACM Borehole Locations

N

0 25 50 75

Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Non-ACM Borehole Locations at Central Power Plant

Figure 2-18

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-18_RI_nonACM_PowerPlant_rev1.mxd

Legend

- Parcels
- Non-ACM Borehole Locations

N

0 25 50 75

Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Non-ACM Borehole Locations at Maintenance/Repair Shop

Figure 2-19

CDM

M:\3210-AES\030_NorthRidge\Exhibits\RI_Figs\Revised_RI\Revised\RI_071119\Fig2-19_RI_nonACM_MachineRepairShop_rev1.mxd

Legend

Parcels

Non-ACM Borehole Locations

N

0 25 50 75

Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Non-ACM Borehole Locations at Laundry Building

Figure 2-20

CDM

M:\3210-AES\030_NorthRidgeEsf\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-20_RI_nonACM_LaundryBldg_rev1.mxd

Legend

Parcels

Non-ACM Borehole Locations

N

0 25 50 75

Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon
South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Non-ACM Borehole Locations at Landfill

Figure 2-21

CDM

Legend

Parcels

Non-ACM Borehole Locations

N

0 25 50 75

Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Non-ACM Borehole Locations at Paint Shops

Figure 2-22

CDM

Legend

Parcels

Non-ACM Borehole Locations

N

0 25 50 75

Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Non-ACM Borehole Locations at Fire Station

Figure 2-23

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-23_RI_nonACM_FireStation_rev1.mxd

Legend

Parcels

Non-ACM Borehole Locations

N

0 25 50 75

Feet

1 inch equals 50 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Non-ACM Borehole Locations at OTI Mainenance Shop

Figure 2-24

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-24_RI_nonACM_OTIMaintenanceShop_rev1.mxd

Document: S:\3210-AES\030_NorthRidgeEast\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig2-25_RI_nonACM_ServiceStation_rev2.mxd

Legend

- Site Boundary
- Parcels
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

N

0 200 400 600 800

Feet

1 inch equals 450 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Buried Piping

Figure 4-1

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig4-1_RI_BuriedPiping_rev1.mxd

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig4-2_RI_SitewideBurialPiles_rev1.mxd

Legend

- Parcels
- Site Boundary
- 2006 PMX/CDM Burial Area
- 2003 PBS Burial Area

N

0 200 400 600

Feet

1 inch equals 325 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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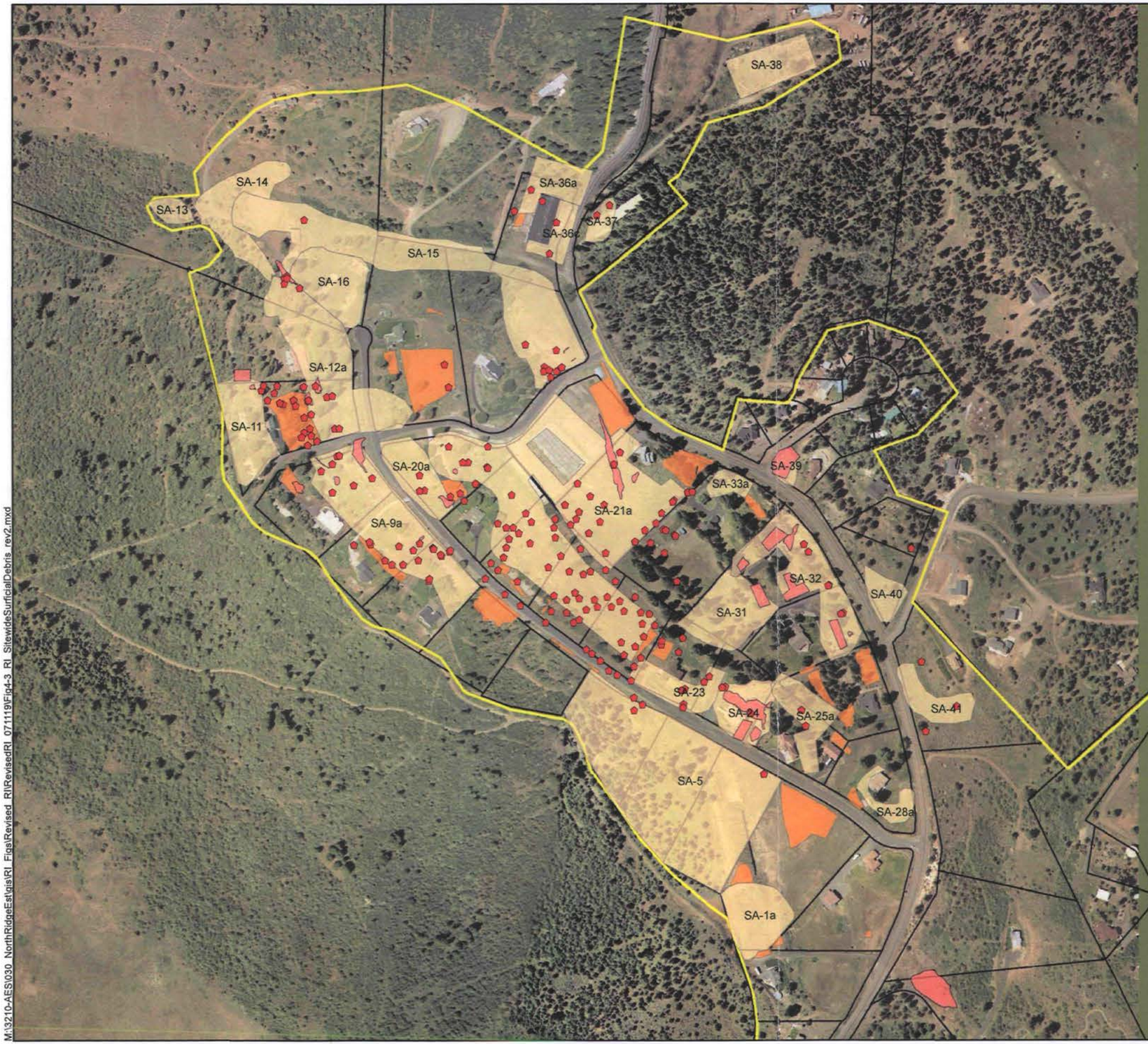
Site-wide Representation of ACM in Burial Areas

Figure 4-2

CDM



M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig4-3_RI_SitewideSurficialDebris_rev2.mxd

Legend

- Parcels
- Site Boundary

2005 EPA START-2 Surficial ACM

- ACM Observed

2006 PMX/CDM Surficial ACM

- ACM Observed

2005 EPA START-2 Mag / Air Cell

- Mag Observed
- Mag / Air Cell Area Observed

N

0 200 400 600 800

Feet

1 inch equals 400 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Site-wide Representation of ACM/Asbestos Surficial Debris

Figure 4-3

CDM

Legend

- Parcels
- Site Boundary

2003 PBS Soil Samples

- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples

- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples

- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples

- Borehole Samples

N

0 200 400 600 800

Feet

1 inch equals 500 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Site-wide Soil Sample Locations

Figure 4-4

CDM

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig4-4_RI_SitewideSoilSamples_rev1.mxd

Legend

2006 PMX/CDM Test Pit

▲ ACM Not Observed

2006 PMX/CDM Borehole

● ACM Not Observed

2005 EPA START-2 Surficial ACM

N

0 25 50 75 100
Feet

1 inch equals 75 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon
South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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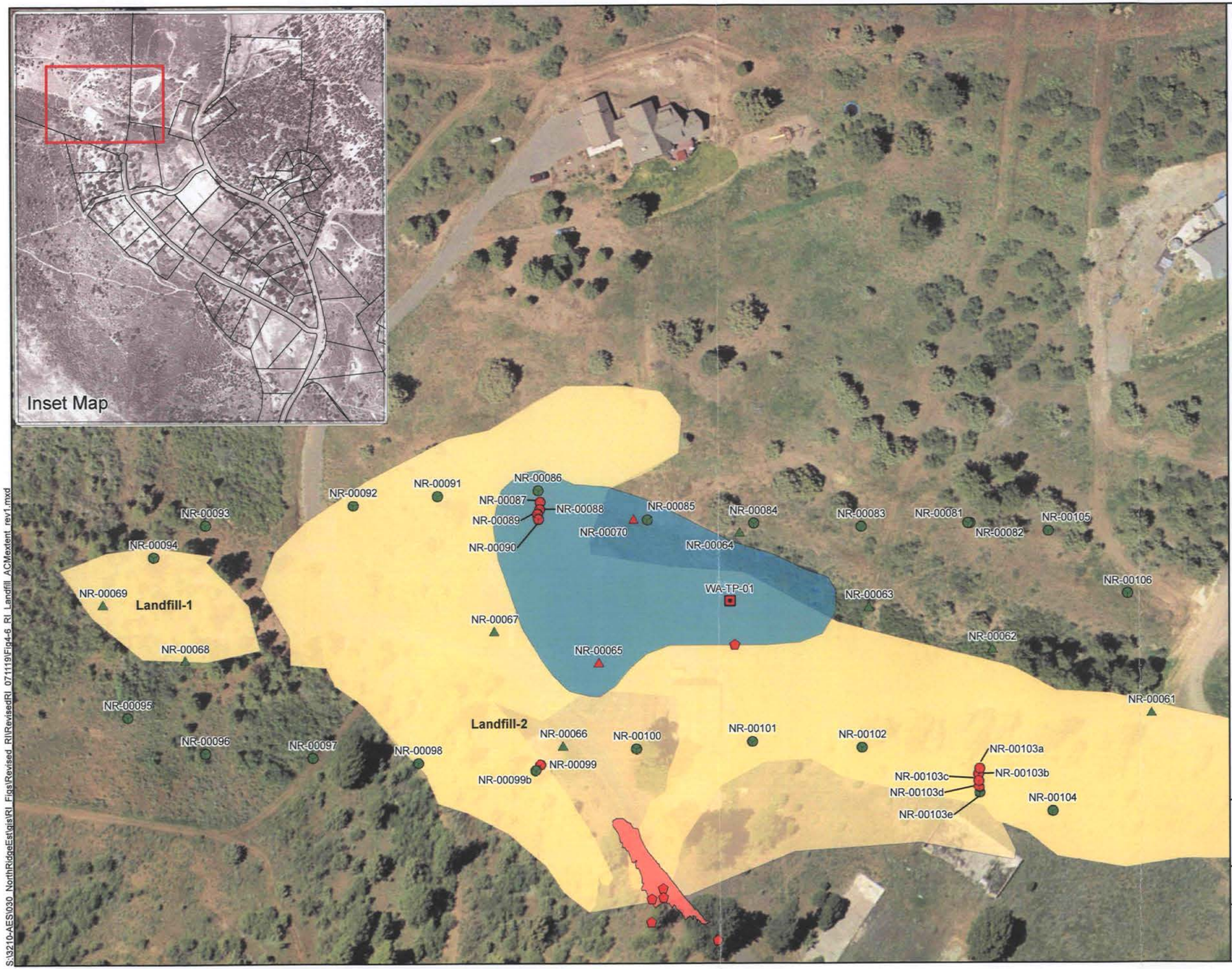
Extent of ACM/Asbestos Contamination at Wastewater Treatment Plant

Figure 4-5

CDM

S:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig4-5_RI_WWTP_ACMextent_rev1.mxd



S:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig4-6_RI_Landfill_ACMextent_rev1.mxd

Legend

2005 EPA START-2 Test Pit
- ACM Observed

2006 PMX/CDM Test Pit
- ACM Not Observed
- ACM Observed

2006 PMX/CDM Borehole
- ACM Not Observed
- ACM Observed

2005 EPA START-2 Mag / Air Cell
- Mag Observed
- Mag / Air Cell Area Observed

2005 EPA START-2 Surficial ACM

2006 PMX/CDM Identified Burial Area

N

0 50 100 150
Feet

1 inch equals 85 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Extent of ACM/Asbestos Contamination at Landfill

Figure 4-6

CDM

Legend

2006 PMX/CDM Test Pit

- ACM Not Observed
- ACM Observed
- Mag / Air Cell Area Observed

2006 PMX/CDM Borehole

- ACM Not Observed

2005 EPA START-2 Surficial ACM

2006 PMX/CDM Surficial ACM

2006 PMX/CDM Identified Burial Area

N

0 25 50 75 100

Feet

1 inch equals 75 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon
South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Extent of ACM/Asbestos Contamination at Swimming Pool

Figure 4-7

CDM

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 SIXTH AVENUE
SEATTLE, WA 98101

TARGET SHEET

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This is due to the Original being:

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CD Rom

Computer Disk

Video Tape

Other:

**A copy of the document may be requested from the Superfund Records Center.

Document Information

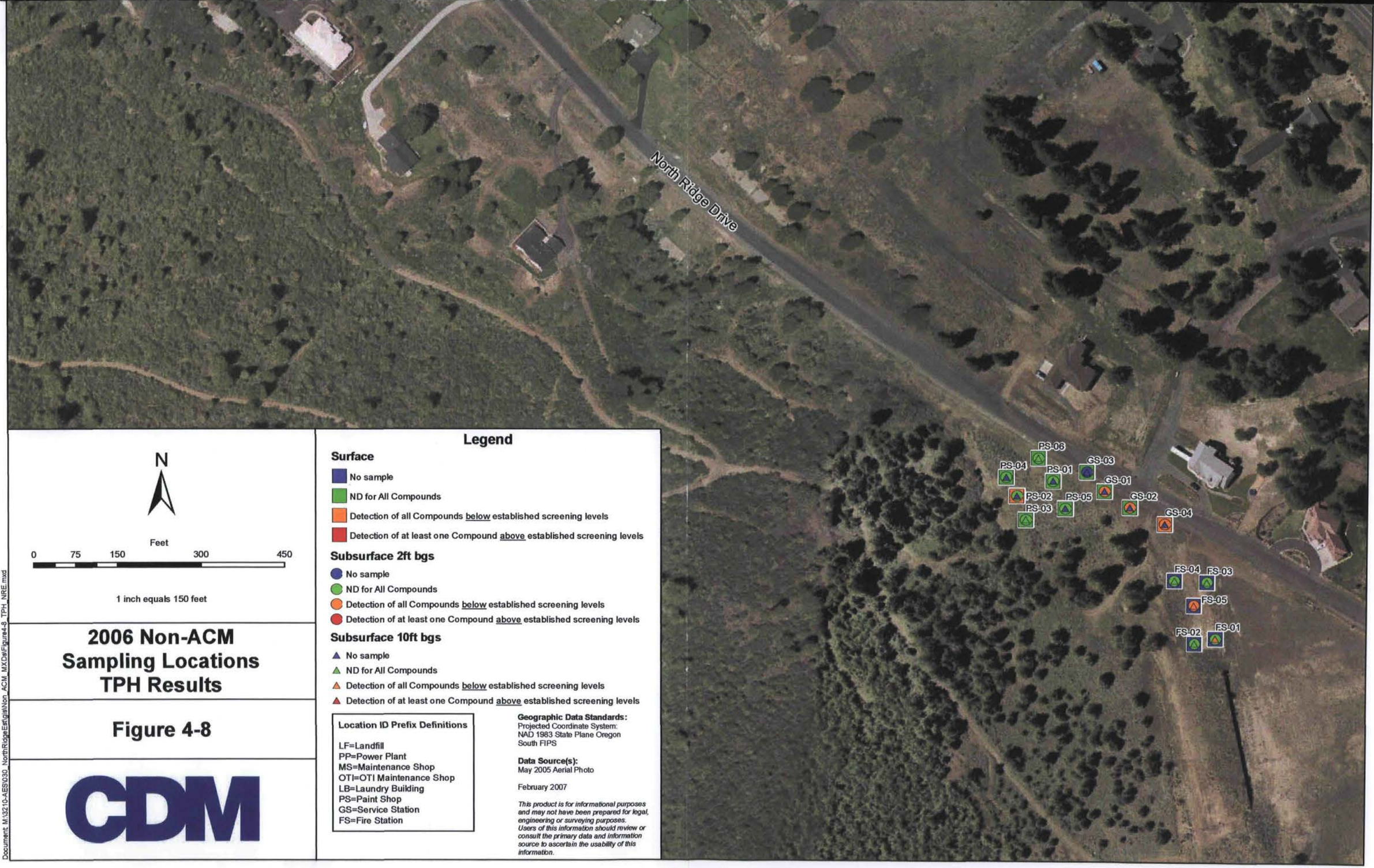
Document ID #: 1269111

File #: NRESF 2.7.2.1
NRMAR 2.7.2.1

Site Name: NORTH RIDGE ESTATES

FIG 4-8, 4-9, 4-10, 4-11, 4-12, 4-13

LF-01
LF-02
LF-03
PP-08
PP-01
PP-02
PP-03
PP-07
PP-05
PP-04
PP-06
Hunters Ridge Road
MS-01
MS-09
MS-08
MS-02
MS-03
MS-04
MS-07
MS-05
MS-06
LB-01
LB-02
LB-05
LB-06
LB-03
LB-04
Old Fort Road
OTI-03
OTI-02
OTI-01



N

Feet

0 75 150 300 450

1 inch equals 150 feet

2006 Non-ACM Sampling Locations TPH Results

Figure 4-8

CDM

Legend

Surface

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 2ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 10ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Location ID Prefix Definitions

LF=Landfill
PP=Power Plant
MS=Maintenance Shop
OTI=OTI Maintenance Shop
LB=Laundry Building
PS=Paint Shop
GS=Service Station
FS=Fire Station

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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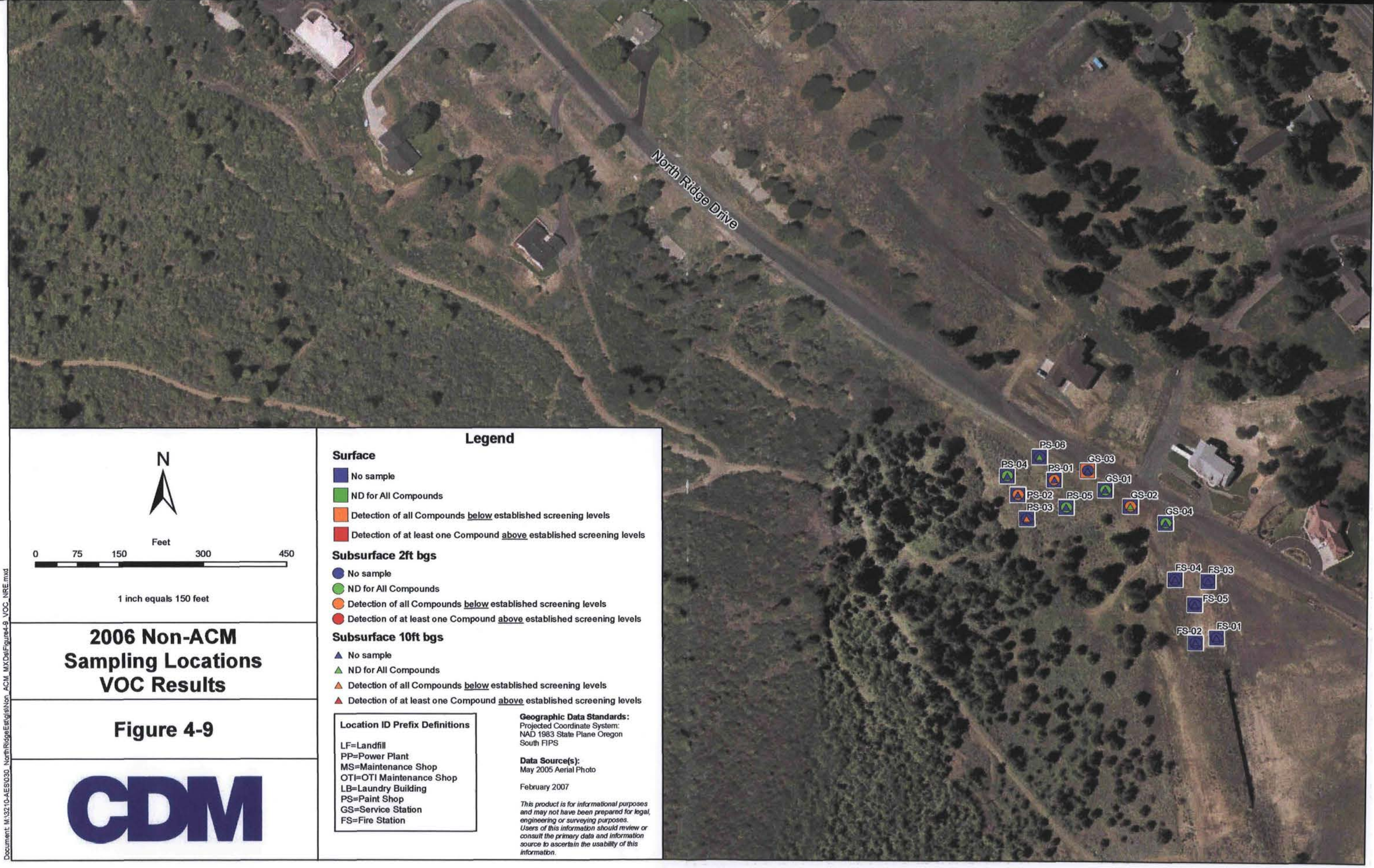
Document: M:\3210-AES\030_NorthRidgeEast\gis\Non_ACM_MXD\st\Figure4-8_TPH_NRE.mxd

LF-01
LF-02
LF-03
PP-08
PP-01
PP-02
PP-03
PP-07
PP-05
PP-04
PP-06
Hunters Ridge Road
MS-01
MS-09
MS-08
MS-02
MS-03
MS-04
MS-07
MS-05
MS-06
LB-01
LB-05
LB-02
LB-03
LB-06
LB-04
Old Fort Road
OTI-03
OTI-02
OTI-01



N

Feet

0 75 150 300 450

1 inch equals 150 feet

2006 Non-ACM Sampling Locations VOC Results

Figure 4-9

CDM

Legend

Surface

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 2ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 10ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Location ID Prefix Definitions

LF=Landfill
PP=Power Plant
MS=Maintenance Shop
OTI=OTI Maintenance Shop
LB=Laundry Building
PS=Paint Shop
GS=Service Station
FS=Fire Station

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
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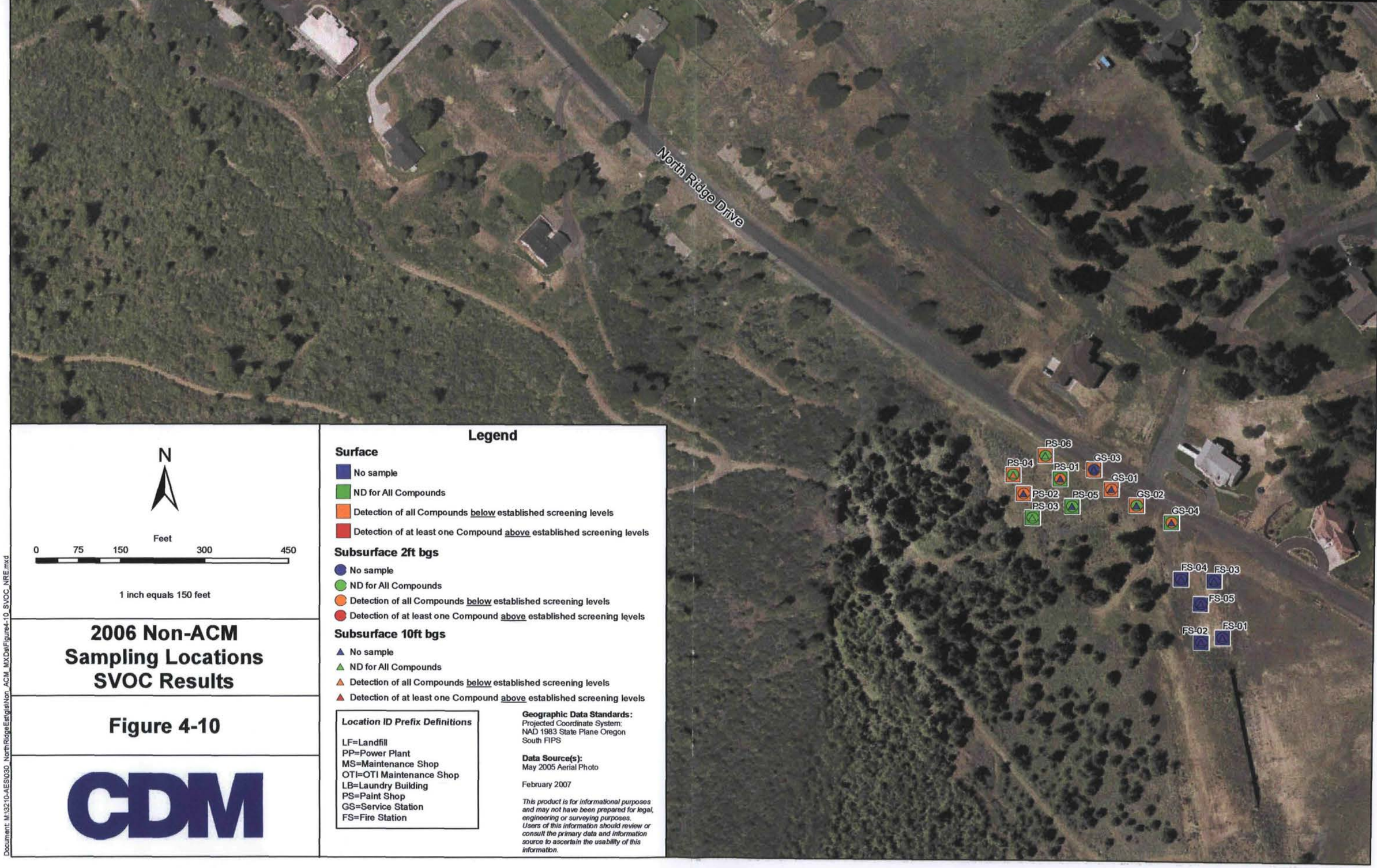
LF-01
LF-02
LF-03
PP-08
PP-01
PP-02
PP-03
PP-07
PP-05
PP-04
PP-06
Hunters Ridge Road
MS-01
MS-09
MS-08
MS-02
MS-03
MS-04
MS-07
MS-05
MS-06
LB-01
LB-02
LB-05
LB-03
LB-06
LB-04
Old Fort Road
OTI-03
OTI-02
OTI-01



N

Feet

0 75 150 300 450

1 inch equals 150 feet

2006 Non-ACM Sampling Locations SVOC Results

Figure 4-10

CDM

Legend

Surface

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 2ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 10ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Location ID Prefix Definitions

LF=Landfill
PP=Power Plant
MS=Maintenance Shop
OTI=OTI Maintenance Shop
LB=Laundry Building
PS=Paint Shop
GS=Service Station
FS=Fire Station

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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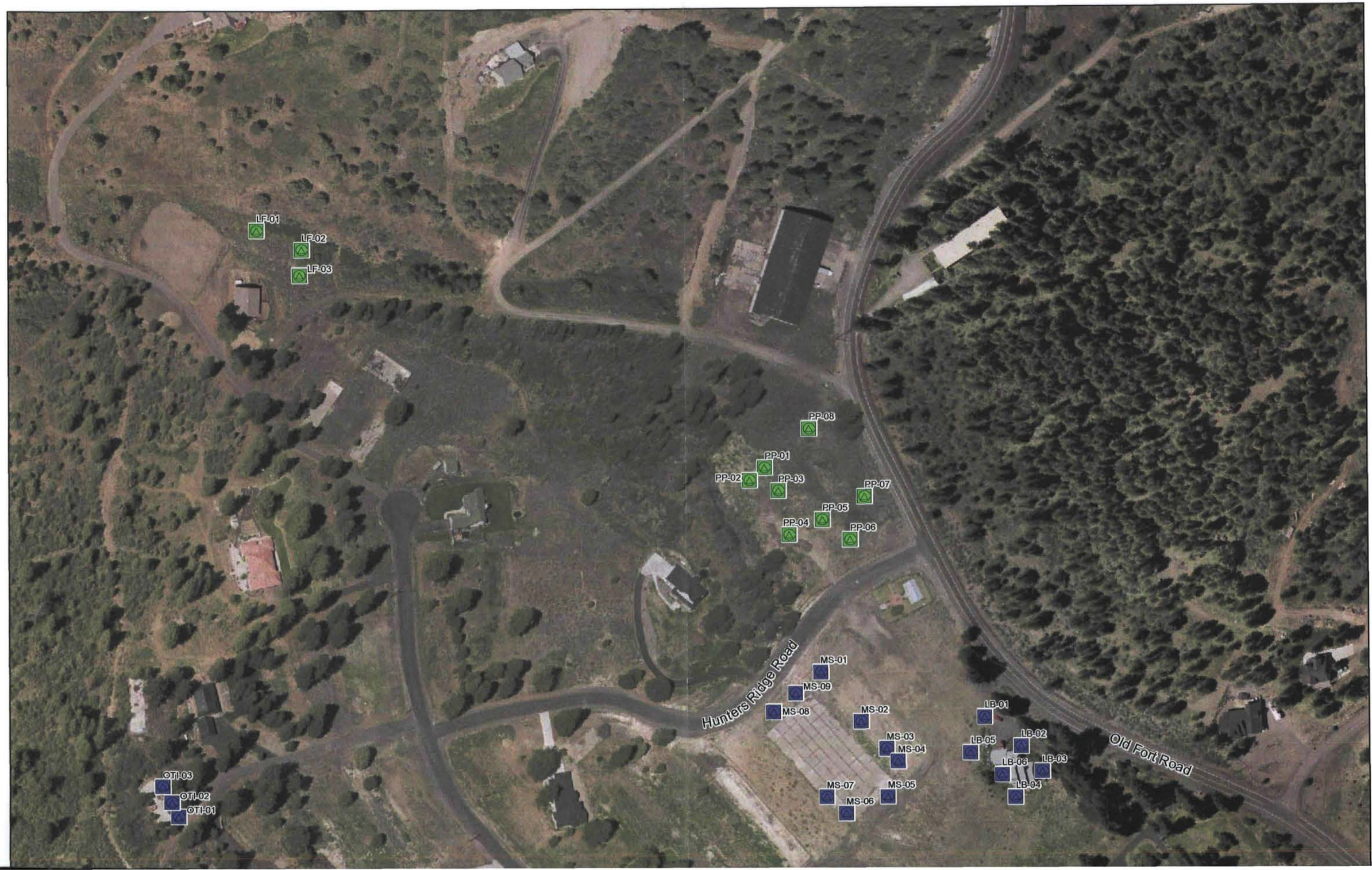
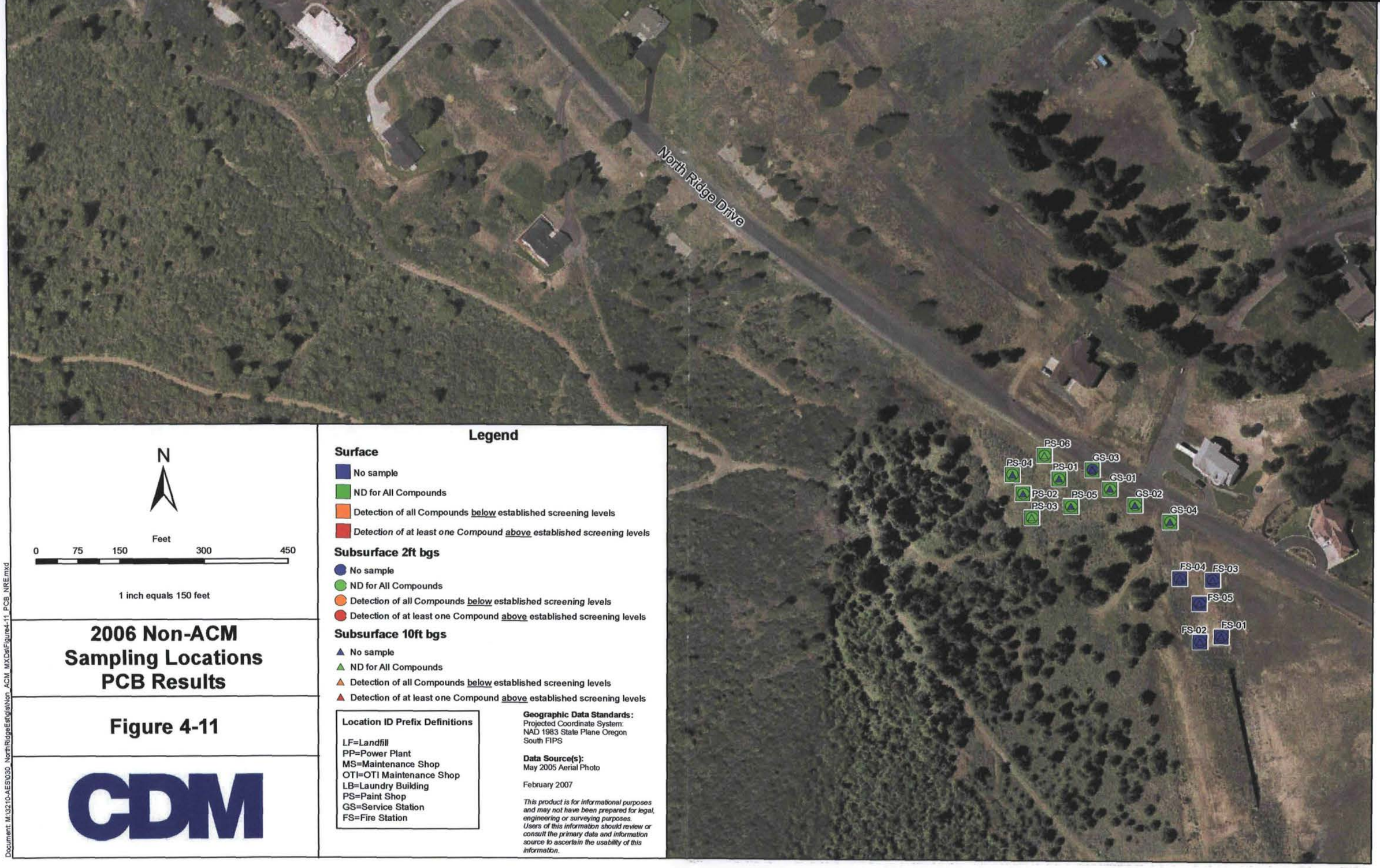

LF-01
LF-02
LF-03
PP-08
PP-01
PP-02
PP-03
PP-07
PP-05
PP-04
PP-06
Hunters Ridge Road
MS-01
MS-09
MS-08
MS-02
MS-03
MS-04
MS-07
MS-06
MS-05
LB-01
LB-02
LB-05
LB-06
LB-03
LB-04
Old Fort Road
OTI-03
OTI-02
OTI-01



N

Feet

0 75 150 300 450

1 inch equals 150 feet

2006 Non-ACM Sampling Locations PCB Results

Figure 4-11

CDM

Document: M:\3210-AES\030_NorthRidgeEast\gis\Non_ACM_MXD\sFigure4-11_PCB_NRE.mxd

Legend

Surface

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 2ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 10ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Location ID Prefix Definitions

LF=Landfill
PP=Power Plant
MS=Maintenance Shop
OTI=OTI Maintenance Shop
LB=Laundry Building
PS=Paint Shop
GS=Service Station
FS=Fire Station

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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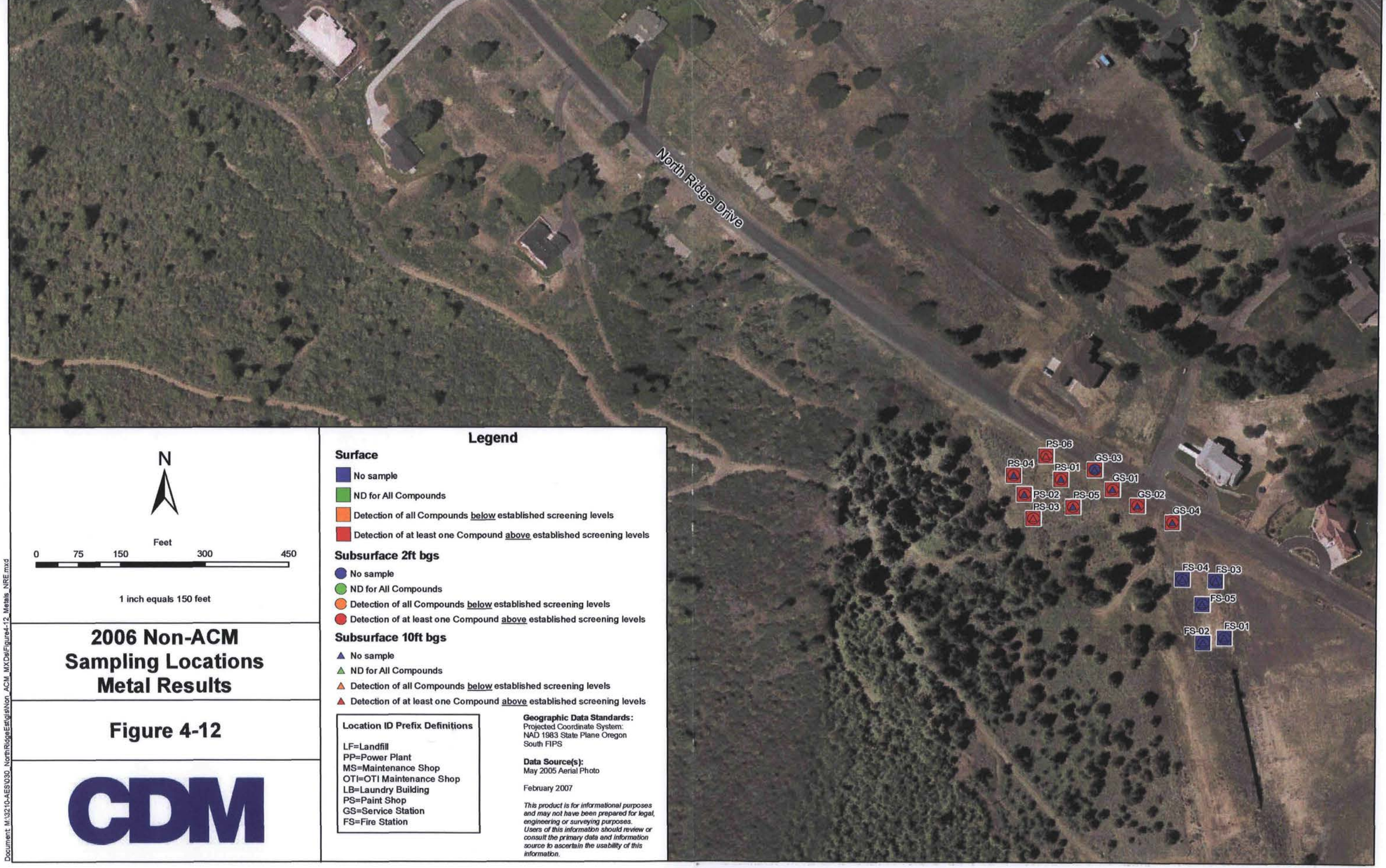
LF-01
LF-02
LF-03
PP-08
PP-01
PP-02
PP-03
PP-07
PP-05
PP-04
PP-06
Hunters Ridge Road
MS-01
MS-09
MS-08
MS-02
MS-03
MS-04
MS-07
MS-06
MS-05
LB-01
LB-05
LB-02
LB-06
LB-03
LB-04
Old Fort Road
OTI-03
OTI-02
OTI-01



N

Feet

0 75 150 300 450

1 inch equals 150 feet

2006 Non-ACM Sampling Locations Metal Results

Figure 4-12

CDM

Legend

Surface

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 2ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 10ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Location ID Prefix Definitions

LF=Landfill
PP=Power Plant
MS=Maintenance Shop
OTI=OTI Maintenance Shop
LB=Laundry Building
PS=Paint Shop
GS=Service Station
FS=Fire Station

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Document: M:\3210-AES\030_NorthRidgeEast\gis\Non_ACM_MXD\sFigure4-12_Metals_NRE.mxd

LF-01
LF-02
LF-03
Hunters Ridge Road
Old Fort Road
OTI-03
OTI-02
OTI-01
MS-01
MS-09
MS-08
MS-02
MS-03
MS-04
MS-07
MS-06
MS-05
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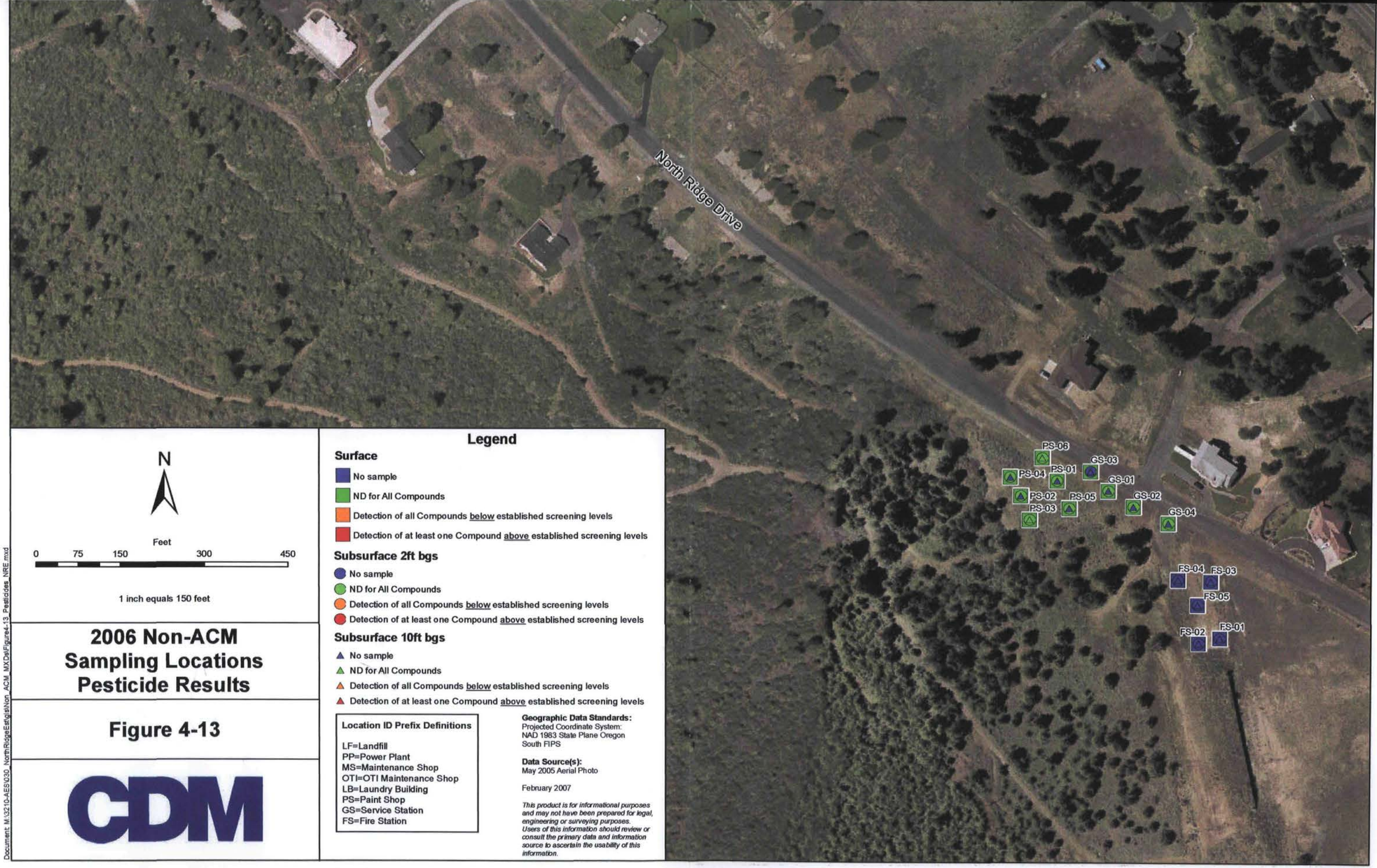
LB-05
LB-06
LB-03
LB-04



N

Feet

0 75 150 300 450

1 inch equals 150 feet

2006 Non-ACM Sampling Locations Pesticide Results

Figure 4-13

CDM

Legend

Surface

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 2ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Subsurface 10ft bgs

- No sample
- ND for All Compounds
- Detection of all Compounds below established screening levels
- Detection of at least one Compound above established screening levels

Location ID Prefix Definitions

LF=Landfill
PP=Power Plant
MS=Maintenance Shop
OTI=OTI Maintenance Shop
LB=Laundry Building
PS=Paint Shop
GS=Service Station
FS=Fire Station

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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Document: M:\3210-AES\030_NorthRidgeEE&G\sNon_ACM_MXDs\Figure4-13_Pesticides_NRE.mxd

M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Revised_RI\RevisedRI_071119\Fig6-1_RI_ACM_Distribution_rev1.mxd

Legend

- Parcels
- Site Boundary

2005 EPA START-2 Surficial ACM

- ACM Observed

2006 PMX/CDM Surficial ACM

- ACM Observed

2005 EPA START-2 Mag / Air Cell

- Mag Observed
- Mag / Air Cell Area Observed
- 2003 Burial Area
- 2006 PMX/CDM Burial Area
- Steam Pipe (Identified by PBS)

N

0 200 400 600 800

Feet

1 inch equals 400 feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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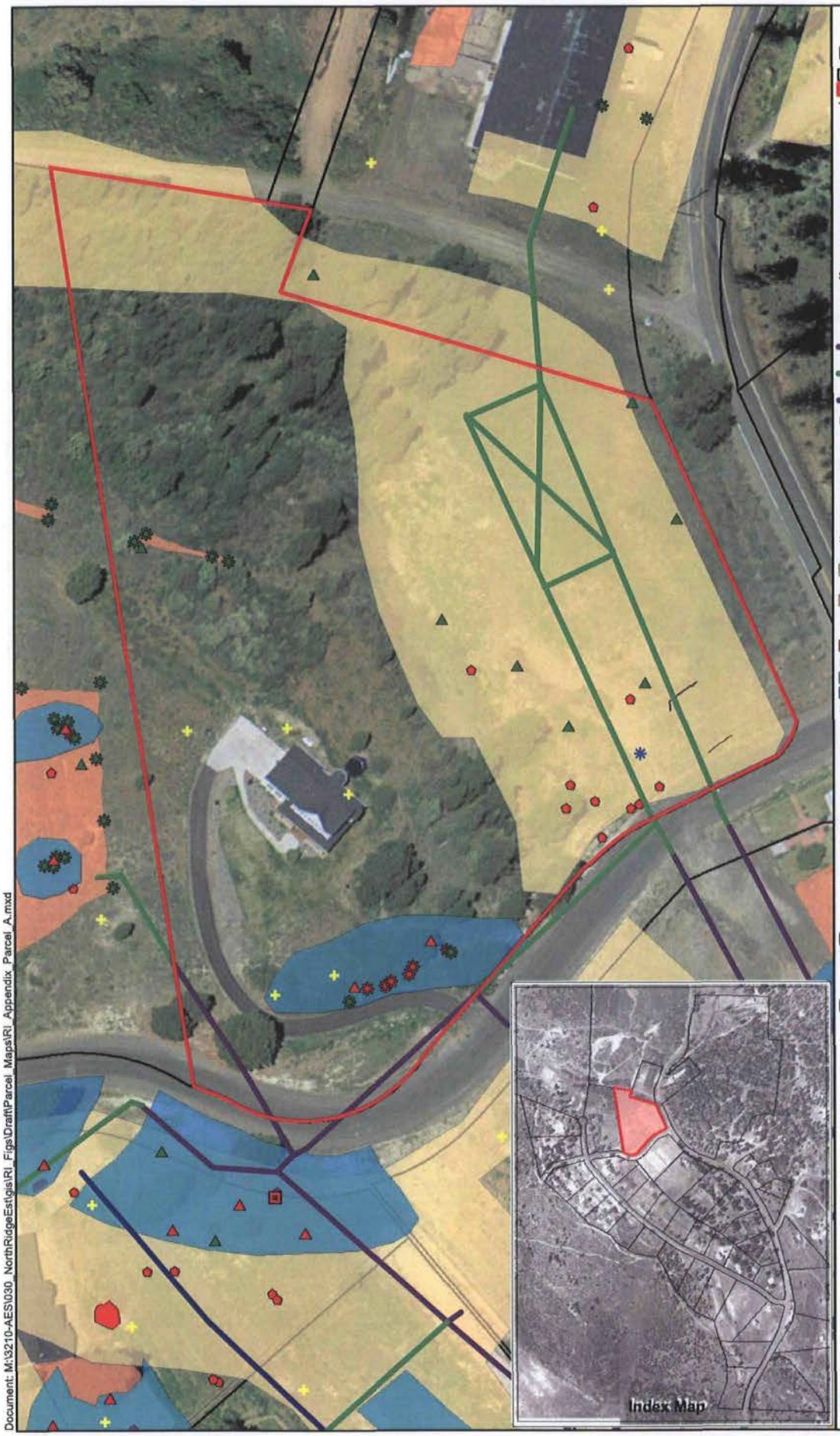
Distribution of ACM

Figure 6-1

CDM

Appendix C
Bin A Parcel Maps

DRAFT



Parcel A

Legend

- Parcels
- Parcel A

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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Parcel B

Legend

- Parcels
- Parcel B

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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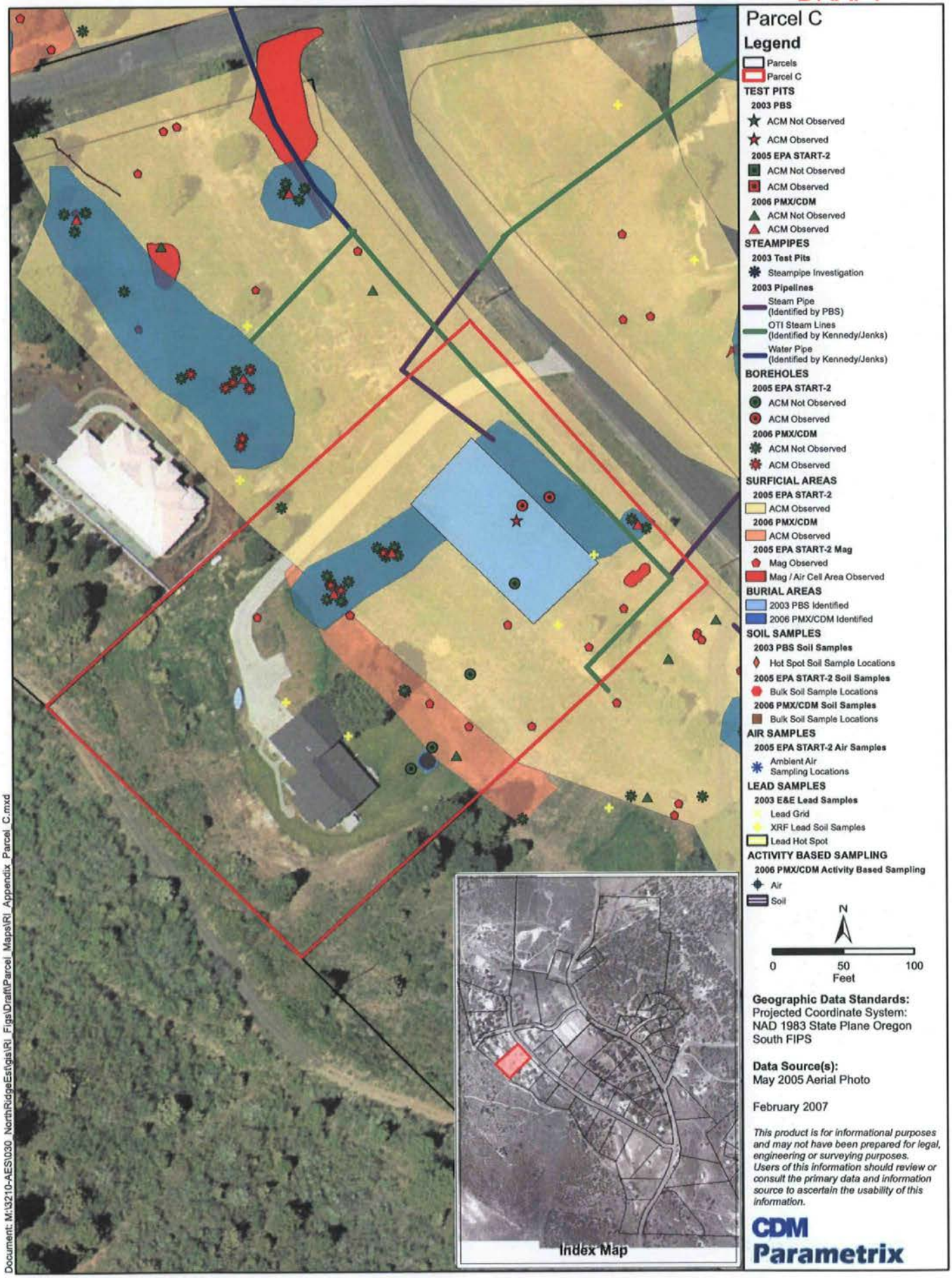

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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DRAFT

Parcel D

Legend

- Parcels
- Parcel D

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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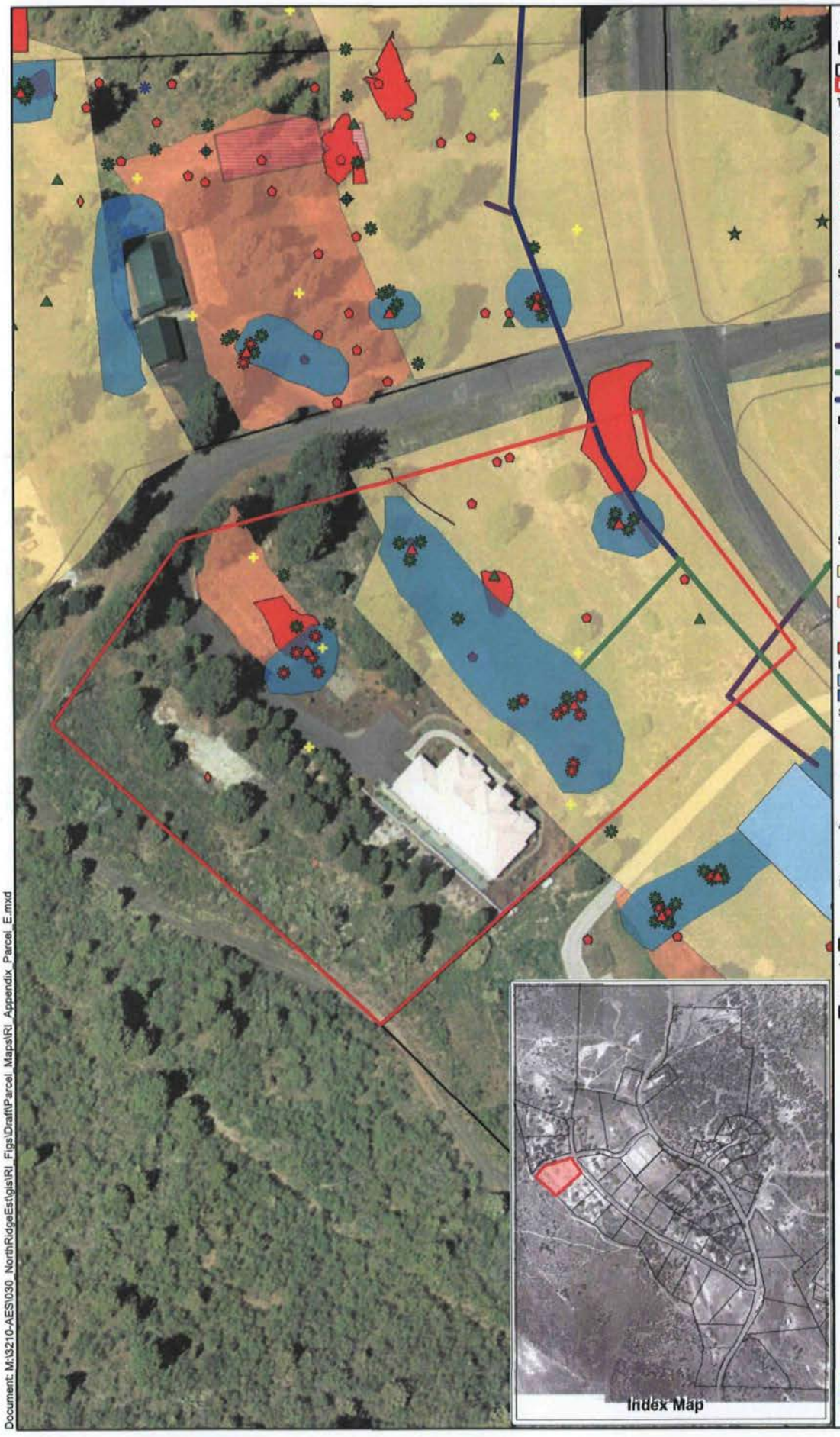

Parcel E

Legend

- Parcels
- Parcel E

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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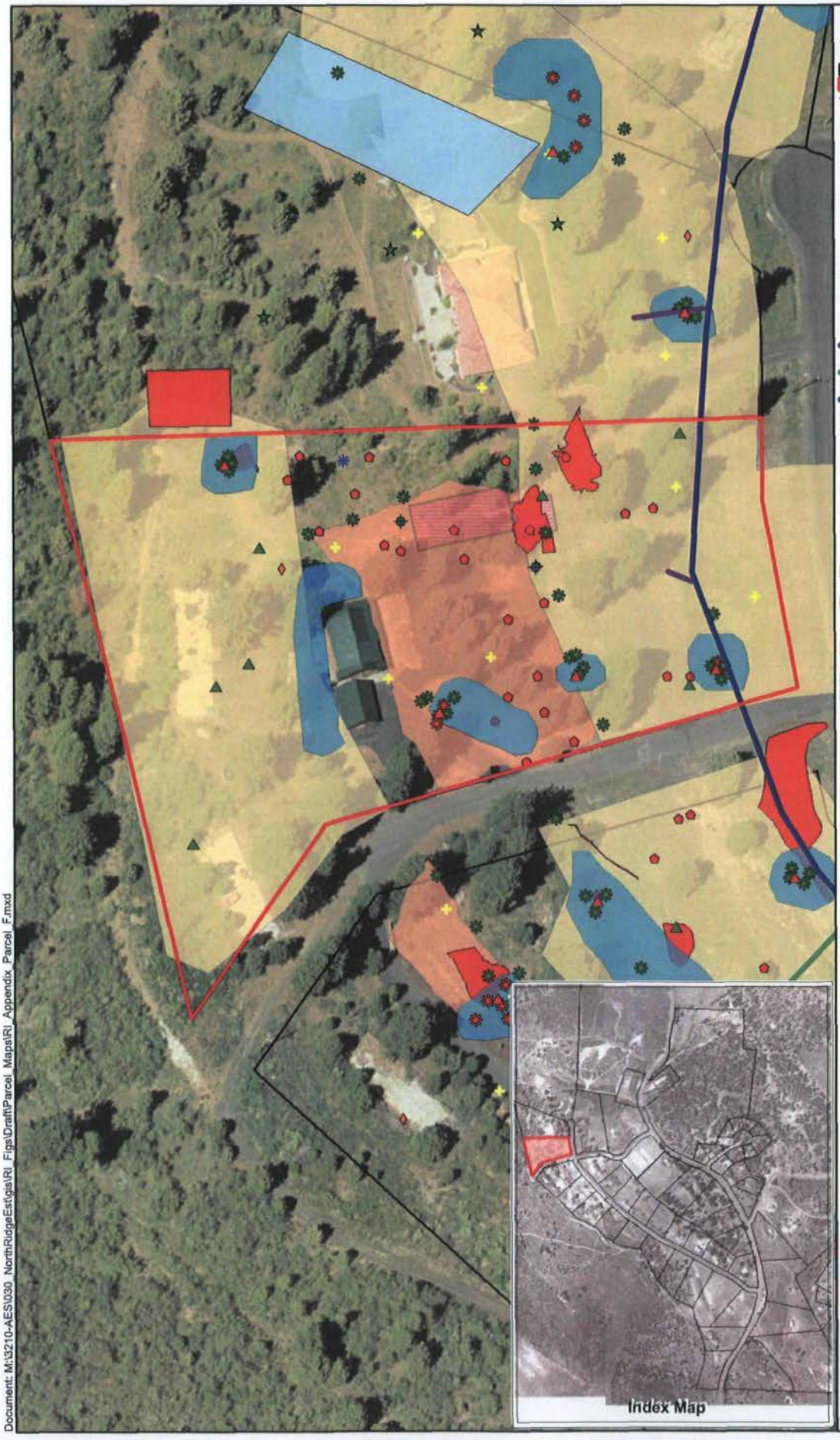

Parcel F

Legend

- Parcels
- Parcel F

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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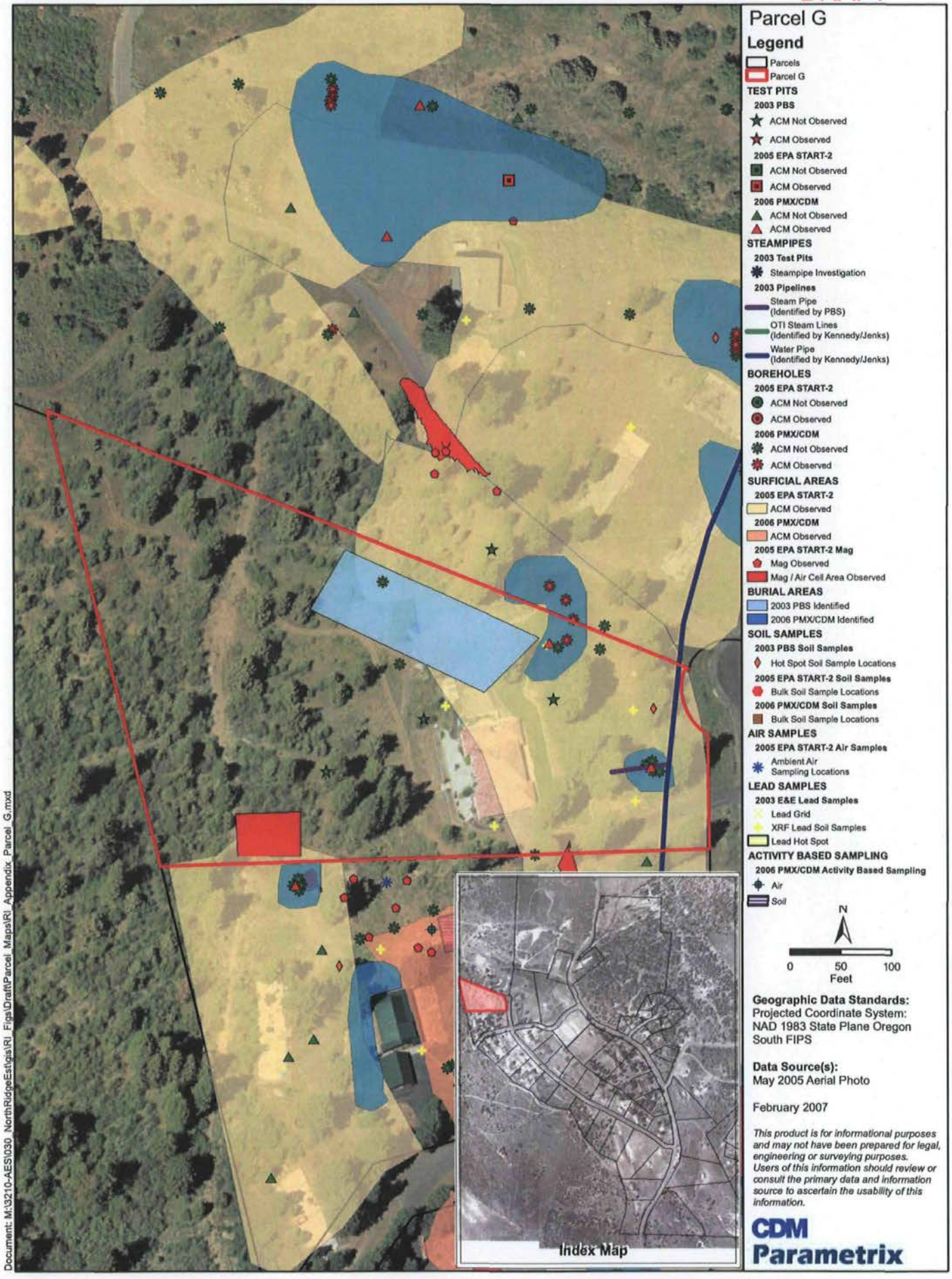

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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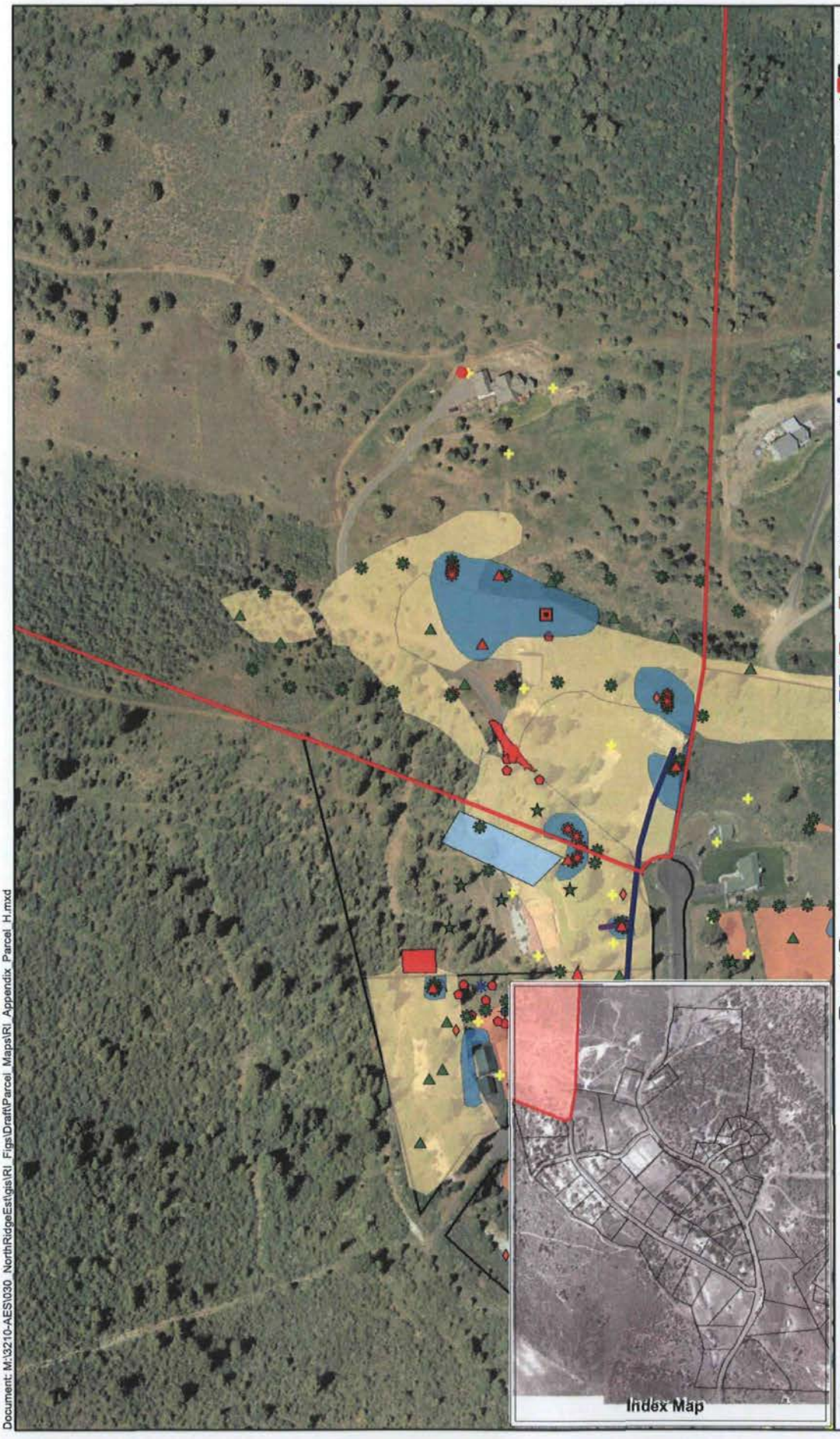

Parcel H

Legend

- Parcels
- Parcel H

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 100 200 300
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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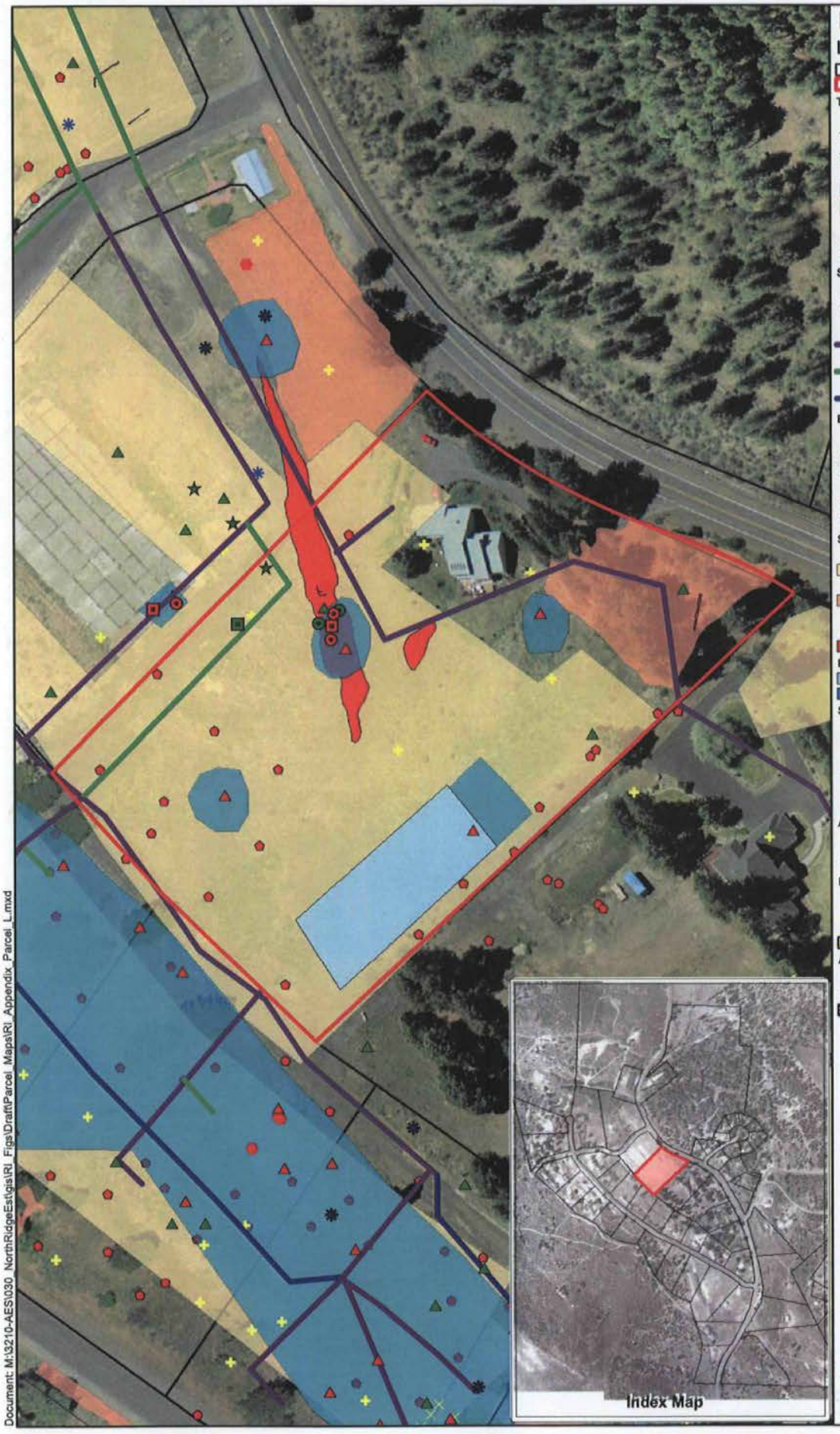

Parcel L

Legend

- Parcels
- Parcel L

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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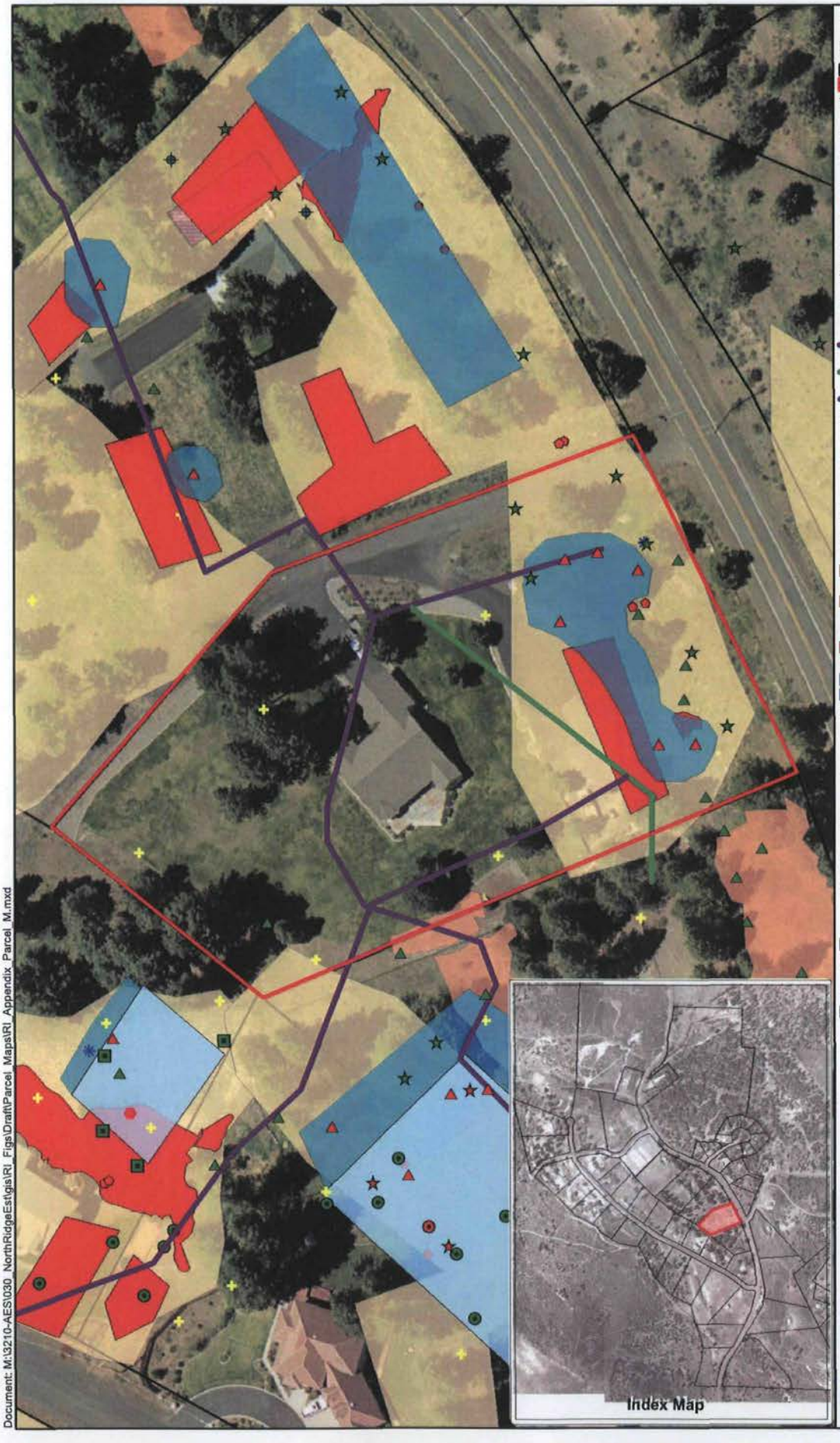

Parcel M

Legend

- Parcels
- Parcel M

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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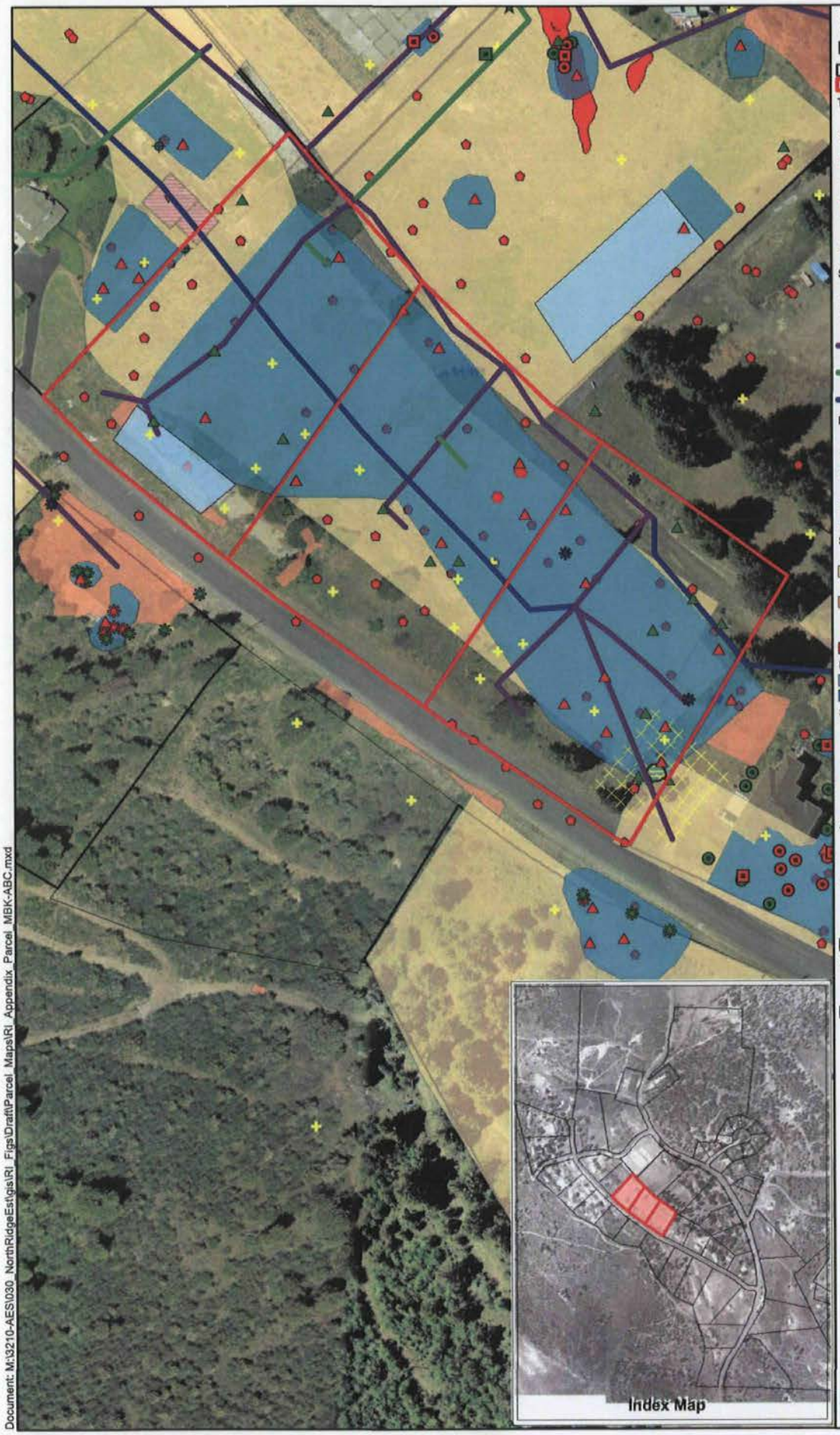

Parcels MBK-A, B, C

Legend

- Parcels
- Parcel MBK-A,B,C

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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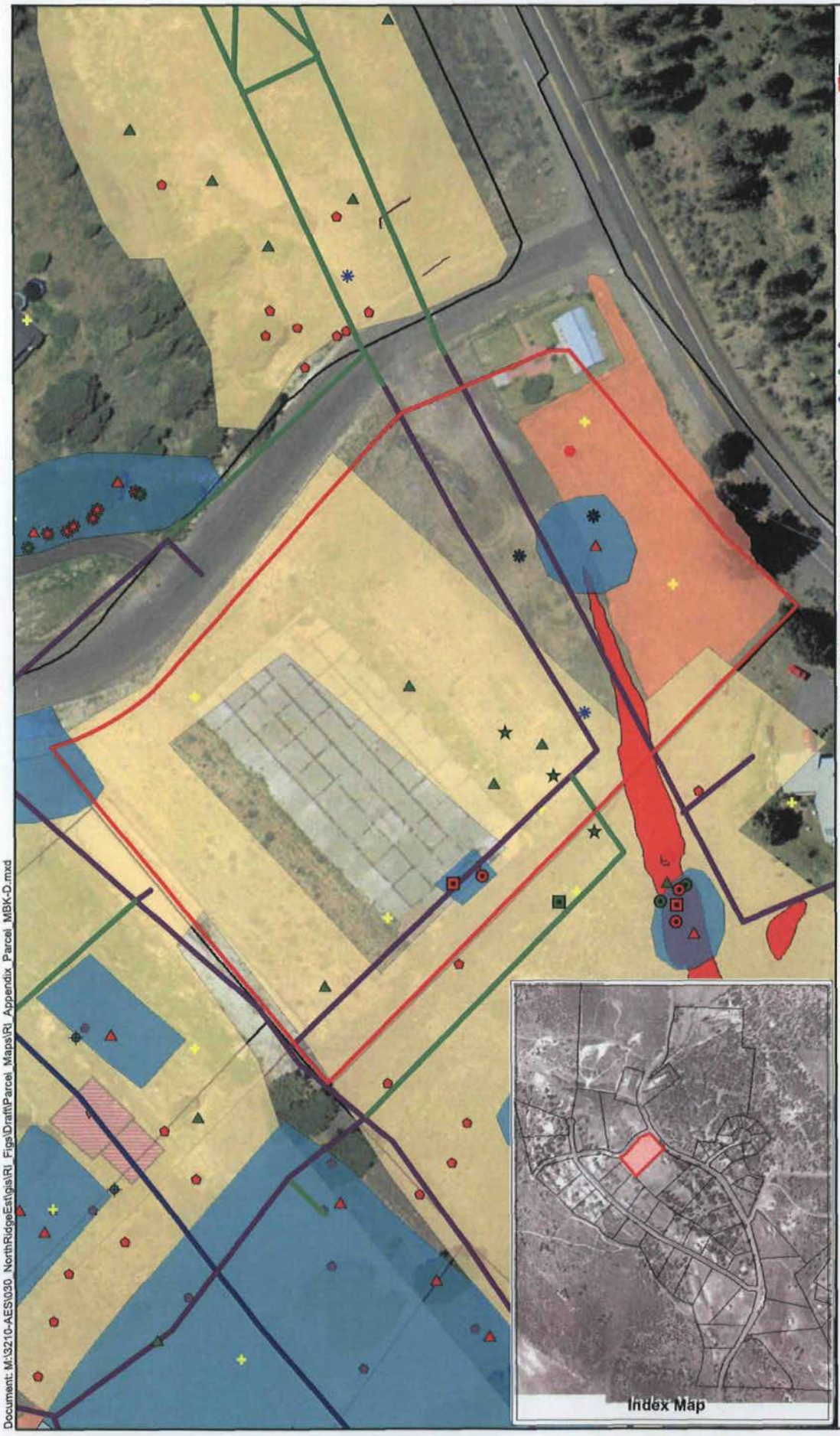

Parcel MBK-D

Legend

- Parcels
- Parcel MBK-D

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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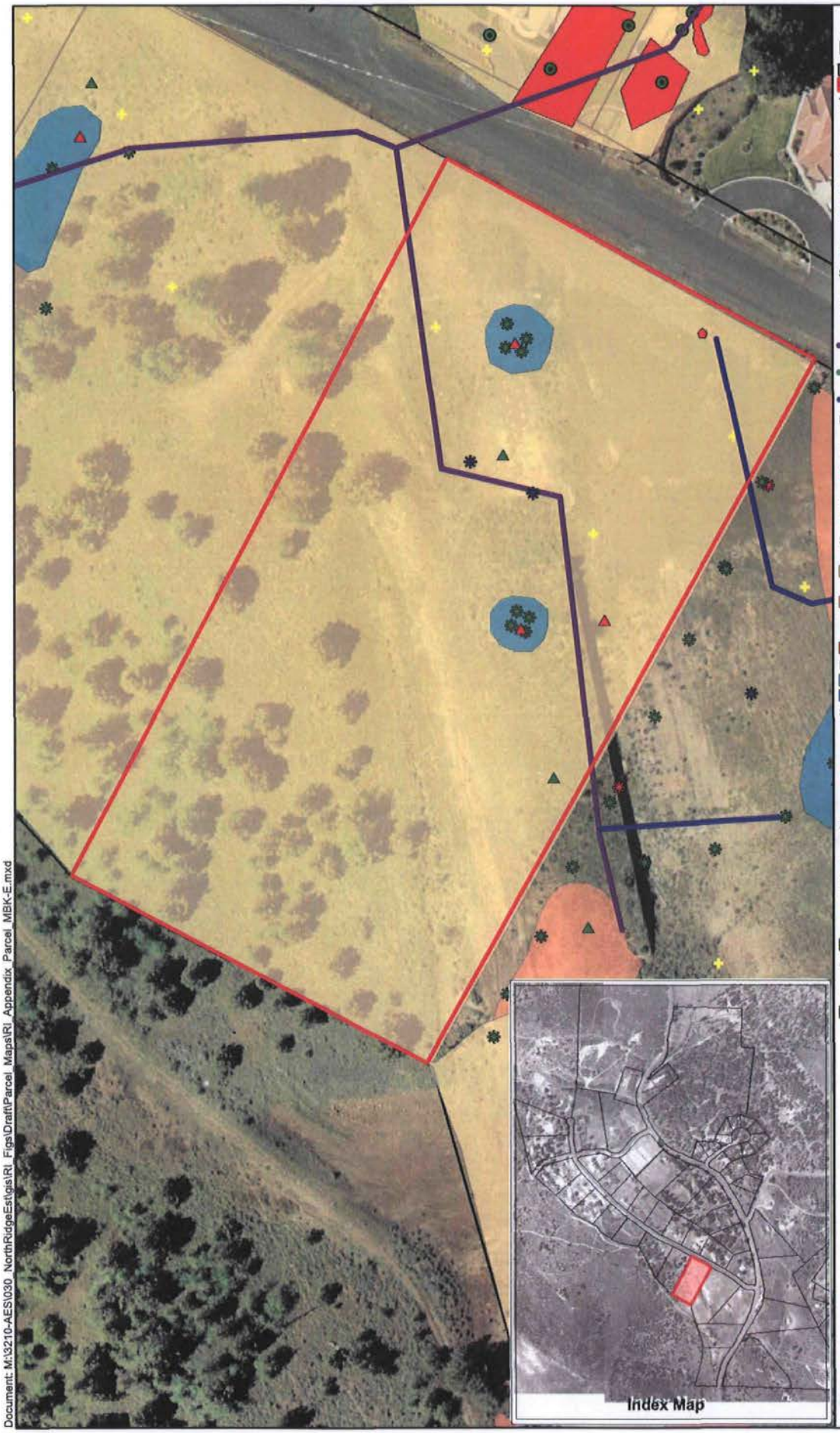

Parcel MBK-E

Legend

- Parcels
- Parcel MBK-E

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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DRAFT

Parcel MBK-F

Legend

- Parcels
- Parcel MBK-F

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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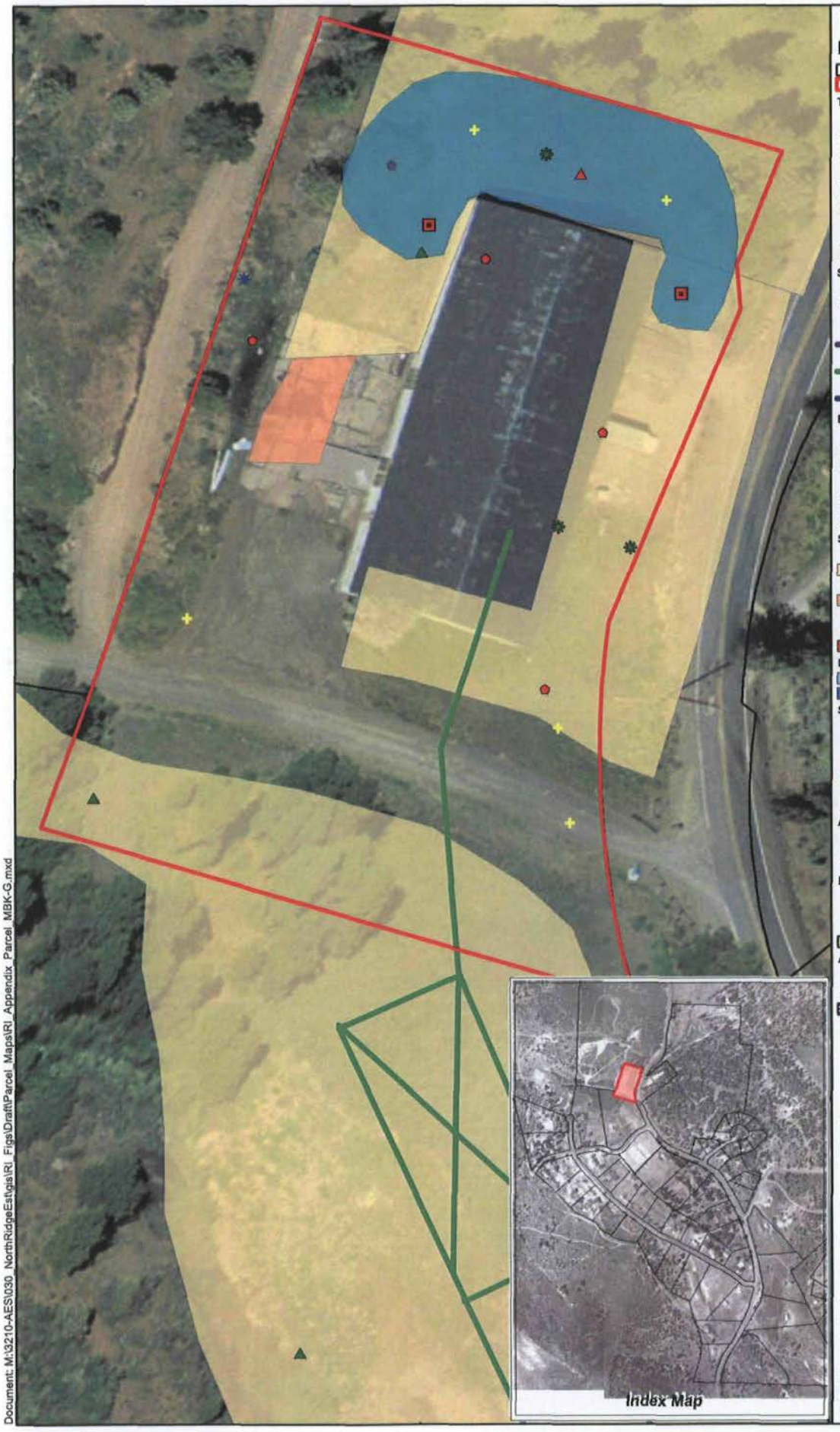

Parcel MBK-G

Legend

- Parcels
- Parcel MBK-G

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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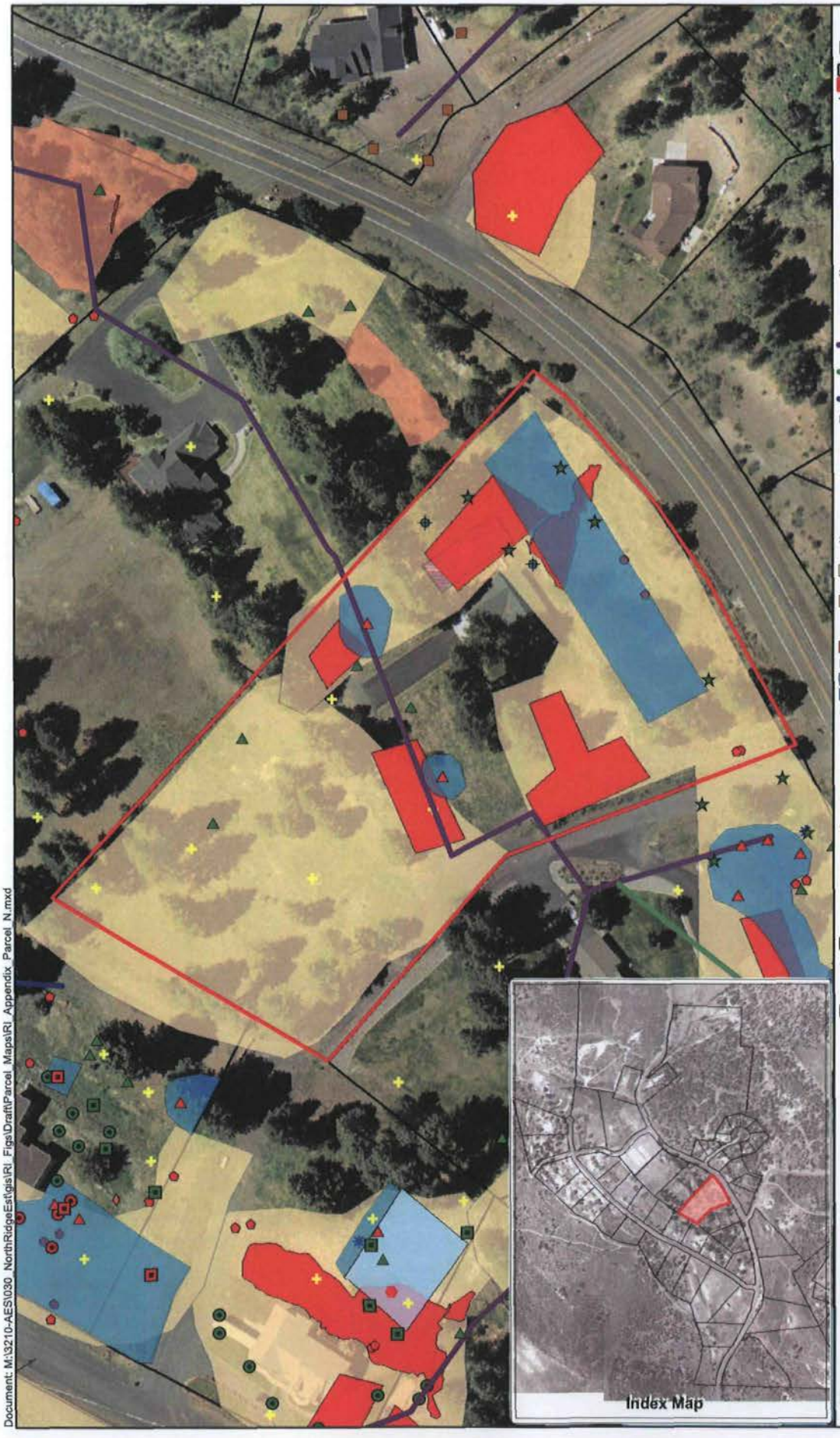

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- Parcels
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TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150

Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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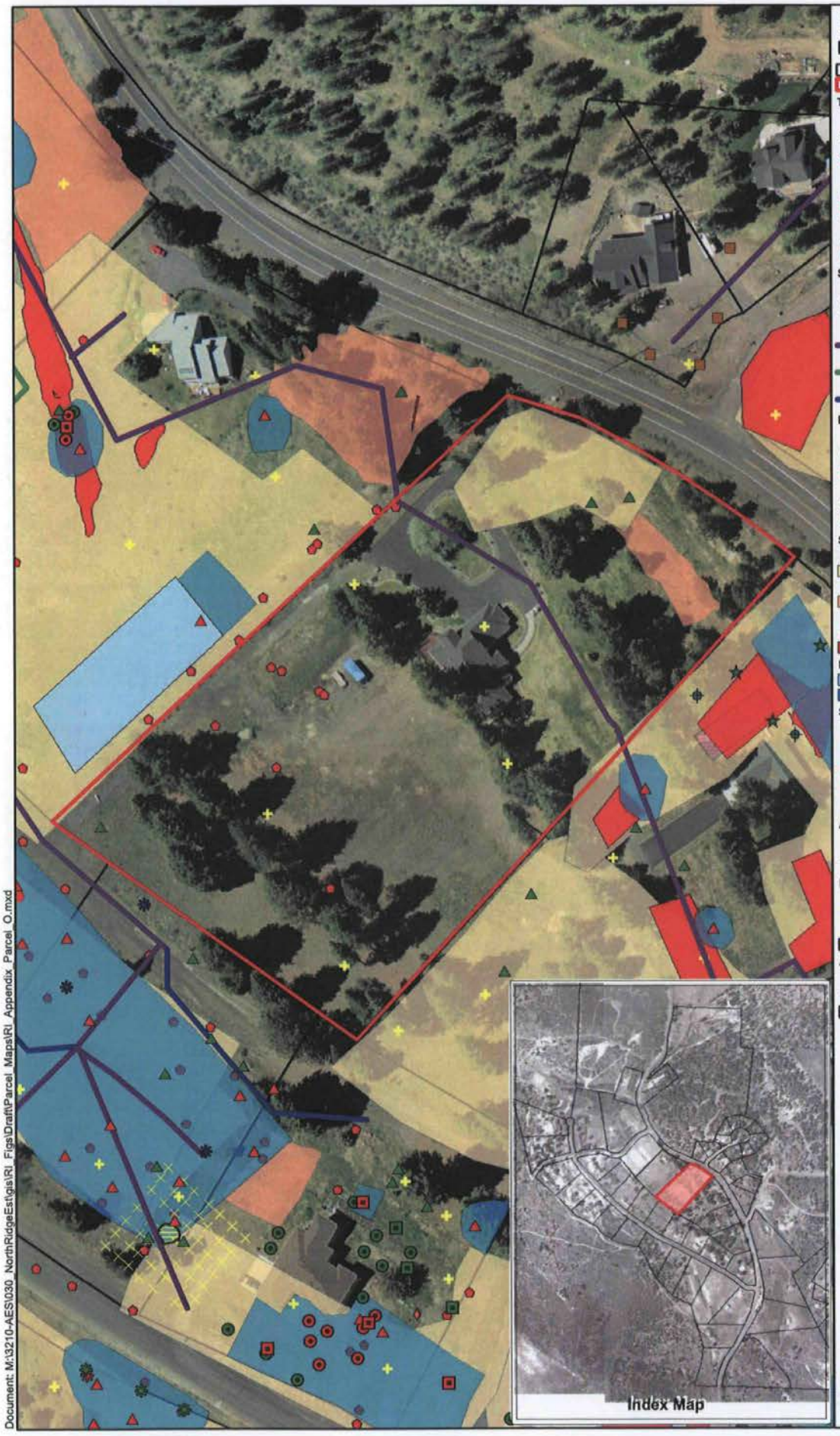

Parcel O

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- Parcels
- Parcel O

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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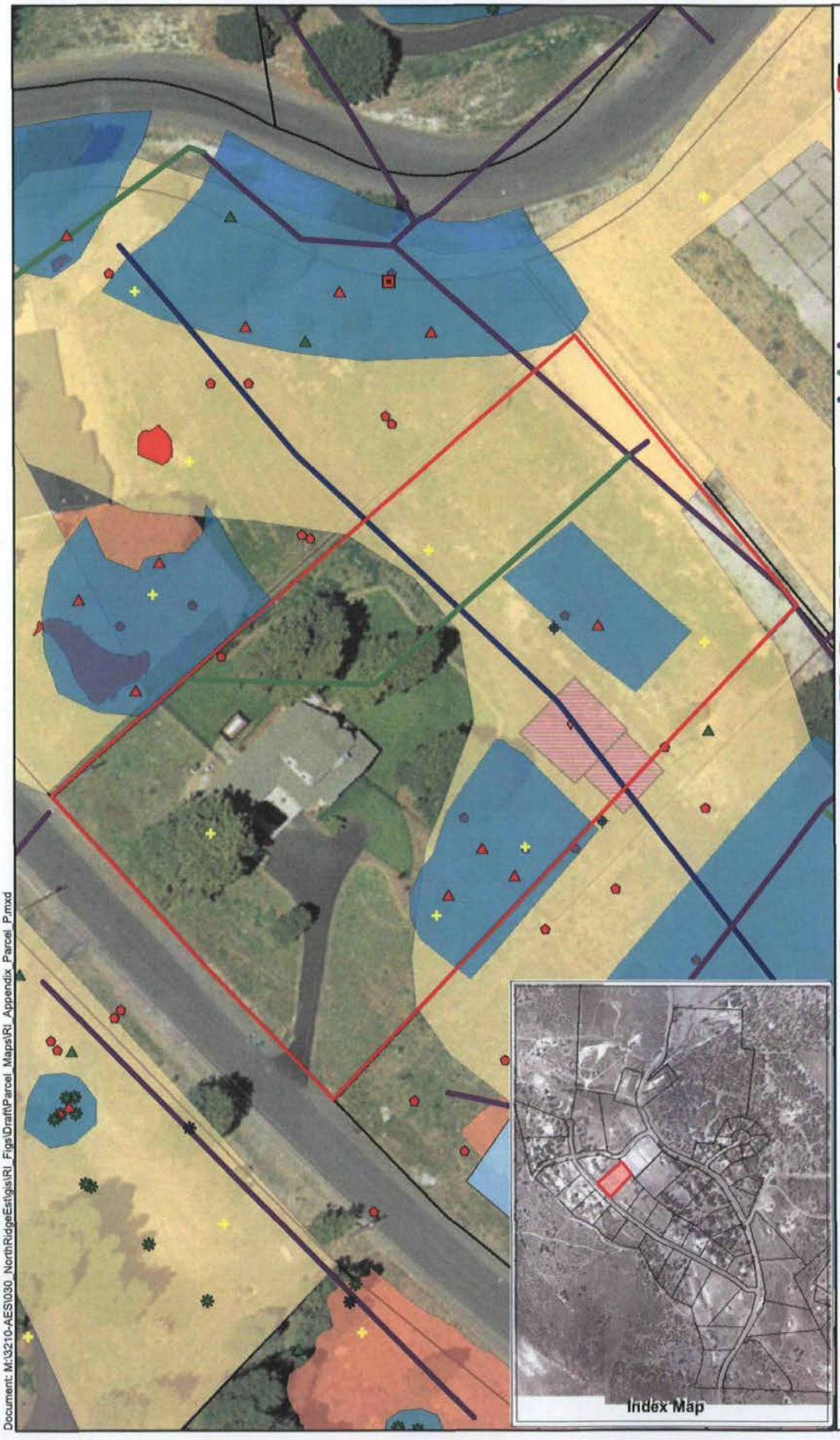

Parcel P

Legend

- Parcels
- Parcel P

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
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February 2007

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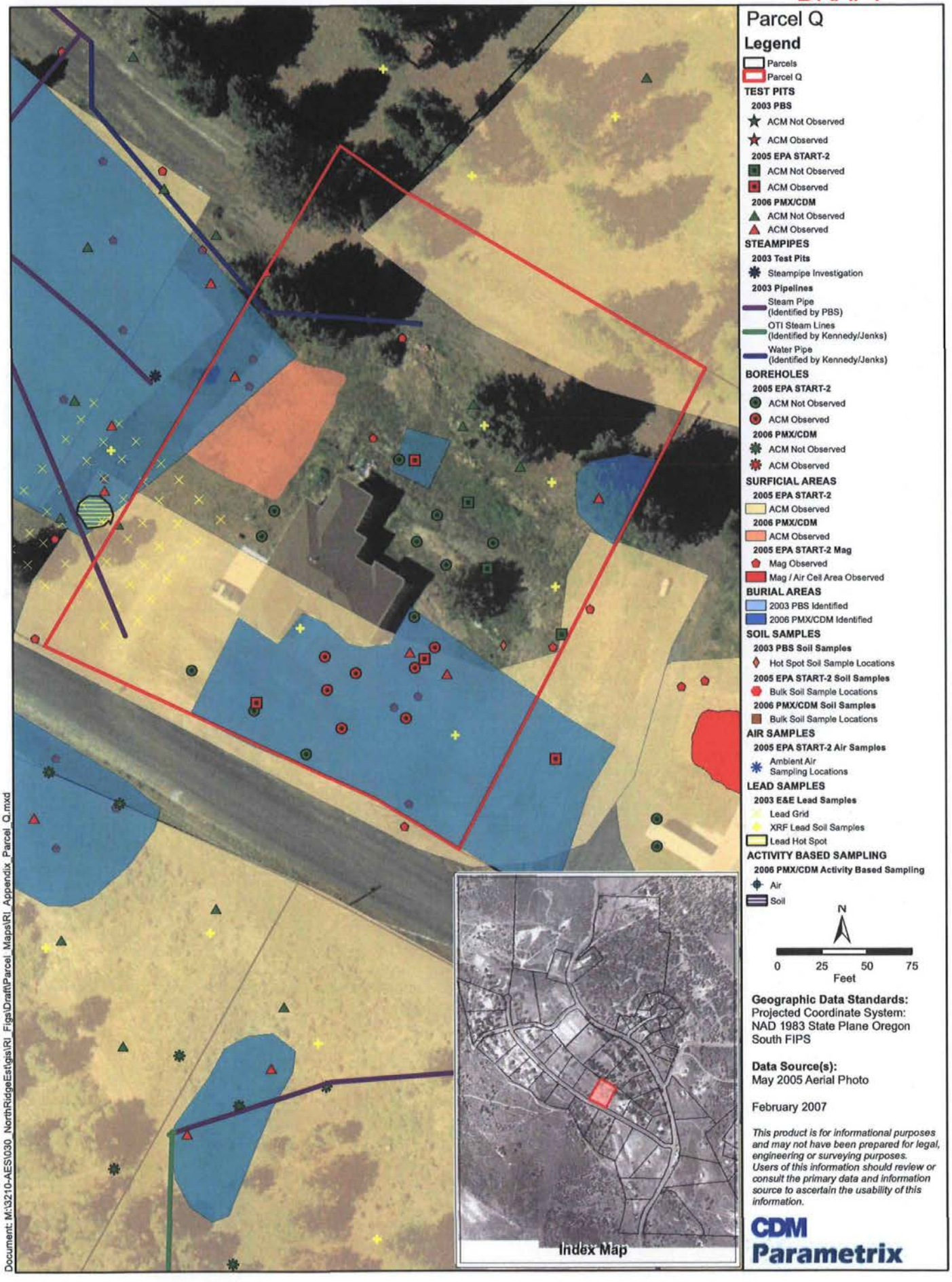

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Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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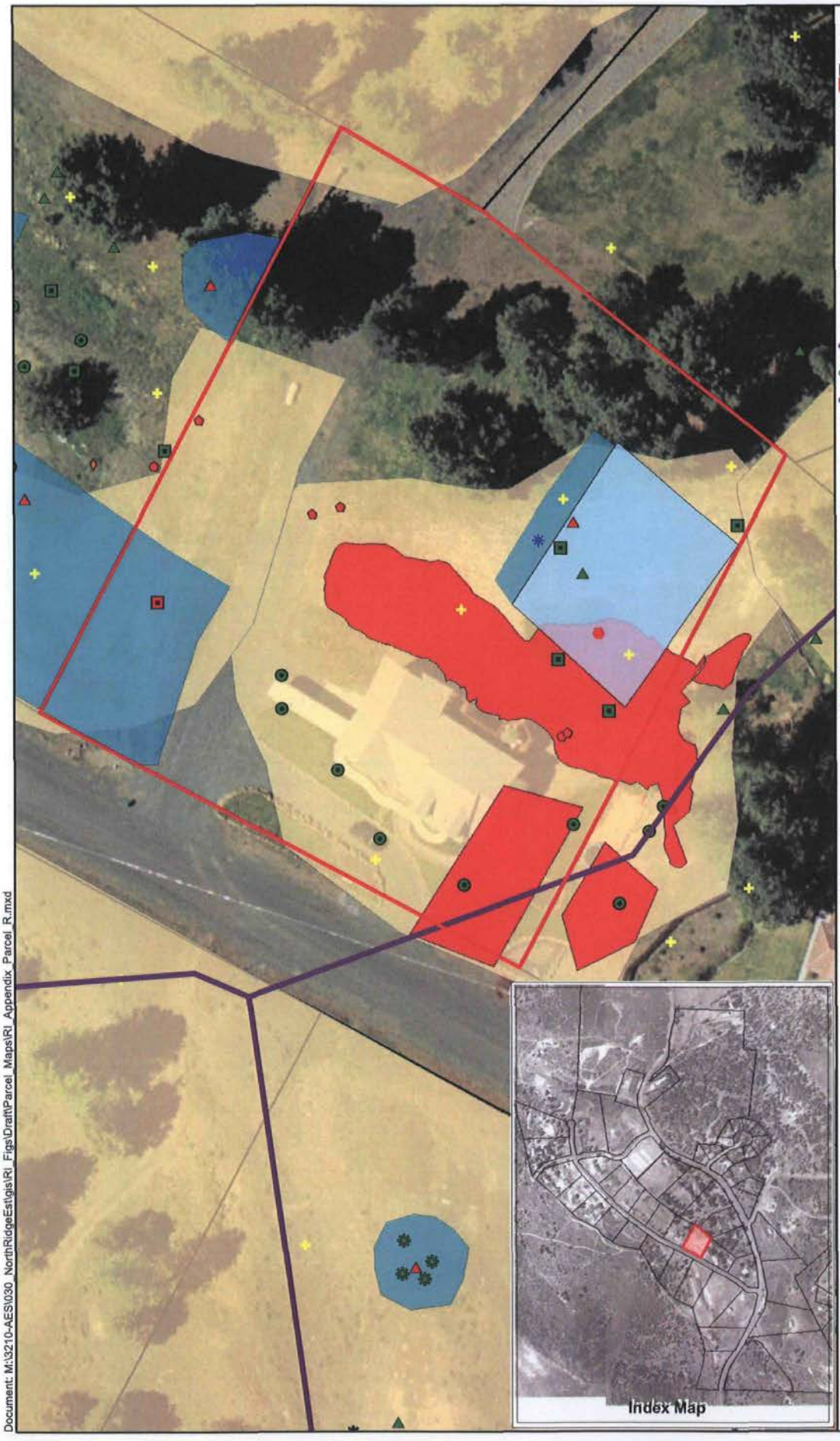

Parcel R

Legend

- Parcels
- Parcel R

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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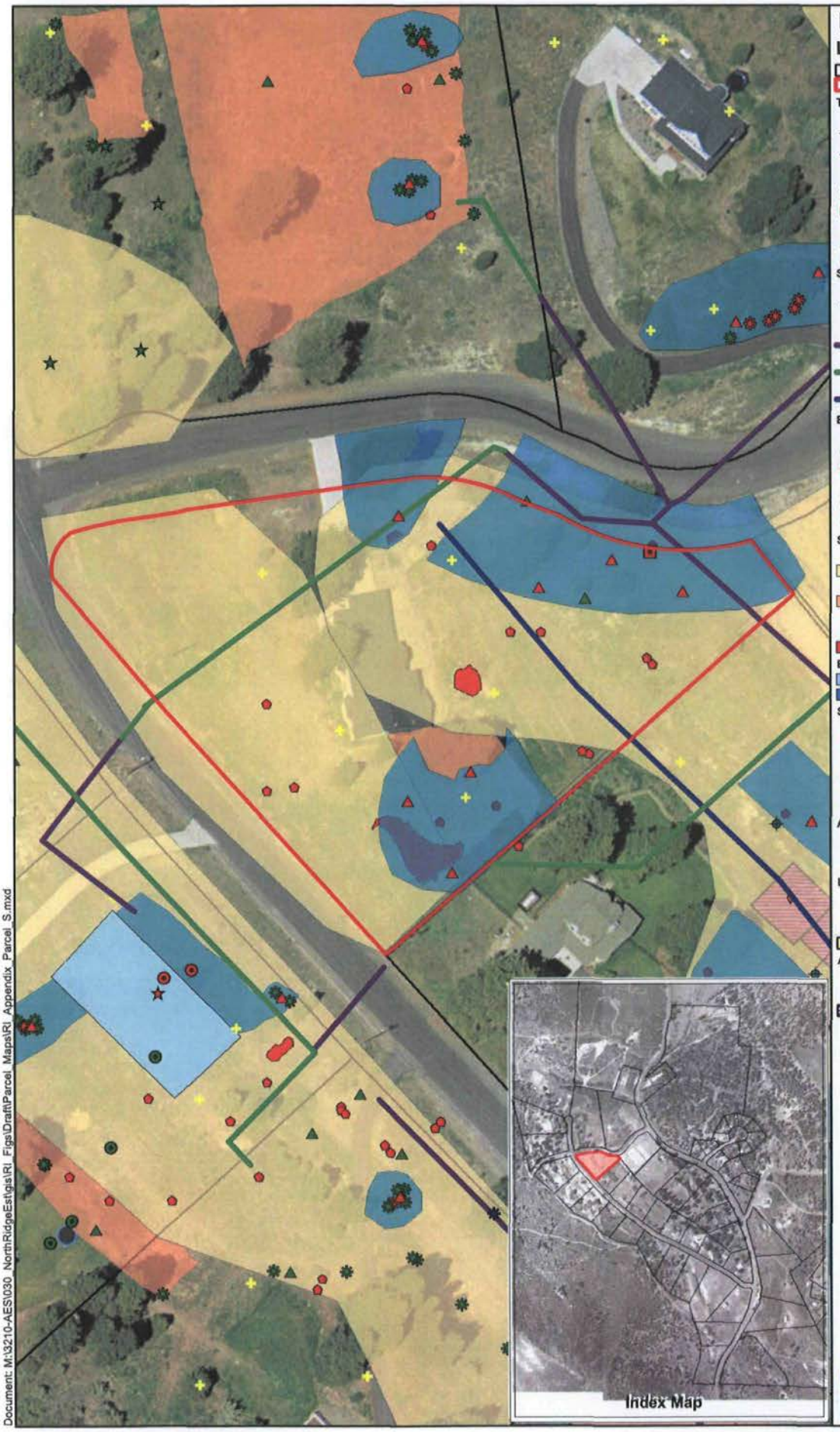

Parcel S

Legend

- Parcels
- Parcel S

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Parcel AG
Legend

- Parcels
- Parcel AG

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
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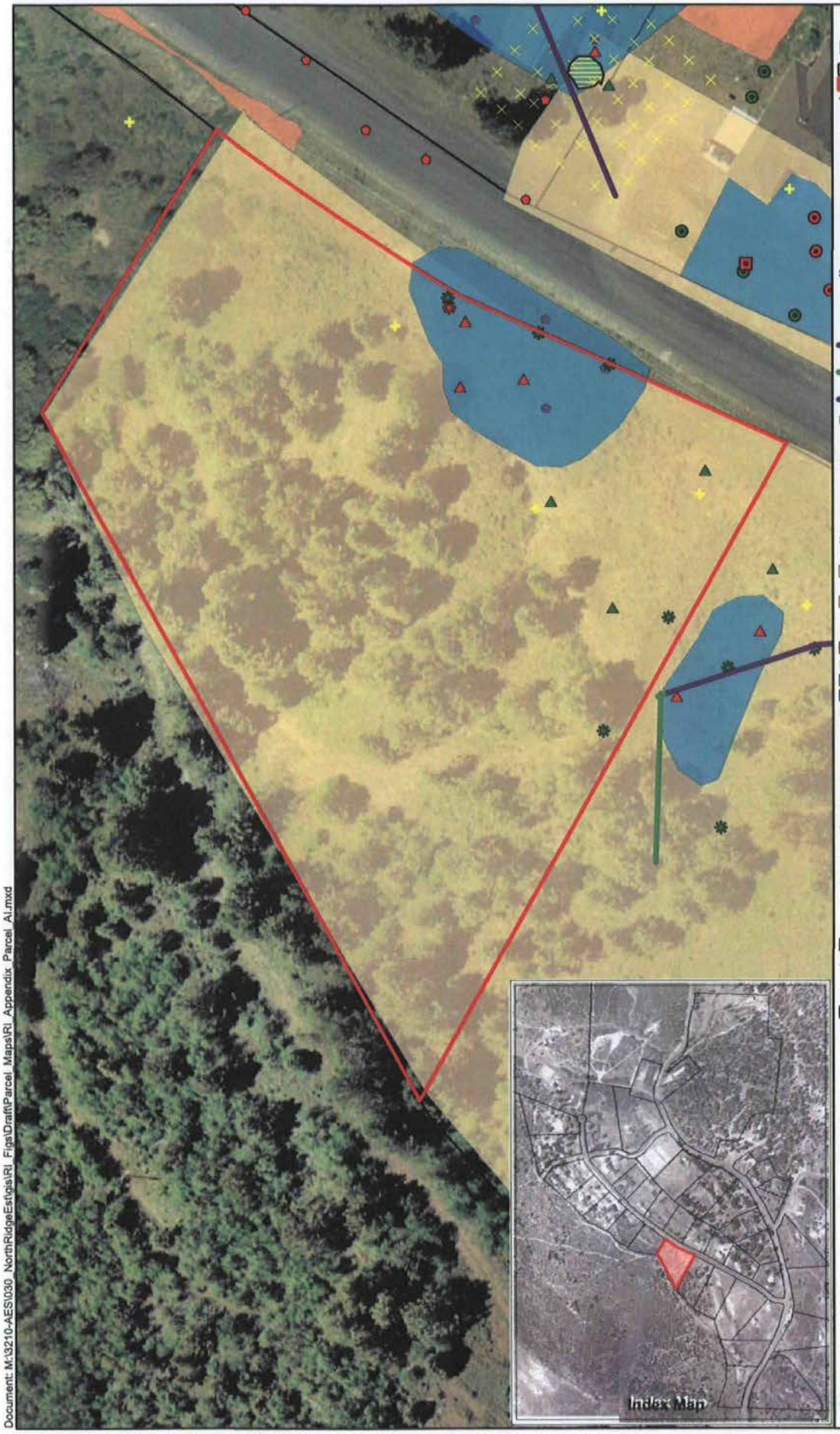

Parcel AI

Legend

- Parcels
- Parcel AI

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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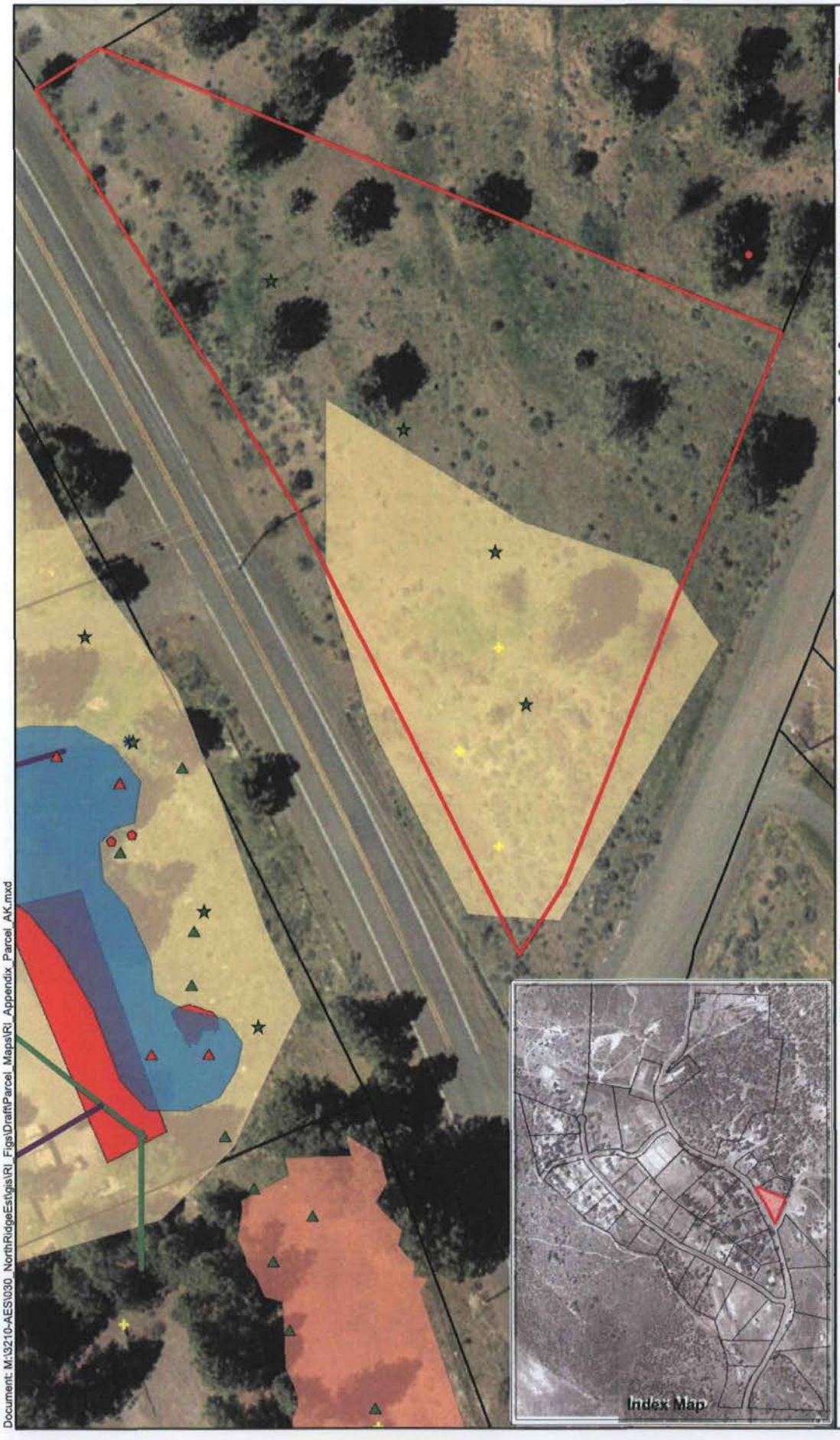

Parcel AK

Legend

- Parcels
- Parcel AK

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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DRAFT

Parcel AL

Legend

- Parcels
- Parcel AL

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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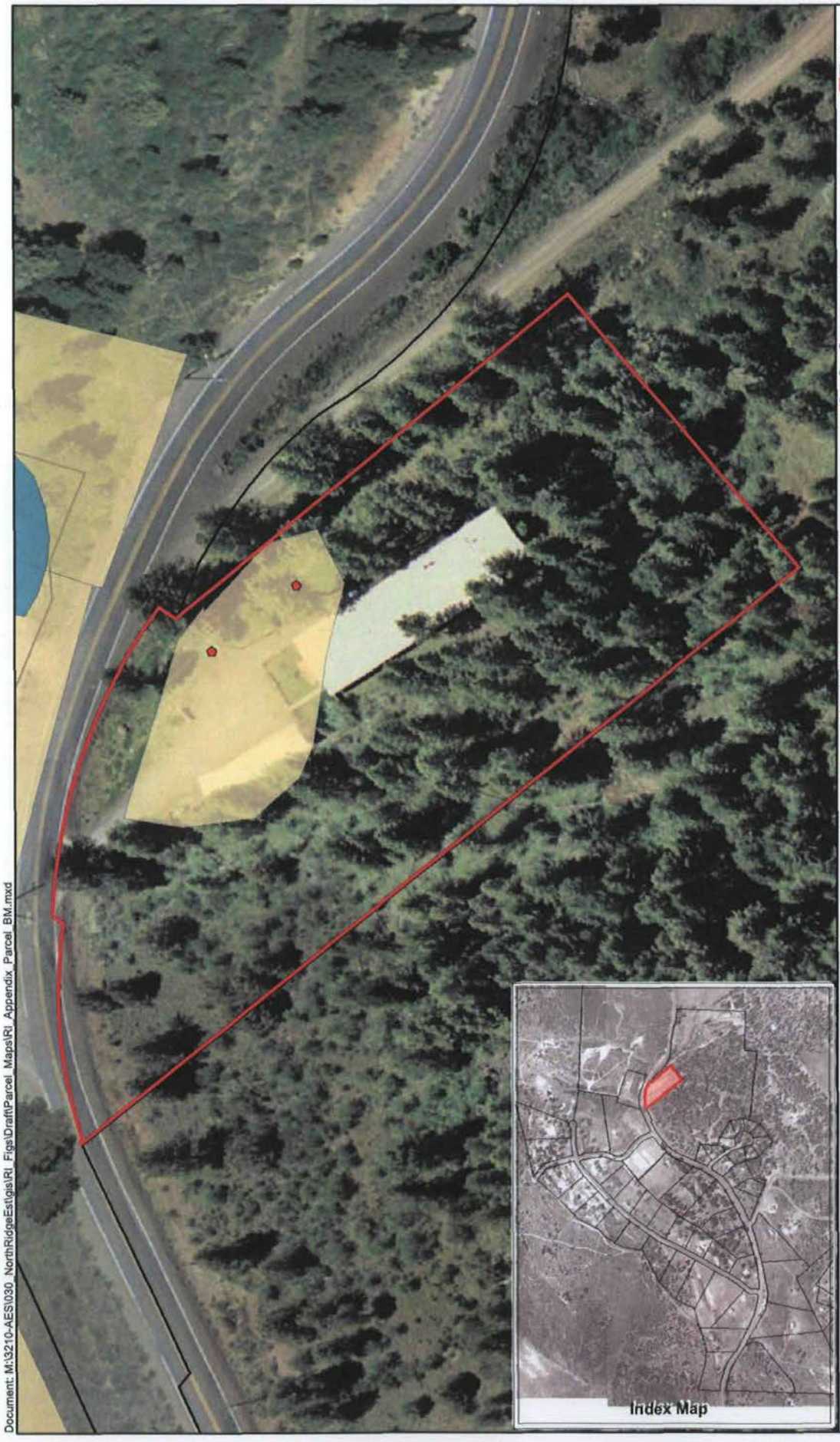
DRAFT



Parcel BM

Legend

- Parcels
- Parcel BM

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Parcel BO

Legend

- Parcels
- Parcel BO

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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Appendix D
Bin B Parcel Maps

DRAFT

Parcel Y

Legend

- Parcels
- Parcel Y

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Parcel AM

Legend

- Parcels
- Parcel AM

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
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- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100 125
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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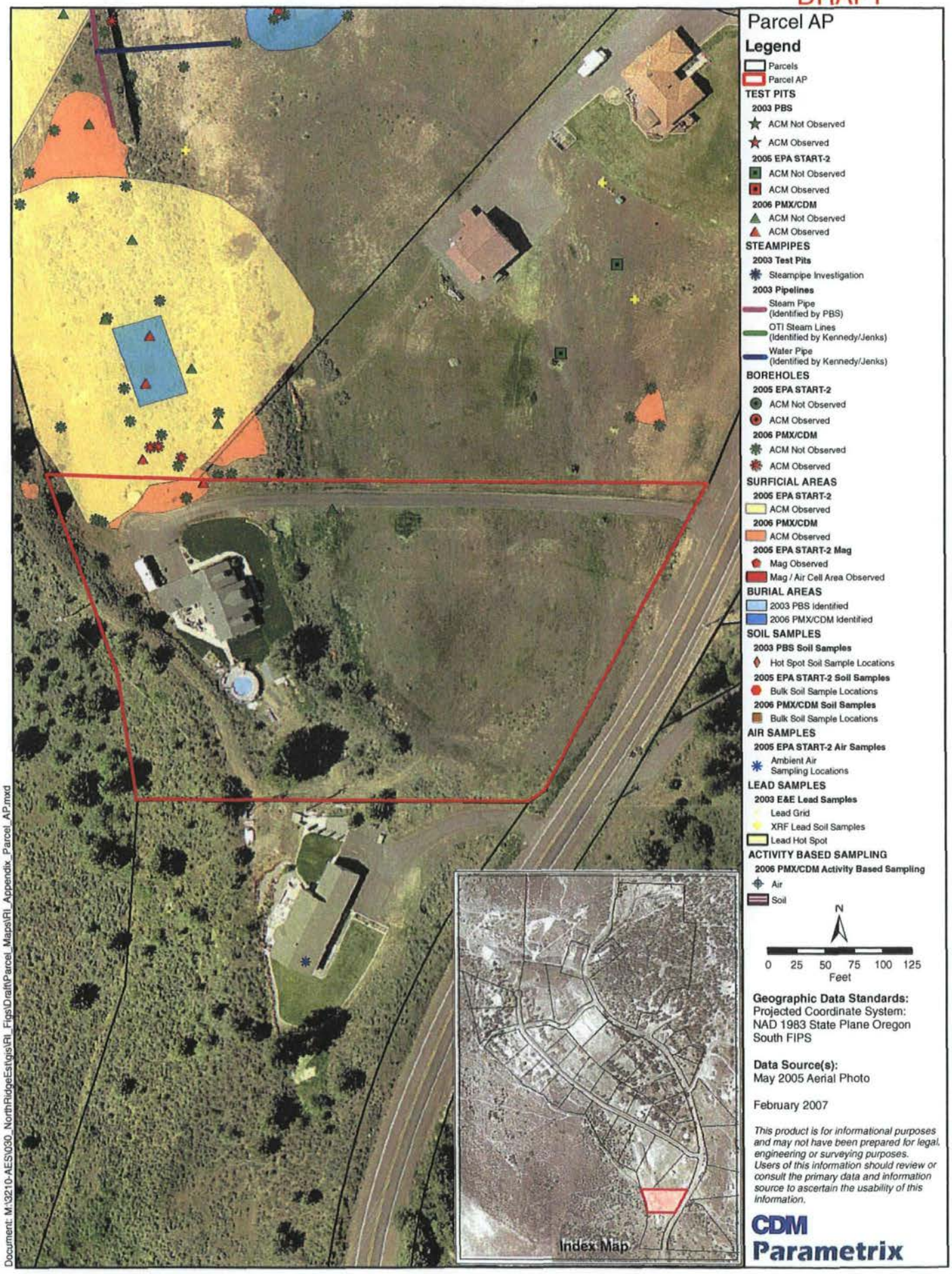

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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DRAFT

Parcel AQ

Legend

- Parcels
- Parcel AQ

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
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- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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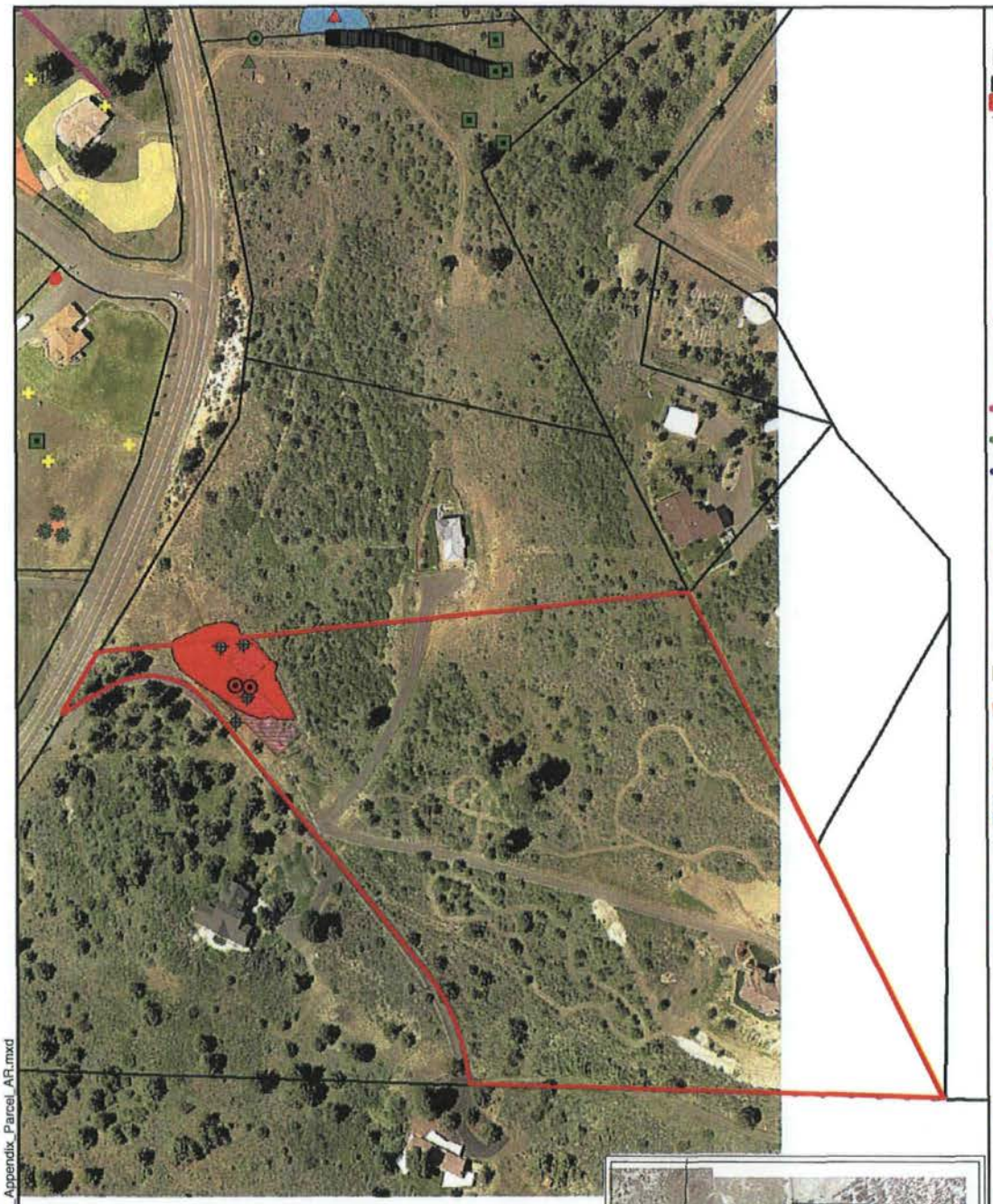

Parcel AR

Legend

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TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
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- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100 Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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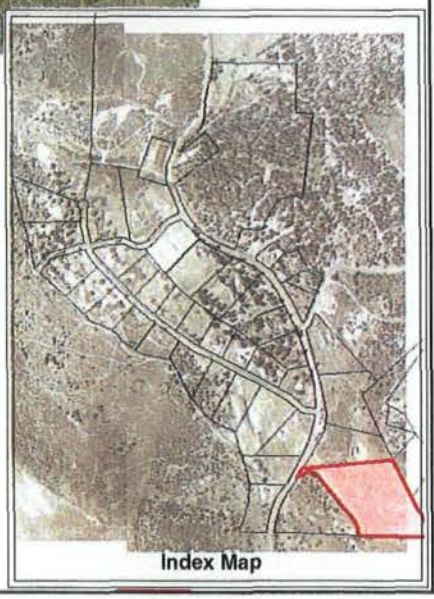

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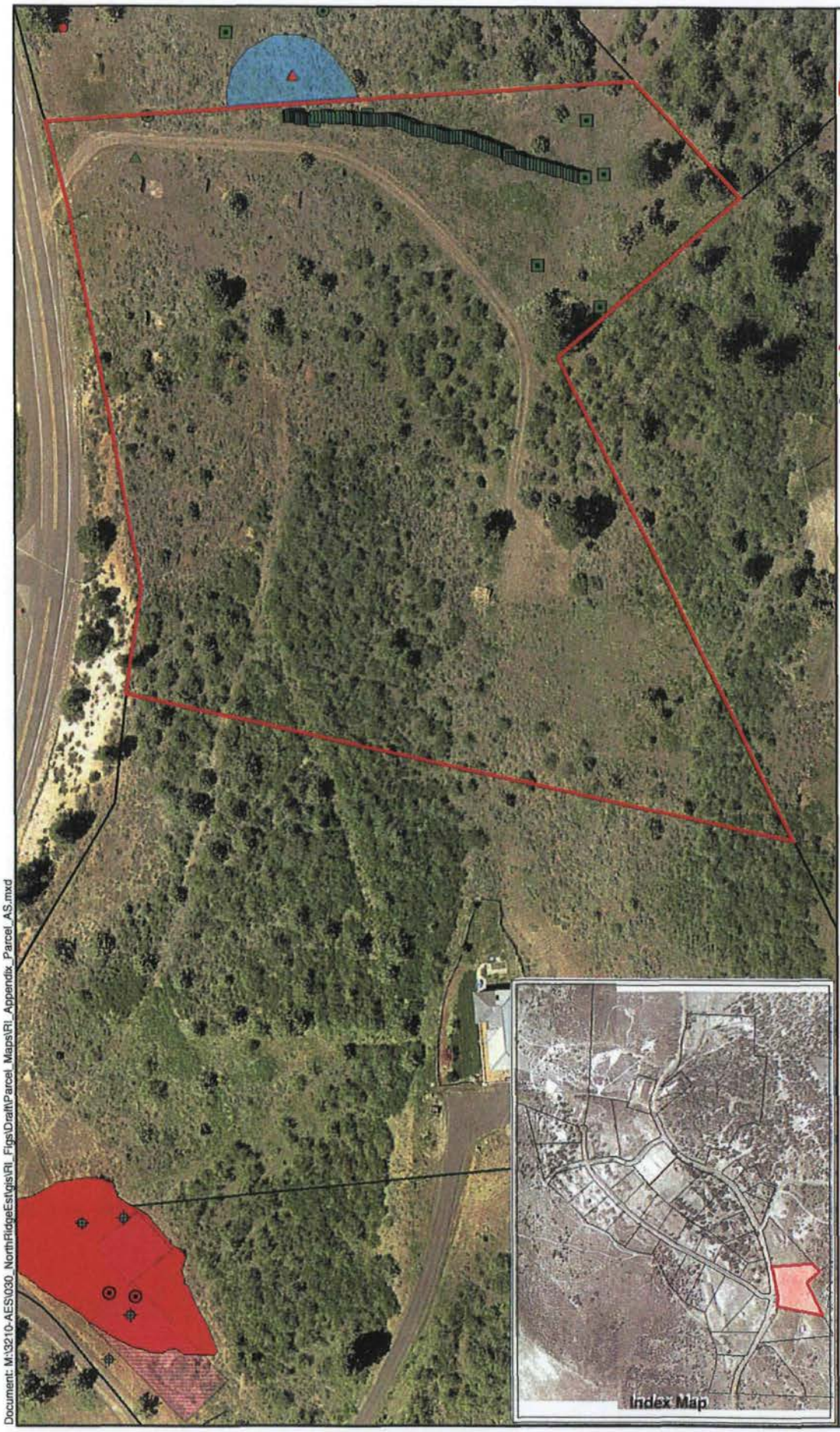

Parcel AS

Legend

- Parcels
- Parcel AS

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
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- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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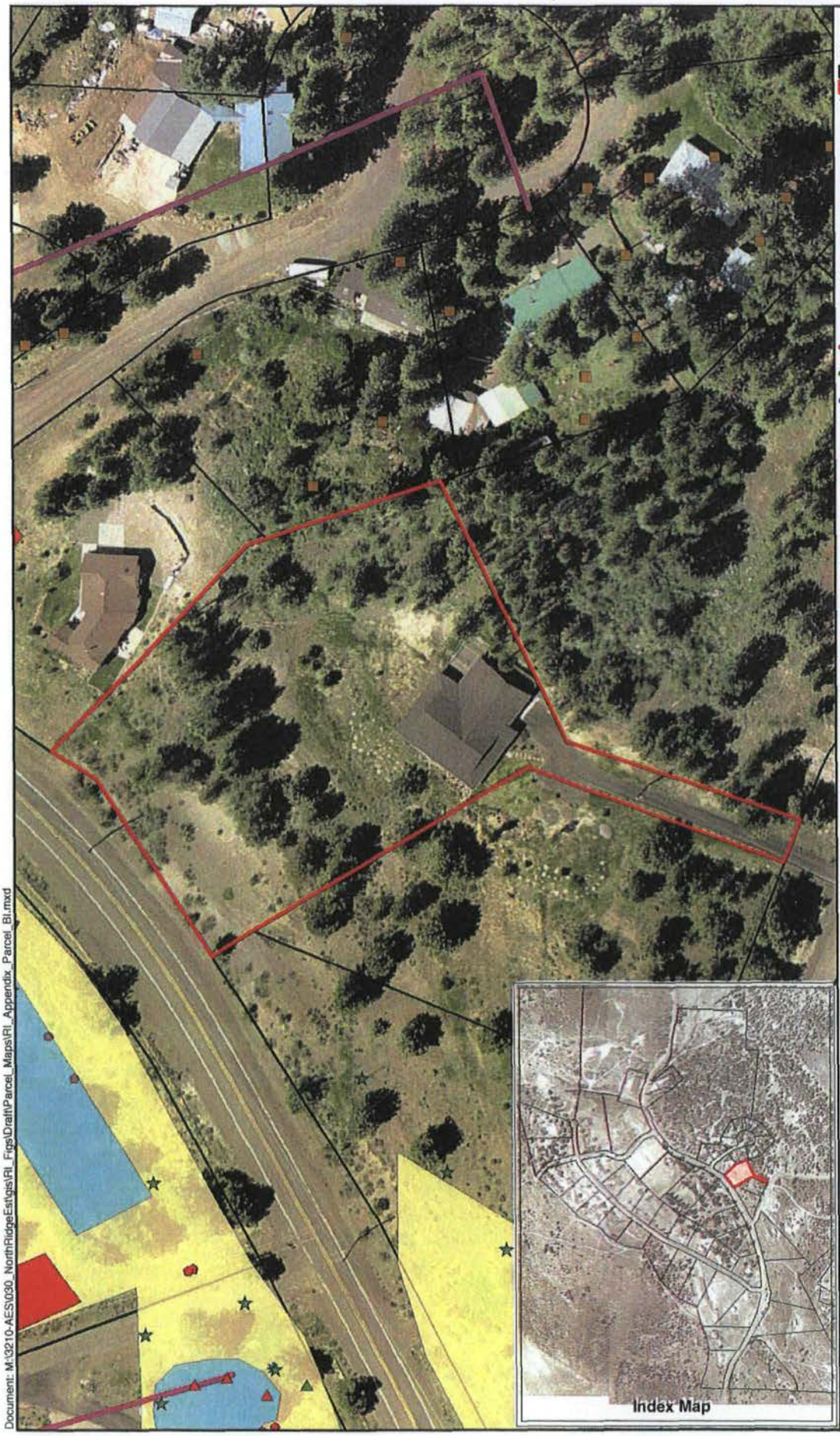

Parcel BI

Legend

- Parcels
- Parcel BI

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75 100
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Parcel BJ

Legend

- Parcels
- Parcel BJ

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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DRAFT

Parcel BK

Legend

- Parcels
- Parcel BK

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
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- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Parcel BL

Legend

- Parcels
- Parcel BL

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
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2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Swimming Pool

Legend

- Parcels
- Swimming Pool

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
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- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

Document: M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Draft\Parcel_Maps\RI_Appendix_Pool.mxd

DRAFT

WWTP

Legend

- Parcels
- Wastewater Treatment Plant

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

Document: M:\3210-AES\030_NorthRidgeEsg\gis\RI_Figs\Draft\Parcel_Maps\RI_Appendix_WWTP.mxd

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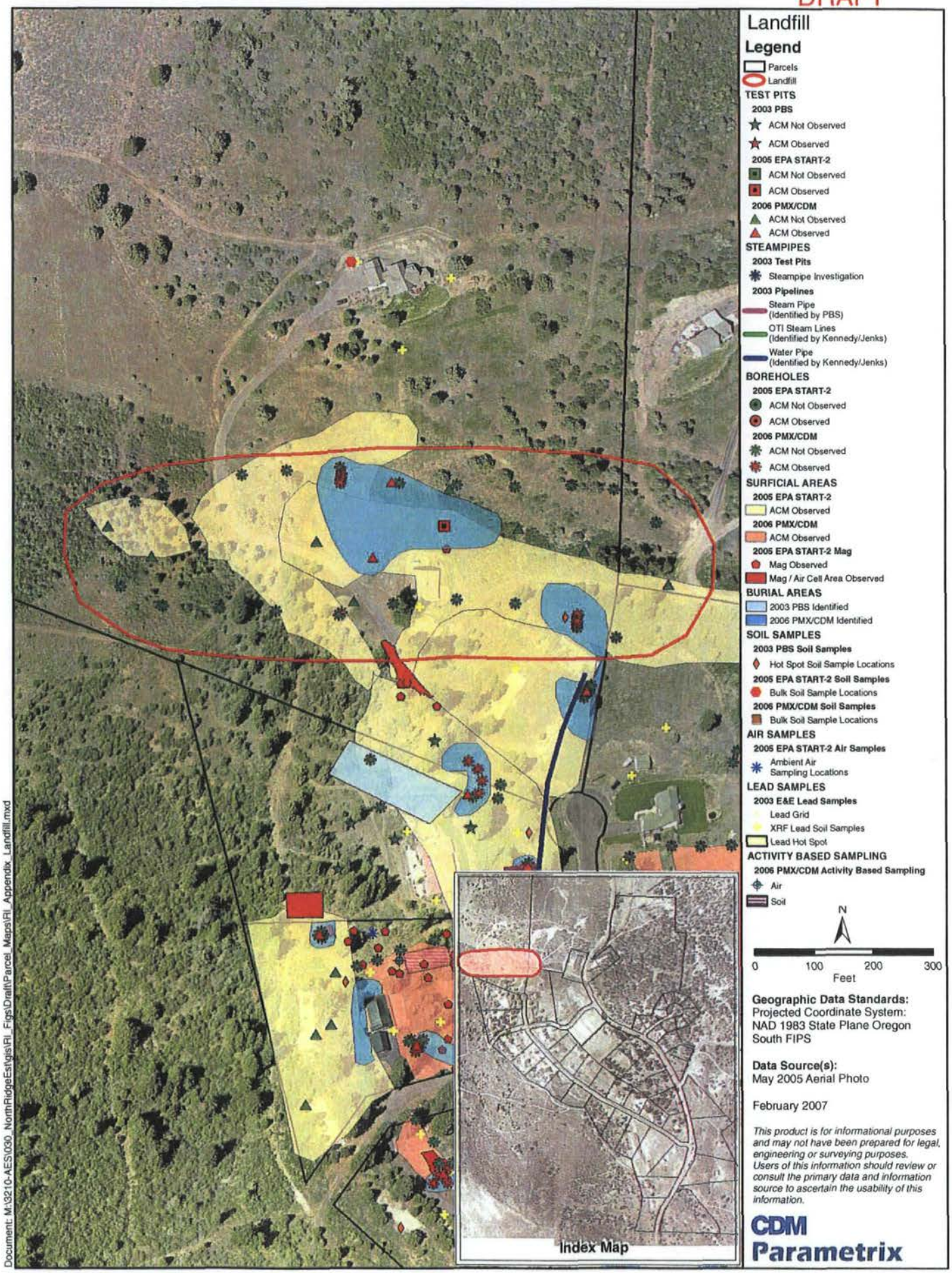

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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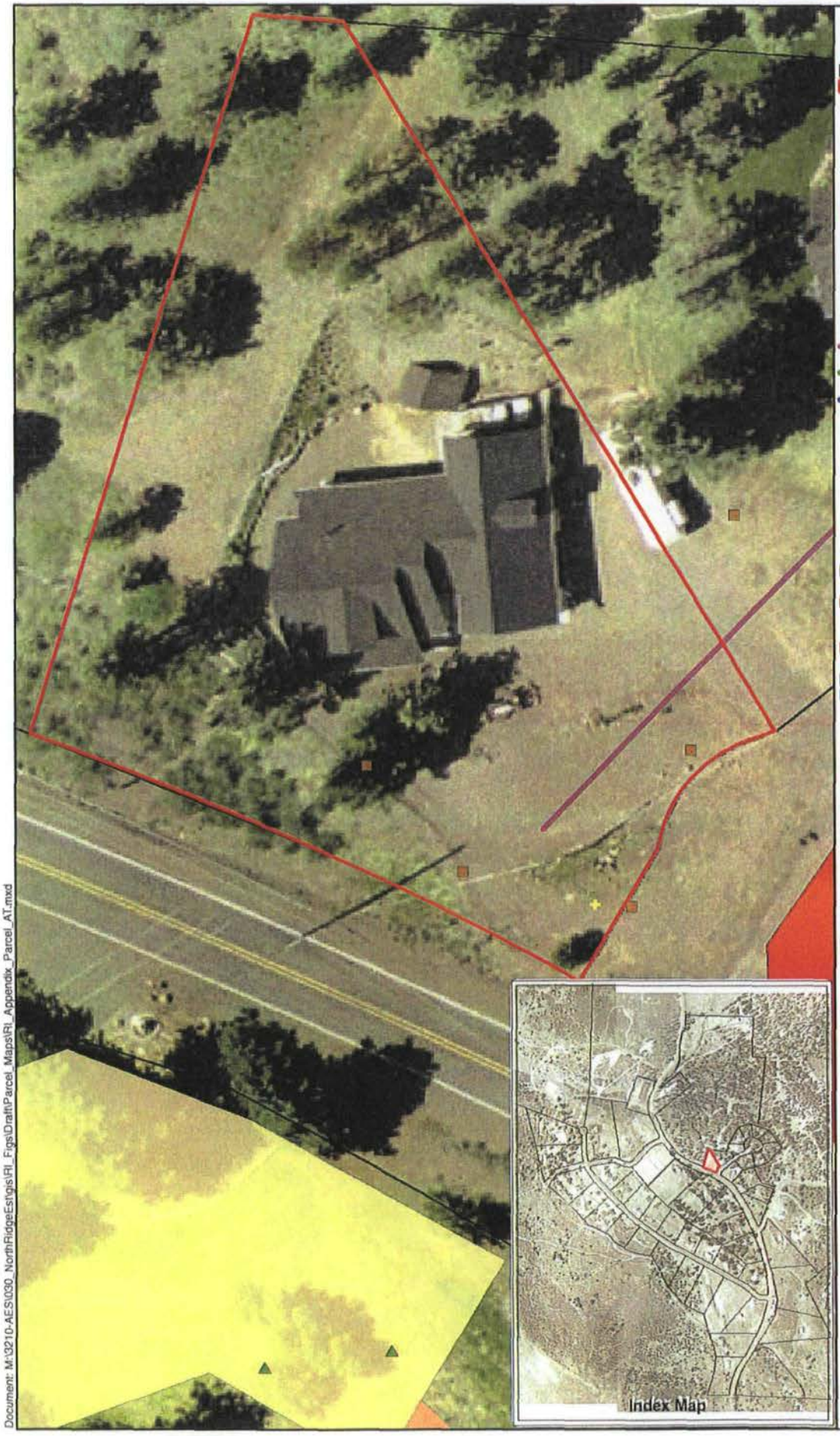
CDM Parametrix

Document: M:\3210-AESV030_NorthRidgeEstates\RI_Figs\Draft\Parcel_Maps\RI_Appendix_Landfill.mxd

Appendix E
Bin C Parcel Maps

DRAFT



Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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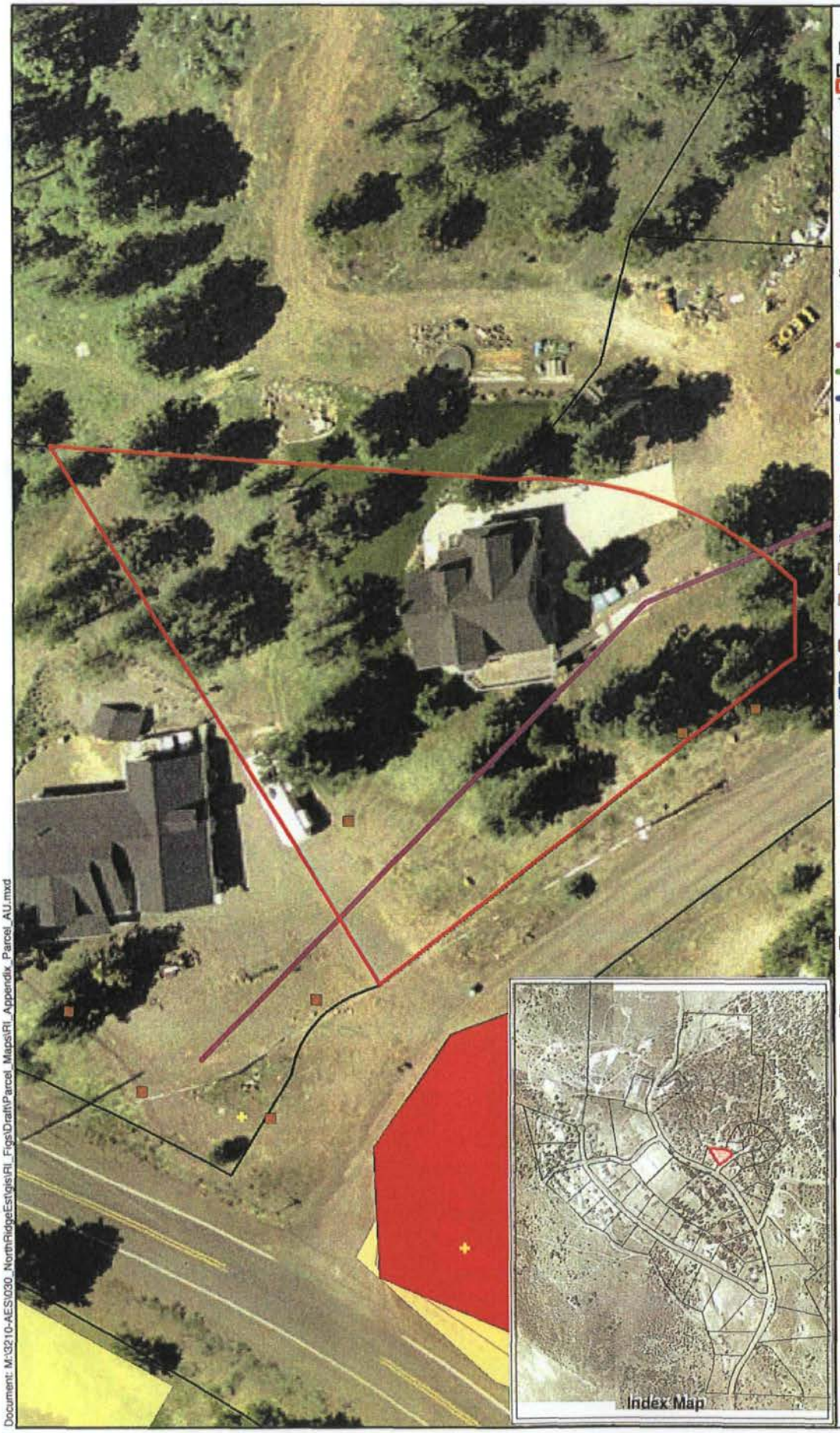

Parcel AU

Legend

- Parcels
- Parcel AU

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Document: M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Draft\Parcel_Maps\RI_Appendix_Parcel_AU.mxd

DRAFT

Parcel AV

Legend

- Parcels
- Parcel AV

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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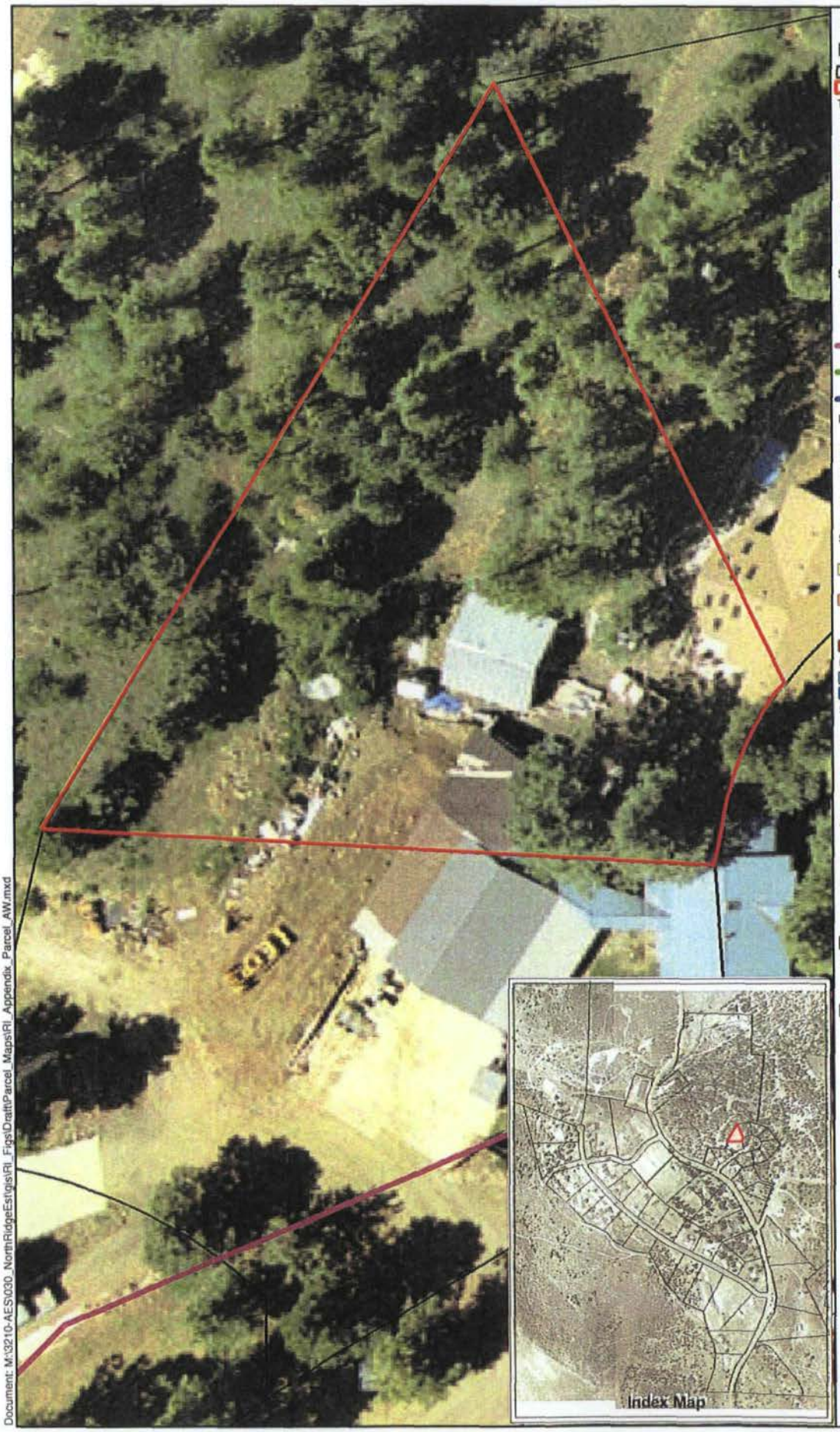

Parcel AW

Legend

- Parcels
- Parcel AW

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

Document: M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Draft\Parcel_Maps\RI_Appendix_Parcel_AW.mxd

DRAFT

Parcel AX

Legend

- Parcels
- Parcel AX

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe *(Identified by PBS)*
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 15 30 45
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

Document: M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Draft\Parcel_Maps\RI_Appendix_Parcel_AX.mxd

DRAFT

Parcel AY

Legend

- Parcels
- Parcel AY

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- *Steampipe Investigation*

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- *ACM Not Observed*
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 15 30 45
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Document: M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Draft\Parcel_Maps\RI_Appendix_Parcel_AY.mxd

DRAFT

Parcel AZ

Legend

- Parcels
- Parcel AZ

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 15 30 45

Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Parcel BA

Legend

- Parcels
- Parcel BA

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Parcel BB

Legend

- Parcels
- Parcel BB

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

Document: M:\3210-AES\030_NorthRidgeEst\gis\RI_Figs\Draft\Parcel_Maps\RI_Appendix_Parcel_BB.mxd

DRAFT

Parcel BC

Legend

- Parcels
- Parcel BC

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

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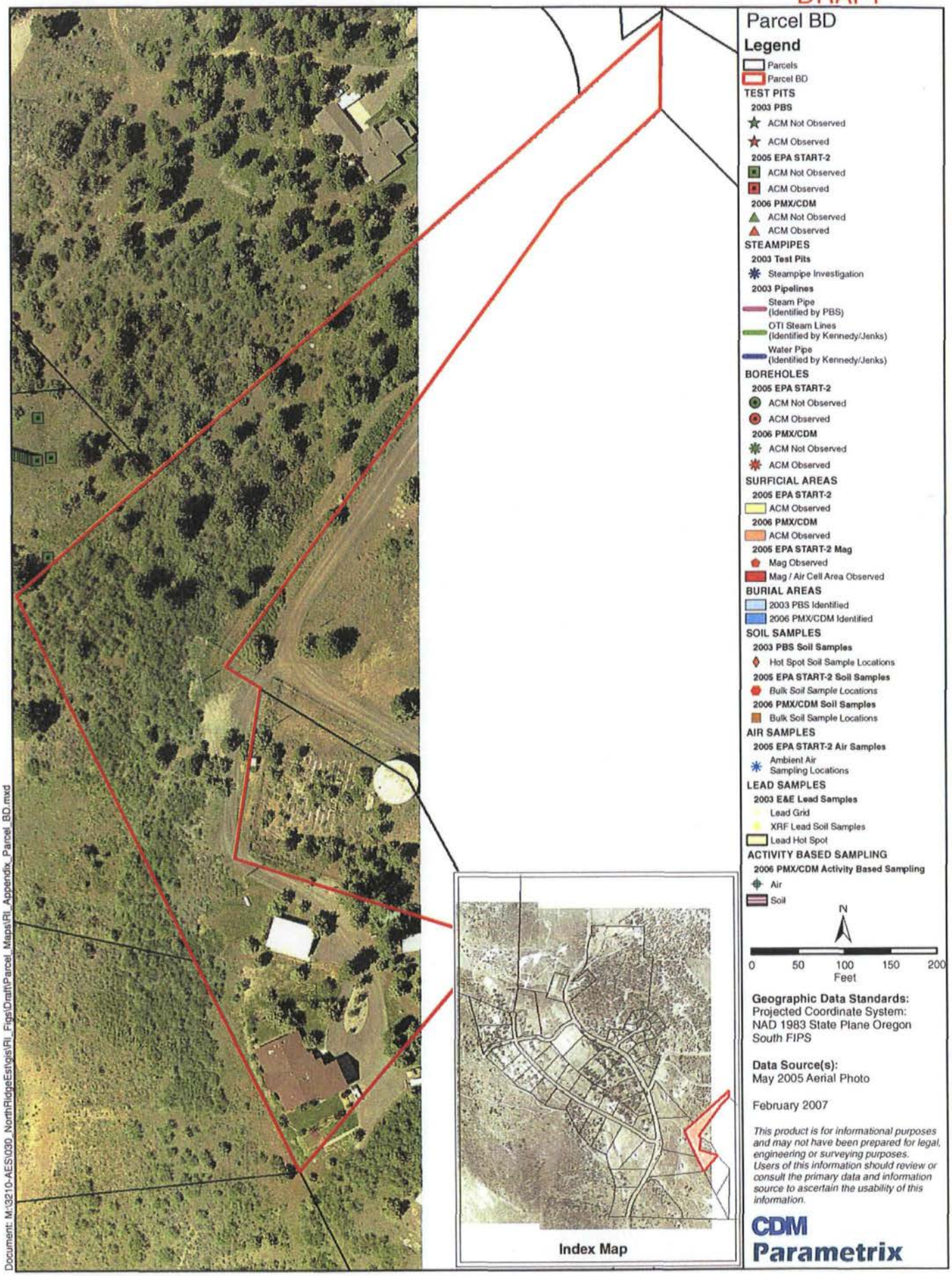

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Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

DRAFT

Parcel BE

Legend

- Parcels
- Parcel BE

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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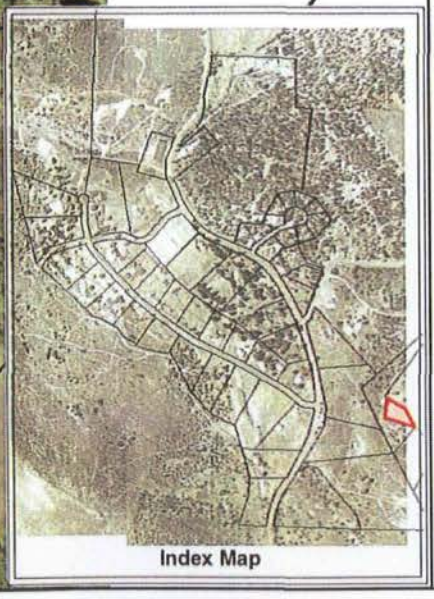
CDM Parametrix



Index Map

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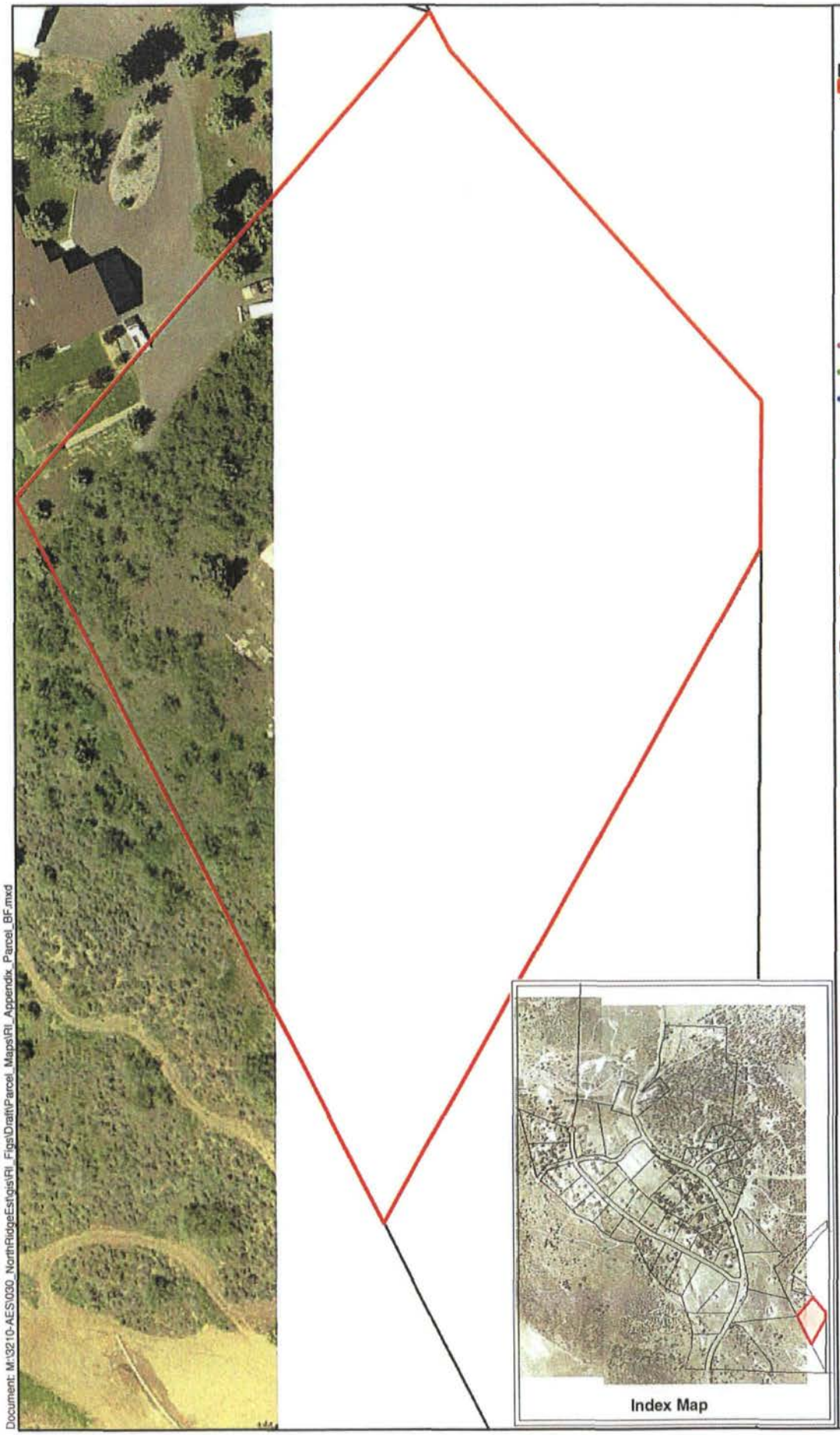

Parcel BF

Legend

- Parcels
- Parcel BF

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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CDM Parametrix

Index Map

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DRAFT

Parcel BG

Legend

- Parcels
- Parcel BG

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- *Bulk Soil Sample Locations*

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 25 50 75
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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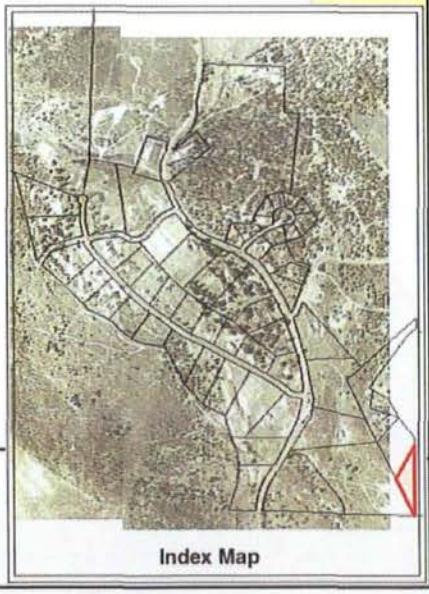

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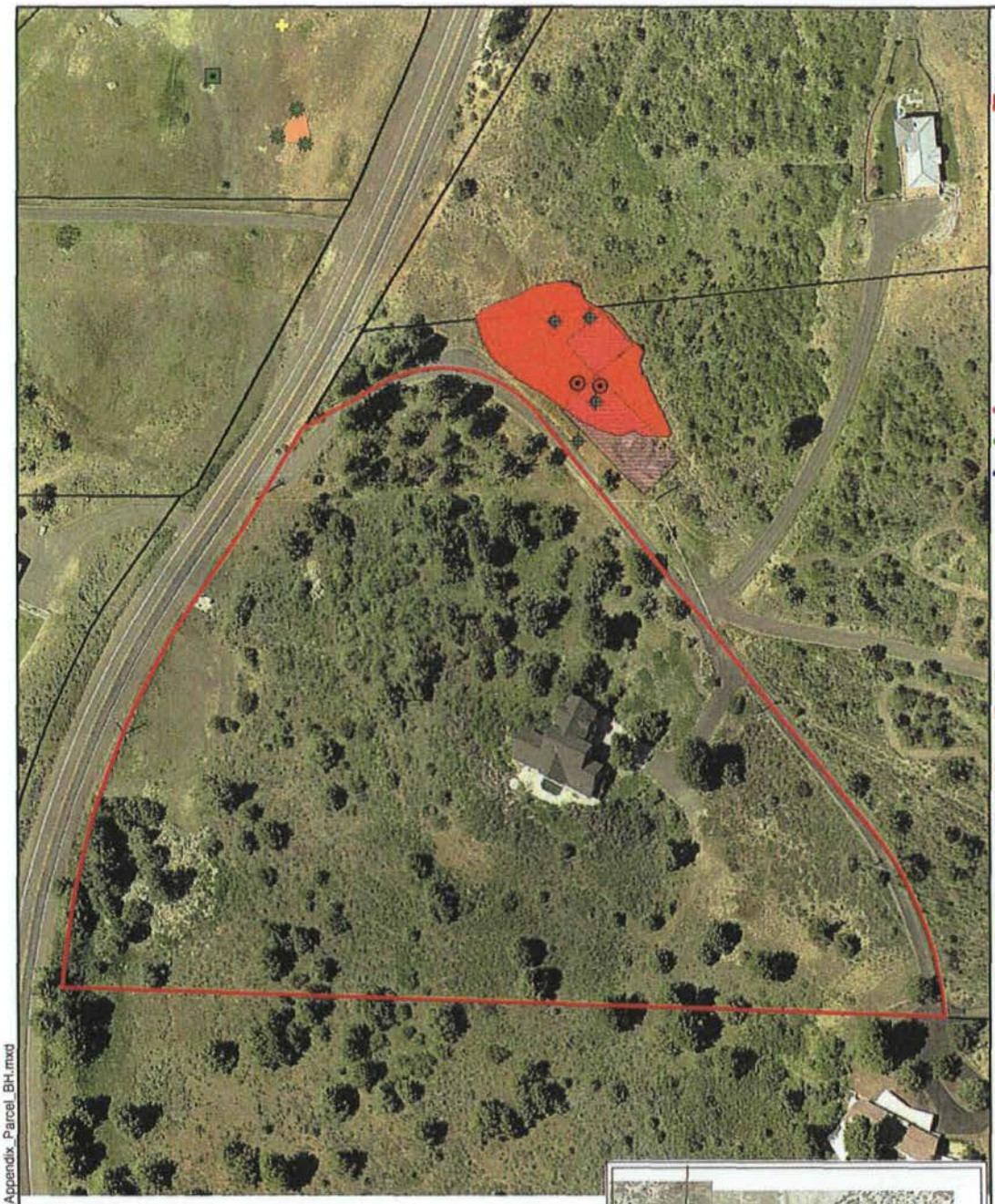

Parcel BH

Legend

- Parcels
- Parcel BH

TEST PITS

2003 PBS
- ACM Not Observed
- ACM Observed

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

STEAMPIPES

2003 Test Pits
- Steampipe Investigation

2003 Pipelines
- Steam Pipe (Identified by PBS)
- OTI Steam Lines (Identified by Kennedy/Jenks)
- Water Pipe (Identified by Kennedy/Jenks)

BOREHOLES

2005 EPA START-2
- ACM Not Observed
- ACM Observed

2006 PMX/CDM
- ACM Not Observed
- ACM Observed

SURFICIAL AREAS

2005 EPA START-2
- ACM Observed

2006 PMX/CDM
- ACM Observed

2005 EPA START-2 Mag
- Mag Observed
- Mag / Air Cell Area Observed

BURIAL AREAS
- 2003 PBS Identified
- 2006 PMX/CDM Identified

SOIL SAMPLES

2003 PBS Soil Samples
- Hot Spot Soil Sample Locations

2005 EPA START-2 Soil Samples
- Bulk Soil Sample Locations

2006 PMX/CDM Soil Samples
- Bulk Soil Sample Locations

AIR SAMPLES

2005 EPA START-2 Air Samples
- Ambient Air Sampling Locations

LEAD SAMPLES

2003 E&E Lead Samples
- Lead Grid
- XRF Lead Soil Samples
- Lead Hot Spot

ACTIVITY BASED SAMPLING

2006 PMX/CDM Activity Based Sampling
- Air
- Soil

N

0 50 100 150 200
Feet

Geographic Data Standards:
Projected Coordinate System:
NAD 1983 State Plane Oregon South FIPS

Data Source(s):
May 2005 Aerial Photo

February 2007

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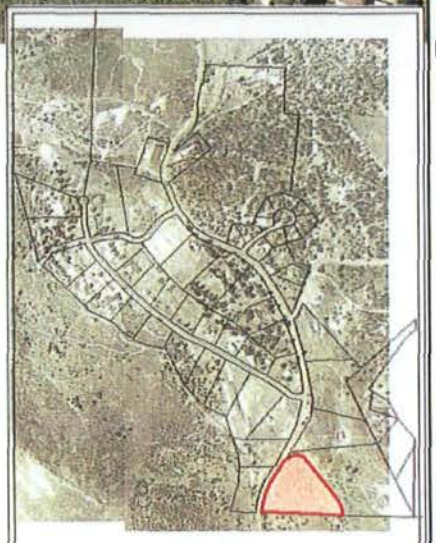
CDM Parametrix



Index Map

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Tables

Table 1-1. Summary of Asbestos Content of ACM at NRE (ODEQ 2001 and E&E 2006)		
Material Type	**Asbestos Type**	**% Asbestos**
CAB	Chrysotile	3 – 25
Roofing Material	Chrysotile	30 – 45
VAT	Chrysotile	<1 – 10
AirCell	Chrysotile	35 – 40
MAG Insulation	Chrysotile	3 – 70
	Amosite	20 – 55
Tar Paper	Chrysotile	35 – 40

Notes: ODEQ – Oregon Department of Environmental Quality; E&E – Ecology and Environment, Inc; ACM – asbestos containing material; NRE – North Ridge Estates; CAB – cement asbestos board; VAT – vinyl asbestos tile; % - percent; < - less than

Sources:

E&E. 2006. *North Ridge Estates Site 2005 Removal Action Report*, Klamath Falls, Oregon, prepared for the U.S. Environmental Protection Agency, Contract No. EP-S7-06-02, Seattle, Washington.

ODEQ. 2001. Notice of Noncompliance, AQ-ERB-01-7715. September 21, 2001.

Table 1-2. Summary of ACM Used in Construction of MRB, by Weight	
Material Type	**Weight (U.S. Tons)**
Exterior CAB Siding	580
Interior CAB Panels	60
Roofing Material	150
Floor Tile	730
Steam Pipe Insulation	2
TOTAL	**1,522**

Notes: ACM – asbestos containing material; MRB – Marine Recuperation Barracks; CAB – cement asbestos board

Source:
Kennedy/Jenks (Kennedy/Jenks Consultants). 2005. Expert report of Mr. Gregg Bryden and Dr. Bill Williams.

Table 2-1. Summary of Baseline and "Hot Spot" Soil Results (Berman 2004)

Sample Type	Sample Location	PCME Asbestos Results		
		Structure Count	Analytical Sensitivity (f/g)	Concentration (f/g)
Baseline	C1	0	2.0E+06	<2.0E+06
	C2	0	1.9E+06	<1.9E+06
	C3	0	1.9E+06	<1.9E+06
	C4	0	2.0E+06	<2.0E+06
	C5	0	2.0E+06	<2.0E+06
	C6	1	2.0E+06	2.0E+06
	C7	0	2.0E+06	<2.0E+06
	C8	0	2.0E+06	<2.0E+06
	C9	0	2.0E+06	<2.0E+06
	C10	0	1.9E+06	<1.9E+06
"Hot Spot"	HS-1	1	2.0E+06	2.00E+06
	HS-2	3	2.0E+06	5.90E+06
	HS-3	2	1.9E+06	3.80E+06
	HS-4	0	1.9E+06	<1.9E+06
	HS-5	0	2.0E+06	<2.0E+06
	HS-6	44	2.0E+06	8.60E+07
	HS-7	4	2.3E+06	9.20E+06

Notes:
f/g - fibers per gram of reparable dust
PCME - phase contrast microscopy equivalent

Source: Berman 2004

Table 2-2. Summary of 2003 Removal Quantities (E&E 2005)

Parcel ID	Surficial Removal Quantity[a] (lbs)	Hot Spot Removal Quantity (lbs)
MBK-G	397	
BM	27	
MBK-D	53	
A	122	
H	1,514	
G	968	41,200[b,c]
F	2,535	79,040[c]
B	362	
S	1,176	
E	1,265	500[b]
C	385	
D	159	
L	1,098	
O	355	
N	772	
M	284	
W	20	
AM	1,288	[d]
X	65	
Y	13	
AP	10	
AQ	4	
AK, BJ, and BI,	30	
P	416	[d]
MBK-A	204	
Q	516	32,660[c]
R	67	
Z	326	[d]

Notes: [a] The majority of the ACM was CAB, with lesser amounts of roofing material. Floor tile and AirCell were rare; [b] The hot spot includes roofing material and CAB; [c] Removed by excavator; assume weight includes soil; [d] Removal was performed by hand pick up and is included in surficial removal weight; See Figure 1-1 for parcel ID locations; lbs - pounds

Source:
E&E. (Ecology and Environment). 2005. MBK Partnership/North Ridge Estates Subdivision Responsible Party Removal Action Report, Klamath Falls, Oregon.

Table 2-3. Summary of 2003 Burial Pile Investigation (PBS 2004a)

Parcel ID	Evidence and Location of Burial Pile	Burial Pile Investigation Results		Quantity of Material Removed (lbs)
		ACM Observed (Yes or No)	Type of ACM Observed	
H	Debris pile near foundation	No	N/A	None
G	Debris pile on N property line	Yes	CAB	3,720
F	Steep to vertical slope W of house/deck	Yes	CAB	None
B	Void in SW corner filled with soil	No	N/A	None
C	Mound on downhill (NE) side of parcel	Yes	CAB	930
L	Low, broad, uneven mound on SW corner of parcel	No test pits excavated; historical evidence suggests mound is a burial location for plastic-wrapped steam lines covered with concrete demolition waste		None
N	Pile on N side of property	Yes	CAB	1,860
M	Mound between house and Old Fort Rd	Yes	CAB	930
Y	Former swimming pool is assumed to contain ACM, construction debris, and soil	No test pits excavated		None
MBK-G	Debris on north side of building	Yes	Roofing material	None
MBK-A	Debris pile in NE corner	No	N/A	None
R	Debris pile on NE side of lot	No	N/A	None
Z and W	Debris pile at property line	Yes	VAT, floor tile mastic, CAB	1,860

Note: ACM – asbestos containing material; CAB – cement asbestos board; VAT – vinyl asbestos tile; lbs – pounds; N/A – not applicable; See Figure 1-1 for parcel ID locations

Source:
PBS. 2004a. Report of Surficial Removal and Burial Pile Location Actions, North Ridge Estates, Klamath Falls, Oregon.

Table 2-4. Summary of 2003 ACM Burial Piles and Stabilization Remedies (PBS 2004b)

Parcel ID	General Description of Pile	Approximate Dimensions	Method of Stabilization/Control Utilized
MBK-G	N side into ravine; exposed by roof runoff erosion.	67' EW x 15' NS x 10' thick	6" of clean fill laid over sloping surface, one layer of 6-mil poly laid over clean fill, one layer of geotextile fabric laid over poly, area covered with 6" minus rock. A 6" diameter drain was placed along the uphill boundary to divert surface runoff from roof drains.
G and H	On N 015B-00400 and SW 015B-00200 property line; moderate to heavy grass and shrub cover, some trees and pine needle cover; erosion in places.	Approximately 5,740 ft^2	Owner did not allow access for completion of work.
F	Steep to vertical slope W of house/deck.	56' long x 8' wide x 8' thick	Two sections of hillside W of the house were covered with 6-mil poly sheeting. Areas covered measure 31' by 8' and 11' by 8'.
C	Sage and other brush, grass vegetation; E slope is eroding.	Northern portion – 60' wide x 42' long x 10' thick; Southern portion – 30' wide x 42' long x 6' thick	Rock was placed on sloping portion among existing vegetation to control erosion.
L	Low, broad, uneven mound on SW corner of parcel; some grass and sage.	Approximately 1,424 ft^2	Pile delineated with posts.
Y	Covered with rock from hillside to W; sage bushes.	52' wide x 110' long x 12' thick	Due to concern for continued compaction and voids, clean soil was pushed into three cave-in areas atop retaining wall. The area was fenced off and "no trespassing" signs were placed on the fencing.
Z and W	Typically vegetated mound on 015D-03500 E side and 015D-00900 W side; tall grass, shrubs, pine needle cover from trees.	015D-03500: 28' wide x 200' long x 4' high 015D-00900: Southern portion - 52' wide x 90' long x 4' high; Northern portion – 80' wide x 90' long x 5' high	Areas are fenced, good natural ground cover. No controls placed.

Note: See Figure 1-1 for parcel ID locations; ft^2 – square feet.

Source:

PBS. 2004b. Burial Pile and Stabilization Remedies Report, North Ridge Estates, Klamath Falls, Oregon.

Table 2-5. Residential Air Sample Results (E&E 2005)

Parcel ID	Sample Location	PCME Asbestos Results			Asbestos Fiber Type
		Structure Count	Sensitivity (S/cc)	Concentration (S/cc)	
A	Indoors	***1***	1.00E-04	***1.00E-04***	Amosite
	Outdoors	***1***	1.00E-04	***1.00E-04***	Chrysotile
H	Indoors	0	1.00E-04	<1.00E-04	-
	Outdoors	0	1.00E-04	<1.00E-04	-
G	Indoors	0	1.00E-04	<1.00E-04	Chrysotile
	Outdoors	0	1.00E-04	<1.00E-04	-
F	Indoors	***1***	1.00E-04	***1.00E-04***	Chrysotile
	Outdoors	0	8.00E-05	<8.00E-05	-
B	Indoors	0	1.00E-04	<1.00E-04	-
	Outdoors	0	1.00E-04	<8.00E-05	-
S	Indoors	0	9.00E-05	<9.00E-05	-
	Outdoors	0	8.00E-05	<8.00E-05	-
E	Indoors	0	1.00E-04	<8.00E-05	-
	Outdoors	***1***	1.00E-04	***1.00E-04***	Chrysotile
	Indoors	0	1.20E-04	<1.20E-04	-
	Outdoors	0	9.70E-05	<9.70E-05	-
C	Indoors	0	1.00E-04	<1.00E-04	Chrysotile
	Outdoors	0	1.00E-04	<1.00E-04	-
D	Indoors	0	1.00E-04	<1.00E-04	-
	Outdoors	0	1.00E-04	<1.00E-04	-
MBK-F	Indoors	0	9.00E-05	<9.00E-05	-
	Outdoors	0	9.00E-05	<9.00E-05	-
AQ	Indoors	0	9.00E-05	<9.00E-05	-
	Outdoors	0	1.00E-04	<1.00E-04	-
N	Indoors	0	9.00E-05	<9.00E-05	-
	Outdoors	0	9.00E-05	<9.00E-05	-
M	Indoors	0	9.00E-05	<9.00E-05	-
	Outdoors	0	9.00E-05	<9.00E-05	-
W	Indoors	0	1.00E-04	<1.00E-04	-
	Outdoors	0	9.50E-05	<9.50E-05	-
X	Indoors	0	9.60E-05	<9.60E-05	-
	Outdoors	0	9.10E-05	<9.10E-05	-
Y	Indoors	0	1.00E-04	<1.00E-04	-
	Outdoors	0	9.90E-05	<9.90E-05	-
AP	Indoors	0	9.90E-05	<9.90E-05	-
	Outdoors	0	1.10E-04	<1.10E-04	-
AP	Indoors	0	9.70E-05	<9.70E-05	-
	Outdoors	0	9.70E-05	<9.70E-05	-
BL	Indoors	0	9.00E-05	<9.00E-05	-
	Outdoors	0	1.00E-04	<1.00E-04	-

Table 2-5. Residential Air Sample Results (E&E 2005)

Parcel ID	Sample Location	PCME Asbestos Results			Asbestos Fiber Type
		Structure Count	Sensitivity (S/cc)	Concentration (S/cc)	
Q	Indoors	0	1.00E-04	<1.00E-04	-
	Outdoors	0	1.00E-04	<1.00E-04	-
R	Indoors	0	9.00E-05	<9.00E-05	-
	Outdoors	0	9.00E-05	<9.00E-05	-
Z	Indoors	0	9.50E-05	<9.50E-05	-
	Outdoors	0	9.50E-05	<9.50E-05	-
Background #1		0	9.00E-05	<9.00E-05	-
Background #2		0	9.00E-05	<9.00E-05	-
Background #3		0	9.00E-05	<9.00E-05	-
Background #4		0	1.00E-04	<1.00E-04	-
Background #5		0	1.00E-04	<1.00E-04	-
Background #6		0	1.20E-04	<1.20E-04	-
Background #7		0	9.30E-05	<9.30E-05	-
Background #8		0	9.80E-05	<9.80E-05	-
Background #9		0	9.90E-05	<9.90E-05	-

Note: See Figure 1-1 for parcel ID locations. PCME - structures longer than 5µm, thicker than 0.25µm, with a length to width aspect ratio greater than 3, which meet the criteria for a B structure defined in NIOSH Method 7402; S/cc – structures per cubic centimeter.

Source:
Berman. 2004. *Final Soil Sampling Results and Preliminary Risk Assessment for the North Ridge Estates Site,* Klamath Falls, Oregon.

Table 2-6. Ambient Air Sample Results (Berman 2003)

Location	Date of Collection	PCME Asbestos Results			Fiber
		Structure Count	Analytical Sensitivity (S/cc)	Concentrations (S/cc)	Type
Aa	8/20/2003	0	1.0E-03	<1.0E-03	-
	8/22/2003	0	1.0E-03	<1.0E-03	-
	8/26/2003	0	2.0E-03	<2.0E-03	-
	8/27/2003	0	1.0E-03	<1.0E-03	-
	8/28/2003	0	1.0E-03	<1.0E-03	-
	9/3/2003	0	1.0E-03	<1.0E-03	-
	9/4/2003	0	1.0E-03	<1.0E-03	-
	9/5/2003	0	1.0E-03	<1.0E-03	-
	9/17/2003	0	1.0E-03	<1.0E-03	-
	9/18/2003	0	1.0E-03	<1.0E-03	-
	9/19/2003	0	1.0E-03	<1.0E-03	-
	9/22/2003	0	1.0E-03	<1.0E-03	-
	9/23/2003	0	1.0E-03	<1.0E-03	-
Bb	8/20/2003	0	1.0E-03	<1.0E-03	-
	8/22/2003	0	2.0E-03	<2.0E-03	-
	8/26/2003	0	1.0E-03	<1.0E-03	-
	8/27/2003	0	2.0E-03	<2.0E-03	-
	8/28/2003	0	1.0E-03	<1.0E-03	-
	9/3/2003	0	1.0E-03	<1.0E-03	-
	9/4/2003	0	1.0E-03	<1.0E-03	-
	9/5/2003	0	1.0E-03	<1.0E-03	-
	9/17/2003	0	1.0E-03	<1.0E-03	-
	9/18/2003	0	1.0E-03	<1.0E-03	-
	9/19/2003	0	1.0E-03	<1.0E-03	-
	9/22/2003	0	1.0E-03	<1.0E-03	-
	9/23/2003	0	1.0E-03	<1.0E-03	-
Cc	8/20/2003	0	1.0E-03	<1.0E-03	-
	8/22/2003	0	2.0E-03	<2.0E-03	-
	8/26/2003	0	2.0E-03	<2.0E-03	-
	8/27/2003	0	2.0E-03	<2.0E-03	-
	8/28/2003	0	1.0E-03	<1.0E-03	-
	9/3/2003	0	1.0E-03	<1.0E-03	-
	9/4/2003	0	1.0E-03	<1.0E-03	-
	9/5/2003	0	1.0E-03	<1.0E-03	-
	9/17/2003	0	1.0E-03	<1.0E-03	-
	9/18/2003	0	1.0E-03	<1.0E-03	-
	9/19/2003	0	1.0E-03	<1.0E-03	-
	9/22/2003	0	1.0E-03	<1.0E-03	-
	9/23/2003	0	1.0E-03	<1.0E-03	-
Dd	8/20/2003	0	1.0E-03	<1.0E-03	-

Table 2-6. Ambient Air Sample Results (Berman 2003)

Location	Date of Collection	PCME Asbestos Results			Fiber
		Structure Count	Analytical Sensitivity (S/cc)	Concentrations (S/cc)	Type
	8/22/2003	0	2.0E-03	<2.0E-03	-
	8/26/2003	0	2.0E-03	<2.0E-03	-
	8/27/2003	0	2.0E-03	<2.0E-03	-
	8/28/2003	0	1.0E-03	<1.0E-03	-
	9/3/2003	0	1.0E-03	<1.0E-03	-
	9/4/2003	0	1.0E-03	<1.0E-03	-
	9/5/2003	0	1.0E-03	<1.0E-03	-
	9/17/2003	0	1.0E-03	<1.0E-03	-
	9/18/2003	0	1.0E-03	<1.0E-03	-
	9/19/2003	0	1.0E-03	<1.0E-03	-
	9/22/2003	0	1.0E-03	<1.0E-03	-
	9/23/2003	0	1.0E-03	<1.0E-03	-
Ee	8/26/2003	0	1.0E-03	<1.0E-03	-
	8/27/2003	0	2.0E-03	<2.0E-03	-
	8/28/2003	0	1.0E-03	<1.0E-03	-
	9/3/2003	0	1.0E-03	<1.0E-03	-
	9/4/2003	0	1.0E-03	<1.0E-03	-
	9/5/2003	0	1.0E-03	<1.0E-03	-
	9/17/2003	0	1.0E-03	<1.0E-03	-
	9/18/2003	0	1.0E-03	<1.0E-03	-
	9/19/2003	0	1.0E-03	<1.0E-03	-
	9/22/2003	0	1.0E-03	<1.0E-03	-
	9/23/2003	0	1.0E-03	<1.0E-03	-
Ff	8/26/2003	0	2.0E-03	<2.0E-03	-
	8/27/2003	0	2.0E-03	<2.0E-03	-
	8/28/2003	0	1.0E-03	<1.0E-03	-
	9/3/2003	0	1.0E-03	<1.0E-03	-
	9/4/2003	***1***	1.0E-03	***1.0E-03***	Actinolite
	9/5/2003	0	1.0E-03	<1.0E-03	-
	9/17/2003	0	1.0E-03	<1.0E-03	-
	9/18/2003	0	1.0E-03	<1.0E-03	-
	9/19/2003	0	1.0E-03	<1.0E-03	-
	9/22/2003	0	1.0E-03	<1.0E-03	-
	9/23/2003	0	1.0E-03	<1.0E-03	-

Note: PCME - structures that are longer than 5µm, thicker than 0.25µm, with a length to width aspect ratio greater than 3 which meet the criteria for a B structure defined in NIOSH Method 7402S/cc – structures per cubic centimeter.

Source: Berman. 2005. Draft – Preliminary Evaluation of the Implications of Airborne Asbestos Exposure Concentrations Observed During Simulation of a Selected Set of Common, Outdoor Residential Activities Conducted at the North Ridge Estates Site, Klamath Falls, Oregon.

Table 2-7 Ambient Air Sample Results (E 2006)

Sample Number	EPA ID	Sample Date	Sample Type	Location [1]	Activity	SUMMARY OF ISO 10312 TEM RESULTS PCM Equivalent Fibers Count	Concentration (f/cc)	Fiber Type and Dimensions (length x width, mm)
REMOVAL ASSESSMENT - SITE INVESTIGATION								
AMBTEM016	05060120	6/27/2005	Ambient	(b) (6)	Traffic at Command Post	0	< 0.000301	N/A
AMBTEM017	05060121	6/27/2005	Ambient		Test Pit Excavation Areas	**2**	***0.0002***	Amosite (23.1 x 0.7) Chrysotile (8 x 0.9)
AMBTEM024	05060129	6/28/2005	Ambient		Traffic at Command Post	0	< 0.000295	N/A
AMBTEM025	05060130	6/28/2005	Ambient		Test Pit Excavation Areas	**2**	***0.000185***	Winchite (10 x 0.75) Amosite (7.35 x 0.38)
AMBTEM032	05060137	6/29/2005	Ambient		Traffic at Command Post	0	< 0.000296	N/A
AMBTEM033	05060138	6/29/2005	Ambient		Test Pit Excavation Areas	0	< 0.000297	N/A
AMBIENT AIR SAMPLING AT SIX FIXED LOCATIONS - JUNE								
AMBTEM010	05060114	6/27/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000295	N/A
AMBTEM011	05060115	6/27/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM012	05060116	6/27/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM013	05060117	6/27/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM014	05060118	6/27/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000298	N/A
AMBTEM015	05060119	6/27/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000294	N/A
AMBTEM018	05060123	6/28/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000290	N/A
AMBTEM019	05060124	6/28/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM020	05060125	6/28/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM021	05060126	6/28/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000294	N/A
AMBTEM022	05060127	6/28/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM023	05060128	6/28/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM026	05060131	6/29/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000297	N/A
AMBTEM027	05060132	6/29/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM028	05060133	6/29/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM029	05060134	6/29/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000294	N/A
AMBTEM030	05060135	6/29/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000298	N/A
AMBTEM031	05060136	6/29/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM034	05060139	6/30/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	**1**	***0.0000994***	Actinolite (9.1 x 1.8)
AMBTEM035	05060140	6/30/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000298	N/A
AMBTEM036	05060141	6/30/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000298	N/A
AMBTEM037	05060142	6/30/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000299	N/A
AMBTEM038	05060143	6/30/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000298	N/A
AMBTEM039	05060144	6/30/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000299	N/A
Blank TEM	05060122	6/28/2005	Blank	N/A	N/A	0	N/A	N/A
AMBIENT AIR SAMPLING AT SIX FIXED LOCATIONS - JULY								
AMBTEM040	05060145	7/11/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	**1**	***0.000100***	Actinolite (9 x 1.2)
AMBTEM041	05060146	7/11/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM042	05060147	7/11/2005	Ambient	Dd - (b) (6)	Typical Ambient	**1**	***0.0000999***	Tremolite (5.7 x 0.25)
AMBTEM043	05060148	7/11/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000296	N/A

Table 2-7. Ambient Air Sample Results (E 2006)

Sample Number	EPA ID	Sample Date	Sample Type	Location [1]	Activity	SUMMARY OF ISO 10312 TEM RESULTS		
						PCM Equivalent Fibers		
						Count	Concentration (f/cc)	Fiber Type and Dimensions (length x width, mm)
AMBTEM044	05060149	7/11/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM045	05060150	7/11/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM046	05060151	7/12/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000294	N/A
AMBTEM047	05060152	7/12/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000298	N/A
AMBTEM048	05060153	7/12/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM049	05060154	7/12/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000298	N/A
AMBTEM050	05060155	7/12/2005	Ambient	Ee - (b) (6)	Typical Ambient	***1***	***0.000102***	Actinolite (5.6 x 1.2)
AMBTEM051	05060156	7/12/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM052	05060157	7/13/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000295	N/A
AMBTEM053	05060158	7/13/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000293	N/A
AMBTEM054	05060159	7/13/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM055	05060160	7/13/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000294	N/A
AMBTEM056	05060161	7/13/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000299	N/A
AMBTEM057	05060162	7/13/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000299	N/A
AMBTEM058	05060163	7/14/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000299	N/A
AMBTEM059	05060164	7/14/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000290	N/A
AMBTEM060	05060165	7/14/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM061	05060166	7/14/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM062	05060167	7/14/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM063	05060168	7/14/2005	Ambient	Cc - (b) (6)	Typical Ambient	***1***	***0.0000984***	Actinolite (9 x 1.2)
Blank TEM	05060169	7/15/2005	Blank	N/A	N/A	0	N/A	N/A
Blank TEM	05060170	7/15/2005	Blank	N/A	N/A	0	N/A	N/A
Blank TEM	05060171	7/15/2005	Blank	N/A	N/A	0	N/A	N/A
AMBIENT AIR SAMPLING AT SIX FIXED LOCATIONS - AUGUST								
AMBTEM064	05060172	8/2/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000295	N/A
AMBTEM065	05060173	8/2/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM066	05060174	8/2/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM067	05060175	8/2/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000294	N/A
AMBTEM068	05060176	8/2/2005	Ambient	Ee - (b) (6)	Typical Ambient	***1***	***0.0000991***	Actinolite (5.1 x 0.3)
AMBTEM069	05060177	8/2/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000294	N/A
AMBTEM070	05060178	8/3/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000296	N/A
AMBTEM071	05060179	8/3/2005	Ambient	Bb - (b) (6)	Typical Ambient	***1***	***0.0000997***	Actinolite (5.2 x 1.1)
AMBTEM072	05060180	8/3/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM073	05060181	8/3/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM074	05060182	8/3/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000294	N/A
AMBTEM075	05060183	8/3/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000299	N/A
AMBTEM076	05060184	8/4/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000269	N/A
AMBTEM077	05060185	8/4/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM078	05060186	8/4/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM079	05060187	8/4/2005	Ambient	Ff (b) (6)	Typical Ambient	0	< 0.000303	N/A
AMBTEM080	05060188	8/4/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000299	N/A

Table 2-7 Ambient Air Sample Results (E 2006)

Sample Number	EPA ID	Sample Date	Sample Type	Location [1]	Activity	SUMMARY OF ISO 10312 TEM RESULTS PCM Equivalent Fibers Count	Concentration (f/cc)	Fiber Type and Dimensions (length x width, mm)
AMBTEM081	05060189	8/4/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM082	05060190	8/5/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000296	N/A
AMBTEM083	05060191	8/5/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM084	05060192	8/5/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000300	N/A
AMBTEM085	05060193	8/5/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM086	05060194	8/5/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000297	N/A
AMBTEM087	05060195	8/5/2005	Ambient	Cc - (b) (6)	Typical Ambient	***1***	***0.0000995***	Actinolite (5.5 x 0.8)
Blank TEM	05060196	8/9/2005	Blank	N/A	N/A	0	N/A	N/A
Blank TEM	05060197	8/9/2005	Blank	N/A	N/A	0	N/A	N/A
Blank TEM	05060198	8/9/2005	Blank	N/A	N/A	0	N/A	N/A
REMOVAL ACTION -- SURFACE CLEAN-UP								
AMBTEM088	05080401	8/9/2005	Ambient	(b) (6) - South of Abatement Area	Surface Clean-up	0	< 0.000297	N/A
AMBTEM089	05080402	8/9/2005	Ambient	(b) (6) - North of Abatement Area	Surface Clean-up	0	< 0.000297	N/A
AMBTEM092	05080405	8/15/2005	Ambient	(b) (6) - North of Steam Pipe Abatement	Surface Clean-up	0	< 0.000296	N/A
AMBTEM093	05080406	8/15/2005	Ambient	(b) (6) - South of Steam Pipe Abatement	Surface Clean-up	0	< 0.000296	N/A
AMBTEM099	05080412	8/17/2005	Ambient	MBK Lot A, B, and C - South of Abatement Area	Surface Clean-up	0	< 0.000298	N/A
AMBTEM100	05080413	8/17/2005	Ambient	MBK Lot A, B, and C - North of Abatement Area	Surface Clean-up	0	< 0.000298	N/A
Blank	05080418	8/31/2005	Blank	N/A	N/A	0	N/A	N/A
Blank	05080419	8/31/2005	Blank	N/A	N/A	0	N/A	N/A
AMBIENT AIR SAMPLING AT SIX FIXED LOCATIONS - SEPTEMBER								
AMBTEM105	05080421	9/2/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	***1***	***0.0000991***	Tremolite (6 x 0.8)
AMBTEM106	05080422	9/2/2005	Ambient	Bb - (b) (6)	Typical Ambient	***1***	***0.0000993***	Actinolite (5.2 x 0.38)
AMBTEM107	05080423	9/2/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000294	N/A
AMBTEM108	05080424	9/2/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM109	05080425	9/2/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM110	05080426	9/2/2005	Ambient	Cc (b) (6)	Typical Ambient	***1***	***0.0000986***	Actinolite (6.1 x 0.65)
AMBTEM111	05080427	9/3/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	***1***	***0.0000988***	Chrysotile (6 x 2)
AMBTEM112	05080428	9/3/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000299	N/A
AMBTEM113	05080429	9/3/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM114	05080430	9/3/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000298	N/A
AMBTEM115	05080431	9/3/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM116	05080432	9/3/2005	Ambient	Cc - (b) (6)	Typical Ambient	***1***	***0.0000986***	Actinolite (6 x 0.7)
AMBTEM117	05080433	9/4/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	***1***	***0.000103***	Tremolite (12.5 x 2)
AMBTEM118	05080434	9/4/2005	Ambient	Bb - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM119	05080435	9/4/2005	Ambient	Dd - (b) (6)	Typical Ambient	0	< 0.000296	N/A

Table 2-7. Ambient Air Sample Results (E 2006)

Sample Number	EPA ID	Sample Date	Sample Type	Location [1]	Activity	SUMMARY OF ISO 10312 TEM RESULTS		
						PCM Equivalent Fibers		
						Count	Concentration (f/cc)	Fiber Type and Dimensions (length x width, mm)
AMBTEM120	05080436	9/4/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000302	N/A
AMBTEM121	05080437	9/4/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000296	N/A
AMBTEM122	05080438	9/4/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM123	05080439	9/5/2005	Ambient	Aa - MBK Lot G (Warehouse)	Typical Ambient	0	< 0.000296	N/A
AMBTEM124	05080440	9/5/2005	Ambient	Bb - (b) (6)	Typical Ambient	***1***	***0.0000986***	Amosite (12.5 x 0.8)
AMBTEM125	05080441	9/5/2005	Ambient	Dd - (b) (6)	Typical Ambient	***1***	***0.0000999***	Actinolite (5.4 x 0.4)
AMBTEM126	05080442	9/5/2005	Ambient	Ff - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM127	05080443	9/5/2005	Ambient	Ee - (b) (6)	Typical Ambient	0	< 0.000295	N/A
AMBTEM128	05080444	9/5/2005	Ambient	Cc - (b) (6)	Typical Ambient	0	< 0.000296	N/A
Blank	05080445	9/6/2005	Blank	N/A	N/A	0	N/A	N/A
Blank	05080446	9/6/2005	Blank	N/A	N/A	0	N/A	N/A
Blank	05080447	9/6/2005	Blank	N/A	N/A	0	N/A	N/A

Notes: (1) For the ambient air samples collected at the six fixed locations, the locations have been labeled Aa through Ff to be consistent with the previous results reported in E & E 2005.
ID - identification; mm - micrometer; PCME - phase contrast microscopy equivilent; N/A - not applicable; TEM - transmission electron microscopy

Table 2-8. Summary of Bin A Property Investigations			
Parcel ID	Number of Test Pits	Number of Boreholes	Reason for Only Surficial Inspection
BM	0	0	Previous data collection judged sufficient for characterization.
MBK-G	3	3	-
B	4	24	-
A	9	12	-
G	2	10	-
MBK-D	5	0	-
F	11	29	-
L	7	0	-
BO	0	0	Area of concern also contains septic system drain field.
S	9	0	-
E	6	27	-
P	4	0	-
O	3	0	-
C	4	18	-
MBK-A	7	0	-
N	6	0	-
AK	0	0	Owner requested test pits and boreholes not be completed on this parcel.
MBK-B	9	0	-
D	5	12	-
MBK-C	14	0	-
M	12	0	-
MBK-F	3	12	-
Q	9	0	-
R	2	0	-
W	13	0	-
AI	6	6	-
Z	6	0	-
AL	3	3	-
X	0	0	Previous data collection judged sufficient for characterization.
MBK-E	5	8	-
AG	8	51	-
H	1	9	-
TOTAL	**176**	**224**	

Table 2-9. Summary of Bin B Property Investigations				
Parcel ID	**Development Status**	**Number of Test Pits**	**Number of Boreholes**	**Reason for Only Surficial Inspection**
BI	Developed	0	0	Owner requested test pits and boreholes not be completed on this parcel.
BJ	Undeveloped	0	0	Owner requested test pits and boreholes not be completed on this parcel.
AM	Developed	3	0	-
AS	Undeveloped	1	0	-
Y	Developed	0	4	-
BK	Developed	0	0	Utilities in area of concern could not be located with confidence.
AP	Developed	2	2	-
AR	Developed	0	0	Utilities in area of concern could not be located with confidence.
AQ	Developed	0	0	Burial piles and concentrated areas of surficial ACM were not found on this property.
BL	Undeveloped	0	0	Burial piles were not found on this property. The slope of this property was too steep to allow DPT equipment to access the surficial area of concern.
Total		**6**	**6**	

Table 2-10. Summary of Bulk Soil Sample at Bin C Properties		
Parcel ID	**Development Status**	**Number of Bulk Soil Samples**
AT	Developed	5
AU	Developed	2
AV	Developed	0
AW	Developed	4
AX	Developed	0
AY	Developed	4
AZ	Undeveloped	1
BA	Developed	5
BB	Developed	5
BC	Developed	5
BH	Developed	0
BD	Developed	0
BF	Developed	0
BG	Developed	0
BE	Undeveloped	0
	Total	**31**

Table 2-11. ABS Air Results

Location	Activity	Index ID	Type		Sample Archived	ACM Removed (Y/N)	Prep (I/D)	Analysis Rev	Sensitivity (S/cc)	Chrysotile				Amosite				Actinolite			
										Total		PCME		Total		PCME		Total		PCME	
										Count	Conc (S/cc)	Count	Conc (S/cc)	Count	Conc (S/cc)	Count	Conc (S/cc)	Count	Conc (S/cc)	Count	Conc (S/cc)
F	Child Play	NR-00577	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00578	Personal	Highflow Personal	N	N	Direct	ANALYZED	7.20E-04	**14**	**1.01E-02**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00575	Stationary	Upwind	N	N	Direct	ANALYZED	1.01E-03	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00576	Stationary	Downwind	N	N	Direct	ANALYZED	7.02E-04	**1**	**7.02E-04**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
	Raking	NR-00560	Personal	Lowflow Personal	Y	N	Direct	ARCHIVE	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00561	Personal	Lowflow Personal	Y	N	Direct	ARCHIVE	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00562	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00562	Personal	Highflow Personal	N	N	Indirect	ANALYZED	1.00E-03	**69**	**6.90E-02**	**1**	**1.00E-03**	**2**	**2.00E-03**	**2**	**2.00E-03**	**1**	**1.00E-03**	**1**	**1.00E-03**
		NR-00558	Stationary	Upwind	N	N	Direct	ANALYZED	9.90E-04	**1**	**9.90E-04**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00559	Stationary	Downwind	N	N	Direct	ANALYZED	6.90E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00589	Personal	Lowflow Personal	Y	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00590	Personal	Highflow Personal	N	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00590	Personal	Highflow Personal	N	Y	Indirect	ANALYZED	9.94E-04	**79**	**7.85E-02**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00587	Stationary	Upwind	N	Y	Direct	ANALYZED	1.01E-03	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00588	Stationary	Downwind	N	Y	Direct	ANALYZED	1.01E-03	**24**	**2.42E-02**	**2**	**2.02E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
	Weed Trimming	NR-00569	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00570	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00570	Personal	Highflow Personal	N	N	Indirect	ANALYZED	9.45E-04	**66**	**6.23E-02**	**3**	**2.83E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00567	Stationary	Upwind	N	N	Direct	ANALYZED	1.02E-03	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00568	Stationary	Downwind	N	N	Direct	OVERLOADED	6.92E-04	**3**	**2.08E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
N	Child Play	NR-00551	Personal	Lowflow Personal	Y	N	Direct	ARCHIVE	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00552	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00552	Personal	Highflow Personal	N	N	Indirect	ANALYZED	2.26E-03	**102**	**2.30E-01**	**1**	**2.26E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00549	Stationary	Upwind	N	N	Direct	ANALYZED	9.63E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00550	Stationary	Downwind	N	N	Direct	ANALYZED	1.01E-03	**3**	**3.04E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
	Raking	NR-00547	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00548	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00548	Personal	Highflow Personal	N	N	Indirect	ANALYZED	9.87E-04	**43**	**4.24E-02**	**2**	**1.97E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00545	Stationary	Upwind	N	N	Direct	ANALYZED	9.63E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00546	Stationary	Downwind	N	N	Direct	OVERLOADED		-	-	-	-	-	-	-	-	-	-	-	-
		NR-00546	Stationary	Downwind	N	N	Indirect	ANALYZED	1.00E-03	**46**	**4.60E-02**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
	Weed Trimming	NR-00543	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00544	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00544	Personal	Highflow Personal	N	N	Indirect	ANALYZED	2.47E-03	**112**	**2.76E-01**	**1**	**2.47E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00541	Stationary	Upwind	N	N	Direct	ANALYZED	9.79E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00542	Stationary	Downwind	N	N	Direct	ANALYZED	1.01E-03	**43**	**4.36E-02**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
AR	Child Play	NR-00565	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00566	Personal	Highflow Personal	N	N	Direct	NOT ANALYZED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00566	Personal	Highflow Personal	N	N	Indirect	ANALYZED	5.00E-02	**60**	**3.00E+00**	0	0.00E+00	**48**	**2.40E+00**	**27**	**1.35E+00**	0	0.00E+00	0	0.00E+00
		NR-00563	Stationary	Upwind	N	N	Direct	ANALYZED	6.92E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00564	Stationary	Downwind	N	N	Direct	ANALYZED	7.01E-04	0	0.00E+00	0	0.00E+00	**1**	**7.01E-04**	**1**	**7.01E-04**	0	0.00E+00	0	0.00E+00
	Raking	NR-00573	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00574	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00574	Personal	Highflow Personal	N	N	Indirect	ANALYZED	3.52E-03	**52**	**1.83E-01**	**1**	**3.52E-03**	**50**	**1.76E-01**	**23**	**8.10E-02**	0	0.00E+00	0	0.00E+00

Location	Activity	Index ID	Type		Sample Archived	ACM Removed (Y/N)	Prep (I/D)	Analysis Rev	Sensitivity (S/cc)	Chrysotile				Amosite				Actinolite			
										Total		PCME		Total		PCME		Total		PCME	
										Count	Conc (S/cc)	Count	Conc (S/cc)	Count	Conc (S/cc)	Count	Conc (S/cc)	Count	Conc (S/cc)	Count	Conc (S/cc)
P	Weed Trimming	NR-00571	Stationary	Upwind	N	N	Direct	ANALYZED	9.96E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00572	Stationary	Downwind	N	N	Direct	ANALYZED	9.96E-04	**1**	**9.96E-04**	0	0.00E+00	0	0.00E+00	0	0.00E+00	**1**	**9.96E-04**	0	0.00E+00
		NR-00597	Personal	Lowflow Personal	Y	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00598	Personal	Highflow Personal	N	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00598	Personal	Highflow Personal	N	Y	Indirect	ANALYZED	4.98E-03	**39**	**1.94E-01**	0	0.00E+00	**20**	**9.97E-02**	**12**	**5.98E-02**	0	0.00E+00	0	0.00E+00
		NR-00595	Stationary	Upwind	N	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00595	Stationary	Upwind	N	Y	Indirect	ANALYZED	1.00E-03	**37**	**3.71E-02**	0	0.00E+00	**1**	**1.00E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00596	Stationary	Downwind	N	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00596	Stationary	Downwind	N	Y	Indirect	ANALYZED	1.10E-03	**72**	**7.93E-02**	**1**	**1.10E-03**	**29**	**3.19E-02**	**17**	**1.87E-02**	0	0.00E+00	0	0.00E+00
		NR-00555	Personal	Lowflow Personal	Y	N	Direct	ANALYZED	4.81E-03	**1**	**4.81E-03**	**1**	**4.81E-03**	**1**	**4.81E-03**	**1**	**4.81E-03**	0	0.00E+00	0	0.00E+00
		NR-00556	Personal	Highflow Personal	N	N	Direct	ANALYZED	6.92E-04	**4**	**2.77E-03**	0	0.00E+00	**3**	**2.08E-03**	**3**	**2.08E-03**	0	0.00E+00	0	0.00E+00
		NR-00557	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00557	Personal	Highflow Personal	N	N	Indirect	ANALYZED	3.92E-03	**50**	**1.96E-01**	0	0.00E+00	**49**	**1.92E-01**	**24**	**9.40E-02**	0	0.00E+00	0	0.00E+00
		NR-00553	Stationary	Upwind	N	N	Direct	ANALYZED	7.10E-04	**1**	**7.10E-04**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00554	Stationary	Downwind	N	N	Direct	ANALYZED	7.01E-04	**1**	**7.01E-04**	0	0.00E+00	**5**	**3.50E-03**	**2**	**1.40E-03**	0	0.00E+00	0	0.00E+00
	Child Play	NR-00593	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00594	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00594	Personal	Highflow Personal	N	N	Indirect	ANALYZED	1.74E-03	**104**	**1.81E-01**	**3**	**5.23E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00591	Stationary	Upwind	N	N	Direct	ANALYZED	1.01E-03	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00592	Stationary	Downwind	N	N	Direct	ANALYZED	1.01E-03	**1**	**1.01E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
	Raking	NR-00581	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00582	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00582	Personal	Highflow Personal	N	N	Indirect	ANALYZED	5.41E-03	**100**	**5.41E-01**	**3**	**1.62E-02**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00579	Stationary	Upwind	N	N	Direct	NOT ANALYZED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00580	Stationary	Downwind	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00580	Stationary	Downwind	N	N	Indirect	ANALYZED	1.01E-03	**42**	**4.22E-02**	0	0.00E+00	**2**	**2.01E-03**	**2**	**2.01E-03**	0	0.00E+00	0	0.00E+00
		NR-00661	Personal	Lowflow Personal	Y	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00662	Personal	Highflow Personal	N	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00662	Personal	Highflow Personal	N	Y	Indirect	ANALYZED	3.32E-03	**99**	**3.29E-01**	0	0.00E+00	**1**	**3.32E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00599	Stationary	Upwind	N	Y	Direct	ANALYZED	1.01E-03	**1**	**1.01E-03**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00600	Stationary	Downwind	N	Y	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00600	Stationary	Downwind	N	Y	Indirect	ANALYZED	1.00E-03	**22**	**2.21E-02**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
	Weed Trimming	NR-00585	Personal	Lowflow Personal	Y	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00585	Personal	Lowflow Personal	Y	N	Indirect	ANALYZED	2.11E-02	**4**	**8.42E-02**	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00586	Personal	Highflow Personal	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00586	Personal	Highflow Personal	N	N	Indirect	ANALYZED	1.92E-03	**98**	**1.88E-01**	**3**	**5.77E-03**	**2**	**3.84E-03**	**1**	**1.92E-03**	0	0.00E+00	0	0.00E+00
		NR-00583	Stationary	Upwind	N	N	Direct	ANALYZED	9.98E-04	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
		NR-00584	Stationary	Downwind	N	N	Direct	OVERLOADED	NA	-	-	-	-	-	-	-	-	-	-	-	-
		NR-00584	Stationary	Downwind	N	N	Indirect	ANALYZED	9.93E-04	**21**	**2.08E-02**	0	0.00E+00	**2**	**1.99E-03**	**1**	**9.93E-04**	0	0.00E+00	0	0.00E+00

Notes: S/cc – structures per cubic centimeter; PCME – phase contact microcopy equivalent

Table 2-12. Summary of ACM Removed at each Property		
Parcel ID	**Type of ACM**	**Quantity Removed (lbs)**
F	Air Cell	0.2
	VAT	0.7
	Mag	0.65
	Roofing material	3.1
AR	Air Cell	0
	VAT	0.1
	Mag	0.1
	Roofing material	0
P	Air Cell	0
	VAT	0.5
	Mag	0.0065
	Roofing material	0.04

Notes: ACM – asbestos containing material; lbs – pounds; VAT – vinyl asbestos tile

Table 2-13. ABS Soil Sample Results

Parcel	Sample ID	Area Description	Loose Particulate - Free Fibers						ACM						
			% of Sample	% Asbestos					% of Sample	% Asbestos					
				Chrysotile	Amosite	Crocidolite	Total Calc	Total		Chrysotile	Amosite	Crocidolite	Actinolite	Total Calc	Total
AR	NR-00531	non-pick up	99.9	0	0	0	0	<0.25	0.11	30	40	0	0	70	70
	NR-00532	non-pick up	99.96	0	0.75	0	0.75	0.75	0.04	30	70	0	0	100	100
	NR-00533	pick up	99.8	0	0	0	0	<0.25	0.23	50	50	0	0	100	100
	NR-00534	pick up	99.8	0	0	0	0	<0.25	0.16	50	50	0	0	100	100
F	NR-00535	non-pick up	100	0	0	0	0	<0.25	0	100	0	0	0	100	100
	NR-00536	non-pick up	89	0	0	0	0	<0.25	11	40	0	0	0	40	40
	NR-00537	pick up	100	0	0	0	0	<0.25	0	0	0	0	0	0	0
	NR-00538	pick up	91.1	0	0	0	0	<0.25	8.88	40	0	0	0	40	40
P	NR-00540	non-pick up	100	0	0	0	0	<0.25	0	0	0	0	0	0	0
	NR-00721	non-pick up	100	0	0	0	0	<0.25	0	0	0	0	95	95	95
	NR-00722	pick up	100	0	0	0	0	<0.25	0	100	0	0	0	100	100
	NR-00723	pick up	100	0	0	0	0	<0.25	0	100	0	0	0	100	100
N	NR-00724	non-pick up	100	0	0	0	0	<0.25	0.05	60	0	0	0	60	60
	NR-00725	non-pick up	99.9	0	0	0	0	<0.25	0.08	60	0	0	0	60	60
	NR-00726	non-pick up	100	0	0	0	0	<0.25	0	60	0	0	0	60	60
	NR-00727	non-pick up	100	0	0	0	0	<0.25	0.01	60	0	0	0	60	60

Table 2-14. Indoor Air Results

Location	Index ID	Prep (I/D)	Sens (S/cc)	Chrysotile				Amosite				Actinolite			
				Total		PCME		Total		PCME		Total		PCME	
				N	Conc (S/cc)	N	Conc (S/cc)	N	Conc (S/cc)	N	Conc (S/cc)	N	Conc (S/cc)	N	Conc (S/cc)
F	NR-00261	Indirect	9.87E-05	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
N	NR-00268	Indirect	9.87E-05	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
P	NR-00276	Direct	9.88E-05	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00
BO	NR-00365	Direct	9.96E-05	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00	0	0.00E+00

Table 2-15. Summary of 2006 Indoor Dust Sampling

Property	Sample Description	Sample Number	PCME Fiber Concentration			Total Fiber Concentration		
			Count	Sensitivity (f/cm2)	Concentration (f/cm2)	Count	Sensitivity (f/cm2)	Concentration (f/cm2)
F	ground floor-horizontal surface	NR-00262	0	180	<180	0	178	<178
	ground floor-high traffic	NR-00263	0	180	<180	0	178	<178
	second floor-horizontal surface	NR-00264	0	225	<225	0	22	<222
	second floor-high traffic	NR-00265	0	180	<180	0	178	<178
N	ground floor-horizontal surface	NR-00267	0	180	<180	0	178	<178
	ground floor-high traffic	NR-00269	0	180	<180	0	178	<178
P	ground floor-horizontal surface	NR-00271	0	180	<180	0	178	<178
	ground floor-high traffic	NR-00272	0	180	<180	0	178	<178
	second floor-high traffic	NR-00273	0	180	<180	0	178	<178
	second floor-horizontal surface	NR-00274	0	180	<180	0	178	<178
BO	ground floor-horizontal surface [a]	NR-00140	0	60	<60	**1**	59.2	**59.2**
	ground floor-high traffic	NR-00366	0	180	<180	0	178	<178

Note: See Figure 1-1 for parcel ID locations; [a] One non-PCM chrysotile fiber was detected; ND – non-detect; < - less than; f/cm2 – fibers per square centimeter; PCME – phase contrast microscopy equivalent. Field blanks submitted for analyses were NR-00266, NR-00270, NR-00275, and NR-00367 – all field blanks were non-detect for asbestos.

Table 4-1. Site-wide Representation of ACM in Burial Areas

Parcel ID			Burial ID**	Buried ACM Debris				
				Area		Depth	Volume	
Bin A	Bin B	Bin C		SF	Acre	FT	CF	CY
A*			BA-46	9,620.30	0.22	4.75	45,696.44	1,692.46
AG*			BA-1[1]	3,030.43	0.07	2.40	7,273.03	269.37
			BA-2	18,518.22	0.43	2.40	44,443.72	1,646.06
AI*			BA-6	7,124.44	0.16	2.00	14,248.88	527.74
AL*			BA-5	4,080.76	0.09	4.00	16,323.05	604.56
	AM		BA-48	4,629.96	0.11	0.25	1,157.49	42.87
B*			BA-23	2,429.68	0.06	1.00	2,429.68	89.99
			BA-24	1,878.59	0.04	0.75	1,408.94	52.18
C*			BA-10a	7,770.97	0.18	8.67	67,343.25	2,494.19
			BA-10b	4,108.37	0.09	1.25	5,135.46	190.20
			BA-10c	3,748.09	0.09	1.50	5,622.14	208.23
D*			BA-9	1,226.58	0.03	1.00	1,226.58	45.43
E*			BA-11	1,929.04	0.04	1.00	1,929.04	71.45
			BA-12	13,842.65	0.32	1.75	24,224.64	897.21
			BA-13	1,946.50	0.04	1.00	1,946.50	72.09
F			BA-14	1,670.48	0.04	1.00	1,670.48	61.87
			BA-15a	448.00	0.01	8.00	3,584.00	132.74
			BA-15b	3,721.83	0.09	8.00	29,774.63	1,102.76
			BA-16	2,846.49	0.07	2.50	7,116.23	263.56
			BA-17	831.17	0.02	1.00	831.17	30.78
			BA-18	1,663.66	0.04	1.50	2,495.48	92.43
G*			BA-19	1,600.04	0.04	0.50	800.02	29.63
			BA-20a	13,653.32	0.31	9.00	122,879.88	4,551.11
			BA-20b	2,442.27	0.06	9.00	21,980.43	814.09
H*			BA-20b	3,730.83	0.09	9.00	33,577.47	1,243.61
			BA-21[2]	36,786.32	0.84	6.52	240,030.00	8,890.00
			BA-22	15,251.47	0.35	2.00	30,502.95	1,129.74
L*			BA-40	1,684.96	0.04	0.50	842.48	31.20
			BA-41	2,686.34	0.06	0.50	1,343.17	49.75
			BA-42	2,244.24	0.05	1.00	2,244.24	83.12
			BA-43a	12,474.69	0.29	3.50	43,661.42	1,617.09
			BA-43b	2,661.63	0.06	3.50	9,315.69	345.03
M*			BA-36	9,043.68	0.21	1.33	12,058.23	446.60
MBK-A*			BA-30	48,640.54	1.12	1.15	55,774.49	2,065.72
MBK-B*			BA-30	43,763.94	1.00	1.15	50,182.65	1,858.62
MBK-C*			BA-30	50,396.49	1.16	1.15	57,787.98	2,140.30
MBK-D*			BA-26	580.56	0.01	1.17	677.32	25.09
			BA-44	814.01	0.02	9.00	7,326.11	271.34
			BA-45	3,643.91	0.08	1.00	3,643.91	134.96
MBK-E*			BA-3	1,017.31	0.02	0.50	508.65	18.84
			BA-4	1,471.97	0.03	0.50	735.99	27.26
MBK-F*			BA-7	2,011.73	0.05	3.50	7,041.05	260.78
			BA-8	683.32	0.02	0.50	341.66	12.65
MBK-G*			BA-47a	1,010.37	0.02	10.00	10,103.74	374.21
			BA-47	11,257.10	0.26	6.00	67,542.60	2,501.58
N			BA-37	1,077.49	0.02	0.50	538.75	19.95
			BA-38	2,115.51	0.05	0.50	1,057.75	39.18
			BA-39	15,269.10	0.35	2.00	30,538.20	1,131.04
P			BA-28	7,096.14	0.16	1.33	9,461.52	350.43
			BA-29	4,305.36	0.10	2.00	8,610.72	318.92
Q*			BA-30	6,645.83	0.15	1.15	7,620.55	282.24
			BA-31	14,003.98	0.32	0.75	10,502.99	389.00
			BA-32	644.87	0.01	2.00	1,289.74	47.77
			BA-33	1,467.41	0.03	0.50	733.71	27.17
R*			BA-31	4,778.77	0.11	0.75	3,584.08	132.74
			BA-34	1,106.10	0.03	0.50	553.05	20.48
S*			BA-25	2,194.59	0.05	1.00	2,194.59	81.28
			BA-26	11,805.29	0.27	1.17	13,772.84	510.11
			BA-27	8,669.96	0.20	2.17	18,784.91	695.74
W*			BA-35a	9,842.99	0.23	4.41	43,427.27	1,608.42
			BA-35b	16,432.82	0.38	0.69	11,407.12	422.49
Z*			BA-35a	14,206.12	0.33	4.41	62,677.40	2,321.39
			BA-35b	4,662.82	0.11	0.69	3,236.77	119.88
Burial Area Extending Outside Parcel Areas								
			BA-6	2,432.54	0.06	2.00	4,865.08	180.19
			BA-25	3,126.73	0.07	1.00	3,126.73	115.80
			BA-26	7,032.33	0.16	1.17	8,204.39	303.87
							SUBTOTAL	48,628.56
							MATERIAL REMOVED IN 2003	9,300.00
							TOTAL VOLUME OF ACM AND ASSOCIATED SOILS IN CURRENTLY IDENTIFIED BURIAL AREAS	**39,328.56**

* Indicates properties no longer occupied

** Refer to Figure 4-6 for burial area locations

[1] Depth of buried ACM debris at BA-1 assumed to be same as at BA-2. Both BA-1 and BA-2 are under parcel AG.

[2] See Section 4.1.8.2 for ACM volumes at BA-21 (under parcel H).

Table 4.2 Site-wide Representation of Surficial ACM

Parcel ID			Surficial ID**	Surficial ACM Debris	
				Area	
Bin A	Bin B	Bin C		SF	Acre
A*			SA-15	98,740.00	2.27
			SA-42	418	0.01
			SA-43	72	0.00
AG*			SA-1a	55,684.34	1.28
			SA-1b	88.38	0.00
			SA-1c	224.26	0.01
			SA-1d	4,651.83	0.11
			SA-4	31,677	0.73
AI*			SA-5	105,157.00	2.41
AK*			SA-40	17,892	0.41
AL*			SA-5	116,176.00	2.67
	AM		SA-41	32,611	0.75
	AP*		SA-1a	2,157.11	0.05
			SA-1b	1,394.68	0.03
			SA-45	22	0.00
B*			SA-12a	19,410.00	0.45
			SA-15	31,402.00	0.72
			SA-17	873	0.02
			SA-18	3,659	0.08
			SA-19	39,888	0.92
BM			SA-37	13,743	0.32
BO			SA-39	9,077	0.21
C*			SA-9a	49,565.00	1.14
			SA-9b	5,827.00	0.13
D*			SA-9a	40,140.00	0.92
			SA-9b	1,292.00	0.03
E*			SA-9a	56,984.00	1.31
			SA-10	5,245	0.12
			SA-44	30	0.00
F			SA-11	57,744.00	1.33
			SA-12a	39,748.00	0.91
			SA-12b	28,406	0.65
G*			SA-11	2,641.00	0.06
			SA-12a	56,025.00	1.29
H*			SA-12a	24,264.00	0.56
			SA-13	12,650	0.29
			SA-14	63,706	1.46
			SA-15	84,053.00	1.93
			SA-16	62,644	1.44
L*			SA-21a	125,926.00	2.89
			SA-34	14,814	0.34
M*			SA-25a	914.00	0.02
			SA-30	474.00	0.01
			SA-32	33,678.00	0.77
MBK-A*			SA-21a	55,013.00	1.26
			SA-21b	3,061	0.07
MBK-B*			SA-21a	51,972.00	1.19
			SA-21c	847	0.02
MBK-C*			SA-21a	37,796.00	0.87
			SA-21d	3,237	0.07
			SA-23	2,322.00	0.05
MBK-D*			SA-21a	63,160.00	1.45
			SA-35	17,583	0.40
MBK-E*			SA-5	131,801.00	3.03
MBK-F*			SA-8	12,792	0.29
MBK-G*			SA-15	11,949.00	0.27
			SA-36a	16,788	0.39
			SA-36b	1,635	0.04
			SA-36c	14,606	0.34
N			SA-31	61,018.00	1.40
			SA-32	67,888.00	1.56
O*			SA-32	959.00	0.02
			SA-33a	13,703	0.31
			SA-33b	3,751	0.09
P			SA-21a	37,880.00	0.87
Q*			SA-22	4,287	0.10
			SA-23	24,629.00	0.57
			SA-31	7,753.00	0.18
R*			SA-23	11,024.00	0.25
			SA-24	35,789.00	0.82
			SA-25a	399.00	0.01
			SA-31	965.00	0.02

Table 4.2 Site-wide Representation of Surficial ACM

Parcel ID			Surficial ID**	Surficial ACM Debris	
				Area	
Bin A	Bin B	Bin C		SF	Acre
S*			SA-20a	38,340	0.88
			SA-20b	1,541	0.04
			SA-21a	42,413.00	0.97
W*			SA-25a	14,872.00	0.34
			SA-25b	9,339	0.21
			SA-29	8,829	0.20
			SA-30	824.00	0.02
			SA-32	835.00	0.02
X*			SA-27	668	0.02
			SA-28a	18,663	0.43
			SA-28b	2,553	0.06
	Y*		SA-1b	47.04	0.00
			SA-1c	977.32	0.02
			SA-3	616	0.01
Z*			SA-24	8,971.00	0.21
			SA-25a	28,070.00	0.64
			SA-26	2,483	0.06
WWTP			SA-38	50,001	1.15
Surficial ACM Extending Outside Parcel Areas					
			SA-1a	15.90	0.00
			SA-2	192.85	0.00
			SA-5	3,939.35	0.09
			SA-6	111.31	0.00
			SA-7	2,178.72	0.05
			SA-8	2,370.85	0.05
			SA-9a	9,263.44	0.21
			SA-10	146.10	0.00
			SA-11	2,267.49	0.05
			SA-12a	12,431.41	0.29
			SA-12b	37.19	0.00
			SA-15	9,393.23	0.22
			SA-16	51.87	0.00
			SA-20a	8,882.59	0.20
			SA-21a	8,899.50	0.20
			SA-23	2,633.77	0.06
			SA-24	999.82	0.02
			SA-25a	13.86	0.00
			SA-28a	262.20	0.01
			SA-28b	377.87	0.01
			SA-30	15.18	0.00
			SA-32	106.31	0.00
			SA-34	1,022.16	0.02
			SA-35	4,256.08	0.10
			SA-36a	20,035.81	0.46
			SA-36c	7,647.05	0.18
			SA-39	966.78	0.02
			SA-40	3,796.52	0.09
			SA-41	1,884.46	0.04
				TOTAL	**54.65**

* Indicates properties no longer occupied
** Refer to Figure 4-5 for SA locations

Table 4-3 Summary of Observations and Analytical Results at the Former WWTP

Index ID	Type	FIL Number	Interval of Completion		ACM Visual Observations (Presence or Absence)		Type of ACM Observed		Depth of ACM (in. bgs)	Analytical Results	
			Top (in. bgs)	Bottom (in. bgs)	Surface	Depth	Surface	Depth		Free Asbestos Fibers [Result (Analytical Sensitivity)]	Bulk ACM
NR-00107	Borehole	S-0048	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00108	Borehole	S-0048	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00109	Borehole	S-0048	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00110	Borehole	S-0049	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00111	Borehole	S-0049	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00112	Borehole	S-0049	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00113	Borehole	S-0050	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00114	Borehole	S-0050	0	72	NO	NO	N/A	N/A	N/A	ND (<0.25%)	ND
NR-00115	Borehole	S-0050	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00116	Borehole	S-0063	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00117	Borehole	S-0063	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00118	Borehole	S-0063	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00071	test pit	S-0034	0	48	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00072	test pit	S-0034	0	48	NO	NO	N/A	N/A	N/A	N/A	N/A

Notes: ID - identification; FIL - field investigation log; in. bgs - inches below ground surface; ACM - asbestos containing material; N/A - not applicable; ND - non-detect
indicates sample was sent for asbestos testing

Table 4-4. Summary of Observations and Analytical Results at the Former Landfill

Index ID	Type	FIL Number	Interval of Completion		ACM Visual Observations (Presence or Absence)		Type of ACM Observed		Depth of ACM (in. bgs)	Analytical Results	
			Top (in. bgs)	Bottom (in. bgs)	Surface	Depth	Surface	Depth		Free Asbestos Fibers [Result (Analytical Sensitivity)]	Bulk ACM
NR-00081	Borehole	S-0047	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00082	Borehole	S-0046	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00083	Borehole	S-0046	0	72	NO	NO	N/A	N/A	N/A	ND (<0.25%)	ND
NR-00084	Borehole	S-0046	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00085	Borehole	S-0045	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00086	Borehole	S-0045	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00087	Borehole	S-0045	0	72	NO	YES	N/A	MAG	24[a]	N/A	N/A
NR-00088	Borehole	S-0044	0	72	NO	YES	N/A	MAG	24[a]	N/A	N/A
NR-00089	Borehole	S-0044	0	72	NO	YES	N/A	MAG	24[a]	N/A	N/A
NR-00090	Borehole	S-0044	0	72	NO	YES	N/A	MAG	24[a]	N/A	N/A
NR-00091	Borehole	S-0043	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00092	Borehole	S-0043	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00093	Borehole	S-0043	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00094	Borehole	S-0025	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00095	Borehole	S-0025	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00096	Borehole	S-0023	0	72	NO	NO	N/A	N/A	N/A	ND (<0.25%)	ND
NR-00097	Borehole	S-0023	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00098	Borehole	S-0023	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00099 (a)	Borehole	S-0021	0	72	NO	YES	N/A	VAT	24[a]	N/A	N/A
NR-00099 (b)	Borehole	S-0021	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00100	Borehole	S-0021	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00101	Borehole	S-0021	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00102	Borehole	S-0022	0	72	YES	NO	VAT	N/A	N/A	N/A	N/A
NR-00103 (a)	Borehole	S-0022	0	72	NO	YES	N/A	VAT, MAG	24[a]	N/A	N/A
NR-00103 (b)	Borehole	S-0022	0	72	NO	YES	N/A	VAT, MAG	24[a]	N/A	N/A
NR-00103 (c)	Borehole	S-0022	0	72	NO	YES	N/A	VAT, MAG	24[a]	N/A	N/A
NR-00103 (d)	Borehole	S-0022	0	72	YES	YES	VAT	VAT, MAG	24[a]	N/A	N/A
NR-00103 (e)	Borehole	S-0022	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00104	Borehole	S-0022	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00105	Borehole	S-0047	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00106	Borehole	S-0047	0	72	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00061	test pit	S-0016	0	36	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00062	test pit	S-0017	0	36	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00063	test pit	S-0018	0	38	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00064	test pit	S-0019	0	42	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00065	test pit	S-0020	0	36	NO	YES	N/A	CAB, RM	36	N/A	N/A
NR-00066	test pit	S-0031	0	42	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00067	test pit	S-0032	0	30	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00068	test pit	S-0033	0	42	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00069	test pit	S-0033	0	40	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00070	test pit	S-0033	0	48	NO	YES	N/A	CAB	24	N/A	N/A

Notes: ID - identfication; FIL - field investigation log; in. bgs - inches below ground surface; ACM - asbestos containing material; N/A - not applicable; ND - non-detect; CAB - cement asbestos board; VAT - vinyl asbestos tile; MAG - magnesium asbestos; RM - roofing material; a - indicates depth is estimated due to lack of depth information reported from the field.
indicates sample was sent for asbestos testing

Table 4-5. Summary of Observations and Analytical Results at the Former Swimming Pool

Index ID	Type	FIL Number	Interval of Completion		ACM Visual Observations		Type of ACM Observed		Depth of ACM (in. bgs)	Analytical Results	
			Top (in. bgs)	Bottom (in. bgs)	Surface	Depth	Surface	Depth		Free Asbestos Fibers [Result (Analytical Sensitivity)]	Bulk ACM
NR-00204	DPT	S-0079	0	60	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00205	DPT	S-0079	0	60	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00206	DPT	S-0079	0	60	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00207	DPT	S-0080	0	48	YES	NO	CAB	N/A	N/A	N/A	N/A
NR-00208	DPT	S-0080	0	60	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00209	DPT	S-0080	0	60	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00210	DPT	S-0081	0	55	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00076	test pit	S-0035	0	48	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00077	test pit	S-0035	0	48	NO	YES	N/A	CAB, RM	48	N/A	N/A
NR-00078	test pit	S-0035	0	48	NO	NO	N/A	N/A	N/A	N/A	N/A
NR-00079	test pit	S-0062	0	36	NO	YES	N/A	CAB, RM	36	N/A	N/A
NR-00208b	test pit	S-0132	0	60	NO	NO	N/A	N/A	N/A	N/A	N/A

Notes: ID - identfication; FIL - field investigation log; in. bgs - inches below ground surface; ACM - asbestos containing material; N/A - not applicable; ND - non-detect; CAB - cement asbestos board; VAT - vinyl asbestos tile; MAG - magnesium asbestos; RM - roofing material
indicates sample was sent for asbestos testing

Table 4-6
Summary of Former Power Plant Soil Analytical Results

Analysis/Analyte	SLVs* EPA Region 6 SLs	SLVs* Oregon DEQ Risk-Based Concentrations	Reporting Units	PP-01 Surface	PP-01 2 ft bgs	PP-01 10 ft bgs	PP-02 Surface	PP-02 2 ft bgs	PP-02 10 ft bgs	PP-03 Surface	PP-03 2 ft bgs	PP-03 10 ft bgs	PP-04 Surface	PP-04 2 ft bgs	PP-04 10 ft bgs	PP-05 Surface	PP-05 2 ft bgs	PP-05 10 ft bgs	PP-06 Surface	PP-06 2 ft bgs	PP-06 10 ft bgs	PP-07 Surface	PP-07 2 ft bgs	PP-07 10 ft bgs	PP-08 Surface	PP-08 2 ft bgs	PP-08 10 ft bgs
NWTPH by Northwest Total Petroleum Hydrocarbon analytytial methods																											
Gasoline-Range		140	mg/kg	13UJ	13UJ	51J	9.6UJ	10UJ	11UJ	11UJ	6.8UJ	25J	12UJ	14UJ	14UJ	9UJ	9.4UJ	8.5UJ	41J	13UJ	12UJ	17	12U	13U	10U	12U	14U
Diesel-Range		3,900	mg/kg	12U	110U	210**	11U	110U	40***	11U	22U	200**/***	33**	13U	15U	16**	20U	11U	150**/***	13U	11U	96**	11U	11U	39***	220***	24**/***
Motor Oil-Range		9,800	mg/kg	31U	600†	490†	43†	560†	82***	28U	290†	240†/***	28U	32U	57U	26U	410†	28U	170†/***	32U	28U	96***	27U	28U	120†/***	360***	31U
PCBs by CLP Method SOM01.1																											
Aroclor-1016	0.22		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Aroclor-1221	0.22		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Aroclor-1232	0.22		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Aroclor-1242	0.22		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Aroclor-1248	0.22		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Aroclor-1254	0.22		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Aroclor-1260	0.22		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Aroclor-1262	NE		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Aroclor-1268	NE		mg/kg	0.043U	0.040U	0.042U	0.038U	0.040U	0.037U	0.038U	0.039U	0.041U	0.040U	0.046U	0.036U	0.037U	0.037U	0.040U	0.035U	0.043U	0.041U	0.035U	0.041U	0.042U	0.035U	0.042U	0.036U
Metals by CLP Method ILM05.3																											
Arsenic	0.39		mg/kg	***27.2***	***2***	***5.4***	***12.3***	***10***	***0.92***	***12.9***	***1.7***	***2.1***	***15.5***	***18.1***	***2.5***	***11.4***	***2.8***	***0.73***	***2.5***	***1.2***	***0.5***	***2.3***	***0.58***	***1***	***3.3***	***2.1***	***1.4***
Barium	16,000		mg/kg	81.3	224	136	150	88	160	73.6	215	267	118	121	117	115	175	118	497	116	112	603	140	180	683	427	142
Cadmium	39		mg/kg	0.28U	0.084J	0.24J	0.095J	0.071J	0.069J	0.056J	0.084J	0.099J	0.083J	0.067J	0.051J	0.062J	0.11J	0.04J	0.21J	0.051J	0.036J	0.10J	0.059J	0.14J	0.22	0.13J	0.062J
Chromium	210		mg/kg	11	12.5	13.1	22.3	21.9	30.3	26.2	11.5	14.8	35.1	26.5	23.8	35.3	13	11.3	13.5	21.8	13.7	10.7	15	27.1	10.4	5.8	16.5
Lead	400		mg/kg	2.6	6.9	20	7.6	4.1	5.9	4.7	10.4	9.2	4.1	3.8	3.8	3.6	17	2.9	25.8	5.8	3.3	14.6	3.2	4.4	41	4.8	4.9
Mercury	23		mg/kg	0.37	0.088	0.047	0.092	0.049	0.018	0.24	0.059	0.12	0.18	0.12	0.064	0.16	0.17	0.023	0.18	0.081	0.014	0.26	0.033	0.0041J	3.7	0.032	0.022
Selenium	390		mg/kg	0.42	0.25	1.4	0.24U	0.26U	0.28U	0.23U	0.28	0.3	0.25U	0.24J	0.31UJ	0.23UJ	0.27J	0.24UJ	0.52J	0.26UJ	0.21J	0.6	0.25U	0.26U	0.65	0.74	0.28U
Silver	390		mg/kg	0.037J	0.051J	0.10J	0.039J	0.025J	0.076J	0.027J	0.066J	0.081J	0.028J	0.046J	0.056J	0.042J	0.046J	0.043J	0.076J	0.052J	0.046J	0.059J	0.042J	0.039J	0.10U	0.078U	0.065J
SVOCs by CLP Method SOM01.1																											
Benzaldehyde	6,100		mg/kg	0.22U	0.20U	NC	0.19U	0.20U	NC	0.19U	0.20U	0.21U	0.20U	0.23U	NC	0.18U	0.19U	NC	0.18U	0.21U	NC	0.18UJ	0.21UJ	NC	NC	0.21UJ	0.18U
Naphthalene	120		mg/kg	0.0043U	0.0044	NC	0.0038U	0.0040U	NC	0.0038U	0.0020J	0.015	0.0024J	0.0028J	NC	0.0037U	0.0034J	NC	0.028	0.0021J	NC	0.014	0.0041U	NC	NC	0.0097	0.0036U
2-Methyl-naphthalene	NE		mg/kg	0.0043U	0.0071	NC	0.0038U	0.0032J	NC	0.0038U	0.0031J	0.027	0.0040U	0.0046U	NC	0.0037U	0.0034J	NC	0.058	0.0043U	NC	0.025	0.0041U	NC	NC	0.022	0.0036U
Fluorene	2,600		mg/kg	0.0043U	0.0040U	NC	0.0038U	0.0040U	NC	0.0038U	0.0039U	0.0041U	0.0040U	0.0046U	NC	0.0037U	0.0037U	NC	0.0036U	0.0043U	NC	0.0017J	0.0041U	NC	NC	0.0026J	0.0036U
Pentachlorophenol	3		mg/kg	0.0086U	0.0079U	NC	0.0077U	0.0080U	NC	0.0076U	0.0078U	0.15	0.0080U	0.0092U	NC	0.0073U	0.0075U	NC	0.0070U	0.0086U	NC	0.0070U	0.0082U	NC	NC	0.0084U	0.0072U
Phenanthrene	NE		mg/kg	0.0043U	0.0051	NC	0.0038U	0.0092	NC	0.0038U	0.0047	0.0086	0.0040U	0.0046U	NC	0.0037U	0.0019J	NC	0.019	0.0043U	NC	0.0084	0.0041U	NC	NC	0.0089	0.0026J
Anthracene	22,000		mg/kg	0.0043U	0.0040U	NC	0.0038U	0.0020J	NC	0.0038U	0.0039U	0.0041U	0.0040U	0.0046U	NC	0.0037U	0.0037U	NC	0.0031J	0.0043U	NC	0.0017J	0.0041U	NC	NC	0.0042U	0.0036U
Fluoranthene	2,300		mg/kg	0.0043U	0.0032J	NC	0.0038U	0.0044	NC	0.0038U	0.0039U	0.0025J	0.0040U	0.0046U	NC	0.0037U	0.0037U	NC	0.0077	0.0043U	NC	0.0024J	0.0041U	NC	NC	0.0029J	0.0058
Pyrene	2,300		mg/kg	0.0043U	0.0056	NC	0.0038U	0.031	NC	0.0038U	0.0020J	0.0029J	0.0040U	0.0046U	NC	0.0037U	0.0037U	NC	0.0074	0.0043U	NC	0.0031J	0.0041U	NC	NC	0.0042J	0.0058
Benzo(a)-anthracene	0.15		mg/kg	0.0043U	0.0040U	NC	0.0038U	0.012	NC	0.0038U	0.0039U	0.0041U	0.0040U	0.0046U	NC	0.0037U	0.0037U	NC	0.0042	0.0043U	NC	0.0036U	0.0041U	NC	NC	0.0042U	0.0018J
Chrysene	62		mg/kg	0.0043U	0.023	NC	0.0019J	0.1	NC	0.0023J	0.012	0.01	0.0040U	0.0046U	NC	0.0037U	0.026	NC	0.018	0.0043U	NC	0.0056	0.0041U	NC	NC	0.0072	0.0054
Bis(2-ethylhexyl)-phthalate	35		mg/kg	0.22U	0.20UJ	NC	0.19U	0.20UJ	NC	0.19UJ	0.20UJ	0.21UJ	0.20U	0.23U	NC	0.18U	0.19U	NC	0.18U	0.21U	NC	0.18U	0.21U	NC	NC	0.21J	0.18U
Benzo(b)-fluoranthene	0.15		mg/kg	0.0043U	0.0040U	NC	0.0038U	0.0092	NC	0.0038U	0.0020J	0.0041U	0.0040U	0.0046U	NC	0.0037U	0.0049	NC	0.0021J	0.0043U	NC	0.0036U	0.0041U	NC	NC	0.0042U	0.0036U
Benzo(k)-fluoranthene	1.5		mg/kg	0.0043U	0.0040U	NC	0.0038U	0.0024J	NC	0.0038U	0.0031J	0.0041U	0.0040U	0.0046U	NC	0.0037U	0.0037U	NC	0.0028J	0.0043U	NC	0.0036U	0.0041U	NC	NC	0.0042U	0.0036U
Benzo(a)-pyrene	0.015		mg/kg	0.0043U	0.0040U	NC	0.0038U	0.011	NC	0.0038U	0.0067	0.0041U	0.0040U	0.0046U	NC	0.0037U	0.0052	NC	0.0024J	0.0043U	NC	0.0036U	0.0025J	NC	NC	0.0042U	0.0036U
Ideno(1,2,3-cd)pyrene	0.15		mg/kg	0.0043U	0.0040U	NC	0.0038U	0.0040U	NC	0.0038U	0.0039U	0.0041U	0.0040U	0.0046U	NC	0.0037U	0.0037U	NC	0.0036U	0.0043U	NC	0.0036U	0.0041U	NC	NC	0.0042U	0.0036U
Dibenzo(a,h)-nthracene	0.015		mg/kg	0.0043U	0.0040U	NC	0.0038U	0.0084	NC	0.0038U	0.0039U	0.0041U	0.0040U	0.0046U	NC	0.0037U	0.015	NC	0.0024J	0.0043U	NC	0.0036U	0.0041U	NC	NC	0.0042U	0.0036U
Benzo(g,h,i)-perylene	NE		mg/kg	0.0043U	0.0099	NC	0.0019J	0.018	NC	0.0023J	0.0039U	0.0049	0.0040U	0.0046U	NC	0.0037U	0.031	NC	0.0053	0.0043U	NC	0.0036U	0.0041U	NC	NC	0.0042U	0.0036U
VOCs by CLP Method SOM01.1																											
Trichloroluoromethane	390		mg/kg	NC	NC	0.0011J	NC	NC	0.068U	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
Acetone	14,000		mg/kg	NC	NC	0.020U	NC	NC	0.026U	NC	NC	0.014U	NC	NC	0.017U	NC	NC	0.013U	NC	NC	0.010U	NC	NC	0.035	NC	NC	0.013U
Carbon Disulfide	78‡		mg/kg	NC	NC	0.01U	NC	NC	0.00099J	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
cis-1,2-Dichloroethene	43		mg/kg	NC	NC	0.01U	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.0025J	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
2-Butanone	32,000		mg/kg	NC	NC	0.02U	NC	NC	0.0067J	NC	NC	0.014U	NC	NC	0.017U	NC	NC	0.013U	NC	NC	0.010U	NC	NC	0.011J	NC	NC	0.013U
Chloro-form	0.25		mg/kg	NC	NC	0.01U	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
1,1,1-Trichloroethane	160‡		mg/kg	NC	NC	0.01U	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
Benzene	0.66		mg/kg	NC	NC	0.014J	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
1,2-Dichloroethane	0.35		mg/kg	NC	NC	0.01U	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
1,4-Dioxane	44		mg/kg	NC	NC	0.20R	NC	NC	0.14R	NC	NC	0.14R	NC	NC	0.17R	NC	NC	0.13R	NC	NC	0.10R	NC	NC	0.12R	NC	NC	0.13R
Trichloro-ethene	0.043		mg/kg	NC	NC	0.00067J	NC	NC	0.0014J	NC	NC	0.0072U	NC	NC	0.0032J	NC	NC	0.0067U	NC	NC	0.00018J	NC	NC	0.0059U	NC	NC	0.0065U
Methylcyclohexane	100‡		mg/kg	NC	NC	0.0052J	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
Toluene	350‡		mg/kg	NC	NC	0.013U	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
Tetrachloroethene	0.55		mg/kg	NC	NC	0.00049J	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.00031J	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
Chlorobenzene	270		mg/kg	NC	NC	0.01U	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.0084U	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
Ethylbenzene	23‡		mg/kg	NC	NC	0.00049J	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.00029J	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
o-Xylenes	160‡		mg/kg	NC	NC	0.00055J	NC	NC	0.0068U	NC	NC	0.0072U	NC	NC	0.00023J	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U
m,p-Xylenes	46‡		mg/kg	NC	NC	0.0018J	NC	NC	0.00021J	NC	NC	0.00057J	NC	NC	0.00095J	NC	NC	0.0067U	NC	NC	0.00035J	NC	NC	0.0059U	NC	NC	0.0065U
1,2,4-Trichlorobenzene	140		mg/kg	NC	NC	0.01UJ	NC	NC	0.0068U	NC	NC	0.0072UJ	NC	NC	0.0017J	NC	NC	0.0067U	NC	NC	0.0050U	NC	NC	0.0059U	NC	NC	0.0065U

Notes:
*SLVs are for Residential Soils
**Similar to number 2 diesel
***Unknown organics
†Similar to asphalt
‡SL for non-carcinogenic compounds multiplied by 0.10 for the residential direct exposure pathway for soil (for SLs set at saturation concentration, HQ=1 value multiplied by 0.1)
U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantification limit or the sample detection limit.
J = The associated value is an estimated quantity.
UJ = The analyte was analyzed for, but not detected. The associated value is an estimate and may be inaccurate or imprecise.
R = Result was rejected and should not be used for decision making

EPA = Environmental Protection Agency
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons-Gasoline extended analytical method
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons-Diesel extended analytical method
mg/kg = milligrams per kilogram
DEQ = Department of Environmental Quality
NE = SL not established
NC = not collected
Bold = results above SLV
Bold = detection limit above SLV

Table 4-7
Summary of Former Maintenance Shop Area Soil Analytical Results

	SLVs*			MS-01			MS-02			MS-03			MS-04			MS-05			MS-06			MS-07			MS-08			MS-09		
Analysis/Analyte	**EPA Region 6 SLs**	**Oregon DEQ Risk-Based Concentrations**	**Reporting Units**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**
NWTPH by Northwest Total Petroleum Hydrocarbon analtytial methods																														
Gasoline-Range		140	mg/kg	10UJ	12UJ	13UJ	9.9UJ	9.7UJ	13UJ	10UJ	9.9UJ	12UJ	14U	11U	17U	NC	11U	13U	9.7U	14U	15U	9.8U	14U	16U	9.9U	12U	19U	9.6U	12U	19U
Diesel-Range		3,900	mg/kg	10UJ	12UJ	12U	10U	11U	16U	10UJ	10UJ	12UJ	13U	11U	13U	NC	12U	12U	9.8U	13U	17U	10U	9.8U	16U	11U	10U	17U	8.8U	11U	19U
Motor Oil-Range		9,800	mg/kg	43†	31U	31U	26U	27U	41U	25U	26U	30U	33U	27U	33U	NC	30U	29U	25U	28U	43U	25U	24U	40U	26U	26U	43U	22U	27U	48U
Metals by CLP Method ILM05.3																														
Arsenic	0.39		mg/kg	***0.97***	***0.75***	***1.6***	***0.92***	***0.63***	***0.67***	***0.96***	***0.39***	***0.84***	***0.96***	***0.41***	***0.77***	NC	***0.7***	***0.7***	***0.99***	***0.48***	***0.74***	***0.88***	***0.52***	***0.67***	***0.94***	***1.1***	***0.63***	***0.76***	***1.1***	***1.2***
Barium	16,000		mg/kg	121	103	135	131	99.1	192	138	87.4	133	152	78.8	191	NC	174	131	136	152	148	133	157	230	172	162	154	136	172	102
Cadmium	39		mg/kg	0.074J	0.051J	0.063J	0.046J	0.26U	0.078J	0.11J	0.036J	0.053J	0.040J	0.23U	0.082J	NC	0.071J	0.040J	0.065J	0.058J	0.049J	0.043J	0.069J	0.067J	0.067J	0.055J	0.41U	0.071J	0.050J	0.44U
Chromium	210		mg/kg	13.4	37.7	38.2	13.6	10.1	19.1	19.6	12.3	19.5	22.6	9.4	23.8	NC	23.2	24.7	13.9	21.4	14.2	14.3	22.1	27.1	21.2	24.2	17.7	13.3	22.7	26.4
Lead	400		mg/kg	8.5	4.4	3.9	5.8	2.5	4.3	11.9	2.2	3.1	4.9	2.2	4.5	NC	4.9	4.2	8.3	4.5	3.0	4.7	5.0	4.2	9.4	4.1	3.2	7.2	4.3	2.0
Mercury	23		mg/kg	0.017	0.013	0.02	0.019	0.013	0.015	0.015	0.0084J	0.015	0.023	0.019	0.019	NC	0.027	0.017	0.041	0.015	0.058	0.03	0.016	0.038	0.013	0.010J	0.014J	0.015	0.013	0.012J
Selenium	390		mg/kg	0.21J	0.25U	0.31U	0.23U	0.26U	0.24U	0.22U	0.23U	0.26U	0.26UJ	0.23UJ	0.28U	NC	0.24J	0.29UJ	0.21UJ	0.34U	0.35UJ	0.21UJ	0.26U	0.34UJ	0.21U	0.24U	0.41U	0.21U	0.25U	0.44U
Silver	390		mg/kg	*0.044J*	*0.033J*	*0.030J*	*0.042J*	*0.032J*	*0.032J*	*0.036J*	*0.027J*	*0.031J*	*0.044J*	*0.038J*	*0.053J*	NC	*0.053J*	*0.045J*	*0.037J*	*0.031J*	*0.037J*	*0.040J*	*0.043J*	*0.046J*	0.043J	0.61	*0.064J*	*0.034J*	*0.027J*	0.22U
VOCs by CLP Method SOM01.1																														
Trichloroluoromethane	390		mg/kg	NC	NC	0.0059U	NC	NC	0.0063U	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0096U	NC	NC	0.015U	NC	NC	0.010U
Acetone	14,000		mg/kg	NC	NC	0.012U	NC	NC	0.013U	NC	NC	0.012U	NC	NC	0.032U	NC	NC	0.016U	NC	NC	0.023U	NC	NC	0.019U	NC	NC	0.030U	NC	NC	0.021U
Carbon Disulfide	78‡		mg/kg	NC	NC	0.0059U	NC	NC	0.0063U	NC	NC	0.0062U	NC	NC	**0.00074J**	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
cis-1,2-Dichloroethene	43		mg/kg	NC	NC	**0.00069J**	NC	NC	**0.00083J**	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
2-Butanone	32,000		mg/kg	NC	NC	0.012U	NC	NC	0.013U	NC	NC	0.012U	NC	NC	0.032U	NC	NC	0.016U	NC	NC	0.023U	NC	NC	0.019U	NC	NC	0.030U	NC	NC	0.021U
Chloro-form	0.25		mg/kg	NC	NC	0.0059U	NC	NC	0.0063U	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
1,1,1-Trichloroethane	160‡		mg/kg	NC	NC	0.0059U	NC	NC	0.0063U	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
Benzene	0.66		mg/kg	NC	NC	0.0059U	NC	NC	**0.0011J**	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	**0.0036J**	NC	NC	0.015U	NC	NC	0.010U
1,2-Dichloroethane	0.35		mg/kg	NC	NC	0.012	NC	NC	0.0092	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
1,4-Dioxane	44		mg/kg	NC	NC	0.12R	NC	NC	0.13R	NC	NC	0.12R	NC	NC	0.19R	NC	NC	0.16R	NC	NC	0.23R	NC	NC	0.19R	NC	NC	0.30R	NC	NC	0.21R
Trichloroethene	0.043		mg/kg	NC	NC	**0.0026J**	NC	NC	**0.0025J**	NC	NC	**0.00019J**	NC	NC	0.0096U	NC	NC	**0.00024J**	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
Methylcyclohexane	100‡		mg/kg	NC	NC	0.0059U	NC	NC	0.0063U	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
Toluene	350‡		mg/kg	NC	NC	0.039	NC	NC	0.0056U	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	**0.02**	NC	NC	0.015U	NC	NC	0.010U
Tetrachloroethene	0.55		mg/kg	NC	NC	0.0059U	NC	NC	**0.018**	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
Chlorobenzene	270		mg/kg	NC	NC	0.0059U	NC	NC	**0.00046J**	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
Ethylbenzene	23‡		mg/kg	NC	NC	**0.0013J**	NC	NC	**0.00061J**	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
o-Xylenes	160‡		mg/kg	NC	NC	**0.0020J**	NC	NC	**0.00085J**	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U
m,p-Xylenes	46‡		mg/kg	NC	NC	0.0077	NC	NC	**0.0029J**	NC	NC	**0.00023J**	NC	NC	0.0096U	NC	NC	**0.00056J**	NC	NC	**0.00030J**	NC	NC	**0.00029J**	NC	NC	0.015U	NC	NC	0.010U
1,2,4-Trichlorobenzene	140		mg/kg	NC	NC	**0.00034J**	NC	NC	**0.00090J**	NC	NC	0.0062U	NC	NC	0.0096U	NC	NC	0.0078U	NC	NC	0.011U	NC	NC	0.0095U	NC	NC	0.015U	NC	NC	0.010U

Notes:
*SLVs are for Residential Soils
**Similar to number 2 diesel
***Unknown organics
†Similar to asphalt
‡SL for non-carcinogenic compounds multiplied by 0.10 for the residential direct exposure pathway for soil (for SLs set at saturation concentration, HQ=1 value multiplied by 0.1)
U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantification limit or the sample detection limit.
J = The associated value is an estimated quantity.
UJ = The analyte was analyzed for, but not detected. The associated value is an estimate and may be inaccurate or imprecise.
R = Result was rejected and should not be used for decision making
EPA = Environmental Protection Agency
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons-Gasoline extended analytical method
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons-Diesel extended analytical method
mg/kg = milligrams per kilogram
DEQ = Department of Environmental Quality
NE = SL not established
NC = not collected
Bold = results above SLV
Bold = detection limit above SLV

Table 4-8
Summary of Former Laundry Building Area Soil Analytical Results

Analysis/Analyte	SLVs* EPA Region 6 SLs	SLVs* Oregon DEQ Risk-Based Concentrations	Reporting Units	LB-01 Surface	LB-01 2 ft bgs	LB-01 10 ft bgs	LB-02 Surface	LB-02 2 ft bgs	LB-02 10 ft bgs	LB-03 Surface	LB-03 2 ft bgs	LB-03 10 ft bgs	LB-04 Surface	LB-04 2 ft bgs	LB-04 10 ft bgs	LB-05 Surface	LB-05 2 ft bgs	LB-05 10 ft bgs	LB-06 Surface	LB-06 2 ft bgs	LB-06 10 ft bgs
SVOCs by CLP Method SOM01.1																					
Benzaldehyde	6,100		mg/kg	0.19U	0.19U	0.19U	0.17U	0.19U	0.19U	0.21U	0.19U	0.28U	0.18U	0.19U	0.22U	0.19U	0.19U	0.20U	0.18U	0.19U	0.20U
Naphthalene	120		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
2-Methyl-naphthalene	NE		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Fluorene	2,600		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Pentachlorophenol	3		mg/kg	0.0075U	0.0077U	0.0077U	0.0069U	0.0075U	**0.0077J**	0.0086U	**0.00377**	0.011U	**0.0029J**	0.0076U	0.0089U	0.0075U	0.0077U	0.0081U	0.0070U	0.0075U	0.0078U
Phenanthrene	NE		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Anthracene	22,000		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Fluoranthene	2,300		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Pyrene	2,300		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Benzo(a)-anthracene	0.15		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Chrysene	62		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Bis(2-ethylhexyl)-phthalate	35		mg/kg	0.19U	0.19U	0.19U	0.17U	0.19U	0.19U	0.21U	0.19U	0.28U	0.18U	0.19U	0.22U	0.19U	0.19U	0.20U	0.18U	0.19U	0.20U
Benzo(b)-fluoranthene	0.15		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Benzo(k)-fluoranthene	1.5		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Benzo(a)-pyrene	0.015		mg/kg	**0.0019J**	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Ideno(1,2,3-cd)pyrene	0.15		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Dibenzo(a,h)-nthracene	0.015		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
Benzo(g,h,i)-perylene	NE		mg/kg	0.0037U	0.0039U	0.0038U	0.0034U	0.0037U	**0.0039J**	0.0043U	0.0038U	0.0056U	0.0036U	0.0038U	0.0044U	0.0037U	0.0038U	0.0041U	0.0036U	0.0037U	0.0039U
VOCs by CLP Method SOM01.1																					
Trichloroluoromethane	390		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	0.0062U	NC	NC	0.0055U
Acetone	14,000		mg/kg	NC	NC	0.012U	NC	NC	0.012U	NC	NC	0.028U	NC	NC	0.015U	NC	NC	0.028U	NC	NC	0.011U
Carbon Disulfide	78‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	**0.0023J**	NC	NC	0.0055U
cis-1,2-Dichloroethene	43		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	0.0062U	NC	NC	0.0055U
2-Butanone	32,000		mg/kg	NC	NC	0.012U	NC	NC	0.012U	NC	NC	0.024U	NC	NC	0.015U	NC	NC	**0.0082J**	NC	NC	0.011U
Chloro-form	0.25		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	**0.057**	NC	NC	0.0055U
1,1,1-Trichloroethane	160‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	**0.015**	NC	NC	0.0055U
Benzene	0.66		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	0.0062U	NC	NC	0.0055U
1,2-Dichloroethane	0.35		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	***0.34J***	NC	NC	0.0055U
1,4-Dioxane	44		mg/kg	NC	NC	0.12R	NC	NC	0.12R	NC	NC	0.24R	NC	NC	0.15R	NC	NC	0.12R	NC	NC	0.11R
Trichloro-ethene	0.043		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	**0.0029J**	NC	NC	**0.011**	NC	NC	***0.063***	NC	NC	0.0055U
Methylcyclohexane	100‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	0.0062U	NC	NC	0.0055U
Toluene	350‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	**0.02**	NC	NC	**0.046**	NC	NC	0.0055U
Tetrachloroethene	0.55		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	**0.00038J**	NC	NC	**0.00057J**	NC	NC	**0.00068J**	NC	NC	0.0055U
Chlorobenzene	270		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	0.0075U	NC	NC	0.0062U	NC	NC	0.0055U
Ethylbenzene	23‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	**0.00050J**	NC	NC	**0.0044J**	NC	NC	**0.00039J**	NC	NC	0.0055U
o-Xylenes	160‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	**0.0048J**	NC	NC	0.0062U	NC	NC	0.0055U
m,p-Xylenes	46‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	**0.0019J**	NC	NC	**0.019**	NC	NC	**0.0015J**	NC	NC	0.0055U
1,2,4-Trichlorobenzene	140		mg/kg	NC	NC	0.0058U	NC	NC	0.0062U	NC	NC	0.012U	NC	NC	**0.0075U**	NC	NC	0.0062U	NC	NC	0.0055U

Notes:
*SLVs are for Residential Soils
**Similar to number 2 diesel
***Unknown organics
†Similar to asphalt
‡SL for non-carcinogenic compounds multiplied by 0.10 for the residential direct exposure pathway for soil (for SLs set at saturation concentration, HQ=1 value multiplied by 0.1)
U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantification limit or the sample detection limit.
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EPA = Environmental Protection Agency
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons-Gasoline extended analytical method
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons-Diesel extended analytical method
mg/kg = milligrams per kilogram
DEQ = Department of Environmental Quality
NE = SL not established
NC = not collected
Bold = results above SLV
Bold = detection limit above SLV

Table 4-9
Summary of Former Landfill Area Soil Analytical Results

Analysis/Analyte	SLVs* EPA Region 6 SLs	SLVs* Oregon DEQ Risk-Based Concentrations	Reporting Units	LF-01 Surface	LF-01 2 ft bgs	LF-01 10 ft bgs	LF-02 Surface	LF-02 2 ft bgs	LF-02 10 ft bgs	LF-03 Surface	LF-03 2 ft bgs	LF-03 10 ft bgs
NWTPH by Northwest Total Petroleum Hydrocarbon analtytial methods												
Gasoline-Range		140	mg/kg	7.6U	11U	8.7U	6.5U	11U	8.9U	8.2U	11U	13U
Diesel-Range		3,900	mg/kg	9.9U	20U	11U	9U	20U	9.8U	93U	9.8U	11U
Motor Oil-Range		9,800	mg/kg	120†	170†	28U	23U	280†	24U	660†	57°	27U
PCBs by CLP Method SOM01.1												
Aroclor-1016	0.22		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Aroclor-1221	0.22		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Aroclor-1232	0.22		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Aroclor-1242	0.22		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Aroclor-1248	0.22		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Aroclor-1254	0.22		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Aroclor-1260	0.22		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Aroclor-1262	NE		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Aroclor-1268	NE		mg/kg	0.035U	0.036U	0.040U	0.035U	0.037U	0.041U	0.034U	0.040U	0.040U
Pesticides by CLP Method SOM01.1												
alpha-BHC	0.09		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
beta-BHC	0.32		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
delta-BHC	NE		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
gamma-BHC	0.44		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
Heptachlor	0.11		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
Aldrin	0.029		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
Heptachlor epoxide	0.053		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
Endo-sulfan I	NE		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
Dieldrin	0.03		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.34U	0.0040U	0.0040U
4,4'-DDE	1.7		mg/kg	0.045	0.039	0.0040U	0.045	0.16J	0.0041U	0.34U	0.0040U	0.0040U
Endrin	18		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.34U	0.0040U	0.0040U
Endo-sulfan II	NE		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.34U	0.0040U	0.0040U
4,4'-DDD	2.4		mg/kg	0.0066J	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.34U	0.0040U	0.0040U
Endosulfan sulfate	NE		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.34U	0.0040U	0.0040U
4,4'-DDT	1.7		mg/kg	0.12	0.074	0.0040U	0.053	1.6	0.026	0.34U	0.0040U	0.0040U
Methoxychlor	310		mg/kg	0.018U	0.018U	0.020U	0.018U	0.190U	0.020U	1.7U	0.020U	0.020U
Endrin keytone	NE		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.34U	0.0040U	0.0040U
Endrin Aldehyde	NE		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.34U	0.0040U	0.0040U
alpha-Chlordane	NE		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
gamma-Chlordane	NE		mg/kg	0.0017U	0.0018U	0.0020U	0.0018U	0.0018U	0.0020U	0.17U	0.0020U	0.0020U
Toxaphene	0.44		mg/kg	0.18U	0.18U	0.20U	0.18U	0.19	0.20U	17.0U	0.20U	0.20U
Metals by CLP Method ILM05.3												
Arsenic	0.39		mg/kg	***1.3***	***16.6***	***1.2***	***1.4***	***4***	***1.1***	***1.4***	***1.6***	***0.94***
Barium	16,000		mg/kg	208	284	151	247	218	172	190	206	174
Cadmium	39		mg/kg	0.87	1.3	0.25U	0.29	1.5	0.10J	0.23	0.051J	0.25U
Chromium	210		mg/kg	22.1	32.7	22.7	28	28.3	25.8	21.8	28	24.9
Lead	400		mg/kg	123	201	6.3	32.2	383	7.6	26.7	9.1	5.5
Mercury	23		mg/kg	0.48	1.6	0.013	0.049	0.64	0.02	0.092	0.016U	0.025U
Selenium	390		mg/kg	0.21UJ	0.25J	0.27J	0.21UJ	0.37J	0.29J	0.20J	0.24UJ	0.22J
Silver	390		mg/kg	0.19	0.42	0.12U	0.10U	0.4	0.12U	0.026J	0.12U	0.12U
SVOCs by CLP Method SOM01.1												
Benzaldehyde	6,100		mg/kg	0.18UJ	0.18U	0.20U	0.18U	0.19U	0.20U	0.17U	0.20U	0.20U
Naphthalene	120		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0026J	0.0041U	0.0034U	0.0024J	0.0040U
2-Methyl-naphthalene	NE		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.0034U	0.0040U	0.0040U
Fluorene	2,600		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.0034U	0.0040U	0.0040U
Pentachlorophenol	3		mg/kg	0.0070U	0.0072U	0.0079U	0.0071U	0.0056J	0.0081U	0.0068U	0.0079U	0.0080U
Phenanthrene	NE		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0052	0.0041U	0.0024J	0.0071	0.0040U
Anthracene	22,000		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.0034U	0.0040U	0.0040U
Fluoranthene	2,300		mg/kg	0.0036U	0.0036U	0.0040U	0.0032J	0.0033J	0.0041U	0.0054	0.027	0.0040U
Pyrene	2,300		mg/kg	0.0036U	0.0036U	0.0040U	0.0039	0.0041	0.0041U	0.022	0.043	0.0028J
Benzo(a)-anthracene	0.15		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0022J	0.0041U	0.0051	0.014	0.0040U
Chrysene	62		mg/kg	0.0036U	0.0036	0.0040U	0.0046	0.022	0.0041U	0.23	0.033	0.0040U
Bis(2-ethylhexyl)-phthalate	35		mg/kg	0.18UJ	0.17J	0.20U	0.18U	0.13J	0.20U	0.17U	0.20U	0.20U
Benzo(b)-fluoranthene	0.15		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0033J	0.0041U	0.0034J	0.01	0.0040U
Benzo(k)-fluoranthene	1.5		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0037U	0.0041U	0.034J	0.012	0.0040U
Benzo(a)-pyrene	0.015		mg/kg	0.0042	0.0036U	0.0040U	0.0036U	0.0041	0.0041U	0.032	0.019	0.0040U
Ideno(1,2,3-cd)pyrene	0.15		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0018J	0.0041U	0.0020J	0.015	0.0040U
Dibenzo(a,h)-nthracene	0.015		mg/kg	0.0036U	0.0036U	0.0040U	0.0036U	0.0063	0.0041U	0.051	0.0051	0.0040U
Benzo(g,h,i)-perylene	NE		mg/kg	0.0036U	0.0036U	0.0040U	0.0046	0.012	0.0041U	0.065	0.053	0.0036J
VOCs by CLP Method SOM01.1												
Trichloroluoromethane	390		mg/kg	NC	NC	0.0058U	NC	NC	0.0049U	NC	NC	0.0058U
Acetone	14,000		mg/kg	NC	NC	0.012U	NC	NC	0.0098U	NC	NC	0.012U
Carbon Disulfide	78‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0049U	NC	NC	0.0058U
cis-1,2-Dichloroethene	43		mg/kg	NC	NC	0.00058J	NC	NC	0.0049U	NC	NC	0.0058U
2-Butanone	32,000		mg/kg	NC	NC	0.012U	NC	NC	0.0098U	NC	NC	0.012U
Chloro-form	0.25		mg/kg	NC	NC	0.0058U	NC	NC	0.0049U	NC	NC	0.0058U
1,1,1-Trichloroethane	160‡		mg/kg	NC	NC	0.0013J	NC	NC	0.0049U	NC	NC	0.0058U
Benzene	0.66		mg/kg	NC	NC	0.0058U	NC	NC	0.0049U	NC	NC	0.0058U
1,2-Dichloroethane	0.35		mg/kg	NC	NC	0.039	NC	NC	0.0049U	NC	NC	0.0058U
1,4-Dioxane	44		mg/kg	NC	NC	0.12R	NC	NC	0.098R	NC	NC	0.12R
Trichloro-ethene	0.043		mg/kg	NC	NC	0.0073	NC	NC	0.0049U	NC	NC	0.0058U
Methylcyclohexane	100‡		mg/kg	NC	NC	0.0058U	NC	NC	0.0049U	NC	NC	0.0058U
Toluene	350‡		mg/kg	NC	NC	0.0084	NC	NC	0.0049U	NC	NC	0.0058U
Tetrachloroethene	0.55		mg/kg	NC	NC	0.00028J	NC	NC	0.0049U	NC	NC	0.0058U
Chlorobenzene	270		mg/kg	NC	NC	0.0058U	NC	NC	0.0049U	NC	NC	0.0058U
Ethylbenzene	23‡		mg/kg	NC	NC	0.00037J	NC	NC	0.0049U	NC	NC	0.0058U
o-Xylenes	160‡		mg/kg	NC	NC	0.00039J	NC	NC	0.0049U	NC	NC	0.0058U
m,p-Xylenes	46‡		mg/kg	NC	NC	0.0015J	NC	NC	0.0049U	NC	NC	0.00015J
1,2,4-Trichlorobenzene	140		mg/kg	NC	NC	0.00095J	NC	NC	0.0049U	NC	NC	0.0058U

Notes:
*SLVs are for Residential Soils
**Similar to number 2 diesel
***Unknown organics
†Similar to asphalt
‡SL for non-carcinogenic compounds multiplied by 0.10 for the residential direct exposure pathway for soil (for SLs set at saturation concentration, HQ=1 value multiplied by 0.1)
U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantification limit or the sample detection limit.
J = The associated value is an estimated quantity.
UJ = The analyte was analyzed for, but not detected. The associated value is an estimate and may be inaccurate or imprecise.
R = Result was rejected and should not be used for decision making
EPA = Environmental Protection Agency
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons-Gasoline extended analytical method
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons-Diesel extended analytical method
mg/kg = milligrams per kilogram
DEQ = Department of Environmental Quality
NE = SL not established
NC = not collected
Bold = results above SLV
Bold = detection limit above SLV

Table 4-10
Summary of Former OTI Maintenance Shop Area Soil Analytical Results

	SLVs*			OTI-01			OTI-02			OTI-03		
Analysis/Analyte	**EPA Region 6 SLs**	**Oregon DEQ Risk-Based Concentrations**	**Reporting Units**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**	**Surface**	**2 ft bgs**	**10 ft bgs**
NWTPH by Northwest Total Petroleum Hydrocarbon analtytial methods												
Gasoline-Range		140	mg/kg	11U	12U	11U	26	11U	12U	7.2U	11U	13U
Diesel-Range		3,900	mg/kg	10U	11U	11U	29**/***	11U	11U	10U	11U	13U
Motor Oil-Range		9,800	mg/kg	26U	27U	28U	47†	29U	62†	74†/***	28U	33U
Metals by CLP Method ILM05.3												
Arsenic	0.39		mg/kg	***1.5***	***0.91***	***1.4***	0.36U	***1.4***	***1.2***	***1.1***	***1.3***	***1.3***
Barium	16,000		mg/kg	118	204	128	62.7	185	164	112	222	220
Cadmium	39		mg/kg	0.051J	0.031J	0.043J	0.083J	0.046J	0.099J	0.077J	0.039J	0.27U
Chromium	210		mg/kg	21.4	25.2	27.8	7.8	21.4	25.5	19.4	26	31
Lead	400		mg/kg	11.6	5.3	22.6	5.5	6.2	37.9	63.1	12.8	5.2
Mercury	23		mg/kg	0.0077U	0.012U	0.010U	0.015U	0.022U	0.049	0.084	0.049	0.018U
Selenium	390		mg/kg	0.25UJ	0.24J	0.23UJ	0.24UJ	0.21UJ	0.22J	0.22UJ	0.24UJ	0.27UJ
Silver	390		mg/kg	0.12U	0.10U	0.12U	0.12U	0.10U	0.12U	0.11U	0.12U	0.14U
VOCs by CLP Method SOM01.1												
Trichloroluoromethane	390		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.00074J
Acetone	14,000		mg/kg	NC	NC	0.016U	NC	NC	0.012U	NC	NC	0.019U
Carbon Disulfide	78‡		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.0093U
cis-1,2-Dichloroethene	43		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.019
2-Butanone	32,000		mg/kg	NC	NC	0.016U	NC	NC	0.012U	NC	NC	0.019U
Chloro-form	0.25		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.12
1,1,1-Trichloroethane	160‡		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.032
Benzene	0.66		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.0093U
1,2-Dichloroethane	0.35		mg/kg	NC	NC	0.0079U	NC	NC	0.036	NC	NC	***0.62J***
1,4-Dioxane	44		mg/kg	NC	NC	0.16R	NC	NC	0.12R	NC	NC	0.19R
Trichloro-ethene	0.043		mg/kg	NC	NC	0.0079U	NC	NC	0.0015J	NC	NC	***0.075***
Methylcyclohexane	100‡		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.0093U
Toluene	350‡		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.039
Tetrachloroethene	0.55		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.00042J
Chlorobenzene	270		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.0093U
Ethylbenzene	23‡		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.0093U
o-Xylenes	160‡		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.0093U
m,p-Xylenes	46‡		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.0011J
1,2,4-Trichlorobenzene	140		mg/kg	NC	NC	0.0079U	NC	NC	0.0062U	NC	NC	0.0093U

Notes:
*SLVs are for Residential Soils
**Similar to number 2 diesel
***Unknown organics
†Similar to asphalt
‡SL for non-carcinogenic compounds multiplied by 0.10 for the residential direct exposure pathway for soil (for SLs set at saturation concentration, HQ=1 value multiplied by 0.1)
U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantification limit or the sample detection limit.
J = The associated value is an estimated quantity.
UJ = The analyte was analyzed for, but not detected. The associated value is an estimate and may be inaccurate or imprecise.
R = Result was rejected and should not be used for decision making
EPA = Environmental Protection Agency
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons-Gasoline extended analytical method
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons-Diesel extended analytical method
mg/kg = milligrams per kilogram
DEQ = Department of Environmental Quality
NE = SL not established
NC = not collected
Bold = results above SLV
Bold = detection limit above SLV

Table 4-11
Summary of Former Paint Shop Area Soil Analytical Results

Analysis/Analyte	SLVs* EPA Region 6 SLs	SLVs* Oregon DEQ Risk-Based Concentrations	Reporting Units	PS-01 Surface	PS-01 2 ft bgs	PS-02 Surface	PS-02 2 ft bgs	PS-03 Surface	PS-03 2 ft bgs	PS-03 10 ft bgs	PS-04 Surface	PS-04 2 ft bgs	PS-05 Surface	PS-05 2 ft bgs	PS-06 Surface	PS-06 2 ft bgs	PS-06 10 ft bgs
NWTPH by Northwest Total Petroleum Hydrocarbon analtytial methods																	
Gasoline-Range		140	mg/kg	11U	11U	10U	13U	7U	11U	17U	10U	13U	9.8U	13U	9.7U	15U	14U
Diesel-Range		3,900	mg/kg	11U	12U	9U	12U	9.8U	13U	18U	18U	14U	8.8U	12U	9.7U	14U	14U
Motor Oil-Range		9,800	mg/kg	26U	30U	42†/***	29U	24U	31U	41U	46U	34U	22U	29U	23U	35U	35U
PCBs by CLP Method SOM01.1																	
Aroclor-1016	0.22		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Aroclor-1221	0.22		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Aroclor-1232	0.22		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Aroclor-1242	0.22		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Aroclor-1248	0.22		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Aroclor-1254	0.22		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Aroclor-1260	0.22		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Aroclor-1262	NE		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Aroclor-1268	NE		mg/kg	0.034U	0.041U	0.034U	0.041U	0.035U	0.045U	0.050U	0.034U	0.044U	0.034U	0.040U	0.034U	0.049U	0.051U
Pesticides by CLP Method SOM01.1																	
alpha-BHC	0.09		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
beta-BHC	0.32		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
delta-BHC	NE		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
gamma-BHC	0.44		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
Heptachlor	0.11		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
Aldrin	0.029		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
Heptachlor epoxide	0.053		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
Endo-sulfan I	NE		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
Dieldrin	0.03		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
4,4'-DDE	1.7		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Endrin	18		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Endo-sulfan II	NE		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
4,4'-DDD	2.4		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Endosulfan sulfate	NE		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
4,4'-DDT	1.7		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Methoxychlor	310		mg/kg	0.017U	0.021U	0.017U	0.020U	0.018U	0.023U	0.025U	0.017U	0.023U	0.017U	0.020U	0.017U	0.025U	0.026U
Endrin keytone	NE		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Endrin Aldehyde	NE		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0035U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
alpha-Chlordane	NE		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
gamma-Chlordane	NE		mg/kg	0.0017U	0.0020U	0.0017U	0.0020U	0.0017U	0.0023U	0.0026U	0.0017U	0.0022U	0.0017U	0.0020U	0.0017U	0.0025U	0.0026U
Toxaphene	0.44		mg/kg	0.17U	0.21U	0.17U	0.20U	0.18U	0.23U	0.25U	0.17U	0.23U	0.17U	0.20U	0.17U	0.25U	0.26U
Metals by CLP Method ILM05.3																	
Arsenic	0.39		mg/kg	***0.88***	***0.6***	***0.9***	***0.95***	***1.5***	***0.67***	***0.86***	***0.83***	***0.52***	***0.79***	***0.86***	***0.94***	***0.65***	***0.83***
Barium	16,000		mg/kg	280	728	158	295	299	203	226	128	306	106	238	207	233	173
Cadmium	39		mg/kg	0.081J	0.13J	0.63	0.12J	0.17J	0.076J	0.079J	0.10J	0.077J	0.26	0.056J	0.11J	0.065J	0.13J
Chromium	210		mg/kg	38.4	56.7	21.1	36.1	36.2	22.1	18.2	10.7	48.8	17.8	34.8	27	37.7	30.2
Lead	400		mg/kg	5.2	3.2	53.5	8.5	13.4	4	6.1	24.9	4.2	18.1	4.8	6.6	4.6	4
Mercury	23		mg/kg	0.017	0.013U	0.0098J	0.017	0.021	0.024	0.047	0.031	0.019	0.015	0.025	0.014	0.029	0.013J
Selenium	390		mg/kg	0.22	0.25U	0.21U	0.28	0.25J	0.30U	0.34U	0.20U	0.29U	0.21U	0.26U	0.20U	0.29U	0.31U
Silver	390		mg/kg	0.025J	0.13U	0.021J	0.12U	0.039J	0.15U	0.17U	0.032U	0.14U	0.032U	0.13U	0.049U	0.043U	0.16U
SVOCs by CLP Method SOM01.1																	
Benzaldehyde	6,100		mg/kg	0.17U	0.21U	0.17U	0.20U	0.18U	0.23U	0.25U	0.17U	0.23U	0.17U	0.02U	0.17U	0.25U	0.26U
Naphthalene	120		mg/kg	0.0034U	0.0041U	0.0031J	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
2-Methyl-naphthalene	NE		mg/kg	0.0034U	0.0041U	0.0021J	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Fluorene	2,600		mg/kg	0.0034U	0.0041U	0.0035U	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Pentachlorophenol	3		mg/kg	0.0089U	0.0082U	0.0089UJ	0.0081U	0.0070U	0.0091U	0.010U	0.0089UJ	0.0090U	0.0089U	0.0081U	0.0066J	0.0099U	0.010U
Phenanthrene	NE		mg/kg	0.0034U	0.0041U	0.0035UJ	0.0041U	0.0036U	0.0046U	0.0050U	0.0034UJ	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Anthracene	22,000		mg/kg	0.0034U	0.0041U	0.0035UJ	0.0041U	0.0036U	0.0046U	0.0050U	0.0034UJ	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Fluoranthene	2,300		mg/kg	0.0034U	0.0041U	0.0035UJ	0.0041U	0.0036U	0.0046U	0.0050U	0.0034UJ	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Pyrene	2,300		mg/kg	0.0034U	0.0041U	0.0062J	0.0045	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0059	0.0050U	0.0051U
Benzo(a)-anthracene	0.15		mg/kg	0.0034U	0.0041U	0.0021J	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Chrysene	62		mg/kg	0.0034U	0.0041U	0.0094J	0.0036J	0.0036U	0.0046U	0.0050U	0.0051	0.0046U	0.0035U	0.0041U	0.0087	0.0050U	0.0051U
Bis(2-ethylhexyl)-phthalate	35		mg/kg	0.17U	0.21U	0.17U	0.20U	0.18U	0.23U	0.25U	0.17U	0.23U	0.17U	0.02U	0.17U	0.25U	0.26U
Benzo(b)-fluoranthene	0.15		mg/kg	0.0034U	0.0041U	0.0049J	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Benzo(k)-fluoranthene	1.5		mg/kg	0.0034U	0.0041U	0.0035UJ	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Benzo(a)-pyrene	0.015		mg/kg	0.0034U	0.0041U	0.0049J	0.0041U	0.0036U	0.0046U	0.0050U	0.0031J	0.0046U	0.0035U	0.0041U	0.0083	0.0050U	0.0051U
Ideno(1,2,3-cd)pyrene	0.15		mg/kg	0.0034U	0.0041U	0.0035J	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0059	0.0050U	0.0051U
Dibenzo(a,h)-nthracene	0.015		mg/kg	0.0034U	0.0041U	0.0035UJ	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.0035U	0.0050U	0.0051U
Benzo(g,h,i)-perylene	NE		mg/kg	0.0034U	0.012J	0.0053	0.0041U	0.0036U	0.0046U	0.0050U	0.0034U	0.0046U	0.0035U	0.0041U	0.017	0.0050U	0.0051U
VOCs by CLP Method SOM01.1																	
Trichlorofluoromethane	390		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
Acetone	14,000		mg/kg	NC	0.013U	NC	0.012U	NC	NC	0.016U	NC	0.016U	NC	0.011U	NC	NC	0.017U
Carbon Disulfide	78‡		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
cis-1,2-Dichloroethene	43		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
2-Butanone	32,000		mg/kg	NC	0.013U	NC	0.012U	NC	NC	0.016U	NC	0.016U	NC	0.011U	NC	NC	0.017U
Chloro-form	0.25		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
1,1,1-Trichloroethane	160‡		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
Benzene	0.66		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
1,2-Dichloroethane	0.35		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
1,4-Dioxane	44		mg/kg	NC	0.13R	NC	0.12R	NC	NC	0.16R	NC	0.16R	NC	0.11R	NC	NC	0.17R
Trichloro-ethene	0.043		mg/kg	NC	0.00034J	NC	0.00083J	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
Methylcyclohexane	100‡		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
Toluene	350‡		mg/kg	NC	0.029	NC	0.025	NC	NC	0.02	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
Tetrachloroethene	0.55		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
Chlorobenzene	270		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
Ethylbenzene	23‡		mg/kg	NC	0.0042J	NC	0.00053J	NC	NC	0.0011J	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
o-Xylenes	160‡		mg/kg	NC	0.0049J	NC	0.00066J	NC	NC	0.0016J	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
m,p-Xylenes	46‡		mg/kg	NC	0.025	NC	0.0019J	NC	NC	0.0053J	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U
1,2,4-Trichlorobenzene	140		mg/kg	NC	0.0057U	NC	0.0062U	NC	NC	0.0078U	NC	0.0082U	NC	0.0057U	NC	NC	0.0085U

Notes:
*SLVs are for Residential Soils
**Similar to number 2 diesel
***Unknown organics
†Similar to asphalt
‡SL for non-carcinogenic compounds multiplied by 0.10 for the residential direct exposure pathway for soil (for SLs set at saturation concentration, HQ=1 value multiplied by 0.1)
U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantification limit or the sample detection limit.
J = The associated value is an estimated quantity.
UJ = The analyte was analyzed for, but not detected. The associated value is an estimate and may be inaccurate or imprecise.
R = Result was rejected and should not be used for decision making
EPA = Environmental Protection Agency
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons-Gasoline extended analytical method
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons-Diesel extended analytical method
mg/kg = milligrams per kilogram
DEQ = Department of Environmental Quality
NE = SL not established
NC = not collected
Bold = results above SLV
Bold = detection limit above SLV

Table 4-12
Summary of Former Service Station Soil Analytical Results

Analysis/Analyte	SLVs* EPA Region 6 SLs	SLVs* Oregon DEQ Risk-Based Concentrations	Reporting Units	GS-01 Surface	GS-01 2 ft bgs	GS-02 Surface	GS-02 2 ft bgs	GS-02 5 ft bgs	GS-03 Surface	GS-04 Surface	GS-04 2 ft bgs
NWTPH by Northwest Total Petroleum Hydrocarbon analytial methods											
Gasoline-Range		140	mg/kg	8.6U	10U	9.4U	12U	NC	7.9U	7.7U	11U
Diesel-Range		3,900	mg/kg	21U	20U	19U	10U	NC	11U	97U	12U
Motor Oil-Range		9,800	mg/kg	51U	78†	81†	26U	NC	28U	150†	30U
PCBs by CLP Method SOM01.1											
Aroclor-1016	0.22		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Aroclor-1221	0.22		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Aroclor-1232	0.22		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Aroclor-1242	0.22		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Aroclor-1248	0.22		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Aroclor-1254	0.22		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Aroclor-1260	0.22		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Aroclor-1262	NE		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Aroclor-1268	NE		mg/kg	0.035U	0.037U	0.035U	0.040U	NC	0.041U	0.036U	0.043U
Pesticides by CLP Method SOM01.1											
alpha-BHC	0.09		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
beta-BHC	0.32		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
delta-BHC	NE		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
gamma-BHC	0.44		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
Heptachlor	0.11		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
Aldrin	0.029		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
Heptachlor epoxide	0.053		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
Endo-sulfan I	NE		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
Dieldrin	0.03		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
4,4'-DDE	1.7		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
Endrin	18		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
Endo-sulfan II	NE		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
4,4'-DDD	2.4		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
Endosulfan sulfate	NE		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
4,4'-DDT	1.7		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
Methoxychlor	310		mg/kg	0.018U	0.019U	0.018U	0.020U	NC	0.021U	0.018U	0.022U
Endrin keytone	NE		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
Endrin Aldehyde	NE		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044U
alpha-Chlordane	NE		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
gamma-Chlordane	NE		mg/kg	0.0018U	0.0019U	0.0018U	0.0020U	NC	0.0020U	0.0018U	0.0022U
Toxaphene	0.44		mg/kg	0.18U	0.19U	0.18U	0.20U	NC	0.21U	0.18U	0.22U
Metals by CLP Method ILM05.3											
Arsenic	0.39		mg/kg	***1.4***	***1.3***	***1.2***	***0.47***	NC	***0.99***	***1.2***	***0.96***
Barium	16,000		mg/kg	248	249	173	56.7	NC	181	243	104
Cadmium	39		mg/kg	0.34	0.23J	0.15J	0.24U	NC	0.095J	0.14J	0.22J
Chromium	210		mg/kg	36.7	33.5	25.4	8.5	NC	39.7	27.9	20
Lead	400		mg/kg	45.8	28.6	14.5	9.5	NC	6.4	30.7	5.5
Mercury	23		mg/kg	0.032	0.011J	0.018	0.012U	NC	0.0047J	0.026	0.0055J
Selenium	390		mg/kg	0.28J	0.32	0.23U	0.24U	NC	0.23J	0.18J	0.27U
Silver	390		mg/kg	0.046J	0.036J	0.11U	0.12U	NC	0.12U	0.019J	0.13U
SVOCs by CLP Method SOM01.1											
Benzaldehyde	6,100		mg/kg	0.18UJ	0.19U	0.18U	0.20U	NC	0.21U	0.18U	0.22U
Naphthalene	120		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044UJ
2-Methyl-naphthalene	NE		mg/kg	0.0036U	0.0022J	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044UJ
Fluorene	2,600		mg/kg	0.0036U	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044UJ
Pentachlorophenol	3		mg/kg	0.0071UJ	0.0075U	0.0071U	0.0079U	NC	0.012	0.0073U	0.0088UJ
Phenanthrene	NE		mg/kg	0.0036UJ	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044UJ
Anthracene	22,000		mg/kg	0.0036UJ	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037U	0.0044UJ
Fluoranthene	2,300		mg/kg	0.0036UJ	0.0037U	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0044UJ
Pyrene	2,300		mg/kg	0.0057J	0.0030J	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0022J
Benzo(a)-anthracene	0.15		mg/kg	0.0036UJ	0.0037UJ	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0044U
Chrysene	62		mg/kg	0.0092J	0.0060J	0.0042	0.0040U	NC	0.0041U	0.0037UJ	0.0044U
Bis(2-ethylhexyl)-phthalate	35		mg/kg	0.18U	0.19U	0.18U	0.20U	NC	0.21U	0.18U	0.22U
Benzo(b)-fluoranthene	0.15		mg/kg	0.0036UJ	0.0026J	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0044U
Benzo(k)-fluoranthene	1.5		mg/kg	0.0036UJ	0.0037UJ	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0044U
Benzo(a)-pyrene	0.015		mg/kg	0.0036UJ	0.0037UJ	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0044U
Ideno(1,2,3-cd)pyrene	*0.15*		*mg/kg*	0.0036UJ	0.0037UJ	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0044U
Dibenzo(a,h)-nthracene	0.015		mg/kg	0.0036UJ	0.0037UJ	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0044U
Benzo(g,h,i)-perylene	NE		mg/kg	0.0036UJ	0.0037UJ	0.0036U	0.0040U	NC	0.0041U	0.0037UJ	0.0044U
VOCs by CLP Method SOM01.1											
Trichloroluoromethane	390		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
Acetone	14,000		mg/kg	NC	0.014U	NC	0.015U	1.2U	0.014U	NC	0.015U
Carbon Disulfide	78‡		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
cis-1,2-Dichloroethene	43		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
2-Butanone	32,000		mg/kg	NC	0.014U	NC	0.015U	1.2U	0.014U	NC	0.015U
Chloro-form	0.25		mg/kg	NC	0.0071U	NC	0.0075U	**0.59U**	0.0068U	NC	0.0073U
1,1,1-Trichloroethane	160‡		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
Benzene	0.66		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
1,2-Dichloroethane	0.35		mg/kg	NC	0.0071U	NC	0.0075U	**0.59U**	0.0068U	NC	0.0073U
1,4-Dioxane	44		mg/kg	NC	0.14R	NC	0.15R	12R	0.14R	NC	0.15R
Trichloro-ethene	0.043		mg/kg	NC	0.0071U	NC	0.00060J	**0.59U**	0.01	NC	0.0073U
Methylcyclohexane	100‡		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
Toluene	350‡		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
Tetrachloroethene	0.55		mg/kg	NC	0.0071U	NC	0.0075U	**0.59U**	0.0010J	NC	0.0073U
Chlorobenzene	270		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
Ethylbenzene	23‡		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0068U	NC	0.0073U
o-Xylenes	160‡		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.00034J	NC	0.0073U
m,p-Xylenes	46‡		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.00042J	NC	0.0073U
1,2,4-Trichlorobenzene	140		mg/kg	NC	0.0071U	NC	0.0075U	0.59U	0.0010J	NC	0.0073U

Notes:
*SLVs are for Residential Soils
**Similar to number 2 diesel
***Unknown organics
†Similar to asphalt
‡SL for non-carcinogenic compounds multiplied by 0.10 for the residential direct exposure pathway for soil (for SLs set at saturation concentration, HQ=1 value multiplied by 0.1)
U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantification limit or the sample detection limit.
J = The associated value is an estimated quantity.
UJ = The analyte was analyzed for, but not detected. The associated value is an estimate and may be inaccurate or imprecise.
R = Result was rejected and should not be used for decision making
EPA = Environmental Protection Agency
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons-Gasoline extended analytical method
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons-Diesel extended analytical method
mg/kg = milligrams per kilogram
DEQ = Department of Environmental Quality
NE = SL not established
NC = not collected
Bold = results above SLV
Bold = detection limit above SLV

Table 4-13
Summary of Former Fire Station Area Soil Analytical Results

	SLVs*			FS-01		FS-02	FS-03	FS-04		FS-05	
Analysis/Analyte	EPA Region 6 SLs	Oregon DEQ Risk-Based Concentrations	Reporting Units	2 ft bgs	10 ft bgs	2 ft bgs	2 ft bgs	2 ft bgs	10 ft bgs	2 ft bgs	10 ft bgs
NWTPH by Northwest Total Petroleum Hydrocarbon analtytial methods											
Gasoline-Range		140	mg/kg	10UJ	14UJ	14UJ	14U	11U	14U	11U	13U
Diesel-Range		3,900	mg/kg	11U	25**	14U	12U	11U	14U	11U	19**
Motor Oil-Range		9,800	mg/kg	29U	25U	35U	31U	28U	34U	110†	35U

Notes:
*SLVs are for Residential Soils
**Similar to number 2 diesel
***Unknown organics
†Similar to asphalt
‡SL for non-carcinogenic compounds multiplied by 0.10 for the residential direct exposure pathway for soil (for SLs set at saturation concentration, HQ=1 value multiplied by 0.1)
U = The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantification limit or the sample detection limit.
J = The associated value is an estimated quantity.
UJ = The analyte was analyzed for, but not detected. The associated value is an estimate and may be inaccurate or imprecise.
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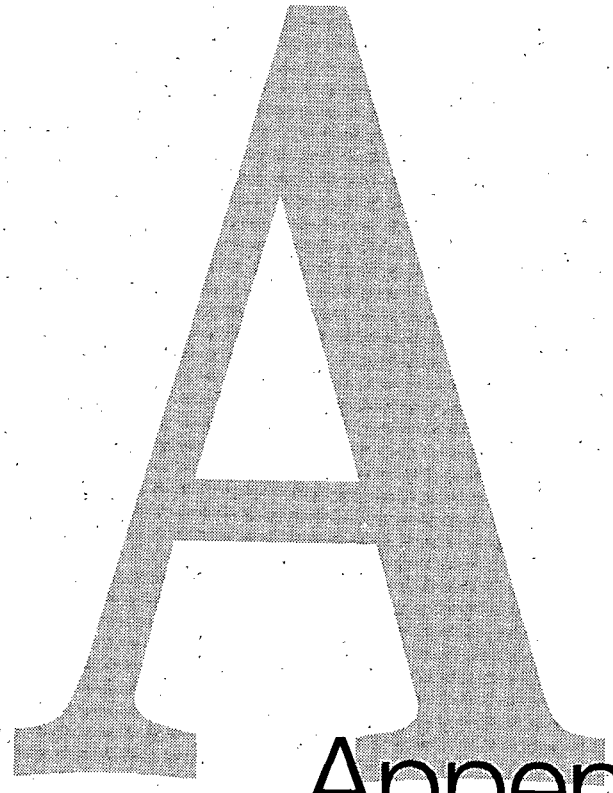
EPA = Environmental Protection Agency
NWTPH-Gx = Northwest Total Petroleum Hydrocarbons-Gasoline extended analytical method
NWTPH-Dx = Northwest Total Petroleum Hydrocarbons-Diesel extended analytical method
mg/kg = milligrams per kilogram
DEQ = Department of Environmental Quality
NE = SL not established
NA = not analyzed
27.2 = results above SLV
27.2 = detection limit above SLV

Appendices



Appendix A

Appendix A
Baseline Risk Assessment

Appendix A will be provided in the final version of this document.

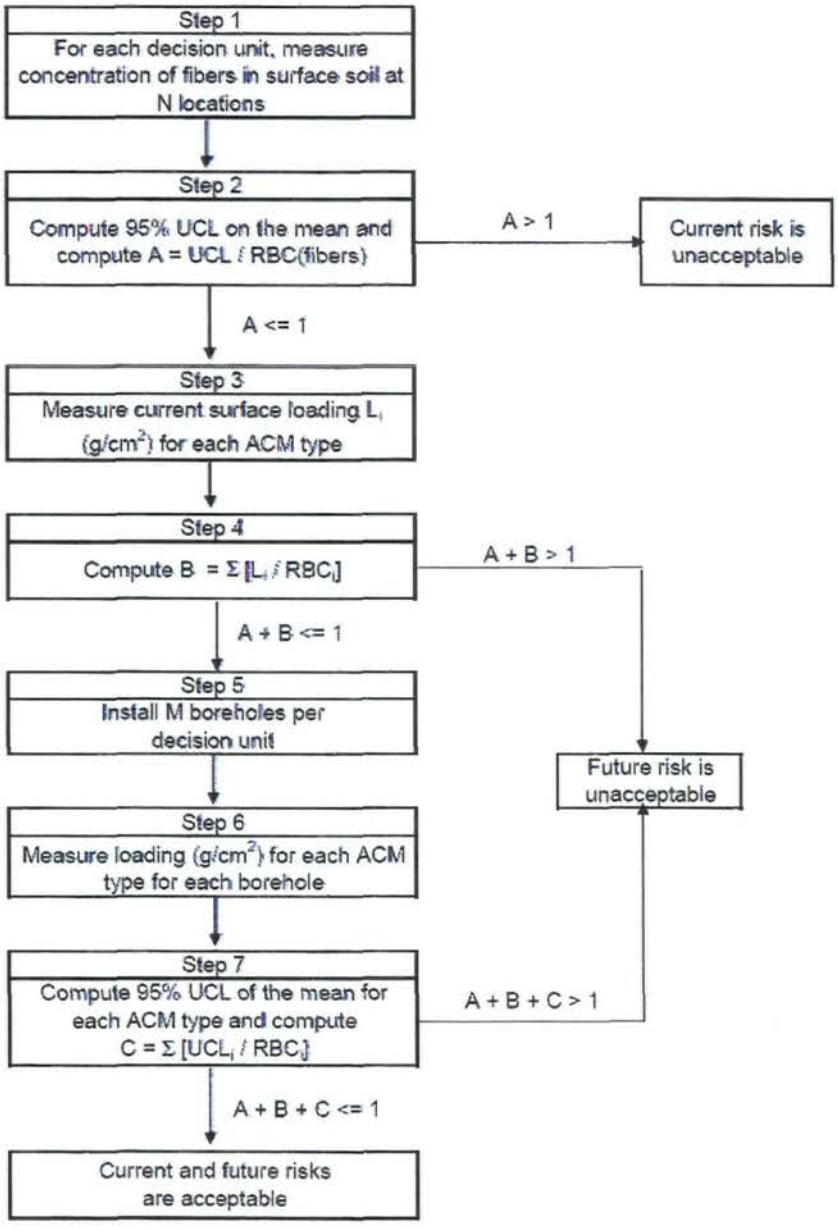
B

Appendix B

Appendix B
NRE Asbestos and ACM Investigation DQO Analysis

The following flow chart summarizes the general strategy that EPA would normally follow in evaluating any particular parcel of land (a decision unit) at the site in order to determine if the amount of asbestos and ACM present is above a level of potential human health concern, either now or in the future. The process consists of three sequential evaluations, as follows:

- Evaluation of current risks from free asbestos in surface soil
- Evaluation of future risks from ACM currently at the surface
- Evaluation of future risks from ACM and free asbestos in subsurface soil



Because ACM has been coming to the surface at the NRE site for several years, some of this material may have already broken down and caused the release of asbestos fibers to soil. In addition, free fibers generated during building demolition may also have contaminated surface soil.

Methods for the evaluation of risks from asbestos in soil are conceptually similar to the methods used by EPA for risks from other chemicals in soil, but are more difficult because of several technical issues, including:

- Absence of established analytical methods for the analysis of free asbestos in soil, especially for levels below about 1 percent by mass
- Uncertainty in the quantitative relationship between asbestos in soil and the resultant level of human exposure to airborne fibers
- Uncertainty in the relationship between the level of human exposure and the resultant risk of cancer (lung cancer and mesothelioma)

Nevertheless, based on the best data available at the time of investigation development, it was possible to derive estimates of the level of free asbestos fibers in soil that are likely to be of potential health concern, as detailed in Attachment 1. Values derived using EPA's recommended risk model (USEPA 1986, Integrated Risk Information System [IRIS] 2006), denoted as risk-based concentrations (RBCs), are summarized below:

Summary of Cancer Risk and Associated Risk-Based Concentrations	
Maximum Acceptable Excess Cancer Risk	**Risk-Based Concentration (PCM S/g soil)**
1E-04	6.9E+06
1E-05	6.9E+05
1E-06	6.9E+04

Notes: Calculations for RBCs are based on IRIS 2006; S/g – structures per gram; PCM – phase contrast microscopy

In accordance with the standard procedures used by EPA at most Superfund sites and other hazardous waste areas, the procedure that EPA would typically follow in order to evaluate the risk from free asbestos fibers in surface soil at any decision unit consists of the following steps:

1. Collect a representative set of N samples of surface soil from within the area
2. Measure the amount of free asbestos fibers in each sample, expressed in units of phase contrast microscopy equivalent (PCME) structures per gram (S/g) of soil (Note that current methods for measuring free asbestos fibers in soil usually have detection limits that are at or greater than 2E+07 S/g, so attempts to investigate risks at or below 1E-04 are technically infeasible)

3. Compute the average concentration and the 95% upper confidence limit (UCL) on the mean concentration using EPA's ProUCL software. The UCL equation that is likely to be preferred is based on the Chebychev inequality method.

4. Compare the 95% UCL to the RBC selected for decision making. If the 95% UCL exceeds the RBC, EPA will conclude that there is insufficient evidence to conclude that risks are acceptable under current circumstances, and will declare that the area is unacceptable.

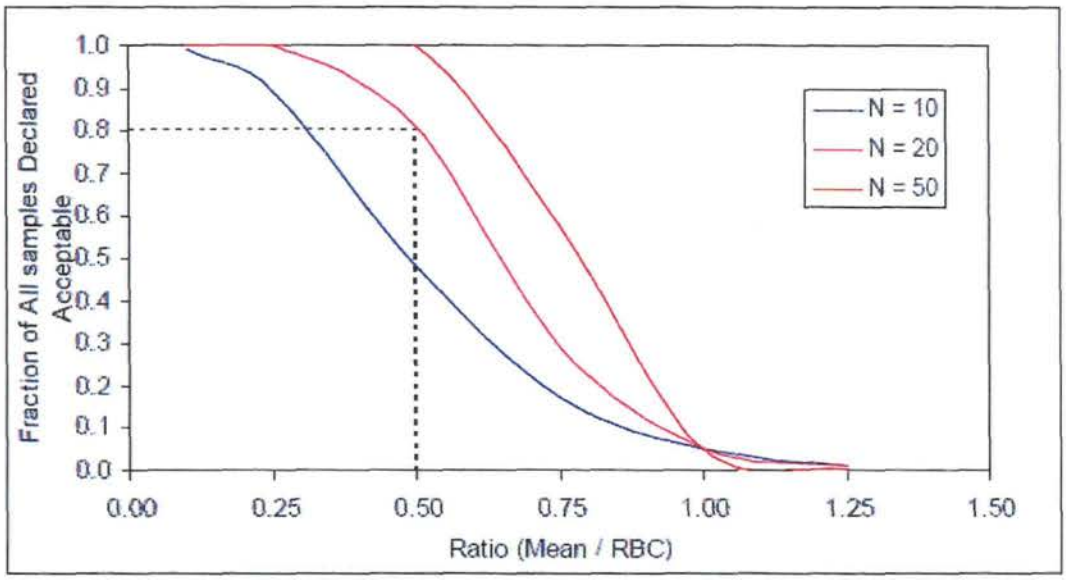
In making this decision, two types of decision error are possible:

- *False Negative.* In this case, the true concentration of the contaminant of concern in the decision unit is above the RBC, but the UCL is below the RBC. The probability of this error occurring is, by definition, no greater than about 5 percent (assuming that the 95% UCL has been calculated appropriately). This level of error is generally considered to be acceptable for the protection of human health, since the errors will be rare, and when they occur, the magnitude of the error will typically be very small.

- *False Positive.* In this case, the true concentration of the contaminant of concern in the decision unit is below the RBC, but the UCL is above the RBC. The probability of this error occurring depends on the number of samples collected, with the chances of false positives tending to decrease as the number of samples increases. The exact number of samples needed depends on the acceptable rate of false positives, as well as the underlying distribution of values, the average value, and the between-sample variability in the decision unit.

The number of samples collected at a decision unit is usually chosen to limit the probability of a false positive decision to some specified level. For example, the goal might be to have no more than 20 percent false positives when the true concentration is 1/2 the level of concern.

Because sufficient surface soil data were not available prior to the 2006 investigation efforts to identify the expected distributional form, the expected mean, or the likely between-sample variability, it was not possible to calculate the probability of decision error as a function of sample number with certainty. However, for screening purposes, it is assumed the distribution is likely to be approximately lognormal, and that the standard deviation will be about equal to the mean (CV = 1). Based on this, the relationship between sample number and the frequency of false positives is as shown in the following graph:



As seen, if the true mean is 1/2 the RBC, the frequency of false positives at 1/2 the level of concern is about 50 percent for N = 10, 20 percent for N = 20, and close to zero for N = 50.

Based on this, it is concluded that the number of samples needed for evaluation of surface soil to limit the probability of false positive decisions to an acceptable level is likely to be at least 20 (and perhaps more) per decision unit.

Evaluation of Future Risks from ACM Presently at the Surface

Macroscopic pieces of ACM that exist on the surface of the ground are too large to be respirable, and hence do not pose a health risk until they begin to undergo degradation and release fibers into air or soil. For the purposes of this evaluation, attention is focused on the maximum future risk which would occur if pieces of ACM were to break down entirely and 100 percent of all fibers in the ACM were released to soil. It is likely that process would take a substantial number of years for some types of ACM (e.g., CAB, floor tile, roofing material), but might occur relatively quickly for other types (AirCell, MAG).

In order to evaluate risks from ACM presently at the surface, EPA would perform a manual pickup of the ACM from the decision unit. The amount of each type of ACM picked up (expressed as grams per square centimeter (g/cm^2]) would be compared to the corresponding RBCs for ACM, derived as detailed in Attachment 1 and Attachment 2. These values, based on a target risk of 1E-04, are summarized below:

Summary of Risk-Based Concentrations for ACM Types at NRE		
ACM Type	Risk-Based Concentration (1E-04)	
	g ACM/cm^2	Area Fraction (%)
CAB	0.088	10.0
Floor tiles	0.188	41.0
Roofing material	0.015	4.5
AirCell	0.016	2.3
MAG	0.024	3.1

Notes: ACM – asbestos containing material; NRE – North Ridge Estates; g ACM/cm^2 – grams of ACM per square centimeter; % - percent

The total risk from all ACMs combined would be computed as the sum of the ratios multiplied by the risk value associated with the RBCs:

$$\text{Risk (total)} = 1E\text{-}04 \sum (C_i/RBC_i)$$

While it is understood that a manual pickup of ACM from a specified area may be less than 100 percent complete (due to small pieces being overlooked), the resulting mass per unit area values would be treated as if there were no uncertainty, since both mass and area can be measured with good accuracy and there is no variability between different measurements.

Evaluation of Future Risks from ACM in Subsurface Soil

As noted above, observations at the site indicate that ACM that is presently contained within subsurface soil is tending to become exposed at the surface due to a combination of forces, including surface erosion and frost heave. For the purposes of this evaluation, the goal of the sampling is to estimate the total amount (mass) of ACM that exists in subsurface soil and that could be brought to the surface in the future and, from this mass, to estimate the maximum amount of free asbestos fibers that could be released to surface soil in the future.

Measuring the amount of ACM in subsurface soil is a difficult undertaking. EPA would generally perform this evaluation by installing a number of boreholes into the subsurface soil, each to a depth equal to the maximum depth from which pieces of ACM may migrate upward (this is approximately equal to the frost depth). The soil from each borehole would be inspected and all pieces of ACM would be isolated, grouped by type, and weighed. Thus, each borehole would yield a value of mass per unit area for each ACM type. The values for each ACM type would then be averaged across boreholes, and the 95% UCL for each would be computed using EPA's ProUCL software. The UCL would be divided by the RBC (g/cm^2) for each ACM type, and the ratios summed across all ACM types present. This ensures that additivity of risks from different ACM types are properly accounted for. If the sum of the ratios does not exceed 1, the risks from

subsurface soil would be considered acceptable, while if the sum exceeds 1, risks would be considered potentially unacceptable.

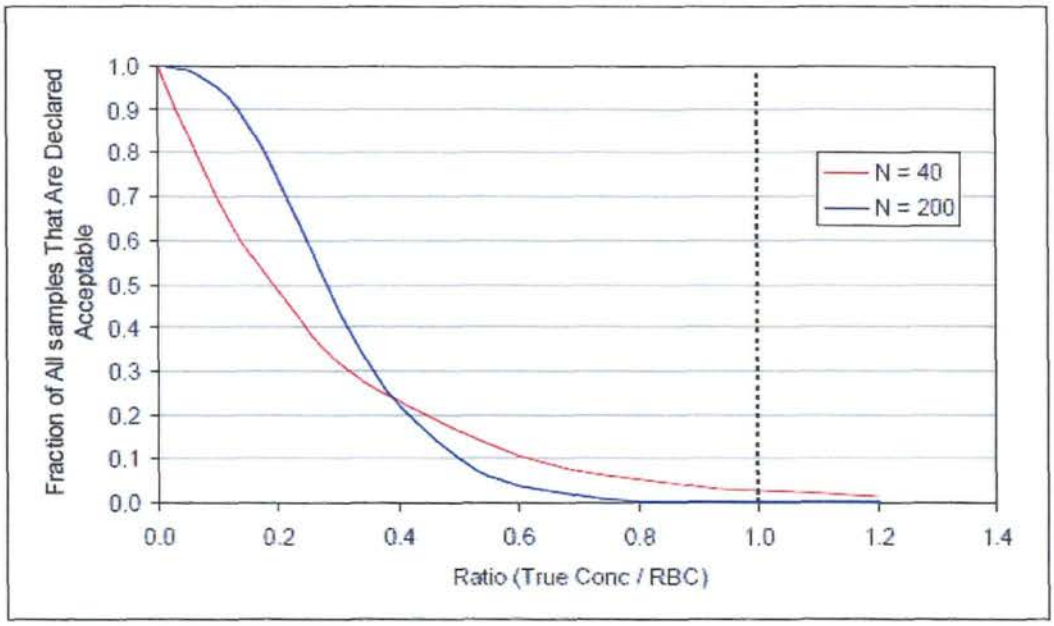
In considering the number of boreholes that would have to be installed, the first step is to identify the *minimum* number required to detect ACM contamination if it were present at a level of concern. For this effort, the minimum number of boreholes required is defined as the number such that there is at least a 95% probability that one or more boreholes will intercept the ACM when it is present at a level of concern. The following table shows the minimum number of boreholes required as a function of the area fraction of concern:

Minimum Boreholes Required	
Area Fraction of Concern (%)	**Minimum Number of Boreholes**
1	299
2	149
3	99
5	59
10	29
15	19

Notes: % - percent. See Attachment 1 for details regarding these estimations.

As noted above, based on EPA's IRIS risk model, the ACM type with the smallest area fraction of concern is AirCell (2.3 percent at a target risk of 1E-04), and the minimum number of samples required for this area fraction is 129 as determined by interpolation. Based on this, the minimum number of boreholes that would be acceptable for each decision unit at a risk level of 1E-04 is about 130. If a risk level of 1E-05 or lower were selected, the area fraction of concern would be 0.23 percent, and the minimum number of boreholes per decision unit would be 1,300 or more.

Use of the minimum number of boreholes is expected to ensure that decision units with true concentrations of asbestos exceeding the RBC are likely to be detected, but may also be associated with a substantial risk of false positives. Because sufficient data are not yet available to identify the expected distributional form or the likely between-sample variability for ACM in subsurface soil, it is not possible to calculate the relation between sample number and false positive rate with certainty, but a screening level assessment can be performed using Monte Carlo modeling, as described in Attachment 2. The modeling results are shown below:



As seen, the false positive rate is expected to be very high, even if a large number of boreholes (greater than [>] 500 per decision unit) were installed. This pattern does not depend on the type of ACM present. Based on these simulations, it is expected that very few decision units could ever be declared clean (i.e., not requiring remediation) based on the results of a reasonable number of boreholes, even when the true level of ACM contamination is 1/2 or less of the true level of concern.

Thus, even a significant (i.e., bordering on impractical) drilling and sampling program across all decision units on the site would not enable EPA to distinguish acceptable from unacceptable levels of future risk from buried ACM. Consequently, this type of evaluation will not be performed.

Modified Strategy for Decision-making

In accordance with standard EPA guidance at Superfund sites (e.g., EPA 2001), it is expected that the size of most decision units at the NRE site would range from about 1/4 to 1/2 acre. Based on this, the total number of decision units in the NRE development requiring evaluation would likely be at least 350, and potentially 400-500. Thus, implementation of the sampling-based procedure for decision-making described above would require a minimum sampling effort of at least 7,000 surface soil samples and at least 39,000 subsurface borings, and the actual number might be higher. EPA believed that this effort would be impractical and that in most cases, even with this extreme effort, it would not be possible to declare an area clean (95% confidence level that cumulative risk is less than 1E-04) unless zero contamination is seen at each step. This problem would become much more severe for lower target risk values (e.g., the State of Oregon has a default target risk of 1E-06) or if alternative asbestos risk models being evaluated by EPA were employed (e.g., EPA 2003).

Therefore, EPA devised an alternative strategy for characterizing the risk from asbestos contamination present at each parcel of the site. This strategy is based on the assignment of site areas to three different categories ("bins"), as follows:

- **Bin A** – Areas assigned to Bin A are characterized by the past or present occurrence of ACM on the surface, or the occurrence of former base buildings that are no longer present. In these areas, it is expected that ACM will always be present in the surface and/or subsurface soil as a result of ACM being dispersed during building demolition, and that it will not be possible to exclude any area from concern based on any plausible sampling strategy. Therefore, all locations assigned to Bin A will be presumed to pose an unacceptable future health risk from exposure to asbestos, based on a presumed likely future residential land use, and all Bin A areas will require remediation. The details of any required remediation action will be defined in the feasibility study (FS).

- **Bin B** – Areas assigned to Bin B are characterized by the occurrence of visible ACM or building debris at the surface, but it is believed that no former base buildings existed near the location, and that the ACM material was likely placed at the location by hauling. In this case, it is likely that the lateral and vertical extent of contamination is much more limited than for Bin A areas, and that it will be possible to design location-specific sampling strategies to define the area (and perhaps the depth) of contamination to support the FS and remedial design (RD) process. Once defined, all areas of ACM contamination will be identified for remediation, while areas outside the contaminated area will be considered acceptable.

- **Bin C** – Areas assigned to Bin C are areas where no ACM or building debris has been observed, no base buildings that were demolished are known to have existed in the area, and no reason exists to suspect placement of ACM waste in the area. All such areas will be verified by visual inspection and limited sampling, as needed, to guard against potential mis-classification. All locations confirmed as Bin C will be considered to have acceptable risk without further sampling or remediation.

Attachment 1

CALCULATION OF RISK-BASED CONCENTRATION OF ASBESTOS AND ACM IN SOIL AT THE NORTH RIDGE ESTATES SITE

1.0 INTRODUCTION

Asbestos is the primary contaminant of concern in soil at the North Ridge Estates (NRE) site near Klamath Falls, Oregon. The purpose of this Appendix is to provide screening level equations that predict the level of human health risk that may be associated with some specified level of asbestos in soil. These calculations can then be used to calculate the level of asbestos that would be associated with some specified maximum acceptable level of risk. Such values are usually referred to as "risk-based concentrations" (RBCs). RBCs are often used by risk managers in planning site investigations and in evaluating remedial strategies.

2.0 EXPOSURE PATHWAYS OF CONCERN

When asbestos is present in soil, there are several pathways that may lead to inhalation exposure by humans, including:

- Asbestos may be released into the personal breathing zone of an individual who is engaged in some activity that disturbs the soil (e.g., digging, raking, weed-whacking, etc.)
- Contaminated soil may be transferred on shoes or clothing or by air into indoor dust in indoor living spaces. Disturbance of the indoor dust by normal indoor activities can re-suspend the asbestos into indoor air.
- Asbestos may be released from the soil into ambient outdoor air by wind or mechanical forces that disturb the soil

The following sections present the equations needed to quantify human exposure from each of these pathways.

3.0 QUANTIFICATION OF EXPOSURE

3.1 Estimation of Airborne Asbestos Levels

Asbestos in Personal Air During Active Disturbances

The concentration of asbestos in personal air during activities that actively disturb soil may be estimated using an equation of the following form:

$$C(\text{personal air}) = C(\text{soil}) \cdot PEF_{\text{scenario}}$$

where:

$PEF_{scenario}$ = Scenario-specific particulate emission factor (g soil per cc of air, g/cc)

The value of $PEF_{scenario}$ is expected to vary substantially as a function of the type, intensity and duration of various disturbance scenarios, and also as a function of the soil conditions (wet *vs* dry, grass covered *vs* bare, etc.). Thus, it is difficult to select any single value for $PEF_{scenario}$ that is likely to be appropriate in all cases. For the purposes of this evaluation, a screening level value of 5E-09 g/cc was selected. This value is similar to values predicted by screening-level release and dispersion models (Berman 2004), and is similar to measured values of dust observed during soil disturbance activities at this site (3E-09 to 6E-09 g/cc) and at other sites (up to 2E-08 g/cc). This level corresponds to an airborne particulate level of 5000 ug/m^3.

Asbestos in Indoor Dust and Indoor Air

The transfer of asbestos from outdoor soil to indoor dust may be modeled using the following equation:

$$C(dust) = C(soil) \cdot Ksd$$

where

C(dust) = Concentration of asbestos in indoor dust (s/g dust)
Ksd = Transfer factor for soil to dust (g soil per gram of dust)

Given the concentration of asbestos in indoor dust, the concentration in indoor air is calculated as:

$$C(indoor\ air) = C(dust) \cdot PEF_{indoor}$$

where:

PEF_{indoor} = Transfer factor for dust into indoor air (g dust per cc of air, g/cc)

Combining these two equations yields:

$$C(indoor\ air) = C(soil) \cdot Ksd \cdot PEF_{indoor}$$

EPA typically assumes a value for Ksd of about 0.7 to 1.0 (i.e., 70-100% of the dust that occurs indoors is derived from soil). However, studies at a number of Superfund sites have suggested that this value is likely to be somewhat too high in most cases, so a value of 0.3 (30%) was assumed for this evaluation.

Data on dust levels that may occur in indoor air under conditions of routine human occupancy are limited, but values of 3E-12 to 2E-10 g/cc (average = 3E-11 g/cc) have been observed at other sites and similar values have been reported in the literature (e.g., Levy et al. 2000). For the

purposes of this screening assessment, a PEF_{indoor} value of 5E-11 g/cc was assumed. This corresponds to an airborne level of 50 ug/m^3.

Ambient Air

The transfer of asbestos from soil to ambient air may be evaluated using the following equation:

$$C(\text{ambient air}) = C(\text{soil}) \cdot PEF_{ambient}$$

where:

C(ambient air)	=	Concentration of asbestos in ambient air (structures per cubic centimeter, s/cc)
C(soil)	=	Concentration of asbestos in soil (structures per gram, s/g)
$PEF_{ambient}$	=	Particulate emission factor for ambient air (g soil per cc of air, g/cc)

The USEPA recommends a default value for $PEF_{ambient}$ of 1E-12 g/cc (USEPA 2002). This corresponds to a suspended dust level of 1 ug/m^3.

3.2 Human Exposure Parameters

All available models for predicting excess cancer risk from inhalation exposure to asbestos (see Section 4.0, below) are based on the long-term (lifetime) average concentration of asbestos in air. Thus, if exposures occur that are not continuous over the lifetime, it is necessary to compute a time-weighted average (TWA) concentration in air that would yield the same inhaled dose if the exposure were for a lifetime, as follows:

$$C(air)_{TWA} = C(air) \cdot \text{TWA Factor}$$

For a resident, the following values of ET and ED were used:

Scenario	TWA Factor
Ambient air	0.0625
Active disturbance of soil	0.010
Indoor exposures	0.928

The TWA factor for exposure to ambient air is based on USEPA's Exposure Factors Handbook (USEPA 1997), which indicates that most people spend about 1.5 hrs/day outside. Based on this, the TWA factor is:

$$\text{TWA(ambient air)} = 1.5/24 = 0.0625$$

The TWA factor for active disturbance of soil is based on the assumption that this type of activity might occur for 4 hours per day, 50 days per year, and for 30 years out of a lifetime:

TWA(active disturbance) = 4/24 · 50/365 · 30/70 = 0.010

The TWA for indoor exposures is calculated by difference.

4.0 QUANTIFICATION OF RISK

Standard Risk Model (IRIS)

The USEPA has developed a quantitative model for predicting the lifetime excess risk of cancer (lung cancer plus mesothelioma) in an individual exposed to asbestos. This model, which is described on EPA's IRIS website, may be written as:

$$\text{Risk} = C(\text{air})_{TWA} \cdot \text{Unit Risk}$$

where:

Risk = probability that an individual will die from a site-related asbestos exposure
Unit risk = Risk per unit concentration of asbestos in air (s/cc)

In this model, the concentration of asbestos in air is expressed in units of s/cc that are measured using phase contrast microscopy (PCM). A fiber is counted under PCM if it meets the following size requirements:

Length > 5 um
Width ≥ 0.25 um (the resolving power of a PCM scope)
Aspect ratio ≥ 3:1

When concentration is expressed using PCM as the measurement technique, the lifetime average unit risk is 0.23 per PCM s/cc (IRIS 2006).

Alternative Risk Models

One potential limitation to the current standard risk model is that it does not distinguish between the two main mineralogical forms of asbestos (chrysotile and amphibole). However, data have accumulated that suggest that amphibole asbestos (including amosite) is more potent in causing cancer than chrysotile asbestos (USEPA 2003, Hodgeson and Darnton 2000). None of these alternative models have been reviewed or approved for use by EPA so it is not possible to utilize them for quantitative calculations. However, it is important to bear in mind that calculations of RBC values presented below based on the IRIS model may tend to underestimate the risks due to exposures to amphiboles (e.g., amosite in mag).

5.0 CALCULATION OF RISK-BASED CONCENTRATIONS

5.1 Target Risk

The level of risk that is acceptable from an environmental contaminant is a matter of judgment. The USEPA typically considers a risk of 1E-04 to be the highest that can be tolerated without triggering the need for remedial action (USEPA 1991). The State of Oregon has established a regulatory requirement that sets a target risk level of 1E-06 (Oregon 2006). For the purposes of this assessment, results are presented for target risk values of 1E-04, 1E-05 and 1E-06.

5.2 RBC For Asbestos Fibers in Soil

Based on the exposure equations given above, the RBC for asbestos fibers in soil may be calculated as:

$$RBC(s/g) = \frac{Target\ Risk}{\left(PEF_{ambient} \cdot TWA_{ambient} + PEF_{scenario} \cdot TWA_{scenario} + Ksd \cdot PEF_{indoor} \cdot TWA_{indoor}\right) \cdot Unit\ Risk}$$

Based on the input values selected above, the results are as shown below:

Target Risk Level	RBC (PCM s/g soil)
1E-04	6.9E+06
1E-05	6.9E+05
1E-06	6.9E+04

5.3 RBC for ACM in Soil

The relationship between the amount of ACM in soil and the amount of fibers that might be released into soil in the future if all the ACM were to migrate to the surface and be entirely broken down is as follows:

$$Csoil\ (s/g) = \frac{ACM\ (g\ ACM/cm^2) \cdot SPG\ (PCM\ s/g\ ACM)}{MD\ (cm) \cdot SD\ (g\ soil/cm^3\ soil)}$$

where:

ACM = Amount of ACM per unit area (g ACM/cm^2 of soil, summed across all depths)
SPG = PCM structures per gram ACM
MD = Mixing depth (depth to which asbestos fibers in surface soil will mix) (cm)
SD = Soil density (grams of soil per cm^3 of soil)

Data on the value of SPG are available from PCM analysis of pieces of ACM obtained at the site (E&E 2006). Values are summarized below:

ACM Type	PCM s/g ACM
CAB	3.0E+08
Air Cell	1.6E+09
Roofing tiles	1.7E+09
Floor tiles	1.4E+08

Mag	1.1E+09

Based on these estimates of SPG, and assuming a mixing depth of 1 inch (2.54 cm) and a bulk soil density of 1.5 g/cm^3, the resulting IRIS-based RBCs for ACM are as follows:

Target Risk Level	RBC (g ACM /cm^2 soil)				
	CAB	AirCell	Roofing	Floor Tile	Mag
1E-04	8.8E-02	1.6E-02	1.5E-02	1.9E-01	2.4E-02
1E-05	8.8E-03	1.6E-03	1.5E-03	1.9E-02	2.4E-03
1E-06	8.8E-04	1.6E-04	1.5E-04	1.9E-03	2.4E-04

6.0 REFERENCES

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Attachment 2

CALCULATION OF THE NUMBER OF BOREHOLES REQUIRED TO DETECT ACM IN SUBSURFACE SOIL

1.0 INTRODUCTION

Asbestos is the primary contaminant of concern in soil at the North Ridge Estates (NRE) site near Klamath Falls, Oregon. In particular, concern exists over the occurrence of ACM in subsurface soil, since this is a continuing source that can not be observed directly. There are five main types of ACM observed at the NRE site: concrete asbestos board (CAB), vinyl asbestos floor tiles, roofing materials, and two types of pipe wrap – aircell and mag. Quantification of the amount of buried ACM is a difficult task, since it does not exist in a continuous deposit, but occurs in discrete pieces of varying type, size, and thickness in random locations. One approach for estimating the amount of ACM present in an exposure unit is to place a number of boreholes into the subsurface soil, and measure the total amount of ACM present in each boring, combining across all depths from the surface to the base of the boring. The results for each borehole would be expressed in units of grams of ACM per unit surface area sampled (e.g., grams ACM per cm^2), which may then be evaluated by comparison to the appropriate risk-based concentration (RBC) for ACM is soil (see Appendix A). The purpose of this Appendix is to provide screening level calculations of the number of boreholes that would be needed in a decision unit (exposure area) in order to detect ACM with confidence if it were present at the RBC.

2.0 LEVELS OF CONCERN

Appendix A provided calculations of the risk-based concentrations of ACM in soil, expressed in units of g ACM / cm^2 of soil. The results are summarized below:

Target Risk Level	RBC (g ACM /cm^2 soil)				
	CAB	AirCell	Roofing	Floor Tile	Mag
1E-04	8.8E-02	1.6E-02	1.5E-02	1.9E-01	2.4E-02
1E-05	8.8E-03	1.6E-03	1.5E-03	1.9E-02	2.4E-03
1E-06	8.8E-04	1.6E-04	1.5E-04	1.9E-03	2.4E-04

For the purposes of this evaluation, all calculations are based on a target risk of 1E-04. Results for any other target risk level can be derived by simple linear extrapolation. For example, if N boreholes are needed to evaluate an area based on a 1E-04 risk level, then 10xN boreholes would be needed to evaluate an area based on a 1E-05 risk level, and 100xN would be needed to evaluate an area based on a 1E-06 risk level.

3.0 TENTATIVE DECISION RULE

Conceptually, all that is needed to make a decision about the acceptability of an exposure area is an estimate of the mean amount of ACM present in the area (g ACM/cm^2), followed by a

comparison of that value to the RBC. However, because of sampling and analytical variability, the data collected from the exposure area might either underestimate or overestimate the true amount of ACM present, and two types of decision error are possible:

- *False Negative*. In this case, the true concentration of ACM in the decision unit is above the RBC, but the measured value is below the RBC.

- *False Positive*. In this case, the true concentration of ACM in the decision unit is below the RBC, but the measured value is above the RBC.

Controlling False Negative Errors

In most cases, false negative errors are of greatest concern to EPA, since a false negative decision may lead to exposure of humans to unacceptable risks. Therefore, EPA generally sets a goal that the probability of making a false negative decision is no higher than 5%. This is usually accomplished by computing the 95% upper confidence limit (UCL) on the mean, and comparing that value (rather than the simple mean) to the RBC. If the 95% UCL does not exceed the RBC, then there is no more than a 5% chance of a false negative decision error occurring.

Based on this, the tentative decision rule at this site is:

> If the 95% UCL of the mean level of ACM in an exposure unit does not exceed the RBC, the exposure unit will be considered acceptable. If the 95% UCL of the mean exceeds the RBC, the exposure unit will be considered potentially unacceptable.

Controlling False Positive Errors

While the use of the 95% UCL for decision making automatically ensures a high degree of protectiveness, application of this approach tends to increase the occurrence of false positive decision errors. For example, a property for which it is 90% certain (rather than 95% certain) that the risk is acceptable would be declared unacceptable. A false positive decision error does not pose a risk to residents, but can result in substantial expenditure of resources (both time and money) on properties that are actually acceptable. In order to address this problem, the number of samples collected at a decision unit is usually chosen to limit the probability of a false positive decision to some specified criterion. At this site, that criterion is that there should be no more than a 20% chance of declaring an exposure unit unacceptable when the true concentration is ½ the RBC.

4.0 METHOD FOR COMPUTING THE 95% UCL

The method used to compute the 95% UCL of the mean of a set of measured values depends on the nature of the data set. If the data are well characterized by a normal or lognormal distribution, then standard equations are available for computing the UCL (USEPA 1992). However, in many cases, data sets are not well characterized by parametric distributions, and other approaches may be more appropriate. EPA has developed a software system called

ProUCL (USEPA 2004) that computes alternative estimates of the UCL for a data set by a variety of different strategies, and recommends the value that is most appropriate based on the nature of the data provided.

At this site, data are not available to estimate the nature of the data that might be generated by a borehole investigation. For this reason, computer-based simulations were performed to generate a series of hypothetical data sets that might be reasonable expectations of the nature of real data sets, and these were provided to ProUCL to determine which statistical procedure was recommended as most appropriate. In nearly all cases, the ProUCL software selected the Chebychev inequality method for computing the UCL. This procedure is as follows:

$$UCL \leq Mean + (1/\alpha - 1)^{0.5} \cdot stdev/N^{0.5}$$

For $\alpha = 0.05$, this yields

$$UCL \leq Mean + 4.36 \cdot stdev/N^{0.5}$$

5.0 ESTIMATING THE NUMBER OF BOREHOLES NEEDED TO LIMIT DECISION ERRORS

5.1 Number Needed to Avoid False Negative Decisions

In considering the number of boreholes that must be installed, the first step is to identify the minimum number required to provide sufficient power to detect ACM contamination if it were present at a level of concern. For this effort, the minimum number of boreholes required is defined as the number such that there is at least a 95% probability that one or more boreholes will intercept the ACM when it is present at a level of concern. This is important because, if every borehole is negative (non-detect), the mean is zero and the 95% UCL (computed as above) is also zero. Thus, if the true concentration were above the RBC, this would rank as a false negative decision.

In order to compute this minimum number of boreholes, it is first necessary to convert the RBC values presented above (expressed in units of g ACM/cm^2) into units of area fraction (cm^2 of ACM per cm^2 of soil surface). For convenience, the result may be referred to as the area fraction of concern (AFOC). This conversion is performed as follows:

$$AFOC\ (cm^2\ ACM/cm^2\ soil) = RBC\ (g\ ACM/cm^2\ soil) / [T_{ACM}\ (cm) \cdot D_{ACM}\ (g/cm^3)]$$

where:

T_{ACM} = Average thickness of a piece of ACM (cm)
D_{ACM} = Average density of a piece of ACM (g / cm^3)

Values for T_{ACM} and D_{ACM} are available from measurements performed on pieces of ACM collected at the site (E&E 2006), as summarized below:

Parameter	CAB	AirCell	Roofing	Floor Tile	Mag
T_{ACM} (cm)	0.45	0.25	0.30	0.30	0.60
D_{ACM} (g / cm^3)	1.93	2.88	1.14	1.52	1.28

Based on these data, the corresponding area fractions of concern are as follows:

Target Risk Level	Area Fraction of Concern (cm^2 ACM /cm^2 soil)				
	CAB	AirCell	Roofing	Floor Tile	Mag
1E-04	0.101	0.023	0.045	0.412	0.031

In order to estimate the minimum number of boreholes needed to have at least one detect if the true concentration exceeds the RBC, it is assumed the probability of a detect is proportional to the AFOC occupied by the ACM. For example, if the AFOC were 0.05 (5%), then there is only a 5% chance that a random borehole would detect the ACM, and a 95% chance the borehole would be non-detect. If more than 1 borehole is installed, the probability that all of the boreholes will be non-detect is given by:

$$\text{Probability(All ND)} = (1\text{-AFOC})^N$$

The following table shows the minimum number of boreholes required to ensure there is a 95% chance of at least one detect occurring in an exposure area investigation, based on a 1E-04 risk level:

Area Fraction of Concern	Minimum Number of Boreholes
0.2%	1497
0.5%	598
1.0%	299
2.0%	149
3.0%	99
5.0%	59
10%	29
15%	19

As noted above, based on EPA's IRIS risk model, the ACM type with the smallest area fraction of concern is AirCell (2.3% at a target risk of 1E-04), and the minimum number of samples required for this area fraction is 129. If a risk level of 1E-05 or lower were selected, the area fraction of concern would be 0.23% or lower, and the minimum number of boreholes per decision unit would be 1290 or more.

5.2 Number Needed to Limit False Positive Decisions

Use of the minimum number of boreholes is expected to minimize the chance of a false negative decision error, but if only the minimum number of boreholes are installed, the risk of false positive decisions may be quite high. In order to investigate the relationship between the number

of boreholes and the false positive error rate, a screening level assessment was performed using Monte Carlo modeling.

In this approach, Monte Carlo simulation is used to place random boreholes in an exposure unit where the true average area fraction of ACM for the exposure unit is specified. The concentration of ACM in each borehole is given by:

$$C(i) = P \cdot A_{ACM} \cdot T_{ACM} \cdot D_{ACM} / A_{Borehole}$$

where:

$C(i)$ = Concentration of ACM in borehole "i" (g / cm^2)
P = Probability that the borehole will intercept a piece of ACM
A_{ACM} = Area of ACM intersected in the borehole (cm^2)
T_{ACM} = Thickness of the ACM (cm)
D_{ACM} = Density of the ACM (g / cm^3)
$A_{borehole}$ = Area of the borehole (cm^2)

For convenience, assume the area of the ACM in a borehole is the same as the area of the borehole. Then:

$$C(i) (g/cm^2) = P \cdot T_{ACM} \cdot D_{ACM}$$

The probability of a detect is modeled as :

P = BINOMIAL(true area fraction for the exposure unit)

Thickness may be modeled as:

T_{ACM} = Average thickness ·Triangular(0.5, 1, 2)

Density is assumed to be constant.

Values of thickness and density are based on measurements form site samples, and are provided above.

Given a set of random boreholes placed in an exposure unit with some specified true area fraction, each borehole will yield a random value of C(i). From this data set, the mean and standard deviation can be used to compute the 95% UCL assuming the Chebychev inequality approach (see Section 4). Then, the UCL is compared to the RBC, and the sample is ranked either as "Pass" (UCL ≤ RBC) or "Fail" (UCL > RBC).

The results are shown in Figure B-1. As seen, the probability of "failing" (declaring the area is unacceptable) is very high (> 75%), even when the true concentration of ACM is ½ or less of the RBC, even if a very large number of boreholes (500 per decision unit) were installed. This pattern does not depend on the type of ACM present, but is true for all types and combinations.

6.0 CONCLUSIONS

Based on the RBC levels for ACM derived in Appendix A using EPA's standard risk model (IRIS) and assuming a target risk level of 1E-04, it is concluded that a large number of boreholes (a minimum of 130) would be needed in each decision unit in order to guard against false negative decision errors, and that a much higher number (>> 500) would be needed in order to limit the frequency of false positive decision errors. If a lower target risk level were selected (1E-05, 1E-06), the number of boreholes needed would be proportionately higher. Based on these calculations, it is concluded that unless very large numbers of boreholes are installed in each decision unit, application of the approach above would have low probability of declaring that a decision unit was acceptable, even in situations where it really was acceptable.

7.0 REFERENCES

Ecology and Environment, Inc. (E & E). 2006. North Ridge Estates Site 2005 Removal Action Report, Klamath Falls, Oregon, prepared for the U.S. Environmental Protection Agency, Contract No. EP-S7-06-02, Seattle, Washington. March, 2006.

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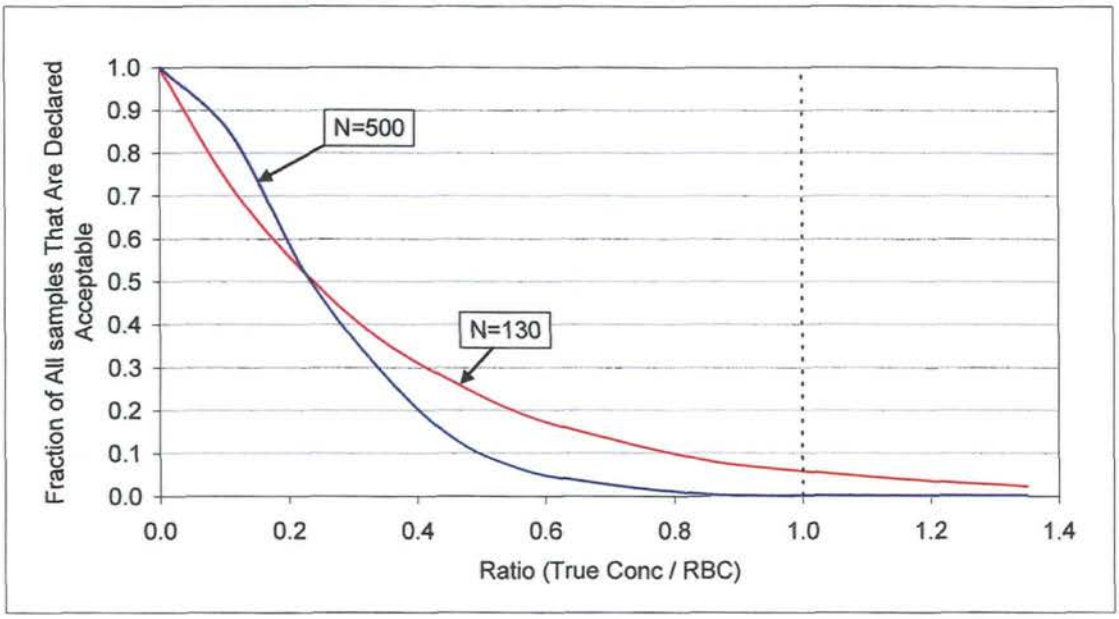
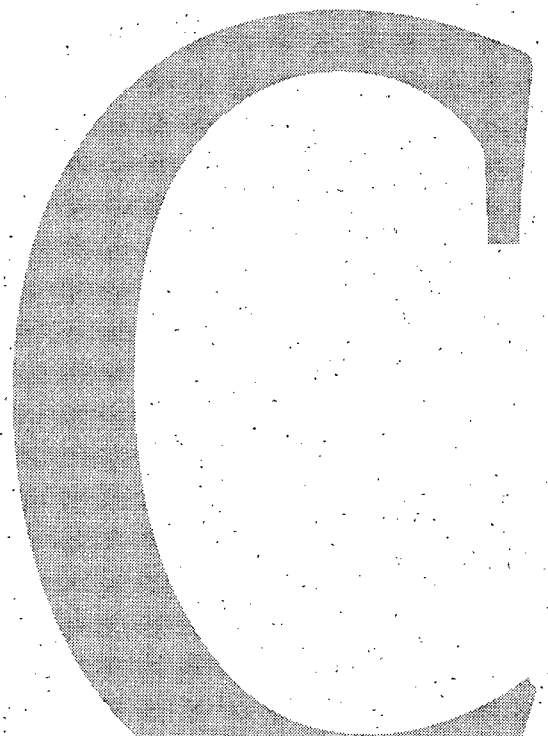
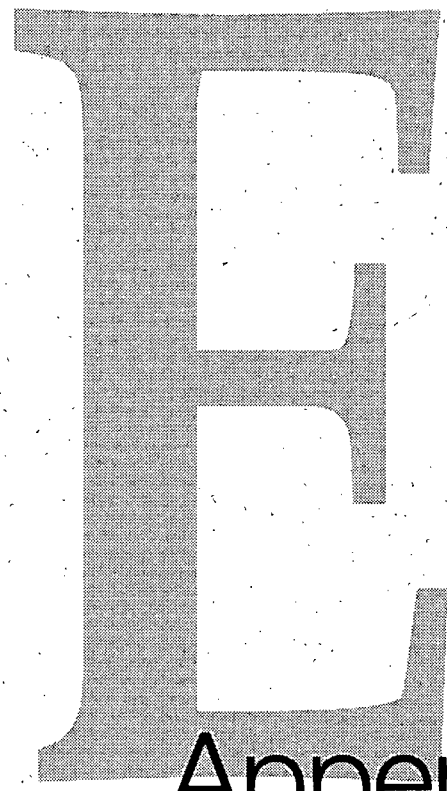
Figure B-1. Simulated Sampling Results for an Area Contaminated with ACM





Appendix C

Appendix D



Appendix E

Appendix F

Appendix F
2006 Air Analytical Data Packages

LabCor Portland Inc
Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Analysis Report Cover

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060359 **PDX**

Report Number: 060359R01

Report Date: 9/29/2006

Client: Parametrix

Address: 700 NE Multnomah, Ste. 1000
Portland, OR 97232-2131

Project Name: Northridge Estates

Project Num: 35430

PO Number:

Sub Project:

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
060359 - S4	NR-552 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S6	NR-546 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S8	NR-548 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S12	NR-542 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S17	NR-557 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S22	NR-562 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S26	NR-566 -	ISO 13794, indirect		6/30/2006
060359 - S30	NR-570 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S34	NR-574 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S40	NR-580 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S42	NR-582 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S44	NR-584 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S45	NR-585 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S46	NR-586 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S50	NR-590 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S54	NR-594 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S55	NR-595 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S56	NR-596 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S58	NR-598 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S60	NR-600 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S62	NR-662 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S63	NR-261 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S64	NR-268 -	ISO 13794, indirect	REJECTED: Overloaded - Redeposited	6/30/2006

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Portland, OR 97239

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Report Date: 9/29/2006

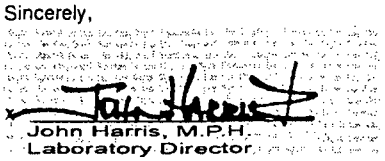
ISO 13794, indirect - Preparation and analysis of the above samples was conducted in accordance with the ISO method 13794 (Indirect) for the identification of asbestos. Briefly, a portion of the original filter was ashed and treated with acetic acid to isolate the material of interest. The samples were then aliquoted onto lab filters which were collapsed with acetone, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in acetone until cleared of filter debris.

TEM analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The redeposit samples were analyzed at various approximate screen magnifications of 5,000x for PCM equivalent structures, 10,000x for asbestos structures greater than 5.0 micrometer lengths, and 20,000x for asbestos structures greater than 0.5 micrometer lengths. An accelerating voltage of 100 KV was applied. The sizing of grid openings was performed on the microscope at a magnification of approximately 550X.

Disclaimer The results reported relate only to the samples tested or analyzed. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor Portland, Inc. the opportunity to provide you with the analytical services.

Sincerely,



John Harris, M.P.H.
Laboratory Director

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S4
Client Sample No.: NR-552
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 1200
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 18
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.26082
Analytical Sens. (struc/cc) : 0.00247
Dectection Limit. (struc/cc) : 0.00738

Analyst(s)	Analysis Date
DW	8/23/2006
KM	8/27/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.25652	0.24595 - 0.28541 - Gaussian	104	
Total Asbestos Structures	0.27626	5.16493 - 10.83507 - Gaussian		112
Asbestos Structures > 5um and 5:1	0.04193	0.02443 - 0.06714 - Poisson	17	
Asbestos Fibers and Bundles > 5um and 5:1	0.01233	0.00401 - 0.02878 - Poissan		5
PCM Equivalent Fibers-ISO	0.00493	0.0006 - 0.01782 - Poissan		2
PCM Equivalent Structures-ISO	0.0074	0.00153 - 0.02162 - Poissan	3	

Lab/Cor Sample No.: S6
Client Sample No.: NR-546
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 1210
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 44
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.63756
Analytical Sens. (struc/cc) : 0.001
Dectection Limit. (struc/cc) : 0.00299

Analyst(s)	Analysis Date
JH	8/27/2006
JH	8/30/2006
JH	9/10/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.04603	0.0337 - 0.0614 - Poisson	46	
Total Asbestos Structures	0.04603	0.07805 - 3.19467 - Gaussian		46
Asbestos Structures > 5um and 5:1	0.01201	0.00621 - 0.02098 - Poisson	12	
Asbestos Fibers and Bundles > 5um and 5:1	0.01201	0.00621 - 0.02098 - Poisson		12
PCM Equivalent Fibers-ISO	0.002	0.00024 - 0.00723 - Poisson		2
PCM Equivalent Structures-ISO	0.001	0.00003 - 0.00558 - Poisson	1	

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Final Report

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Fax: (503) 228-8282
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Asbestos and Environmental Analysis

ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S8
Client Sample No.: NR-548
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 1200
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 45
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.65205
Analytical Sens. (struc/cc) : 0.00099
Dectection Limit. (struc/cc) : 0.00295

Analyst(s)	Analysis Date
JH	8/26/2006
JH	8/30/2006
JH	9/10/2006
JH	9/9/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.04243	0 - 4.35833 - Gaussian	43	
Total Asbestos Structures	0.04243	0.0307 - 0.05715 - Poisson		43
Asbestos Structures > 5um and 5:1	0.01875	0.01129 - 0.02927 - Poisson	19	
Asbestos Fibers and Bundles > 5um and 5:1	0.01677	0.00977 - 0.02686 - Poisson		17
PCM Equivalent Fibers-ISO	0.00197	0.00024 - 0.00713 - Poisson		2
PCM Equivalent Structures-ISO	0.00099	0.00002 - 0.0055 - Poisson	1	

Lab/Cor Sample No.: S12
Client Sample No.: NR-542
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.05
Volume Taken: 1

Sample Area/Mass/Volume (L) : 1180
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 200
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 2.898
Analytical Sens. (struc/cc) : 0.00226
Dectection Limit. (struc/cc) : 0.00675

Analyst(s)	Analysis Date
KM	8/25/2006
KM	8/27/2006
KM	8/28/2006
KM	9/12/2006
KM	9/7/2006
TM	8/27/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.21672	0 - 3.14044 - Gaussian	96	
Total Asbestos Structures	0.23478	0.23446 - 0.24071 - Gaussian		104
Asbestos Structures > 5um and 5:1	0.04741	0.02935 - 0.07247 - Poisson	21	
Asbestos Fibers and Bundles > 5um and 5:1	0.02483	0.0124 - 0.04444 - Poisson		11
PCM Equivalent Fibers-ISO	0.00903	0.00246 - 0.02312 - Poisson		4
PCM Equivalent Structures-ISO	0.00452	0.00055 - 0.01631 - Poisson	2	

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Asbestos and Environmental Analysis

ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S17
Client Sample No.: NR-557
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.15
Residual Ash Vol: 20 **Final Dilution:** 0.15
Volume Taken: 3

Sample Area/Mass/Volume (L) : 1008
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 45
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.65205
Analytical Sens. (struc/cc) : 0.00392
Dectection Limit. (struc/cc) : 0.01171

Analyst(s)	Analysis Date
KM	8/25/2006
KM	9/12/2006
KM	9/13/2006

Structure Type	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Total
Primary Asbestos Structures	0.37977	0.30796 - 0.46333 - Poisson	97	
Total Asbestos Structures	0.38369	0.31148 - 0.46763 - Poisson		98
Asbestos Structures > 5um and 5:1	0.14878	1.13066 - 4.91378 - Gaussian	38	
Asbestos Fibers and Bundles > 5um and 5:1	0.12137	0.08247 - 0.17228 - Poisson		31
PCM Equivalent Fibers-ISO	0.09788	0.06334 - 0.14449 - Poisson		25
PCM Equivalent Structures-ISO	0.07047	0.04177 - 0.11138 - Poisson	18	

Lab/Cor Sample No.: S22
Client Sample No.: NR-562
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.05
Volume Taken: 1

Sample Area/Mass/Volume (L) : 891
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 598
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 8.66502
Analytical Sens. (struc/cc) : 0.001
Dectection Limit. (struc/cc) : 0.00299

Analyst(s)	Analysis Date
JH	8/27/2006
JH	8/30/2006
JH	9/14/2006
JH	9/16/2006
JH	9/17/2006

Structure Type	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Total
Primary Asbestos Structures	0.071	0.39778 - 1.72931 - Gaussian	71	
Total Asbestos Structures	0.07299	0.39778 - 1.72931 - Gaussian		73
Asbestos Structures > 5um and 5:1	0.02	0.01222 - 0.03089 - Poisson	20	
Asbestos Fibers and Bundles > 5um and 5:1	0.017	0.0099 - 0.02722 - Poisson		17
PCM Equivalent Fibers-ISO	0.006	0.0022 - 0.01306 - Poisson		6
PCM Equivalent Structures-ISO	0.005	0.00162 - 0.01167 - Poisson	5	

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Asbestos and Environmental Analysis

ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S26
Client Sample No.: NR-566
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.05
Volume Taken: 1

Sample Area/Mass/Volume (L) : 1185
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 9
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.13041
Analytical Sens. (struc/cc) : 0.04996
Dectection Limit. (struc/cc) : 0.14937

Analyst(s)	Analysis Date
KM	8/25/2006
KM	9/13/2006

Structure Type	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	5.24538	4.44125 - 6.16196 - Gaussian	105	
Total Asbestos Structures	5.39525	4.60298 - 6.32369 - Gaussian		108
Asbestos Structures > 5um and 5:1	2.19807	1.40579 - 3.1265 - Gaussian	44	
Asbestos Fibers and Bundles > 5um and 5:1	1.69851	1.17622 - 2.37351 - Poissan		34
PCM Equivalent Fibers-ISO	1.39877	0.92948 - 2.02162 - Poissan		28
PCM Equivalent Structures-ISO	0.99912	0.61031 - 1.54309 - Poissan	20	

Lab/Cor Sample No.: S30
Client Sample No.: NR-570
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 1200
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 47
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.68103
Analytical Sens. (struc/cc) : 0.00094
Dectection Limit. (struc/cc) : 0.00282

Analyst(s)	Analysis Date
JH	8/26/2006
JH	8/31/2006
JH	9/10/2006
JH	9/12/2006
KM	9/13/2006

Structure Type	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.05857	0.0449 - 0.07508 - Poisson	62	
Total Asbestos Structures	0.06235	0.0263 - 4.35668 - Gaussian		66
Asbestos Structures > 5um and 5:1	0.01134	0.00586 - 0.0198 - Poisson	12	
Asbestos Fibers and Bundles > 5um and 5:1	0.00756	0.00326 - 0.01489 - Poisson		8
PCM Equivalent Fibers-ISO	0.00378	0.00103 - 0.00968 - Poisson		4
PCM Equivalent Structures-ISO	0.00378	0.00103 - 0.00968 - Poisson	4	

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Asbestos and Environmental Analysis

ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S34
Client Sample No.: NR-574
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Volume Taken: 3

Aliquot Dilution: 0.15
Final Dilution: 0.15

Sample Area/Mass/Volume (L) : 1200
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 42
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.60858
Analytical Sens. (struc/cc) : 0.00352
Dectection Limit. (struc/cc) : 0.01054

Analyst(s)	Analysis Date
KM	8/25/2006
KM	9/13/2006
KM	9/14/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Total
Primary Asbestos Structures	0.3418	0 - 9.06548 - Gaussian	97	
Total Asbestos Structures	0.35942	0.21166 - 6.6931 - Gaussian		102
Asbestos Structures > 5um and 5:1	0.14095	0 - 9.06548 - Gaussian	40	
Asbestos Fibers and Bundles > 5um and 5:1	0.12333	0.0859 - 0.17152 - Poisson		35
PCM Equivalent Fibers-ISO	0.10571	0.07132 - 0.15091 - Poisson		30
PCM Equivalent Structures-ISO	0.04933	0.02697 - 0.08277 - Poisson	14	

Lab/Cor Sample No.: S40
Client Sample No.: NR-580
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Volume Taken: 10

Aliquot Dilution: 0.5
Final Dilution: 0.5

Sample Area/Mass/Volume (L) : 869
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 61
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.88389
Analytical Sens. (struc/cc) : 0.00101
Dectection Limit. (struc/cc) : 0.00301

Analyst(s)	Analysis Date
JH	8/26/2006
KM	9/14/2006
KM	9/15/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Total
Primary Asbestos Structures	0.04422	0 - 3.11089 - Gaussian	44	
Total Asbestos Structures	0.04422	0.03213 - 0.05937 - Poisson		44
Asbestos Structures > 5um and 5:1	0.01106	0.00552 - 0.01978 - Poisson	11	
Asbestos Fibers and Bundles > 5um and 5:1	0.00704	0.00283 - 0.0145 - Poisson		7
PCM Equivalent Fibers-ISO	0.00201	0.00024 - 0.00726 - Poisson		2
PCM Equivalent Structures-ISO	0.00201	0.00024 - 0.00726 - Poisson	2	

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Asbestos and Environmental Analysis

ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S42
Client Sample No.: NR-582
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.05
Volume Taken: 1

Sample Area/Mass/Volume (L) : 880
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 112
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 1.62288
Analytical Sens. (struc/cc) : 0.00541
Dectection Limit. (struc/cc) : 0.01616

Analyst(s)	Analysis Date
JH	8/27/2006
JH	9/20/2006
KM	9/15/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.51894	0 - 4.20941 - Gaussian	96	
Total Asbestos Structures	0.54057	0.4398 - 0.65765 - Poisson		100
Asbestos Structures > 5um and 5:1	0.08649	0.04944 - 0.14046 - Poisson	16	
Asbestos Fibers and Bundles > 5um and 5:1	0.05946	0.02968 - 0.1064 - Poisson		11
PCM Equivalent Fibers-ISO	0.01622	0.00335 - 0.04739 - Poisson		3
PCM Equivalent Structures-ISO	0.02162	0.00589 - 0.05536 - Poisson	4	

Lab/Cor Sample No.: S44
Client Sample No.: NR-584
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 880
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 61
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.88389
Analytical Sens. (struc/cc) : 0.00099
Dectection Limit. (struc/cc) : 0.00297

Analyst(s)	Analysis Date
JH	8/26/2006
KM	9/15/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.02184	0.01368 - 0.03306 - Poisson	22	
Total Asbestos Structures	0.02283	0.01447 - 0.03425 - Poisson		23
Asbestos Structures > 5um and 5:1	0.00199	0.00024 - 0.00717 - Poisson	2	
Asbestos Fibers and Bundles > 5um and 5:1	0.00199	0.00024 - 0.00717 - Poisson		2
PCM Equivalent Fibers-ISO	0.00099	0.00002 - 0.00553 - Poisson		1
PCM Equivalent Structures-ISO	0.00099	0.00002 - 0.00553 - Poisson	1	

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Asbestos and Environmental Analysis

ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S45
Client Sample No.: NR-585
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 253
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 10
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.1449
Analytical Sens. (struc/cc) : 0.02106
Dectection Limit. (struc/cc) : 0.06297

Analyst(s)	Analysis Date
JH	8/26/2006

Structure Type	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0.08423	0.02295 - 0.21568 - Poisson	4	
Total Asbestos Structures	0.08423	0.02295 - 0.21568 - Poisson		4
Asbestos Structures > 5um and 5:1	0.02106	0.00053 - 0.11734 - Poisson	1	
Asbestos Fibers and Bundles > 5um and 5:1	0.02106	0.00053 - 0.11734 - Poisson		1
PCM Equivalent Fibers-ISO	< 0.021	0 - 0.07768 - Poisson		0
PCM Equivalent Structures-ISO	< 0.021	0 - 0.07768 - Poisson	0	

Lab/Cor Sample No.: S46
Client Sample No.: NR-586
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.15
Residual Ash Vol: 20 **Final Dilution:** 0.15
Volume Taken: 3

Sample Area/Mass/Volume (L) : 880
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 105
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 1.52145
Analytical Sens. (struc/cc) : 0.00192
Dectection Limit. (struc/cc) : 0.00575

Analyst(s)	Analysis Date
KM	8/25/2006
KM	9/18/2006

Structure Type	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0.18451	0 - 4.72295 - Gaussian	96	
Total Asbestos Structures	0.19412	0 - 4.72295 - Gaussian		101
Asbestos Structures > 5um and 5:1	0.01538	0.00664 - 0.0303 - Poisson	8	
Asbestos Fibers and Bundles > 5um and 5:1	0.01153	0.00423 - 0.0251 - Poisson		6
PCM Equivalent Fibers-ISO	0.00769	0.00209 - 0.01969 - Poisson		4
PCM Equivalent Structures-ISO	0.00384	0.00047 - 0.01389 - Poisson	2	

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ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S50
Client Sample No.: NR-590
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 878.9
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 61
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.88389
Analytical Sens. (struc/cc) : 0.00099
Dectection Limit. (struc/cc) : 0.00297

Analyst(s)	Analysis Date
KM	8/24/2006
KM	9/11/2006

Structure Type	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0.07354	0.8204 - 3.21239 - Gaussian	74	
Total Asbestos Structures	0.07851	0.06216 - 0.09784 - Poisson		79
Asbestos Structures > 5um and 5:1	0.01888	0.01137 - 0.02949 - Poisson	19	
Asbestos Fibers and Bundles > 5um and 5:1	0.00497	0.00161 - 0.0116 - Poisson		5
PCM Equivalent Fibers-ISO	0.00099	0.00002 - 0.00554 - Poisson		1
PCM Equivalent Structures-ISO	0.00099	0.00002 - 0.00554 - Poisson	1	

Lab/Cor Sample No.: S54
Client Sample No.: NR-594
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.05
Volume Taken: 1

Sample Area/Mass/Volume (L) : 880
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 347
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 5.02803
Analytical Sens. (struc/cc) : 0.00174
Dectection Limit. (struc/cc) : 0.00522

Analyst(s)	Analysis Date
JH	9/18/2006
JH	9/19/2006
KM	8/25/2006

Structure Type	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0.16401	0 - 3.36062 - Gaussian	94	
Total Asbestos Structures	0.18146	0 - 3.36062 - Gaussian		104
Asbestos Structures > 5um and 5:1	0.03838	0.02406 - 0.05812 - Poisson	22	
Asbestos Fibers and Bundles > 5um and 5:1	0.0349	0.02132 - 0.05389 - Poisson		20
PCM Equivalent Fibers-ISO	0.00872	0.00283 - 0.02036 - Poisson		5
PCM Equivalent Structures-ISO	0.00872	0.00283 - 0.02036 - Poisson	5	

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ISO 13794, indirect Summary Data

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Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S55
Client Sample No.: NR-595
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 858
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 62
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.89838
Analytical Sens. (struc/cc) : 0.001
Dectection Limit. (struc/cc) : 0.00299

Analyst(s)	Analysis Date
KM	8/25/2006
KM	9/11/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.03505	0.09895 - 2.25589 - Gaussian	35	
Total Asbestos Structures	0.03806	0.02693 - 0.05224 - Poisson		38
Asbestos Structures > 5um and 5:1	< 0.001	0 - 0.00369 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 0.001	0 - 0.00369 - Poisson		0
PCM Equivalent Fibers-ISO	< 0.001	0 - 0.00369 - Poisson		0
PCM Equivalent Structures-ISO	< 0.001	0 - 0.00369 - Poisson	0	

Lab/Cor Sample No.: S56
Client Sample No.: NR-596
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 880
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 55
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.79695
Analytical Sens. (struc/cc) : 0.0011
Dectection Limit. (struc/cc) : 0.00329

Analyst(s)	Analysis Date
KM	8/25/2006
KM	9/11/2006
KM	9/12/2006
TM	9/11/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.10788	0.08758 - 0.13148 - Poisson	98	
Total Asbestos Structures	0.11118	0 - 6.22801 - Gaussian		101
Asbestos Structures > 5um and 5:1	0.03082	0.02048 - 0.04455 - Poisson	28	
Asbestos Fibers and Bundles > 5um and 5:1	0.02422	0.01518 - 0.03667 - Poisson		22
PCM Equivalent Fibers-ISO	0.01981	0.01174 - 0.03132 - Poisson		18
PCM Equivalent Structures-ISO	0.00881	0.0038 - 0.01735 - Poisson	8	

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ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S58
Client Sample No.: NR-598
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.05
Volume Taken: 1

Sample Area/Mass/Volume (L) : 869
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 123
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 1.78227
Analytical Sens. (struc/cc) : 0.00498
Dectection Limit. (struc/cc) : 0.0149

Analyst(s)	Analysis Date
DW	9/19/2006
DW	9/20/2006
KM	8/27/2006
TM	8/27/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.28412	0.21519 - 0.36811 - Poisson	57	
Total Asbestos Structures	0.29409	0.12649 - 2.29627 - Gaussian		59
Asbestos Structures > 5um and 5:1	0.07477	0.04185 - 0.12332 - Poisson	15	
Asbestos Fibers and Bundles > 5um and 5:1	0.05981	0.03091 - 0.10449 - Poisson		12
PCM Equivalent Fibers-ISO	0.05981	0.03091 - 0.10449 - Poisson		12
PCM Equivalent Structures-ISO	0.04486	0.02051 - 0.08516 - Poisson	9	

Lab/Cor Sample No.: S60
Client Sample No.: NR-600
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.5
Residual Ash Vol: 20 **Final Dilution:** 0.5
Volume Taken: 10

Sample Area/Mass/Volume (L) : 690
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 77
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 1.11573
Analytical Sens. (struc/cc) : 0.001
Dectection Limit. (struc/cc) : 0.003

Analyst(s)	Analysis Date
JH	8/27/2006
KM	9/15/2006
KM	9/16/2006
KM	9/17/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.02206	0.01383 - 0.0334 - Poisson	22	
Total Asbestos Structures	0.02206	0.01383 - 0.0334 - Poisson		22
Asbestos Structures > 5um and 5:1	0.00401	0.00109 - 0.01027 - Poisson	4	
Asbestos Fibers and Bundles > 5um and 5:1	0.00401	0.00109 - 0.01027 - Poisson		4
PCM Equivalent Fibers-ISO	< 0.001	0 - 0.0037 - Poisson		0
PCM Equivalent Structures-ISO	0.001	0.00003 - 0.00559 - Poisson	1	

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ISO 13794, indirect Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S62
Client Sample No.: NR-662
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.05
Volume Taken: 1

Sample Area/Mass/Volume (L) : 858
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 187
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 2.70963
Analytical Sens. (struc/cc) : 0.00332
Dectection Limit. (struc/cc) : 0.00993

Analyst(s)	Analysis Date
KM	8/25/2006
KM	9/18/2006
KM	9/19/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0.31214	0 - 2.86472 - Gaussian	94	
Total Asbestos Structures	0.33538	0.21092 - 2.4094 - Gaussian		101
Asbestos Structures > 5um and 5:1	0.05977	0.03542 - 0.09447 - Poisson	18	
Asbestos Fibers and Bundles > 5um and 5:1	0.03321	0.01592 - 0.06107 - Poisson		10
PCM Equivalent Fibers-ISO	< 0.003	0 - 0.01225 - Poisson		0
PCM Equivalent Structures-ISO	0.00664	0.0008 - 0.02399 - Poisson	2	

Lab/Cor Sample No.: S63
Client Sample No.: NR-261
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.75
Residual Ash Vol: 20 **Final Dilution:** 0.75
Volume Taken: 15

Sample Area/Mass/Volume (L) : 4800
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 75
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 1.08675
Analytical Sens. (struc/cc) : 0.0001
Dectection Limit. (struc/cc) : 0.0003

Analyst(s)	Analysis Date
JH	8/27/2006
JH	9/19/2006
JH	9/20/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 0	0 - 0.00036 - Poisson	0	
Total Asbestos Structures	< 0	0 - 0.00036 - Poisson		0
Asbestos Structures > 5um and 5:1	< 0	0 - 0.00036 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 0	0 - 0.00036 - Poisson		0
PCM Equivalent Fibers-ISO	< 0	0 - 0.00036 - Poisson		0
PCM Equivalent Structures-ISO	< 0	0 - 0.00036 - Poisson	0	

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Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
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http://www.labcorpdx.net

ISO 13794, indirect Summary Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Lab/Cor Sample No.: S64
Client Sample No.: NR-268
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Volume Taken: 15

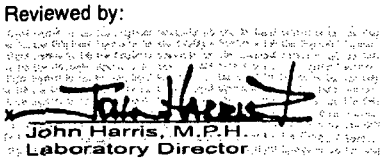
Aliquot Dilution: 0.75
Final Dilution: 0.75

Sample Area/Mass/Volume (L) : 4800
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 75
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 1.08675
Analytical Sens. (struc/cc) : 0.0001
Dectection Limit. (struc/cc) : 0.0003

Analyst(s)	Analysis Date
JH	8/27/2006
JH	9/20/2006

Structure Type	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 0	0 - 0.00036 - Poisson	0	
Total Asbestos Structures	< 0	0 - 0.00036 - Poisson		0
Asbestos Structures > 5um and 5:1	< 0	0 - 0.00036 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 0	0 - 0.00036 - Poisson		0
PCM Equivalent Fibers-ISO	< 0	0 - 0.00036 - Poisson		0
PCM Equivalent Structures-ISO	< 0	0 - 0.00036 - Poisson	0	

Reviewed by:



John Harris, M.P.H.
Laboratory Director

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-552** Lab/Cor Sample No: **S4**
Client Description: **Date Sampled:** **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	1	D41	CDQ	1	1	F	1	0.1	10	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1926 BF					
						Diffraction		J1926		JH	9/25/2006		
						Spectra		J2279					
G9	1	D41	CM	2	2	F	1.5	0.1	15	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1927BF					
G9	1	D41	CM	3	3	F	1.5	0.1	15	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1928BF					
G9	1	D41	CM	4	4	F	2	0.1	20	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1929BF					
G9	2	D23	CM	5	5	F	2.75	0.5	5.5	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1930BF					
G9	2	D23	CM	6		MD 3-0	15	10	1.5	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1931BF					
G9	2	D23	CM		6	MF	2	0.1	20	Chrysotile			
G9	2	D23	CM		7	MF	1	0.1	10	Chrysotile			
G9	2	D23	CM		8	MF	1	0.1	10	Chrysotile			
G9	2	D23	CM	7	9	F	1	0.05	20	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1932					
G9	2	D23	CM	8		MD 1-0	1.2	0.8	1.5	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1933					
G9	2	D23	CM		10	MF	0.5	0.1	5	Chrysotile			
G9	3	B13	CM	9	11	F	2	0.1	20	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1934					
G9	3	B13	CM	10	12	F	0.6	0.1	6	Chrysotile			
G9	3	B13	CM	11		MD 1-0	10	6	1.7	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J1935					
G9	3	B13	CM		13	MF	1.4	0.15	9.3	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-552** Lab/Cor Sample No: **S4**
Client Description: **Date Sampled:** **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	3	B13	CM	12	14	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1936					
G9	3	B13	CM	13	15	F	0.8	0.05	16	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1937					
G9	3	B13	CM	14	16	F	1.5	0.1	15	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1938					
G9	3	B13	CD	15	17	F	2	0.15	13.3	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1939					
						Diffraction		J1939		JH 9/25/2006			
G9	3	B13	CM	16		MD 4-0	40	20	2	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1940					
G9	3	B13	CM		18	MB	4.8	0.2	24	Chrysotile			
G9	3	B13	CM		19	MF	1.5	0.1	15	Chrysotile			
G9	3	B13	CM		20	MF	1	0.1	10	Chrysotile			
G9	3	B13	CM		21	MF	0.8	0.1	8	Chrysotile			
G9	3	B13	CM	17	22	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1941					
G9	3	B13	CM	18	23	F	0.8	0.1	8	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1942					
G9	3	B13	CM	19		MD 1-0	5	5	1	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1943					
G9	3	B13	CM		24	MF	0.8	0.1	8	Chrysotile			
G9	3	B13	CM	20	25	F	1	0.05	20	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1944					
G9	4	B24	CM	21		MD 1-0	2	1	2	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1945					
G9	4	B24	CM		26	MF	1.5	0.05	30	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1946					

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-552** Lab/Cor Sample No: **S4**
Client Description: **Date Sampled:** **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	4	B24	CM	22		MD 1-0	5.5	5	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1946					
G9	4	B24	CM		27	MF	4	0.1	40	Chrysotile			
G9	4	B24	CM	23		MD 1-1	7	2	3.5	Chrysotile			AS>5, PCMES-ISO
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1947					
G9	4	B24	CM		28	MF	7	0.15	46.7	Chrysotile			AFB>5
G9	4	B24	CM	24		MD 1-0	1.2	1.2	1	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1948					
G9	4	B24	CM		29	MF	1	0.1	10	Chrysotile			
G9	4	B24	CM	25	30	F	1.5	0.1	15	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1949					
G9	4	B24	CM	26	31	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1950					
G9	4	B24	CM	27		MD 7-0	15	15	1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1951					
G9	4	B24	CM		32	MF	0.8	0.1	8	Chrysotile			
G9	4	B24	CM		33	MR 6-0	1.5	1.5	1	Chrysotile			
G9	5	B4	CM	28	34	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1952					
G9	5	B4	CM	29	35	F	3.5	0.1	35	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1953					
G9	5	B4	CM	30	36	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1954					
G9	6	C4	CM	31		MD 1-0	2.5	0.8	3.1	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1955					
G9	6	C4	CM		37	MF	2	0.1	20	Chrysotile			
G9	6	C4	CM	32	38	F	4	0.1	40	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1956					

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-552** Lab/Cor Sample No: **S4**
Client Description: **Date Sampled:** **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	6	C4	CM	33	39	F	3.8	0.1	38	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1957					
G9	6	C4	CM	34	40	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1958					
G9	6	C4	CM	35	41	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1959					
G9	6	C4	CM	36	42	F	0.6	0.1	6	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1960					
G9	6	C4	CM	37	43	F	1.4	0.1	14	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1961					
G9	6	C4	CM	38	44	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1962					
G9	7	C12	CM	39	45	F	1	0.05	20	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1963					
G9	7	C12	CM	40	46	F	1.5	0.05	30	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1964					
G9	7	C12	CM	41	47	F	0.5	0.1	5	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1965					
G9	7	C12	CM	42	48	F	2.75	0.1	27.5	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1966					
G9	8	C20	CM	43	49	F	1.2	0.1	12	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1967					
G9	8	C20	CM	44	50	B	5.1	0.2	25.5	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1968					
G9	8	C20	CM	45		MD 1-0	20	10	2	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1969					

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-552** Lab/Cor Sample No: **S4**
Client Description: **Date Sampled:** **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	8	C20	CM		51	MF	3	0.1	30	Chrysotile			
G9	8	C20	CM	46	52	F	1.5	0.1	15	Chrysotile			
						ItemType		*ItemNum*		*Confirmed*		*Comment*	
						Brightfield		J1970					
G10	9	D10	CM	47		MD 1-0	1.5	1.5	1	Chrysotile			
G10	9	D10	CD		53	MF	1	0.08	12.5	Chrysotile			
G10	9	D10	CD	49	55	F	0.65	0.1	6.5	Chrysotile			
G10	9	D10	CD	48	54	F	0.65	0.1	6.5	Chrysotile			
G10	9	D10	CD	50		MD 2-0	4	2	2	Chrysotile			
G10	9	D10	CD		56	MF	1.2	0.11	10.9	Chrysotile			
G10	9	D10	CD		57	MF	0.5	0.1	5	Chrysotile			
G10	9	D10	CD	51	58	F	0.85	0.01	85	Chrysotile			
G10	9	D10	CD	52		MD 1-0	6	2.5	2.4	Chrysotile			AS>5
G10	9	D10	CD		59	MF	3.5	0.08	43.8	Chrysotile			
G10	9	D10	CD	53		MD 1-0	4.8	3	1.6	Chrysotile			
G10	9	D10	CD		60	MF	2.5	0.1	25	Chrysotile			
G10	9	D10	CD	54	61	F	0.51	0.1	5.1	Chrysotile			
G10	9	D10	CD	55		MD 1-0	2.7	0.4	6.8	Chrysotile			
G10	9	D10	CD		62	MF	2.5	0.1	25	Chrysotile			
G10	9	D10	CD	56	63	F	1.5	0.11	13.6	Chrysotile			
G10	9	D10	CD	57		MD 1-0	2	1.2	1.7	Chrysotile			
G10	9	D10	CD		64	MF	1.2	0.13	9.2	Chrysotile			
G10	10	C11	CD	58		MD 2-0	1.8	1	1.8	Chrysotile			
G10	10	C11	CD		65	MF	1.5	0.11	13.6	Chrysotile			
G10	10	C11	CD		66	MF	1.2	0.08	15	Chrysotile			
G10	10	C11	CD	59		MD 1-0	7.5	4	1.9	Chrysotile			AS>5
G10	10	C11	CD		67	MF	3	0.1	30	Chrysotile			
G10	10	C11	CD	60	68	F	1.25	0.11	11.4	Chrysotile			
G10	10	C11	CM	61	69	B	4.2	0.15	28	Chrysotile			
G10	10	C11	CM	62	70	F	1.8	0.1	18	Chrysotile			
G10	11	B3	CM	63	71	B	1.8	0.18	10	Chrysotile			
G10	11	B3	CD	64	72	B	2.1	0.18	11.7	Chrysotile			
G10	11	B3	CD	65	73	F	1.85	0.12	15.4	Chrysotile			
G10	11	B3	CD	66	74	B	3.35	0.38	8.8	Chrysotile			
G10	12	B32	CD	67	75	F	1.85	0.1	18.5	Chrysotile			
G10	12	B32	CD	68		MD 1-0	5.2	3	1.7	Chrysotile			AS>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	**AS>5**	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	**PCMEF-ISO**	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	**TAS**	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-552** Lab/Cor Sample No: **S4**
Client Description: **Date Sampled:** 6/20/2006

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	12	B32	CD		76	MF	2.5	0.1	25	Chrysotile			
G10	12	B32	CD	69		MD 1-0	3.5	0.6	5.8	Chrysotile			
G10	12	B32	CD		77	MB	2.75	0.15	18.3	Chrysotile			
G10	12	B32	CD	70	78	F	1.8	0.1	18	Chrysotile			
G10	12	B32	CD	71	79	B	5.2	0.5	10.4	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G10	12	B32	CM	72		MD 1-0	0.8	0.7	1.1	Chrysotile			
G10	12	B32	CM		80	MF	0.65	0.1	6.5	Chrysotile			
G10	12	B32	CD	73	81	F	1.5	0.08	18.8	Chrysotile			
G10	12	B32	CD	74	82	F	1.85	0.1	18.5	Chrysotile			
G10	12	B32	CD	75	83	F	0.65	0.1	6.5	Chrysotile			
G10	13	B40	CD	76		MD 1-0	3.5	1.2	2.9	Chrysotile			
G10	13	B40	CD		84	MF	3.5	0.1	35	Chrysotile			
G10	13	B40	CD	77	85	F	3	0.1	30	Chrysotile			
G10	13	B40	CD	78	86	F	0.7	0.1	7	Chrysotile			
G10	14	A32	CD	79	87	F	0.8	0.1	8	Chrysotile			
G10	14	A32	CM	80		MD 1-0	1.2	0.25	4.8	Chrysotile			
G10	14	A32	CM		88	MF	1.1	0.08	13.8	Chrysotile			
G10	14	A32	CD	81		MD 1-0	1.25	1.2	1	Chrysotile			
G10	14	A32	CD		89	MF	1.2	0.1	12	Chrysotile			
G10	14	A32	CM	82	90	F	1.1	0.11	10	Chrysotile			
G10	14	A32	CD	83	91	F	0.7	0.1	7	Chrysotile			
G10	15	A1	CM	84	92	F	1.8	0.1	18	Chrysotile			
G10	15	A1	CD	85	93	F	0.8	0.12	6.7	Chrysotile			
G10	16	D12	CD	86		MD 1-0	2.1	0.6	3.5	Chrysotile			
G10	16	D12	CD		94	MF	1.7	0.1	17	Chrysotile			
G10	16	D12	CM	87		MD 1-0	6.5	4	1.6	Chrysotile			AS>5
G10	16	D12	CM		95	MF	1.5	0.03	50	Chrysotile			
G10	16	D12	CD	88	96	F	1.2	0.03	40	Chrysotile			
G10	17	D41	CM	89		MD 1-1	12	8	1.5	Chrysotile			AS>5
G10	17	D41	CM		97	MF	6	0.11	54.5	Chrysotile			AFB>5
G10	17	D41	CM	90		MD 1-0	5.5	4	1.4	Chrysotile			AS>5
G10	17	D41	CM		98	MF	2	0.11	18.2	Chrysotile			
G10	17	D41	CM	91		MD 1-0	1.5	0.4	3.8	Chrysotile			
G10	17	D41	CM		99	MF	1.2	0.1	12	Chrysotile			
G10	17	D41	CM	92	100	F	0.8	0.1	8	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

LabCor Portland Inc
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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-552** Lab/Cor Sample No: **S4**
Client Description: **Date Sampled: 6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	17	D41	CD	93	101	F	5.1	0.1	51	Chrysotile			AS>5, AFB>5
G10	17	D41	CM	94	102	F	0.8	0.1	8	Chrysotile			
G10	17	D41	CD	95	103	B	1.85	0.15	12.3	Chrysotile			
G10	18	C24	CM	96		MD 1-0	5.8	4	1.5	Chrysotile			AS>5
G10	18	C24	CM		104	MF	1.5	0.1	15	Chrysotile			
G10	18	C24	CD	97	105	F	0.8	0.1	8	Chrysotile			
G10	18	C24	CM	98	106	F	0.5	0.1	5	Chrysotile			
G10	18	C24	CD	99	107	F	1.75	0.1	17.5	Chrysotile			
G10	18	C24	CD	100	108	F	0.75	0.1	7.5	Chrysotile			
G10	18	C24	CD	101	109	F	1.1	0.03	36.7	Chrysotile			
G10	18	C24	CD	102	110	F	1.7	0.1	17	Chrysotile			
G10	18	C24	CD	103	111	F	1.8	0.1	18	Chrysotile			
G10	18	C24	CD	104	112	F	2.4	0.12	20	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-546** Lab/Cor Sample No: **S6**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A14				NSD							
G6	2	D33				NSD							
G6	3	D3	CDQ	1		MD 1-1	26	12	2.2	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		318		JH	9/25/2006	Neg #400	
						Brightfield		319				Neg#401	
						Spectra		1209					
G6	3	D3	CDQ		1	MF	26	0.15	173.3	Chrysotile	Mg, Si		AFB>5
G6	4	A22	CD	2	2	F	2.2	0.06	36.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		320				060359-S6-A1-G6-ST26-4000	
G6	5	A40	CD	3		MD 1-1	22	20	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		321				060359-S6-A1-G6-ST31-1500	
G6	5	A40	CD		3	MF	5.2	0.06	86.7	Chrysotile			AFB>5
G6	6	A20	CD	4	4	F	1.1	0.05	22	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		322				060359-S6-A1-G6-ST41-6000	
G6	7	A10	CD	5		MD 1-0	3.7	1.6	2.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		323				060359-S6-A1-G6-ST46-3500	
G6	7	A10	CD		5	MF	3.5	0.07	50	Chrysotile			
G6	7	A10	CD	6		MD 1-1	12	11	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		324				060359-S6-A1-G6-ST56-2500	
G6	7	A10	CD		6	MF	11	0.06	183.3	Chrysotile			AFB>5
G6	8	D10				NSD							
G6	9	B10				NSD							
G6	10	B30	CD	7	7	F	3.6	0.06	60	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		325				060359-S6-A1-G6-ST76-2000	
G6	11	B40	CD	8	8	B	3	0.25	12	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		348				060359-S6-A1-G1-ST81-3500	
G6	12	B41	CD	9	9	F	2	0.15	13.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		349				060359-S6-A1-G1-ST86-6000	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-546** Lab/Cor Sample No: **S6**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	13	B31	CD	10	10	B	5.1	0.2	25.5	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		350				060359-S6-A1-G1-ST91-3000	
G6	13	B31	CD	11	11	F	1.5	0.07	21.4	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		351				060359-S6-A1-G1-ST96-2000	
G6	13	B31	CD	12	12	F	2.2	0.25	8.8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield						see #351 above	
G6	14	B21				NSD							
G6	15	B11	CD	13		MD 1-1	6.2	5	1.2	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		352				060359-S6-A1-G1-ST111-2000	
G6	15	B11	CD		13	MF	7	0.1	70	Chrysotile			AFB>5
G6	15	B11	CD	14		MD 1-1	9	7	1.3	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		353				060359-S6-A1-G1-ST121-2500	
G6	15	B11	CD		14	MF	5.1	0.1	51	Chrysotile			AFB>5
G6	15	B11	CD	15	15	F	2.4	0.07	34.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		354				060359-S6-A1-G1-ST131-5000	
G6	16	B1				NSD							
G6	17	C1	CD	16	16	F	1.5	0.1	15	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		355				060359-S6-A1-G1-ST141-4000	
G6	18	B12	CD	17		MD 1-0	2	0.4	5	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		356				060359-S6-A1-G1-ST146-3500	
G6	18	B12	CD		17	MF	2	0.06	33.3	Chrysotile			
G6	19	B22	CD	18	18	B	2.4	0.25	9.6	Chrysotile			
G6	19	B22	CD	19	19	F	1.5	0.06	25	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		357				060359-S6-A1-G1-ST161-6000	
G6	20	B32	CD	20	20	F	1.5	0.07	21.4	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		358				060359-S6-A1-G1-ST166-6000	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-546** Lab/Cor Sample No: **S6**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	20	B32	CD	21	21	F	3	0.06	50	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		359				060359-S6-A1-G1-ST171-5000	
G6	21	B22	CD	22	22	B	1.8	0.25	7.2	Chrysotile			
G6	22	B12	CD	23		MD 1-0	1.8	0.4	4.5	Chrysotile			
G6	22	B12	CD		23	MF	1.8	0.06	30	Chrysotile			
G6	23	B2	CD	24	24	F	1.5	0.06	25	Chrysotile			
G6	24	B13				NSD							
G6	25	B23	CD	25	25	F	2.5	0.06	41.7	Chrysotile			
G6	25	B23	CD	26	26	B	3.2	0.3	10.7	Chrysotile			
G6	26	B33	CD	27	27	F	1.5	0.07	21.4	Chrysotile			
G6	27	B24	CD	28	28	F	1	0.08	12.5	Chrysotile			
G7	28	A24	CD	29	29	F	2.6	0.07	37.1	Chrysotile			
G7	28	A24	CD	30	30	F	1.1	0.06	18.3	Chrysotile			
G7	28	A24	CD	31	31	F	0.9	0.06	15	Chrysotile			
G7	28	A24	CD	32	32	F	2.5	0.06	41.7	Chrysotile			
G7	29	A4				NSD							
G7	30	D14	CD	33	33	F	1.7	0.06	28.3	Chrysotile			
G7	31	D32	CD	34	34	F	1.7	0.06	28.3	Chrysotile			
G7	32	D12				NSD							
G7	33	A2	CD	35	35	F	0.6	0.06	10	Chrysotile			
G7	34	A32				NSD							
G7	35	A30	CD	36		MD 1-1	6	5	1.2	Chrysotile			AS>5
G7	35	A30	CD		36	MF	6	0.06	100	Chrysotile			AFB>5
G7	36	A10	CD	37	37	F	0.6	0.06	10	Chrysotile			
G7	36	A10	CD	38	38	F	0.51	0.06	8.5	Chrysotile			
G7	37	D20				NSD							
G7	38	C41	CD	39	39	F	14.5	0.06	241.7	Chrysotile			AS>5, AFB>5
G7	38	C41	CD	40		MD 1-1	20	15	1.3	Chrysotile			AS>5
G7	38	C41	CD		40	MF	13	0.06	216.7	Chrysotile			AFB>5
G7	39	C31				NSD							
G7	40	C1				NSD							
G7	41	B21	CD	41	41	F	4:3	0.06	71.7	Chrysotile			
G7	41	B21	CD	42	42	F	2.9	0.06	48.3	Chrysotile			
G7	42	B31				NSD							
G7	43	B33	CD	43	43	F	5.7	0.06	95	Chrysotile			AS>5, AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-546** Lab/Cor Sample No: **S6**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	44	B23	CD	44		MD 1-1	16	15	1.1	Chrysotile			AS>5
G7	44	B23	CD		44	MB	15.5	0.2	77.5	Chrysotile			AFB>5, PCMEF-ISO
G7	44	B23	CD	45	45	F	1.7	0.06	28.3	Chrysotile			
G7	44	B23	CD	46		MD 1-1	28	23	1.2	Chrysotile			AS>5
G7	44	B23	CD		46	MF	5.8	0.15	38.7	Chrysotile			AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-548** Lab/Cor Sample No: **S8**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A13	CDQ	1	1	F	0.6	0.07	8.6	Chrysotile	Mg, Al, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		267		JH	9/25/2006	Neg #388	
						Brightfield		269					
						Spectra		1197					
G6	1	A13	CDQ	2		MD 1-0	2.9	1.6	1.8	Chrysotile	Mg, Al, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		270				060359-S8-A1-G1-ST16-7000	
G6	1	A13	CDQ		2	MF	2.1	0.06	35	Chrysotile	Mg, Al, Si		
G6	2	D3	CDQ	3		MD 1-1	11.5	11	1	Chrysotile	Mg, Al, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		271				060359-S8-A1-G1-ST21-2000	
G6	2	D3	CDQ		3	MF	10	0.06	166.7	Chrysotile	Mg,Al, Si		AFB>5
G6	2	D3	CD	4	4	F	22	0.1	220	Chrysotile			AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		272				060359-S8-A1-G1-ST31-2000	
G6	2	D3	CD	5	5	F	8	0.09	88.9	Chrysotile			AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		273				060359-S8-A1-G1-ST36-3500	
G6	3	D23	CDQ	6		MD 1-1	6.5	4	1.6	Chrysotile	Mg, Al, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		274				060359-S8-A1-G1-ST41-3500	
G6	3	D23	CDQ		6	MF	6	0.1	60	Chrysotile	Mg, Al, Si		AFB>5
G6	3	D23	CD	7	7	F	0.55	0.06	9.2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		275				060359-S8-A1-G1-ST511-7000	
G6	4	D42	CD	8		MD 1-1	18	16	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		276				060359-S8-A1-G1-ST56-2000	
G6	4	D42	CD		8	MF	6.5	0.06	108.3	Chrysotile			AFB>5
G6	4	D42	CD	9	9	F	1.5	0.07	21.4	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		277				060359-S8-A1-G1-ST66-4000	
G6	4	D42	CD	10		MD 1-1	18	13	1.4	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		278				060359-S8-A1-G1-ST71-1500	
G6	4	D42	CD		10	MB	7.9	0.1	79	Chrysotile			AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-548** Lab/Cor Sample No: **S8**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	5	D22	CD	11	11	F	3.8	0.09	42.2	Chrysotile			
						ItemType		*ItemNum*		*Confirmed*		*Comment*	
						Brightfield		336				060359-S6-A1-G1-ST81-2000	
G6	6	D2	CD	12		MD 1-1	25	13	1.9	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		337				060359-S6-A1-G1-ST86-1000	
G6	6	D2	CD		12	MB	21.5	0.8	26.9	Chrysotile			AFB>5, PCMEF-ISO
G6	6	D2	CD	13	13	B	3.7	0.1	37	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		338				060359-S6-A1-G1-ST96-2500	
G6	6	D2	CD	14		MD 1-0	2.7	2	1.4	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		339				060359-S8-A1-G1-ST101-2500	
G6	6	D2	CD		14	MF	2.2	0.06	36.7	Chrysotile			
G6	7	A12	CD	15	15	B	1.6	0.2	8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		340				060359-S8-A1-G1-ST111-2500	
G6	7	A12	CD	16		MD 1-1	14	13	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		341				060359-S8-A1-G1-ST116-1500	
G6	7	A12	CD		16	MF	5.2	0.08	65	Chrysotile			AFB>5
G6	8	A22	CD	17	17	F	2	0.07	28.6	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		344				060359-S8-A1-G1-ST126-2500	
G6	9	A10				NSD							
G6	10	D10	CD	18		MD 1-0	6.5	5.5	1.2	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		345				060359-S8-A1-G1-ST136-2500	
G6	10	D10	CD		18	MF	3	0.06	50	Chrysotile			
G6	10	D10	CD	19	19	F	2.1	0.06	35	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		346				060359-S8-A1-G1-ST146-4000	
G6	11	D30	CD	20		MD 1-0	9.5	7.5	1.3	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		347				060359-S8-A1-G1-ST151-3000	
G6	11	D30	CD		20	MF	4.2	0.06	70	Chrysotile			
G6	12	D40	CD	21	21	F	8	0.07	114.3	Chrysotile			AS>5, AFB>5
G6	13	C31	CD	22	22	F	3.7	0.06	61.7	Chrysotile			
G6	14	C21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-548** Lab/Cor Sample No: **S8**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	15	C11	CD	23	23	B	27	0.1	270	Chrysotile			AS>5, AFB>5
G6	16	B1	CD	24		MD 1-0	2.8	0.4	7	Chrysotile			
G6	16	B1	CD		24	MF	2.1	0.06	35	Chrysotile			
G6	16	B1	CD	25		MD 1-0	4	1.8	2.2	Chrysotile			
G6	16	B1	CD		25	MF	2.7	0.06	45	Chrysotile			
G6	17	B11	CD	26	26	F	1.4	0.06	23.3	Chrysotile			
G6	18	B32	CD	27	27	F	1.7	0.06	28.3	Chrysotile			
G6	18	B32	CD	28	28	F	2.2	0.07	31.4	Chrysotile			
G6	18	B32	CD	29	29	F	9	0.08	112.5	Chrysotile			AS>5, AFB>5
G6	19	B22	CD	30	30	F	1.7	0.06	28.3	Chrysotile			
G6	19	B22	CD	31		MD 1-1	7	3	2.3	Chrysotile			AS>5
G6	19	B22	CD		31	MF	7	0.06	116.7	Chrysotile			AFB>5
G6	20	B2	CD	32	32	F	6	0.06	100	Chrysotile			AS>5, AFB>5
G6	21	C12	CD	33	33	F	1.5	0.06	25	Chrysotile			
G6	22	C32				NSD							
G6	23	C24				NSD							
G6	24	B4				NSD							
G6	25	A23	CD	34		MD 1-0	4	2	2	Chrysotile			
G6	25	A23	CD		34	MF	4	0.05	80	Chrysotile			
G6	26	A2				NSD							
G6	27	D41	CD	35		MD 1-1	16	15	1.1	Chrysotile			AS>5
G6	27	D41	CD		35	MB	7.5	0.1	75	Chrysotile			AFB>5
G6	27	D41	CD	36	36	F	1.5	0.05	30	Chrysotile			
G6	28	D21				NSD							
G6	29	D1	CD	37	37	B	14	3	4.7	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	30	A1				NSD							
G6	31	A31				NSD							
G6	32	B40				NSD							
G6	33	B10				NSD							
G6	34	C10				NSD							
G6	35	C20				NSD							
G6	36	C30				NSD							
G6	37	C33				NSD							
G6	38	C3				NSD							
G6	39	B3	CD	38		MD 1-1	8	6	1.3	Chrysotile			AS>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: *060359* **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-548** Lab/Cor Sample No: **S8**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	39	B3	CD		38	MF	8	0.06	133.3	Chrysotile			AFB>5
G7	40	D33				NSD							
G7	41	D31				NSD							
G7	42	C30				NSD							
G7	43	D40				NSD							
G7	44	D41	CD	39	39	F	1.1	0.06	18.3	Chrysotile			
G7	44	D41	CD	40	40	F	2.3	0.06	38.3	Chrysotile			
G7	45	D42	CD	41		MD 1-1	13	10	1.3	Chrysotile			AS>5
G7	45	D42	CD		41	MF	13	0.06	216.7	Chrysotile			AFB>5
G7	45	D42	CD	42	42	F	2	0.06	33.3	Chrysotile			
G7	45	D42	CD	43		MD 1-0	2	1	2	Chrysotile			
G7	45	D42	CD		43	MF	1.2	0.1	12	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-542** Lab/Cor Sample No: **S12**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A10				NSD							
G6	2	A22				NSD							
G6	3	A3				NSD							
G6	4	D12	CDQ	1	1	F	1.15	0.1	11.5	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J2008 BF					
						Diffraction		J2008		KM	8/25/2006		
						Spectra		J2290					
G6	5	D30	CM	2	2	B	3.7	0.15	24.7	Chrysotile			
G6	6	C42	CD	3	3	F	2.6	0.1	26	Chrysotile			
G6	7	C13				NSD							
G6	8	B4				NSD							
G6	9	B33	CD	4	4	B	1.15	0.15	7.7	Chrysotile			
G6	10	B31				NSD							
G6	11	B40				NSD							
G6	12	B1				NSD							
G6	13	B44	CD	5		CD 2-0	1.7	0.4	4.2	Chrysotile			
G6	13	B44	CD		5	CF	1.7	0.1	17	Chrysotile			
G6	13	B44	CD		6	CF	0.55	0.01	55	Chrysotile			
G6	14	B24	CM	6		MD 1-0	3.5	1.8	1.9	Chrysotile			
G6	14	B24	CM		7	MF	1.5	0.1	15	Chrysotile			
G6	15	C34				NSD							
G6	16	C43				NSD							
G6	17	C23				NSD							
G6	18	B13	CD	7		MD 1-0	5	3.8	1.3	Chrysotile			
G6	18	B13	CD		8	MF	4	0.12	33.3	Chrysotile			
G6	18	B13	CD	8		MD 1-0	6.5	2.5	2.6	Chrysotile			AS>5
G6	18	B13	CD		9	MF	1.25	0.1	12.5	Chrysotile			
G6	19	B42				NSD							
G6	20	B22	CD	9	10	B	2.35	0.12	19.6	Chrysotile			
G6	21	B2				NSD							
G6	22	C12	CD	10		MD 1-0	1.8	1.2	1.5	Chrysotile			
G6	22	C12	CD		11	MF	1.25	0.08	15.6	Chrysotile			
G6	23	C41				NSD							
G6	24	A30				NSD							
G6	25	A41	CDQ	11	12	F	2.75	0.2	13.8	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-542** Lab/Cor Sample No: **S12**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	25	A41	CM	12		MD 1-0	2.75	1.75	1.6	Chrysotile			
G6	25	A41	CM		13	MF	0.7	0.1	7	Chrysotile			
G6	26	A21	CDQ	13	14	F	6	0.1	60	Chrysotile			AS>5, AFB>5
G6	27	A1	ADQ	14	15	B	28.25	4	7.1	Amosite			AFB>5, AS>5
G6	27	A1	CD	15		MD 1-0	4	3	1.3	Chrysotile			
G6	27	A1	CD		16	MF	0.9	0.1	9	Chrysotile			
G6	28	D11				NSD							
G6	29	D31				NSD							
G6	30	D42				NSD							
G7	31	C44				NSD							
G7	32	C24				NSD							
G7	33	C4				NSD							
G7	34	B14				NSD							
G7	35	B34	CMQ	16	17	F	1.75	0.05	35	Chrysotile			
G7	35	B34	CD	17	18	F	0.95	0.05	19	Chrysotile			
G7	36	B43				NSD							
G7	37	B23	CD	18	19	F	1.8	0.08	22.5	Chrysotile			
G7	38	B3	CD	19		MD 1-0	4	2	2	Chrysotile			
G7	38	B3	CD		20	MF	1.7	0.03	56.7	Chrysotile			
G7	39	C13				NSD							
G7	40	C33				NSD							
G7	41	C41				NSD							
G7	42	C21				NSD							
G7	43	C1	CD	20		CD 3-1	6.5	0.85	7.6	Chrysotile			AS>5, PCMES-ISO
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2047					
G7	43	C1	CD		21	CB	6.5	0.22	29.5	Chrysotile			AFB>5, PCMEF-ISO
G7	43	C1	CD		22	CF	3.8	0.12	31.7	Chrysotile			
G7	43	C1	CD		23	CF	1.2	0.1	12	Chrysotile			
G7	43	C1	CD	21	24	F	2.1	0.1	21	Chrysotile			
G7	44	B11	CD	22		MD 1-0	12	10	1.2	Chrysotile			AS>5
G7	44	B11	CD		25	MF	3.8	0.1	38	Chrysotile			
G7	45	B31				NSD							
G7	46	B40	CD	23	26	CC 600-200	30	6.5	4.6	Chrysotile			AS>5
G7	47	B20	CM	24		MD 1-0	1.25	1	1.2	Chrysotile			
G7	47	B20	CM		27	MF	1.2	0.1	12	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-542** Lab/Cor Sample No: **S12**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	47	B20	CD	25		MD 1-0	2.7	1.1	2.5	Chrysotile			
G7	47	B20	CD		28	MF	1.8	0.1	18	Chrysotile			
G7	47	B20	CM	26	29	F	2	0.1	20	Chrysotile			
G7	47	B20	CD	27	30	F	1	0.08	12.5	Chrysotile			
G7	48	B10				NSD							
G7	49	C10				NSD							
G7	50	C30				NSD							
G7	51	D41				NSD							
G7	52	D21	CD	28		MD 1-0	6.2	5	1.2	Chrysotile			AS>5
G7	52	D21	CD		31	MF	3.8	0.1	38	Chrysotile			
G7	53	D1				NSD							
G7	54	A11				NSD							
G7	55	A22				NSD							
G7	56	A2				NSD							
G7	57	D12	CD	29	32	F	2.55	0.1	25.5	Chrysotile			
G7	57	D12	CD	30		MD 1-0	1.2	0.8	1.5	Chrysotile			
G7	57	D12	CD		33	MF	0.8	0.05	16	Chrysotile			
G7	58	D32	CM	31	34	B	10.8	0.2	54	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	59	D43				NSD							
G7	60	D23				NSD							
G8	61	C43	CD	32	35	F	1.1	0.08	13.8	Chrysotile			
G8	62	C23	CD	33	36	F	1.7	0.1	17	Chrysotile			
G8	63	C3				NSD							
G8	64	B13				NSD							
G8	65	B33	CD	34		MD 1-0	6	5	1.2	Chrysotile			AS>5
G8	65	B33	CD		37	MF	1.5	0.1	15	Chrysotile			
G8	65	B33	CD	35		MD 1-1	8.8	4	2.2	Chrysotile			AS>5
G8	65	B33	CD		38	MF	7.5	0.1	75	Chrysotile			AFB>5
G8	66	B22				NSD							
G8	67	B2	CD	36	39	F	1.12	0.1	11.2	Chrysotile			
G8	67	B2	CD	37		MD 1-0	3.8	2.8	1.4	Chrysotile			
G8	67	B2	CD		40	MF	1.8	0.1	18	Chrysotile			
G8	68	C12				NSD							
G8	69	C32				NSD							
G8	70	C21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-542**
Client Description:

Lab/Cor Sample No: **S12**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	71	C1	CD	38	41	B	5.55	0.18	30.8	Chrysotile			AS>5, AFB>5
G8	72	B11	CD	39	42	F	0.85	0.1	8.5	Chrysotile			
G8	73	B31	CM	40	43	B	2.22	0.25	8.9	Chrysotile			
G8	73	B31	CM	41		MD 1-0	2.8	0.6	4.7	Chrysotile			
G8	73	B31	CM		44	MF	0.8	0.05	16	Chrysotile			
G8	74	A30				NSD							
G8	75	A10	CM	42	45	F	1.25	0.1	12.5	Chrysotile			
G8	75	A10	CD	43	46	F	0.55	0.05	11	Chrysotile			
G8	76	D10				NSD							
G8	77	D30				NSD							
G8	78	D41				NSD							
G8	79	D21				NSD							
G8	80	D1				NSD							
G8	81	A11	CM	44		MD 1-0	4	2.5	1.6	Chrysotile			
G8	81	A11	CM		47	MF	1.8	0.1	18	Chrysotile			
G8	82	A22				NSD							
G8	83	A2	CD	45		MD 1-0	6.8	3.8	1.8	Chrysotile			AS>5
G8	83	A2	CD		48	MF	3.5	0.1	35	Chrysotile			
G8	84	D12	CD	46		MD 1-1	10	5	2	Chrysotile			AS>5
G8	84	D12	CD		49	MF	7.7	0.1	77	Chrysotile			AFB>5
G8	85	D32				NSD							
G8	86	D43				NSD							
G8	87	D3				NSD							
G8	88	A13				NSD							
G8	89	A33				NSD							
G8	90	C20				NSD							
G9	91	B44	CM	47	50	F	1	0.08	12.5	Chrysotile			
G9	91	B44	CD	48		MD 1-0	2.5	2	1.2	Chrysotile			
G9	91	B44	CD		51	MF	2	0.1	20	Chrysotile			
G9	92	B24	CD	49	52	B	3.2	0.15	21.3	Chrysotile			
G9	93	B4	CM	50	53	F	0.53	0.08	6.6	Chrysotile			
G9	94	C14				NSD							
G9	95	C34				NSD							
G9	96	C43				NSD							
G9	97	C23				NSD							
G9	98	C3				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-542** Lab/Cor Sample No: **S12**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	99	B13				NSD							
G9	100	B33				NSD							
G9	101	B41				NSD							
G9	102	B21				NSD							
G9	103	B1	CD	51	54	F	0.7	0.1	7	Chrysotile			
G9	104	C11				NSD							
G9	105	C31	CM	52	55	F	1.25	0.08	15.6	Chrysotile			
G9	105	C31	CD	53	56	F	1.8	0.08	22.5	Chrysotile			
G9	106	C40				NSD							
G9	107	C20				NSD							
G9	108	C10				NSD							
G9	109	B10				NSD							
G9	110	B30				NSD							
G9	111	A41				NSD							
G9	112	A21				NSD							
G9	113	A1	CD	54		MD 1-1	8	2.7	3	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2049					
G9	113	A1	CD		57	MB	5.5	0.2	27.5	Chrysotile			AFB>5, PCMEF-ISO
G9	114	D11				NSD							
G9	115	D31				NSD							
G9	116	D42				NSD							
G9	117	D22				NSD							
G9	118	D2	CD	55	58	F	2	0.11	18.2	Chrysotile			
G9	118	D2	CD	56		MD 1-0	1.5	1.1	1.4	Chrysotile			
G9	118	D2	CD		59	MF	1.5	0.1	15	Chrysotile			
G9	119	A12	CD	57		MD 1-0	3.2	2	1.6	Chrysotile			
G9	119	A12	CD		60	MF	1.25	0.1	12.5	Chrysotile			
G9	120	A32				NSD							
G10	121	B44				NSD							
G10	122	B24	CD	58		MD 1-0	4.5	4.5	1	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J2020					
G10	122	B24	CD		61	MF	1.25	0.1	12.5	Chrysotile			
G10	123	B4				NSD							
G10	124	C14				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-542** Lab/Cor Sample No: **S12**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	125	C34	CD	59	62	F	1	0.08	12.5	Chrysotile			
G10	126	C43				NSD							
G10	127	C23				NSD							
G10	128	C3				NSD							
G10	129	B13				NSD							
G10	130	B33				NSD							
G10	131	B41				NSD							
G10	132	B21				NSD							
G10	133	B1				NSD							
G10	134	C11	CD	60	63	F	1.2	0.1	12	Chrysotile			
G10	135	C31	CD	61		MD 1-0	1.8	1.25	1.4	Chrysotile			
G10	135	C31	CD		64	MF	1.8	0.08	22.5	Chrysotile			
G10	135	C31	CD	62		MD 1-0	18	9	2	Chrysotile			AS>5
G10	135	C31	CD		65	MF	4	0.12	33.3	Chrysotile			
G10	136	C40				NSD							
G10	137	C20				NSD							
G10	138	C10				NSD							
G10	139	B10	CD	63	66	F	0.75	0.1	7.5	Chrysotile			
G10	140	B30				NSD							
G10	141	A41				NSD							
G10	142	A21	CD	64		MD 1-0	3	1.5	2	Chrysotile			
G10	142	A21	CD		67	MF	1.8	0.11	16.4	Chrysotile			
G10	142	A21	CD	65		MD 1-0	4	2	2	Chrysotile			
G10	142	A21	CD		68	MF	1.8	0.08	22.5	Chrysotile			
G10	143	A1				NSD							
G10	144	D11				NSD							
G10	145	D41				NSD							
G10	146	D43				NSD							
G10	147	D23	CD	66		CD 2-0	4.1	0.18	22.8	Chrysotile			
G10	147	D23	CD		69	CB	4.1	0.18	22.8	Chrysotile			
G10	147	D23	CD		70	CF	1	0.1	10	Chrysotile			
G10	147	D23	CD	67	71	B	3.2	0.18	17.8	Chrysotile			
G10	148	D3	CD	68		MD 2-0	7	4.8	1.5	Chrysotile			AS>5
G10	148	D3	CD		72	MB	4	0.15	26.7	Chrysotile			
G10	148	D3	CD		73	MF	1.8	0.1	18	Chrysotile			
G10	149	A13	CD	69		MD 1-0	1.5	0.2	7.5	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-542** Lab/Cor Sample No: **S12**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	149	A13	CD		74	MF	1.5	0.05	30	Chrysotile			
G10	149	A13	CD	70	75	F	1.8	0.12	15	Chrysotile			
G10	150	A33				NSD							
G11	151	B44	CD	71		MD 3-1	7	5.5	1.3	Chrysotile			AS>5
G11	151	B44	CD		76	MB	42	0.3	140	Chrysotile			AFB>5, PCMEF-ISO
G11	151	B44	CD		77	MF	1.2	0.08	15	Chrysotile			
G11	151	B44	CD		78	MF	0.8	0.1	8	Chrysotile			
G11	152	B24				NSD							
G11	153	B4				NSD							
G11	154	C14	CD	72		MD 1-1	6.8	3.5	1.9	Chrysotile			AS>5
G11	154	C14	CD		79	MF	5.33	0.11	48.5	Chrysotile			AFB>5
G11	155	C34	CD	73		MD 1-0	3.8	2.7	1.4	Chrysotile			
G11	155	C34	CD		80	MF	2.7	0.1	27	Chrysotile			
G11	156	C33				NSD							
G11	157	C13	CD	74		MD 1-0	1.8	1.5	1.2	Chrysotile			
G11	157	C13	CD		81	MF	1	0.1	10	Chrysotile			
G11	157	C13	CD	75	82	F	1	0.11	9.1	Chrysotile			
G11	157	C13	CD	76	83	F	1.1	0.08	13.8	Chrysotile			
G11	158	B3	CD	77	84	F	1.8	0.1	18	Chrysotile			
G11	159	B23				NSD							
G11	160	B43				NSD							
G11	161	B31	CD	78	85	F	2	0.1	20	Chrysotile			
G11	161	B31	CD	79		MD 1-0	1.8	1.5	1.2	Chrysotile			
G11	161	B31	CD		86	MF	1.25	0.08	15.6	Chrysotile			
G11	162	B11				NSD							
G11	163	C1	CD	80	87	F	0.7	0.1	7	Chrysotile			
G11	164	C21				NSD							
G11	165	C41	CD	81	88	F	0.65	0.08	8.1	Chrysotile			
G11	166	C30	CD	82		MD 1-0	3	2.8	1.1	Chrysotile			
G11	166	C30	CD		89	MF	1.5	0.05	30	Chrysotile			
G11	167	C10				NSD							
G11	168	B10	CD	83		MD 2-0	5.3	4	1.3	Chrysotile			AS>5
G11	168	B10	CD		90	MF	3.7	0.1	37	Chrysotile			
G11	168	B10	CD		91	MF	3.5	0.1	35	Chrysotile			
G11	169	B20				NSD							
G11	170	B40				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-542**
Client Description:

Lab/Cor Sample No: **S12**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G11	171	A31				NSD							
G11	172	A11	CD	84	92	F	1.85	0.1	18.5	Chrysotile			
G11	173	D1	CD	85	93	F	2.5	0.1	25	Chrysotile			
G11	174	D21	CD	86	94	F	2.68	0.1	26.8	Chrysotile			
G11	174	D21	CD	87	95	F	1.5	0.05	30	Chrysotile			
G11	175	D41				NSD							
G11	176	D32				NSD							
G11	177	D12				NSD							
G11	178	A2	CD	88	96	F	4.2	0.1	42	Chrysotile			
G11	179	A22				NSD							
G11	180	A42				NSD							
G12	181	B41				NSD							
G12	182	B21				NSD							
G12	183	B1				NSD							
G12	184	C11				NSD							
G12	185	C31	CD	89	97	F	1.75	0.03	58.3	Chrysotile			
G12	186	D41				NSD							
G12	187	D21	CD	90		MD 1-0	8	6.5	1.2	Chrysotile			AS>5
G12	187	D21	CD		98	MF	1	0.1	10	Chrysotile			
G12	188	D1				NSD							
G12	189	A11				NSD							
G12	190	A31				NSD							
G12	191	A42				NSD							
G12	192	A22	CD	91	99	F	0.7	0.1	7	Chrysotile			
G12	192	A22	CD	92	100	B	3.85	0.3	12.8	Chrysotile			
G12	193	A2				NSD							
G12	194	D12				NSD							
G12	195	D32	CD	93	101	F	0.6	0.08	7.5	Chrysotile			
G12	195	D32	CD	94		MD 1-0	2.85	1.5	1.9	Chrysotile			
G12	195	D32	CD		102	MF	2.2	0.1	22	Chrysotile			
G12	196	C42	CD	95	103	F	4.2	0.1	42	Chrysotile			
G12	197	C22				NSD							
G12	198	C2				NSD							
G12	199	B32	CD	96		MD 1-1	8	3.8	2.1	Chrysotile			AS>5
G12	199	B32	CD		104	MB	8	0.15	53.3	Chrysotile			AFB>5
G12	200	B12				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	*Primary Asbestos Structures*	PCMEF-ISO	*PCM Equivalent Fibers-ISO*
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-557** Lab/Cor Sample No: **S17**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	B10	CDQ	1		CD 2-0	3.75	0.7	5.4	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J2009 BF					
						Diffraction		J2009		KM	8/25/2006		
						Spectra		J2291					
G6	1	B10	CDQ		1	CF	1.5	0.1	15	Chrysotile	Mg, Si		
G6	1	B10	CDQ		2	CR 1-0	3	0.7	4.3	Chrysotile	Mg, Si	15 STR.	
G6	2	B42	ADQ	2		MD 1-0	6.5	4.5	1.4	Amosite	Mg, Si, Fe		AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J2010 BF					
						Diffraction		J2010		KM	8/25/2006	5.3A IMAGE	
						Spectra		J2292					
G6	2	B42	ADQ		3	MF	4	0.4	10	Amosite			
G6	2	B42	ADQ	3	4	F	12.2	0.7	17.4	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	3	B4	NAM	4	5	F	4	0.85	4.7	Non Asbestos Mineral	Si		
G6	4	C42	ADQ	5	6	F	7.5	0.48	15.6	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	4	C42	CD	6	7	F	1.75	0.1	17.5	Chrysotile			
G6	5	C10	ADQ	7	8	F	4.35	0.3	14.5	Amosite			
G6	6	D4	CM	8	9	F	3.2	0.11	29.1	Chrysotile			
G6	7	A41	CM	9		MD 2-0	1.8	0.7	2.6	Chrysotile			
G6	7	A41	CD		10	MF	1.2	0.1	12	Chrysotile			
G6	7	A41	CD		11	MF	0.7	0.1	7	Chrysotile			
G6	7	A41	ADQ	10	12	F	10.7	0.5	21.4	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	7	A41	ADQ	11	13	F	12.5	0.65	19.2	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	7	A41	CD	12	14	F	1.9	0.1	19	Chrysotile			
G6	8	A40	AZQ	13		MD 1-0	5.3	3.8	1.4	Amosite	Mg, Si, Mn, Fe		AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2110 BF					
						Diffraction		P2110		KM	9/12/2006	ZONE AXIS [2 0 1]	
						Spectra		P17405					
G6	8	A40	AZQ		15	MF	3.85	0.6	6.4	Amosite			
G6	9	A20	CD	14	16	F	1.8	0.1	18	Chrysotile			
G6	9	A20	CD	15	17	F	1.15	0.08	14.4	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-557** Lab/Cor Sample No: **S17**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	10	D10	ADQ	16	18	F	2.2	0.4	5.5	Amosite	Mg, Si, Fe		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2111					
G6	10	D10	ADQ	17	19	F	1.38	0.4	3.5	Amosite	Mg, Si, Fe		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2111					
G6	10	D10	CD	18	20	F	3.6	0.1	36	Chrysotile			
G6	10	D10	ADQ	19		MD 1-1	28	25	1.1	Amosite			AS>5
G6	10	D10	ADQ		21	MF	30	0.25	120	Amosite			AFB>5, PCMEF-ISO
G6	10	D10	CD	20	22	F	3	0.1	30	Chrysotile			
G6	10	D10	ADQ	21		MD 1-0	11	8.5	1.3	Amosite			AS>5
G6	10	D10	ADQ		23	MF	4.2	0.3	14	Amosite			
G6	11	D20	CD	22	24	F	2.5	0.1	25	Chrysotile			
G6	11	D20	CD	23		MD 1-0	4.8	2.8	1.7	Chrysotile			
G6	11	D20	CD		25	MF	2.5	0.1	25	Chrysotile			
G6	11	D20	ADQ	24	26	F	4	0.28	14.3	Amosite			
G6	11	D20	CD	25		MD 1-1	7.5	3	2.5	Chrysotile			AS>5
G6	11	D20	CD		27	MF	7.5	0.1	75	Chrysotile			AFB>5
G6	11	D20	CD	26		MD 1-0	0.9	0.3	3	Chrysotile			
G6	11	D20	CD		28	MF	0.7	0.1	7	Chrysotile			
G6	11	D20	ADQ	27		MD 1-0	7.5	4.5	1.7	Amosite			AS>5
G6	11	D20	ADQ		29	MF	4	0.3	13.3	Amosite			
G6	11	D20	CD	28	30	F	4	0.1	40	Chrysotile			
G6	12	D40				NSD							
G7	13	B14	ADQ	29		MD 1-1	9	6.5	1.4	Amosite			AS>5
G7	13	B14	ADQ		31	MF	10.8	0.4	27	Amosite			AFB>5, PCMEF-ISO
G7	13	B14	ADQ	30	32	F	41.5	0.4	103.8	Amosite			AS>5, AFB>5, PCMEF-ISO, PCMES-ISO
G7	13	B14	CD	31	33	F	4.55	0.1	45.5	Chrysotile			
G7	14	B44				NSD							
G7	15	C14	CD	32		MD 1-1	11.8	1.5	7.9	Chrysotile			AS>5, PCMES-ISO
G7	15	C14	CD		34	MF	11.8	0.11	107.3	Chrysotile			AFB>5
G7	15	C14	CD	33		MD 1-0	3	1	3	Chrysotile			
G7	15	C14	CD		35	MF	2	0.08	25	Chrysotile			
G7	15	C14	ADQ	34	36	F	1.75	0.18	9.7	Amosite			
G7	15	C14	ADQ	35		MD 1-1	25	12	2.1	Amosite			AS>5
G7	15	C14	ADQ		37	MF	6	0.38	15.8	Amosite			AFB>5, PCMEF-ISO

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-557** Lab/Cor Sample No: **S17**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	16	C44	CD	36	38	F	0.75	0.1	7.5	Chrysotile			
G7	16	C44	ADQ	37	39	F	11	0.38	28.9	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	17	C33				NSD							
G7	18	C3	CD	38	40	F	1.7	0.1	17	Chrysotile			
G7	18	C3	CD	39	41	F	0.55	0.05	11	Chrysotile			
G7	18	C3	ADQ	40	42	F	61.8	0.6	103	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	19	B23	CD	41		MD 1-0	4.2	1.5	2.8	Chrysotile			
G7	19	B23	CD		43	MF	1.8	0.1	18	Chrysotile			
G7	19	B23	CD	42		MD 1-0	11.5	7	1.6	Chrysotile			AS>5
G7	19	B23	CD		44	MB	4.2	0.2	21	Chrysotile			
G7	20	B42	ADQ	43		MD 1-1	7.5	5	1.5	Amosite			AS>5
G7	20	B42	ADQ		45	MF	5.4	0.4	13.5	Amosite			AFB>5, PCMEF-ISO
G7	20	B42	ADQ	44	46	F	6	0.38	15.8	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	21	B12	CD	45		MD 1-0	4.7	1.8	2.6	Chrysotile			
G7	21	B12	CD		47	MF	1.5	0.05	30	Chrysotile			
G7	21	B12	CD	46		MD 1-0	2	0.8	2.5	Chrysotile			
G7	21	B12	CD		48	MB	2	0.15	13.3	Chrysotile			
G7	21	B12	ADQ	47	49	F	1.5	0.4	3.8	Amosite			
G7	22	C12	ADQ	48	50	F	5.7	0.5	11.4	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	23	C42	ADQ	49	51	F	6	1.12	5.4	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	24	C30				NSD							
G7	25	C10	ADQ	50	52	F	5	0.4	12.5	Amosite			
G7	25	C10	ADQ	51	53	F	2.2	0.35	6.3	Amosite			
G7	25	C10	ADQ	52		MD 1-0	10	5	2	Amosite			AS>5
G7	25	C10	ADQ	53	54	MF	1.8	0.25	7.2	Amosite			
G7	25	C10	CD	54		MD 1-1	13	10	1.3	Chrysotile			AS>5
G7	25	C10	CD		55	MF	6.5	0.1	65	Chrysotile			AFB>5
G7	26	B20	ADQ	55	56	F	7	0.6	11.7	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	26	B20	CD	56	57	F	7.5	0.1	75	Chrysotile			AS>5, AFB>5
G7	27	D41	CD	57	58	F	0.6	0.1	6	Chrysotile			
G7	27	D41	ADQ	58		MD 1-1	13	12	1.1	Amosite			AS>5
G7	27	D41	ADQ		59	MF	10	0.2	50	Amosite			AFB>5, PCMEF-ISO

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-557**
Client Description:

Lab/Cor Sample No: **S17**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	28	D11	ADQ	59	60	F	16.75	0.5	33.5	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	28	D11	CD	60		MD 1-0	4	2	2	Chrysotile			
G7	28	D11	CD		61	MF	1.8	0.08	22.5	Chrysotile			
G7	28	D11	CD	61	62	F	1.8	0.1	18	Chrysotile			
G7	28	D11	ADQ	62	63	F	3.85	0.8	4.8	Amosite			
G7	29	C11	ADQ	63	64	F	4	0.65	6.2	Amosite			
G7	30	C41	CD	64	65	B	4.9	0.175	28	Chrysotile			
G7	30	C41	ADQ	65	66	F	2	0.12	16.7	Amosite			
G7	30	C41	ADQ	66	67	F	1.25	0.12	10.4	Amosite			
G8	31	B42	CD	67	68	F	0.7	0.08	8.8	Chrysotile			
G8	31	B42	ADQ	68	69	F	10.5	0.3	35	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G8	32	B12	CD	69		MD 1-0	3.5	1	3.5	Chrysotile			
G8	32	B12	CD		70	MF	1.8	0.12	15	Chrysotile			
G8	32	B12	CD	70	71	F	0.5	0.08	6.2	Chrysotile			
G8	33	C12	ADQ	71	72	F	2.65	0.7	3.8	Amosite			
G8	34	C42	ADQ	72		MD 1-1	11	11	1	Amosite			AS>5
G8	34	C42	ADQ		73	MF	10.75	0.5	21.5	Amosite			AFB>5, PCMEF-ISO
G8	34	C42	CD	73	74	F	0.7	0.08	8.8	Chrysotile			
G8	34	C42	CD	74	75	F	6.7	0.12	55.8	Chrysotile			AS>5, AFB>5
G8	34	C42	ADQ	75	76	F	13	0.4	32.5	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G8	35	C31	CD	76	77	F	4	0.11	36.4	Chrysotile			
G8	36	C1	ADQ	77		MD 1-1	18	13	1.4	Amosite			AS>5
G8	36	C1	ADQ		78	MF	7	0.3	23.3	Amosite			AFB>5, PCMEF-ISO
G8	36	C1	CD	78	79	B	1.25	0.12	10.4	Chrysotile			
G8	36	C1	CD	79	80	F	1.1	0.11	10	Chrysotile			
G8	37	B21	CD	80	81	F	1.2	0.08	15	Chrysotile			
G8	37	B21	ADQ	81	82	F	3.7	0.22	16.8	Amosite			
G8	37	B21	CD	82	83	F	1.1	0.08	13.8	Chrysotile			
G8	38	A41				NSD							
G8	39	A11	CD	83	84	F	0.8	0.08	10	Chrysotile			
G8	39	A11	ADQ	84		MD 1-0	8	5	1.6	Amosite			AS>5
G8	39	A11	ADQ		85	MF	2.2	0.4	5.5	Amosite			
G8	39	A11	ADQ	85	86	F	1.6	0.12	13.3	Amosite			
G8	39	A11	ADQ	86	87	F	0.7	0.12	5.8	Amosite			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-557**
Client Description:

Lab/Cor Sample No: **S17**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	39	A11	CD	87	88	F	0.8	0.1	8	Chrysotile			
G8	39	A11	CD	88	89	F	0.8	0.1	8	Chrysotile			
G8	40	D11	CD	89	90	B	5.5	0.12	45.8	Chrysotile			AS>5, AFB>5
G8	40	D11	ADQ	90	91	F	5.75	0.33	17.4	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G8	40	D11	CD	91		MD 1-0	1.8	0.4	4.5	Chrysotile			
G8	40	D11	CD		92	MF	1.8	0.07	25.7	Chrysotile			
G8	41	D41	ADQ	92	93	F	22	1.25	17.6	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G8	42	A13	ADQ	93	94	F	8	0.55	14.5	Amosite			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G8	42	A13	ADQ	94	95	F	1.8	0.1	18	Amosite			
G8	42	A13	CD	95	96	B	3.75	0.15	25	Chrysotile			
G8	42	A13	CD	96	97	B	0.85	0.15	5.7	Chrysotile			
G8	43	D13	ADQ	97		MD 1-1	20	5.8	3.4	Amosite			AS>5
G8	43	D13	ADQ		98	MF	19	0.85	22.4	Amosite			AFB>5, PCMEF-ISO
G8	43	D13	CD	98		MD 1-0	2.7	1.5	1.8	Chrysotile			
G8	43	D13	CD		99	MF	1.2	0.05	24	Chrysotile			
G8	44	D43				NSD							
G8	45	D20	ADQ	99	100	F	2	0.35	5.7	Amosite			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A33				NSD							
G6	2	A3				NSD							
G6	3	D13				NSD							
G6	4	D33	CDQ	1	1	F	1.2	0.06	20	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		326				Neg #402	
						Brightfield		327				Neg #403	
						Spectra		1210					
G6	5	D31				NSD							
G6	6	D11				NSD							
G6	7	A1				NSD							
G6	8	A30				NSD							
G6	9	B40				NSD							
G6	10	B20				NSD							
G6	11	C10	CD	2	2	F	1.7	0.06	28.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		360				060359-S22-A1-G1-ST56-3000	
G6	12	C20				NSD							
G6	13	C30				NSD							
G6	14	C32				NSD							
G6	15	C12				NSD							
G6	16	B2				NSD							
G6	17	B22				NSD							
G6	18	B32				NSD							
G6	19	B13				NSD							
G6	20	C3				NSD							
G7	21	A33				NSD							
G7	22	A23				NSD							
G7	23	A24				NSD							
G7	24	A14				NSD							
G7	25	A4	CD	3		MD 1-0	2	1	2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		474				060359-S22-G7-ST26-3000	
G7	25	A4	CD		3	MF	2	0.06	33.3	Chrysotile			
G7	26	D14				NSD							
G7	27	D24				NSD							
G7	28	D33				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	29	D13				NSD							
G7	30	D3				NSD							
G7	31	A22				NSD							
G7	32	A42				NSD							
G7	33	A2				NSD							
G7	34	D12				NSD							
G7	35	D32				NSD							
G7	36	D30				NSD							
G7	37	D10				NSD							
G7	38	A10				NSD							
G7	39	A30				NSD							
G7	40	A40				NSD							
G7	41	B20				NSD							
G7	42	B10				NSD							
G7	43	C10	CD	4	4	F	2.1	0.07	30	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		475				060359-S22-G7-ST121-3000	
G7	44	C20				NSD							
G7	45	C21				NSD							
G7	46	C1				NSD							
G7	47	B1	CD	5	5	F	2.5	0.06	41.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		476				060359-S22-G7-ST141-2000	
G7	48	B11				NSD							
G7	49	B21	CD	6	6	F	1.1	0.1	11	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		477				060359-S22-G7-ST151-3000	
G7	50	B41				NSD							
G7	51	B42				NSD							
G7	52	B12				NSD							
G7	53	B2				NSD							
G7	54	C2				NSD							
G7	55	C12				NSD							
G7	56	C22				NSD							
G7	57	C3				NSD							
G7	58	B3				NSD							
G7	59	B33				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	60	B14				NSD							
G7	61	C4				NSD							
G7	62	C24				NSD							
G8	63	D4				NSD							
G8	64	D24				NSD							
G8	65	D34				NSD							
G8	66	D34				NSD							
G8	67	D13				NSD							
G8	68	D3				NSD							
G8	69	A3				NSD							
G8	70	A23				NSD							
G8	71	A33				NSD							
G8	72	A32				NSD							
G8	73	A12				NSD							
G8	74	D22				NSD							
G8	75	D32				NSD							
G8	76	D42				NSD							
G8	77	D22				NSD							
G8	78	D40	ADQ	7	7	F	5.5	0.45	12.2	Amosite	Mg, Al, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO

ItemType	ItemNum	Confirmed		Comment
Diffraction	478	JH	9/25/2006	Neg #445
Brightfield	479			Neg #446
Spectra	1227			

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	79	D30				NSD							
G8	80	C30				NSD							
G8	81	C40				NSD							
G8	82	C31				NSD							
G8	83	C21				NSD							
G8	84	B1				NSD							
G8	85	B11				NSD							
G8	86	C2				NSD							
G8	87	C12				NSD							
G8	88	C22				NSD							
G8	89	D41				NSD							
G8	90	D31				NSD							
G8	91	D21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	92	D11				NSD							
G8	93	D1	CD	8	8	F	1.5	0.06	25	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		480				060359-S22-G8-ST156-4000	
G8	94	A1	CD	9	9	F	6	0.06	100	Chrysotile			AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		481				060359-S22-G8-ST161-1000	
G8	95	A11				NSD							
G9	96	A34				NSD							
G9	97	A4				NSD							
G9	98	D4				NSD							
G9	99	D24				NSD							
G9	100	D33				NSD							
G9	101	D13				NSD							
G9	102	A23				NSD							
G9	103	A33				NSD							
G9	104	A22				NSD							
G9	105	A12				NSD							
G9	106	A2				NSD							
G9	107	D12				NSD							
G9	108	D32				NSD							
G9	109	D41				NSD							
G9	110	D21				NSD							
G9	111	D1				NSD							
G9	112	A1				NSD							
G9	113	A11				NSD							
G9	114	A10	CD	10	10	F	1.1	0.05	22	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		483				060359-S22-G9-ST96-2000	
G9	115	D10				NSD							
G9	116	D40	CD	11	11	B	13.5	0.2	67.5	Chrysotile			AS>5, AFB>5, PCMEF-ISO, PCMES-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		484				060359-S22-G9-ST106-1000	
G9	117	C30				NSD							
G9	118	C20				NSD							
G9	119	C10				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	120	B10	CD	12		MD 1-0	4.7	2.6	1.8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		485				060359-S22-G9-ST126-1000	
G9	120	B10	CD		12	MF	4.7	0.08	58.8	Chrysotile			
G9	121	A10				NSD							
G9	122	B40				NSD							
G9	123	B31				NSD							
G9	124	B21				NSD							
G9	125	B11				NSD							
G9	126	B1				NSD							
G9	127	C21				NSD							
G9	128	C31				NSD							
G9	129	C42				NSD							
G9	130	C32				NSD							
G9	131	B2				NSD							
G9	132	B22				NSD							
G9	133	B32				NSD							
G9	134	B33				NSD							
G9	135	B13				NSD							
G9	136	B3				NSD							
G9	137	C3				NSD							
G9	138	C13				NSD							
G9	139	C23				NSD							
G9	140	C24				NSD							
G9	141	C14				NSD							
G9	142	C4				NSD							
G9	143	B14				NSD							
G10	144	A4				NSD							
G10	145	D4				NSD							
G10	146	D14				NSD							
G10	147	D24				NSD							
G10	148	D43				NSD							
G10	149	D23				NSD							
G10	150	D3				NSD							
G10	151	A3				NSD							
G10	152	A23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562**
Client Description:

Lab/Cor Sample No: **S22**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	153	A43				NSD							
G10	154	A41				NSD							
G10	155	A31				NSD							
G10	156	A21				NSD							
G10	157	A11				NSD							
G10	158	D1				NSD							
G10	159	D11				NSD							
G10	160	D21				NSD							
G10	161	D31				NSD							
G10	162	D41				NSD							
G10	163	C40				NSD							
G10	164	C20				NSD							
G10	165	C10				NSD							
G10	166	B10				NSD							
G10	167	B20				NSD							
G10	168	B30				NSD							
G10	169	B40				NSD							
G10	170	B31				NSD							
G10	171	B11				NSD							
G10	172	B1				NSD							
G10	173	C1				NSD							
G10	174	C11				NSD							
G10	175	C21	CD	13	13	B	6.5	1	6.5	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		486				060359-S22-G10-ST161-1000	
G10	176	C31				NSD							
G10	177	C22				NSD							
G10	178	C12				NSD							
G10	179	C2	CD	14		MD 1-1	7.5	4.8	1.6	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		487				060359-S22-G10-ST181-3000	
G10	179	C2	CD		14	MF	6	0.06	100	Chrysotile			AFB>5
G10	180	B2				NSD							
G10	181	B22				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	182	B42	CD	15	15	F	9	0.1	90	Chrysotile			AS>5, AFB>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		488			060359-S22-G10-ST201-2000		
G10	183	B34				NSD							
G10	184	B14				NSD							
G10	185	B4				NSD							
G10	186	C4				NSD							
G10	187	C14				NSD							
G10	188	C24				NSD							
G11	189	A24				NSD							
G11	190	A14				NSD							
G11	191	A4				NSD							
G11	192	D4				NSD							
G11	193	D14				NSD							
G11	194	D24				NSD							
G11	195	D33				NSD							
G11	196	D13				NSD							
G11	197	A3				NSD							
G11	198	A23				NSD							
G11	199	A33				NSD							
G11	200	A43				NSD							
G11	201	A41	CD	16	16	MC 25-0	7.5	7	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		489			060359-S22-G11-ST66-2000		
G11	202	A31				NSD							
G11	203	A21				NSD							
G11	204	A11				NSD							
G11	205	A1				NSD							
G11	206	D1	CD	17	17	F	0.9	0.05	18	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		490			060359-S22-G11-ST91-6000		
G11	207	D11				NSD							
G11	208	D21				NSD							
G11	209	D31				NSD							
G11	210	D41				NSD							
G11	211	C40				NSD							
G11	212	C30				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G11	213	C20	CD	18		MD 1-0	2.6	1.5	1.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		491				060359-S22-G11-ST126-7000	
G11	213	C20	CD		18	MF	2.6	0.06	43.3	Chrysotile			
G11	214	C10				NSD							
G11	215	B10				NSD							
G11	216	B20				NSD							
G11	217	B30				NSD							
G11	218	B40				NSD							
G11	219	B31	CD	19		MD 1-0	4.9	2.2	2.2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		492				060359-S22-G11-ST161-3500	
G11	219	B31	CD		19	MB	4.9	0.2	24.5	Chrysotile			
G11	220	B11				NSD							
G11	221	C1				NSD							
G11	222	C21				NSD							
G11	223	C41	CD	20	20	F	1.6	0.06	26.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		493				060359-S22-G11-ST186-4000	
G11	224	C42				NSD							
G11	225	C32				NSD							
G11	226	C12				NSD							
G11	227	B2				NSD							
G11	228	B22	CD	21	21	F	3.8	0.06	63.3	Chrysotile			
G11	229	B32				NSD							
G11	230	B42	CD	22		MD 1-0	5.5	3	1.8	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		494				060359-S22-G11-ST221-3500	
G11	230	B42	CD		22	MF	4	0.2	20	Chrysotile			
G11	231	B43				NSD							
G11	232	B33				NSD							
G11	233	B13				NSD							
G11	234	C3				NSD							
G11	235	C23				NSD							
G11	236	C33				NSD							
G11	237	C24				NSD							
G11	238	C4				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G11	239	B14				NSD							
G11	240	B24	CD	23	23	F	1.5	0.06	25	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		495				060359-S22-G11-ST276-2000	
G11	241	B34				NSD							
G12	242	A24				NSD							
G12	243	A14				NSD							
G12	244	A4				NSD							
G12	245	D4	CD	24		MD 4-0	4	2.7	1.5	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		496				060359-S22-G12-ST21-4000	
G12	245	D4	CD		24	MF	3.8	0.04	95	Chrysotile			
G12	245	D4	CD		25	MR 3-0	0.7	0.5	1.4	Chrysotile			
G12	245	D4	CD	25	26	F	1.2	0.09	13.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		497				060359-S22-G12-ST36-2000	
G12	245	D4	CD	26	27	F	0.6	0.09	6.7	Chrysotile			
G12	246	D14				NSD							
G12	247	D24	ADQ	27	28	B	66	2	33	Actinolite	Mg, Si, Ca, Fe		AFB>5, AS>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction				JH	9/25/2006	0.53 nm row spacing	
						Brightfield		500				Neg #449	
						Spectra							
G12	248	D43	CD	28	29	F	5.2	0.07	74.3	Chrysotile			AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		501				060359-S22-G12-ST56-6000	
G12	249	D23				NSD							
G12	250	D3				NSD							
G12	251	A3	CD	29	30	F	1.6	0.05	32	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		502				060359-S22-G12-ST71-2000	
G12	252	A23				NSD							
G12	253	A43				NSD							
G12	254	A42	CD	30		MD 2-0	3.7	2.1	1.8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		503				060359-S22-G12-ST786-5000	
G12	254	A42	CD		31	MF	2.1	0.07	30	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G12	254	A42	CD		32	MF	1.6	0.07	22.9	Chrysotile			
G12	255	A22	ADQ	31		MD 1-1	22	20	1.1	Amosite			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction				JH	9/25/2006	0.53 nm row spacing	
						Brightfield		504				Neg #451	
						Spectra		1243					
G12	255	A22	ADQ		33	MB	22	1	22	Amosite			AFB>5, PCMEF-ISO
G12	256	A2	CD	32		MD 1-0	2.8	1	2.8	Chrysotile			
G12	256	A2	CD		34	MF	2.6	0.07	37.1	Chrysotile			
G12	257	D12				NSD							
G12	258	D32				NSD							
G12	259	D42				NSD							
G12	260	C40				NSD							
G12	261	C30				NSD							
G12	262	C20				NSD							
G12	263	C10				NSD							
G12	264	B10				NSD							
G12	265	B20				NSD							
G12	266	B30				NSD							
G12	267	B40				NSD							
G12	268	B41				NSD							
G12	269	B31				NSD							
G12	270	B21				NSD							
G12	271	B11				NSD							
G12	272	B1				NSD							
G12	273	C1	CD	33	35	F	1.7	0.06	28.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		505				060359-S22-G12-ST201-3000	
G12	273	C1	CD	34	36	F	0.51	0.06	8.5	Chrysotile			
G12	274	C11				NSD							
G12	275	C21	CD	35		MD 1-0	1.9	0.5	3.8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		506				060359-S22-G12-ST216-3000	
G12	275	C21	CD		37	MF	1.9	0.06	31.7	Chrysotile			
G12	275	C21	CD	36	38	F	2	0.08	25	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		506				060359-S22-G12-ST216-1500	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G12	276	C31				NSD							
G12	277	C41				NSD							
G12	278	C32				NSD							
G12	279	C12				NSD							
G12	280	B2				NSD							
G12	281	B22	CD	37		MD 1-0	2.5	1.3	1.9	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		507				060359-S22-G12-ST256-3000	
G12	281	B22	CD		39	MF	2.5	0.06	41.7	Chrysotile			
G12	282	B32				NSD							
G12	283	B42				NSD							
G12	284	B33				NSD							
G12	285	B13	CD	38		MD 1-0	1.9	0.7	2.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		508				060359-S22-G12-ST281-5000	
G12	285	B13	CD		40	MF	1.9	0.07	27.1	Chrysotile			
G12	286	C3				NSD							
G12	287	C23				NSD							
G12	288	C43				NSD							
G12	289	C24				NSD							
G12	290	C14	CD	39	41	F	2.5	0.06	41.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		509				060359-S22-G12-ST311-3000	
G12	291	C4				NSD							
G12	292	B4				NSD							
G12	293	B14				NSD							
G12	294	B24				NSD							
G13	295	A14				NSD							
G13	296	A4				NSD							
G13	297	D4				NSD							
G13	298	D14				NSD							
G13	299	D24				NSD							
G13	300	D34				NSD							
G13	301	D33				NSD							
G13	302	D13	CD	40		MD 1-1	8.5	6	1.4	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		510				060359-S22-G13-ST41-2000	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G13	302	D13	CD		42	MF	6	0.06	100	Chrysotile			AFB>5
G13	302	D13	CD	41		MD 1-1	5.1	2	2.5	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		511				060359-S22-G13-ST51-3000	
G13	302	D13	CD		43	MF	5.1	0.1	51	Chrysotile			AFB>5
G13	303	A3				NSD							
G13	304	A23				NSD							
G13	305	A43				NSD							
G13	306	A41				NSD							
G13	307	A11				NSD							
G13	308	A1				NSD							
G13	309	D1				NSD							
G13	310	D11				NSD							
G13	311	D21				NSD							
G13	312	D31				NSD							
G13	313	D41				NSD							
G13	314	D40				NSD							
G13	315	D20				NSD							
G13	316	D10	CD	42		MD 1-1	15	6	2.5	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		512				060359-S22-G13-ST126-1000	
G13	316	D10	CD		44	MF	7.5	0.06	125	Chrysotile			AFB>5
G13	317	A10				NSD							
G13	318	A20				NSD							
G13	319	A30				NSD							
G13	320	A40				NSD							
G13	321	B40				NSD							
G13	322	B20				NSD							
G13	323	C10				NSD							
G13	324	C30	CD	43	45	F	5.6	0.08	70	Chrysotile			AS>5. AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		513				060359-S22-G13-ST171-2500	
G13	324	C30	CD	44	46	F	1.2	0.08	15	Chrysotile			
G13	325	C40				NSD							
G13	326	C41				NSD							
G13	327	C31				NSD							
G13	328	C21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G13	329	C11				NSD							
G13	330	C1				NSD							
G13	331	B1				NSD							
G13	332	B11				NSD							
G13	333	B21	CD	45		MD 1-1	27	15	1.8	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		514				060359-S22-G13-ST221-1000	
G13	333	B21	CD		47	MB	25	0.1	250	Chrysotile			AFB>5
G13	334	B31				NSD							
G13	335	B41				NSD							
G13	336	B42				NSD							
G13	337	B22				NSD							
G13	338	B2				NSD							
G13	339	C2				NSD							
G13	340	C22				NSD							
G13	341	C42				NSD							
G13	342	C43				NSD							
G13	343	C33				NSD							
G13	344	C13				NSD							
G13	345	B3				NSD							
G13	346	B23				NSD							
G13	347	B43				NSD							
G13	348	B24				NSD							
G13	349	B14				NSD							
G13	350	B4				NSD							
G13	351	C4				NSD							
G13	352	C14				NSD							
G13	353	C24	CD	46	48	F	3.5	0.08	43.8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		515				060359-S22-G13-ST326-2000	
G14	354	A24				NSD							
G14	355	A14	CD	47	49	B	15.5	0.15	103.3	Chrysotile			AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		516				060359-S22-G14-ST11-1500	
G14	355	A14	CD	48		MD 1-0	2.7	1	2.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		517				060359-S22-G14-ST16-2500	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G14	355	A14	CD		50	MF	1.4	0.08	17.5	Chrysotile			
G14	356	D4				NSD							
G14	357	D24				NSD							
G14	358	D43				NSD							
G14	359	D13				NSD							
G14	360	A3				NSD							
G14	361	A23				NSD							
G14	362	A43				NSD							
G14	363	A41				NSD							
G14	364	A31				NSD							
G14	365	A21				NSD							
G14	366	A11	CD	49	51	F	0.9	0.05	18	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		518				060359-S22-G14-ST76-2500	
G14	367	A1				NSD							
G14	368	D1				NSD							
G14	369	D21				NSD							
G14	370	D41				NSD							
G14	371	D40				NSD							
G14	372	D20	CD	50	52	F	2.7	0.1	27	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		519				060359-S22-G14-ST106-5000	
G14	373	D10				NSD							
G14	374	A10				NSD							
G14	375	A30				NSD							
G14	376	A40				NSD							
G14	377	B41				NSD							
G14	378	B31				NSD							
G14	379	B21				NSD							
G14	380	B11				NSD							
G14	381	B1				NSD							
G14	382	C1	CD	51		MD 1-0	1.8	0.5	3.6	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		520				060359-S22-G14-ST156-6000	
G14	382	C1	CD		53	MF	1.8	0.06	30	Chrysotile			
G14	383	C11				NSD							
G14	384	C21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G14	385	C42				NSD							
G14	386	C32				NSD							
G14	387	C22				NSD							
G14	388	C2				NSD							
G14	389	B2				NSD							
G14	390	B12				NSD							
G14	391	B22				NSD							
G14	392	B32				NSD							
G14	393	B42				NSD							
G14	394	B43				NSD							
G14	395	B23				NSD							
G14	396	C3				NSD							
G14	397	C13				NSD							
G14	398	C23	CD	52	54	B	8	0.2	40	Chrysotile			PCMES-ISO, PCMEF-ISO, AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		521				060359-S22-G14-ST241-1500	
G14	398	C23	CD	53	55	F	0.7	0.06	11.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		522				060359-S22-G14-ST246-2000	
G14	399	C33				NSD							
G14	400	C43				NSD							
G15	401	A24	CD	54	56	B	0.9	0.1	9	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		523				060359-S22-G15-ST6-2000	
G15	402	A14				NSD							
G15	403	A4				NSD							
G15	404	D4				NSD							
G15	405	D24				NSD							
G15	406	D34				NSD							
G15	407	D34				NSD							
G15	408	D43				NSD							
G15	409	D23				NSD							
G15	410	D3				NSD							
G15	411	A33	CD	55		MD 1-0	2.8	2.2	1.3	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G15	411	A33	CD		57	MF	2.8	0.07	40	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		524				060359-S22-G15-ST61-5000	
G15	412	A43				NSD							
G15	413	A42				NSD							
G15	414	A32				NSD							
G15	415	A22				NSD							
G15	416	A12				NSD							
G15	417	A2				NSD							
G15	418	D2	CD	56		MD 1-0	2.1	0.5	4.2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		525				060359-S22-G15-ST96-1500	
G15	418	D2	CD		58	MF	2.1	0.07	30	Chrysotile			
G15	419	D12				NSD							
G15	420	D22				NSD							
G15	421	D32				NSD							
G15	422	D42				NSD							
G15	423	D41				NSD							
G15	424	D21				NSD							
G15	425	D1				NSD							
G15	426	A11				NSD							
G15	427	A30				NSD							
G15	428	A20				NSD							
G15	429	A10				NSD							
G15	430	D10				NSD							
G15	431	D20				NSD							
G15	432	D30				NSD							
G15	433	D40				NSD							
G15	434	C40				NSD							
G15	435	C20				NSD							
G15	436	C10				NSD							
G15	437	B20				NSD							
G15	438	B30				NSD							
G15	439	B40				NSD							
G15	440	B41				NSD							
G15	441	B21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G15	442	B1				NSD							
G15	443	C11				NSD							
G15	444	C31				NSD							
G15	445	C41				NSD							
G15	446	C42				NSD							
G15	447	C32				NSD							
G15	448	C22				NSD							
G15	449	C12				NSD							
G15	450	B2				NSD							
G15	451	B12				NSD							
G15	452	B22				NSD							
G15	453	B32	CD	57	59	B	3.5	0.15	23.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		526				060359-S22-G15-ST276-4000	
G15	454	B42				NSD							
G15	455	B43				NSD							
G15	456	B33				NSD							
G15	457	B13				NSD							
G15	458	D23				NSD							
G15	459	D43				NSD							
G15	460	D24				NSD							
G15	461	D14				NSD							
G15	462	D4				NSD							
G15	463	B14				NSD							
G15	464	B24				NSD							
G16	465	A24	CD	58		MD 1-0	8.5	7.6	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		527				060359-S22-G16-ST6-2000	
G16	465	A24	CD		60	MF	3.1	0.08	38.8	Chrysotile			
G16	466	A14				NSD							
G16	467	A4				NSD							
G16	468	D4				NSD							
G16	469	D3				NSD							
G16	470	A13				NSD							
G16	471	A33	CD	59		MD 1-1	6.5	2.5	2.6	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		528				060359-S22-G16-ST41-2000	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	*Primary Asbestos Structures*	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G16	471	A33	CD		61	MF	6.5	0.1	65	Chrysotile			AFB>5
G16	471	A33	CD	60	62	F	2.1	0.08	26.2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		529				060359-S22-G16-ST51-4000	
G16	472	A43				NSD							
G16	473	A42				NSD							
G16	474	A22				NSD							
G16	475	A2				NSD							
G16	476	D12				NSD							
G16	477	D32				NSD							
G16	478	D41				NSD							
G16	479	D31				NSD							
G16	480	D21				NSD							
G16	481	D11				NSD							
G16	482	D1				NSD							
G16	483	A1				NSD							
G16	484	A21				NSD							
G16	485	A31				NSD							
G16	486	A41				NSD							
G16	487	A40				NSD							
G16	488	A20				NSD							
G16	489	A10				NSD							
G16	490	D10				NSD							
G16	491	D20				NSD							
G16	492	D40				NSD							
G16	493	C30				NSD							
G16	494	C20				NSD							
G16	495	B10				NSD							
G16	496	B30				NSD							
G16	497	B40				NSD							
G16	498	B41				NSD							
G16	499	B31				NSD							
G16	500	B21				NSD							
G16	501	B11				NSD							
G16	502	C1				NSD							
G16	503	C21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G16	504	C31	CD	61	63	F	1.9	0.07	27.1	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		530				060359-S22-G16-ST216-2000	
G16	505	C41	CD	62	64	B	1.8	0.25	7.2	Chrysotile			
G16	505	C41	CD	63	65	B	1	0.25	4	Chrysotile			
G16	506	C42				NSD							
G16	507	C32				NSD							
G16	508	C22				NSD							
G16	509	C2				NSD							
G16	510	B2				NSD							
G16	511	B12				NSD							
G16	512	B22				NSD							
G16	513	B32				NSD							
G16	514	B43				NSD							
G16	515	B23				NSD							
G16	516	B3				NSD							
G16	517	C13	CD	64	66	B	4	0.1	40	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		532				060359-S22-G16-ST286-1500	
G16	518	C33				NSD							
G16	519	C43				NSD							
G16	520	C24				NSD							
G16	521	C14				NSD							
G16	522	C4				NSD							
G16	523	B4				NSD							
G16	524	B14				NSD							
G16	525	B24				NSD							
G17	526	A24				NSD							
G17	527	A14	CD	65	67	B	1.8	0.15	12	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		533				060359-S22-G17-ST11-1500	
G17	528	A4				NSD							
G17	529	D4				NSD							
G17	530	D14				NSD							
G17	531	D24				NSD							
G17	532	D43				NSD							
G17	533	D23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G17	534	D3				NSD							
G17	535	A13				NSD							
G17	536	A33				NSD							
G17	537	A32				NSD							
G17	538	A22				NSD							
G17	539	A12				NSD							
G17	540	A2				NSD							
G17	541	D2				NSD							
G17	542	D12				NSD							
G17	543	D22				NSD							
G17	544	D32				NSD							
G17	545	D42				NSD							
G17	546	D41				NSD							
G17	547	D21				NSD							
G17	548	D1				NSD							
G17	549	A11				NSD							
G17	550	A31	CD	66		MD 1-0	2.4	1.3	1.8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		534				060359-S22-G17-ST126-5000	
G17	550	A31	CD		68	MF	1.8	0.06	30	Chrysotile			
G17	550	A31	CD	67	69	F	1.9	0.06	31.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		535				060359-S22-G17-ST136-2000	
G17	551	A41				NSD							
G17	552	A40				NSD							
G17	553	A20	CD	68	70	F	1.2	0.05	24	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		536				060359-S22-G17-ST151-2000	
G17	554	A10				NSD							
G17	555	D10				NSD							
G17	556	D30				NSD							
G17	557	D40				NSD							
G17	558	C40				NSD							
G17	559	C30				NSD							
G17	560	C20				NSD							
G17	561	C10				NSD							
G17	562	B10				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562** Lab/Cor Sample No: **S22**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G17	563	B20				NSD							
G17	564	B30				NSD							
G17	565	B40				NSD							
G17	566	B41				NSD							
G17	567	B21				NSD							
G17	568	B1				NSD							
G17	569	C11				NSD							
G17	570	C31				NSD							
G17	571	C41				NSD							
G17	572	C42				NSD							
G17	573	C32				NSD							
G17	574	C22				NSD							
G17	575	C12				NSD							
G17	576	C2				NSD							
G17	577	B2				NSD							
G17	578	B22	CD	69	71	F	2.2	0.1	22	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		537				060359-S22-G17-ST276-1500	
G17	579	B12				NSD							
G17	580	B32				NSD							
G17	581	B42	CD	70		MD 1-0	1.6	0.5	3.2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		538				060359-S22-G17-ST291-2000	
G17	581	B42	CD		72	MF	1.6	0.08	20	Chrysotile			
G17	582	B43				NSD							
G17	583	B23				NSD							
G17	584	B3				NSD							
G17	585	C13				NSD							
G17	586	C33				NSD							
G17	587	C43				NSD							
G18	588	D21				NSD							
G18	589	A1				NSD							
G18	590	A31	CD	71	73	F	2	0.1	20	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		539				060359-S22-G18-ST16-2500	
G18	591	B31				NSD							
G18	592	B11				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-562**
Client Description:

Lab/Cor Sample No: **S22**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G18	593	C1				NSD							
G18	594	C31				NSD							
G18	595	C33				NSD							
G18	596	C14				NSD							
G18	597	B3				NSD							
G18	598	B24				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-566**
Client Description:

Lab/Cor Sample No: **S26**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A1	CD	1	1	F	0.7	0.08	8.8	Chrysotile			
G6	1	A1	CD	2		MD 1-0	1.25	0.7	1.8	Chrysotile			
G6	1	A1	CD		2	MF	1.25	0.08	15.6	Chrysotile			
G6	1	A1	CDQ	3		MD 1-0	5	1.2	4.2	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J2011 BF					
						Diffraction		J2011		KM	8/25/2006		
						Spectra		J2293					
G6	1	A1	CDQ		3	MF	2.7	0.1	27	Chrysotile	Mg, Si		
G6	1	A1	CD	4		MD 1-0	3.5	1.8	1.9	Chrysotile			
G6	1	A1	CD		4	MF	0.8	0.1	8	Chrysotile			
G6	1	A1	ADQ	5		MD 1-0	4.7	1.8	2.6	Amosite	Mg, Si, Fe		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J2012 BF					
						Diffraction		J2012		KM	8/25/2006	5.3A IMAGE	
						Spectra		J2294					
G6	1	A1	ADQ		5	MF	4.7	0.18	26.1	Amosite	Mg, Si, Fe		
G6	1	A1	ADQ	6		MD 1-0	13	13	1	Amosite	Mg, Si, Fe		AS>5
G6	1	A1	ADQ		6	MF	2	0.2	10	Amosite	Mg, Si, Fe		
G6	1	A1	CD	7	7	F	2	0.1	20	Chrysotile			
G6	1	A1	ADQ	8	8	F	2.5	0.4	6.2	Amosite	Mg, Si, Fe		
G6	1	A1	CD	9		CD 2-0	1.1	0.5	2.2	Chrysotile			
G6	1	A1	CD		9	CF	1.1	0.1	11	Chrysotile			
G6	1	A1	CD		10	CF	0.5	0.08	6.2	Chrysotile			
G6	1	A1	CD	10	11	F	2.25	0.1	22.5	Chrysotile			
G6	1	A1	CD	11	12	F	0.8	0.1	8	Chrysotile			
G6	2	C21	ADQ	12	13	F	1.2	0.11	10.9	Amosite	Mg, Si, Fe		
G6	2	C21	ADQ	13	14	B	3.8	0.7	5.4	Amosite	Mg, Si, Fe		
G6	2	C21	CD	14		MD 1-0	1.8	1	1.8	Chrysotile			
G6	2	C21	CD		15	MF	1.5	0.1	15	Chrysotile			
G6	2	C21	CD	15		MD 1-0	2.8	1	2.8	Chrysotile			
G6	2	C21	CD		16	MF	2	0.1	20	Chrysotile			
G6	2	C21	ADQ	16	17	F	10	0.75	13.3	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	2	C21	ADQ	17		MD 1-1	9.5	2.5	3.8	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G6	2	C21	ADQ		18	MF	7.75	0.38	20.4	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	2	C21	CD	18		MD 1-0	2.7	1.2	2.2	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-566**
Client Description:

Lab/Cor Sample No: **S26**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	2	C21	CD		19	MF	1	0.08	12.5	Chrysotile			
G6	2	C21	ADQ	19	20	F	5.5	0.3	18.3	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	2	C21	ADQ	20	21	F	1.1	0.2	5.5	Amosite	Mg, Si, Fe		
G6	2	C21	AZQ	21	22	F	4	0.4	10	Amosite	Mg, Al, Si, Fe		

ItemType	ItemNum	Confirmed	Comment
Brightfield	J2021 BF		
Diffraction	J2021	KM	9/13/2006 ZONE AXIS [2 0 3]
Spectra	J2308		

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	2	C21	ADQ	22		MD 2-2	30	5	6	Amosite	Mg, Si, Fe		AS>5
G6	2	C21	ADQ		23	MF	30	0.3	100	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	2	C21	ADQ		24	MF	27	0.35	77.1	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	2	C21	CD	23	25	F	2	0.11	18.2	Chrysotile			
G6	2	C21	CD	24	26	F	1	0.1	10	Chrysotile			
G6	2	C21	CD	25		MD 1-0	6	4	1.5	Chrysotile			AS>5
G6	2	C21	CD		27	MB	3.5	0.11	31.8	Chrysotile			
G6	2	C21	CD	26	28	F	1	0.1	10	Chrysotile			
G6	3	B13	CD	27	29	F	0.7	0.1	7	Chrysotile			
G6	3	B13	ADQ	28	30	F	1.5	0.25	6	Amosite	Mg, Si, Fe		
G6	3	B13	CD	29		MD 1-0	10	2.5	4	Chrysotile			AS>5, PCMES-ISO
G6	3	B13	CD		31	MF	3.5	0.08	43.8	Chrysotile			
G6	3	B13	ADQ	30		MD 1-1	11.5	9	1.3	Amosite	Mg, Si, Fe		AS>5
G6	3	B13	ADQ		32	MF	5.2	0.25	20.8	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	3	B13	ADQ	31	33	F	12	0.75	16	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	3	B13	CD	32	34	F	0.85	0.05	17	Chrysotile			
G6	3	B13	ADQ	33	35	F	7.22	0.3	24.1	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	3	B13	ADQ	34		MD 1-0	6	3	2	Amosite	Mg, Si, Fe		AS>5
G6	3	B13	ADQ		36	MF	5	0.7	7.1	Amosite	Mg, Si, Fe		
G6	3	B13	CD	35	37	B	1.75	0.11	15.9	Chrysotile			
G6	3	B13	CD	36	38	F	0.6	0.05	12	Chrysotile			
G6	3	B13	CD	37	39	F	0.9	0.05	18	Chrysotile			
G6	3	B13	CD	38	40	F	0.7	0.08	8.8	Chrysotile			
G6	3	B13	ADQ	39	41	F	23	0.3	76.7	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	3	B13	ADQ	40		MD 1-1	12	3	4	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G6	3	B13	ADQ		42	MF	17	0.4	42.5	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-566** Lab/Cor Sample No: **S26**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	4	D40	CD	41	43	F	1	0.03	33.3	Chrysotile			
G6	4	D40	CD	42		MD 1-0	5.5	2	2.8	Chrysotile			AS>5
G6	4	D40	CD		44	MF	1.2	0.08	15	Chrysotile			
G6	4	D40	CD	43	45	F	1.1	0.08	13.8	Chrysotile			
G6	4	D40	CD	44	46	F	3.8	0.1	38	Chrysotile			
G6	4	D40	CD	45	47	F	1.1	0.1	11	Chrysotile			
G6	4	D40	ADQ	46		MD 1-1	11	11	1	Amosite	Mg, Si, Fe		AS>5
G6	4	D40	ADQ		48	MF	10	0.6	16.7	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	4	D40	ADQ	47		MD 1-1	16	7.5	2.1	Amosite	Mg, Si, Fe		AS>5
G6	4	D40	ADQ		49	MF	16	0.2	80	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	4	D40	ADQ	48	50	F	19	0.35	54.3	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	4	D40	ADQ	49		MD 2-1	9	2	4.5	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G6	4	D40	ADQ		51	MF	5.5	0.25	22	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	4	D40	ADQ		52	MF	4.5	0.38	11.8	Amosite	Mg, Si, Fe		
G6	4	D40	ADQ	50		MD 1-1	12	8	1.5	Amosite	Mg, Si, Fe		AS>5
G6	4	D40	ADQ		53	MF	10	0.3	33.3	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	4	D40	CD	51		MD 1-1	20	12	1.7	Chrysotile			AS>5
G6	4	D40	CD		54	MF	9	0.1	90	Chrysotile			AFB>5
G7	5	A30	CD	52	55	F	2.2	0.1	22	Chrysotile			
G7	5	A30	ADQ	53		MD 1-0	7	5.5	1.3	Amosite	Mg, Si, Fe		AS>5
G7	5	A30	ADQ		56	MF	4.8	0.4	12	Amosite	Mg, Si, Fe		
G7	5	A30	CD	54	57	F	1.2	0.1	12	Chrysotile			
G7	5	A30	ADQ	55	58	F	6.2	0.4	15.5	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	5	A30	ADQ	56	59	F	6.2	0.65	9.5	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	5	A30	CD	57	60	F	1.7	0.1	17	Chrysotile			
G7	5	A30	CD	58		MD 1-0	7.5	4	1.9	Chrysotile			AS>5
G7	5	A30	CD		61	MF	3.5	0.1	35	Chrysotile			
G7	5	A30	CD	59	62	F	1.5	0.05	30	Chrysotile			
G7	5	A30	ADQ	60	63	F	4.5	0.33	13.6	Amosite	Mg, Si, Fe		
G7	5	A30	CD	61	64	F	9.5	0.1	95	Chrysotile			AS>5, AFB>5
G7	5	A30	ADQ	62	65	F	8	0.3	26.7	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	6	A1	ADQ	63		MD 1-1	24	10	2.4	Amosite	Mg, Si, Fe		AS>5
G7	6	A1	ADQ		66	MF	24	0.7	34.3	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	6	A1	ADQ	64	67	F	1.8	0.2	9	Amosite	Mg, Si, Fe		

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-566**
Client Description:

Lab/Cor Sample No: **S26**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	6	A1	CD	65		MD 1-0	12	12	1	Chrysotile			AS>5
G7	6	A1	CD		68	MF	3.8	0.1	38	Chrysotile			
G7	6	A1	CD	66		MD 1-1	8.2	1.5	5.5	Chrysotile			AS>5, PCMES-ISO
G7	6	A1	CD		69	MF	8.2	0.1	82	Chrysotile			AFB>5
G7	6	A1	CD	67	70	F	1.2	0.1	12	Chrysotile			
G7	6	A1	CD	68	71	F	1.5	0.1	15	Chrysotile			
G7	6	A1	CD	69		MD 1-0	1.8	1	1.8	Chrysotile			
G7	6	A1	CD		72	MF	0.8	0.03	26.7	Chrysotile			
G7	6	A1	CD	70		MD 1-0	1.8	0.6	3	Chrysotile			
G7	6	A1	CD		73	MF	1.1	0.08	13.8	Chrysotile			
G7	6	A1	ADQ	71	74	F	1.1	0.2	5.5	Amosite	Mg, Si, Fe		
G7	6	A1	CD	72		MD 1-0	1.8	0.2	9	Chrysotile			
G7	6	A1	CD		75	MF	1.8	0.08	22.5	Chrysotile			
G7	6	A1	ADQ	73		MD 1-1	14	5	2.8	Amosite	Mg, Si, Fe		AS>5
G7	6	A1	ADQ		76	MF	12.2	0.38	32.1	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	7	D20	ADQ	74	77	F	14.3	0.75	19.1	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	7	D20	CD	75	78	F	0.6	0.1	6	Chrysotile			
G7	7	D20	CD	76	79	F	1.7	0.1	17	Chrysotile			
G7	7	D20	ADQ	77	80	F	18	0.9	20	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	7	D20	CD	78	81	F	0.6	0.1	6	Chrysotile			
G7	7	D20	CD	79	82	F	0.75	0.1	7.5	Chrysotile			
G7	7	D20	CD	80		MD 1-0	5.2	3	1.7	Chrysotile			AS>5
G7	7	D20	CD		83	MF	3.5	0.1	35	Chrysotile			
G7	7	D20	ADQ	81		MD 1-1	12.5	7	1.8	Amosite	Mg, Si, Fe		AS>5
G7	7	D20	ADQ		84	MF	10.5	0.18	58.3	Amosite	Mg, Si, Fe		AFB>5
G7	7	D20	CD	82		MD 1-0	2	0.7	2.9	Chrysotile			
G7	7	D20	CD		85	MF	1.8	0.1	18	Chrysotile			
G7	7	D20	ADQ	83		MD 1-1	34	10	3.4	Amosite	Mg, Si, Fe		AS>5
G7	7	D20	ADQ		86	MF	6.8	0.4	17	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	7	D20	ADQ	84	87	F	2.75	0.38	7.2	Amosite	Mg, Si, Fe		
G7	8	C22	ADQ	85	88	F	8	0.75	10.7	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	8	C22	CD	86		MD 1-0	2	0.2	10	Chrysotile			
G7	8	C22	CD		89	MF	1.5	0.1	15	Chrysotile			
G7	8	C22	ADQ	87		MD 1-0	2.7	2	1.4	Amosite	Mg, Si, Fe		

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-566** Lab/Cor Sample No: **S26**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	8	C22	ADQ		90	MF	1.7	0.18	9.4	Amosite	Mg, Si, Fe		
G7	8	C22	CD	88	91	B	3.3	0.25	13.2	Chrysotile			
G7	8	C22	ADQ	89		MD 1-1	30	10	3	Amosite	Mg, Si, Fe		AS>5
G7	8	C22	ADQ		92	MF	30	0.4	75	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	8	C22	CD	90		MD 1-1	5.8	1.5	3.9	Chrysotile			AS>5, PCMES-ISO
G7	8	C22	CD		93	MF	5.5	0.1	55	Chrysotile			AFB>5
G7	8	C22	CD	91		MD 1-0	5.5	4.8	1.1	Chrysotile			AS>5
G7	8	C22	CD		94	MF	1.7	0.1	17	Chrysotile			
G7	8	C22	CD	92		MD 1-1	12	3.5	3.4	Chrysotile			AS>5
G7	8	C22	CD		95	MF	12	0.1	120	Chrysotile			AFB>5
G7	8	C22	ADQ	93	96	F	22	0.48	45.8	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	8	C22	ADQ	94	97	F	9.5	0.6	15.8	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	8	C22	CD	95		MD 1-0	4	3	1.3	Chrysotile			
G7	8	C22	CD		98	MF	1.7	0.1	17	Chrysotile			
G7	9	B21	CD	96	99	F	0.8	0.1	8	Chrysotile			
G7	9	B21	CD	97		MD 1-0	1.4	0.7	2	Chrysotile			
G7	9	B21	CD		100	MF	1.4	0.1	14	Chrysotile			
G7	9	B21	ADQ	98		MD 1-0	2.7	1.7	1.6	Amosite	Mg, Si, Fe		
G7	9	B21	ADQ		101	MF	1	0.11	9.1	Amosite	Mg, Si, Fe		
G7	9	B21	CD	99	102	B	1	0.11	9.1	Chrysotile			
G7	9	B21	CD	100	103	F	2.7	0.1	27	Chrysotile			
G7	9	B21	ADQ	101	104	F	1.2	0.22	5.5	Amosite	Mg, Si, Fe		
G7	9	B21	CD	102		MD 1-0	1.75	0.7	2.5	Chrysotile			
G7	9	B21	CD		105	MF	1.7	0.1	17	Chrysotile			
G7	9	B21	ADQ	103		MD 1-1	40	15	2.7	Amosite	Mg, Si, Fe		AS>5
G7	9	B21	ADQ		106	MF	14	0.6	23.3	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	9	B21	CD	104		MD 1-0	5.7	2	2.8	Chrysotile			AS>5
G7	9	B21	CD		107	MF	4.2	0.11	38.2	Chrysotile			
G7	9	B21	ADQ	105	108	F	2	0.18	11.1	Amosite	Mg, Si, Fe		

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-570** Lab/Cor Sample No: **S30**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A33	CDQ	1		MD 1-1	13	12	1.1	Chrysotile	Mg, Al, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		279				060359-S30-A1-G6-ST6-1500	
G6	1	A33	CDQ		1	MB	9	0.25	36	Chrysotile	Mg, Al, Si		AFB>5, PCMEF-ISO
G6	1	A33	CD	2		MD 1-0	1.5	0.7	2.1	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		280				060359-S30-A1-G6-ST16-8000	
G6	1	A33	CD		2	MB	1.5	0.09	16.7	Chrysotile			
G6	1	A33	CD	3	3	F	0.9	0.06	15	Chrysotile	Mg, Al, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		281		JH	9/25/2006	Neg #389	
						Brightfield		282				Neg #390	
						Spectra		1199					
G6	1	A33	CD	4	4	F	1.1	0.06	18.3	Chrysotile			
G6	2	A13	CD	5	5	B	1.4	0.15	9.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		283				060359-S30-A1-G6-ST36-12000	
G6	3	D3				NSD							
G6	4	D23	CD	6	6	F	1.4	0.06	23.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		284				060359-S30-A1-G6-ST46-17000	
G6	4	D23	CD	7		MD 1-0	7.5	6	1.2	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		285				060359-S30-A1-G6-ST51-2500	
G6	4	D23	CD		7	MB	4	0.1	40	Chrysotile			
G6	5	D21	CD	8		MD 1-0	2	1.2	1.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		286				060359-S30-A1-G6-ST61-5000	
G6	5	D21	CD		8	MF	2	0.07	28.6	Chrysotile			
G6	5	D21	CD	9	9	F	1	0.06	16.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		287				060359-S30-A1-G6-ST71-20000	
G6	6	D1	CD	10		MD 1-0	8	7	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		288				060359-S30-A1-G6-ST76-3000	
G6	6	D1	CD		10	MB	4	0.1	40	Chrysotile			
G6	6	D1	CD	11	11	B	1	0.15	6.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
												see Image #288 above	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

Lab/Cor Portland, Inc.
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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-570**
Client Description:

Lab/Cor Sample No: **S30**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	6	D1	CD	12	12	F	1.6	0.05	32	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		289				060359-S30-A1-G6-ST91-10000	
G6	6	D1	CD	13		MD 1-0	2.7	2	1.4	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		290				060359-S30-A1-G6-ST96-5000	
G6	6	D1	CD		13	MB	2	0.09	22.2	Chrysotile			
G6	6	D1	CD	14	14	B	8.5	0.3	28.3	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		291				060359-S30-A1-G6-ST106-2000	
G6	7	A21	CD	15	15	F	1	0.09	11.1	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		363				060359-S30-A1-G1-ST111-5000	
G6	7	A21	CD	16		MD	1.5	0.5	3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		364				060359-S30-A1-G1-ST116-4000	
G6	8	A41	CD		16	MF	1.5	0.06	25	Chrysotile			
G6	8	A41	CD	17	17	F	2.3	0.05	46	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		365				060359-S30-A1-G1-ST126-2500	
G6	9	B20	CD	18	18	B	1.5	0.2	7.5	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		366				060359-S30-A1-G1-ST131-2000	
G6	9	B20	CD	19	19	F	1.6	0.2	8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		367				060359-S30-A1-G1-ST136-6000	
G6	9	B20	CD	20		MD 8-0	2.5	2	1.2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		368				060359-S30-A1-G1-ST141-3000	
G6	9	B20	CD		20	MF	2.5	0.06	41.7	Chrysotile			
G6	9	B20	CD		21	MR 7-0	2	1.5	1.3	Chrysotile			
G6	10	C10				NSD							
G6	11	C30	CD	21	22	F	2.5	0.06	41.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		369				060359-S30-A1-G1-ST161-3500	
G6	11	C30	CD	22	23	F	1.7	0.06	28.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		370				060359-S30-A1-G1-ST166-3000	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

LabCor Portland Inc
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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-570**
Client Description:

Lab/Cor Sample No: **S30**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	12	C42				NSD							
G6	13	C22	CD	23	24	B	3.7	0.2	18.5	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		371				060359-S30-A1-G1-ST176-5000	
G6	14	C21				NSD							
G6	15	C11	CD	24	25	F	2.4	0.06	40	Chrysotile			
G6	16	C1				NSD							
G6	17	B11				NSD							
G6	18	B21				NSD							
G6	19	B31				NSD							
G6	20	B2	CD	25	26	B	2.2	0.2	11	Chrysotile			
G6	20	B2	CD	26		MD 1-0	4.8	3.5	1.4	Chrysotile			
G6	20	B2	CD		27	MF	3	0.06	50	Chrysotile			
G6	21	C2	CD	27		MD 3-0	2.8	1.3	2.2	Chrysotile			
G6	21	C2	CD		28	MB	1.6	0.1	16	Chrysotile			
G6	21	C2	CD		29	MB	1	0.1	10	Chrysotile			
G6	21	C2	CD		30	MB	0.55	0.1	5.5	Chrysotile			
G6	21	C2	CD	28	31	F	5.8	0.08	72.5	Chrysotile			AS>5, AFB>5
G6	22	C12	CD	29	32	B	4	0.2	20	Chrysotile			
G6	22	C12	CD	30	33	F	2	0.06	33.3	Chrysotile			
G6	23	C32				NSD							
G6	24	C42				NSD							
G7	25	A33	CD	31		MD 1-0	3.1	1.3	2.4	Chrysotile			
G7	25	A33	CD		34	MF	2.8	0.07	40	Chrysotile			
G7	26	A13				NSD							
G7	27	D3				NSD							
G7	28	D13				NSD							
G7	29	D23	CD	32	35	B	0.7	0.1	7	Chrysotile			
G7	29	D23	CD	33		CD 3-0	12.5	0.7	17.9	Chrysotile			AS>5, PCMES-ISO
G7	29	D23	CD		36	CB	0.7	0.1	7	Chrysotile			
G7	29	D23	CD		37	CB	0.7	0.1	7	Chrysotile			
G7	29	D23	CD		38	CB	0.6	0.1	6	Chrysotile			
G7	29	D23	CD	34	39	F	0.7	0.06	11.7	Chrysotile			
G7	29	D23	CD	35	40	F	2.2	0.06	36.7	Chrysotile			
G7	29	D23	CD	36		MD 1-0	1.5	0.5	3	Chrysotile			
G7	29	D23	CD		41	MF	1.5	0.06	25	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-570** Lab/Cor Sample No: **S30**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	29	D23	CD	37	42	F	0.6	0.05	12	Chrysotile			
G7	29	D23	CD	38		MD 1-0	3.5	2.2	1.6	Chrysotile			
G7	29	D23	CD		43	MF	2.5	0.06	41.7	Chrysotile			
G7	30	D41	CD	39	44	B	1.5	0.1	15	Chrysotile			
G7	30	D41	CD	40	45	B	0.9	0.15	6	Chrysotile			
G7	30	D41	CD	41		MD 1-0	1.7	0.7	2.4	Chrysotile			
G7	30	D41	CD		46	MF	1.7	0.08	21.3	Chrysotile			
G7	30	D41	CD	42	47	F	1.1	0.06	18.3	Chrysotile			
G7	31	D21				NSD							
G7	32	D1	CD	43	48	B	3.2	0.1	32	Chrysotile			
G7	33	A1	CD	44	49	F	1.5	0.06	25	Chrysotile			
G7	34	A21				NSD							
G7	35	A41	CD	45		MD 1-0	1.8	1.1	1.6	Chrysotile			
G7	35	A41	CD		50	MF	1.8	0.06	30	Chrysotile			
G7	35	A41	CD	46	51	F	2	0.08	25	Chrysotile			
G7	36	B40	CD	47		MD	5.1	4.9	1	Chrysotile			AS>5
G7	37	B20	CD	48	52	F	7.7	0.07	110	Chrysotile			AS>5, AFB>5
G7	38	C10	CD	49	53	F	1.2	0.06	20	Chrysotile			
G7	39	C30	CD	50	54	F	2	0.06	33.3	Chrysotile			
G7	40	C31	CD	51	55	CC 6-0	1.5	0.6	2.5	Chrysotile			
G7	40	C31	CD	52	56	B	1.8	0.1	18	Chrysotile			
G7	40	C31	CD	53		MD 1-1	12	9	1.3	Chrysotile			AS>5
G7	40	C31	CD		57	MF	7	0.06	116.7	Chrysotile			AFB>5
G7	41	C11	CD	54	58	F	1.2	0.06	20	Chrysotile			
G7	42	B1	CD	55	59	B	11.2	0.4	28	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	42	B1	CD	56	60	F	2.9	0.06	48.3	Chrysotile			
G7	42	B1	CD	57	61	F	2.1	0.06	35	Chrysotile			
G7	43	B21				NSD							
G7	44	B41	CD	58	62	B	7.7	0.2	38.5	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	45	B13				NSD							
G7	46	B14	CD	59	63	B	8.35	0.15	55.7	Chrysotile			AS>5, AFB>5
G7	46	B14	CD	60	64	F	0.7	0.1	7	Chrysotile			
G7	47	B24	CD	61		MD 1-0	1.5	0.38	3.9	Chrysotile			
G7	47	B24	CD		65	MF	1.5	0.08	18.8	Chrysotile			
G7	47	B24	CD	62		MD 1-0	1.5	1.5	1	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-570** Lab/Cor Sample No: **S30**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	47	B24	CD		66	MB	1	0.15	6.7	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-574** Lab/Cor Sample No: **S34**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A20	AZQ	1		MD 1-1	15	9	1.7	Amosite	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2041 BF					
						Diffraction		P2041		KM	8/25/2006	ZONE AXIS [2 0 3]	
						Spectra		P17351					
G6	1	A20	AZQ		1	MF	12	0.25	48	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	1	A20	CDQ	2	2	F	2.8	0.1	28	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2042 BF					
						Diffraction		P2042		KM	8/25/2006		
						Spectra		P17352					
G6	1	A20	CM	3	3	F	1.7	0.08	21.3	Chrysotile			
G6	1	A20	ADQ	4		MD 1-0	2	0.65	3.1	Amosite	Mg, Si, Fe		
G6	1	A20	ADQ		4	MF	1.3	0.2	6.5	Amosite	Mg, Si, Fe		
G6	1	A20	ADQ	5		MD 1-0	6.2	6	1	Amosite	Mg, Si, Fe		AS>5
G6	1	A20	ADQ		5	MF	4.75	0.35	13.6	Amosite	Mg, Si, Fe		
G6	2	C21	ADQ	6		MD 1-1	17	8	2.1	Amosite	Mg, Si, Fe		AS>5
G6	2	C21	ADQ		6	MF	7.5	0.25	30	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	2	C21	ADQ	7		MD 2-1	16	15	1.1	Amosite	Mg, Si, Fe		AS>5
G6	2	C21	ADQ		7	MF	11	0.65	16.9	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	2	C21	CD		8	MF	3	0.1	30	Chrysotile			
G6	2	C21	CD	8	9	F	0.65	0.1	6.5	Chrysotile			
G6	2	C21	ADQ	9		MD 1-1	11	8	1.4	Amosite	Mg, Si, Fe		AS>5
G6	2	C21	ADQ		10	MF	7.7	0.22	35	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	2	C21	CD	10		MD 1-0	2	0.6	3.3	Chrysotile			
G6	*2*	*C21*	*CD*		*11*	*MF*	*1*	*0.1*	*10*	*Chrysotile*			
G6	3	B2	ADQ	11	12	F	3	0.18	16.7	Amosite	Mg, Si, Fe		
G6	3	B2	CD	12	13	F	0.55	0.1	5.5	Chrysotile			
G6	4	B32	ADQ	13	14	F	1.5	0.22	6.8	Amosite	Mg, Si, Fe		
G6	5	B30	CD	14	15	F	2.7	0.1	27	Chrysotile			
G6	5	B30	ADQ	15		MD 1-1	16	3	5.3	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G6	5	B30	ADQ		16	MF	12.7	0.7	18.1	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	6	A32	CD	16	17	F	2.75	0.1	27.5	Chrysotile			
G6	7	A13				NSD							
G6	8	D32	CD	17	18	F	3	0.1	30	Chrysotile			
G6	8	D32	CD	18	19	F	1.8	0.1	18	Chrysotile			
G6	9	A31	ADQ	19		MD 1-0	6.5	5	1.3	Amosite	Mg, Si, Fe		AS>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-574**
Client Description:

Lab/Cor Sample No: **S34**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	9	A31	ADQ		20	MF	4.5	0.2	22.5	Amosite	Mg, Si, Fe		
G6	10	A21	ADQ	20	21	F	4.8	0.2	24	Amosite	Mg, Si, Fe		
G6	10	A21	ADQ	21	22	F	1.7	0.15	11.3	Amosite	Mg, Si, Fe		
G6	10	A21	CD	22		MD 3-1	12	9	1.3	Chrysotile			AS>5
G6	10	A21	CD		23	MF	7.5	0.1	75	Chrysotile			AFB>5
G6	10	A21	CD		24	MF	3	0.1	30	Chrysotile			
G6	10	A21	CD		25	MF	1	0.1	10	Chrysotile			
G6	11	A1	ADQ	23		MD 1-1	8	5.8	1.4	Amosite	Mg, Si, Fe		AS>5
G6	11	A1	ADQ		26	MF	7	0.28	25	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	11	A1	CD	24	27	F	1.2	0.08	15	Chrysotile			
G6	11	A1	CD	25	28	B	9	0.2	45	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	11	A1	ADQ	26		MD 1-0	4.5	3	1.5	Amosite	Mg, Si, Fe		
G6	11	A1	ADQ		29	MF	2.65	0.2	13.2	Amosite	Mg, Si, Fe		
G6	11	A1	ADQ	27	30	F	1.25	0.3	4.2	Amosite	Mg, Si, Fe		
G6	12	D21	CD	28	31	F	1	0.1	10	Chrysotile			
G6	13	D41	ADQ	29		MD 1-1	12	7	1.7	Amosite	Mg, Si, Fe		AS>5
G6	13	D41	ADQ		32	MF	12.5	0.4	31.2	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	13	D41	CD	30	33	B	3.2	0.18	17.8	Chrysotile			
G6	13	D41	ADQ	31	34	F	1.8	0.18	10	Amosite	Mg, Si, Fe		
G6	14	C41	ADQ	32		MD 1-0	4.8	4.5	1.1	Amosite	Mg, Si, Fe		
G6	14	C41	ADQ		35	MF	2.75	0.38	7.2	Amosite	Mg, Si, Fe		
G6	15	C1	ADQ	33		MD 1-1	40	12	3.3	Amosite	Mg, Si, Fe		AS>5
G6	15	C1	ADQ		36	MF	13	0.38	34.2	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	15	C1	ADQ	34		MD 1-1	20	12	1.7	Amosite	Mg, Si, Fe		AS>5
G6	15	C1	ADQ		37	MF	12	0.22	54.5	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	15	C1	ADQ	35	38	F	3.6	0.18	20	Amosite	Mg, Si, Fe		
G6	15	C1	ADQ	36	39	F	6.8	0.45	15.1	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	15	C1	CD	37	40	F	1.12	0.08	14	Chrysotile			
G6	15	C1	ADQ	38	41	F	4.2	0.18	23.3	Amosite	Mg, Si, Fe		
G6	16	B11	ADQ	39	42	F	1.6	0.38	4.2	Amosite	Mg, Si, Fe		
G6	17	B23	ADQ	40		MD 1-1	12	6	2	Amosite	Mg, Si, Fe		AS>5
G6	17	B23	ADQ		43	MF	12	0.3	40	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	17	B23	CD	41	44	F	0.7	0.1	7	Chrysotile			
G6	18	C23				NSD							
G6	19	C4	CD	42		MD 1-0	7	3.8	1.8	Chrysotile			AS>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-574**
Client Description:

Lab/Cor Sample No: **S34**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	19	C4	CD		45	MF	4	0.1	40	Chrysotile			
G6	19	C4	ADQ	43	46	F	4.5	0.75	6	Amosite	Mg, Si, Fe		
G6	19	C4	ADQ	44	47	F	3.75	0.2	18.8	Amosite	Mg, Si, Fe		
G6	19	C4	CD	45		MD 1-0	1.2	0.6	2	Chrysotile			
G6	19	C4	CD		48	MF	0.65	0.05	13	Chrysotile			
G6	19	C4	CD	46	49	F	1.12	0.12	9.3	Chrysotile			
G6	19	C4	CD	47		CD 2-0	1.2	0.12	10	Chrysotile			
G6	19	C4	CD		50	CF	1.4	0.08	17.5	Chrysotile			
G6	19	C4	CD		51	CF	0.65	0.08	8.1	Chrysotile			
G6	19	C4	ADQ	48		MD 1-1	14	3.5	4	Amosite	Mg, Si, Fe		AS>5
G6	19	C4	ADQ		52	MF	13	0.2	65	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	20	B44	ADQ	49	53	F	1.8	0.2	9	Amosite	Mg, Si, Fe		
G7	20	B44	ADQ	50	54	F	10.7	0.6	17.8	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	21	B24	ADQ	51	55	F	4.23	0.52	8.1	Amosite	Mg, Si, Fe		
G7	21	B24	ADQ	52		MD 1-1	9.5	2	4.8	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G7	21	B24	ADQ		56	MF	7.5	0.2	37.5	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	22	B4	CD	53		MD 1-1	9.5	3.5	2.7	Chrysotile			AS>5
G7	22	B4	CD		57	MF	9.5	0.1	95	Chrysotile			AFB>5
G7	22	B4	CD	54	58	F	1.7	0.05	34	Chrysotile			
G7	23	C14	ADQ	55	59	F	3.5	0.18	19.4	Amosite	Mg, Si, Fe		
G7	24	C34	CD	56	60	B	1.2	0.1	12	Chrysotile			
G7	24	C34	CD	57	61	F	1.1	0.08	13.8	Chrysotile			
G7	25	C43	ADQ	58		MD 1-1	63	12	5.2	Amosite	Mg, Si, Fe		AS>5
G7	25	C43	ADQ		62	MF	49	0.55	89.1	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	25	C43	ADQ		63	MF	33	0.7	47.1	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	25	C43	ADQ	59	64	F	34	1	34	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	25	C43	ADQ	60	65	F	3.8	0.25	15.2	Amosite	Mg, Si, Fe		
G7	26	C23				NSD							
G7	27	C3	ADQ	61	66	F	7	0.3	23.3	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	27	C3	CD	62	67	F	1.8	0.08	22.5	Chrysotile			
G7	28	B13	CD	63	68	F	1.2	0.1	12	Chrysotile			
G7	28	B13	ADQ	64	69	F	12	0.75	16	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	28	B13	CD	65	70	F	2.6	0.1	26	Chrysotile			
G7	28	B13	CD	66	71	F	1	0.1	10	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-574**
Client Description:

Lab/Cor Sample No: **S34**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	29	B33	CD	67	72	F	0.6	0.05	12	Chrysotile			
G7	29	B33	ADQ	68	73	F	6.35	0.7	9.1	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	30	B42	ADQ	69		MD 1-1	7.7	3.8	2	Amosite	Mg, Si, Fe		AS>5
G7	30	B42	ADQ		74	MF	7.5	0.5	15	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	30	B42	CD	70	75	F	0.7	0.1	7	Chrysotile			
G7	30	B42	CD	71		MD 1-0	6	5	1.2	Chrysotile			AS>5
G7	30	B42	CD		76	MF	1.8	0.03	60	Chrysotile			
G7	30	B42	CD	72		MD 1-0	0.85	0.18	4.7	Chrysotile			
G7	30	B42	CD		77	MF	0.85	0.05	17	Chrysotile			
G7	31	B12	CD	73	78	B	7.35	0.3	24.5	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	31	B12	ADQ	74		MD 1-1	8.5	2	4.2	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G7	31	B12	ADQ		79	MF	8.5	0.4	21.2	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	31	B12	CD	75		MD 1-0	11	7.5	1.5	Chrysotile			AS>5
G7	31	B12	CD		80	MF	2.5	0.05	50	Chrysotile			
G7	32	C2				NSD							
G7	33	C12	CD	76	81	F	5.75	0.1	57.5	Chrysotile			AS>5, AFB>5
G7	34	C22	ADQ	77		MD 1-1	5.8	1.5	3.9	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G7	34	C22	ADQ		82	MF	5.8	0.28	20.7	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	34	C22	CD	78	83	F	1.75	0.1	17.5	Chrysotile			
G7	34	C22	ADQ	79	84	F	2.3	0.3	7.7	Amosite	Mg, Si, Fe		
G7	35	C40	ADQ	80	85	F	7	0.2	35	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	35	C40	CD	81	86	F	0.55	0.08	6.9	Chrysotile			
G7	35	C40	CD	82	87	F	5	0.1	50	Chrysotile			
G7	35	C40	ADQ	83	88	F	2.2	0.4	5.5	Amosite	Mg, Si, Fe		
G7	35	C40	ADQ	84		MD 1-1	25	20	1.2	Amosite	Mg, Si, Fe		AS>5
G7	35	C40	ADQ		89	MF	15	0.3	50	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	36	C20				NSD							
G7	37	C10	CD	85	90	F	5.6	0.1	56	Chrysotile			AS>5, AFB>5
G7	38	B20	ADQ	86	91	F	8.5	0.4	21.2	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	38	B20	CD	87		MD 1-0	2	1.5	1.3	Chrysotile			
G7	38	B20	CD		92	MF	1	0.1	10	Chrysotile			
G7	38	B20	CD	88	93	F	1.85	0.11	16.8	Chrysotile			
G7	39	B40	CD	89	94	B	1.8	0.11	16.4	Chrysotile			
G7	40	A10	CD	90		MD 1-0	5.5	3.8	1.4	Chrysotile			AS>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-574**
Client Description:

Lab/Cor Sample No: **S34**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	40	A10	CD		95	MF	2.5	0.11	22.7	Chrysotile			
G7	40	A10	CD	91		MD 1-1	8.5	4	2.1	Chrysotile			AS>5
G7	40	A10	CD		96	MF	5.8	0.1	58	Chrysotile			AFB>5
G7	41	D20	CD	92	97	F	1.6	0.1	16	Chrysotile			
G7	41	D20	ADQ	93		MD 1-1	22	4	5.5	Amosite	Mg, Si, Fe		AS>5
G7	41	D20	ADQ		98	MF	22	0.5	44	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	42	D30	CD	94		MD 1-0	1.2	1	1.2	Chrysotile			
G7	42	D30	CD		99	MF	1	0.1	10	Chrysotile			
G7	42	D30	CD	95	100	F	1.8	0.1	18	Chrysotile			
G7	42	D30	ADQ	96		MD 1-1	26	7.5	3.5	Amosite	Mg, Si, Fe		AS>5
G7	42	D30	ADQ		101	MF	25.5	0.6	42.5	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	42	D30	CD	97		MD 1-0	2.7	1.5	1.8	Chrysotile			
G7	42	D30	CD		102	MF	1.8	0.08	22.5	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-580** Lab/Cor Sample No: **S40**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A32	CDQ	1	1	F	3.5	0.08	43.8	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		292		JH	9/25/2006	Neg #391	
						Brightfield		293				Neg #392	
						Spectra		1201					
G6	2	A12				NSD							
G6	3	D12	CD	2		MD 1-0	4.8	3.2	1.5	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		294				060359-S40-A1-G6-ST16-5000	
G6	3	D12	CD		2	MF	3.5	0.07	50	Chrysotile			
G6	4	D32	AZQ	3	3	F	48	0.8	60	Amosite	Mg, Al, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		295		JH	9/25/2006	Neg #393	
						Brightfield		296				Neg #394	
						Spectra		1202					
G6	4	D32	CD	4		MD 1-1	12	11	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		297				060359-S40-A1-G6-ST31-1000	
G6	4	D32	CD		4	MF	12.7	0.1	127	Chrysotile			AFB>5
G6	5	D40				NSD							
G6	6	A10				NSD							
G6	7	A30	CD	5	5	F	2.1	0.05	42	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		298				060359-S40-A1-G6-ST51-3500	
G6	7	A30	CD	6		MD 1-0	5.1	3.7	1.4	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		299				060359-S40-A1-G6-ST56-1000	
G6	7	A30	CD		6	MF	2.5	0.06	41.7	Chrysotile			
G6	7	A30	CD	7	7	B	2.2	0.1	22	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		300				060359-S40-A1-G6-ST66-3000	
G6	8	A40	CD	8	8	F	1.1	0.06	18.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		301				060359-S40-A1-G6-ST71-12000	
G6	8	A40	CD	9	9	F	0.6	0.05	12	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		302				060359-S40-A1-G6-ST76-20000	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-580** Lab/Cor Sample No: **S40**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	8	A40	CD	10	10	F	2	0.1	20	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		303				060359-S40-A1-G6-ST81-4000	
G6	9	C10				NSD							
G6	10	B10	CD	11	11	F	0.7	0.1	7	Chrysotile			
G6	10	B10	CD	12		MD 1-0	1.8	1	1.8	Chrysotile			
G6	10	B10	CD		12	MF	0.5	0.08	6.2	Chrysotile			
G6	11	B20				NSD							
G6	12	B21				NSD							
G6	13	B12	CD	13	13	F	0.6	0.1	6	Chrysotile			
G6	13	B12	CD	14		MD 1-0	1.8	0.6	3	Chrysotile			
G6	13	B12	CD		14	MB	1.8	0.15	12	Chrysotile			
G6	14	A1				NSD							
G7	15	A43	CD	15		MD 1-0	7.5	5	1.5	Chrysotile			AS>5
G7	15	A43	CD		15	MF	4.8	0.1	48	Chrysotile			
G7	16	A23				NSD							
G7	17	A3	CD	16		MD 1-1	7	1	7	Chrysotile			AS>5, PCMES-ISO
G7	17	A3	CD		16	MF	7	0.1	70	Chrysotile			AFB>5
G7	18	D13	CD	17	17	F	0.8	0.05	16	Chrysotile			
G7	19	D33				NSD							
G7	20	D42				NSD							
G7	21	D22	ADQ	18		MD 1-1	45	35	1.3	Amosite	Mg, Si, Fe		AS>5
G7	21	D22	ADQ		18	MF	22	0.5	44	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	22	D2	CD	19	19	F	0.8	0.1	8	Chrysotile			
G7	23	A12				NSD							
G7	24	A32	CD	20	20	F	0.7	0.1	7	Chrysotile			
G7	25	A40				NSD							
G7	26	A20	CD	21		MD 1-0	9.5	6	1.6	Chrysotile			AS>5
G7	26	A20	CD		21	MF	1.2	0.08	15	Chrysotile			
G7	26	A20	CD	22		MD 1-1	9	4.5	2	Chrysotile			AS>5
G7	26	A20	CD		22	MF	9	0.1	90	Chrysotile			AFB>5
G7	27	A10				NSD							
G7	28	D10				NSD							
G7	29	D30	CD	23	23	F	1.2	0.1	12	Chrysotile			
G7	30	B41	CD	24		MD 1-0	4	1.8	2.2	Chrysotile			
G7	30	B41	CD		24	MF	1.8	0.1	18	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-580** Lab/Cor Sample No: **S40**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	31	B21	CD	25	25	F	1	0.1	10	Chrysotile			
G7	32	B1	CD	26	26	F	0.55	0.1	5.5	Chrysotile			
G7	33	C11				NSD							
G7	34	B33	CD	27	27	B	1.7	0.12	14.2	Chrysotile			
G8	35	B24				NSD							
G8	36	B4	CD	28		MD 1-0	12	6	2	Chrysotile			AS>5
G8	36	B4	CD		28	MB	3	0.15	20	Chrysotile			
G8	37	C14	CD	29	29	F	0.7	0.1	7	Chrysotile			
G8	38	C3	CD	30	30	F	0.65	0.08	8.1	Chrysotile			
G8	39	B13				NSD							
G8	40	B33				NSD							
G8	41	B42				NSD							
G8	42	B22	CD	31		MD 1-0	4.2	1.8	2.3	Chrysotile			
G8	42	B22	CD		31	MF	1.8	0.05	36	Chrysotile			
G8	42	B22	CD	32	32	F	0.9	0.1	9	Chrysotile			
G8	42	B22	CD	33	33	F	0.55	0.1	5.5	Chrysotile			
G8	43	B2	CD	34	34	F	0.6	0.08	7.5	Chrysotile			
G8	44	C1	CD	35	35	F	2	0.08	25	Chrysotile			
G8	44	C1	CD	36	36	B	1.7	0.2	8.5	Chrysotile			
G8	45	B11				NSD							
G8	46	B31				NSD							
G8	47	B41				NSD							
G8	48	B40	CD	37	37	F	1.1	0.1	11	Chrysotile			
G8	48	B40	CD	38	38	F	1.1	0.1	11	Chrysotile			
G8	49	B20	CD	39		MD 1-0	1.8	0.8	2.2	Chrysotile			
G8	49	B20	CD		39	MF	1.1	0.08	13.8	Chrysotile			
G8	50	B10	CD	40	40	F	0.8	0.1	8	Chrysotile			
G8	51	A20	CD	41	41	F	0.75	0.08	9.4	Chrysotile			
G8	52	A40				NSD							
G8	53	A31				NSD							
G8	54	A21				NSD							
G8	55	A1	CD	42	42	B	5.2	0.11	47.3	Chrysotile			AS>5, AFB>5
G8	56	A32				NSD							
G8	57	A22	CD	43	43	F	18	0.1	180	Chrysotile			AS>5, AFB>5
G8	58	D23				NSD							
G8	59	B43				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-580** Lab/Cor Sample No: **S40**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	60	B23	CD	44	44	F	0.75	0.1	7.5	Chrysotile			
G8	61	B3				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-582** Lab/Cor Sample No: **S42**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A33	CDQ	1	1	B	9	0.1	90	Chrysotile	Mg, Si		AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		330		JH	9/25/2006	Neg #405	
						Brightfield		331				Neg #406	
						Spectra		1211					
G6	2	A22	CD	2	2	B	4	0.2	20	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		332				060359-S42-A1-G6-ST11-5000	
G6	3	A2				NSD							
G6	4	D2				NSD							
G6	5	D31				NSD							
G6	6	D30	CD	3	3	F	1.8	0.07	25.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		333				060359-S42-A1-G6-ST31-3000	
G6	7	C30	CD	4	4	F	2.1	0.07	30	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		334				060359-S42-A1-G6-ST36-2000	
G6	8	C20				NSD							
G6	9	B20	CD	5	5	F	2.2	0.06	36.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		335				060359-S42-A1-G6-ST46-2000	
G6	10	B30				NSD							
G6	11	B44	CD	6	6	B	4.5	0.15	30	Chrysotile			
G6	12	C4	CD	7	7	F	4.38	0.08	54.8	Chrysotile			
G6	12	C4	CD	8	8	B	5.35	0.1	53.5	Chrysotile			AS>5, AFB>5
G6	12	C4	CD	9	9	F	0.6	0.08	7.5	Chrysotile			
G6	13	B32	CD	10		MD 1-1	7.5	1	7.5	Chrysotile			AS>5, PCMES-ISO
G6	13	B32	CD		10	MF	7.5	0.11	68.2	Chrysotile			AFB>5
G6	14	C2				NSD							
G6	15	C12	CD	11	11	F	0.7	0.1	7	Chrysotile			
G6	16	C42	CD	12		MD 1-0	1.7	0.7	2.4	Chrysotile			
G6	16	C42	CD		12	MF	1.5	0.08	18.8	Chrysotile			
G6	17	A11	CD	13	13	F	1.85	0.08	23.1	Chrysotile			
G6	17	A11	CD	14	14	F	1.7	0.1	17	Chrysotile			
G6	18	A43	CD	15		MD 1-0	7.5	7	1.1	Chrysotile			AS>5
G6	18	A43	CD		15	MF	3.8	0.12	31.7	Chrysotile			
G7	19	B4	CD	16		MD 1-0	18	9.2	2	Chrysotile			AS>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-582** Lab/Cor Sample No: **S42**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	19	B4	CD		16	MB	3.5	0.15	23.3	Chrysotile			
G7	20	C24	CD	17	17	F	0.6	0.1	6	Chrysotile			
G7	21	C34	CD	18	18	F	1.25	0.08	15.6	Chrysotile			
G7	21	C34	CD	19		MD 1-0	7	4	1.8	Chrysotile			AS>5
G7	21	C34	CD		19	MF	4.8	0.05	96	Chrysotile			
G7	21	C34	CD	20	20	F	3	0.1	30	Chrysotile			
G7	21	C34	CD	21	21	B	1.5	0.2	7.5	Chrysotile			
G7	21	C34	CD	22		MD 1-0	4.8	4.5	1.1	Chrysotile			
G7	21	C34	CD		22	MF	4.35	0.1	43.5	Chrysotile			
G7	22	C13	CD	23		MD 1-0	1.2	0.38	3.2	Chrysotile			
G7	22	C13	CD		23	MF	0.7	0.1	7	Chrysotile			
G7	23	B23				NSD							
G7	24	B33				NSD							
G7	25	B43	CD	24	24	F	0.6	0.08	7.5	Chrysotile			
G7	26	B10	CD	25	25	F	1.7	0.1	17	Chrysotile			
G7	27	A40	CD	26	26	F	1.8	0.1	18	Chrysotile			
G7	28	A41	CD	27	27	F	1.8	0.1	18	Chrysotile			
G7	28	A41	CD	28		MD 1-0	1.5	1.5	1	Chrysotile			
G7	28	A41	CD		28	MF	1.5	0.1	15	Chrysotile			
G7	28	A41	CD	29		MD 1-0	2.5	0.6	4.2	Chrysotile			
G7	28	A41	CD		29	MF	2.5	0.08	31.2	Chrysotile			
G7	29	A31				NSD							
G7	30	A12	CD	30		MD 1-0	8.5	4	2.1	Chrysotile			AS>5
G7	30	A12	CD		30	MF	4.5	0.05	90	Chrysotile			
G7	31	A43				NSD							
G7	32	D33	CD	31	31	F	1.8	0.03	60	Chrysotile			
G7	33	D4	CD	32		MD 1-0	4.35	1.8	2.4	Chrysotile			
G7	33	D4	CD		32	MF	1.8	0.05	36	Chrysotile			
G7	34	A24	CD	33		MD 1-0	3.8	2.8	1.4	Chrysotile			
G7	34	A24	CD		33	MF	1.8	0.05	36	Chrysotile			
G8	35	B13				NSD							
G8	36	B3	CD	34	34	B	3.35	0.12	27.9	Chrysotile			
G8	36	B3	CD	35		MD 1-0	4.35	1.8	2.4	Chrysotile			
G8	36	B3	CD		35	MF	0.8	0.08	10	Chrysotile			
G8	37	C23	CD	36		MD 1-0	3.7	0.4	9.2	Chrysotile			
G8	37	C23	CD		36	MF	3.7	0.05	74	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-582**
Client Description:

Lab/Cor Sample No: **S42**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	38	C32	CD	37	37	F	1.3	0.08	16.2	Chrysotile			
G8	38	C32	CD	38		CD 2-0	3.75	1.2	3.1	Chrysotile			
G8	38	C32	CD		38	CB	3.75	0.2	18.8	Chrysotile			
G8	38	C32	CD		39	CF	1.5	0.1	15	Chrysotile			
G8	38	C32	CD	39	40	B	2.7	0.12	22.5	Chrysotile			
G8	39	C12				NSD							
G8	40	B21				NSD							
G8	41	C30				NSD							
G8	42	C20				NSD							
G8	43	D10				NSD							
G8	44	D1	CD	40	41	F	3.5	0.1	35	Chrysotile			
G8	44	D1	CD	41	42	B	1.8	0.15	12	Chrysotile			
G9	45	A43				NSD							
G9	46	A24	CD	42	43	F	1.8	0.08	22.5	Chrysotile			
G9	47	A4				NSD							
G9	48	D14				NSD							
G9	49	D43	CD	43	44	F	2.3	0.08	28.8	Chrysotile			
G9	50	D12				NSD							
G9	51	D2				NSD							
G9	52	A12	CD	44	45	F	2.5	0.07	35.7	Chrysotile			
G9	53	A32				NSD							
G9	54	A41	CD	45	46	F	5.2	0.07	74.3	Chrysotile			AS>5, AFB>5
G9	55	A21				NSD							
G9	56	A1	CD	46	47	F	4.9	0.06	81.7	Chrysotile			
G9	57	D11	CD	47	48	F	4.9	0.07	70	Chrysotile			
G9	58	D21				NSD							
G9	59	D20				NSD							
G9	60	D10	CD	48		MD 1-0	4.3	3	1.4	Chrysotile			
G9	60	D10	CD		49	MF	3.2	0.06	53.3	Chrysotile			
G9	61	A10				NSD							
G9	62	A30				NSD							
G9	63	B40	CD	49	50	F	2.2	0.06	36.7	Chrysotile			
G9	64	B20				NSD							
G9	65	C20				NSD							
G9	66	C11	CD	50		MD 1-0	4.8	1.8	2.7	Chrysotile			
G9	66	C11	CD		51	MF	4.8	0.1	48	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-582**
Client Description:

Lab/Cor Sample No: **S42**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	66	C11	CD	51	52	F	0.6	0.08	7.5	Chrysotile			
G9	66	C11	CD	52		MD 1-0	4.5	2.8	1.6	Chrysotile			
G9	66	C11	CD		53	MF	1.5	0.1	15	Chrysotile			
G9	67	B1	CD	53	54	F	4	0.08	50	Chrysotile			
G9	67	B1	CD	54	55	F	1.4	0.07	20	Chrysotile			
G9	68	B21				NSD							
G9	69	B32				NSD							
G9	70	B12				NSD							
G9	71	C2				NSD							
G9	72	C22				NSD							
G9	73	C33				NSD							
G9	74	C13	CD	55	56	B	8	0.25	32	Chrysotile			PCMES-ISO, PCMEF-ISO, AS>5, AFB>5
G9	75	C3				NSD							
G9	76	B13				NSD							
G9	77	B33				NSD							
G9	78	B24	CD	56	57	F	4.9	0.08	61.3	Chrysotile			
G9	79	B4				NSD							
G9	80	C24	CD	57	58	F	1.7	0.07	24.3	Chrysotile			
G10	81	A24	CD	58		MD 1-1	22	8	2.8	Chrysotile			AS>5
G10	81	A24	CD		59	MF	7.5	0.07	107.1	Chrysotile			AFB>5
G10	82	A4				NSD							
G10	83	D14				NSD							
G10	84	D24				NSD							
G10	85	A3	CD	59	60	F	0.7	0.06	11.7	Chrysotile			
G10	85	A3	CD	60	61	F	1.7	0.07	24.3	Chrysotile			
G10	85	A3	CD	61	62	F	1	0.07	14.3	Chrysotile			
G10	85	A3	CD	62		MD 1-0	1.5	1.5	1	Chrysotile			
G10	85	A3	CD		63	MB	1.5	0.3	5	Chrysotile			
G10	85	A3	CD		64	MF	0.7	0.1	7	Chrysotile			
G10	85	A3	CD		65	MF	1.7	0.06	28.3	Chrysotile			
G10	85	A3	CD		66	MF	1.6	0.06	26.7	Chrysotile			
G10	86	D13				NSD							
G10	87	A23	CD	63	67	F	1.7	0.05	34	Chrysotile			
G10	87	A23	CD	64	68	F	0.7	0.08	8.8	Chrysotile			
G10	87	A23	CD	65		MD 1-0	2	1.8	1.1	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-582**
Client Description:

Lab/Cor Sample No: **S42**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	87	A23	CD		69	MF	2	0.07	28.6	Chrysotile			
G10	88	A32	CD	66	70	F	1.1	0.05	22	Chrysotile			
G10	89	A12				NSD							
G10	90	D2	CD	67	71	F	1	0.05	20	Chrysotile			
G10	91	D22	CD	68	72	B	1.6	0.1	16	Chrysotile			
G10	91	D22	CD	69	73	F	1.4	0.05	28	Chrysotile			
G10	92	D32	CD	70	74	F	0.6	0.08	7.5	Chrysotile			
G10	93	D31	CD	71		MD 1-0	2.1	1	2.1	Chrysotile			
G10	93	D31	CD		75	MF	2.1	0.07	30	Chrysotile			
G10	93	D31	CD	72		MD 1-1	5.2	3	1.7	Chrysotile			AS>5
G10	93	D31	CD		76	MF	5.2	0.08	65	Chrysotile			AFB>5
G10	94	D11	CD	73	77	F	1	0.07	14.3	Chrysotile			
G10	95	A1				NSD							
G10	96	A21				NSD							
G10	97	A41	CD	74	78	F	1.8	0.07	25.7	Chrysotile			
G10	97	A41	CD	75		MD 1-1	9	7	1.3	Chrysotile			AS>5
G10	97	A41	CD		79	MB	5.3	0.25	21.2	Chrysotile			PCMEF-ISO, AFB>5
G10	97	A41	CD	76	80	F	1.2	0.06	20	Chrysotile			
G10	97	A41	CD	77	81	B	0.6	0.1	6	Chrysotile			
G10	98	B30	CD	78		MD 1-0	0.8	0.3	2.7	Chrysotile			
G10	98	B30	CD		82	MF	0.8	0.06	13.3	Chrysotile			
G10	99	B10	CD	79		MD 1-0	2.7	1.5	1.8	Chrysotile			
G10	99	B10	CD		83	MB	2.7	0.12	22.5	Chrysotile			
G10	100	D10	CD	80	84	B	2.7	0.13	20.8	Chrysotile			
G10	101	D30	CD	81	85	F	1.7	0.06	28.3	Chrysotile			
G10	102	C30				NSD							
G10	103	C20	CD	82	86	F	1.3	0.08	16.2	Chrysotile			
G10	103	C20	CD	83		MD 1-1	5.1	1.5	3.4	Chrysotile			PCMES-ISO, AS>5
G10	103	C20	CD		87	MF	5.1	0.08	63.8	Chrysotile			AFB>5
G10	104	B20	CD	84	88	B	1.7	0.1	17	Chrysotile			
G10	104	B20	CD	85	89	B	2	0.12	16.7	Chrysotile			
G10	104	B20	CD	86	90	F	0.6	0.06	10	Chrysotile			
G10	104	B20	CD	87		CD 1-0	1	0.5	2	Chrysotile			
G10	104	B20	CD		91	CF	0.6	0.06	10	Chrysotile			
G10	105	B40				NSD							
G10	106	B31	CD	88	92	F	1.1	0.06	18.3	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-582** Lab/Cor Sample No: **S42**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	107	B11	CD	89	93	F	1.6	0.06	26.7	Chrysotile			
G10	107	B11	CD	90	94	F	1.3	0.96	1.4	Chrysotile			
G10	108	C1	CD	91	95	F	1	0.1	10	Chrysotile			
G10	109	C21	CD	92	96	F	2.1	0.08	26.2	Chrysotile			
G10	110	C31	CD	93	97	F	1.1	0.08	13.8	Chrysotile			
G10	110	C31	CD	94	98	B	6	0.15	40	Chrysotile			AS>5, AFB>5
G10	110	C31	CD	95		MD 1-0	10	4	2.5	Chrysotile			AS>5
G10	110	C31	CD		99	MF	3.5	0.08	43.8	Chrysotile			
G10	111	D22				NSD							
G10	112	D2	CD	96	100	B	7	0.25	28	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-584** Lab/Cor Sample No: **S44**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	D3	CD	1		MD 1-0	4.5	2.7	1.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		304				060359-S44-A1-G6-ST6-2500	
G6	1	D3	CD		1	MF	3	0.06	50	Chrysotile			
G6	2	D21	CDQ	2	2	B	4	0.4	10	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		305		JH 9/25/2006		Neg #395	
						Brightfield		306				Neg #396	
						Spectra		1203					
G6	3	D1				NSD							
G6	4	A1				NSD							
G6	5	A31				NSD							
G6	6	B40				NSD							
G6	7	B20				NSD							
G6	8	C10				NSD							
G6	9	C20	CD	3	3	F	0.51	0.05	10.2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		307				060359-S44-A1-G6-ST51-3000	
G6	9	C20	NAM	4	4	F	26	2.5	10.4	Non Asbestos Mineral	Na, Mg, Si, K, Ca, Fe	too thick for diffraction	
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		308				060359-S44-A1-G6-ST53-700	
G6	10	C30				NSD							
G6	11	B44				NSD							
G6	12	B24				NSD							
G6	13	B4				NSD							
G6	14	C14				NSD							
G6	15	C34	CD	5	5	B	3	0.18	16.7	Chrysotile			
G6	16	C43				NSD							
G6	17	C23				NSD							
G6	18	C3				NSD							
G6	19	B13	CD	6	6	F	0.75	0.1	7.5	Chrysotile			
G6	19	B13	CD	7	7	F	0.55	0.1	5.5	Chrysotile			
G6	20	B33				NSD							
G6	21	B42				NSD							
G6	22	B22	CD	8		MD 1-1	8	8	1	Chrysotile			AS>5
G6	22	B22	CD		8	MF	5.35	0.12	44.6	Chrysotile			AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

LabCor Portland Inc
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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-584** Lab/Cor Sample No: **S44**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	23	B2				NSD							
G6	24	C12				NSD							
G6	25	C32				NSD							
G6	26	C41	CD	9	9	F	0.7	0.05	14	Chrysotile			
G6	27	C21				NSD							
G6	28	C1				NSD							
G6	29	B11	ADQ	10	10	F	7.25	0.38	19.1	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO

ItemType	ItemNum	Confirmed	Comment
Brightfield	J2023 BF		
Diffraction	J2023	KM 9/15/2006	5.3A IMAGE
Spectra	J2310		

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	30	B31				NSD							
G6	31	A22				NSD							
G7	32	A43	CD	11	11	F	1.7	0.08	21.3	Chrysotile			
G7	32	A43	CD	12		MD 1-0	4.35	1.25	3.5	Chrysotile			
G7	32	A43	CD		12	MF	4.35	0.11	39.5	Chrysotile			
G7	32	A43	CD	13		MD 1-0	3	1.2	2.5	Chrysotile			
G7	32	A43	CD		13	MF	3	0.08	37.5	Chrysotile			
G7	33	A3	CD	14	14	F	0.68	0.1	6.8	Chrysotile			
G7	33	A3	CD	15		MD 1-0	1.75	0.7	2.5	Chrysotile			
G7	33	A3	CD		15	MF	0.65	0.05	13	Chrysotile			
G7	34	D13				NSD							
G7	35	D2	ADQ	16	16	B	3.7	0.9	4.1	Amosite	Mg, Al, Si, Fe		

ItemType	ItemNum	Confirmed	Comment
Spectra	J2311		

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	36	A12				NSD							
G7	37	A32				NSD							
G7	38	A41	CD	17		MD 2-0	3.35	1	3.3	Chrysotile			
G7	38	A41	CD		17	MF	3.35	0.08	41.9	Chrysotile			
G7	38	A41	CD		18	MF	1.2	0.1	12	Chrysotile			
G7	39	A21	CD	18		MD 1-0	2	0.6	3.3	Chrysotile			
G7	39	A21	CD		19	MF	1.7	0.03	56.7	Chrysotile			
G7	40	A1				NSD							
G7	41	D11	CD	19	20	F	0.55	0.08	6.9	Chrysotile			
G7	42	D20				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-584**
Client Description:

Lab/Cor Sample No: **S44**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	43	A10				NSD							
G7	44	A30				NSD							
G7	45	A40				NSD							
G7	46	B40				NSD							
G7	47	B30				NSD							
G7	48	B20				NSD							
G7	49	B10				NSD							
G7	50	C10				NSD							
G7	51	C20				NSD							
G7	52	C21				NSD							
G7	53	C1	CD	20	21	F	0.9	0.1	9	Chrysotile			
G7	54	B11	CD	21	22	F	0.7	0.08	8.8	Chrysotile			
G7	55	B31				NSD							
G7	56	B42				NSD							
G7	57	B2	CD	22	23	F	0.6	0.08	7.5	Chrysotile			
G7	58	C12				NSD							
G7	59	B23				NSD							
G7	60	B33				NSD							
G7	61	C42	CD	23	24	CC 30-0	4.5	3	1.5	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-585**
Client Description:

Lab/Cor Sample No: **S45**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A33				NSD							
G6	2	A13				NSD							
G6	3	D3	CDQ	1		MD 1-0	3.7	1.9	1.9	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		309		JH	9/25/2006	Neg #397	
						Brightfield		310				060359-S45-A1-G6-ST6-2500	
						Spectra		1207					
G6	3	D3	CDQ		1	MF	3	0.06	50	Chrysotile	Mg, Si		
G6	4	D23				NSD							
G6	5	D21				NSD							
G6	6	D1	CDQ	2	2	B	1.7	0.08	21.3	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		312				060359-S45-A1-G6-ST36-3500	
G6	7	A1				NSD							
G6	8	A21	CDQ	3		MD 1-1	27	3.3	8.2	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		313				060359-S45-A1-G6-ST46-1000	
G6	8	A21	CDQ		3	MF	23	0.1	230	Chrysotile	Mg, Si		AFB>5
G6	9	A41				NSD							
G6	10	B30	CD	4	4	B	4	0.2	20	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		214				060359-S45-A1-G6-ST61-3500	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-586** Lab/Cor Sample No: **S46**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A1	CDQ	1	1	CC 75-0	7.5	3.8	2	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2043 BF					
						Diffraction		P2043		KM	8/25/2006		
						Spectra		P17353					
G6	1	A1	CD	2	2	F	0.85	0.1	8.5	Chrysotile			
G6	1	A1	CD	3	3	F	1	0.08	12.5	Chrysotile			
G6	2	D22	CM	4	4	F	1.25	0.11	11.4	Chrysotile			
G6	2	D22	CD	5		MD 1-0	2	1	2	Chrysotile			
G6	2	D22	CD		5	MF	1.8	0.11	16.4	Chrysotile			
G6	2	D22	CM	6	6	F	1.2	0.1	12	Chrysotile			
G6	2	D22	CM	7	7	F	1.2	0.1	12	Chrysotile			
G6	2	D22	CM	8	8	B	1	0.12	8.3	Chrysotile			
G6	3	B1	CD	9		MD 1-0	3.5	1	3.5	Chrysotile			
G6	3	B1	CD		9	MF	3.5	0.1	35	Chrysotile			
G6	3	B1	CD	10	10	F	1.2	0.12	10	Chrysotile			
G6	3	B1	CD	11		CD 2-0	2	0.1	20	Chrysotile			
G6	3	B1	CD		11	CF	1.2	0.1	12	Chrysotile			
G6	3	B1	CD		12	CF	0.9	0.08	11.2	Chrysotile			
G6	4	B40				NSD							
G6	5	B20				NSD							
G6	6	B10				NSD							
G6	7	C30				NSD							
G6	8	B32	CD	12	13	F	0.65	0.05	13	Chrysotile			
G6	9	B12	CD	13		MD 1-1	9	8.5	1.1	Chrysotile			AS>5
G6	9	B12	CD		14	MB	7	0.25	28	Chrysotile			AFB>5, PCMEF-ISO
G6	9	B12	CD	14		MD 1-0	4	1.2	3.3	Chrysotile			
G6	9	B12	CD		15	MF	3	0.1	30	Chrysotile			
G6	10	C2				NSD							
G6	11	A42	CD	15	16	F	4.5	0.1	45	Chrysotile			
G6	12	A22	CD	16		MD 1-0	4	3	1.3	Chrysotile			
G6	12	A22	CD		17	MB	3	0.18	16.7	Chrysotile			
G6	13	A2				NSD							
G6	14	D12				NSD							
G6	15	D32				NSD							
G6	16	A33				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-586** Lab/Cor Sample No: **S46**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	17	A13	CD	17		MD 1-0	1.8	1	1.8	Chrysotile			
G6	17	A13	CD		18	MF	1.1	0.1	11	Chrysotile			
G6	18	D3				NSD							
G6	19	D23				NSD							
G6	20	D43	CD	18	19	B	6	0.4	15	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	20	D43	CD	19	20	F	1.7	0.1	17	Chrysotile			
G6	21	B34				NSD							
G6	22	B14				NSD							
G6	23	C4				NSD							
G6	24	C24	CD	20	21	F	1.8	0.1	18	Chrysotile			
G6	25	C44				NSD							
G7	26	B44				NSD							
G7	27	B24	CD	21		MD 1-0	1.2	0.4	3	Chrysotile			
G7	27	B24	CD		22	MF	0.8	0.1	8	Chrysotile			
G7	28	B4				NSD							
G7	29	C14	CD	22		MD 1-0	3.2	1.1	2.9	Chrysotile			
G7	29	C14	CD		23	MF	2.65	0.08	33.1	Chrysotile			
G7	30	C34				NSD							
G7	31	C42	CD	23	24	F	1.1	0.1	11	Chrysotile			
G7	31	C42	CD	24	25	F	1	0.1	10	Chrysotile			
G7	32	C22	CD	25	26	B	2.8	0.15	18.7	Chrysotile			
G7	32	C22	CD	26	27	F	1.25	0.1	12.5	Chrysotile			
G7	33	C2				NSD							
G7	34	B12	CD	27	28	F	2	0.1	20	Chrysotile			
G7	34	B12	CD	28	29	F	7	0.1	70	Chrysotile			AS>5, AFB>5
G7	35	B32				NSD							
G7	36	B40				NSD							
G7	37	B20				NSD							
G7	38	B10	CD	29	30	F	1.7	0.1	17	Chrysotile			
G7	38	B10	CD	30	31	F	1.85	0.1	18.5	Chrysotile			
G7	39	C10				NSD							
G7	40	C30				NSD							
G7	41	D41				NSD							
G7	42	D21	CD	31	32	F	0.55	0.1	5.5	Chrysotile			
G7	42	D21	CD	32		MD 1-0	1.2	0.75	1.6	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-586** Lab/Cor Sample No: **S46**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	42	D21	CD		33	MF	0.75	0.1	7.5	Chrysotile			
G7	42	D21	CD	33	34	F	1	0.1	10	Chrysotile			
G7	42	D21	CD	34	35	B	1.7	0.15	11.3	Chrysotile			
G7	43	D1	CD	35		MD 1-1	28	8	3.5	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J2024					
G7	43	D1	CD		36	MB	25	0.4	62.5	Chrysotile			AFB>5, PCMEF-ISO
G7	43	D1	CD	36	37	F	1.2	0.08	15	Chrysotile			
G7	44	A11				NSD							
G7	45	A31	CD	37	38	F	0.5	0.08	6.2	Chrysotile			
G7	46	A43	AZQ	38	39	F	5.75	0.9	6.4	Amosite	Mg, Al, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J2025 BF					
						Diffraction		J2025		KM	9/18/2006	ZONE AXIS [1 0 1]	
						Spectra		J2312					
G7	47	A23				NSD							
G7	48	A3	CD	39	40	F	1.85	0.1	18.5	Chrysotile			
G7	49	D13	CD	40	41	F	1.35	0.1	13.5	Chrysotile			
G7	50	D33				NSD							
G8	51	A44				NSD							
G8	52	A24				NSD							
G8	53	D4				NSD							
G8	54	D14	CD	41	42	F	4	0.1	40	Chrysotile			
G8	55	D34	CD	42	43	F	0.65	0.08	8.1	Chrysotile			
G8	56	D42	CD	43	44	F	0.7	0.08	8.8	Chrysotile			
G8	56	D42	CD	44	45	F	2.2	0.1	22	Chrysotile			
G8	57	D22	CD	45	46	B	1.2	0.1	12	Chrysotile			
G8	57	D22	CD	46	47	F	0.65	0.1	6.5	Chrysotile			
G8	58	D2	CD	47		MD 1-0	4.5	1.8	2.5	Chrysotile			
G8	58	D2	CD		48	MF	2.3	0.12	19.2	Chrysotile			
G8	59	A12				NSD							
G8	60	A32				NSD							
G8	61	A40	CD	48	49	F	2.7	0.1	27	Chrysotile			
G8	62	A20	CD	49		MD 2-0	1.3	0.6	2.2	Chrysotile			
G8	62	A20	CD		50	MF	0.8	0.08	10	Chrysotile			
G8	62	A20	CD		51	MF	0.6	0.05	12	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-586** Lab/Cor Sample No: **S46**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	63	D10	CD	50	52	F	2.5	0.08	31.2	Chrysotile			
G8	64	D30	CD	51	53	F	2.7	0.08	33.8	Chrysotile			
G8	64	D30	CD	52	54	F	0.7	0.1	7	Chrysotile			
G8	65	D40				NSD							
G8	66	B41				NSD							
G8	67	B21				NSD							
G8	68	B1	CD	53	55	F	0.6	0.05	12	Chrysotile			
G8	68	B1	CD	54	56	F	0.7	0.08	8.8	Chrysotile			
G8	69	C11				NSD							
G8	70	C31	CD	55	57	F	0.7	0.05	14	Chrysotile			
G8	70	C31	CD	56	58	B	4.35	0.3	14.5	Chrysotile			
G8	71	C42	CD	57	59	B	3	0.15	20	Chrysotile			
G8	72	C22				NSD							
G8	73	C2	CD	58	60	F	1.2	0.1	12	Chrysotile			
G8	74	B12	CD	59	61	F	2.7	0.1	27	Chrysotile			
G8	75	B32				NSD							
G9	76	A43				NSD							
G9	77	A23				NSD							
G9	78	A3				NSD							
G9	79	D13	CD	60	62	B	1.8	0.11	16.4	Chrysotile			
G9	80	D33	CD	61	63	B	3.2	0.15	21.3	Chrysotile			
G9	81	D41	CD	62	64	F	2.8	0.08	35	Chrysotile			
G9	82	D21	CD	63	65	B	1.25	0.1	12.5	Chrysotile			
G9	82	D21	CD	64		MD 1-0	2.5	2	1.2	Chrysotile			
G9	82	D21	CD		66	MF	1	0.1	10	Chrysotile			
G9	83	D1	CD	65	67	F	0.75	0.1	7.5	Chrysotile			
G9	84	A11				NSD							
G9	85	A31	CD	66	68	F	1.5	0.08	18.8	Chrysotile			
G9	85	A31	CD	67	69	F	0.8	0.08	10	Chrysotile			
G9	85	A31	CD	68		MD 1-0	3.35	1	3.3	Chrysotile			
G9	85	A31	CD		70	MF	3.35	0.1	33.5	Chrysotile			
G9	85	A31	CD	69	71	F	0.8	0.1	8	Chrysotile			
G9	85	A31	CD	70	72	F	0.6	0.01	60	Chrysotile			
G9	86	B40				NSD							
G9	87	B20				NSD							
G9	88	B10				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-586** Lab/Cor Sample No: **S46**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	89	C10	CD	71	73	F	1.8	0.08	22.5	Chrysotile			
G9	90	C30	ADQ	72	74	F	4.9	0.7	7	Amosite			
G9	91	C42	CD	73	75	F	4	0.1	40	Chrysotile			
G9	92	C22				NSD							
G9	93	C2	CD	74		MD 2-0	5.3	3	1.8	Chrysotile			AS>5
G9	93	C2	CD		76	MB	4.35	0.2	21.8	Chrysotile			
G9	93	C2	CD		77	MB	2.25	0.2	11.2	Chrysotile			
G9	93	C2	CD	75	78	F	1.2	0.1	12	Chrysotile			
G9	93	C2	CD	76	79	CC 5-0	1.7	0.3	5.7	Chrysotile			
G9	93	C2	CD	77	80	B	2.65	0.12	22.1	Chrysotile			
G9	93	C2	CD	78		MD 1-0	3.7	1	3.7	Chrysotile			
G9	93	C2	CD		81	MB	1.8	0.12	15	Chrysotile			
G9	93	C2	CD	79		CD 3-0	2.75	0.2	13.8	Chrysotile			
G9	93	C2	CD		82	CF	1.5	0.1	15	Chrysotile			
G9	93	C2	CD		83	CF	1.5	0.12	12.5	Chrysotile			
G9	93	C2	CD		84	MF	1.2	0.1	12	Chrysotile			
G9	94	B12	CD	80	85	F	4.2	0.1	42	Chrysotile			
G9	94	B12	CD	81	86	F	1.8	0.05	36	Chrysotile			
G9	95	B32	CD	82	87	B	6	0.15	40	Chrysotile			AS>5, AFB>5
G9	95	B32	CD	83	88	F	0.55	0.08	6.9	Chrysotile			
G9	95	B32	CD	84		MD 1-0	1.8	0.5	3.6	Chrysotile			
G9	95	B32	CD		89	MF	1.7	0.08	21.3	Chrysotile			
G9	95	B32	CD	85	90	B	1.2	0.11	10.9	Chrysotile			
G9	95	B32	CD	86	91	F	1.3	0.08	16.2	Chrysotile			
G9	96	B44	CD	87	92	B	0.6	0.12	5	Chrysotile			
G9	96	B44	CD	88	93	B	1.8	0.12	15	Chrysotile			
G9	97	B24	CD	89	94	F	0.7	0.05	14	Chrysotile			
G9	97	B24	CD	90	95	F	2	0.08	25	Chrysotile			
G9	98	B4	CD	91	96	F	0.7	0.08	8.8	Chrysotile			
G9	99	C34	CD	92	97	F	1.2	0.08	15	Chrysotile			
G9	100	A10				NSD							
G10	101	A10	CD	93	98	F	3.8	0.08	47.5	Chrysotile			
G10	102	C10				NSD							
G10	103	C32	CD	94	99	F	1.25	0.08	15.6	Chrysotile			
G10	104	B22				NSD							
G10	105	D1	CD	95	100	F	0.8	0.1	8	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-586**
Lab/Cor Sample No: **S46**
Client Description:
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	105	D1	CD	96	101	B	1.2	0.08	15	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-590** Lab/Cor Sample No: **S50**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	C11	CD	1		MD 1-0	0.5	0.12	4.2	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1995 BF					
						Diffraction		J1995		KM	8/24/2006		
G6	1	C11	CD		1	MF	0.5	0.08	6.2	Chrysotile			
G6	2	D31	CDQ	2	2	F	3.4	0.11	30.9	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1996 BF					
						Diffraction		J1996		KM	8/24/2006		
						Spectra		J2285					
G6	3	B44				NSD							
G6	4	B24	CD	3		MD 1-1	18	15	1.2	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1997 BF					
G6	4	B24	CD		3	MB	12.5	0.17	73.5	Chrysotile			AFB>5
G6	5	B4				NSD							
G6	6	C14	CD	4	4	F	0.8	0.075	10.7	Chrysotile			
G6	7	C34				NSD							
G6	8	C42	CD	5	5	F	0.85	0.1	8.5	Chrysotile			
G6	9	C22	CD	6	6	F	2.1	0.11	19.1	Chrysotile			
G6	10	C2	CD	7	7	F	6.8	0.11	61.8	Chrysotile			AS>5, AFB>5
G6	11	B12	CD	8	8	F	0.65	0.08	8.1	Chrysotile			
G6	12	B32	CD	9	9	B	0.85	0.12	7.1	Chrysotile			
G6	12	B32	CD	10	10	F	0.65	0.08	8.1	Chrysotile			
G6	12	B32	CD	11	11	F	0.75	0.08	9.4	Chrysotile			
G6	13	A41	CD	12		MD 1-1	5.67	4.8	1.2	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1998 BF					
G6	13	A41	CD		12	MF	5.67	0.05	113.4	Chrysotile			AFB>5
G6	14	A21				NSD							
G6	15	A1				NSD							
G6	16	D11	CM	13	13	F	1.75	0.08	21.9	Chrysotile			
G6	17	D23	CD	14		MD 3-0	6.75	2.5	2.7	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J1999 BF					
G6	17	D23	CD		14	MF	4	0.11	36.4	Chrysotile			
G6	17	D23	CD		15	MF	1.2	0.1	12	Chrysotile			
G6	17	D23	CD		16	MF	0.65	0.08	8.1	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-590** Lab/Cor Sample No: **S50**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	17	D23	CD	15	17	F	0.9	0.1	9	Chrysotile			
G6	17	D23	CD	16	18	F	0.55	0.08	6.9	Chrysotile			
G6	17	D23	CD	17		MD 1-0	7.5	3.5	2.1	Chrysotile			AS>5
G6	17	D23	CD		19	MF	4.9	0.1	49	Chrysotile			
G6	18	D3				NSD							
G6	19	A13				NSD							
G6	20	A33	CD	18	20	F	1.12	0.1	11.2	Chrysotile			
G6	20	A33	CD	19	21	F	1	0.08	12.5	Chrysotile			
G6	20	A33	CD	20	22	F	2.2	0.05	44	Chrysotile			
G6	21	A10	CD	21	23	F	3	0.1	30	Chrysotile			
G6	21	A10	CD	22		MD 1-0	5.5	4.8	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J2000 BF					
G6	21	A10	CD		24	MF	2.5	0.1	25	Chrysotile			
G6	21	A10	CD	23	25	F	4.2	0.08	52.5	Chrysotile			
G6	21	A10	CD	24		MD 1-0	8.5	7	1.2	Chrysotile			AS>5
G6	21	A10	CD		26	MF	2	0.1	20	Chrysotile			
G7	22	B43				NSD							
G7	23	B23	CD	25	27	F	0.55	0.08	6.9	Chrysotile			
G7	24	B3	CM	26	28	F	1.25	0.08	15.6	Chrysotile			
G7	25	C13	CD	27		MD 1-0	5.75	4	1.4	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J2001 BF					
G7	25	C13	CD		29	MF	3	0.12	25	Chrysotile			
G7	25	C13	CD	28	30	F	2.2	0.1	22	Chrysotile			
G7	26	C33	CD	29		MD 1-0	1.8	0.5	3.6	Chrysotile			
G7	26	C33	CD		31	MF	0.65	0.1	6.5	Chrysotile			
G7	27	C41	CD	30		MD 1-0	4.75	1.2	4	Chrysotile			
G7	27	C41	CD		32	MB	3.75	0.12	31.2	Chrysotile			
G7	28	C21	CM	31	33	F	1.2	0.08	15	Chrysotile			
G7	28	C21	CD	32	34	F	1.2	0.1	12	Chrysotile			
G7	28	C21	CD	33		MD 3-0	1.2	0.7	1.7	Chrysotile			
G7	28	C21	CD		35	MF	0.6	0.1	6	Chrysotile			
G7	28	C21	CD		36	MF	0.55	0.1	5.5	Chrysotile			
G7	28	C21	CD		37	MF	0.5	0.08	6.2	Chrysotile			
G7	28	C21	CD	34		MD 1-0	1.8	1	1.8	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-590**
Client Description:

Lab/Cor Sample No: **S50**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	28	C21	CD		38	MF	1.3	0.05	26	Chrysotile			
G7	29	C1	CD	35	39	F	1	0.1	10	Chrysotile			
G7	30	B11				NSD							
G7	31	B31	CM	36	40	F	1.8	0.1	18	Chrysotile			
G7	31	B31	CD	37		CD 2-0	2.5	1.2	2.1	Chrysotile			
G7	31	B31	CD		41	CF	2.5	0.1	25	Chrysotile			
G7	31	B31	CD		42	CF	1.25	0.1	12.5	Chrysotile			
G7	32	A41	CM	38		MD 1-0	3.8	1.15	3.3	Chrysotile			
G7	32	A41	CM		43	MF	3.8	0.1	38	Chrysotile			
G7	32	A41	CM	39	44	F	1.15	0.08	14.4	Chrysotile			
G7	33	A21				NSD							
G7	34	A1	CM	40	45	F	1.1	0.1	11	Chrysotile			
G7	35	D11	CD	41		MD 1-0	10	5	2	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		J2002 BF					
G7	35	D11	CD		46	MB	2.85	0.18	15.8	Chrysotile			
G7	35	D11	CM	42	47	F	1.7	0.1	17	Chrysotile			
G7	35	D11	CD	43	48	F	1.85	0.11	16.8	Chrysotile			
G7	35	D11	CD	44	49	F	0.75	0.1	7.5	Chrysotile			
G7	36	D30	CD	45		MD 1-0	17.5	12	1.5	Chrysotile			AS>5
G7	36	D30	CD		50	MF	4	0.1	40	Chrysotile			
G7	36	D30	CD	46	51	B	0.75	0.1	7.5	Chrysotile			
G7	36	D30	CD	47		MD 1-0	5.2	4.8	1.1	Chrysotile			AS>5
G7	36	D30	CD		52	MF	4.2	0.1	42	Chrysotile			
G7	36	D30	CD	48	53	F	0.6	0.08	7.5	Chrysotile			
G7	37	D43	CM	49	54	F	1.2	0.08	15	Chrysotile			
G7	37	D43	CM	50		MD 1-0	4.2	3.8	1.1	Chrysotile			
G7	37	D43	CD		55	MF	4	0.1	40	Chrysotile			
G7	38	D23	CM	51	56	F	0.9	0.08	11.2	Chrysotile			
G7	39	D3	CM	52	57	F	1.25	0.1	12.5	Chrysotile			
G7	39	D3	CD	53	58	F	1.2	0.05	24	Chrysotile			
G7	40	A13	CM	54	59	F	1.2	0.1	12	Chrysotile			
G7	41	A33				NSD							
G8	42	B44				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-590** Lab/Cor Sample No: **S50**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	43	B14	CDQ	55	60	B	3.75	0.15	25	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P2099 BF					
						Diffraction		P2099		KM	9/11/2006		
						Spectra		P17397					
G8	43	B14	CD	56		MD 1-0	1	0.15	6.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P2100					
G8	43	B14	CD		61	MF	0.9	0.08	11.2	Chrysotile			
G8	44	C14	CD	57	62	F	1.85	0.1	18.5	Chrysotile			
G8	44	C14	CD	58	63	B	6.3	0.17	37.1	Chrysotile			AS>5, AFB>5
G8	45	C33				NSD							
G8	46	C3	CD	59	64	F	1.7	0.1	17	Chrysotile			
G8	47	B23				NSD							
G8	48	B41	CD	60	65	F	0.75	0.11	6.8	Chrysotile			
G8	48	B41	CD	61		MD 1-0	5.2	3	1.7	Chrysotile			AS>5
G8	48	B41	CD		66	MF	2.5	0.11	22.7	Chrysotile			
G8	49	B11				NSD							
G8	50	C11				NSD							
G8	51	C41	CD	62	67	F	3.75	0.12	31.2	Chrysotile			
G8	52	D30	CD	63		MD 1-0	10	7	1.4	Chrysotile			AS>5
G8	52	D30	CD		68	MF	2.5	0.08	31.2	Chrysotile			
G8	53	D10	CD	64	69	F	2.7	0.1	27	Chrysotile			
G8	53	D10	CD	65	70	B	3.7	0.18	20.6	Chrysotile			
G8	54	A20	CD	66	71	B	4.75	0.18	26.4	Chrysotile			
G8	55	A42	CD	67		MD 1-0	12	7	1.7	Chrysotile			AS>5
G8	55	A42	CD		72	MF	2.5	0.1	25	Chrysotile			
G8	56	A12				NSD							
G8	57	D12	CD	68		MD 1-0	9.5	4.5	2.1	Chrysotile			AS>5
G8	57	D12	CD		73	MF	1.5	0.08	18.8	Chrysotile			
G8	57	D12	CD	69	74	B	12	0.2	60	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G8	58	D42	CD	70	75	B	4.2	0.8	5.2	Chrysotile			
G8	58	D42	CD	71		MD 1-0	8	8	1	Chrysotile			AS>5
G8	58	D42	CD		76	MF	3.8	0.1	38	Chrysotile			
G8	59	D33	CD	72		MD 1-0	1.8	0.8	2.2	Chrysotile			
G8	59	D33	CD		77	MF	1.8	0.08	22.5	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-590**
Client Description:

Lab/Cor Sample No: **S50**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	59	D33	CD	73		MD 1-0	8.5	4	2.1	Chrysotile			AS>5
G8	59	D33	CD		78	MF	1.8	0.08	22.5	Chrysotile			
G8	60	D3				NSD							
G8	61	C23	CD	74	79	B	2	0.12	16.7	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** Lab/Cor Sample No: **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A11				NSD							
G6	2	A42				NSD							
G6	3	A2				NSD							
G6	4	D22				NSD							
G6	5	D31	NAM	1	1	F	4.9	0.35	14	Non Asbestos Mineral	Mg, Al, Si, Ca, Ti, Fe	POSSIBLE MAGNESIO-HORNEBLEND E	
G6	6	C20				NSD							
G6	7	C41	CDQ	2	2	B	1.1	0.2	5.5	Chrysotile	Mg, Si		
						ItemType		ItemNum			Confirmed	Comment	
						Brightfield		P2044 BF					
						Diffraction		P2044			KM 8/25/2006		
						Spectra		P17354					
G6	8	C13	CD	3		MD 1-0	3	1.8	1.7	Chrysotile			
G6	8	C13	CD		3	MF	1.5	0.1	15	Chrysotile			
G6	9	B14	CD	4		MD 1-0	4.8	2	2.4	Chrysotile			
G6	9	B14	CD		4	MF	3.8	0.1	38	Chrysotile			
G6	10	B42	CD	5		MD 1-0	2	2	1	Chrysotile			
G6	10	B42	CD		5	MF	2	0.1	20	Chrysotile			
G6	10	B42	CD	6	6	F	5.2	0.1	52	Chrysotile			AS>5, AFB>5
G6	11	A24	CD	7	7	F	4.5	0.06	75	Chrysotile			
G6	11	A24	CD	8	8	F	1.2	0.09	13.3	Chrysotile			
G6	12	A4				NSD							
G6	13	D14				NSD							
G6	14	D24	CD	9	9	F	4	0.15	26.7	Chrysotile			
G6	15	D34				NSD							
G6	16	D23				NSD							
G6	17	D3				NSD							
G6	18	A13				NSD							
G6	19	A33				NSD							
G6	20	A42	CD	10		MD	5.5	2.3	2.4	Chrysotile			AS>5
G6	20	A41	CD		10	MF	1.7	0.1	17	Chrysotile			
G6	21	A31				NSD							
G6	22	A21	CD	11	11	F	6.5	0.09	72.2	Chrysotile			AS>5, AFB>5
G6	23	A11				NSD							
G6	24	A1				NSD							

Count Categories

AFB>5	*Asbestos Fibers and Bundles > 5um and*	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** Lab/Cor Sample No: **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	25	D1				NSD							
G6	26	D11				NSD							
G6	27	D21				NSD							
G6	28	D31				NSD							
G6	29	D41				NSD							
G6	30	D40				NSD							
G6	31	D20	CD	12	12	F	1.2	0.08	15	Chrysotile			
G6	32	D10	CD	13	13	F	3	0.08	37.5	Chrysotile			
G6	33	A10				NSD							
G6	34	A20				NSD							
G6	35	A40				NSD							
G6	36	B41				NSD							
G6	37	B21				NSD							
G6	38	B1				NSD							
G6	39	C11				NSD							
G6	40	C31				NSD							
G6	41	C41				NSD							
G6	42	C42				NSD							
G6	43	C22	CD	14		MD 1-0	3.8	2	1.9	Chrysotile			
G6	43	C22	CD		14	MF	1.7	0.08	21.3	Chrysotile			
G6	44	C2	CD	15		MD 1-0	3.4	2.7	1.3	Chrysotile			
G6	44	C2	CD		15	MF	3.6	0.06	60	Chrysotile			
G6	45	B12				NSD							
G6	46	B32	CD	16	16	F	1.7	0.1	17	Chrysotile			
G6	47	B42	CD	17	17	F	2	0.06	33.3	Chrysotile			
G6	48	B33				NSD							
G6	49	B13	CD	18	18	F	5.6	0.08	70	Chrysotile			AS>5, AFB>5
G6	50	C3				NSD							
G6	51	C23	CD	19		MD 1-0	2.6	2.4	1.1	Chrysotile			
G6	51	C23	CD		19	MF	1.7	0.06	28.3	Chrysotile			
G6	52	C24				NSD							
G6	53	C14				NSD							
G6	54	C4	CD	20		MD 1-0	7	6	1.2	Chrysotile			AS>5
G6	54	C4	CD		20	MF	2.4	0.08	30	Chrysotile			
G6	55	B4				NSD							
G7	56	A24				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** Lab/Cor Sample No: **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	57	A14				NSD							
G7	58	A4	CD	21		MD 1-1	8	2.5	3.2	Chrysotile			AS>5, PCMES-ISO
G7	58	A4	CD		21	MF	8	0.08	100	Chrysotile			AFB>5
G7	59	D4				NSD							
G7	60	D14				NSD							
G7	61	D24				NSD							
G7	62	D33				NSD							
G7	63	D13				NSD							
G7	64	A3				NSD							
G7	65	A23				NSD							
G7	66	A43				NSD							
G7	67	A32				NSD							
G7	68	A12				NSD							
G7	69	D2	CD	22	22	F	1	0.08	12.5	Chrysotile			
G7	70	D22				NSD							
G7	71	D42				NSD							
G7	72	D31				NSD							
G7	73	D11				NSD							
G7	74	A1				NSD							
G7	75	A21				NSD							
G7	76	A41				NSD							
G7	77	A30	CD	23		MD 1-0	3.5	2.3	1.5	Chrysotile			
G7	77	A30	CD		23	MF	3.5	0.07	50	Chrysotile			
G7	78	A10				NSD							
G7	79	D10				NSD							
G7	80	D30				NSD							
G7	81	C40				NSD							
G7	82	C20				NSD							
G7	83	B10				NSD							
G7	84	B30				NSD							
G7	85	B21	CD	24		MD 1-1	20	19	1.1	Chrysotile			AS>5
G7	85	B21	CD		24	MF	13.5	0.07	192.9	Chrysotile			AFB>5
G7	86	B41				NSD							
G7	87	B1				NSD							
G7	88	C11	CD	25	25	F	1.1	0.07	15.7	Chrysotile			
G7	89	C31				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** Lab/Cor Sample No: **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	90	C42				NSD							
G7	91	C22				NSD							
G7	92	C2				NSD							
G7	93	B12				NSD							
G7	94	B22				NSD							
G7	95	B43				NSD							
G7	96	B23				NSD							
G7	97	B3				NSD							
G7	98	C13				NSD							
G7	99	C33	CD	26		MD 1-0	2	0.9	2.2	Chrysotile			
G7	99	C33	CD		26	MF	0.9	0.07	12.9	Chrysotile			
G7	100	C24				NSD							
G7	101	C4				NSD							
G7	102	B14				NSD							
G8	103	A24				NSD							
G8	104	A4				NSD							
G8	105	D14	CD	27	27	B	3.8	0.2	19	Chrysotile			
G8	106	D34				NSD							
G8	107	D43				NSD							
G8	108	D23	CD	28	28	F	2.6	0.07	37.1	Chrysotile			
G8	109	D3				NSD							
G8	110	A13				NSD							
G8	111	A33				NSD							
G8	112	A42	CD	29	29	F	4.2	0.07	60	Chrysotile			
G8	113	A22				NSD							
G8	114	A2	CD	30		MD 1-0	4.9	1	4.9	Chrysotile			
G8	114	A2	CD		30	MB	4.9	0.2	24.5	Chrysotile			
G8	114	A2	CD	31	31	F	2.2	0.07	31.4	Chrysotile			
G8	115	D12	CD	32	32	F	0.51	0.06	8.5	Chrysotile			
G8	115	D12	CD	33	33	F	2	0.1	20	Chrysotile			
G8	116	D32	CD	34	34	F	5.1	0.06	85	Chrysotile			AS>5, AFB>5
G8	117	D41				NSD							
G8	118	D21				NSD							
G8	119	D1	CD	35		MD 1-1	14	7.5	1.9	Chrysotile			AS>5
G8	119	D1	CD		35	MF	6	0.06	100	Chrysotile			AFB>5
G8	120	A11				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** Lab/Cor Sample No: **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	121	A31				NSD							
G8	122	A40				NSD							
G8	123	A20				NSD							
G8	124	A10				NSD							
G8	125	D10				NSD							
G8	126	D30				NSD							
G8	127	C40				NSD							
G8	128	C20				NSD							
G8	129	C10				NSD							
G8	130	B10				NSD							
G8	131	B30	CD	36		MD 1-1	6.5	3.3	2	Chrysotile			AS>5
G8	131	B30	CD		36	MF	6.5	0.07	92.9	Chrysotile			AFB>5
G8	131	B30	CD	37		MD 1-0	4.8	1.5	3.2	Chrysotile			
G8	131	B30	CD		37	MF	4.8	0.07	68.6	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						B41							
G8	132	B41	CD	38	38	F	1	0.06	16.7	Chrysotile			
G8	133	B21				NSD							
G8	134	B1				NSD							
G8	135	C11				NSD							
G8	136	C31	CD	39		MD 1-1	9	7	1.3	Chrysotile			AS>5
G8	136	C31	CD		39	MB	6	0.3	20	Chrysotile			AFB>5, PCMEF-ISO
G8	137	C42				NSD							
G8	138	C22				NSD							
G8	139	C2				NSD							
G8	140	B12				NSD							
G8	141	B32				NSD							
G8	142	B43				NSD							
G8	143	B23				NSD							
G8	144	B3				NSD							
G8	145	B23				NSD							
G8	146	B43				NSD							
G8	147	B24	CD	40	40	F	2.5	0.08	31.2	Chrysotile			
G8	147	B24	CD	41	41	F	3.2	0.08	40	Chrysotile			
G8	147	B24	CD	42	42	F	1.7	0.06	28.3	Chrysotile			
G8	147	B24	CD	43		MD 1-0	3.5	2.5	1.4	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	*PCM Equivalent Structures-ISO*	TAS	*Total Asbestos Structures*

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594**
Client Description:

Lab/Cor Sample No: **S54**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	147	B24	CD		43	MF	3.5	0.06	58.3	Chrysotile			
G8	148	B4	CD	44		CD 4-1	5.1	0.5	10.2	Chrysotile			AS>5, PCMES-ISO
G8	148	B4	CD		44	CF	5.1	0.06	85	Chrysotile			AFB>5
G8	148	B4	CD		45	CF	4.3	0.06	71.7	Chrysotile			
G8	148	B4	CD		46	CF	4.2	0.06	70	Chrysotile			
G8	148	B4	CD		47	CF	1.8	0.06	30	Chrysotile			
G8	148	B4	CD	45	48	F	1.3	0.06	21.7	Chrysotile			
G8	148	B4	CD	46		MD 1-0	1.5	0.9	1.7	Chrysotile			
G8	148	B4	CD		49	MB	1.2	1	1.2	Chrysotile			
G8	148	B4	CD		50	MF	1.5	0.08	18.8	Chrysotile			
G8	148	B4	CD	47		MD 51-0	10	8	1.2	Chrysotile			AS>5
G8	148	B4	CD		51	MF	3.5	0.06	58.3	Chrysotile			
G8	148	B4	CD		52	MR 50-0	7.5	2	3.8	Chrysotile			
G8	148	B4	CD	48	53	F	0.52	0.06	8.7	Chrysotile			
G8	148	B4	CD	49	54	F	0.51	0.06	8.5	Chrysotile			
G8	148	B4	CD	50	55	F	0.51	0.06	8.5	Chrysotile			
G8	148	B4	CD	51		CD 2-0	2	1	2	Chrysotile			
G8	148	B4	CD		56	CF	2.1	0.08	26.2	Chrysotile			
G8	148	B4	CD		57	CB	1.5	0.2	7.5	Chrysotile			
G8	149	B24				NSD							
G9	149	B24				NSD							
G9	150	B4				NSD							
G9	151	C14				NSD							
G9	152	C34	CD	53	59	B	4.9	0.3	16.3	Chrysotile			
G9	152	C34	CD	54	60	F	0.8	0.2	4	Chrysotile			
G9	152	C34	CD	52	58	F	0.7	0.2	3.5	Chrysotile			
G9	152	C34	CD	55	62	F	3	0.07	42.9	Chrysotile			
G9	153	C43				NSD							
G9	154	C23	CD		61	MF	2	0.08	25	Chrysotile			
G9	154	C23	CD	56		MD 1-0	2	0.5	4	Chrysotile			
G9	155	C3				NSD							
G9	156	B13				NSD							
G9	157	B33				NSD							
G9	158	B42				NSD							
G9	159	B22				NSD							
G9	160	B2				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** *Lab/Cor Sample No:* **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	161	C12				NSD							
G9	162	C32	CD	57	63	B	0.8	0.2	4	Chrysotile			
G9	163	C41	CD	58	64	F	1.5	0.1	15	Chrysotile			
G9	164	C21				NSD							
G9	165	C1				NSD							
G9	166	B11				NSD							
G9	167	B31				NSD							
G9	168	B40				NSD							
G9	169	B20				NSD							
G9	170	B10				NSD							
G9	171	C10				NSD							
G9	172	C30				NSD							
G9	173	D40				NSD							
G9	174	D20				NSD							
G9	175	D10				NSD							
G9	176	A10				NSD							
G9	177	A40				NSD							
G9	178	A21				NSD							
G9	179	A1				NSD							
G9	180	D11				NSD							
G9	181	D31				NSD							
G9	182	D42				NSD							
G9	183	D22				NSD							
G9	184	D2				NSD							
G9	185	A12				NSD							
G9	186	A32				NSD							
G9	187	A43				NSD							
G9	188	A33				NSD							
G9	189	A3				NSD							
G9	190	D13				NSD							
G9	191	D33				NSD							
G9	192	D13	CD	59		MD 1-0	1.1	0.6	1.8	Chrysotile			
G9	192	D13	CD		65	MF	1.1	0.07	15.7	Chrysotile			
G9	193	D33				NSD							
G9	194	A3				NSD							
G9	195	A13				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594**
Client Description:

Lab/Cor Sample No: **S54**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	196	A43				NSD							
G9	197	A4	CD	60		MD 1-1	6	5	1.2	Chrysotile			AS>5
G9	197	A4	CD		66	MF	6	0.1	60	Chrysotile			AFB>5
G9	198	D14				NSD							
G9	199	D24				NSD							
G9	200	D43				NSD							
G9	201	D23				NSD							
G9	202	D3				NSD							
G9	203	A13				NSD							
G9	204	A33				NSD							
G9	205	A42				NSD							
G9	206	A22				NSD							
G9	207	A2				NSD							
G9	208	D12				NSD							
G9	209	D32				NSD							
G9	210	D41				NSD							
G9	211	D21				NSD							
G9	212	D1				NSD							
G9	213	A11				NSD							
G9	214	A31				NSD							
G9	215	A40				NSD							
G9	216	A20	CD	61	67	B	4.2	0.25	16.8	Chrysotile			
G9	217	D20				NSD							
G9	218	C30	CD	62	68	F	2.5	0.06	41.7	Chrysotile			
G9	219	C10	CD	63		MD 1-0	2	1.8	1.1	Chrysotile			
G9	219	C10	CD		69	MF	1.5	0.1	15	Chrysotile			
G9	220	B10				NSD							
G9	221	B30				NSD							
G9	222	B41				NSD							
G9	223	B21				NSD							
G9	224	B1				NSD							
G9	225	C11				NSD							
G9	226	C31				NSD							
G9	227	C42				NSD							
G9	228	C22	CD	64	70	B	1.9	0.2	9.5	Chrysotile			
G9	229	C2				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: *Parametrix*
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** Lab/Cor Sample No: **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	230	B12				NSD							
G9	231	B32	CD	65		MD 1-1	5.8	0.6	9.7	Chrysotile			AS>5, PCMES-ISO
G9	231	B32	CD		71	MF	5.2	0.06	86.7	Chrysotile			AFB>5
G9	232	B43	CD	66	72	F	1.1	0.09	12.2	Chrysotile			
G9	233	B23	CD	67		MD 1-0	3.2	1.2	2.7	Chrysotile			
G9	233	B23	CD		73	MF	3.2	0.06	53.3	Chrysotile			
G9	234	B3				NSD							
G9	235	C13				NSD							
G9	236	C23				NSD							
G9	237	C43	CD	68	74	F	1.1	0.05	22	Chrysotile			
G9	238	C24				NSD							
G9	239	C4				NSD							
G9	240	B14	CD	69	75	F	2.5	0.07	35.7	Chrysotile			
G9	241	B24				NSD							
G11	242	A24	CD	70	76	B	2.1	0.1	21	Chrysotile			
G11	243	A4				NSD							
G11	244	D14				NSD							
G11	245	D24				NSD							
G11	246	D43				NSD							
G11	247	D13				NSD							
G11	248	A3				NSD							
G11	249	A23				NSD							
G11	250	A43				NSD							
G11	251	A22				NSD							
G11	252	A2				NSD							
G11	253	D12				NSD							
G11	254	D32				NSD							
G11	255	D41				NSD							
G11	256	D21				NSD							
G11	257	D1				NSD							
G11	258	A11				NSD							
G11	259	A31	CD	71	77	F	3	0.1	30	Chrysotile			
G11	259	A31	CD	72	78	F	3.2	0.1	32	Chrysotile			
G11	260	A40				NSD							
G11	261	A20				NSD							
G11	262	D10	CD	73	79	F	2.5	0.06	41.7	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** Lab/Cor Sample No: **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G11	263	D30	CD	74	80	F	5.7	0.07	81.4	Chrysotile			AS>5, AFB>5
G11	264	C40	CD	75		MD 1-0	4.5	4	1.1	Chrysotile			
G11	264	C40	CD		81	MF	4	0.08	50	Chrysotile			
G11	265	C20				NSD							
G11	266	B20				NSD							
G11	267	B40				NSD							
G11	268	B31				NSD							
G11	269	B11				NSD							
G11	270	C1				NSD							
G11	271	C31				NSD							
G11	272	C42				NSD							
G11	273	C22				NSD							
G11	274	C2				NSD							
G11	275	B12				NSD							
G11	276	B32				NSD							
G11	277	B43				NSD							
G11	278	B23				NSD							
G11	279	B3				NSD							
G11	280	C13				NSD							
G11	281	C33				NSD							
G11	282	C24				NSD							
G11	283	C4				NSD							
G11	284	B14				NSD							
G11	285	B24				NSD							
G12	286	A24				NSD							
G12	287	A4				NSD							
G12	288	D14				NSD							
G12	289	D43				NSD							
G12	290	D23				NSD							
G12	291	D3				NSD							
G12	292	A13				NSD							
G12	293	A33	CD	76	82	F	3	0.1	30	Chrysotile			
G12	294	A42				NSD							
G12	295	A22	CD	77		CD 2-0	3	0.7	4.3	Chrysotile			
G12	295	A22	CD		83	CB	2.8	0.15	18.7	Chrysotile			
G12	295	A22	CD		84	CB	1.1	0.2	5.5	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594** Lab/Cor Sample No: **S54**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G12	296	A2				NSD							
G12	297	D12				NSD							
G12	298	D32				NSD							
G12	299	D41				NSD							
G12	300	D21	CD	78	85	B	3.5	0.25	14	Chrysotile			
G12	301	D1				NSD							
G12	302	A11	CD	79		MD 1-0	1.5	0.5	3	Chrysotile			
G12	302	A11	CD		86	MF	1.5	0.08	18.8	Chrysotile			
G12	303	A31				NSD							
G12	304	A40				NSD							
G12	305	A20				NSD							
G12	306	D10				NSD							
G12	307	D40				NSD							
G12	308	C30				NSD							
G12	309	C10				NSD							
G12	310	B10				NSD							
G12	311	B30				NSD							
G12	312	B41				NSD							
G12	313	B21	CD	80	87	F	2.5	0.07	35.7	Chrysotile			
G12	314	B1				NSD							
G12	315	C11	CD	81	88	F	5.1	0.07	72.9	Chrysotile			AS>5, AFB>5
G12	316	C42				NSD							
G12	317	C2	CD	82		MD 1-0	4.4	3	1.5	Chrysotile			

ItemType	ItemNum	Confirmed	Comment
c12			

G12	317	C2	CD		89	MF	3.3	0.06	55	Chrysotile			
G12	317	C2	CD	83	90	F	4.3	0.1	43	Chrysotile			
G12	318	C22				NSD							
G12	319	B12				NSD							
G12	320	B32				NSD							
G12	321	B43				NSD							
G12	322	B23				NSD							
G12	323	B3				NSD							
G12	324	D23	CD	84	91	F	1.6	0.06	26.7	Chrysotile			
G12	324	D23	CD	85	92	B	1.8	0.2	9	Chrysotile			
G12	324	D23	CD	86		MD 1-0	1.9	0.4	4.8	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-594**
Client Description:

Lab/Cor Sample No: **S54**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G12	324	D23	CD		93	MB	1.9	0.1	19	Chrysotile			
G12	325	D24	CD	87	94	F	3	0.1	30	Chrysotile			
G13	326	A24				NSD							
G13	327	A4				NSD							
G13	328	D14				NSD							
G13	329	D24	CD	88	95	B	6.1	0.25	24.4	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G13	330	D23				NSD							
G13	331	D3				NSD							
G13	332	A13				NSD							
G13	333	A33	CD	89	96	F	1.5	0.07	21.4	Chrysotile			
G13	334	A22				NSD							
G13	335	A2				NSD							
G13	336	D12	CD	90		MD 4-2	35	25	1.4	Chrysotile			AS>5
G13	336	D12	CD		97	MB	19	0.2	95	Chrysotile			AFB>5, PCMEF-ISO
G13	336	D12	CD		98	MB	18	0.2	90	Chrysotile			AFB>5, PCMEF-ISO
G13	336	D12	CD		99	MB	4.9	0.2	24.5	Chrysotile			
G13	336	D12	CD		100	MB	3.5	0.2	17.5	Chrysotile			
G13	336	D12	CD	91	101	B	6	0.2	30	Chrysotile			AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G13	337	D32				NSD							
G13	338	D41				NSD							
G13	339	D21				NSD							
G13	340	D1				NSD							
G13	341	A11	CD	92		MD 1-0	1.6	0.3	5.3	Chrysotile			
G13	341	A11	CD		102	MB	1.6	0.08	20	Chrysotile			
G13	342	A31				NSD							
G13	343	A40				NSD							
G13	344	A20				NSD							
G13	345	D10	CD	93		MD 1-1	10	7.5	1.3	Chrysotile			AS>5
G13	345	D10	CD		103	MF	10	0.08	125	Chrysotile			AFB>5
G13	346	D40	CD	94	104	F	1	0.1	10	Chrysotile			
G13	347	C30	CD	95		MD 1-1	15	14	1.1	Chrysotile			AS>5
G13	347	C30	CD		105	MB	12.5	0.1	125	Chrysotile			AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: *060359* **PDX**
Client: Parametrix
Project Name: *Northridge Estates*

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-595** Lab/Cor Sample No: **S55**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A30	CD	1	1	F	1	0.1	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Diffraction		J2005		JH	9/25/2006		
G6	2	B34				NSD							
G6	3	B2	CDQ	2	2	F	0.8	0.1	8	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J2006 BF					
						Diffraction		J2006		KM	8/25/2006		
						Spectra		J2288					
G6	4	C14	CD	3	3	F	1.2	0.1	12	Chrysotile			
G6	5	C32				NSD							
G6	6	C40				NSD							
G6	7	D21				NSD							
G6	8	D14	CD	4	4	F	1.2	0.1	12	Chrysotile			
G6	9	A1	CD	5	5	F	0.8	0.1	8	Chrysotile			
G6	9	A1	AZQ	6	6	F	1.4	0.25	5.6	Amosite	Mg, Si, Fe		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J2007 BF					
						Diffraction		J2007		KM	8/25/2006	ZONE AXIS [3 0 1]	
						Spectra		J2289					
G6	10	A32				NSD							
G6	11	B41	CD	7	7	F	0.8	0.1	8	Chrysotile			
G6	11	B41	CD	8	8	F	0.65	0.1	6.5	Chrysotile			
G6	12	B21	CD	9	9	F	0.75	0.1	7.5	Chrysotile			
G6	12	B21	CD	10	10	F	0.9	0.1	9	Chrysotile			
G6	13	B1	CD	11	11	F	0.7	0.1	7	Chrysotile			
G6	14	C11	CD	12	12	F	0.85	0.1	8.5	Chrysotile			
G6	15	C31				NSD							
G6	16	A43	CD	13	13	F	0.85	0.1	8.5	Chrysotile			
G6	17	A23				NSD							
G6	18	A3				NSD							
G6	19	D13				NSD							
G6	20	D33				NSD							
G6	21	B10				NSD							
G7	22	B34	CD	14	14	F	0.85	0.11	7.7	Chrysotile			
G7	22	B34	CD	15	15	F	0.75	0.1	7.5	Chrysotile			
G7	23	B4	CD	16	16	F	0.55	0.01	55	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-595**
Client Description:

Lab/Cor Sample No: **S55**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	24	C24	CD	17	17	F	0.53	0.1	5.3	Chrysotile			
G7	25	C43				NSD							
G7	26	C13				NSD							
G7	27	B13				NSD							
G7	28	B43	CD	18	18	F	0.65	0.1	6.5	Chrysotile			
G7	29	B32	CD	19	19	F	0.6	0.05	12	Chrysotile			
G7	29	B32	CD	20	20	F	0.7	0.08	8.8	Chrysotile			
G7	30	B2	CD	21	21	F	5	0.11	45.5	Chrysotile			
G7	31	C22				NSD							
G7	32	C40				NSD							
G7	33	C10	CD	22		MD 3-0	2.5	0.22	11.4	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2101					
G7	33	C10	CD		22	MB	1.85	0.18	10.3	Chrysotile			
G7	33	C10	CD		23	MF	1.5	0.1	15	Chrysotile			
G7	33	C10	CD		24	MF	0.6	0.1	6	Chrysotile			
G7	34	B10	CD	23	25	F	2.7	0.1	27	Chrysotile			
G7	35	B40	CD	24	26	F	1.6	0.1	16	Chrysotile			
G7	36	A31				NSD							
G7	37	A1				NSD							
G7	38	D21				NSD							
G7	39	D42				NSD							
G7	40	D12	CD	25		CD 2-0	1.8	0.1	18	Chrysotile			
G7	40	D12	CD		27	MF	1.1	0.1	11	Chrysotile			
G7	40	D12	CD		28	MF	0.9	0.1	9	Chrysotile			
G7	41	A12	CD	26	29	F	1.12	0.1	11.2	Chrysotile			
G7	42	A42				NSD							
G8	43	B44	CD	27	30	F	0.65	0.11	5.9	Chrysotile			
G8	44	B14	CD	28		MD 1-0	3.8	1	3.8	Chrysotile			
G8	44	B14	CD		31	MF	3	0.1	30	Chrysotile			
G8	45	C14				NSD							
G8	46	C44	CD	29	32	F	0.9	0.1	9	Chrysotile			
G8	47	C33	CD	30	33	F	0.75	0.11	6.8	Chrysotile			
G8	48	C3				NSD							
G8	49	B23	CD	31	34	F	0.5	0.08	6.2	Chrysotile			
G8	50	B31				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-595** Lab/Cor Sample No: **S55**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	51	B1	CD	32	35	F	1	0.03	33.3	Chrysotile			
G8	52	C40				NSD							
G8	53	C10				NSD							
G8	54	B10				NSD							
G8	55	B40	CD	33	36	F	0.65	0.1	6.5	Chrysotile			
G8	56	A31				NSD							
G8	57	A1				NSD							
G8	58	D21	CD	34	37	F	1.25	0.1	12.5	Chrysotile			
G8	59	D42				NSD							
G8	60	D12				NSD							
G8	61	A12	CD	35	38	F	0.75	0.1	7.5	Chrysotile			
G8	62	A42				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-596**
Client Description:

Lab/Cor Sample No: **S56**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A10	ADQ	1		MD 1-1	22	10	2.2	Amosite	Mg, Si, Fe		AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J2003 BF					
						Diffraction		J2003 BF		KM	8/25/2006	5.3A IMAGE	
						Spectra		J2286					
G6	1	A10	ADQ		1	MF	22	0.45	48.9	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	2	C10	ADQ	2		MD 1-1	15	10	1.5	Amosite	Mg, Si, Fe		AS>5
G6	2	C10	ADQ		2	MF	14.5	0.38	38.2	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	2	C10	ADQ	3		MD 1-1	15	8	1.9	Amosite	Mg, Si, Fe		AS>5
G6	2	C10	ADQ		3	MF	8	0.4	20	Amosite	Mg, Si, Fe		AFB>5. PCMEF-ISO
G6	2	C10	ADQ	4	4	F	15.85	0.25	63.4	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	3	D32	CDQ	5	5	F	1.75	0.11	15.9	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J2004 BF					
						Diffraction		J2004		KM	8/25/2006		
						Spectra		J2287					
G6	4	A22	CD	6	6	F	1.35	0.1	13.5	Chrysotile			
G6	5	B30	ADQ	7	7	F	7.5	0.48	15.6	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	6	B23				NSD							
G6	7	B4	ADQ	8	8	F	4.2	0.25	16.8	Amosite	Mg, Si, Fe		
G6	7	B4	ADQ	9	9	F	7.2	0.48	15	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G6	8	C12	CD	10	10	F	1.6	0.1	16	Chrysotile			
G6	8	C12	CD	11	11	F	1.5	0.1	15	Chrysotile			
G6	9	C32	CD	12	12	F	0.75	0.1	7.5	Chrysotile			
G6	9	C32	CD	13	13	F	0.85	0.11	7.7	Chrysotile			
G6	9	C32	CD	14	14	F	1.25	0.1	12.5	Chrysotile			
G6	10	D40	CM	15		MD 1-0	1.3	0.8	1.6	Chrysotile			
G6	10	D40	CM		15	MF	0.85	0.1	8.5	Chrysotile			
G6	10	D40	ADQ	16	16	F	2.8	0.38	7.4	Amosite	Mg, Si, Fe		
G6	11	C43	CD	17		MD 1-1	10	5	2	Chrysotile			AS>5
G6	11	C43	CD		17	MF	10	0.08	125	Chrysotile			AFB>5
G6	11	C43	CD	18		MD 1-0	0.8	0.6	1.3	Chrysotile			
G6	11	C43	CD		18	MF	0.6	0.1	6	Chrysotile			
G6	11	C43	CD	19		MD 1-1	8.5	8	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2102					

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-596** Lab/Cor Sample No: **S56**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	11	C43	CD		19	MB	7.5	0.35	21.4	Chrysotile			AFB>5, PCMEF-ISO
G6	12	C23				NSD							
G6	13	B22	CD	20	20	F	1.75	0.08	21.9	Chrysotile			
G6	14	B2				NSD							
G6	15	C12	CD	21	21	F	1.25	0.1	12.5	Chrysotile			
G6	16	C32	CD	22	22	F	1.75	0.1	17.5	Chrysotile			
G6	16	C32	CD	23	23	F	3.5	0.1	35	Chrysotile			
G6	16	C32	ADQ	24		MD 1-1	12	5	2.4	Amosite	Mg, Si, Fe		AS>5
G6	16	C32	ADQ		24	MF	5.6	0.36	15.6	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	17	D41	ADQ	25		MD 1-1	15	9	1.7	Amosite	Mg, Si, Fe		AS>5
G6	17	D41	ADQ		25	MF	15	0.8	18.8	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	18	D21	CD	26	26	F	0.5	0.1	5	Chrysotile			
G6	18	D21	CD	27		MD 1-0	25	15	1.7	Chrysotile			AS>5
G6	18	D21	CD		27	MF	1.5	0.1	15	Chrysotile			
G6	18	D21	CD	28	28	F	3.2	0.1	32	Chrysotile			
G6	18	D21	CD	29	29	F	0.75	0.01	75	Chrysotile			
G6	19	D1	CD	30	30	F	1.25	0.1	12.5	Chrysotile			
G6	19	D1	CD	31	31	F	1.22	0.1	12.2	Chrysotile			
G6	19	D1	CD	32	32	F	1.7	0.1	17	Chrysotile			
G6	20	D3	ADQ	33		MD 1-1	9.75	8.5	1.1	Amosite	Mg, Si, Fe		AS>5
G6	20	D3	ADQ		33	MF	9.75	0.7	13.9	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	20	D3	ADQ	34	34	F	3	0.22	13.6	Amosite	Mg, Si, Fe		
G6	21	D23	ADQ	35		MD 1-1	7.5	3.5	2.1	Amosite	Mg, Si, Fe		AS>5
G6	21	D23	ADQ		35	MF	6	0.65	9.2	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G6	21	D23	CD	36		CD 2-0	0.9	0.1	9	Chrysotile			
G6	21	D23	CD		36	CF	0.9	0.1	9	Chrysotile			
G6	21	D23	CD		37	CF	0.75	0.1	7.5	Chrysotile			
G6	21	D23	CD	37	38	F	1.85	0.1	18.5	Chrysotile			
G7	22	A42				NSD							
G7	23	A22	CDQ	38		CD 2-0	3	2.25	1.3	Chrysotile	Mg, Si		

ItemType	ItemNum	Confirmed	Comment
Brightfield	P2103BF		
Diffraction	P2103	JH	9/25/2006
Spectra	P17398		

G7	23	A22	CDQ		39	CB	2.75	0.25	11	Chrysotile	Mg, Si		
G7	23	A22	CDQ		40	CR 1-0	2.5	1	2.5	Chrysotile	Mg, Si		

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-596** Lab/Cor Sample No: **S56**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	23	A22	AZQ	39	41	F	1.75	0.5	3.5	Amosite	Mg, Si, Fe		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2104BF					
						Diffraction		P2104		JH	9/28/2006		
						Spectra		P17399					
G7	23	A22	CD	40	42	F	1.4	0.1	14	Chrysotile			
G7	24	A2	CD	41	43	F	2.5	0.1	25	Chrysotile			
G7	24	A2	CD	42	44	F	1.7	0.1	17	Chrysotile			
G7	24	A2	ADQ	43		MD 1-0	21	17	1.2	Amosite	Mg, Si, Fe		AS>5
G7	24	A2	ADQ		45	MF	4	0.25	16	Amosite	Mg, Si, Fe		
G7	24	A2	CMQ	44	46	F	0.6	0.05	12	Chrysotile	Mg, Si		
G7	24	A2	CMQ	45	47	F	1.3	0.1	13	Chrysotile	Mg, Si		
G7	25	D12	CD	46	48	F	1.4	0.1	14	Chrysotile			
G7	25	D12	ADQ	47	49	F	2.5	0.15	16.7	Amosite	Mg, Si, Fe		
G7	25	D12	CMQ	48	50	F	2.25	0.1	22.5	Chrysotile			
G7	26	B44	CD	49		MD 1-0	1	0.8	1.2	Chrysotile			
G7	26	B44	CD		51	MF	0.65	0.1	6.5	Chrysotile			
G7	26	B44	CD	50	52	F	1	0.1	10	Chrysotile			
G7	26	B44	CD	51		MD 1-0	2.8	2.5	1.1	Chrysotile			
G7	26	B44	CD		53	MF	0.95	0.05	19	Chrysotile			
G7	27	B14	CD	52		MD 1-1	18	15	1.2	Chrysotile			AS>5
G7	27	B14	CD		54	MF	7.5	0.1	75	Chrysotile			AFB>5
G7	27	B14	CD	53	55	F	1.5	0.08	18.8	Chrysotile			
G7	28	C14	CD	54	56	B	3.85	0.15	25.7	Chrysotile			
G7	29	C3	NAM	55		MD 1-1	6.8	3.5	1.9	Non Asbestos Mineral	Na, Mg, Si, K, Ca, Fe		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2105					
						Spectra		P17400					
G7	29	C3	NAM		57	MF	5.3	0.55	9.6	Non Asbestos Mineral			
G7	29	C3	ADQ	56	58	B	6.75	0.75	9	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMES-ISO, PCMEF-ISO
G7	29	C3	CD	57	59	F	3.8	0.1	38	Chrysotile			
G7	30	B23	ADQ	58	60	F	1.75	0.22	8	Amosite	Mg, Si, Fe		
G7	30	B23	CD	59	61	F	0.65	0.1	6.5	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-596** Lab/Cor Sample No: **S56**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	31	B41	CD	60	62	B	2	0.15	13.3	Chrysotile			
G7	31	B41	CD	61		MD 1-0	6.5	5	1.3	Chrysotile			AS>5
G7	31	B41	CD		63	MF	1.2	0.1	12	Chrysotile			
G7	32	B11	CD	62	64	F	0.7	0.08	8.8	Chrysotile			
G7	32	B11	CD	63	65	F	2.55	0.38	6.7	Chrysotile			
G7	33	C11	CD	64	66	F	0.6	0.05	12	Chrysotile			
G7	34	C41	ADQ	65	67	F	4.4	0.4	11	Amosite	Mg, Si, Fe		
G7	34	C41	CD	66	68	F	0.55	0.1	5.5	Chrysotile			
G7	34	C41	CD	67	69	F	9.5	0.1	95	Chrysotile			AS>5, AFB>5
G7	34	C41	CD	68		MD 1-0	2	0.5	4	Chrysotile			
G7	34	C41	CD		70	MF	0.65	0.05	13	Chrysotile			
G7	35	D30	ADQ	69	71	F	6.8	0.4	17	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G7	36	D10				NSD							
G7	37	A20	CD	70		MD 1-0	6.5	3.5	1.9	Chrysotile			AS>5
G7	37	A20	CD		72	MF	4.5	0.1	45	Chrysotile			
G7	38	A31	ADQ	71		MD 1-0	4.2	1.5	2.8	Amosite	Mg, Si, Fe		
G7	38	A31	ADQ		73	MF	3.12	0.38	8.2	Amosite	Mg, Si, Fe		
G7	39	A11	CD	72	74	F	0.6	0.08	7.5	Chrysotile			
G7	40	D1	CD	73	75	MC 6-0	4	2.5	1.6	Chrysotile			
G7	41	D21	ADQ	74		MD 1-1	6.2	1.8	3.4	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G7	41	D21	ADQ		76	MF	5.5	0.3	18.3	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	41	D21	CD	75	77	F	1.2	0.1	12	Chrysotile			
G7	41	D21	ADQ	76		MD 1-1	20	12	1.7	Amosite	Mg, Si, Fe		AS>5
G7	41	D21	ADQ		78	MF	6.5	0.25	26	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G7	41	D21	ADQ	77		MD 1-1	7.8	6.5	1.2	Amosite	Mg, Si, Fe		AS>5
G7	41	D21	ADQ		79	MF	6.5	0.18	36.1	Amosite	Mg, Si, Fe		AFB>5
G7	42	D41	CD	78	80	F	1.25	0.08	15.6	Chrysotile			
G8	43	B34	AZQ	79	81	F	4.2	0.68	6.2	Amosite	Mg, Si, Fe		

ItemType	ItemNum	Confirmed	Comment
Brightfield	P2109 BF		
Diffraction	P2109	KM	9/12/2006 ZONE AXIS [2 0 1]
Spectra	P17404		

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	44	B4	CD	80	82	F	1.1	0.1	11	Chrysotile			
G8	45	C24	ADQ	81	83	F	38.5	0.68	56.6	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G8	46	C43	CD	82	84	F	0.65	0.1	6.5	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-596** Lab/Cor Sample No: **S56**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	46	C43	ADQ	83	85	F	6.8	0.6	11.3	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
G8	46	C43	CD	84	86	F	0.7	0.1	7	Chrysotile			
G8	46	C43	CD	85		MD 1-0	15	10	1.5	Chrysotile			AS>5
G8	46	C43	CD		87	MF	4	0.1	40	Chrysotile			
G8	47	C13	ADQ	86		MD 1-1	25	7	3.6	Amosite	Mg, Si, Fe		AS>5
G8	47	C13	ADQ		88	MF	25	0.37	67.6	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G8	47	C13	CD	87		CD 2-0	1.8	0.1	18	Chrysotile			
G8	47	C13	CD		89	CF	1	0.1	10	Chrysotile			
G8	47	C13	CD		90	CF	0.75	0.1	7.5	Chrysotile			
G8	47	C13	CD	88	91	F	1.7	0.1	17	Chrysotile			
G8	48	B13	CD	89	92	F	0.55	0.1	5.5	Chrysotile			
G8	48	B13	CD	90	93	F	0.85	0.08	10.6	Chrysotile			
G8	48	B13	CD	91		MD 1-0	5.2	3	1.7	Chrysotile			AS>5
G8	48	B13	CD		94	MF	1.8	0.1	18	Chrysotile			
G8	48	B13	ADQ	92	95	F	1.75	0.2	8.8	Amosite			
G8	49	B43				NSD							
G8	50	B32	CD	93	96	F	1.8	0.08	22.5	Chrysotile			
G8	51	B2	CD	94	97	F	1.7	0.11	15.5	Chrysotile			
G8	52	C22	CD	95	98	F	1.1	0.12	9.2	Chrysotile			
G8	53	D40	CD	96	99	F	1.9	0.1	19	Chrysotile			
G8	54	D10				NSD							
G8	55	A10	CD	97	100	F	0.75	0.11	6.8	Chrysotile			
G8	55	A10	CD	98	101	F	3.5	0.1	35	Chrysotile			
G8	55	A10	CD	99	102	F	0.8	0.1	8	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-598** Lab/Cor Sample No: **S58**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G12	1	C4	CDQ	1	1	F	1.5	0.1	15	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		J2046 BF					
						Diffraction		J2046		KM	8/27/2006		
						Spectra		J17355					
G12	2	C14	ADQ	2		CD 2-1	9	3	3	Amosite	Mg, Si, Fe		AS>5, PCMES-ISO
G12	2	C14	ADQ		2	CF	8	1	8	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G12	2	C14	ADQ		3	CF	3.5	0.35	10	Amosite	Mg, Si, Fe		
G12	3	C34	ADQ	3		MD 1-1	24	19	1.3	Amosite	Mg, Si, Fe	Intersects right grid bar	AS>5
G12	3	C34	ADQ		4	MF	6.4	0.35	18.3	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G12	4	C23				NSD							
G12	5	C12				NSD							
G12	6	C32	CDQ	4	5	F	1.4	0.1	14	Chrysotile	Mg, Si		
G12	7	C21	CDQ	5	6	F	0.75	0.1	7.5	Chrysotile	Mg, Si		
G12	8	C30	CDQ	6	7	F	1.7	0.1	17	Chrysotile	Mg, Si		
G12	9	D20				NSD							
G12	10	D31				NSD							
G13	11	B44				NSD							
G13	12	B34				NSD							
G13	13	B33				NSD							
G13	14	B14	CD	7		MD 2-0	4	4	1	Chrysotile	Mg, Si		
G13	14	B14	CD		8	MF	2.5	0.1	25	Chrysotile			
G13	14	B14	CD		9	MF	0.75	0.1	7.5	Chrysotile			
G13	15	B3				NSD							
G13	16	C13				NSD							
G13	17	C34				NSD							
G13	18	C41				NSD							
G13	19	C21				NSD							
G13	20	C22	CM	8	10	F	2.5	0.15	16.7	Chrysotile	Mg, Si		
G13	21	C1				NSD							
G13	22	B1				NSD							
G13	23	B2				NSD							
G13	24	B22	CM	9		MD 1-0	3.5	3.5	1	Chrysotile			
G13	24	B22	CM		11	MF	0.6	0.1	6	Chrysotile	Mg, Si		
G13	24	B22	AQ	10	12	F	1.25	0.15	8.3	Amosite	Mg, Si, Fe		
G13	24	B22	CM	11	13	F	2.5	0.1	25	Chrysotile	Mg, Si		

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-598** Lab/Cor Sample No: **S58**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G13	25	B42	AQ	12	14	F	22	0.25	88	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
G13	25	B42	ADQ	13	15	F	22	0.35	62.9	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
						ItemType	ItemNum	Confirmed	Comment				
						Brightfield	P2126 BF						
						Diffraction	P2126	JH	9/25/2006 Zone Axis [2 0 1]				
						Spectra	P17412						
G13	26	B41				NSD							
G13	27	B21				NSD							
G13	28	B10				NSD							
G13	29	A10				NSD							
G13	30	A1	AQ	14	16	F	21.5	0.4	53.8	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
G13	30	A1	AQ	15	17	F	8.5	0.35	24.3	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
G14	31	B10				NSD							
G14	32	B11				NSD							
G14	33	B2				NSD							
G14	34	C2	AD	16		MD 1-0	11	7.5	1.5	Amosite	Mg, Si, Fe		AS>5
G14	34	C2	AD		18	MF	3.5	0.3	11.7	Amosite	Mg, Si, Fe		
G14	35	C22				NSD							
G14	36	C31				NSD							
G14	37	C30	CMQ	17	19	F	3.5	0.1	35	Chrysotile	Mg, Si		
G14	37	C30	CMQ	18	20	F	0.75	0.05	15	Chrysotile	Mg, Si		
G14	38	C44				NSD							
G14	39	C24				NSD							
G14	40	C4	CDQ	19	21	F	1.2	0.1	12	Chrysotile	Mg, Si		
G14	40	C4	CMQ	20	22	F	3	0.1	30	Chrysotile	Mg, Si		
G14	40	C4	AQ	21	23	F	5.5	0.4	13.8	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
G14	41	C3	CMQ	22	24	F	1	0.1	10	Chrysotile	Mg, Si		
G14	42	B3				NSD							
G14	43	B44	ADQ	23		MD 1-1	10	5	2	Amosite	Mg, Si, Fe		AS>5
G14	43	B44	ADQ		25	MF	9	0.4	22.5	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G14	44	A40	CDQ	24		MD 1-0	5	5	1	Chrysotile	Mg, Si		
G14	44	A40	CDQ		26	MF	3	0.15	20	Chrysotile	Mg, Si		
G14	45	A41				NSD							
G14	46	A31				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

Lab/Cor Portland, Inc.
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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-598** Lab/Cor Sample No: **S58**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G14	47	A20	CMQ	25	27	F	3.5	0.1	35	Chrysotile	Mg, Si		
G14	47	A20	ADQ	26		MD 1-0	10	7.5	1.3	Amosite	Mg, Si, Fe		AS>5
G14	47	A20	ADQ		28	MF	4	0.65	6.2	Amosite	Mg, Si, Fe		
G14	48	A1	CMQ	27	29	F	1	0.1	10	Chrysotile	Mg, Si		
G14	49	D2	CDQ	28	30	B	2	0.15	13.3	Chrysotile	Mg, Si		

ItemType	ItemNum	Confirmed	Comment
Brightfield	P2127		
Brightfield	P2127 BF		
Spectra	P17413		

G14	50	D12	CMQ	29	31	F	1.5	0.05	30	Chrysotile	Mg, Si		
G14	51	D10				NSD							
G14	52	D20				NSD							
G14	53	D30	ADQ	30		MD 1-0	5	5	1	Amosite	Mg, Si, Fe		
G14	53	D30	ADQ		32	MF	2.5	0.4	6.2	Amosite	Mg, Si, Fe		
G14	54	D41				NSD							
G14	55	D32				NSD							
G14	56	D12				NSD							
G14	57	D44				NSD							
G14	58	D24	CMQ	31	33	F	1	0.05	20	Chrysotile	Mg, Si		
G14	58	D24	CMQ	32	34	F	1	0.1	10	Chrysotile	Mg, Si		
G14	59	A24	CMQ	33	35	F	2.5	0.1	25	Chrysotile	Mg, Si		
G14	60	A34	CMQ	34	36	F	1	0.1	10	Chrysotile	Mg, Si		
G14	61	A32				NSD							
G15	62	A43				NSD							
G15	63	A32	AQ	35		MD 1-0	7.5	7.5	1	Amosite	Mg, Si, Fe		AS>5
G15	63	A32	AQ		37	MF	3.5	0.35	10	Amosite	Mg, Si, Fe		
G15	64	A23				NSD							
G15	65	A34	CMQ	36	38	F	2	0.15	13.3	Chrysotile	Mg, Si		
G15	66	A14				NSD							
G15	67	A13				NSD							
G15	68	D3	CMQ	37	39	F	2.5	0.1	25	Chrysotile	Mg, Si		
G15	69	D4				NSD							
G15	70	D14				NSD							
G15	71	D23				NSD							
G15	72	D32				NSD							
G15	73	D44				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-598** Lab/Cor Sample No: **S58**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G15	74	B44	AQ	38	40	F	6	0.55	10.9	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
G15	75	B34	CMQ	39	41	F	1	0.05	20	Chrysotile	Mg, Si		
G15	75	B34	AQ	40	42	F	15	1.2	12.5	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
G15	76	B23				NSD							
G15	77	B3				NSD							
G15	78	B4				NSD							
G15	79	C24				NSD							
G15	80	C41	CMQ	41	43	B	1.1	0.15	7.3	Chrysotile	Mg, Si		
G16	81	B43	CMQ	42	44	F	2.5	0.1	25	Chrysotile	Mg, Si		
G16	82	B34				NSD							
G16	83	B23				NSD							
G16	84	B4	CMQ	43	45	F	2.5	0.1	25	Chrysotile	Mg, Si		
G16	85	C3	AQ	44	46	F	0.75	0.15	5	Amosite	Mg, Si, Fe		
G16	86	C23	AQ	45	47	F	6	0.25	24	Amosite	Mg, Si, Fe		AFB>5, AS>5, PCMEF-ISO, PCMES-ISO
G16	87	C34				NSD							
G16	88	C44	CMQ	46	48	F	2	0.05	40	Chrysotile	Mg, Si		
G16	88	C44	CDQ	47	49	F	2.5	0.1	25	Chrysotile	Mg, Si		
G16	89	C42				NSD							
G16	90	C21				NSD							
G16	91	C1	CM	48	50	F	0.75	0.05	15	Chrysotile			
G16	92	B2				NSD							
G16	93	B12				NSD							
G16	94	B10	AQ	49		MD 1-1	15	10	1.5	Amosite	Mg, Si, Fe		AS>5
G16	94	B10	AQ		51	MF	10	0.35	28.6	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G16	95	B20				NSD							
G16	96	B31				NSD							
G16	97	B41	CMQ	50	52	F	3.5	0.05	70	Chrysotile	Mg, Si		
G16	98	A40				NSD							
G16	99	A31	CMQ	51	53	F	1.5	0.05	30	Chrysotile	Mg, Si		
G16	100	A20				NSD							
G16	101	D41				NSD							
G16	102	D42	CMQ	52		MD 1-0	2.5	2.5	1	Chrysotile	Mg, Si		
G16	102	D42	CMQ		54	MF	2	0.1	20	Chrysotile	Mg, Si		
G16	103	D32	AQ	53	55	F	4.5	0.35	12.9	Amosite	Mg, Si, Fe		

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-598** Lab/Cor Sample No: **S58**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G16	104	D21				NSD							
G16	105	D11				NSD							
G16	106	D2				NSD							
G16	107	A2	CMQ	54	56	F	1	0.05	20	Chrysotile	Mg, Si		
G16	108	A44				NSD							
G16	109	A34				NSD							
G16	110	A24				NSD							
G16	111	A23				NSD							
G16	112	A13				NSD							
G16	113	A3				NSD							
G17	114	A41	CMQ	55	57	F	2	0.05	40	Chrysotile	Mg, Si		
G17	115	A31				NSD							
G17	116	A22				NSD							
G17	117	A13				NSD							
G17	118	A4				NSD							
G17	119	D14				NSD							
G17	120	D22				NSD							
G17	121	D32				NSD							
G17	122	D41	CMQ	56	58	F	0.75	0.1	7.5	Chrysotile	Mg, Si		
G17	122	D41	CMQ	57	59	F	1	0.1	10	Chrysotile	Mg, Si		
G17	123	C10				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-600** Lab/Cor Sample No: **S60**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A23				NSD							
G6	2	A3				NSD							
G6	3	D13	CDQ	1	1	F	3.5	0.1	35	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		315		JH	9/25/2006	Neg #398	
						Brightfield		346				Neg #399	
						Spectra		1208					
G6	4	D31				NSD							
G6	5	D11				NSD							
G6	6	A1				NSD							
G6	7	A21	CD	2		MD 1-0	1.5	1	1.5	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		317				060359-S60-A1-G6-ST36-10000	
G6	7	A21	CD		2	MF	1.6	0.06	26.7	Chrysotile			
G6	8	A41				NSD							
G6	9	B40				NSD							
G6	10	B20				NSD							
G6	11	B44	CD	3	3	F	1.8	0.1	18	Chrysotile			
G6	11	B44	CD	4	4	F	0.8	0.08	10	Chrysotile			
G6	12	C13				NSD							
G6	13	B23	CD	5		MD 1-1	30	12	2.5	Chrysotile			AS>5
G6	13	B23	CD		5	MB	8	0.15	53.3	Chrysotile			AFB>5
G6	14	B33	CD	6	6	F	1	0.1	10	Chrysotile			
G6	15	B22				NSD							
G6	16	C31				NSD							
G6	17	C11				NSD							
G6	18	B30				NSD							
G6	19	C40				NSD							
G6	20	D40				NSD							
G6	21	D30				NSD							
G6	22	A30				NSD							
G6	23	A40				NSD							
G6	24	D2				NSD							
G6	25	A12				NSD							
G6	26	A32	CD	7	7	F	3	0.1	30	Chrysotile			
G6	27	A31				NSD							
G6	28	D1	CD	8	8	F	0.65	0.08	8.1	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-600** Lab/Cor Sample No: **S60**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	29	D41				NSD							
G6	30	D4				NSD							
G7	31	B24				NSD							
G7	32	B4				NSD							
G7	33	C14				NSD							
G7	34	C34				NSD							
G7	35	C43				NSD							
G7	36	C3				NSD							
G7	37	B13				NSD							
G7	38	B33				NSD							
G7	39	B42	CD	9	9	F	1.1	0.08	13.8	Chrysotile			
G7	40	B22				NSD							
G7	41	B2				NSD							
G7	42	C12				NSD							
G7	43	C32				NSD							
G7	44	C41	CD	10	10	B	3.7	0.4	9.2	Chrysotile			
G7	45	C21				NSD							
G7	46	C1	CD	11	11	F	7.5	0.11	68.2	Chrysotile			AS>5, AFB>5
G7	47	B31				NSD							
G7	48	B40				NSD							
G7	49	B20	CD	12	12	F	0.7	0.11	6.4	Chrysotile			
G7	50	C10				NSD							
G7	51	C30				NSD							
G7	52	D40	CD	13	13	F	1.1	0.1	11	Chrysotile			
G7	53	D20	CD	14	14	F	1.1	0.05	22	Chrysotile			
G7	53	D20	CD	15	15	F	1.5	0.1	15	Chrysotile			
G7	54	D10				NSD							
G7	55	A30				NSD							
G7	56	A41	CD	16	16	F	1.5	0.11	13.6	Chrysotile			
G7	57	A21				NSD							
G7	58	A1				NSD							
G7	59	D11	CD	17	17	F	1.7	0.1	17	Chrysotile			
G7	60	D31				NSD							
G7	61	D42	CD	18	18	F	1.5	0.1	15	Chrysotile			
G7	62	D22				NSD							
G7	63	D2				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-600**
Client Description:

Lab/Cor Sample No: **S60**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	64	A12				NSD							
G7	65	A32	CD	19	19	F	1.12	0.12	9.3	Chrysotile			
G7	66	A43				NSD							
G7	67	A23				NSD							
G7	68	A3				NSD							
G7	69	D13				NSD							
G7	70	D33				NSD							
G7	71	D44				NSD							
G7	72	D24				NSD							
G7	73	D4	CD	20	20	F	1.2	0.1	12	Chrysotile			
G7	74	A14	CD	21		MD 1-1	15	8	1.9	Chrysotile			AS>5
G7	74	A14	CD		21	MF	11	0.1	110	Chrysotile			AFB>5
G7	75	A31	CD	22		MD 1-1	6	0.6	10	Chrysotile			AS>5, PCMES-ISO
G7	75	A31	CD		22	MF	6	0.1	60	Chrysotile			AFB>5
G7	76	D2				NSD							
G7	77	D21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-662** Lab/Cor Sample No: **S62**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	D1				NSD							
G6	2	D32				NSD							
G6	3	D10				NSD							
G6	4	C21				NSD							
G6	5	C33	CD	1	1	F	0.8	0.08	10	Chrysotile			
						ItemType		ItemNum		Confirmed	Comment		
						Brightfield		P2045 BF					
						Diffraction		P2045		KM	8/25/2006		
G6	6	C13	CD	2		CD 2-0	1.85	0.35	5.3	Chrysotile			
G6	6	C13	CD		2	CB	1.25	0.18	6.9	Chrysotile			
G6	6	C13	CD		3	CF	1	0.1	10	Chrysotile			
G6	7	B14				NSD							
G6	8	C1				NSD							
G6	9	B21				NSD							
G6	10	B43				NSD							
G6	11	A44	CD	3		MD 1-0	3.5	2	1.8	Chrysotile			
G6	11	A44	CD		4	MF	3.5	0.03	116.7	Chrysotile			
G6	12	A24				NSD							
G6	13	A4				NSD							
G6	14	D14				NSD							
G6	15	D34	CD	4	5	F	4.1	0.1	41	Chrysotile			
G6	16	D42	CD	5	6	F	1.7	0.1	17	Chrysotile			
G6	17	D22				NSD							
G6	18	D2	CD	6	7	F	1.12	0.08	14	Chrysotile			
G6	19	A12	CD	7	8	F	4.1	0.11	37.3	Chrysotile			
G6	19	A12	CD	8	9	F	2.85	0.1	28.5	Chrysotile			
G6	20	A32	CD	9	10	B	1.2	0.12	10	Chrysotile			
G6	20	A32	CD	10	11	F	1.8	0.08	22.5	Chrysotile			
G6	21	A40				NSD							
G6	22	A20				NSD							
G6	23	A10				NSD							
G6	24	D10				NSD							
G6	25	C41	CD	11	12	F	1.2	0.08	15	Chrysotile			
G6	25	C41	CD	12	13	F	3.6	0.1	36	Chrysotile			
G7	26	B44				NSD							
G7	27	B24				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-662** Lab/Cor Sample No: **S62**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	28	B4	CD	13		MD 1-0	1.1	0.7	1.6	Chrysotile			
G7	28	B4	CD		14	MF	0.65	0.1	6.5	Chrysotile			
G7	29	C14	CD	14		MD 1-0	10	8	1.2	Chrysotile			AS>5
G7	29	C14	CD		15	MF	1.5	0.08	18.8	Chrysotile			
G7	30	C34				NSD							
G7	31	C42	CD	15		MD 1-1	8	4.8	1.7	Chrysotile			AS>5
G7	31	C42	CD		16	MF	8	0.03	266.7	Chrysotile			AFB>5
G7	32	C2				NSD							
G7	33	B12	CD	16		MD 1-0	1.85	0.6	3.1	Chrysotile			
G7	33	B12	CD		17	MF	1.7	0.1	17	Chrysotile			
G7	34	B32				NSD							
G7	35	B40				NSD							
G7	36	B20				NSD							
G7	37	B10				NSD							
G7	38	C10				NSD							
G7	39	D41				NSD							
G7	40	D21				NSD							
G7	41	D1	CD	17		MD 1-0	5.2	0.6	8.7	Chrysotile			AS>5, PCMES-ISO
G7	41	D1	CD		18	MF	4.8	0.1	48	Chrysotile			
G7	41	D1	CD	18	19	F	0.6	0.1	6	Chrysotile			
G7	41	D1	CD	19	20	CC 4-0	1	1	1	Chrysotile			
G7	42	A11	CD	20	21	F	6.5	0.1	65	Chrysotile			AS>5, AFB>5
G7	43	A31				NSD							
G7	44	A42				NSD							
G7	45	A22				NSD							
G7	46	A2				NSD							
G7	47	D12				NSD							
G7	48	D23				NSD							
G7	49	D3				NSD							
G7	50	A13				NSD							
G8	51	A44	CD	21		MD 1-0	4.5	1.8	2.5	Chrysotile			
G8	51	A44	CD		22	MF	4	0.05	80	Chrysotile			
G8	52	A24				NSD							
G8	53	A4	CD	22		MD 1-0	30	7	4.3	Chrysotile			AS>5
G8	53	A4	CD		23	MF	4.3	0.12	35.8	Chrysotile			
G8	54	D14				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

LabCor Portland Inc
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Final Report

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-662** Lab/Cor Sample No: **S62**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	55	D34				NSD							
G8	56	D42	CD	23	24	F	2.7	0.1	27	Chrysotile			
G8	57	D22				NSD							
G8	58	D2	CD	24	25	F	1.2	0.1	12	Chrysotile			
G8	58	D2	CD	25	26	F	0.65	0.08	8.1	Chrysotile			
G8	59	A12				NSD							
G8	60	A40				NSD							
G8	61	A20				NSD							
G8	62	A10	CD	26	27	F	1.8	0.1	18	Chrysotile			
G8	63	D10				NSD							
G8	64	D30	CD	27	28	F	1.7	0.08	21.3	Chrysotile			
G8	65	D40				NSD							
G8	66	C21				NSD							
G8	67	C1	CD	28		MD 1-0	2	0.5	4	Chrysotile			
G8	67	C1	CD		29	MF	2	0.1	20	Chrysotile			
G8	67	C1	CD	29	30	B	2.7	0.35	7.7	Chrysotile			
G8	68	B31	CD	30	31	F	1.2	0.11	10.9	Chrysotile			
G8	69	B11				NSD							
G8	70	B43				NSD							
G8	71	B23				NSD							
G8	72	B3				NSD							
G8	73	C4	CD	31		MD 1-0	4.8	2.8	1.7	Chrysotile			
G8	73	C4	CD		32	MF	2	0.1	20	Chrysotile			
G8	74	B14				NSD							
G8	75	B34				NSD							
G9	76	C44	CD	32	33	F	1.75	0.11	15.9	Chrysotile			
G9	77	C24	CD	33	34	F	1.7	0.05	34	Chrysotile			
G9	78	C4				NSD							
G9	79	B14				NSD							
G9	80	B34				NSD							
G9	81	B42	CD	34	35	F	5.75	0.11	52.3	Chrysotile			AS>5, AFB>5
G9	82	B22				NSD							
G9	83	B2	CD	35		MD 1-0	1.7	0.5	3.4	Chrysotile			
G9	83	B2	CD		36	MF	1.7	0.05	34	Chrysotile			
G9	84	C12	CD	36		MD 1-1	8.8	6	1.5	Chrysotile			AS>5
G9	84	C12	CD		37	MF	7.8	0.1	78	Chrysotile			AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-662**
Client Description:

Lab/Cor Sample No: **S62**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G9	85	C32				NSD							
G9	86	C40	CD	37	38	F	1.2	0.1	12	Chrysotile			
G9	87	C20	CD	38	39	F	3	0.11	27.3	Chrysotile			
G9	88	C10	CD	39		MD 7-0	4.8	1.5	3.2	Chrysotile			
G9	88	C10	CD		40	MB	3.7	0.15	24.7	Chrysotile			
G9	88	C10	CD		41	MR 6-0	1.3	0.1	13	Chrysotile			
G9	89	B10				NSD							
G9	90	B30	CD	40		MD 1-0	7	3	2.3	Chrysotile			AS>5
G9	90	B30	CD		42	MF	3.1	0.08	38.8	Chrysotile			
G9	91	A21	CD	41		MD 1-0	6.35	3	2.1	Chrysotile			AS>5
G9	91	A21	CD		43	MF	1.5	0.1	15	Chrysotile			
G9	92	A1	CD	42	44	F	2.5	0.1	25	Chrysotile			
G9	93	D11	CD	43	45	F	0.7	0.1	7	Chrysotile			
G9	94	D31				NSD							
G9	95	D43				NSD							
G9	96	D23				NSD							
G9	97	D3	CD	44		MD 1-0	2.5	1.8	1.4	Chrysotile			
G9	97	D3	CD		46	MF	1.5	0.1	15	Chrysotile			
G9	98	A13	CD	45	47	B	3	0.38	7.9	Chrysotile			
G9	99	A33	CD	46	48	F	6.5	0.1	65	Chrysotile			AS>5, AFB>5
G9	100	A20				NSD							
G10	101	B44	CD	47		MD 1-0	3.8	1	3.8	Chrysotile			
G10	101	B44	CD		49	MF	1.5	0.1	15	Chrysotile			
G10	102	B24				NSD							
G10	103	B4	CD	48		MD 1-0	1.1	0.7	1.6	Chrysotile			
G10	103	B4	CD		50	MF	1.1	0.03	36.7	Chrysotile			
G10	104	C14	CD	49		MD 1-1	15	10	1.5	Chrysotile			AS>5
G10	104	C14	CD		51	MF	5.3	0.1	53	Chrysotile			AFB>5
G10	105	C23				NSD							
G10	106	C3				NSD							
G10	107	B13				NSD							
G10	108	B33				NSD							
G10	109	B41	CD	50	52	CC 75-25	10	4	2.5	Chrysotile			AS>5
G10	110	B21				NSD							
G10	111	B1	CD	51	53	F	1.12	0.08	14	Chrysotile			
G10	112	C11				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-662** Lab/Cor Sample No: **S62**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G10	113	C40				NSD							
G10	114	C10	CD	52	54	F	2.1	0.1	21	Chrysotile			
G10	*114*	*C10*	*CD*	*53*	*55*	*F*	*2.65*	*0.1*	*26.5*	*Chrysotile*			
G10	115	B10				NSD							
G10	116	B30				NSD							
G10	117	B40	CD	54	56	B	2.2	0.3	7.3	Chrysotile			
G10	117	B40	CD	55	57	B	1.7	0.12	14.2	Chrysotile			
G10	118	A21	CD	56	58	F	1.1	0.03	36.7	Chrysotile			
G10	119	A1				NSD							
G10	120	D11				NSD							
G10	121	D31				NSD							
G10	122	A12				NSD							
G10	123	D2	ADQ	57	59	F	4	0.4	10	Amosite	Mg, Si, Fe		
G10	124	D22	CD	58	60	F	3	0.1	30	Chrysotile			
G10	124	D22	CD	59	61	F	5.2	0.1	52	Chrysotile			AS>5, AFB>5
G10	125	B42				NSD							
G11	126	B44	CD	60		MD 1-0	1.7	0.35	4.9	Chrysotile			
G11	126	B44	CD		62	MF	0.8	0.08	10	Chrysotile			
G11	127	B24				NSD							
G11	128	B4				NSD							
G11	129	C14	CD	61	63	F	4.9	0.1	49	Chrysotile			
G11	130	C34				NSD							
G11	131	C42	CD	62		MD 1-1	8.5	1.1	7.7	Chrysotile			AS>5, PCMES-ISO
G11	131	C42	CD		64	MB	7.2	0.17	42.4	Chrysotile			AFB>5
G11	132	C32				NSD							
G11	133	C2				NSD							
G11	134	B12	CD	63	65	F	2.75	0.1	27.5	Chrysotile			
G11	135	B32				NSD							
G11	136	B40				NSD							
G11	137	B20				NSD							
G11	138	B10	CD	64	66	F	3.75	0.08	46.9	Chrysotile			
G11	138	B10	CD	65	67	F	0.7	0.1	7	Chrysotile			
G11	138	B10	CD	66	68	F	0.65	0.08	8.1	Chrysotile			
G11	138	B10	CD	67	69	F	0.55	0.08	6.9	Chrysotile			
G11	139	C10				NSD							
G11	140	C30	CD	68	70	F	1.75	0.1	17.5	Chrysotile			

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-662** Lab/Cor Sample No: **S62**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G11	140	C30	CD	69	71	F	1.7	0.03	56.7	Chrysotile			
G11	140	C30	CD	70	72	F	2	0.1	20	Chrysotile			
G11	140	C30	CD	71	73	F	5.3	0.08	66.3	Chrysotile			AS>5, AFB>5
G11	141	D41				NSD							
G11	142	D21				NSD							
G11	143	D1	CD	72		MD 1-0	3.3	0.6	5.5	Chrysotile			
G11	143	D1	CD		74	MB	3.3	0.4	8.2	Chrysotile			
G11	144	A11				NSD							
G11	145	A31	CD	73		MD 1-0	4	3.8	1.1	Chrysotile			
G11	145	A31	CD		75	MF	1.1	0.03	36.7	Chrysotile			
G11	146	A43	CD	74	76	F	1.3	0.08	16.2	Chrysotile			
G11	146	A43	CD	75	77	F	2.7	0.08	33.8	Chrysotile			
G11	147	A23				NSD							
G11	148	A3				NSD							
G11	149	D13				NSD							
G11	150	D33				NSD							
G12	151	D43				NSD							
G12	152	D23				NSD							
G12	153	D3	CD	76	78	F	1.1	0.1	11	Chrysotile			
G12	154	A13				NSD							
G12	155	A33				NSD							
G12	156	A42				NSD							
G12	157	A22	CD	77	79	F	1.8	0.08	22.5	Chrysotile			
G12	158	A2				NSD							
G12	159	D12	CMQ	78	80	F	1.75	0.1	17.5	Chrysotile	Mg, Si		
G12	159	D12	CD	79	81	F	1.1	0.08	13.8	Chrysotile			
G12	159	D12	CD	80	82	F	0.7	0.1	7	Chrysotile			
G12	159	D12	CD	81		MD 9-0	8	5.5	1.5	Chrysotile			AS>5
G12	159	D12	CD		83	MB	1.25	0.12	10.4	Chrysotile			
G12	159	D12	CD		84	MF	1.7	0.1	17	Chrysotile			
G12	159	D12	CD		85	MR 7-0	0.8	0.08	10	Chrysotile			
G12	160	D32				NSD							
G12	161	D40				NSD							
G12	162	D20	CD	82	86	F	2.65	0.11	24.1	Chrysotile			
G12	163	D10				NSD							
G12	164	A10				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-662** Lab/Cor Sample No: **S62**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G12	165	A20				NSD							
G12	166	D21				NSD							
G12	167	D1				NSD							
G12	168	A11	CD	83		CD 4-0	2	1	2	Chrysotile			
G12	168	A11	CD		87	CB	1.85	0.1	18.5	Chrysotile			
G12	168	A11	CD		88	CF	0.8	0.03	26.7	Chrysotile			
G12	168	A11	CD		89	CF	0.75	0.08	9.4	Chrysotile			
G12	168	A11	CD		90	CF	0.5	0.11	4.5	Chrysotile			
G12	169	A31				NSD							
G12	170	A42				NSD							
G12	171	A22				NSD							
G12	172	A2	CD	84	91	F	2.5	0.1	25	Chrysotile			
G12	173	D12	CD	85	92	F	4.35	0.1	43.5	Chrysotile			
G12	174	D3				NSD							
G12	175	A13				NSD							
G13	176	C44				NSD							
G13	177	C24	CD	86		MD 1-0	3	2.5	1.2	Chrysotile			
G13	177	C24	CD		93	MF	1.8	0.08	22.5	Chrysotile			
G13	178	C4				NSD							
G13	179	B14	CD	87	94	F	4.2	0.08	52.5	Chrysotile			
G13	180	B34				NSD							
G13	181	B42	CD	88	95	F	1	0.1	10	Chrysotile			
G13	182	B22	CD	89		MD 1-0	4	1.2	3.3	Chrysotile			
G13	182	B22	CD		96	MF	1.5	0.08	18.8	Chrysotile			
G13	183	B2				NSD							
G13	184	C12	CD	90	97	F	1.8	0.1	18	Chrysotile			
G13	185	C32	CD	91		MD 1-0	1.1	0.3	3.7	Chrysotile			
G13	185	C32	CD		98	MF	0.7	0.08	8.8	Chrysotile			
G13	186	C40	CD	92		MD 1-0	15	15	1	Chrysotile			AS>5
G13	186	C40	CD		99	MF	1.5	0.01	150	Chrysotile			
G13	186	C40	CD	93	100	F	2.2	0.1	22	Chrysotile			
G13	187	C20	CD	94	101	F	5.2	0.08	65	Chrysotile			AS>5, AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-261** Lab/Cor Sample No: **S63**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A23				NSD							
G6	2	A14				NSD							
G6	3	D3				NSD							
G6	4	D23				NSD							
G6	5	D11				NSD							
G6	6	D1				NSD							
G6	7	D10				NSD							
G6	8	A20				NSD							
G6	9	A30				NSD							
G6	10	B31				NSD							
G6	11	A24				NSD							
G6	12	D4				NSD							
G6	13	D14				NSD							
G6	14	D22				NSD							
G6	15	D12				NSD							
G6	16	D3				NSD							
G6	17	A2				NSD							
G6	18	A21				NSD							
G6	19	B40				NSD							
G6	20	B20				NSD							
G6	21	B21				NSD							
G6	22	B22				NSD							
G6	23	C3				NSD							
G6	24	C33				NSD							
G6	25	C32				NSD							
G6	26	C42				NSD							
G6	27	C41				NSD							
G6	28	D20				NSD							
G7	29	A24				NSD							
G7	30	A4				NSD							
G7	31	A14				NSD							
G7	32	A24				NSD							
G7	33	D13				NSD							
G7	34	A3				NSD							
G7	35	A21				NSD							
G7	36	D1				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-261**
Client Description:

Lab/Cor Sample No: **S63**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	37	D10				NSD							
G7	38	D20				NSD							
G7	39	C30				NSD							
G7	40	C10				NSD							
G7	41	B20				NSD							
G7	42	B40				NSD							
G7	43	B21				NSD							
G7	44	C1				NSD							
G7	45	C11				NSD							
G7	46	C31				NSD							
G7	47	D22				NSD							
G7	48	D2				NSD							
G7	49	B22				NSD							
G8	50	A23				NSD							
G8	51	A3				NSD							
G8	52	D3				NSD							
G8	53	D23				NSD							
G8	54	D32				NSD							
G8	55	D12				NSD							
G8	56	A2				NSD							
G8	57	A22				NSD							
G8	58	A31				NSD							
G8	59	A11				NSD							
G8	60	D1				NSD							
G8	61	D21				NSD							
G8	62	D30				NSD							
G8	63	A10				NSD							
G8	64	A40				NSD							
G8	65	A20				NSD							
G8	66	B10				NSD							
G8	67	C10				NSD							
G8	68	C30				NSD							
G8	69	C22				NSD							
G8	70	C2				NSD							
G8	71	B32				NSD							
G8	72	B23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Date Received: 6/30/2006

Client Sample No: **NR-261**
Client Description:

Lab/Cor Sample No: **S63**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G8	73	C3				NSD							
G8	74	C23				NSD							
G8	75	C33				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Final Report

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

ISO 13794, indirect Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-268**
Client Description:

Lab/Cor Sample No: **S64**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G6	1	A33				NSD							
G6	2	D14				NSD							
G6	3	D13				NSD							
G6	4	D41				NSD							
G6	5	D1				NSD							
G6	6	A11				NSD							
G6	7	A31				NSD							
G6	8	B30				NSD							
G6	9	B10				NSD							
G6	10	C20				NSD							
G6	11	A33				NSD							
G6	12	A13				NSD							
G6	13	D23				NSD							
G6	14	D33				NSD							
G6	15	D22				NSD							
G6	16	D2				NSD							
G6	17	A41				NSD							
G6	18	A21				NSD							
G6	19	A11				NSD							
G6	20	D41				NSD							
G6	21	D40				NSD							
G6	22	A20				NSD							
G6	23	B20				NSD							
G6	24	B11				NSD							
G6	25	B41				NSD							
G6	26	B1				NSD							
G6	27	C31				NSD							
G6	28	C22				NSD							
G6	29	C33				NSD							
G6	30	C12				NSD							
G6	31	C42				NSD							
G6	32	B33				NSD							
G6	33	B23				NSD							
G6	34	B3				NSD							
G6	35	C13				NSD							
G6	36	C23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-268**
Client Description:

Lab/Cor Sample No: **S64**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	37	A24				NSD							
G7	38	A4				NSD							
G7	39	D42				NSD							
G7	40	D32				NSD							
G7	41	D2				NSD							
G7	42	A2				NSD							
G7	43	A42				NSD							
G7	44	A41				NSD							
G7	45	A11				NSD							
G7	46	A1				NSD							
G7	47	D1				NSD							
G7	48	D31				NSD							
G7	49	D41				NSD							
G7	50	D30				NSD							
G7	51	D20				NSD							
G7	52	C40				NSD							
G7	53	D20				NSD							
G7	54	B10				NSD							
G7	55	B20				NSD							
G7	56	B40				NSD							
G7	57	B31				NSD							
G7	58	B11				NSD							
G7	59	B1				NSD							
G7	60	C1				NSD							
G7	61	C21				NSD							
G7	62	C31				NSD							
G7	63	C12				NSD							
G7	64	B2				NSD							
G7	65	B12				NSD							
G7	66	B22				NSD							
G7	67	B33				NSD							
G7	68	B13				NSD							
G7	69	B3				NSD							
G7	70	C3				NSD							
G7	71	C13				NSD							
G7	72	C14				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 13794, indirect Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Client Sample No: **NR-268** Lab/Cor Sample No: **S64**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G7	73	B4				NSD							
G7	74	B14				NSD							
G7	75	B34				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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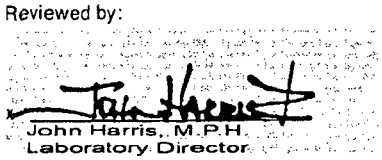
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006

Reviewed by:



John Harris, M.P.H.
Laboratory Director

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/23/2006

Lab/Cor Sample No.: S4
Client Sample No.: NR-552
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 1200
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 18
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.26082
Analytical Sens. (struc/cc): 0.00247
Dectection Limit. (struc/cc): 0.00738

Structure Type	Filter Density (s/mm2)	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	65.2	0.04193	0.02443 - 0.06714 - Poisson	17

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G9	4	B24	CM	22		MD 1-0	5.5	5	1.1	Chrysotile		
G9	2	D23	CM	6		MD 3-0	15	10	1.5	Chrysotile		
G9	8	C20	CM	44	50	B	5.1	0.2	25.5	Chrysotile		
G9	4	B24	CM	23		MD 1-1	7	2	3.5	Chrysotile		
G9	3	B13	CM	11		MD 1-0	10	6	1.7	Chrysotile		
G9	8	C20	CM	45		MD 1-0	20	10	2	Chrysotile		
G9	3	B13	CM	16		MD 4-0	40	20	2	Chrysotile		
G9	4	B24	CM	27		MD 7-0	15	15	1	Chrysotile		
G10	18	C24	CM	96		MD 1-0	5.8	4	1.5	Chrysotile		
G10	9	D10	CD	52		MD 1-0	6	2.5	2.4	Chrysotile		
G10	10	C11	CD	59		MD 1-0	7.5	4	1.9	Chrysotile		
G10	12	B32	CD	71	79	B	5.2	0.5	10.4	Chrysotile		
G10	16	D12	CM	87		MD 1-0	6.5	4	1.6	Chrysotile		
G10	17	D41	CM	89		MD 1-1	12	8	1.5	Chrysotile		
G10	17	D41	CM	90		MD 1-0	5.5	4	1.4	Chrysotile		
G10	17	D41	CD	93	101	F	5.1	0.1	51	Chrysotile		
G10	12	B32	CD	68		MD 1-0	5.2	3	1.7	Chrysotile		

PCM Equivalent Fibers-ISO	7.7	0.00493	0.0006 - 0.01782 - Poissan	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G9	8	C20	CM	44	50	B	5.1	0.2	25.5	Chrysotile		
G10	12	B32	CD	71	79	B	5.2	0.5	10.4	Chrysotile		

PCM Equivalent Structures-ISO	11.5	0.0074	0.00153 - 0.02162 - Poissan	3

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G9	4	B24	CM	23		MD 1-1	7	2	3.5	Chrysotile		
G9	8	C20	CM	44	50	B	5.1	0.2	25.5	Chrysotile		
G10	12	B32	CD	71	79	B	5.2	0.5	10.4	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	11.5	0.01233	0.00401 - 0.02878 - Poissan	3

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G9	4	B24	CM		28	MF	7	0.15	46.7	Chrysotile		
G9	8	C20	CM	44	50	B	5.1	0.2	25.5	Chrysotile		
G10	12	B32	CD	71	79	B	5.2	0.5	10.4	Chrysotile		
G10	17	D41	CM		97	MF	6	0.11	54.5	Chrysotile		
G10	17	D41	CD	93	101	F	5.1	0.1	51	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/27/2006

Lab/Cor Sample No.: S6
Client Sample No.: NR-546
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 1210
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 44
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.63756
Analytical Sens. (struc/cc): 0.001
Dectection Limit. (struc/cc): 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	18.8	0.01201	0.00621 - 0.02098 - Poisson	12

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	3	D3	CDQ	1		MD 1-1	26	12	2.2	Chrysotile	Mg, Si	
G6	15	B11	CD	14		MD 1-1	9	7	1.3	Chrysotile		
G6	15	B11	CD	13		MD 1-1	6.2	5	1.2	Chrysotile		
G6	13	B31	CD	10	10	B	5.1	0.2	25.5	Chrysotile		
G6	7	A10	CD	6		MD 1-1	12	11	1.1	Chrysotile		
G6	5	A40	CD	3		MD 1-1	22	20	1.1	Chrysotile		
G7	44	B23	CD	46		MD 1-1	28	23	1.2	Chrysotile		
G7	38	C41	CD	40		MD 1-1	20	15	1.3	Chrysotile		
G7	35	A30	CD	36		MD 1-1	6	5	1.2	Chrysotile		
G7	43	B33	CD	43	43	F	5.7	0.06	95	Chrysotile		
G7	44	B23	CD	44		MD 1-1	16	15	1.1	Chrysotile		
G7	38	C41	CD	39	39	F	14.5	0.06	241.7	Chrysotile		

PCM Equivalent Fibers-ISO	1.6	0.002	0.00024 - 0.00723 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	B31	CD	10	10	B	5.1	0.2	25.5	Chrysotile		
G7	44	B23	CD		44	MB	15.5	0.2	77.5	Chrysotile		

PCM Equivalent Structures-ISO	1.6	0.001	0.00003 - 0.00558 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	B31	CD	10	10	B	5.1	0.2	25.5	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	4.7	0.01201	0.00621 - 0.02098 - Poisson	3

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	B31	CD	10	10	B	5.1	0.2	25.5	Chrysotile		
G6	5	A40	CD		3	MF	5.2	0.06	86.7	Chrysotile		
G6	15	B11	CD		13	MF	7	0.1	70	Chrysotile		
G6	3	D3	CDQ		1	MF	26	0.15	173.3	Chrysotile	Mg, Si	
G6	15	B11	CD		14	MF	5.1	0.1	51	Chrysotile		
G6	7	A10	CD		6	MF	11	0.06	183.3	Chrysotile		
G7	38	C41	CD	39	39	F	14.5	0.06	241.7	Chrysotile		
G7	44	B23	CD		46	MF	5.8	0.15	38.7	Chrysotile		
G7	38	C41	CD		40	MF	13	0.06	216.7	Chrysotile		
G7	43	B33	CD	43	43	F	5.7	0.06	95	Chrysotile		
G7	44	B23	CD		44	MB	15.5	0.2	77.5	Chrysotile		
G7	35	A30	CD		36	MF	6	0.06	100	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/9/2006

Lab/Cor Sample No.: S8
Client Sample No.: *NR-548*
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 1200
Lab Filter Area (mm2): *193*
Grid Openings Analyzed: 45
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.65205
Analytical Sens. (struc/cc): 0.00099
Dectection Limit. (struc/cc): *0.00295*

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	29.1	0.01875	0.01129 - 0.02927 - Poisson	19

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	18	B32	CD	29	29	F	9	0.08	112.5	Chrysotile		
G6	19	B22	CD	31		MD 1-1	7	3	2.3	Chrysotile		
G6	3	D23	CDQ	6		MD 1-1	6.5	4	1.6	Chrysotile	Mg, Al, Si	
G6	2	D3	CD	5	5	F	8	0.09	88.9	Chrysotile		
G6	15	C11	CD	23	23	B	27	0.1	270	Chrysotile		
G6	2	D3	CD	4	4	F	22	0.1	220	Chrysotile		
G6	7	A12	CD	16		MD 1-1	14	13	1.1	Chrysotile		
G6	29	D1	CD	37	37	B	14	3	4.7	Chrysotile		
G6	6	D2	CD	12		MD 1-1	25	13	1.9	Chrysotile		
G6	4	D42	CD	10		MD 1-1	18	13	1.4	Chrysotile		
G6	4	D42	CD	8		MD 1-1	18	16	1.1	Chrysotile		
G6	2	D3	CDQ	3		MD 1-1	11.5	11	1	Chrysotile	Mg, Al, Si	
G6	20	B2	CD	32	32	F	6	0.06	100	Chrysotile		
G6	12	D40	CD	21	21	F	8	0.07	114.3	Chrysotile		
G6	10	D10	CD	18		MD 1-0	6.5	5.5	1.2	Chrysotile		
G6	39	B3	CD	38		MD 1-1	8	6	1.3	Chrysotile		
G6	27	D41	CD	35		MD 1-1	16	15	1.1	Chrysotile		
G6	11	D30	CD	20		MD 1-0	9.5	7.5	1.3	Chrysotile		
G7	45	D42	CD	41		MD 1-1	13	10	1.3	Chrysotile		

PCM Equivalent Fibers-ISO	1.5	0.00197	0.00024 - 0.00713 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	6	D2	CD		12	MB	21.5	0.8	26.9	Chrysotile		
G6	29	D1	CD	37	37	B	14	3	4.7	Chrysotile		

PCM Equivalent Structures-ISO	1.5	0.00099	0.00002 - 0.0055 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	29	D1	CD	37	37	B	14	3	4.7	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	10.7	0.01677	0.00977 - 0.02686 - Poisson	7

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	2	D3	CD	5	5	F	8	0.09	88.9	Chrysotile		
G6	6	D2	CD		12	MB	21.5	0.8	26.9	Chrysotile		
G6	2	D3	CD	4	4	F	22	0.1	220	Chrysotile		
G6	3	D23	CDQ		6	MF	6	0.1	60	Chrysotile	Mg, Al, Si	
G6	27	D41	CD		35	MB	7.5	0.1	75	Chrysotile		
G6	7	A12	CD		16	MF	5.2	0.08	65	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/9/2006

Lab/Cor Sample No.: S8
Client Sample No.: NR-548
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 1200
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 45
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.65205
Analytical Sens. (struc/cc): 0.00099
Dectection Limit. (struc/cc): 0.00295

Structure Type	Filter Density (s/mm2)	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Fibers and Bundles > 5um and 5:1	10.7	0.01677	0.00977 - 0.02686 - Poisson	7

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	12	D40	CD	21	21	F	8	0.07	114.3	Chrysotile		
G6	4	D42	CD		8	MF	6.5	0.06	108.3	Chrysotile		
G6	2	D3	CDQ		3	MF	10	0.06	166.7	Chrysotile	Mg,Al, Si	
G6	19	B22	CD		31	MF	7	0.06	116.7	Chrysotile		
G6	39	B3	CD		38	MF	8	0.06	133.3	Chrysotile		
G6	29	D1	CD	37	37	B	14	3	4.7	Chrysotile		
G6	4	D42	CD		10	MB	7.9	0.1	79	Chrysotile		
G6	15	C11	CD	23	23	B	27	0.1	270	Chrysotile		
G6	20	B2	CD	32	32	F	6	0.06	100	Chrysotile		
G6	18	B32	CD	29	29	F	9	0.08	112.5	Chrysotile		
G7	45	D42	CD		41	MF	13	0.06	216.7	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/27/2006

Lab/Cor Sample No.: S12
Client Sample No.: NR-542
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 1180
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 200
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 2.898
Analytical Sens. (struc/cc): 0.00226
Dectection Limit. (struc/cc): 0.00675

Structure Type	Filter Density (s/mm2)	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	7.2	0.04741	0.02935 - 0.07247 - Poisson	21

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	18	B13	CD	8		MD 1-0	6.5	2.5	2.6	Chrysotile		
G6	27	A1	ADQ	14	15	B	28.25	4	7.1	Amosite		
G6	26	A21	CDQ	13	14	F	6	0.1	60	Chrysotile		
G7	58	D32	CM	31	34	B	10.8	0.2	54	Chrysotile		
G7	52	D21	CD	28		MD 1-0	6.2	5	1.2	Chrysotile		
G7	46	B40	CD	23	26	CC	30	6.5	4.6	Chrysotile		
G7	43	C1	CD	20		CD 3-1	6.5	0.85	7.6	Chrysotile		
G7	44	B11	CD	22		MD 1-0	12	10	1.2	Chrysotile		
G8	84	D12	CD	46		MD 1-1	10	5	2	Chrysotile		
G8	83	A2	CD	45		MD 1-0	6.8	3.8	1.8	Chrysotile		
G8	71	C1	CD	38	41	B	5.55	0.18	30.8	Chrysotile		
G8	65	B33	CD	35		MD 1-1	8.8	4	2.2	Chrysotile		
G8	65	B33	CD	34		MD 1-0	6	5	1.2	Chrysotile		
G9	113	A1	CD	54		MD 1-1	8	2.7	3	Chrysotile		
G10	148	D3	CD	68		MD 2-0	7	4.8	1.5	Chrysotile		
G10	135	C31	CD	62		MD 1-0	18	9	2	Chrysotile		
G11	168	B10	CD	83		MD 2-0	5.3	4	1.3	Chrysotile		
G11	154	C14	CD	72		MD 1-1	6.8	3.5	1.9	Chrysotile		
G11	151	B44	CD	71		MD 3-1	7	5.5	1.3	Chrysotile		
G12	187	D21	CD	90		MD 1-0	8	6.5	1.2	Chrysotile		
G12	199	B32	CD	96		MD 1-1	8	3.8	2.1	Chrysotile		

PCM Equivalent Fibers-ISO	0.3	0.00903	0.00246 - 0.02312 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	58	D32	CM	31	34	B	10.8	0.2	54	Chrysotile		
G7	43	C1	CD		21	CB	6.5	0.22	29.5	Chrysotile		
G9	113	A1	CD		57	MB	5.5	0.2	27.5	Chrysotile		
G11	151	B44	CD		76	MB	42	0.3	140	Chrysotile		

PCM Equivalent Structures-ISO	0.7	0.00452	0.00055 - 0.01631 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	43	C1	CD	20		CD 3-1	6.5	0.85	7.6	Chrysotile		
G7	58	D32	CM	31	34	B	10.8	0.2	54	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	1.4	0.02483	0.0124 - 0.04444 - Poisson	4

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	26	A21	CDQ	13	14	F	6	0.1	60	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/27/2006

Lab/Cor Sample No.: S12
Client Sample No.: NR-542
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 1180
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 200
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 2.898
Analytical Sens. (struc/cc): 0.00226
Dectection Limit. (struc/cc): 0.00675

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Fibers and Bundles > 5um and 5:1	1.4	0.02483	0.0124 - 0.04444 - Poisson	4

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	27	A1	ADQ	14	15	B	28.25	4	7.1	Amosite		
G7	58	D32	CM	31	34	B	10.8	0.2	54	Chrysotile		
G7	43	C1	CD		21	CB	6.5	0.22	29.5	Chrysotile		
G8	65	B33	CD		38	MF	7.5	0.1	75	Chrysotile		
G8	71	C1	CD	38	41	B	5.55	0.18	30.8	Chrysotile		
G8	84	D12	CD		49	MF	7.7	0.1	77	Chrysotile		
G9	113	A1	CD		57	MB	5.5	0.2	27.5	Chrysotile		
G11	151	B44	CD		76	MB	42	0.3	140	Chrysotile		
G11	154	C14	CD		79	MF	5.33	0.11	48.5	Chrysotile		
G12	199	B32	CD		104	MB	8	0.15	53.3	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/25/2006

Lab/Cor Sample No.: S17
Client Sample No.: NR-557
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.15
Final Dilution:

Volume (L): 1008
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 45
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.65205
Analytical Sens. (struc/cc): 0.00392
Dectection Limit. (struc/cc): 0.01171

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	58.3	0.14878	0.10528 - 0.20421 - Poisson	38

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	2	B42	ADQ	2		MD 1-0	6.5	4.5	1.4	Amosite	Mg, Si, Fe	
G6	7	A41	ADQ	11	13	F	12.5	0.65	19.2	Amosite		
G6	11	D20	ADQ	27		MD 1-0	7.5	4.5	1.7	Amosite		
G6	8	A40	AZQ	13		MD 1-0	5.3	3.8	1.4	Amosite	Mg, Si, Mn, Fe	
G6	10	D10	ADQ	19		MD 1-1	28	25	1.1	Amosite		
G6	10	D10	ADQ	21		MD 1-0	11	8.5	1.3	Amosite		
G6	7	A41	ADQ	10	12	F	10.7	0.5	21.4	Amosite		
G6	2	B42	ADQ	3	4	F	12.2	0.7	17.4	Amosite		
G6	4	C42	ADQ	5	6	F	7.5	0.48	15.6	Amosite		
G6	11	D20	CD	25		MD 1-1	7.5	3	2.5	Chrysotile		
G7	15	C14	CD	32		MD 1-1	11.8	1.5	7.9	Chrysotile		
G7	26	B20	CD	56	57	F	7.5	0.1	75	Chrysotile		
G7	16	C44	ADQ	37	39	F	11	0.38	28.9	Amosite		
G7	27	D41	ADQ	58		MD 1-1	13	12	1.1	Amosite		
G7	25	C10	ADQ	52		MD 1-0	10	5	2	Amosite		
G7	15	C14	ADQ	35		MD 1-1	25	12	2.1	Amosite		
G7	26	B20	ADQ	55	56	F	7	0.6	11.7	Amosite		
G7	13	B14	ADQ	29		MD 1-1	9	6.5	1.4	Amosite		
G7	23	C42	ADQ	49	51	F	6	1.12	5.4	Amosite		
G7	25	C10	CD	54		MD 1-1	13	10	1.3	Chrysotile		
G7	20	B42	ADQ	44	46	F	6	0.38	15.8	Amosite		
G7	28	D11	ADQ	59	60	F	16.75	0.5	33.5	Amosite		
G7	19	B23	CD	42		MD 1-0	11.5	7	1.6	Chrysotile		
G7	13	B14	ADQ	30	32	F	41.5	0.4	103.8	Amosite		
G7	20	B42	ADQ	43		MD 1-1	7.5	5	1.5	Amosite		
G7	22	C12	ADQ	48	50	F	5.7	0.5	11.4	Amosite		
G7	18	C3	ADQ	40	42	F	61.8	0.6	103	Amosite		
G8	34	C42	CD	74	75	F	6.7	0.12	55.8	Chrysotile		
G8	42	A13	ADQ	93	94	F	8	0.55	14.5	Amosite		
G8	43	D13	ADQ	97		MD 1-1	20	5.8	3.4	Amosite		
G8	31	B42	ADQ	68	69	F	10.5	0.3	35	Amosite		
G8	36	C1	ADQ	77		MD 1-1	18	13	1.4	Amosite		
G8	39	A11	ADQ	84		MD 1-0	8	5	1.6	Amosite		
G8	41	D41	ADQ	92	93	F	22	1.25	17.6	Amosite		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/13/2006

Lab/Cor Sample No.: S17
Client Sample No.: NR-557
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.15
Final Dilution:

Volume (L): 1008
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 45
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.65205
Analytical Sens. (struc/cc): 0.00392
Dectection Limit. (struc/cc): 0.01171

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	58.3	0.14878	0.10528 - 0.20421 - Poisson	38

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G8	40	D11	CD	89	90	B	5.5	0.12	45.8	Chrysotile		
G8	34	C42	ADQ	72		MD 1-1	11	11	1	Amosite		
G8	40	D11	ADQ	90	91	F	5.75	0.33	17.4	Amosite		
G8	34	C42	ADQ	75	76	F	13	0.4	32.5	Amosite		

PCM Equivalent Fibers-ISO	26.1	0.09788	0.06334 - 0.14449 - Poisson	17

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	10	D10	ADQ		21	MF	30	0.25	120	Amosite		
G6	7	A41	ADQ	11	13	F	12.5	0.65	19.2	Amosite		
G6	7	A41	ADQ	10	12	F	10.7	0.5	21.4	Amosite		
G6	4	C42	ADQ	5	6	F	7.5	0.48	15.6	Amosite		
G6	2	B42	ADQ	3	4	F	12.2	0.7	17.4	Amosite		
G7	26	B20	ADQ	55	56	F	7	0.6	11.7	Amosite		
G7	23	C42	ADQ	49	51	F	6	1.12	5.4	Amosite		
G7	22	C12	ADQ	48	50	F	5.7	0.5	11.4	Amosite		
G7	28	D11	ADQ	59	60	F	16.75	0.5	33.5	Amosite		
G7	20	B42	ADQ	44	46	F	6	0.38	15.8	Amosite		
G7	27	D41	ADQ		59	MF	10	0.2	50	Amosite		
G7	16	C44	ADQ	37	39	F	11	0.38	28.9	Amosite		
G7	20	B42	ADQ		45	MF	5.4	0.4	13.5	Amosite		
G7	13	B14	ADQ	30	32	F	41.5	0.4	103.8	Amosite		
G7	18	C3	ADQ	40	42	F	61.8	0.6	103	Amosite		
G7	15	C14	ADQ		37	MF	6	0.38	15.8	Amosite		
G7	13	B14	ADQ		31	MF	10.8	0.4	27	Amosite		
G8	31	B42	ADQ	68	69	F	10.5	0.3	35	Amosite		
G8	43	D13	ADQ		98	MF	19	0.85	22.4	Amosite		
G8	41	D41	ADQ	92	93	F	22	1.25	17.6	Amosite		
G8	34	C42	ADQ		73	MF	10.75	0.5	21.5	Amosite		
G8	36	C1	ADQ		78	MF	7	0.3	23.3	Amosite		
G8	40	D11	ADQ	90	91	F	5.75	0.33	17.4	Amosite		
G8	34	C42	ADQ	75	76	F	13	0.4	32.5	Amosite		
G8	42	A13	ADQ	93	94	F	8	0.55	14.5	Amosite		

PCM Equivalent Structures-ISO	27.6	0.07047	0.04177 - 0.11138 - Poisson	18

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	7	A41	ADQ	11	13	F	12.5	0.65	19.2	Amosite		

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ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/25/2006

Lab/Cor Sample No.: S17
Client Sample No.: NR-557
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.15
Final Dilution:

Volume (L): 1008
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 45
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.65205
Analytical Sens. (struc/cc): 0.00392
Dectection Limit. (struc/cc): 0.01171

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
PCM Equivalent Structures-ISO	27.6	0.07047	0.04177 - 0.11138 - Poisson	18

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	7	A41	ADQ	10	12	F	10.7	0.5	21.4	Amosite		
G6	2	B42	ADQ	3	4	F	12.2	0.7	17.4	Amosite		
G6	4	C42	ADQ	5	6	F	7.5	0.48	15.6	Amosite		
G7	28	D11	ADQ	59	60	F	16.75	0.5	33.5	Amosite		
G7	15	C14	CD	32		MD 1-1	11.8	1.5	7.9	Chrysotile		
G7	26	B20	ADQ	55	56	F	7	0.6	11.7	Amosite		
G7	16	C44	ADQ	37	39	F	11	0.38	28.9	Amosite		
G7	23	C42	ADQ	49	51	F	6	1.12	5.4	Amosite		
G7	18	C3	ADQ	40	42	F	61.8	0.6	103	Amosite		
G7	22	C12	ADQ	48	50	F	5.7	0.5	11.4	Amosite		
G7	20	B42	ADQ	44	46	F	6	0.38	15.8	Amosite		
G7	13	B14	ADQ	30	32	F	41.5	0.4	103.8	Amosite		
G8	41	D41	ADQ	92	93	F	22	1.25	17.6	Amosite		
G8	42	A13	ADQ	93	94	F	8	0.55	14.5	Amosite		
G8	34	C42	ADQ	75	76	F	13	0.4	32.5	Amosite		
G8	31	B42	ADQ	68	69	F	10.5	0.3	35	Amosite		
G8	40	D11	ADQ	90	91	F	5.75	0.33	17.4	Amosite		

Asbestos Fibers and Bundles > 5um and 5:1	30.7	0.12137	0.08247 - 0.17228 - Poisson	20

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	11	D20	CD		27	MF	7.5	0.1	75	Chrysotile		
G6	4	C42	ADQ	5	6	F	7.5	0.48	15.6	Amosite		
G6	2	B42	ADQ	3	4	F	12.2	0.7	17.4	Amosite		
G6	7	A41	ADQ	10	12	F	10.7	0.5	21.4	Amosite		
G6	7	A41	ADQ	11	13	F	12.5	0.65	19.2	Amosite		
G6	10	D10	ADQ		21	MF	30	0.25	120	Amosite		
G7	15	C14	CD		34	MF	11.8	0.11	107.3	Chrysotile		
G7	20	B42	ADQ	44	46	F	6	0.38	15.8	Amosite		
G7	20	B42	ADQ		45	MF	5.4	0.4	13.5	Amosite		
G7	13	B14	ADQ	30	32	F	41.5	0.4	103.8	Amosite		
G7	22	C12	ADQ	48	50	F	5.7	0.5	11.4	Amosite		
G7	23	C42	ADQ	49	51	F	6	1.12	5.4	Amosite		
G7	16	C44	ADQ	37	39	F	11	0.38	28.9	Amosite		
G7	25	C10	CD		55	MF	6.5	0.1	65	Chrysotile		
G7	15	C14	ADQ		37	MF	6	0.38	15.8	Amosite		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/13/2006

Lab/Cor Sample No.: S17
Client Sample No.: NR-557
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.15
Final Dilution:

Volume (L): 1008
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 45
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.65205
Analytical Sens. (struc/cc): 0.00392
Dectection Limit. (struc/cc): 0.01171

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Fibers and Bundles > 5um and 5:1	30.7	0.12137	0.08247 - 0.17228 - Poisson	20

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	13	B14	ADQ		31	MF	10.8	0.4	27	Amosite		
G7	26	B20	ADQ	55	56	F	7	0.6	11.7	Amosite		
G7	18	C3	ADQ	40	42	F	61.8	0.6	103	Amosite		
G7	26	B20	CD	56	57	F	7.5	0.1	75	Chrysotile		
G7	27	D41	ADQ		59	MF	10	0.2	50	Amosite		
G7	28	D11	ADQ	59	60	F	16.75	0.5	33.5	Amosite		
G8	34	C42	ADQ		73	MF	10.75	0.5	21.5	Amosite		
G8	41	D41	ADQ	92	93	F	22	1.25	17.6	Amosite		
G8	40	D11	CD	89	90	B	5.5	0.12	45.8	Chrysotile		
G8	36	C1	ADQ		78	MF	7	0.3	23.3	Amosite		
G8	42	A13	ADQ	93	94	F	8	0.55	14.5	Amosite		
G8	31	B42	ADQ	68	69	F	10.5	0.3	35	Amosite		
G8	34	C42	ADQ	75	76	F	13	0.4	32.5	Amosite		
G8	43	D13	ADQ		98	MF	19	0.85	22.4	Amosite		
G8	34	C42	CD	74	75	F	6.7	0.12	55.8	Chrysotile		
G8	40	D11	ADQ	90	91	F	5.75	0.33	17.4	Amosite		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/14/2006

Lab/Cor Sample No.: S22
Client Sample No.: NR-562
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 891
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 598
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 8.66502
Analytical Sens. (struc/cc): 0.001
Dectection Limit. (struc/cc): 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	2.3	0.02	0.01222 - 0.03089 - Poisson	20

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G8	*94*	*A1*	*CD*	*9*	*9*	*F*	*6*	*0.06*	*100*	*Chrysotile*		
G8	78	D40	ADQ	7	7	F	5.5	0.45	12.2	Amosite	Mg, Al, Si, Fe	
G9	116	D40	CD	11	11	B	13.5	0.2	67.5	Chrysotile		
G10	179	C2	CD	14		MD 1-1	7.5	4.8	1.6	Chrysotile		
G10	175	C21	CD	13	13	B	6.5	1	6.5	Chrysotile		
G10	182	B42	CD	15	15	F	9	0.1	90	Chrysotile		
G11	230	B42	CD	22		MD 1-0	5.5	3	1.8	Chrysotile		
G11	201	A41	CD	16	16	MC 25-0	7.5	7	1.1	Chrysotile		
G12	248	D43	CD	28	29	F	5.2	0.07	74.3	Chrysotile		
G12	247	D24	ADQ	27	28	B	66	2	33	Actinolite	Mg, Si, Ca, Fe	
G12	255	A22	ADQ	31		MD 1-1	22	20	1.1	Amosite		
G13	302	D13	CD	40		MD 1-1	8.5	6	1.4	Chrysotile		
G13	302	D13	CD	41		MD 1-1	5.1	2	2.5	Chrysotile		
G13	316	D10	CD	42		MD 1-1	15	6	2.5	Chrysotile		
G13	324	C30	CD	43	45	F	5.6	0.08	70	Chrysotile		
G13	333	B21	CD	45		MD 1-1	27	15	1.8	Chrysotile		
G14	398	C23	CD	52	54	B	8	0.2	40	Chrysotile		
G14	355	A14	CD	47	49	B	15.5	0.15	103.3	Chrysotile		
G16	465	A24	CD	58		MD 1-0	8.5	7.6	1.1	Chrysotile		
G16	471	A33	CD	59		MD 1-1	6.5	2.5	2.6	Chrysotile		

PCM Equivalent Fibers-ISO	0.6	0.006	0.0022 - 0.01306 - Poisson	5

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G8	78	D40	ADQ	7	7	F	5.5	0.45	12.2	Amosite	Mg, Al, Si, Fe	
G9	116	D40	CD	11	11	B	13.5	0.2	67.5	Chrysotile		
G10	175	C21	CD	13	13	B	6.5	1	6.5	Chrysotile		
G12	247	D24	ADQ	27	28	B	66	2	33	Actinolite	Mg, Si, Ca, Fe	
G12	255	A22	ADQ		33	MB	22	1	22	Amosite		
G14	398	C23	CD	52	54	B	8	0.2	40	Chrysotile		

PCM Equivalent Structures-ISO	0.6	0.005	0.00162 - 0.01167 - Poisson	5

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G8	78	D40	ADQ	7	7	F	5.5	0.45	12.2	Amosite	Mg, Al, Si, Fe	
G9	116	D40	CD	11	11	B	13.5	0.2	67.5	Chrysotile		
G10	175	C21	CD	13	13	B	6.5	1	6.5	Chrysotile		
G12	247	D24	ADQ	27	28	B	66	2	33	Actinolite	Mg, Si, Ca, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/17/2006

Lab/Cor Sample No.: S22
Client Sample No.: NR-562
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 891
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 598
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 8.66502
Analytical Sens. (struc/cc): 0.001
Dectection Limit. (struc/cc): 0.00299

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
PCM Equivalent Structures-ISO	0.6	0.005	0.00162 - 0.01167 - Poisson	5

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G14	398	C23	CD	52	54	B	8	0.2	40	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	1.2	0.017	0.0099 - 0.02722 - Poisson	10

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G8	94	A1	CD	9	9	F	6	0.06	100	Chrysotile		
G8	78	D40	ADQ	7	7	F	5.5	0.45	12.2	Amosite	Mg, Al, Si, Fe	
G9	116	D40	CD	11	11	B	13.5	0.2	67.5	Chrysotile		
G10	175	C21	CD	13	13	B	6.5	1	6.5	Chrysotile		
G10	179	C2	CD		14	MF	6	0.06	100	Chrysotile		
G10	182	B42	CD	15	15	F	9	0.1	90	Chrysotile		
G12	247	D24	ADQ	27	28	B	66	2	33	Actinolite	Mg, Si, Ca, Fe	
G12	255	A22	ADQ		33	MB	22	1	22	Amosite		
G12	248	D43	CD	28	29	F	5.2	0.07	74.3	Chrysotile		
G13	316	D10	CD		44	MF	7.5	0.06	125	Chrysotile		
G13	333	B21	CD		47	MB	25	0.1	250	Chrysotile		
G13	302	D13	CD		43	MF	5.1	0.1	51	Chrysotile		
G13	302	D13	CD		42	MF	6	0.06	100	Chrysotile		
G13	324	C30	CD	43	45	F	5.6	0.08	70	Chrysotile		
G14	398	C23	CD	52	54	B	8	0.2	40	Chrysotile		
G14	355	A14	CD	47	49	B	15.5	0.15	103.3	Chrysotile		
G16	471	A33	CD		61	MF	6.5	0.1	65	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/13/2006

Lab/Cor Sample No.: S26
Client Sample No.: NR-566
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 1185
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 9
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.13041
Analytical Sens. (struc/cc): 0.04996
Dectection Limit. (struc/cc): 0.14937

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	337.4	2.19807	1.39986 - 3.12057 - Gaussian	44

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	4	D40	CD	51		MD 1-1	20	12	1.7	Chrysotile		
G6	3	B13	CD	29		MD 1-0	10	2.5	4	Chrysotile		
G6	4	D40	ADQ	49		MD 2-1	9	2	4.5	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ	47		MD 1-1	16	7.5	2.1	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	22		MD 2-2	30	5	6	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ	50		MD 1-1	12	8	1.5	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	34		MD 1-0	6	3	2	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	30		MD 1-1	11.5	9	1.3	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ	46		MD 1-1	11	11	1	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	31	33	F	12	0.75	16	Amosite	Mg, Si, Fe	
G6	4	D40	CD	42		MD 1-0	5.5	2	2.8	Chrysotile		
G6	3	B13	ADQ	33	35	F	7.22	0.3	24.1	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	16	17	F	10	0.75	13.3	Amosite	Mg, Si, Fe	
G6	1	A1	ADQ	6		MD 1-0	13	13	1	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ	48	50	F	19	0.35	54.3	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	40		MD 1-1	12	3	4	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	17		MD 1-1	9.5	2.5	3.8	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	39	41	F	23	0.3	76.7	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	19	20	F	5.5	0.3	18.3	Amosite	Mg, Si, Fe	
G6	2	C21	CD	25		MD 1-0	6	4	1.5	Chrysotile		
G7	7	D20	CD	80		MD 1-0	5.2	3	1.7	Chrysotile		
G7	7	D20	ADQ	81		MD 1-1	12.5	7	1.8	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ	77	80	F	18	0.9	20	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ	74	77	F	14.3	0.75	19.1	Amosite	Mg, Si, Fe	
G7	6	A1	ADQ	73		MD 1-1	14	5	2.8	Amosite	Mg, Si, Fe	
G7	6	A1	CD	66		MD 1-1	8.2	1.5	5.5	Chrysotile		
G7	6	A1	CD	65		MD 1-0	12	12	1	Chrysotile		
G7	5	A30	ADQ	53		MD 1-0	7	5.5	1.3	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	55	58	F	6.2	0.4	15.5	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	62	65	F	8	0.3	26.7	Amosite	Mg, Si, Fe	
G7	5	A30	CD	61	64	F	9.5	0.1	95	Chrysotile		
G7	5	A30	ADQ	56	59	F	6.2	0.65	9.5	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ	83		MD 1-1	34	10	3.4	Amosite	Mg, Si, Fe	
G7	6	A1	ADQ	63		MD 1-1	24	10	2.4	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/13/2006

Lab/Cor Sample No.: S26
Client Sample No.: NR-566
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 1185
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 9
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.13041
Analytical Sens. (struc/cc): 0.04996
Dectection Limit. (struc/cc): 0.14937

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	337.4	2.19807	1.39986 - 3.12057 - Gaussian	44

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	8	C22	ADQ	89		MD 1-1	30	10	3	Amosite	Mg, Si, Fe	
G7	8	C22	CD	91		MD 1-0	5.5	4.8	1.1	Chrysotile		
G7	8	C22	CD	90		MD 1-1	5.8	1.5	3.9	Chrysotile		
G7	8	C22	ADQ	93	96	F	22	0.48	45.8	Amosite	Mg, Si, Fe	
G7	5	A30	CD	58		MD 1-0	7.5	4	1.9	Chrysotile		
G7	8	C22	CD	92		MD 1-1	12	3.5	3.4	Chrysotile		
G7	8	C22	ADQ	94	97	F	9.5	0.6	15.8	Amosite	Mg, Si, Fe	
G7	9	B21	ADQ	103		MD 1-1	40	15	2.7	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ	85	88	F	8	0.75	10.7	Amosite	Mg, Si, Fe	
G7	9	B21	CD	104		MD 1-0	5.7	2	2.8	Chrysotile		

PCM Equivalent Fibers-ISO	107.4	1.39877	0.92948 - 2.02162 - Poissan	14

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	2	C21	ADQ	16	17	F	10	0.75	13.3	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		23	MF	30	0.3	100	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ		53	MF	10	0.3	33.3	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	19	20	F	5.5	0.3	18.3	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		24	MF	27	0.35	77.1	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ		51	MF	5.5	0.25	22	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		18	MF	7.75	0.38	20.4	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	31	33	F	12	0.75	16	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ	48	50	F	19	0.35	54.3	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	39	41	F	23	0.3	76.7	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ		49	MF	16	0.2	80	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ		32	MF	5.2	0.25	20.8	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ		48	MF	10	0.6	16.7	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	33	35	F	7.22	0.3	24.1	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ		42	MF	17	0.4	42.5	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	56	59	F	6.2	0.65	9.5	Amosite	Mg, Si, Fe	
G7	9	B21	ADQ		106	MF	14	0.6	23.3	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ	85	88	F	8	0.75	10.7	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	62	65	F	8	0.3	26.7	Amosite	Mg, Si, Fe	
G7	6	A1	ADQ		76	MF	12.2	0.38	32.1	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ	94	97	F	9.5	0.6	15.8	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ		86	MF	6.8	0.4	17	Amosite	Mg, Si, Fe	

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ISO 13794, indirect Count Categories

Job Number: 060359 **PDX** **Report Number:** 060359R01
Client: Parametrix **Date Received:** 6/30/2006
Project Name: Northridge Estates **Date Completed:** 9/13/2006

Lab/Cor Sample No.: S26 **Volume (L):** 1185
Client Sample No.: NR-566 **Lab Filter Area (mm2):** 193
Description: **Grid Openings Analyzed:** 9
Filter Fraction: 0.5 **Aliquot Dilution:** 0.05 **Average Grid Opening Area:** 0.01449
Residual Ash Vol: 20 **Final Dilution:** **Area Analyzed (mm2):** 0.13041
Analytical Sens. (struc/cc): 0.04996
Dectection Limit. (struc/cc): 0.14937

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
PCM Equivalent Fibers-ISO	107.4	1.39877	0.92948 - 2.02162 - Poissan	14

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	7	D20	ADQ	77	80	F	18	0.9	20	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ		92	MF	30	0.4	75	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ	74	77	F	14.3	0.75	19.1	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ	93	96	F	22	0.48	45.8	Amosite	Mg, Si, Fe	
G7	6	A1	ADQ		66	MF	24	0.7	34.3	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	55	58	F	6.2	0.4	15.5	Amosite	Mg, Si, Fe	

PCM Equivalent Structures-ISO	153.4	0.99912	0.61031 - 1.54309 - Poissan	20

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	3	B13	CD	29		MD 1-0	10	2.5	4	Chrysotile		
G6	3	B13	ADQ	39	41	F	23	0.3	76.7	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ	49		MD 2-1	9	2	4.5	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ	48	50	F	19	0.35	54.3	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	19	20	F	5.5	0.3	18.3	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	31	33	F	12	0.75	16	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	17		MD 1-1	9.5	2.5	3.8	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	16	17	F	10	0.75	13.3	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	33	35	F	7.22	0.3	24.1	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	40		MD 1-1	12	3	4	Amosite	Mg, Si, Fe	
G7	6	A1	CD	66		MD 1-1	8.2	1.5	5.5	Chrysotile		
G7	8	C22	ADQ	85	88	F	8	0.75	10.7	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ	77	80	F	18	0.9	20	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	56	59	F	6.2	0.65	9.5	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ	74	77	F	14.3	0.75	19.1	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	62	65	F	8	0.3	26.7	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ	93	96	F	22	0.48	45.8	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	55	58	F	6.2	0.4	15.5	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ	94	97	F	9.5	0.6	15.8	Amosite	Mg, Si, Fe	
G7	8	C22	CD	90		MD 1-1	5.8	1.5	3.9	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	115.0	1.69851	1.17622 - 2.37351 - Poissan	15

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	3	B13	ADQ	39	41	F	23	0.3	76.7	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		24	MF	27	0.35	77.1	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ		42	MF	17	0.4	42.5	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ		48	MF	10	0.6	16.7	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/13/2006

Lab/Cor Sample No.: S26
Client Sample No.: NR-566
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 1185
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 9
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.13041
Analytical Sens. (struc/cc): 0.04996
Dectection Limit. (struc/cc): 0.14937

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Fibers and Bundles > 5um and 5:1	115.0	1.69851	1.17622 - 2.37351 - Poissan	15

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	2	C21	ADQ	16	17	F	10	0.75	13.3	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ		49	MF	16	0.2	80	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ	48	50	F	19	0.35	54.3	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		18	MF	7.75	0.38	20.4	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	19	20	F	5.5	0.3	18.3	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		23	MF	30	0.3	100	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ	31	33	F	12	0.75	16	Amosite	Mg, Si, Fe	
G6	3	B13	ADQ		32	MF	5.2	0.25	20.8	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ		51	MF	5.5	0.25	22	Amosite	Mg, Si, Fe	
G6	4	D40	CD		54	MF	9	0.1	90	Chrysotile		
G6	3	B13	ADQ	33	35	F	7.22	0.3	24.1	Amosite	Mg, Si, Fe	
G6	4	D40	ADQ		53	MF	10	0.3	33.3	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ	85	88	F	8	0.75	10.7	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ		86	MF	6.8	0.4	17	Amosite	Mg, Si, Fe	
G7	8	C22	CD		93	MF	5.5	0.1	55	Chrysotile		
G7	9	B21	ADQ		106	MF	14	0.6	23.3	Amosite	Mg, Si, Fe	
G7	8	C22	CD		95	MF	12	0.1	120	Chrysotile		
G7	8	C22	ADQ	94	97	F	9.5	0.6	15.8	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ		92	MF	30	0.4	75	Amosite	Mg, Si, Fe	
G7	8	C22	ADQ	93	96	F	22	0.48	45.8	Amosite	Mg, Si, Fe	
G7	5	A30	CD	61	64	F	9.5	0.1	95	Chrysotile		
G7	6	A1	ADQ		66	MF	24	0.7	34.3	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	62	65	F	8	0.3	26.7	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ		84	MF	10.5	0.18	58.3	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	55	58	F	6.2	0.4	15.5	Amosite	Mg, Si, Fe	
G7	6	A1	ADQ		76	MF	12.2	0.38	32.1	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ	74	77	F	14.3	0.75	19.1	Amosite	Mg, Si, Fe	
G7	7	D20	ADQ	77	80	F	18	0.9	20	Amosite	Mg, Si, Fe	
G7	5	A30	ADQ	56	59	F	6.2	0.65	9.5	Amosite	Mg, Si, Fe	
G7	6	A1	CD		69	MF	8.2	0.1	82	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/26/2006

Lab/Cor Sample No.: S30
Client Sample No.: NR-570
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 1200
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 47
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.68103
Analytical Sens. (struc/cc): 0.00094
Dectection Limit. (struc/cc): 0.00282

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	17.6	0.01134	0.00586 - 0.0198 - Poisson	12

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	4	D23	CD	7		MD 1-0	7.5	6	1.2	Chrysotile		
G6	6	D1	CD	14	14	B	8.5	0.3	28.3	Chrysotile		
G6	1	A33	CDQ	1		MD 1-1	13	12	1.1	Chrysotile	Mg, Al, Si	
G6	21	C2	CD	28	31	F	5.8	0.08	72.5	Chrysotile		
G6	6	D1	CD	10		MD 1-0	8	7	1.1	Chrysotile		
G7	29	D23	CD	33		CD 3-0	12.5	0.7	17.9	Chrysotile		
G7	40	C31	CD	53		MD 1-1	12	9	1.3	Chrysotile		
G7	37	B20	CD	48	52	F	7.7	0.07	110	Chrysotile		
G7	46	B14	CD	59	63	B	8.35	0.15	55.7	Chrysotile		
G7	42	B1	CD	55	59	B	11.2	0.4	28	Chrysotile		
G7	36	B40	CD	47		MD	5.1	4.9	1	Chrysotile		
G7	44	B41	CD	58	62	B	7.7	0.2	38.5	Chrysotile		

PCM Equivalent Fibers-ISO	4.4	0.00378	0.00103 - 0.00968 - Poisson	3

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	1	A33	CDQ		1	MB	9	0.25	36	Chrysotile	Mg, Al, Si	
G6	6	D1	CD	14	14	B	8.5	0.3	28.3	Chrysotile		
G7	44	B41	CD	58	62	B	7.7	0.2	38.5	Chrysotile		
G7	42	B1	CD	55	59	B	11.2	0.4	28	Chrysotile		

PCM Equivalent Structures-ISO	5.9	0.00378	0.00103 - 0.00968 - Poisson	4

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	6	D1	CD	14	14	B	8.5	0.3	28.3	Chrysotile		
G7	29	D23	CD	33		CD 3-0	12.5	0.7	17.9	Chrysotile		
G7	44	B41	CD	58	62	B	7.7	0.2	38.5	Chrysotile		
G7	42	B1	CD	55	59	B	11.2	0.4	28	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	8.8	0.00756	0.00326 - 0.01489 - Poisson	6

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	21	C2	CD	28	31	F	5.8	0.08	72.5	Chrysotile		
G6	1	A33	CDQ		1	MB	9	0.25	36	Chrysotile	Mg, Al, Si	
G6	6	D1	CD	14	14	B	8.5	0.3	28.3	Chrysotile		
G7	46	B14	CD	59	63	B	8.35	0.15	55.7	Chrysotile		
G7	44	B41	CD	58	62	B	7.7	0.2	38.5	Chrysotile		
G7	42	B1	CD	55	59	B	11.2	0.4	28	Chrysotile		
G7	40	C31	CD		57	MF	7	0.06	116.7	Chrysotile		
G7	37	B20	CD	48	52	F	7.7	0.07	110	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/13/2006

Lab/Cor Sample No.: S34
Client Sample No.: NR-574
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.15
Final Dilution:

Volume (L): 1200
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 42
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.60858
Analytical Sens. (struc/cc): 0.00352
Dectection Limit. (struc/cc): 0.01054

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	65.7	0.14095	0.10069 - 0.19193 - Poisson	40

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	9	A31	ADQ	19		MD 1-0	6.5	5	1.3	Amosite	Mg, Si, Fe	
G6	5	B30	ADQ	15		MD 1-1	16	3	5.3	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	9		MD 1-1	11	8	1.4	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ	7		MD 2-1	16	15	1.1	Amosite	Mg, Si, Fe	
G6	1	A20	ADQ	5		MD 1-0	6.2	6	1	Amosite	Mg, Si, Fe	
G6	1	A20	AZQ	1		MD 1-1	15	9	1.7	Amosite	Mg, Si	
G6	2	C21	ADQ	6		MD 1-1	17	8	2.1	Amosite	Mg, Si, Fe	
G6	19	C4	CD	42		MD 1-0	7	3.8	1.8	Chrysotile		
G6	11	A1	CD	25	28	B	9	0.2	45	Chrysotile		
G6	19	C4	ADQ	48		MD 1-1	14	3.5	4	Amosite	Mg, Si, Fe	
G6	10	A21	CD	22		MD 3-1	12	9	1.3	Chrysotile		
G6	17	B23	ADQ	40		MD 1-1	12	6	2	Amosite	Mg, Si, Fe	
G6	15	C1	ADQ	36	39	F	6.8	0.45	15.1	Amosite	Mg, Si, Fe	
G6	15	C1	ADQ	34		MD 1-1	20	12	1.7	Amosite	Mg, Si, Fe	
G6	13	D41	ADQ	29		MD 1-1	12	7	1.7	Amosite	Mg, Si, Fe	
G6	11	A1	ADQ	23		MD 1-1	8	5.8	1.4	Amosite	Mg, Si, Fe	
G6	15	C1	ADQ	33		MD 1-1	40	12	3.3	Amosite	Mg, Si, Fe	
G7	38	B20	ADQ	86	91	F	8.5	0.4	21.2	Amosite	Mg, Si, Fe	
G7	25	C43	ADQ	59	64	F	34	1	34	Amosite	Mg, Si, Fe	
G7	27	C3	ADQ	61	66	F	7	0.3	23.3	Amosite	Mg, Si, Fe	
G7	28	B13	ADQ	64	69	F	12	0.75	16	Amosite	Mg, Si, Fe	
G7	29	B33	ADQ	68	73	F	6.35	0.7	9.1	Amosite	Mg, Si, Fe	
G7	25	C43	ADQ	58		MD 1-1	63	12	5.2	Amosite	Mg, Si, Fe	
G7	22	B4	CD	53		MD 1-1	9.5	3.5	2.7	Chrysotile		
G7	30	B42	ADQ	69		MD 1-1	7.7	3.8	2	Amosite	Mg, Si, Fe	
G7	30	B42	CD	71		MD 1-0	6	5	1.2	Chrysotile		
G7	31	B12	CD	73	78	B	7.35	0.3	24.5	Chrysotile		
G7	21	B24	ADQ	52		MD 1-1	9.5	2	4.8	Amosite	Mg, Si, Fe	
G7	34	C22	ADQ	77		MD 1-1	5.8	1.5	3.9	Amosite	Mg, Si, Fe	
G7	31	B12	CD	75		MD 1-0	11	7.5	1.5	Chrysotile		
G7	33	C12	CD	76	81	F	5.75	0.1	57.5	Chrysotile		
G7	20	B44	ADQ	50	54	F	10.7	0.6	17.8	Amosite	Mg, Si, Fe	
G7	40	A10	CD	90		MD 1-0	5.5	3.8	1.4	Chrysotile		
G7	42	D30	ADQ	96		MD 1-1	26	7.5	3.5	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/14/2006

Lab/Cor Sample No.: S34
Client Sample No.: NR-574
Description:
Filter Fraction: 0.5 **Aliquot Dilution:** 0.15
Residual Ash Vol: 20 **Final Dilution:**

Volume (L): 1200
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 42
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.60858
Analytical Sens. (struc/cc): 0.00352
Dectection Limit. (struc/cc): 0.01054

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	65.7	0.14095	0.10069 - 0.19193 - Poisson	40

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	35	C40	ADQ	80	85	F	7	0.2	35	Amosite	Mg, Si, Fe	
G7	40	A10	CD	91		MD 1-1	8.5	4	2.1	Chrysotile		
G7	35	C40	ADQ	84		MD 1-1	25	20	1.2	Amosite	Mg, Si, Fe	
G7	37	C10	CD	85	90	F	5.6	0.1	56	Chrysotile		
G7	41	D20	ADQ	93		MD 1-1	22	4	5.5	Amosite	Mg, Si, Fe	
G7	31	B12	ADQ	74		MD 1-1	8.5	2	4.2	Amosite	Mg, Si, Fe	

PCM Equivalent Fibers-ISO	16.4	0.10571	0.07132 - 0.15091 - Poisson	10

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	15	C1	ADQ	36	39	F	6.8	0.45	15.1	Amosite	Mg, Si, Fe	
G6	15	C1	ADQ		36	MF	13	0.38	34.2	Amosite	Mg, Si, Fe	
G6	15	C1	ADQ		37	MF	12	0.22	54.5	Amosite	Mg, Si, Fe	
G6	11	A1	ADQ		26	MF	7	0.28	25	Amosite	Mg, Si, Fe	
G6	13	D41	ADQ		32	MF	12.5	0.4	31.2	Amosite	Mg, Si, Fe	
G6	5	B30	ADQ		16	MF	12.7	0.7	18.1	Amosite	Mg, Si, Fe	
G6	11	A1	CD	25	28	B	9	0.2	45	Chrysotile		
G6	2	C21	ADQ		10	MF	7.7	0.22	35	Amosite	Mg, Si, Fe	
G6	17	B23	ADQ		43	MF	12	0.3	40	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		7	MF	11	0.65	16.9	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		6	MF	7.5	0.25	30	Amosite	Mg, Si, Fe	
G6	19	C4	ADQ		52	MF	13	0.2	65	Amosite	Mg, Si, Fe	
G6	1	A20	AZQ		1	MF	12	0.25	48	Amosite	Mg, Si, Fe	
G7	21	B24	ADQ		56	MF	7.5	0.2	37.5	Amosite	Mg, Si, Fe	
G7	25	C43	ADQ		63	MF	33	0.7	47.1	Amosite	Mg, Si, Fe	
G7	25	C43	ADQ	59	64	F	34	1	34	Amosite	Mg, Si, Fe	
G7	27	C3	ADQ	61	66	F	7	0.3	23.3	Amosite	Mg, Si, Fe	
G7	25	C43	ADQ		62	MF	49	0.55	89.1	Amosite	Mg, Si, Fe	
G7	28	B13	ADQ	64	69	F	12	0.75	16	Amosite	Mg, Si, Fe	
G7	20	B44	ADQ	50	54	F	10.7	0.6	17.8	Amosite	Mg, Si, Fe	
G7	31	B12	CD	73	78	B	7.35	0.3	24.5	Chrysotile		
G7	29	B33	ADQ	68	73	F	6.35	0.7	9.1	Amosite	Mg, Si, Fe	
G7	31	B12	ADQ		79	MF	8.5	0.4	21.2	Amosite	Mg, Si, Fe	
G7	34	C22	ADQ		82	MF	5.8	0.28	20.7	Amosite	Mg, Si, Fe	
G7	35	C40	ADQ	80	85	F	7	0.2	35	Amosite	Mg, Si, Fe	
G7	35	C40	ADQ		89	MF	15	0.3	50	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/14/2006

Lab/Cor Sample No.: S34
Client Sample No.: NR-574
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.15
Final Dilution:

Volume (L): 1200
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 42
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.60858
Analytical Sens. (struc/cc): 0.00352
Dectection Limit. (struc/cc): 0.01054

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
PCM Equivalent Fibers-ISO	16.4	0.10571	0.07132 - 0.15091 - Poisson	10

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	38	B20	ADQ	86	91	F	8.5	0.4	21.2	Amosite	Mg, Si, Fe	
G7	41	D20	ADQ		98	MF	22	0.5	44	Amosite	Mg, Si, Fe	
G7	42	D30	ADQ		101	MF	25.5	0.6	42.5	Amosite	Mg, Si, Fe	
G7	30	B42	ADQ		74	MF	7.5	0.5	15	Amosite	Mg, Si, Fe	

PCM Equivalent Structures-ISO	23.0	0.04933	0.02697 - 0.08277 - Poisson	14

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	11	A1	CD	25	28	B	9	0.2	45	Chrysotile		
G6	15	C1	ADQ	36	39	F	6.8	0.45	15.1	Amosite	Mg, Si, Fe	
G6	5	B30	ADQ	15		MD 1-1	16	3	5.3	Amosite	Mg, Si, Fe	
G7	20	B44	ADQ	50	54	F	10.7	0.6	17.8	Amosite	Mg, Si, Fe	
G7	29	B33	ADQ	68	73	F	6.35	0.7	9.1	Amosite	Mg, Si, Fe	
G7	31	B12	ADQ	74		MD 1-1	8.5	2	4.2	Amosite	Mg, Si, Fe	
G7	28	B13	ADQ	64	69	F	12	0.75	16	Amosite	Mg, Si, Fe	
G7	34	C22	ADQ	77		MD 1-1	5.8	1.5	3.9	Amosite	Mg, Si, Fe	
G7	27	C3	ADQ	61	66	F	7	0.3	23.3	Amosite	Mg, Si, Fe	
G7	31	B12	CD	73	78	B	7.35	0.3	24.5	Chrysotile		
G7	25	C43	ADQ	59	64	F	34	1	34	Amosite	Mg, Si, Fe	
G7	38	B20	ADQ	86	91	F	8.5	0.4	21.2	Amosite	Mg, Si, Fe	
G7	21	B24	ADQ	52		MD 1-1	9.5	2	4.8	Amosite	Mg, Si, Fe	
G7	35	C40	ADQ	80	85	F	7	0.2	35	Amosite	Mg, Si, Fe	

Asbestos Fibers and Bundles > 5um and 5:1	19.7	0.12333	0.0859 - 0.17152 - Poisson	12

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	5	B30	ADQ		16	MF	12.7	0.7	18.1	Amosite	Mg, Si, Fe	
G6	10	A21	CD		23	MF	7.5	0.1	75	Chrysotile		
G6	2	C21	ADQ		10	MF	7.7	0.22	35	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		7	MF	11	0.65	16.9	Amosite	Mg, Si, Fe	
G6	11	A1	ADQ		26	MF	7	0.28	25	Amosite	Mg, Si, Fe	
G6	2	C21	ADQ		6	MF	7.5	0.25	30	Amosite	Mg, Si, Fe	
G6	11	A1	CD	25	28	B	9	0.2	45	Chrysotile		
G6	1	A20	AZQ		1	MF	12	0.25	48	Amosite	Mg, Si, Fe	
G6	15	C1	ADQ	36	39	F	6.8	0.45	15.1	Amosite	Mg, Si, Fe	
G6	13	D41	ADQ		32	MF	12.5	0.4	31.2	Amosite	Mg, Si, Fe	
G6	15	C1	ADQ		36	MF	13	0.38	34.2	Amosite	Mg, Si, Fe	
G6	15	C1	ADQ		37	MF	12	0.22	54.5	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/14/2006

Lab/Cor Sample No.: S34
Client Sample No.: NR-574
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.15
Final Dilution:

Volume (L): 1200
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 42
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.60858
Analytical Sens. (struc/cc): 0.00352
Dectection Limit. (struc/cc): 0.01054

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Fibers and Bundles > 5um and 5:1	19.7	0.12333	0.0859 - 0.17152 - Poisson	12

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	17	B23	ADQ		43	MF	12	0.3	40	Amosite	Mg, Si, Fe	
G6	19	C4	ADQ		52	MF	13	0.2	65	Amosite	Mg, Si, Fe	
G7	35	C40	ADQ		89	MF	15	0.3	50	Amosite	Mg, Si, Fe	
G7	42	D30	ADQ		101	MF	25.5	0.6	42.5	Amosite	Mg, Si, Fe	
G7	22	B4	CD		57	MF	9.5	0.1	95	Chrysotile		
G7	41	D20	ADQ		98	MF	22	0.5	44	Amosite	Mg, Si, Fe	
G7	40	A10	CD		96	MF	5.8	0.1	58	Chrysotile		
G7	25	C43	ADQ		62	MF	49	0.55	89.1	Amosite	Mg, Si, Fe	
G7	38	B20	ADQ	86	91	F	8.5	0.4	21.2	Amosite	Mg, Si, Fe	
G7	37	C10	CD	85	90	F	5.6	0.1	56	Chrysotile		
G7	30	B42	ADQ		74	MF	7.5	0.5	15	Amosite	Mg, Si, Fe	
G7	25	C43	ADQ	59	64	F	34	1	34	Amosite	Mg, Si, Fe	
G7	35	C40	ADQ	80	85	F	7	0.2	35	Amosite	Mg, Si, Fe	
G7	27	C3	ADQ	61	66	F	7	0.3	23.3	Amosite	Mg, Si, Fe	
G7	34	C22	ADQ		82	MF	5.8	0.28	20.7	Amosite	Mg, Si, Fe	
G7	33	C12	CD	76	81	F	5.75	0.1	57.5	Chrysotile		
G7	28	B13	ADQ	64	69	F	12	0.75	16	Amosite	Mg, Si, Fe	
G7	31	B12	ADQ		79	MF	8.5	0.4	21.2	Amosite	Mg, Si, Fe	
G7	29	B33	ADQ	68	73	F	6.35	0.7	9.1	Amosite	Mg, Si, Fe	
G7	21	B24	ADQ		56	MF	7.5	0.2	37.5	Amosite	Mg, Si, Fe	
G7	31	B12	CD	73	78	B	7.35	0.3	24.5	Chrysotile		
G7	20	B44	ADQ	50	54	F	10.7	0.6	17.8	Amosite	Mg, Si, Fe	
G7	25	C43	ADQ		63	MF	33	0.7	47.1	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/26/2006

Lab/Cor Sample No.: S40
Client Sample No.: NR-580
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 869
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 61
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.88389
Analytical Sens. (struc/cc): 0.00101
Dectection Limit. (struc/cc): 0.00301

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	12.4	0.01106	0.00552 - 0.01978 - Poisson	11

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	4	D32	CD	4		MD 1-1	12	11	1.1	Chrysotile		
G6	7	A30	CD	6		MD 1-0	5.1	3.7	1.4	Chrysotile		
G6	4	D32	AZQ	3	3	F	48	0.8	60	Amosite	Mg, Al, Si, Fe	
G7	26	A20	CD	21		MD 1-0	9.5	6	1.6	Chrysotile		
G7	26	A20	CD	22		MD 1-1	9	4.5	2	Chrysotile		
G7	21	D22	ADQ	18		MD 1-1	45	35	1.3	Amosite	Mg, Si, Fe	
G7	17	A3	CD	16		MD 1-1	7	1	7	Chrysotile		
G7	15	A43	CD	15		MD 1-0	7.5	5	1.5	Chrysotile		
G8	36	B4	CD	28		MD 1-0	12	6	2	Chrysotile		
G8	57	A22	CD	43	43	F	18	0.1	180	Chrysotile		
G8	55	A1	CD	42	42	B	5.2	0.11	47.3	Chrysotile		

PCM Equivalent Fibers-ISO	1.1	0.00201	0.00024 - 0.00726 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	4	D32	AZQ	3	3	F	48	0.8	60	Amosite	Mg, Al, Si, Fe	
G7	21	D22	ADQ		18	MF	22	0.5	44	Amosite	Mg, Si, Fe	

PCM Equivalent Structures-ISO	2.3	0.00201	0.00024 - 0.00726 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	4	D32	AZQ	3	3	F	48	0.8	60	Amosite	Mg, Al, Si, Fe	
G7	17	A3	CD	16		MD 1-1	7	1	7	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	3.4	0.00704	0.00283 - 0.0145 - Poisson	3

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	4	D32	AZQ	3	3	F	48	0.8	60	Amosite	Mg, Al, Si, Fe	
G6	4	D32	CD		4	MF	12.7	0.1	127	Chrysotile		
G7	21	D22	ADQ		18	MF	22	0.5	44	Amosite	Mg, Si, Fe	
G7	17	A3	CD		16	MF	7	0.1	70	Chrysotile		
G7	26	A20	CD		22	MF	9	0.1	90	Chrysotile		
G8	55	A1	CD	42	42	B	5.2	0.11	47.3	Chrysotile		
G8	57	A22	CD	43	43	F	18	0.1	180	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/27/2006

Lab/Cor Sample No.: S42
Client Sample No.: NR-582
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 880
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 112
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 1.62288
Analytical Sens. (struc/cc): 0.00541
Dectection Limit. (struc/cc): 0.01616

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	9.9	0.08649	0.04944 - 0.14046 - Poisson	16

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	1	A33	CDQ	1	1	B	9	0.1	90	Chrysotile	Mg, Si	
G6	18	A43	CD	15		MD 1-0	7.5	7	1.1	Chrysotile		
G6	13	B32	CD	10		MD 1-1	7.5	1	7.5	Chrysotile		
G6	12	C4	CD	8	8	B	5.35	0.1	53.5	Chrysotile		
G7	19	B4	CD	16		MD 1-0	18	9.2	2	Chrysotile		
G7	21	C34	CD	19		MD 1-0	7	4	1.8	Chrysotile		
G7	30	A12	CD	30		MD 1-0	8.5	4	2.1	Chrysotile		
G9	54	A41	CD	45	46	F	5.2	0.07	74.3	Chrysotile		
G9	74	C13	CD	55	56	B	8	0.25	32	Chrysotile		
G10	110	C31	CD	95		MD 1-0	10	4	2.5	Chrysotile		
G10	112	D2	CD	96	100	B	7	0.25	28	Chrysotile		
G10	110	C31	CD	94	98	B	6	0.15	40	Chrysotile		
G10	103	C20	CD	83		MD 1-1	5.1	1.5	3.4	Chrysotile		
G10	97	A41	CD	75		MD 1-1	9	7	1.3	Chrysotile		
G10	93	D31	CD	72		MD 1-1	5.2	3	1.7	Chrysotile		
G10	81	A24	CD	58		MD 1-1	22	8	2.8	Chrysotile		

PCM Equivalent Fibers-ISO	1.2	0.01622	0.00335 - 0.04739 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G9	74	C13	CD	55	56	B	8	0.25	32	Chrysotile		
G10	112	D2	CD	96	100	B	7	0.25	28	Chrysotile		
G10	97	A41	CD		79	MB	5.3	0.25	21.2	Chrysotile		

PCM Equivalent Structures-ISO	2.5	0.02162	0.00589 - 0.05536 - Poisson	4

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	B32	CD	10		MD 1-1	7.5	1	7.5	Chrysotile		
G9	74	C13	CD	55	56	B	8	0.25	32	Chrysotile		
G10	112	D2	CD	96	100	B	7	0.25	28	Chrysotile		
G10	103	C20	CD	83		MD 1-1	5.1	1.5	3.4	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	3.7	0.05946	0.02968 - 0.1064 - Poisson	6

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	B32	CD		10	MF	7.5	0.11	68.2	Chrysotile		
G6	1	A33	CDQ	1	1	B	9	0.1	90	Chrysotile	Mg, Si	
G6	12	C4	CD	8	8	B	5.35	0.1	53.5	Chrysotile		
G9	74	C13	CD	55	56	B	8	0.25	32	Chrysotile		
G9	54	A41	CD	45	46	F	5.2	0.07	74.3	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/20/2006

Lab/Cor Sample No.: S42
Client Sample No.: NR-582
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 880
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 112
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 1.62288
Analytical Sens. (struc/cc): 0.00541
Dectection Limit. (struc/cc): 0.01616

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Fibers and Bundles > 5um and 5:1	3.7	0.05946	0.02968 - 0.1064 - Poisson	6

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G10	110	C31	CD	94	98	B	6	0.15	40	Chrysotile		
G10	112	D2	CD	96	100	B	7	0.25	28	Chrysotile		
G10	97	A41	CD		79	MB	5.3	0.25	21.2	Chrysotile		
G10	93	D31	CD		76	MF	5.2	0.08	65	Chrysotile		
G10	81	A24	CD		59	MF	7.5	0.07	107.1	Chrysotile		
G10	103	C20	CD		87	MF	5.1	0.08	63.8	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 **PDX** | **Report Number:** 060359R01
Client: *Parametrix* | **Date Received:** 6/30/2006
Project Name: Northridge Estates | **Date Completed:** 9/15/2006

Lab/Cor Sample No.: S44 | **Volume (L):** 880
Client Sample No.: NR-584 | **Lab Filter Area (mm2):** 193
Description: | **Grid Openings Analyzed:** 61
Filter Fraction: 0.5 | **Aliquot Dilution:** 0.5 | **Average Grid Opening Area:** 0.01449
Residual Ash Vol: *20* | ***Final Dilution:*** | ***Area Analyzed (mm2):*** 0.88389
Analytical Sens. (struc/cc): 0.00099
Dectection Limit. (struc/cc): 0.00297

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	2.3	0.00199	0.00024 - 0.00717 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	22	B22	CD	8		MD 1-1	8	8	1	Chrysotile		
G6	29	B11	ADQ	10	10	F	7.25	0.38	19.1	Amosite	Mg, Si, Fe	

PCM Equivalent Fibers-ISO	1.1	0.00099	0.00002 - 0.00553 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	29	B11	ADQ	10	10	F	7.25	0.38	19.1	Amosite	Mg, Si, Fe	

PCM Equivalent Structures-ISO	1.1	0.00099	0.00002 - 0.00553 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	29	B11	ADQ	10	10	F	7.25	0.38	19.1	Amosite	Mg, Si, Fe	

Asbestos Fibers and Bundles > 5um and 5:1	1.1	0.00199	0.00024 - 0.00717 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	29	B11	ADQ	10	10	F	7.25	0.38	19.1	Amosite	Mg, Si, Fe	
G6	22	B22	CD		8	MF	5.35	0.12	44.6	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/26/2006

Lab/Cor Sample No.: S45
Client Sample No.: NR-585
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 253
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 10
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.1449
Analytical Sens. (struc/cc): 0.02106
Dectection Limit. (struc/cc): 0.06297

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	6.9	0.02106	0.00053 - 0.11734 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	8	A21	CDQ	3		MD 1-1	27	3.3	8.2	Chrysotile	Mg, Si	

Asbestos Fibers and Bundles > 5um and 5:1	0.0	0.02106	0.00053 - 0.11734 - Poisson	0

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	8	A21	CDQ		3	MF	23	0.1	230	Chrysotile	Mg, Si	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/18/2006

Lab/Cor Sample No.: S46
Client Sample No.: NR-586
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.15
Final Dilution:

Volume (L): 880
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 105
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 1.52145
Analytical Sens. (struc/cc): 0.00192
Dectection Limit. (struc/cc): 0.00575

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	5.3	0.01538	0.00664 - 0.0303 - Poisson	8

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	20	D43	CD	18	19	B	6	0.4	15	Chrysotile		
G6	1	A1	CDQ	1	1	CC 75-0	7.5	3.8	2	Chrysotile	Mg, Si	
G6	9	B12	CD	13		MD 1-1	9	8.5	1.1	Chrysotile		
G7	43	D1	CD	35		MD 1-1	28	8	3.5	Chrysotile		
G7	46	A43	AZQ	38	39	F	5.75	0.9	6.4	Amosite	Mg, Al, Si, Fe	
G7	34	B12	CD	28	29	F	7	0.1	70	Chrysotile		
G9	93	C2	CD	74		MD 2-0	5.3	3	1.8	Chrysotile		
G9	95	B32	CD	82	87	B	6	0.15	40	Chrysotile		

PCM Equivalent Fibers-ISO	1.3	0.00769	0.00209 - 0.01969 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	20	D43	CD	18	19	B	6	0.4	15	Chrysotile		
G6	9	B12	CD		14	MB	7	0.25	28	Chrysotile		
G7	46	A43	AZQ	38	39	F	5.75	0.9	6.4	Amosite	Mg, Al, Si, Fe	
G7	43	D1	CD		36	MB	25	0.4	62.5	Chrysotile		

PCM Equivalent Structures-ISO	1.3	0.00384	0.00047 - 0.01389 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	20	D43	CD	18	19	B	6	0.4	15	Chrysotile		
G7	46	A43	AZQ	38	39	F	5.75	0.9	6.4	Amosite	Mg, Al, Si, Fe	

Asbestos Fibers and Bundles > 5um and 5:1	2.6	0.01153	0.00423 - 0.0251 - Poisson	4

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	20	D43	CD	18	19	B	6	0.4	15	Chrysotile		
G6	9	B12	CD		14	MB	7	0.25	28	Chrysotile		
G7	46	A43	AZQ	38	39	F	5.75	0.9	6.4	Amosite	Mg, Al, Si, Fe	
G7	34	B12	CD	28	29	F	7	0.1	70	Chrysotile		
G7	43	D1	CD		36	MB	25	0.4	62.5	Chrysotile		
G9	95	B32	CD	82	87	B	6	0.15	40	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates
Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/24/2006

Lab/Cor Sample No.: S50
Client Sample No.: NR-590
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.5
Final Dilution:
Volume (L): 878.9
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 61
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.88389
Analytical Sens. (struc/cc): 0.00099
Dectection Limit. (struc/cc): 0.00297

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	21.5	0.01888	0.01137 - 0.02949 - Poisson	19

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	A41	CD	12		MD 1-1	5.67	4.8	1.2	Chrysotile		
G6	21	A10	CD	24		MD 1-0	8.5	7	1.2	Chrysotile		
G6	21	A10	CD	22		MD 1-0	5.5	4.8	1.1	Chrysotile		
G6	17	D23	CD	17		MD 1-0	7.5	3.5	2.1	Chrysotile		
G6	17	D23	CD	14		MD 3-0	6.75	2.5	2.7	Chrysotile		
G6	10	C2	CD	7	7	F	6.8	0.11	61.8	Chrysotile		
G6	4	B24	CD	3		MD 1-1	18	15	1.2	Chrysotile		
G7	25	C13	CD	27		MD 1-0	5.75	4	1.4	Chrysotile		
G7	35	D11	CD	41		MD 1-0	10	5	2	Chrysotile		
G7	36	D30	CD	45		MD 1-0	17.5	12	1.5	Chrysotile		
G7	36	D30	CD	47		MD 1-0	5.2	4.8	1.1	Chrysotile		
G8	48	B41	CD	61		MD 1-0	5.2	3	1.7	Chrysotile		
G8	58	D42	CD	71		MD 1-0	8	8	1	Chrysotile		
G8	59	D33	CD	73		MD 1-0	8.5	4	2.1	Chrysotile		
G8	57	D12	CD	68		MD 1-0	9.5	4.5	2.1	Chrysotile		
G8	55	A42	CD	67		MD 1-0	12	7	1.7	Chrysotile		
G8	57	D12	CD	69	74	B	12	0.2	60	Chrysotile		
G8	44	C14	CD	58	63	B	6.3	0.17	37.1	Chrysotile		
G8	52	D30	CD	63		MD 1-0	10	7	1.4	Chrysotile		

PCM Equivalent Fibers-ISO	1.1	0.00099	0.00002 - 0.00554 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G8	57	D12	CD	69	74	B	12	0.2	60	Chrysotile		

PCM Equivalent Structures-ISO	1.1	0.00099	0.00002 - 0.00554 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G8	57	D12	CD	69	74	B	12	0.2	60	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	3.4	0.00497	0.00161 - 0.0116 - Poisson	3

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	A41	CD		12	MF	5.67	0.05	113.4	Chrysotile		
G6	10	C2	CD	7	7	F	6.8	0.11	61.8	Chrysotile		
G6	4	B24	CD		3	MB	12.5	0.17	73.5	Chrysotile		
G8	57	D12	CD	69	74	B	12	0.2	60	Chrysotile		
G8	44	C14	CD	58	63	B	6.3	0.17	37.1	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/18/2006

Lab/Cor Sample No.: S54
Client Sample No.: NR-594
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 880
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 347
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 5.02803
Analytical Sens. (struc/cc): 0.00174
Dectection Limit. (struc/cc): 0.00522

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	4.4	0.03838	0.02406 - 0.05812 - Poisson	22

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	20	A42	CD	10		MD	5.5	2.3	2.4	Chrysotile		
G6	54	C4	CD	20		MD 1-0	7	6	1.2	Chrysotile		
G6	49	B13	CD	18	18	F	5.6	0.08	70	Chrysotile		
G6	22	A21	CD	11	11	F	6.5	0.09	72.2	Chrysotile		
G6	10	B42	CD	6	6	F	5.2	0.1	52	Chrysotile		
G7	58	A4	CD	21		MD 1-1	8	2.5	3.2	Chrysotile		
G7	85	B21	CD	24		MD 1-1	20	19	1.1	Chrysotile		
G8	148	B4	CD	47		MD 51-0	10	8	1.2	Chrysotile		
G8	136	C31	CD	39		MD 1-1	9	7	1.3	Chrysotile		
G8	131	B30	CD	36		MD 1-1	6.5	3.3	2	Chrysotile		
G8	116	D32	CD	34	34	F	5.1	0.06	85	Chrysotile		
G8	119	D1	CD	35		MD 1-1	14	7.5	1.9	Chrysotile		
G8	148	B4	CD	44		CD 4-1	5.1	0.5	10.2	Chrysotile		
G9	231	B32	CD	65		MD 1-1	5.8	0.6	9.7	Chrysotile		
G9	197	A4	CD	60		MD 1-1	6	5	1.2	Chrysotile		
G11	263	D30	CD	74	80	F	5.7	0.07	81.4	Chrysotile		
G12	315	C11	CD	81	88	F	5.1	0.07	72.9	Chrysotile		
G13	336	D12	CD	90		MD 4-2	35	25	1.4	Chrysotile		
G13	347	C30	CD	95		MD 1-1	15	14	1.1	Chrysotile		
G13	345	D10	CD	93		MD 1-1	10	7.5	1.3	Chrysotile		
G13	329	D24	CD	88	95	B	6.1	0.25	24.4	Chrysotile		
G13	336	D12	CD	91	101	B	6	0.2	30	Chrysotile		

PCM Equivalent Fibers-ISO	0.4	0.00872	0.00283 - 0.02036 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G8	136	C31	CD		39	MB	6	0.3	20	Chrysotile		
G13	329	D24	CD	88	95	B	6.1	0.25	24.4	Chrysotile		
G13	336	D12	CD		97	MB	19	0.2	95	Chrysotile		
G13	336	D12	CD	91	101	B	6	0.2	30	Chrysotile		
G13	336	D12	CD		98	MB	18	0.2	90	Chrysotile		

PCM Equivalent Structures-ISO	1.0	0.00872	0.00283 - 0.02036 - Poisson	5

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	58	A4	CD	21		MD 1-1	8	2.5	3.2	Chrysotile		
G8	148	B4	CD	44		CD 4-1	5.1	0.5	10.2	Chrysotile		
G9	231	B32	CD	65		MD 1-1	5.8	0.6	9.7	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/19/2006

Lab/Cor Sample No.: S54
Client Sample No.: NR-594
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 880
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 347
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 5.02803
Analytical Sens. (struc/cc): 0.00174
Dectection Limit. (struc/cc): 0.00522

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
PCM Equivalent Structures-ISO	1.0	0.00872	0.00283 - 0.02036 - Poisson	5

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G13	329	D24	CD	88	95	B	6.1	0.25	24.4	Chrysotile		
G13	336	D12	CD	91	101	B	6	0.2	30	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	1.6	0.0349	0.02132 - 0.05389 - Poisson	8

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	22	A21	CD	11	11	F	6.5	0.09	72.2	Chrysotile		
G6	10	B42	CD	6	6	F	5.2	0.1	52	Chrysotile		
G6	49	B13	CD	18	18	F	5.6	0.08	70	Chrysotile		
G7	85	B21	CD		24	MF	13.5	0.07	192.9	Chrysotile		
G7	58	A4	CD		21	MF	8	0.08	100	Chrysotile		
G8	131	B30	CD		36	MF	6.5	0.07	92.9	Chrysotile		
G8	148	B4	CD		44	CF	5.1	0.06	85	Chrysotile		
G8	116	D32	CD	34	34	F	5.1	0.06	85	Chrysotile		
G8	119	D1	CD		35	MF	6	0.06	100	Chrysotile		
G8	136	C31	CD		39	MB	6	0.3	20	Chrysotile		
G9	231	B32	CD		71	MF	5.2	0.06	86.7	Chrysotile		
G9	197	A4	CD		66	MF	6	0.1	60	Chrysotile		
G11	263	D30	CD	74	80	F	5.7	0.07	81.4	Chrysotile		
G12	315	C11	CD	81	88	F	5.1	0.07	72.9	Chrysotile		
G13	345	D10	CD		103	MF	10	0.08	125	Chrysotile		
G13	336	D12	CD	91	101	B	6	0.2	30	Chrysotile		
G13	336	D12	CD		97	MB	19	0.2	95	Chrysotile		
G13	347	C30	CD		105	MB	12.5	0.1	125	Chrysotile		
G13	329	D24	CD	88	95	B	6.1	0.25	24.4	Chrysotile		
G13	336	D12	CD		98	MB	18	0.2	90	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/25/2006

Lab/Cor Sample No.: S56
Client Sample No.: NR-596
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 880
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 55
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.79695
Analytical Sens. (struc/cc): 0.0011
Dectection Limit. (struc/cc): 0.00329

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	35.1	0.03082	0.02048 - 0.04455 - Poisson	28

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	2	C10	ADQ	2		MD 1-1	15	10	1.5	Amosite	Mg, Si, Fe	
G6	17	D41	ADQ	25		MD 1-1	15	9	1.7	Amosite	Mg, Si, Fe	
G6	1	A10	ADQ	1		MD 1-1	22	10	2.2	Amosite	Mg, Si, Fe	
G6	5	B30	ADQ	7	7	F	7.5	0.48	15.6	Amosite	Mg, Si, Fe	
G6	21	D23	ADQ	35		MD 1-1	7.5	3.5	2.1	Amosite	Mg, Si, Fe	
G6	16	C32	ADQ	24		MD 1-1	12	5	2.4	Amosite	Mg, Si, Fe	
G6	11	C43	CD	19		MD 1-1	8.5	8	1.1	Chrysotile		
G6	2	C10	ADQ	4	4	F	15.85	0.25	63.4	Amosite	Mg, Si, Fe	
G6	11	C43	CD	17		MD 1-1	10	5	2	Chrysotile		
G6	18	D21	CD	27		MD 1-0	25	15	1.7	Chrysotile		
G6	20	D3	ADQ	33		MD 1-1	9.75	8.5	1.1	Amosite	Mg, Si, Fe	
G6	7	B4	ADQ	9	9	F	7.2	0.48	15	Amosite	Mg, Si, Fe	
G6	2	C10	ADQ	3		MD 1-1	15	8	1.9	Amosite	Mg, Si, Fe	
G7	37	A20	CD	70		MD 1-0	6.5	3.5	1.9	Chrysotile		
G7	41	D21	ADQ	74		MD 1-1	6.2	1.8	3.4	Amosite	Mg, Si, Fe	
G7	35	D30	ADQ	69	71	F	6.8	0.4	17	Amosite	Mg, Si, Fe	
G7	41	D21	ADQ	76		MD 1-1	20	12	1.7	Amosite	Mg, Si, Fe	
G7	24	A2	ADQ	43		MD 1-0	21	17	1.2	Amosite	Mg, Si, Fe	
G7	27	B14	CD	52		MD 1-1	18	15	1.2	Chrysotile		
G7	41	D21	ADQ	77		MD 1-1	7.8	6.5	1.2	Amosite	Mg, Si, Fe	
G7	29	C3	ADQ	56	58	B	6.75	0.75	9	Amosite	Mg, Si, Fe	
G7	34	C41	CD	67	69	F	9.5	0.1	95	Chrysotile		
G7	31	B41	CD	61		MD 1-0	6.5	5	1.3	Chrysotile		
G8	47	C13	ADQ	86		MD 1-1	25	7	3.6	Amosite	Mg, Si, Fe	
G8	46	C43	CD	85		MD 1-0	15	10	1.5	Chrysotile		
G8	48	B13	CD	91		MD 1-0	5.2	3	1.7	Chrysotile		
G8	45	C24	ADQ	81	83	F	38.5	0.68	56.6	Amosite	Mg, Si, Fe	
G8	46	C43	ADQ	83	85	F	6.8	0.6	11.3	Amosite	Mg, Si, Fe	

PCM Equivalent Fibers-ISO	8.8	0.01981	0.01174 - 0.03132 - Poisson	7

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	1	A10	ADQ		1	MF	22	0.45	48.9	Amosite	Mg, Si, Fe	
G6	2	C10	ADQ		3	MF	8	0.4	20	Amosite	Mg, Si, Fe	
G6	2	C10	ADQ	4	4	F	15.85	0.25	63.4	Amosite	Mg, Si, Fe	
G6	2	C10	ADQ		2	MF	14.5	0.38	38.2	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/11/2006

Lab/Cor Sample No.: S56
Client Sample No.: NR-596
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 880
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 55
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.79695
Analytical Sens. (struc/cc): 0.0011
Dectection Limit. (struc/cc): 0.00329

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
PCM Equivalent Fibers-ISO	8.8	0.01981	0.01174 - 0.03132 - Poisson	7

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	21	D23	ADQ		35	MF	6	0.65	9.2	Amosite	Mg, Si, Fe	
G6	20	D3	ADQ		33	MF	9.75	0.7	13.9	Amosite	Mg, Si, Fe	
G6	5	B30	ADQ	7	7	F	7.5	0.48	15.6	Amosite	Mg, Si, Fe	
G6	17	D41	ADQ		25	MF	15	0.8	18.8	Amosite	Mg, Si, Fe	
G6	7	B4	ADQ	9	9	F	7.2	0.48	15	Amosite	Mg, Si, Fe	
G6	11	C43	CD		19	MB	7.5	0.35	21.4	Chrysotile		
G6	16	C32	ADQ		24	MF	5.6	0.36	15.6	Amosite	Mg, Si, Fe	
G7	35	D30	ADQ	69	71	F	6.8	0.4	17	Amosite	Mg, Si, Fe	
G7	41	D21	ADQ		76	MF	5.5	0.3	18.3	Amosite	Mg, Si, Fe	
G7	41	D21	ADQ		78	MF	6.5	0.25	26	Amosite	Mg, Si, Fe	
G7	29	C3	ADQ	56	58	B	6.75	0.75	9	Amosite	Mg, Si, Fe	
G8	46	C43	ADQ	83	85	F	6.8	0.6	11.3	Amosite	Mg, Si, Fe	
G8	47	C13	ADQ		88	MF	25	0.37	67.6	Amosite	Mg, Si, Fe	
G8	45	C24	ADQ	81	83	F	38.5	0.68	56.6	Amosite	Mg, Si, Fe	

PCM Equivalent Structures-ISO	10.0	0.00881	0.0038 - 0.01735 - Poisson	8

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	7	B4	ADQ	9	9	F	7.2	0.48	15	Amosite	Mg, Si, Fe	
G6	2	C10	ADQ	4	4	F	15.85	0.25	63.4	Amosite	Mg, Si, Fe	
G6	5	B30	ADQ	7	7	F	7.5	0.48	15.6	Amosite	Mg, Si, Fe	
G7	35	D30	ADQ	69	71	F	6.8	0.4	17	Amosite	Mg, Si, Fe	
G7	41	D21	ADQ	74		MD 1-1	6.2	1.8	3.4	Amosite	Mg, Si, Fe	
G7	29	C3	ADQ	56	58	B	6.75	0.75	9	Amosite	Mg, Si, Fe	
G8	46	C43	ADQ	83	85	F	6.8	0.6	11.3	Amosite	Mg, Si, Fe	
G8	45	C24	ADQ	81	83	F	38.5	0.68	56.6	Amosite	Mg, Si, Fe	

Asbestos Fibers and Bundles > 5um and 5:1	10.0	0.02422	0.01518 - 0.03667 - Poisson	8

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	1	A10	ADQ		1	MF	22	0.45	48.9	Amosite	Mg, Si, Fe	
G6	2	C10	ADQ		2	MF	14.5	0.38	38.2	Amosite	Mg, Si, Fe	
G6	2	C10	ADQ		3	MF	8	0.4	20	Amosite	Mg, Si, Fe	
G6	2	C10	ADQ	4	4	F	15.85	0.25	63.4	Amosite	Mg, Si, Fe	
G6	21	D23	ADQ		35	MF	6	0.65	9.2	Amosite	Mg, Si, Fe	
G6	7	B4	ADQ	9	9	F	7.2	0.48	15	Amosite	Mg, Si, Fe	
G6	20	D3	ADQ		33	MF	9.75	0.7	13.9	Amosite	Mg, Si, Fe	
G6	17	D41	ADQ		25	MF	15	0.8	18.8	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/11/2006

Lab/Cor Sample No.: S56
Client Sample No.: NR-596
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 880
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 55
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.79695
Analytical Sens. (struc/cc): 0.0011
Dectection Limit. (struc/cc): 0.00329

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Fibers and Bundles > 5um and 5:1	10.0	0.02422	0.01518 - 0.03667 - Poisson	8

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	11	C43	CD		17	MF	10	0.08	125	Chrysotile		
G6	11	C43	CD		19	MB	7.5	0.35	21.4	Chrysotile		
G6	16	C32	ADQ		24	MF	5.6	0.36	15.6	Amosite	Mg, Si, Fe	
G6	5	B30	ADQ	7	7	F	7.5	0.48	15.6	Amosite	Mg, Si, Fe	
G7	41	D21	ADQ		78	MF	6.5	0.25	26	Amosite	Mg, Si, Fe	
G7	41	D21	ADQ		76	MF	5.5	0.3	18.3	Amosite	Mg, Si, Fe	
G7	35	D30	ADQ	69	71	F	6.8	0.4	17	Amosite	Mg, Si, Fe	
G7	34	C41	CD	67	69	F	9.5	0.1	95	Chrysotile		
G7	29	C3	ADQ	56	58	B	6.75	0.75	9	Amosite	Mg, Si, Fe	
G7	27	B14	CD		54	MF	7.5	0.1	75	Chrysotile		
G7	41	D21	ADQ		79	MF	6.5	0.18	36.1	Amosite	Mg, Si, Fe	
G8	45	C24	ADQ	81	83	F	38.5	0.68	56.6	Amosite	Mg, Si, Fe	
G8	46	C43	ADQ	83	85	F	6.8	0.6	11.3	Amosite	Mg, Si, Fe	
G8	47	C13	ADQ		88	MF	25	0.37	67.6	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 8/27/2006

Lab/Cor Sample No.: S58
Client Sample No.: NR-598
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 869
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 123
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 1.78227
Analytical Sens. (struc/cc): 0.00498
Dectection Limit. (struc/cc): 0.0149

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	8.4	0.07477	0.04185 - 0.12332 - Poisson	15

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G12	3	C34	ADQ	3		MD 1-1	24	19	1.3	Amosite	Mg, Si, Fe	Intersects right grid bar
G12	2	C14	ADQ	2		CD 2-1	9	3	3	Amosite	Mg, Si, Fe	
G13	30	A1	AQ	15	17	F	8.5	0.35	24.3	Amosite	Mg, Si, Fe	
G13	25	B42	AQ	12	14	F	22	0.25	88	Amosite	Mg, Si, Fe	
G13	30	A1	AQ	14	16	F	21.5	0.4	53.8	Amosite	Mg, Si, Fe	
G13	25	B42	ADQ	13	15	F	22	0.35	62.9	Amosite	Mg, Si, Fe	
G14	40	C4	AQ	21	23	F	5.5	0.4	13.8	Amosite	Mg, Si, Fe	
G14	34	C2	AD	16		MD 1-0	11	7.5	1.5	Amosite	Mg, Si, Fe	
G14	47	A20	ADQ	26		MD 1-0	10	7.5	1.3	Amosite	Mg, Si, Fe	
G14	43	B44	ADQ	23		MD 1-1	10	5	2	Amosite	Mg, Si, Fe	
G15	75	B34	AQ	40	42	F	15	1.2	12.5	Amosite	Mg, Si, Fe	
G15	74	B44	AQ	38	40	F	6	0.55	10.9	Amosite	Mg, Si, Fe	
G15	63	A32	AQ	35		MD 1-0	7.5	7.5	1	Amosite	Mg, Si, Fe	
G16	86	C23	AQ	45	47	F	6	0.25	24	Amosite	Mg, Si, Fe	
G16	94	B10	AQ	49		MD 1-1	15	10	1.5	Amosite	Mg, Si, Fe	

PCM Equivalent Fibers-ISO	4.5	0.05981	0.03091 - 0.10449 - Poisson	8

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G12	3	C34	ADQ		4	MF	6.4	0.35	18.3	Amosite	Mg, Si, Fe	
G12	2	C14	ADQ		2	CF	8	1	8	Amosite	Mg, Si, Fe	
G13	30	A1	AQ	15	17	F	8.5	0.35	24.3	Amosite	Mg, Si, Fe	
G13	30	A1	AQ	14	16	F	21.5	0.4	53.8	Amosite	Mg, Si, Fe	
G13	25	B42	ADQ	13	15	F	22	0.35	62.9	Amosite	Mg, Si, Fe	
G13	25	B42	AQ	12	14	F	22	0.25	88	Amosite	Mg, Si, Fe	
G14	43	B44	ADQ		25	MF	9	0.4	22.5	Amosite	Mg, Si, Fe	
G14	40	C4	AQ	21	23	F	5.5	0.4	13.8	Amosite	Mg, Si, Fe	
G15	74	B44	AQ	38	40	F	6	0.55	10.9	Amosite	Mg, Si, Fe	
G15	75	B34	AQ	40	42	F	15	1.2	12.5	Amosite	Mg, Si, Fe	
G16	86	C23	AQ	45	47	F	6	0.25	24	Amosite	Mg, Si, Fe	
G16	94	B10	AQ		51	MF	10	0.35	28.6	Amosite	Mg, Si, Fe	

PCM Equivalent Structures-ISO	5.0	0.04486	0.02051 - 0.08516 - Poisson	9

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G12	2	C14	ADQ	2		CD 2-1	9	3	3	Amosite	Mg, Si, Fe	
G13	30	A1	AQ	15	17	F	8.5	0.35	24.3	Amosite	Mg, Si, Fe	
G13	30	A1	AQ	14	16	F	21.5	0.4	53.8	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/19/2006

Lab/Cor Sample No.: S58
Client Sample No.: NR-598
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 869
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 123
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 1.78227
Analytical Sens. (struc/cc): 0.00498
Dectection Limit. (struc/cc): 0.0149

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
PCM Equivalent Structures-ISO	5.0	0.04486	0.02051 - 0.08516 - Poisson	9

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G13	25	B42	ADQ	13	15	F	22	0.35	62.9	Amosite	Mg, Si, Fe	
G13	25	B42	AQ	12	14	F	22	0.25	88	Amosite	Mg, Si, Fe	
G14	40	C4	AQ	21	23	F	5.5	0.4	13.8	Amosite	Mg, Si, Fe	
G15	75	B34	AQ	40	42	F	15	1.2	12.5	Amosite	Mg, Si, Fe	
G15	74	B44	AQ	38	40	F	6	0.55	10.9	Amosite	Mg, Si, Fe	
G16	86	C23	AQ	45	47	F	6	0.25	24	Amosite	Mg, Si, Fe	

Asbestos Fibers and Bundles > 5um and 5:1	4.5	0.05981	0.03091 - 0.10449 - Poisson	8

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G12	3	C34	ADQ		4	MF	6.4	0.35	18.3	Amosite	Mg, Si, Fe	
G12	2	C14	ADQ		2	CF	8	1	8	Amosite	Mg, Si, Fe	
G13	30	A1	AQ	15	17	F	8.5	0.35	24.3	Amosite	Mg, Si, Fe	
G13	25	B42	ADQ	13	15	F	22	0.35	62.9	Amosite	Mg, Si, Fe	
G13	25	B42	AQ	12	14	F	22	0.25	88	Amosite	Mg, Si, Fe	
G13	30	A1	AQ	14	16	F	21.5	0.4	53.8	Amosite	Mg, Si, Fe	
G14	43	B44	ADQ		25	MF	9	0.4	22.5	Amosite	Mg, Si, Fe	
G14	40	C4	AQ	21	23	F	5.5	0.4	13.8	Amosite	Mg, Si, Fe	
G15	74	B44	AQ	38	40	F	6	0.55	10.9	Amosite	Mg, Si, Fe	
G15	75	B34	AQ	40	42	F	15	1.2	12.5	Amosite	Mg, Si, Fe	
G16	86	C23	AQ	45	47	F	6	0.25	24	Amosite	Mg, Si, Fe	
G16	94	B10	AQ		51	MF	10	0.35	28.6	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/15/2006

Lab/Cor Sample No.: S60
Client Sample No.: NR-600
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20

Aliquot Dilution: 0.5
Final Dilution:

Volume (L): 690
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 77
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 1.11573
Analytical Sens. (struc/cc): 0.001
Dectection Limit. (struc/cc): 0.003

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	3.6	0.00401	0.00109 - 0.01027 - Poisson	4

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	B23	CD	5		MD 1-1	30	12	2.5	Chrysotile		
G7	46	C1	CD	11	11	F	7.5	0.11	68.2	Chrysotile		
G7	74	A14	CD	21		MD 1-1	15	8	1.9	Chrysotile		
G7	75	A31	CD	22		MD 1-1	6	0.6	10	Chrysotile		

PCM Equivalent Structures-ISO	0.9	0.001	0.00003 - 0.00559 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	75	A31	CD	22		MD 1-1	6	0.6	10	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	0.9	0.00401	0.00109 - 0.01027 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G6	13	B23	CD		5	MB	8	0.15	53.3	Chrysotile		
G7	46	C1	CD	11	11	F	7.5	0.11	68.2	Chrysotile		
G7	74	A14	CD		21	MF	11	0.1	110	Chrysotile		
G7	75	A31	CD		22	MF	6	0.1	60	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/19/2006

Lab/Cor Sample No.: S62
Client Sample No.: NR-662
Description:
Filter Fraction: 0.5
Residual Ash Vol: 20
Aliquot Dilution: 0.05
Final Dilution:

Volume (L): 858
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 187
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 2.70963
Analytical Sens. (struc/cc): 0.00332
Dectection Limit. (struc/cc): 0.00993

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	6.6	0.05977	0.03542 - 0.09447 - Poisson	18

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	41	D1	CD	17		MD 1-0	5.2	0.6	8.7	Chrysotile		
G7	42	A11	CD	20	21	F	6.5	0.1	65	Chrysotile		
G7	29	C14	CD	14		MD 1-0	10	8	1.2	Chrysotile		
G7	31	C42	CD	15		MD 1-1	8	4.8	1.7	Chrysotile		
G8	53	A4	CD	22		MD 1-0	30	7	4.3	Chrysotile		
G9	81	B42	CD	34	35	F	5.75	0.11	52.3	Chrysotile		
G9	84	C12	CD	36		MD 1-1	8.8	6	1.5	Chrysotile		
G9	99	A33	CD	46	48	F	6.5	0.1	65	Chrysotile		
G9	90	B30	CD	40		MD 1-0	7	3	2.3	Chrysotile		
G9	91	A21	CD	41		MD 1-0	6.35	3	2.1	Chrysotile		
G10	104	C14	CD	49		MD 1-1	15	10	1.5	Chrysotile		
G10	124	D22	CD	59	61	F	5.2	0.1	52	Chrysotile		
G10	109	B41	CD	50	52	CC 75-25	10	4	2.5	Chrysotile		
G11	131	C42	CD	62		MD 1-1	8.5	1.1	7.7	Chrysotile		
G11	140	C30	CD	71	73	F	5.3	0.08	66.3	Chrysotile		
G12	159	D12	CD	81		MD 9-0	8	5.5	1.5	Chrysotile		
G13	187	C20	CD	94	101	F	5.2	0.08	65	Chrysotile		
G13	186	C40	CD	92		MD 1-0	15	15	1	Chrysotile		

PCM Equivalent Structures-ISO	0.7	0.00664	0.0008 - 0.02399 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	41	D1	CD	17		MD 1-0	5.2	0.6	8.7	Chrysotile		
G11	131	C42	CD	62		MD 1-1	8.5	1.1	7.7	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	2.2	0.03321	0.01592 - 0.06107 - Poisson	6

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G7	42	A11	CD	20	21	F	6.5	0.1	65	Chrysotile		
G7	31	C42	CD		16	MF	8	0.03	266.7	Chrysotile		
G9	84	C12	CD		37	MF	7.8	0.1	78	Chrysotile		
G9	81	B42	CD	34	35	F	5.75	0.11	52.3	Chrysotile		
G9	99	A33	CD	46	48	F	6.5	0.1	65	Chrysotile		
G10	124	D22	CD	59	61	F	5.2	0.1	52	Chrysotile		
G10	104	C14	CD		51	MF	5.3	0.1	53	Chrysotile		
G11	140	C30	CD	71	73	F	5.3	0.08	66.3	Chrysotile		
G11	131	C42	CD		64	MB	7.2	0.17	42.4	Chrysotile		
G13	187	C20	CD	94	101	F	5.2	0.08	65	Chrysotile		

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Asbestos and Environmental Analysis

ISO 13794, indirect Count Categories

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R01
Date Received: 6/30/2006
Date Completed: 9/19/2006

Reviewed by:

John Harris, M.P.H.
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Asbestos and Environmental Analysis

ISO 10312, direct Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006
Date Completed: 8/17/2006

Reviewed by:

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Asbestos and Environmental Analysis

ISO 10312, direct Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006
Date Completed: 8/17/2006

Lab/Cor Sample No.: S48
Client Sample No.: NR-588
Description:
Filter Fraction: **Aliquot Dilution:**
Residual Ash Vol: **Final Dilution:**

Volume (L): 880
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 43
Average Grid Opening Area: 0.01007
Area Analyzed (mm2): 0.43301
Analytical Sens. (struc/cc): 0.00101
Dectection Limit. (struc/cc): 0.00302

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	20.8	0.00909	0.00416 - 0.01726 - Poisson	9

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G1	22	C33	CDQ	4	5	F	6.3	0.08	78.8	Chrysotile	Mg, Si	
G1	8	A11	CDQ	2		MD 2-0	7.5	6	1.2	Chrysotile	Mg, Si	
G2	32	C10	CD	6		MD 1-1	7.5	7.5	1	Chrysotile		
G2	33	C20	CD	7		MD 1-1	12	4	3	Chrysotile		
G2	37	A31	CDQ	9	10	F	5.6	0.09	62.2	Chrysotile	Mg, Si	
G2	38	A43	CDQ	10		MD 5-1	6.3	2.8	2.2	Chrysotile	Mg, Si	
G2	40	D43	CDQ	12		MD 1-0	7.5	3.5	2.1	Chrysotile	Mg, Si	
G2	41	D24	CDQ	13		MD 4-52	45	17	2.6	Chrysotile	Mg, Si	
G2	41	D24	CD	14		MD 2-0	5.3	5	1.1	Chrysotile		

PCM Equivalent Fibers-ISO	0.0	0.00442	0.00017 - 0.00507 - Poisson	0

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	41	D24	CDQ		18	MB	33	1.3	25.4	Chrysotile	Mg, Si	
G2	41	D24	CDQ		19	MB	27	0.9	30	Chrysotile	Mg, Si	

Asbestos Fibers and Bundles > 5um and 5:1	4.6	0.00707	0.00284 - 0.01457 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G1	22	C33	CDQ	4	5	F	6.3	0.08	78.8	Chrysotile	Mg, Si	
G2	32	C10	CD		7	MB	6.5	0.09	72.2	Chrysotile		
G2	37	A31	CDQ	9	10	F	5.6	0.09	62.2	Chrysotile	Mg, Si	
G2	38	A43	CDQ		11	MF	5.4	0.06	90	Chrysotile	Mg, Si	
G2	41	D24	CDQ		18	MB	33	1.3	25.4	Chrysotile	Mg, Si	
G2	41	D24	CDQ		19	MB	27	0.9	30	Chrysotile	Mg, Si	
G2	33	C20	CD		8	MF	9	0.06	150	Chrysotile		

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Asbestos and Environmental Analysis

ISO 10312, direct Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006
Date Completed: 8/12/2006

Lab/Cor Sample No.: S38
Client Sample No.: NR-578
Description:
Filter Fraction:
Residual Ash Vol:

Aliquot Dilution:
Final Dilution:

Volume (L): 858
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 43
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.62307
Analytical Sens. (struc/cc): 0.00072
Dectection Limit. (struc/cc): 0.00215

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	3.2	0.00454	0.00017 - 0.0052 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G1	9	D21	CD	6		MD 1-0	6	4.25	1.4	Chrysotile	Mg, Si	
G2	17	C22	CDQ	9		MD	7.5	4	1.9	Chrysotile	Mg, Si	

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Asbestos and Environmental Analysis

ISO 10312, direct Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006
Date Completed: 8/10/2006

Lab/Cor Sample No.: S36
Client Sample No.: NR-576
Description:
Filter Fraction: **Aliquot Dilution:**
Residual Ash Vol: **Final Dilution:**

Volume (L): 880
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 43
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.62307
Analytical Sens. (struc/cc): 0.0007
Dectection Limit. (struc/cc): 0.0021

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	3.2	0.00442	0.00017 - 0.00507 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G1	7	C22	CDQ	1	1	B	12	8	1.5	Chrysotile	Mg, Si	
G3	17	C22	CDQ	2		MD 1-1	8.5	3	2.8	Chrysotile	Mg, Si	

Asbestos Fibers and Bundles > 5um and 5:1	1.6	0.00442	0.00017 - 0.00507 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G1	7	C22	CDQ	1	1	B	12	8	1.5	Chrysotile	Mg, Si	
G3	17	C22	CDQ		2	MF	8.5	0.1	85	Chrysotile	Mg, Si	

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Asbestos and Environmental Analysis

ISO 10312, direct Count Categories

Job Number: 060359 **PDX** **Report Number:** 060359R02
Client: Parametrix **Date Received:** 6/30/2006
Project Name: Northridge Estates **Date Completed:** 8/7/2006

Lab/Cor Sample No.: S24 **Volume (L):** 1185
Client Sample No.: NR-564 **Lab Filter Area (mm2):** 385
Description: **Grid Openings Analyzed:** 32
Filter Fraction: **Aliquot Dilution:** **Average Grid Opening Area:** 0.01449
Residual Ash Vol: **Final Dilution:** **Area Analyzed (mm2):** 0.46368
Analytical Sens. (struc/cc): 0.0007
Dectection Limit. (struc/cc): 0.0021

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	2.2	0.00332	0.00002 - 0.0039 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	4	B32	ADQ	1		MD 1-1	13.5	9	1.5	Amosite	Mg, Si, Fe	

PCM Equivalent Fibers-ISO	0.0	0.00332	0.00002 - 0.0039 - Poisson	0

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	4	B32	ADQ		1	MB	13.5	0.7	19.3	Amosite	Mg, Si, Fe	

Asbestos Fibers and Bundles > 5um and 5:1	0.0	0.00332	0.00002 - 0.0039 - Poisson	0

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	4	B32	ADQ		1	MB	13.5	0.7	19.3	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 10312, direct Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006
Date Completed: 8/4/2006

Lab/Cor Sample No.: S16
Client Sample No.: NR-556
Description:
Filter Fraction: **Aliquot Dilution:**
Residual Ash Vol: **Final Dilution:**

Volume (L): 984
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 39
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.56511
Analytical Sens. (struc/cc): 0.00069
Dectection Limit. (struc/cc): 0.00207

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	7.1	0.00277	0.00075 - 0.00709 - Poisson	4

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	12	A31	ADQ	3		MD 1-1	12.5	11	1.1	Amosite	Mg, Al, Si, Fe	
G2	11	A11	AZQ	2		MD 1-1	36	15	2.4	Amosite	Mg, Al, Si, Fe	
G2	14	B32	ADQ	4	4	F	14	0.75	18.7	Amosite	Mg, Al, Si, Fe	
G3	29	B14	CMQ	6		MD 1-1	19.6	14.5	1.4	Chrysotile	Mg, Si	

PCM Equivalent Fibers-ISO	1.8	0.00537	0.00043 - 0.00607 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	14	B32	ADQ	4	4	F	14	0.75	18.7	Amosite	Mg, Al, Si, Fe	
G2	11	A11	AZQ		2	MF	8.2	0.25	32.8	Amosite	Mg, Al, Si, Fe	
G2	12	A31	ADQ		3	MF	6	0.25	24	Amosite	Mg, Al, Si, Fe	

PCM Equivalent Structures-ISO	1.8	0.00328	0.00002 - 0.00386 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	14	B32	ADQ	4	4	F	14	0.75	18.7	Amosite	Mg, Al, Si, Fe	

Asbestos Fibers and Bundles > 5um and 5:1	1.8	0.00277	0.00075 - 0.00709 - Poisson	1

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	14	B32	ADQ	4	4	F	14	0.75	18.7	Amosite	Mg, Al, Si, Fe	
G2	11	A11	AZQ		2	MF	8.2	0.25	32.8	Amosite	Mg, Al, Si, Fe	
G2	12	A31	ADQ		3	MF	6	0.25	24	Amosite	Mg, Al, Si, Fe	
G3	29	B14	CMQ		6	MB	8.5	0.1	85	Chrysotile	Mg, Si	No Diffraction

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ISO 10312, direct Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006
Date Completed: 8/14/2006

Lab/Cor Sample No.: S14
Client Sample No.: NR-554
Description:
Filter Fraction: **Aliquot Dilution:**
Residual Ash Vol: **Final Dilution:**

Volume (L): 948
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 40
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.5796
Analytical Sens. (struc/cc): 0.0007
Dectection Limit. (struc/cc): 0.0021

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	3.5	0.00441	0.00017 - 0.00506 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G3	23	B32	AZQ	5	5	F	6.25	0.25	25	Amosite	Mg, Si, Fe	
G3	21	A31	AZQ	4	4	F	5.2	0.75	6.9	Amosite	Mg, Si, Fe	

PCM Equivalent Fibers-ISO	3.5	0.00441	0.00017 - 0.00506 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G3	23	B32	AZQ	5	5	F	6.25	0.25	25	Amosite	Mg, Si, Fe	
G3	21	A31	AZQ	4	4	F	5.2	0.75	6.9	Amosite	Mg, Si, Fe	

PCM Equivalent Structures-ISO	3.5	0.00441	0.00017 - 0.00506 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G3	23	B32	AZQ	5	5	F	6.25	0.25	25	Amosite	Mg, Si, Fe	
G3	21	A31	AZQ	4	4	F	5.2	0.75	6.9	Amosite	Mg, Si, Fe	

Asbestos Fibers and Bundles > 5um and 5:1	3.5	0.00441	0.00017 - 0.00506 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G3	21	A31	AZQ	4	4	F	5.2	0.75	6.9	Amosite	Mg, Si, Fe	
G3	23	B32	AZQ	5	5	F	6.25	0.25	25	Amosite	Mg, Si, Fe	

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Asbestos and Environmental Analysis

ISO 10312, direct Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006
Date Completed: 8/12/2006

Lab/Cor Sample No.: S10
Client Sample No.: NR-550
Description:
Filter Fraction:
Residual Ash Vol:

Aliquot Dilution:
Final Dilution:

Volume (L): 1140
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 23
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.33327
Analytical Sens. (struc/cc): 0.00101
Dectection Limit. (struc/cc): 0.00303

Structure Type	Filter Density (s/mm2)	Concen-tration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	6.0	0.00638	0.00025 - 0.00732 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G1	11	A22	CDQ	3		MD 1-1	9	5	1.8	Chrysotile	Mg, Si	
G1	7	D10	CDQ	2		MD 1-0	25	13	1.9	Chrysotile	Mg, Si	

Asbestos Fibers and Bundles > 5um and 5:1	0.0	0.0048	0.00003 - 0.00565 - Poisson	0

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G1	11	A22	CDQ		3	MF	6.5	0.06	108.3	Chrysotile	Mg, Si	

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Asbestos and Environmental Analysis

ISO 10312, direct Count Categories

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006
Date Completed: 7/23/2006

Lab/Cor Sample No.: S2
Client Sample No.: NR-550
Description:
Filter Fraction: **Aliquot Dilution:**
Residual Ash Vol: **Final Dilution:**

Volume (L): 1140
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 23
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.33327
Analytical Sens. (struc/cc): 0.00101
Dectection Limit. (struc/cc): 0.00303

Structure Type	Filter Density (s/mm2)	Concentration (struc/cc)	95% Confidence Interval (struc/cc)	Struc. Count
Asbestos Structures > 5um and 5:1	54.0	0.01824	0.01081 - 0.02883 - Poisson	18

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G1	1	A32	CDQ	3		MD 1-0	7.5	3	2.5	Chrysotile	Mg, Si	
G1	4	D32	CDQ	6		MD 3-0	25	20	1.2	Chrysotile	Mg, Si	
G1	5	D40	CDQ	8		MD 1-0	6	2.5	2.4	Chrysotile	Mg, Si	
G1	8	B42	CDQ	10		MD 1-0	14	8	1.8	Chrysotile	Mg, Si	
G1	10	C2	CDQ	11		MD 1-0	15	10	1.5	Chrysotile	Mg, Si	
G1	11	C22	CDQ	12		MD 3-0	7.5	7	1.1	Chrysotile	Mg, Si	
G2	14	D3	CDQ	16	22	F	5.1	0.06	85	Chrysotile	Mg, Si	
G2	23	B13	CDQ	36		MD 1-1	7.5	3.8	2	Chrysotile	Mg, Si	
G2	14	D3	CDQ	15	21	B	30	4	7.5	Chrysotile	Mg, Si	
G2	14	D3	CDQ	17		MD 2-2	15	8	1.9	Chrysotile	Mg, Si	
G2	18	C10	CDQ	24		MD 1-0	10	7.5	1.3	Chrysotile	Mg, Si	
G2	22	C3	CDQ	33		MD 1-0	18	16	1.1	Chrysotile	Mg, Si	
G2	22	C3	CDQ	32		MD 1-0	9	8	1.1	Chrysotile	Mg, Si	
G2	19	B31	CDQ	28		MD 1-0	5.1	2.4	2.1	Chrysotile	Mg, Si	
G2	16	D41	CDQ	22		MD 1-0	10	9	1.1	Chrysotile	Mg, Si	
G2	16	D41	CDQ	21		MD 1-0	8	6.5	1.2	Chrysotile	Mg, Si	
G2	15	D23	CDQ	20		MD 1-0	11	6	1.8	Chrysotile	Mg, Si	
G2	20	C11	CD	29		MD 1-0	6	3.5	1.7	Chrysotile		

Asbestos Fibers and Bundles > 5um and 5:1	6.0	0.00507	0.00165 - 0.01182 - Poisson	2

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment
G2	14	D3	CDQ		23	MF	6.5	0.06	108.3	Chrysotile	Mg, Si	
G2	23	B13	CDQ		44	MF	6.5	0.06	108.3	Chrysotile		
G2	14	D3	CDQ	15	21	B	30	4	7.5	Chrysotile	Mg, Si	
G2	14	D3	CDQ	16	22	F	5.1	0.06	85	Chrysotile	Mg, Si	
G2	14	D3	CDQ		24	MF	7.5	0.06	125	Chrysotile	Mg, Si	

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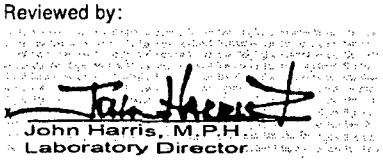
Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Reviewed by:



Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-365** Lab/Cor Sample No: **S66**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	37	A43				NSD							
G2	38	A41				NSD							
G2	39	A21				NSD							
G2	40	A1				NSD							
G2	41	D11				NSD							
G2	42	D31				NSD							
G2	43	C40				NSD							
G2	44	D20				NSD							
G2	45	C10				NSD							
G2	46	B10				NSD							
G2	47	B30				NSD							
G2	48	B42				NSD							
G2	49	B22				NSD							
G2	50	B2				NSD							
G2	51	C12				NSD							
G2	52	C32				NSD							
G2	53	C23				NSD							
G2	54	C13				NSD							
G2	55	B3				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-365**
Client Description:

Lab/Cor Sample No: **S66**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A24				NSD							
G1	2	A4				NSD							
G1	3	D14				NSD							
G1	4	D34				NSD							
G1	5	D43				NSD							
G1	6	D3				NSD							
G1	7	A13				NSD							
G1	8	A43				NSD							
G1	9	A41				NSD							
G1	10	A21				NSD							
G1	11	A1				NSD							
G1	12	D1				NSD							
G1	13	D21				NSD							
G1	14	D31				NSD							
G1	15	C40				NSD							
G1	16	C20				NSD							
G1	17	B20				NSD							
G1	18	B30				NSD							
G1	19	B40				NSD							
G1	20	B31				NSD							
G1	21	B1				NSD							
G1	22	C1				NSD							
G1	23	C21				NSD							
G1	24	C41				NSD							
G1	25	C43				NSD							
G1	26	C23				NSD							
G1	27	C3				NSD							
G1	28	B13				NSD							
G1	29	C43				NSD							
G2	30	A14				NSD							
G2	31	D4				NSD							
G2	32	D24				NSD							
G2	33	D33				NSD							
G2	34	D13				NSD							
G2	35	A3				NSD							
G2	36	A23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-276**
Client Description:

Lab/Cor Sample No: **S65**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	37	C40				NSD							
G2	38	C20				NSD							
G2	39	B10				NSD							
G2	40	B30				NSD							
G2	41	B40				NSD							
G2	42	A41				NSD							
G2	43	A21				NSD							
G2	44	A1				NSD							
G2	45	D11				NSD							
G2	46	D31				NSD							
G2	47	D41				NSD							
G2	48	D43				NSD							
G2	49	D23				NSD							
G2	50	D3				NSD							
G2	51	A13				NSD							
G2	52	A23				NSD							
G2	53	A33				NSD							
G2	54	A43				NSD							
G2	55	A24				NSD							
G2	56	A4				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-276**
Client Description:

Lab/Cor Sample No: **S65**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A24				NSD							
G1	2	A4				NSD							
G1	3	D4				NSD							
G1	4	D24				NSD							
G1	5	D42				NSD							
G1	6	D22				NSD							
G1	7	D2				NSD							
G1	8	A12				NSD							
G1	9	A32				NSD							
G1	10	A42				NSD							
G1	11	A40				NSD							
G1	12	A20				NSD							
G1	13	A10				NSD							
G1	14	D10				NSD							
G1	15	D30				NSD							
G1	16	D40				NSD							
G1	17	C41				NSD							
G1	18	C21				NSD							
G1	19	C1				NSD							
G1	20	A11				NSD							
G1	21	B31				NSD							
G1	22	B41				NSD							
G1	23	B43				NSD							
G1	24	B23				NSD							
G1	25	B3				NSD							
G1	26	C13				NSD							
G1	27	C33				NSD							
G2	28	C24				NSD							
G2	29	C4				NSD							
G2	30	B14				NSD							
G2	31	B42				NSD							
G2	32	B22				NSD							
G2	33	B2				NSD							
G2	34	C12				NSD							
G2	35	C32				NSD							
G2	36	C42				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-599** Lab/Cor Sample No: **S59**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	32	A20				NSD							
G2	33	A10				NSD							
G2	34	D10				NSD							
G2	35	C10				NSD							
G2	36	C1				NSD							
G2	37	B11				NSD							
G2	38	B31				NSD							
G2	39	B41				NSD							
G2	40	B43				NSD							
G2	41	B23				NSD							
G2	42	B14				NSD							
G2	43	B4				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-599**
Client Description:

Lab/Cor Sample No: **S59**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	D24				NSD							
G1	2	D4				NSD							
G1	3	A14				NSD							
G1	4	A42				NSD							
G1	5	A22				NSD							
G1	6	A2				NSD							
G1	7	D12				NSD							
G1	8	D32				NSD							
G1	9	D42				NSD							
G1	10	D40				NSD							
G1	11	D20				NSD							
G1	12	A10				NSD							
G1	13	A30				NSD							
G1	14	B41				NSD							
G1	15	B21				NSD							
G1	16	B1				NSD							
G1	17	C11				NSD							
G1	18	C31				NSD							
G1	19	C43				NSD							
G1	20	C13				NSD							
G1	21	A3				NSD							
G1	22	B13	CDQ	1		MD 1-0	2.5	1.3	1.9	Chrysotile	Mg, Si		

ItemType	ItemNum	Confirmed	Comment
Diffraction	375, 376	JH 8/20/2006	
Brightfield	377		
Spectra	1192	JH 9/25/2006	

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	22	B13	CDQ		1	MF	2	0.06	33.3	Chrysotile	Mg, Si		
G2	23	A24				NSD							
G2	24	A4				NSD							
G2	25	D14				NSD							
G2	26	D22				NSD							
G2	27	D2				NSD							
G2	28	A12				NSD							
G2	29	A32				NSD							
G2	30	A42				NSD							
G2	31	A40				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-592**
Client Description:

Lab/Cor Sample No: **S52**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	33	D10				NSD							
G2	34	A10				NSD							
G2	35	A30				NSD							
G2	36	B31				NSD							
G2	37	B21				NSD							
G2	38	B1				NSD							
G2	39	C1				NSD							
G2	40	C21				NSD							
G2	41	C41				NSD							
G2	42	C43				NSD							
G2	43	C21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-592**
Client Description:

Lab/Cor Sample No: **S52**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A24				NSD							
G1	2	A4				NSD							
G1	3	D14				NSD							
G1	4	D42				NSD							
G1	5	D22				NSD							
G1	6	D2				NSD							
G1	7	A12				NSD							
G1	8	A32				NSD							
G1	9	A42				NSD							
G1	10	A40				NSD							
G1	11	A20				NSD							
G1	12	D10				NSD							
G1	13	D30				NSD							
G1	14	C41				NSD							
G1	15	C21				NSD							
G1	16	C1				NSD							
G1	17	B1				NSD							
G1	18	B21				NSD							
G1	19	B41				NSD							
G1	20	B43				NSD							
G1	21	B23				NSD							
G1	22	B3				NSD							
G1	23	C13				NSD							
G2	24	D24				NSD							
G2	25	D4				NSD							
G2	26	A24				NSD							
G2	27	A42				NSD							
G2	28	A22				NSD							
G2	29	A2				NSD							
G2	30	D12				NSD							
G2	31	D32	CDQ	1	1	F	1	0.06	16.7	Chrysotile	Mg, Si		

ItemType	ItemNum	Confirmed	Comment
Brightfield	373		
Brightfield	374		
Spectra	1191	JH 9/25/2006	

G2	32	D20				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-591** Lab/Cor Sample No: **S51**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	37	C10				NSD							
G2	38	C30				NSD							
G2	39	C42				NSD							
G2	40	C22				NSD							
G2	41	C2				NSD							
G2	42	B12				NSD							
G2	43	B23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Final Report

Asbestos and Environmental Analysis

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-591** Lab/Cor Sample No: **S51**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A43				NSD							
G1	2	A23				NSD							
G1	3	A3				NSD							
G1	4	D3				NSD							
G1	5	D23				NSD							
G1	6	D41				NSD							
G1	7	D21				NSD							
G1	8	D1				NSD							
G1	9	A11				NSD							
G1	10	A31				NSD							
G1	11	B40				NSD							
G1	12	B20				NSD							
G1	13	B10				NSD							
G1	14	C31				NSD							
G1	15	C11				NSD							
G1	16	B1				NSD							
G1	17	B21				NSD							
G1	18	B41				NSD							
G1	19	B43				NSD							
G1	20	B23				NSD							
G1	21	B3				NSD							
G1	22	C13				NSD							
G1	23	B33				NSD							
G2	24	A33				NSD							
G2	25	A13				NSD							
G2	26	D3				NSD							
G2	27	D23				NSD							
G2	28	D43				NSD							
G2	29	D41				NSD							
G2	30	D21				NSD							
G2	31	D1				NSD							
G2	32	A11				NSD							
G2	33	A31				NSD							
G2	34	A41				NSD							
G2	35	B40				NSD							
G2	36	B20				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-588** Lab/Cor Sample No: **S48**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	38	A43	CDQ		14	MF	3	0.06	50	Chrysotile	Mg, Si		
G2	38	A43	CDQ		15	MB	1.41	0.1	14.1	Chrysotile	Mg, Si		
G2	39	A13				NSD							
G2	40	D43	CDQ	11	16	F	2	0.06	33.3	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		245				060359-S48-G2-ST136-6000	
G2	40	D43	CDQ	12		MD 1-0	7.5	3.5	2.1	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		246				060359-S48-G2-ST141-2500	
G2	40	D43	CDQ		17	MF	2.1	0.1	21	Chrysotile	Mg, Si		
G2	41	D24	CDQ	13		MD 4-52	45	17	2.6	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		247				060359-S48-G2-ST151-300	
G2	41	D24	CDQ		18	MB	33	1.3	25.4	Chrysotile	Mg, Si		AFB>5, PCMEF-ISO
G2	41	D24	CDQ		19	MB	27	0.9	30	Chrysotile	Mg, Si		AFB>5, PCMEF-ISO
G2	41	D24	CDQ		20	MR 2-50	19	6	3.2	Chrysotile	Mg, Si		
G2	41	D24	CD	14		MD 2-0	5.3	5	1.1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		248				060359-S48-G2-ST171-2500	
G2	41	D24	CD		21	MF	4.8	0.08	60	Chrysotile			
G2	41	D24	CD		22	MF	1.3	0.06	21.7	Chrysotile			
G2	41	D24	CD	15	23	B	1.5	0.08	18.8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		249				060359-S48-G2-ST186-2500	
G2	41	D24	CD	16	24	F	1.5	0.06	25	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		250				060359-S48-G2-ST191-1500	
G2	42	A14	CD	17	25	F	1.1	0.06	18.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		251				060359-S48-G2-ST196-2500	
G2	43	A24				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-588** Lab/Cor Sample No: **S48**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	22	C33	CDQ	4	5	F	6.3	0.08	78.8	Chrysotile	Mg, Si		AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		238				060359-S48-G1-ST126-2000	
G2	23	B24				NSD							
G2	24	B4				NSD							
G2	25	C42				NSD							
G2	26	C22				NSD							
G2	27	C2				NSD							
G2	28	B12	CD	5	6	F	2	0.06	33.3	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		239				060359-S48-G2-ST31-2000	
G2	29	B32				NSD							
G2	30	B20				NSD							
G2	31	B10				NSD							
G2	32	C10	CD	6		MD 1-1	7.5	7.5	1	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		240				060359-S48-G2-ST51-1500	
G2	32	C10	CD		7	MB	6.5	0.09	72.2	Chrysotile			AFB>5
G2	33	C20	CD	7		MD 1-1	12	4	3	Chrysotile			AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		241				060359-S48-G2-ST61-1500	
G2	33	C20	CD		8	MF	9	0.06	150	Chrysotile			AFB>5
G2	34	C40				NSD							
G2	35	D41				NSD							
G2	36	A20				NSD							
G2	37	A31	CD	8		MD 1-0	2.7	1.5	1.8	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		242				060359-S48-G2-ST86-5000	
G2	37	A31	CD		9	MF	2.1	0.06	35	Chrysotile			
G2	37	A31	CDQ	9	10	F	5.6	0.09	62.2	Chrysotile	Mg, Si		AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		243				060359-S48-G2-ST96-1500	
G2	38	A43	CDQ	10		MD 5-1	6.3	2.8	2.2	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		244				060359-S48-G2-ST101-2500	
G2	38	A43	CDQ		11	MF	5.4	0.06	90	Chrysotile	Mg, Si		AFB>5
G2	38	A43	CDQ		12	MF	3.9	0.06	65	Chrysotile	Mg, Si		
G2	38	A43	CDQ		13	MF	3.1	0.06	51.7	Chrysotile	Mg, Si		

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-588** Lab/Cor Sample No: **S48**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A33				NSD							
G1	2	A13	CDQ	1	1	B	0.7	0.15	4.7	Chrysotile	Mg, Al, Si, K, Ca, Fe		
						ItemType	ItemNum	Confirmed		Comment			
						Diffraction	211	JH	9/25/2006	060359-S48-G1-ST11-5000			
						Brightfield	212			060359-S48-G1-ST11-5000			
						Spectra	1185	JH	9/25/2006	060359-S48-G1-ST11-Chrysotile Structure			
						Spectra	1186	JH	9/25/2006	060359-S48-G1-ST11-Background			
						Spectra	1187	JH	9/25/2006	060359-S48-G1-ST11-Background Subtracted			
G1	3	D3				NSD							
G1	4	D23				NSD							
G1	5	D42				NSD							
G1	6	D21				NSD							
G1	7	D1				NSD							
G1	8	A11	CDQ	2		MD 2-0	7.5	6	1.2	Chrysotile	Mg, Si		AS>5
						ItemType	ItemNum	Confirmed		Comment			
						Diffraction	371	JH	9/25/2006				
						Brightfield	372						
						Spectra	1190	JH	8/17/2006				
G1	8	A11	CDQ		2	MF	3.8	0.06	63.3	Chrysotile	Mg, Si		
G1	8	A11	CDQ		3	MF	3.7	0.06	61.7	Chrysotile	Mg, Si		
G1	9	A20				NSD							
G1	10	A10				NSD							
G1	11	D10				NSD							
G1	12	D30				NSD							
G1	13	C41				NSD							
G1	14	C21				NSD							
G1	15	C1				NSD							
G1	16	B11	CDQ	3		MD 1-0	4	2.5	1.6	Chrysotile	Mg, Si		
						ItemType	ItemNum	Confirmed		Comment			
						Brightfield	237			060359-S48-G1-ST91-5000			
G1	16	B11	CDQ		4	MF	2.5	0.06	41.7	Chrysotile	Mg, Si		
G1	17	B31				NSD							
G1	18	B33				NSD							
G1	19	B13				NSD							
G1	20	C3				NSD							
G1	21	C23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-587** Lab/Cor Sample No: **S47**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	37	C22				NSD							
G2	38	C2				NSD							
G2	39	B12				NSD							
G2	40	B32				NSD							
G2	41	C4				NSD							
G2	42	C24				NSD							
G2	43	C3				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-587** Lab/Cor Sample No: **S47**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A24				NSD							
G1	2	A4				NSD							
G1	3	D14				NSD							
G1	4	D32				NSD							
G1	5	D12				NSD							
G1	6	A2				NSD							
G1	7	A22				NSD							
G1	8	A42				NSD							
G1	9	A40				NSD							
G1	10	A20				NSD							
G1	11	A10				NSD							
G1	12	D10				NSD							
G1	13	D30				NSD							
G1	14	C31				NSD							
G1	15	C11				NSD							
G1	16	B1				NSD							
G1	17	B41				NSD							
G1	18	B43				NSD							
G1	19	B23				NSD							
G1	20	C3				NSD							
G1	21	C13				NSD							
G1	22	C23				NSD							
G2	23	A13				NSD							
G2	24	D13				NSD							
G2	25	D43				NSD							
G2	26	D22				NSD							
G2	27	D12				NSD							
G2	28	D1				NSD							
G2	29	A11				NSD							
G2	30	A21				NSD							
G2	31	A40				NSD							
G2	32	B20				NSD							
G2	33	B10				NSD							
G2	34	C10				NSD							
G2	35	C30				NSD							
G2	36	C42				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
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Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-583**
Client Description:

Lab/Cor Sample No: **S43**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	37	C42				NSD							
G2	38	C22				NSD							
G2	39	C2				NSD							
G2	40	B2				NSD							
G2	41	B12				NSD							
G2	42	B42				NSD							
G2	43	B13				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-583** Lab/Cor Sample No: **S43**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	D13				NSD							
G1	2	D33				NSD							
G1	3	D42				NSD							
G1	4	D22				NSD							
G1	5	A2				NSD							
G1	6	D10				NSD							
G1	7	D30				NSD							
G1	8	C20				NSD							
G1	9	C10				NSD							
G1	10	B40				NSD							
G1	11	B42				NSD							
G1	12	B12				NSD							
G1	13	B2				NSD							
G1	14	C12				NSD							
G1	15	C22				NSD							
G1	16	C32				NSD							
G1	17	C23				NSD							
G1	18	C13				NSD							
G1	19	B3				NSD							
G1	20	B13				NSD							
G1	21	B23				NSD							
G1	22	B33				NSD							
G2	23	A33				NSD							
G2	24	A13				NSD							
G2	25	D3				NSD							
G2	26	D23				NSD							
G2	27	D41				NSD							
G2	28	D21				NSD							
G2	29	D1				NSD							
G2	30	A11				NSD							
G2	31	A31				NSD							
G2	32	B40				NSD							
G2	33	B20				NSD							
G2	34	B10				NSD							
G2	35	C10				NSD							
G2	36	C30				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-578** Lab/Cor Sample No: **S38**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G3	32	C14				NSD							
G3	33	C33				NSD							
G3	34	C3				NSD							
G3	35	B23				NSD							
G3	36	B41				NSD							
G3	37	B11				NSD							
G3	38	C11				NSD							
G3	39	D30				NSD							
G3	40	D10				NSD							
G3	41	A20	CD	14	14	F	1.1	0.1	11	Chrysotile	Mg, Si		
G3	42	A42				NSD							
G3	43	A12				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-578** Lab/Cor Sample No: **S38**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	14	B32				NSD							
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22	CDQ	8		MD 1-0	5	3	1.7	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1952BF					
						Negative		P1952		JH	9/25/2006		
						Spectra		P17298		JH	9/25/2006		
G2	17	C22	CDQ		8	MF	3.75	0.1	37.5	Chrysotile	Mg, Si		
G2	17	C22	CDQ	9		MD	7.5	4	1.9	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1953BF					
G2	17	C22	CDQ		9	MR 1-0	2.2	0.9	2.4	Chrysotile	Mg, Si		
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D1	CDQ	10		MD 1-0	2.9	2.5	1.2	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1954BF					
G2	20	D1	CDQ		10	MF	0.75	0.1	7.5	Chrysotile	Mg, Si		
G2	21	B44	CDQ	11		MD 1-0	2.7	1.8	1.5	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P2098 BF					
						Diffraction		P2098		KM	9/10/2006		
						Spectra		P17396		JH	9/25/2006		
G2	21	B44	CDQ		11	MF	1.2	0.1	12	Chrysotile	Mg, Si		
G2	22	B24				NSD							
G2	23	B4				NSD							
G2	24	C14	CD	12		MD 1-0	2.5	1	2.5	Chrysotile	Mg, Si		
G2	24	C14	CD		12	MF	0.9	0.08	11.2	Chrysotile	Mg, Si		
G2	25	C34				NSD							
G2	26	A42				NSD							
G2	27	A22				NSD							
G2	28	A2				NSD							
G2	29	D32	CMQ	13		MD 1-0	3.8	2.5	1.5	Chrysotile	Mg, Si		
G2	29	D32	CMQ		13	MF	3.5	0.1	35	Chrysotile	Mg, Si		
G3	30	B44				NSD							
G3	31	B14				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

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ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-578** Lab/Cor Sample No: **S38**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11	CMQ	1	1	F	5	0.1	50	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1945BF					
						Spectra		P17295		JH	9/25/2006		
G1	1	A11	CDQ	2		MD 1-0	3	1.2	2.5	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1946BF					
						Negative		P1946		JH	9/25/2006		
						Spectra		P17296		JH	9/25/2006		
G1	1	A11	CDQ		2	MF	3	0.1	30	Chrysotile	Mg, Si		
G1	2	A31	CMQ	3		MD 1-0	1.25	0.25	5	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1947BF					
G1	2	A31	CMQ		3	MF	1.25	0.05	25	Chrysotile	Mg, Si		
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C2	CDQ	4		MD 1-0	3.1	1.7	1.8	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1948BF					
						Negative		P1948		JH	9/25/2006		
						Spectra		17297		JH	9/25/2006		
G1	6	C2	CDQ		4	MF	1.7	0.1	17	Chrysotile	Mg, Si		
G1	7	C22	CDQ	5	5	F	1.5	0.05	30	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1949BF					
G1	8	C20				NSD							
G1	9	D21	CD	6		MD 1-0	6	4.25	1.4	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1950BF					
G1	9	D21	CD		6	MB	1.8	0.1	18	Chrysotile	Mg, Si		
G1	9	D21	CDQ	7	7	F	0.95	0.15	6.3	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1951BF					
G1	10	D1				NSD							
G2	11	A11				NSD							
G2	12	A31				NSD							
G2	13	B30				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-576** Lab/Cor Sample No: **S36**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	43	A33				NSD							
G3	11	A11				NSD							
G3	12	A31				NSD							
G3	13	B30				NSD							
G3	14	B32				NSD							
G3	15	B12				NSD							
G3	16	C2				NSD							
G3	17	C22	CDQ	2		MD 1-1	8.5	3	2.8	Chrysotile	Mg, Si		AS>5

ItemType	ItemNum	Confirmed	Comment
Brightfield	P1944BF		
Diffraction	P1944	JH 9/25/2006	
Spectra	P17294	JH 9/25/2006	

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G3	17	C22	CDQ		2	MF	8.5	0.1	85	Chrysotile	Mg, Si		AFB>5
G3	18	C20				NSD							
G3	19	D21				NSD							
G3	20	D1				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-576**
Client Description:

Lab/Cor Sample No: **S36**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A42				NSD							
G1	3	B20				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C2				NSD							
G1	7	C22	CDQ	1	1	B	12	8	1.5	Chrysotile	Mg, Si		AS>5, AFB>5

ItemType	ItemNum	Confirmed	Comment
Brightfield	P1940BF		
Diffraction	P1940	JH 9/25/2006	
Spectra	P17290	JH 9/25/2006	

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	8	C20				NSD							
G1	9	D21				NSD							
G1	10	D1				NSD							
G2	21	B44				NSD							
G2	22	B24				NSD							
G2	23	B4				NSD							
G2	24	C14				NSD							
G2	25	B42				NSD							
G2	26	B22				NSD							
G2	27	C12				NSD							
G2	28	C42				NSD							
G2	29	C40				NSD							
G2	30	C20				NSD							
G2	31	C10				NSD							
G2	32	B10				NSD							
G2	33	B30				NSD							
G2	34	A11				NSD							
G2	35	D21				NSD							
G2	36	D41				NSD							
G2	37	A42				NSD							
G2	38	A22				NSD							
G2	39	A2				NSD							
G2	40	D12				NSD							
G2	41	D32				NSD							
G2	42	D3				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-575** Lab/Cor Sample No: **S35**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G3	37	D30				NSD							
G3	38	D10				NSD							
G3	39	A10				NSD							
G3	40	A40				NSD							
G3	41	A32				NSD							
G3	42	A2				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-575** Lab/Cor Sample No: **S35**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A31				NSD							
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C2				NSD							
G1	7	C22				NSD							
G1	8	C20				NSD							
G1	9	D21				NSD							
G1	10	D1				NSD							
G2	11	A11				NSD							
G2	12	A31				NSD							
G2	13	B40				NSD							
G2	14	B32				NSD							
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22				NSD							
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D1				NSD							
G2	21	B44				NSD							
G2	22	B24				NSD							
G2	23	B4				NSD							
G2	24	C14				NSD							
G2	25	C34				NSD							
G2	26	D10				NSD							
G2	27	A2				NSD							
G3	28	B44				NSD							
G3	29	B14				NSD							
G3	30	C14				NSD							
G3	31	C33				NSD							
G3	32	C3				NSD							
G3	33	B23				NSD							
G3	34	B41				NSD							
G3	35	B11				NSD							
G3	36	C11				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-572**
Client Description:

Lab/Cor Sample No: **S32**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G3	29	D10				NSD							
G3	30	D32				NSD							
G3	31	D2				NSD							
G3	32	A22				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-572** Lab/Cor Sample No: **S32**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A31				NSD							
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12	CDQ	1	1	B	1.8	0.2	9	Chrysotile	Mg, Si		

ItemType	ItemNum	Confirmed	Comment
Brightfield	P1930BF		
Diffraction	P1930	JH 9/25/2006	
Spectra	P17280	JH 9/25/2006	

G1	6	C2				NSD							
G1	7	C22				NSD							
G1	8	C20				NSD							
G1	9	D2				NSD							
G1	10	A12				NSD							
G2	11	A11				NSD							
G2	12	A31				NSD							
G2	13	B30				NSD							
G2	14	B31				NSD							
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22				NSD							
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D1	AZQ	2	2	F	2	0.35	5.7	Actinolite	Mg, Si, Ca, Fe		

ItemType	ItemNum	Confirmed	Comment
Brightfield	P1931		
Spectra	P17231	JH 9/25/2006	
Negative	P1931	JH 9/25/2006	

G3	21	B43				NSD							
G3	22	B13				NSD							
G3	23	C13				NSD							
G3	24	C31				NSD							
G3	25	C1				NSD							
G3	26	B21				NSD							
G3	27	A40				NSD							
G3	28	A10				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-571** Lab/Cor Sample No: **S31**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A31				NSD							
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C2				NSD							
G1	7	C22				NSD							
G1	8	C20				NSD							
G1	9	D21				NSD							
G1	10	D1				NSD							
G2	11	A11				NSD							
G2	12	A31				NSD							
G2	13	B30				NSD							
G2	14	B32				NSD							
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22				NSD							
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D2				NSD							
G3	21	B43				NSD							
G3	22	B23				NSD							
G3	23	B3				NSD							
G3	24	B11				NSD							
G3	25	B31				NSD							
G3	26	A40				NSD							
G3	27	A20				NSD							
G3	28	A10				NSD							
G3	29	A42				NSD							
G3	30	A22				NSD							
G3	31	A43				NSD							
G3	32	A23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-568** Lab/Cor Sample No: **S28**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	28	C32				NSD							
G2	29	C12				NSD							
G2	30	A2				NSD							
G2	31	A22				NSD							
G2	32	A32				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-568** Lab/Cor Sample No: **S28**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A33				NSD							
G1	2	A13				NSD							
G1	3	A3				NSD							
G1	4	D13				NSD							
G1	5	D33				NSD							
G1	6	D31				NSD							
G1	7	D11				NSD							
G1	8	A1				NSD							
G1	9	A21	CDQ	1	1	F	1.1	0.05	22	Chrysotile	Mg, Al, Si, K	particulate interference in EDS spectra	

ItemType	ItemNum	Confirmed		Comment
Diffraction	386	JH	9/25/2006	060359-S28-G1-ST46
Brightfield	387			060359-S28-G1-ST46
Spectra	1196	JH	9/25/2006	

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	10	A41				NSD							
G1	11	B11				NSD							
G1	12	C12	CDQ	2	2	F	0.7	0.15	4.7	Chrysotile	Mg, Al, Si		

ItemType	ItemNum	Confirmed	Comment
Brightfield	361		060359-S28-A1-G1-ST61-4000

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	13	C13				NSD							
G1	14	B3				NSD							
G1	15	B23				NSD							
G1	16	B42				NSD							
G2	17	A33				NSD							
G2	18	A13				NSD							
G2	19	D13				NSD							
G2	20	D31				NSD							
G2	21	D11				NSD							
G2	22	A1				NSD							
G2	23	A21	CDQ	3	3	F	1	0.06	16.7	Chrysotile	Mg, Al, Si		

ItemType	ItemNum	Confirmed	Comment
Brightfield	362		060359-S28-A1-G2-ST36-5000

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	24	B30				NSD							
G2	25	B10				NSD							
G2	26	C10				NSD							
G2	27	C30				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-567** Lab/Cor Sample No: **S27**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A31				NSD							
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C2				NSD							
G1	7	C22				NSD							
G1	8	C20				NSD							
G1	9	D21				NSD							
G1	10	D1				NSD							
G2	11	A11				NSD							
G2	12	A31				NSD							
G2	13	B30				NSD							
G2	14	B32				NSD							
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22				NSD							
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D1				NSD							
G3	21	A43				NSD							
G3	22	A23				NSD							
G3	23	A3				NSD							
G3	24	D13				NSD							
G3	25	D33				NSD							
G3	26	A40				NSD							
G3	27	A20				NSD							
G3	28	B32				NSD							
G3	29	B12				NSD							
G3	30	C2				NSD							
G3	31	C22				NSD							
G3	32	C4				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

LabCor Portland Inc
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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-564** Lab/Cor Sample No: **S24**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G3	20	D1				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-564** Lab/Cor Sample No: **S24**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	21	B44				NSD							
G1	22	B24				NSD							
G1	23	B4				NSD							
G1	24	C14				NSD							
G1	25	C34				NSD							
G1	26	C32				NSD							
G1	27	C42				NSD							
G1	28	B41				NSD							
G1	29	B21				NSD							
G1	30	C40				NSD							
G1	31	B40				NSD							
G1	32	A40				NSD							
G2	1	A11				NSD							
G2	2	A31				NSD							
G2	3	B30				NSD							
G2	4	B32	ADQ	1		MD 1-1	13.5	9	1.5	Amosite	Mg, Si, Fe		AS>5

ItemType	ItemNum	Confirmed	Comment
Brightfield	P1920BF		
Diffraction	P1920	JH 9/25/2006	
Spectra	P17273	JH 9/25/2006	

G2	4	B32	ADQ		1	MB	13.5	0.7	19.3	Amosite	Mg, Si, Fe		AFB>5, PCMEF-ISO
G2	5	B12				NSD							
G2	6	C2				NSD							
G2	7	C22				NSD							
G2	8	C20				NSD							
G2	9	D21				NSD							
G2	10	D1				NSD							
G3	11	A11				NSD							
G3	12	A31				NSD							
G3	13	B30				NSD							
G3	14	B32				NSD							
G3	15	B12				NSD							
G3	16	C2				NSD							
G3	17	C22				NSD							
G3	18	C20				NSD							
G3	19	D21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-563**
Client Description:

Lab/Cor Sample No: **S23**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A31				NSD							
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C2				NSD							
G1	7	C22				NSD							
G1	8	C20				NSD							
G1	9	D21				NSD							
G1	10	D1				NSD							
G2	11	A11				NSD							
G2	12	A31				NSD							
G2	13	B30				NSD							
G2	14	B32				NSD							
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22				NSD							
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D1				NSD							
G2	21	B44				NSD							
G2	22	B24				NSD							
G2	23	B4				NSD							
G2	24	C14				NSD							
G2	25	C44				NSD							
G2	26	A42				NSD							
G2	27	A22				NSD							
G2	28	A2				NSD							
G2	29	D12				NSD							
G2	30	D32				NSD							
G2	31	D43				NSD							
G2	32	D23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-559** Lab/Cor Sample No: **S19**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A31				NSD							
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C12				NSD							
G1	7	C32				NSD							
G1	8	C30				NSD							
G1	9	D31				NSD							
G1	10	D11				NSD							
G2	11	A11				NSD							
G2	12	A31				NSD							
G2	13	B30				NSD							
G2	14	B32				NSD							
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22				NSD							
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D1				NSD							
G3	21	A11				NSD							
G3	22	A31				NSD							
G3	23	B30				NSD							
G3	24	B32				NSD							
G3	25	B12				NSD							
G3	26	C2				NSD							
G3	27	C22				NSD							
G3	28	C20				NSD							
G3	29	D3				NSD							
G3	30	D23				NSD							
G3	31	D43				NSD							
G3	32	B40				NSD							
G3	33	B20				NSD							
G3	34	B34				NSD							
G3	35	B14				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-558**
Client Description:

Lab/Cor Sample No: **S18**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G3	34	D1				NSD							
G3	35	B44				NSD							
G3	36	C44				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-558** Lab/Cor Sample No: **S18**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A31				NSD							
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C2				NSD							
G1	7	C22				NSD							
G1	8	C20				NSD							
G1	9	D21				NSD							
G1	10	D1				NSD							
G1	29	C44				NSD							
G1	30	B44	CMQ	1	1	B	1	0.2	5	Chrysotile	Mg, Si		
			ItemType			ItemNum				Confirmed		Comment	
			Brightfield			P2096BF							
			Spectra			P17394				JH	9/25/2006		
G2	11	A11				NSD							
G2	12	A31				NSD							
G2	13	B30				NSD							
G2	14	B32				NSD							
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22				NSD							
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D1				NSD							
G2	31	B44				NSD							
G2	32	C44				NSD							
G3	21	A11				NSD							
G3	22	A31				NSD							
G3	23	B30				NSD							
G3	24	B32				NSD							
G3	25	B12				NSD							
G3	26	C2				NSD							
G3	27	C22				NSD							
G3	28	C20				NSD							
G3	33	D21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-556** Lab/Cor Sample No: **S16**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	14	B32	ADQ	4	4	F	14	0.75	18.7	Amosite	Mg, Al, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1913BF					
G2	15	B12				NSD							
G2	16	C2				NSD							
G2	17	C22				NSD							
G2	18	C20				NSD							
G2	19	D21				NSD							
G2	20	D1				NSD							
G3	21	A11				NSD							
G3	22	A31				NSD							
G3	23	B30	CDQ	5		MD 1-0	2	1.2	1.7	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1971BF					
G3	23	B30	CDQ		5	MF	0.5	0.1	5	Chrysotile	Mg, Si		
G3	27	B32				NSD							
G3	28	B34				NSD							
G3	29	B14	CMQ	6		MD 1-1	19.6	14.5	1.4	Chrysotile	Mg, Si		AS>5
G3	29	B14	CMQ		6	MB	8.5	0.1	85	Chrysotile	Mg, Si	No Diffraction	AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P2094					
						Spectra		P17392		JH	9/25/2006		
G3	29	B14	CMQ	7		MD 1-0	3	1	3	Chrysotile	Mg, Si		
G3	29	B14	CMQ		7	MF	2.6	0.05	52	Chrysotile	Mg, Si	No Diffraction	
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P2095BF					
						Negative		P19393		JH	9/25/2006		
G3	30	C4				NSD							
G3	31	C24				NSD							
G3	32	C44				NSD							
G3	33	C42				NSD							
G3	34	C40				NSD							
G3	35	D41				NSD							
G3	36	D21				NSD							
G3	37	D1				NSD							
G3	38	D33				NSD							
G3	39	A33				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-556** Lab/Cor Sample No: **S16**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A11				NSD							
G1	2	A31	CDQ	1		MD 1-0	4.25	3.5	1.2	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1890BF					
						Diffraction		P1890		JH	9/25/2006		
						Spectra		P17246		JH	9/25/2006		
G1	2	A31	CDQ		1	MF	3	0.1	30	Chrysotile	Mg, Si		
G1	3	B30				NSD							
G1	4	B32				NSD							
G1	5	B12				NSD							
G1	6	C2				NSD							
G1	7	C32				NSD							
G1	8	C30				NSD							
G1	9	D31				NSD							
G1	10	D11				NSD							
G1	24	D33				NSD						Matrix with fibers. Chemically look like Chrysotile and Amosite but diffraction did not match	
G1	25	A33				NSD							
G1	26	C34				NSD							
G2	11	A11	AZQ	2		MD 1-1	36	15	2.4	Amosite	Mg, Al, Si, Fe		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1911BF					
						Diffraction		P1911		JH	9/25/2006		
						Spectra		P17266		JH	9/25/2006		
G2	11	A11	AZQ		2	MF	8.2	0.25	32.8	Amosite	Mg, Al, Si, Fe		AFB>5, PCMEF-ISO
G2	12	A31	ADQ	3		MD 1-1	12.5	11	1.1	Amosite	Mg, Al, Si, Fe		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1912					
G2	12	A31	ADQ		3	MF	6	0.25	24	Amosite	Mg, Al, Si, Fe		AFB>5, PCMEF-ISO
G2	13	B30				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-555**
Client Description:

Lab/Cor Sample No: **S15**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G3	21	A11				NSD							
G3	22	A31				NSD							
G3	23	B30				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-554**
Client Description:

Lab/Cor Sample No: **S14**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	30	B34	AZQ		3	MF	0.7	0.2	3.5	Actinolite	Mg, Si, Ca, Fe		
						ItemType		*ItemNum*		*Confirmed*		*Comment*	
						Brightfield		P2092BF					
						Diffraction		P2092		JH	9/25/2006	0.53 nm row spacing	
						Spectra		P17391		JH	9/25/2006		
G3	21	A31	AZQ	4	4	F	5.2	0.75	6.9	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1969BF					
						Diffraction		P1969		JH	9/25/2006		
						Spectra		P17309		JH	9/25/2006		
G3	22	B30				NSD							
G3	23	B32	AZQ	5	5	F	6.25	0.25	25	Amosite	Mg, Si, Fe		AS>5, AFB>5, PCMES-ISO, PCMEF-ISO
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P1670		JH	9/25/2006		
						Brightfield		P1670BF					
						Spectra		P17310		JH	9/25/2006		
G3	31	B34				NSD							
G3	32	B4				NSD							
G3	33	C24				NSD							
G3	34	C22				NSD							
G3	35	C20	CD	6	6	F	4.25	0.05	85	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		P2093BF					
						Diffraction		P2093		JH	9/25/2006		
G3	36	D21				NSD							
G3	37	D23				NSD							
G3	38	A13				NSD							
G3	39	A33				NSD							
G3	40	A11				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-554** Lab/Cor Sample No: **S14**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A43				NSD							
G1	2	A3				NSD							
G1	3	D32				NSD							
G1	4	A22				NSD							
G1	5	D1				NSD							
G1	6	A20				NSD							
G1	7	C11				NSD							
G1	8	C42				NSD							
G1	9	C23				NSD							
G1	10	B14				NSD							
G1	24	B30				NSD							
G1	25	B42				NSD							
G1	26	C44				NSD							
G1	27	C40				NSD							
G2	11	D43				NSD							
G2	12	A4				NSD							
G2	13	D12				NSD							
G2	14	D31				NSD							
G2	15	D10				NSD							
G2	16	C40				NSD							
G2	17	B11	AZQ	1	1	F	2.4	0.45	5.3	Amosite	Mg, Si, Fe		

ItemType	ItemNum	Confirmed		Comment
Brightfield	J1663 BF			
Diffraction	J1663	KM	7/26/2006	ZONE AXIS [3 1 2]
Spectra	J2194	JH	9/25/2006	

G2	18	C22	ADQ	2	2	F	3.3	1	3.3	Amosite	Mg, Al, Si, Fe		

ItemType	ItemNum	Confirmed		Comment
Brightfield	J1664 BF			
Diffraction	J1664	KM	7/26/2006	5.3A IMAGE
Spectra	J2195	JH	9/25/2006	

G2	19	C34				NSD							
G2	20	B4				NSD							
G2	28	A11				NSD							
G2	29	B23				NSD							
G2	30	B34	AZQ	3		MD 1-0	1	0.7	1.4	Actinolite	Mg, Si, Ca, Fe		

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-553**
Client Description:

Lab/Cor Sample No: **S13**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G3	26	C12				NSD							
G3	27	C10				NSD							
G3	28	D11				NSD							
G3	29	D31				NSD							
G3	30	A31				NSD							
G3	31	B31				NSD							
G3	32	B33				NSD							
G3	33	C31				NSD							
G3	34	C33				NSD							

Count Categories

AFB>5	*Asbestos Fibers and Bundles > 5um and*	AS>5	*Asbestos Structures > 5um and 5:1*
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-553** Lab/Cor Sample No: **S13**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A13				NSD							
G1	2	D23				NSD							
G1	3	D11				NSD							
G1	4	A30				NSD							
G1	5	B10				NSD							
G1	6	C21	CDQ	1		MD 1-0	4.25	1.2	3.5	Chrysotile	Mg, Si		

ItemType	ItemNum	Confirmed	Comment
Brightfield	J1662 BF		
Diffraction	J1662	KM 7/25/2006	
Spectra	J2193	JH 9/25/2006	

G1	6	C21	CDQ		1	MF	3.2	0.1	32	Chrysotile	Mg, Si		
G1	7	B12				NSD							
G1	8	B43				NSD							
G1	9	C13				NSD							
G1	10	B4				NSD							
G1	38	A11				NSD							
G1	39	D31				NSD							
G1	40	C44				NSD							
G2	11	A3				NSD							
G2	12	A41				NSD							
G2	13	D11				NSD							
G2	14	C30				NSD							
G2	15	B20				NSD							
G2	16	B42				NSD							
G2	17	C12				NSD							
G2	18	B3				NSD							
G2	19	B43				NSD							
G2	20	B14				NSD							
G2	35	A20				NSD							
G2	36	D20				NSD							
G2	37	C44				NSD							
G3	21	A11				NSD							
G3	22	B10				NSD							
G3	23	B12				NSD							
G3	24	B14				NSD							
G3	25	C14				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-550** Lab/Cor Sample No: **S10**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	C23				NSD							
G1	2	C3				NSD							
G1	3	B1				NSD							
G1	4	B21				NSD							
G1	5	B41				NSD							
G1	6	D30	CDQ	1	1	F	1.6	0.05	32	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		351		JH	8/12/2006	-060359-S10-G1-ST31-10000	
						Brightfield		352				060359-S10-G1-ST31-10000	
						SIS		1180		JH	8/12/2006		
G1	7	D10	CDQ	2		MD 1-0	25	13	1.9	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		192				060359-S10-G1-ST36-500	
						Brightfield		193				060359-S10-G1-ST36-7000	
G1	7	D10	CDQ		2	MF	3	0.07	42.9	Chrysotile	Mg, Si		
G1	8	A10				NSD							
G1	9	A40				NSD							
G1	10	A42				NSD							
G1	11	A22	CDQ	3		MD 1-1	9	5	1.8	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		194				060359-S10-G1-ST56-2000	
G1	11	A22	CDQ		3	MF	6.5	0.06	108.3	Chrysotile	Mg, Si		AFB>5
G1	12	A2				NSD							
G1	13	D12				NSD							
G2	14	A23				NSD							
G2	15	A3				NSD							
G2	16	D13				NSD							
G2	17	D33				NSD							
G2	18	B10				NSD							
G2	19	B30				NSD							
G2	20	B32				NSD							
G2	21	B12				NSD							
G2	22	C3				NSD							
G2	23	C23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-549**
Client Description:

Lab/Cor Sample No: **S9**
Date Sampled:

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A32				NSD							
G1	2	A13				NSD							
G1	3	D3				NSD							
G1	4	D23				NSD							
G1	5	D30				NSD							
G1	6	D10				NSD							
G1	7	A20				NSD							
G1	8	A40				NSD							
G1	9	B31				NSD							
G1	10	B11				NSD							
G1	11	C1				NSD							
G1	12	C21				NSD							
G1	13	C23				NSD							
G2	14	A23				NSD							
G2	15	A3				NSD							
G2	16	D23				NSD							
G2	17	D11				NSD							
G2	18	A1				NSD							
G2	19	A31				NSD							
G2	20	B32				NSD							
G2	21	B12				NSD							
G2	22	C2				NSD							
G2	23	C22				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-00545** Lab/Cor Sample No: **S5**
Client Description: **Date Sampled:**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A21				NSD							
G1	2	A33				NSD							
G1	3	A13				NSD							
G1	4	D12				NSD							
G1	5	D32				NSD							
G1	6	D30				NSD							
G1	7	C20				NSD							
G1	8	B20				NSD							
G1	9	B32				NSD							
G1	10	B12				NSD							
G1	11	C2				NSD							
G1	12	C23				NSD							
G2	13	A42				NSD							
G2	14	A13				NSD							
G2	15	D2				NSD							
G2	16	D32				NSD							
G2	17	C40				NSD							
G2	18	C10				NSD							
G2	19	B20				NSD							
G2	20	B42				NSD							
G2	21	B22				NSD							
G2	22	B12				NSD							
G2	23	C12				NSD							

Count Categories

AF8>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-550**
Client Description:

Lab/Cor Sample No: **S2**
Date Sampled: **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	19	B31	CDQ	27	35	F	1	0.05	20	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		26				see image 060359-S2-G2-ST116-15K-DI.tif	
G2	19	B31	CDQ	28		MD 1-0	5.1	2.4	2.1	Chrysotile	Mg, Si		AS>5
G2	19	B31	CDQ		36	MF	0.7	0.1	7	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		27				060359-S2-G2-ST126-4K-DI.tif	
G2	20	C11	CD	29		MD 1-0	6	3.5	1.7	Chrysotile			AS>5
G2	20	C11	CD		37	MF	1.2	0.06	20	Chrysotile			
G2	21	C23	CDQ	30	38	F	1	0.05	20	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		155				060359-S2-G2-ST141-12K	
G2	22	C3	CDQ	31	39	F	3.7	0.05	74	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		156				060359-S2-G2-ST146-3500.tif	
G2	22	C3	CDQ	32		MD 1-0	9	8	1.1	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		157				060359-S2-G2-ST151-2000	
G2	22	C3	CDQ		40	MF	3.8	0.06	63.3	Chrysotile	Mg, Si		
G2	22	C3	CDQ	33		MD 1-0	18	16	1.1	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		158				060359-S2-G2-ST161-1500	
G2	22	C3	CDQ		41	MB	2	0.1	20	Chrysotile	Mg, Si		
G2	23	B13	CD	34	42	F	1.5	0.05	30	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		189				060359-S2-G2-ST171 & 176-4000	
G2	23	B13	CD	35		MD 1-0	3.5	2.5	1.4	Chrysotile			
G2	23	B13	CD		43	MB	3.5	0.15	23.3	Chrysotile			
G2	23	B13	CDQ	36		MD 1-1	7.5	3.8	2	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		160				060359-S2-G2-ST181-2000	
G2	23	B13	CDQ		44	MF	6.5	0.06	108.3	Chrysotile			AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-550** Lab/Cor Sample No: **S2**
Client Description: **Date Sampled:** **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G2	14	D3	CDQ	18	25	F	4.9	0.05	98	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		17				060359-S2-G2-ST36-4K-DI.tif	
G2	15	D23	CDQ	19		MD 1-0	3.5	1.5	2.3	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		18				060359-S2-G2-ST41-5K-DI.tif	
G2	15	D23	CDQ		26	MF	1.9	0.06	31.7	Chrysotile	Mg, Si		
G2	15	D23	CDQ	20		MD 1-0	11	6	1.8	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		19				060359-S2-G2-ST51-2K-DI.tif	
G2	15	D23	CDQ		27	MF	1.9	0.06	31.7	Chrysotile	Mg, Si		
G2	16	D41	CDQ	21		MD 1-0	8	6.5	1.2	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		20				060359-S2-G2-ST61-2K-DI.tif	
G2	16	D41	CDQ		28	MF	2	0.08	25	Chrysotile	Mg, Si		
G2	16	D41	CDQ	22		MD 1-0	10	9	1.1	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		21				060359-S2-G2-ST71-2,5K-DI.tif	
G2	16	D41	CDQ		29	MF	1.6	0.05	32	Chrysotile	Mg, Si		
G2	17	C30				NSD							
G2	18	C10	CDQ	23	30	F	2	0.2	10	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		22				060359-S2-G2-ST86-9K-DI.tif	
G2	18	C10	CDQ	24		MD 1-0	10	7.5	1.3	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		23				060359-S2-G2-ST91-7K-DI.tif, This structure moved next to the matrix after initial analysis and before imaging.	
						Brightfield		24				060359-S2-G2-ST96-1,5K-DI.tif. Low mag of particulate nearby	
G2	18	C10	CDQ		31	MF	1.3	0.06	21.7	Chrysotile	Mg, Si		
G2	18	C10	CDQ	25		MD 2-0	2.7	2.4	1.1	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		25				060359-S2-G2-ST101-6K-DI.tif	
G2	18	C10	CDQ		32	MF	1	0.1	10	Chrysotile	Mg, Si		
G2	18	C10	CDQ		33	MF	0.6	0.06	10	Chrysotile	Mg, Si		
G2	19	B31	CDQ	26	34	F	1.5	0.05	30	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		26				060359-S2-G2-ST116-15K-DI.tif	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-550** Lab/Cor Sample No: **S2**
Client Description: **Date Sampled:** **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	5	D40	CDQ		12	MF	2.5	0.1	25	Chrysotile	Mg, Si		
G1	6	D10	CD	9	13	F	1.6	0.06	26.7	Chrysotile			
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		8				060359-S2-G1-ST106-12K-DI.tif	
G1	7	B30				NSD							
G1	8	B42	CDQ	10		MD 1-0	14	8	1.8	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		9				060359-S2-G1-ST116-1,5K-DI.tif	
G1	8	B42	CDQ		14	MF	4	0.06	66.7	Chrysotile	Mg, Si		
G1	9	B22				NSD							
G1	10	C2	CDQ	11		MD 1-0	15	10	1.5	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		10				060359-S2-G1-ST131-2K-DI.tif	
G1	10	C2	CDQ		15	MF	1.1	0.08	13.8	Chrysotile	Mg, Si		
G1	11	C22	CDQ	12		MD 3-0	7.5	7	1.1	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		11				060359-S2-G1-ST141-2,5K-DI.tif	
G1	11	C22	CDQ		16	MF	1.7	0.06	28.3	Chrysotile	Mg, Si		
G1	11	C22	CDQ		17	MF	0.55	0.05	11	Chrysotile	Mg, Si		
G1	11	C22	CDQ		18	MF	1.9	0.05	38	Chrysotile	Mg, Si		
G1	12	C42	CDQ	13		MD 1-0	4.9	2.2	2.2	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		12				060359-S2-G1-ST161-4K-DI.tif	
G1	12	C42	CDQ		19	MF	0.9	0.1	9	Chrysotile	Mg, Si		
G2	13	A11	CDQ	14	20	F	2.2	0.06	36.7	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		13				060359-S2-G2-ST6-7K-DI.tif	
G2	14	D3	CDQ	15	21	B	30	4	7.5	Chrysotile	Mg, Si		AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		14				060359-S2-G2-ST11-0,7K-LM-DI.tif	
G2	14	D3	CDQ	16	22	F	5.1	0.06	85	Chrysotile	Mg, Si		AS>5, AFB>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		15				060359-S2-G2-ST16-3K-DI.tif	
G2	14	D3	CDQ	17		MD 2-2	15	8	1.9	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		16				060359-S2-G2-ST21-2K-DI.tif	
G2	14	D3	CDQ		23	MF	6.5	0.06	108.3	Chrysotile	Mg, Si		AFB>5
G2	14	D3	CDQ		24	MF	7.5	0.06	125	Chrysotile	Mg, Si		AFB>5

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

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ISO 10312, direct Raw Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-550** Lab/Cor Sample No: **S2**
Client Description: **Date Sampled:** **6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A32	CDQ	1	1	F	0.7	0.08	8.8	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Diffraction		H0295		JH	7/19/2006		
						Brightfield		H0295-DI					
						Spectra		1155		JH	7/19/2006		
G1	1	A32	CDQ	2		MD 1-0	2.5	2	1.2	Chrysotile	Mg, Si		
G1	1	A32	CDQ		2	MF	0.8	0.1	8	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		1				060359-S2-G1-ST16-3K-DI	
G1	1	A32	CDQ	3		MD 1-0	7.5	3	2.5	Chrysotile	Mg, Si		AS>5
G1	1	A32	CDQ		3	MF	1.5	0.06	25	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		2				060359-S2-G1-ST26-2-5K-DI.tif	
G1	2	A2				NSD							
G1	3	D13				NSD							
G1	4	D32	CDQ	4		MD 1-0	3.5	2	1.8	Chrysotile	Mg, Si		
G1	4	D32	CDQ		4	MF	1.8	0.08	22.5	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		3				060359-S2-G1-ST46-3K-DI.tif	
G1	4	D32	CDQ	5		MD 1-0	1.8	0.8	2.2	Chrysotile	Mg, Si		
G1	4	D32	CDQ		5	MF	0.7	0.1	7	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		3				060359-S2-G1-ST56-3K-DI.tif	
G1	4	D32	CDQ	6		MD 3-0	25	20	1.2	Chrysotile	Mg, Si		AS>5
G1	4	D32	CDQ		6	MF	0.8	0.06	13.3	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		5				060359-S2-G1-ST61-1-5K-DI.tif	
G1	4	D32	CDQ		7	MF	0.8	0.06	13.3	Chrysotile	Mg, Si		
G1	4	D32	CDQ		8	MF	1.4	0.06	23.3	Chrysotile	Mg, Si		
G1	5	D40	CDQ	7		MD 3-0	4.8	3	1.6	Chrysotile	Mg, Si		
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		6				060359-S2-G1-ST86-4K-DI.tif	
G1	5	D40	CDQ		9	MF	2.5	0.1	25	Chrysotile	Mg, Si		
G1	5	D40	CDQ		10	MF	0.55	0.05	11	Chrysotile	Mg, Si		
G1	5	D40	CDQ		11	MF	1	0.06	16.7	Chrysotile	Mg, Si		
G1	5	D40	CDQ	8		MD 1-0	6	2.5	2.4	Chrysotile	Mg, Si		AS>5
						ItemType		ItemNum		Confirmed		Comment	
						Brightfield		7				060359-S2-G1-ST101-5K-DI.tif	

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	**AS>5**	Asbestos Structures > 5um and 5:1
PAS	*Primary Asbestos Structures*	**PCMEF-ISO**	*PCM Equivalent Fibers-ISO*
PCMES-ISO	PCM Equivalent Structures-ISO	**TAS**	Total Asbestos Structures

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Asbestos and Environmental Analysis

ISO 10312, direct Raw Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Client Sample No: **NR-00541** Lab/Cor Sample No: **S1**
Client Description: **Date Sampled: 6/20/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A31				NSD							
G1	2	A12				NSD							
G1	3	D2				NSD							
G1	4	D32				NSD							
G1	5	D30				NSD							
G1	6	D10				NSD							
G1	7	A20				NSD							
G1	8	B42				NSD							
G1	9	B22				NSD							
G1	10	B2				NSD							
G1	11	D12				NSD							
G1	12	D32				NSD							
G2	13	A42				NSD							
G2	14	A12				NSD							
G2	15	D2				NSD							
G2	16	D32				NSD							
G2	17	D20				NSD							
G2	18	A30				NSD							
G2	19	B32				NSD							
G2	20	B12				NSD							
G2	21	C2				NSD							
G2	22	C22				NSD							
G2	23	C42				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S65

Client Sample No.: NR-276
Description:

Analyst(s)	Analysis Date
JH	8/20/2006
JH	8/21/2006

Volume (L) : 4800
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 56
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.81144
Analytical Sens. (struc/cc) : 0.0001
Dectection Limit. (struc/cc) : 0.0003

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.0001	0 - 0.00036 - Poisson	0	
Total Asbestos Structures	0	< 0.0001	0 - 0.00036 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.0001	0 - 0.00036 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0001	0 - 0.00036 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0001	0 - 0.00036 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0001	0 - 0.00036 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S66

Client Sample No.: NR-365
Description:

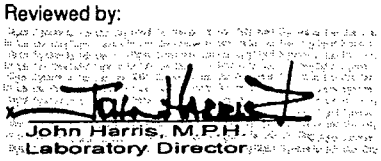
Analyst(s)	Analysis Date
JH	8/22/2006

Volume (L) : 4850
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 55
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.79695
Analytical Sens. (struc/cc) : 0.0001
Dectection Limit. (struc/cc) : 0.0003

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.0001	0 - 0.00037 - Poisson	0	
Total Asbestos Structures	0	< 0.0001	0 - 0.00037 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.0001	0 - 0.00037 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0001	0 - 0.00037 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0001	0 - 0.00037 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0001	0 - 0.00037 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Reviewed by:



John Harris, M.P.H.
Laboratory Director

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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Asbestos and Environmental Analysis

ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S52
Client Sample No.: NR-592
Description:

Analyst(s)	Analysis Date
JH	8/20/2006

Volume (L): 880
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 43
Average Grid Opening Area: 0.01007
Area Analyzed (mm2): 0.43301
Analytical Sens. (struc/cc): 0.00101
Dectection Limit. (struc/cc): 0.00302

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	2.3	0.00479	0.00003 - 0.00563 - Poisson	1	
Total Asbestos Structures	2.3	0.00479	0.00003 - 0.00563 - Poisson		1
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00373 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00373 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00373 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00373 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S59
Client Sample No.: NR-599
Description:

Analyst(s)	Analysis Date
JH	8/20/2006

Volume (L): 880
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 43
Average Grid Opening Area: 0.01007
Area Analyzed (mm2): 0.43301
Analytical Sens. (struc/cc): 0.00101
Dectection Limit. (struc/cc): 0.00302

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	2.3	0.00479	0.00003 - 0.00563 - Poisson	1	
Total Asbestos Structures	2.3	0.00479	0.00003 - 0.00563 - Poisson		1
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00373 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00373 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00373 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00373 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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Asbestos and Environmental Analysis

ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S48
Client Sample No.: NR-588
Description:

Analyst(s)	Analysis Date
JH	8/16/2006
JH	8/17/2006
JH	8/18/2006

Volume (L) : 880
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 43
Average Grid Opening Area : 0.01007
Area Analyzed (mm2) : 0.43301
Analytical Sens. (struc/cc) : 0.00101
Dectection Limit. (struc/cc) : 0.00302

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	39.3	0.01718	0.01001 - 0.0275 - Poisson	17	
Total Asbestos Structures	40.1	0.02526	0.01136 - 0.02591 - Poisson		25
Asbestos Structures > 5um and 5:1	20.8	0.00632	0.00416 - 0.01726 - Poisson	9	
Asbestos Fibers and Bundles > 5um and 5:1	11.2	0.00707	0.00198 - 0.01013 - Poisson		7
PCM Equivalent Fibers-ISO	3.2	0.00442	0.00017 - 0.00507 - Poisson		2
PCM Equivalent Structures-ISO	0	< 0.0007	0 - 0.00259 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S51
Client Sample No.: NR-591
Description:

Analyst(s)	Analysis Date
JH	8/20/2006

Volume (L) : 880
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 43
Average Grid Opening Area : 0.01007
Area Analyzed (mm2) : 0.43301
Analytical Sens. (struc/cc) : 0.00101
Dectection Limit. (struc/cc) : 0.00302

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	0	< 0.001	0 - 0.00373 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00373 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00373 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00373 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00373 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00373 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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Asbestos and Environmental Analysis

ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S43

Client Sample No.: NR-583
Description:

Analyst(s)	Analysis Date
JH	8/16/2006

Volume (L) : 891
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 43
Average Grid Opening Area : 0.01007
Area Analyzed (mm2) : 0.43301
Analytical Sens. (struc/cc) : 0.001
Dectection Limit. (struc/cc) : 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.001	0 - 0.00368 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00368 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00368 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00368 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00368 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00368 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S47

Client Sample No.: NR-587
Description:

Analyst(s)	Analysis Date
JH	8/16/2006

Volume (L) : 880
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 43
Average Grid Opening Area : 0.01007
Area Analyzed (mm2) : 0.43301
Analytical Sens. (struc/cc) : 0.00101
Dectection Limit. (struc/cc) : 0.00302

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.001	0 - 0.00373 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00373 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00373 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00373 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00373 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00373 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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Asbestos and Environmental Analysis

ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S36

Client Sample No.: NR-576
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
TM	8/10/2006
TM	8/11/2006

Volume (L): 880
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 43
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.62307
Analytical Sens. (struc/cc): 0.0007
Dectection Limit. (struc/cc): 0.0021

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	3.2	0.00442	0.00017 - 0.00507 - Poisson	2	
Total Asbestos Structures	3.2	0.00442	0.00017 - 0.00507 - Poisson		2
Asbestos Structures > 5um and 5:1	3.2	0.00442	0.00017 - 0.00507 - Poisson	2	
Asbestos Fibers and Bundles > 5um and 5:1	3.2	0.00442	0.00017 - 0.00507 - Poisson		2
PCM Equivalent Fibers-ISO	0	< 0.0007	0 - 0.00259 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0007	0 - 0.00259 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S38

Client Sample No.: NR-578
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
KM	9/11/2006
TM	8/11/2006
TM	8/12/2006
TM	8/13/2006

Volume (L): 858
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 43
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.62307
Analytical Sens. (struc/cc): 0.00072
Dectection Limit. (struc/cc): 0.00215

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	22.5	0.01008	0.00551 - 0.01692 - Poisson	14	
Total Asbestos Structures	22.5	0.01008	0.00551 - 0.01692 - Poisson		14
Asbestos Structures > 5um and 5:1	3.2	0.00454	0.00017 - 0.0052 - Poisson	2	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0007	0 - 0.00266 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0007	0 - 0.00266 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0007	0 - 0.00266 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S32

Client Sample No.: NR-572
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
TM	8/9/2006

Volume (L) : 1200
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 32
Average Grid Opening Area : 0.01007
Area Analyzed (mm2) : 0.32224
Analytical Sens. (struc/cc) : 0.001
Dectection Limit. (struc/cc) : 0.00298

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	6.2	0.00627	0.00024 - 0.00719 - Poisson	2	
Total Asbestos Structures	6.2	0.00627	0.00024 - 0.00719 - Poisson		2
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00367 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00367 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00367 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00367 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S35

Client Sample No.: NR-575
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
TM	8/10/2006

Volume (L) : 902
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 42
Average Grid Opening Area : 0.01007
Area Analyzed (mm2) : 0.42294
Analytical Sens. (struc/cc) : 0.00101
Dectection Limit. (struc/cc) : 0.00302

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.001	0 - 0.00372 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00372 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00372 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00372 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00372 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00372 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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Asbestos and Environmental Analysis

ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S28

Client Sample No.: NR-568
Description:

Analyst(s)	Analysis Date
JH	8/25/2006
JH	8/26/2006
JH	8/31/2006

Volume (L): 1200
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 32
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.46368
Analytical Sens. (struc/cc): 0.001
Dectection Limit. (struc/cc): 0.00298

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	9.3	0.00772	0.00062 - 0.00873 - Poisson	3	
Total Asbestos Structures	9.3	0.00536	0.00062 - 0.00873 - Poisson		3
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00367 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00367 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00367 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00367 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S31

Client Sample No.: NR-571
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
TM	8/9/2006

Volume (L): 1200
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 32
Average Grid Opening Area: 0.01007
Area Analyzed (mm2): 0.32224
Analytical Sens. (struc/cc): 0.001
Dectection Limit. (struc/cc): 0.00298

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.001	0 - 0.00367 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00367 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00367 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00367 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00367 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00367 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S24

Client Sample No.: NR-564
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
TM	8/7/2006

Volume (L): 1185
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 32
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.46368
Analytical Sens. (struc/cc): 0.0007
Dectection Limit. (struc/cc): 0.0021

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	2.2	0.00332	0.00002 - 0.0039 - Poisson	1	
Total Asbestos Structures	2.2	0.00332	0.00002 - 0.0039 - Poisson		1
Asbestos Structures > 5um and 5:1	2.2	0.00332	0.00002 - 0.0039 - Poisson	1	
Asbestos Fibers and Bundles > 5um and 5:1	2.2	0.00332	0.00002 - 0.0039 - Poisson		1
PCM Equivalent Fibers-ISO	2.2	0.00332	0.00002 - 0.0039 - Poisson		1
PCM Equivalent Structures-ISO	0	< 0.0007	0 - 0.00258 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S27

Client Sample No.: NR-567
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
TM	8/9/2006

Volume (L): 1170
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 32
Average Grid Opening Area: 0.01007
Area Analyzed (mm2): 0.32224
Analytical Sens. (struc/cc): 0.00071
Dectection Limit. (struc/cc): 0.00212

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.0007	0 - 0.00262 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00377 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00377 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00377 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0007	0 - 0.00262 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0007	0 - 0.00262 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S19

Client Sample No.: NR-559
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
TM	8/14/2006
TM	8/6/2006

Volume (L): 1100
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 35
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.50715
Analytical Sens. (struc/cc): 0.00099
Dectection Limit. (struc/cc): 0.00297

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count¹ Prim	Structure Count¹ Total
Primary Asbestos Structures	0	< 0.001	0 - 0.00366 - Poisson	0	
Total Asbestos Structures	0	< 0.0007	0 - 0.00255 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00366 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00366 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00366 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00366 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S23

Client Sample No.: NR-563
Description:

Analyst(s)	Analysis Date
KM	9/10/2006
TM	8/7/2006

Volume (L): 1200
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 32
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.46368
Analytical Sens. (struc/cc): 0.00069
Dectection Limit. (struc/cc): 0.00207

Structure Type	Filter Density (s/mm2)	Concentration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count¹ Prim	Structure Count¹ Total
Primary Asbestos Structures	0	< 0.0007	0 - 0.00255 - Poisson	0	
Total Asbestos Structures	0	< 0.0007	0 - 0.00255 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.0007	0 - 0.00255 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0007	0 - 0.00255 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0007	0 - 0.00255 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0007	0 - 0.00255 - Poisson	0	

¹ Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: *Parametrix*
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: *6/30/2006*

Lab/Cor Sample No.: S16

Client Sample No.: NR-556
Description:

Analyst(s)	Analysis Date
TM	8/14/2006
TM	8/3/2006
TM	8/4/2006
TM	9/9/2006

Volume (L) : 984
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 39
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.56511
Analytical Sens. (struc/cc) : 0.00069
Dectection Limit. (struc/cc) : 0.00207

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	12.4	0.00485	0.00195 - 0.00999 - Poisson	7	
Total Asbestos Structures	12.4	0.00485	0.00195 - 0.00999 - Poisson		7
Asbestos Structures > 5um and 5:1	7.1	0.00277	0.00075 - 0.00709 - Poisson	4	
Asbestos Fibers and Bundles > 5um and 5:1	7.1	0.00277	0.00075 - 0.00709 - Poisson		4
PCM Equivalent Fibers-ISO	5.3	0.00537	0.00043 - 0.00607 - Poisson		3
PCM Equivalent Structures-ISO	1.8	0.00328	0.00002 - 0.00386 - Poisson	1	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S18

Client Sample No.: NR-558
Description:

Analyst(s)	Analysis Date
TM	8/14/2006
TM	8/4/2006
TM	8/6/2006
TM	9/9/2006

Volume (L) : 1072.5
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 36
Average Grid Opening Area : 0.01007
Area Analyzed (mm2) : 0.36252
Analytical Sens. (struc/cc) : 0.00099
Dectection Limit. (struc/cc) : 0.00296

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	2.8	0.00469	0.00002 - 0.00552 - Poisson	1	
Total Asbestos Structures	2.8	0.00469	0.00002 - 0.00552 - Poisson		1
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00365 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00365 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00365 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00365 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S14

Client Sample No.: NR-554
Description:

Analyst(s)	Analysis Date
KM	7/25/2006
KM	7/26/2006
TM	8/14/2006
TM	9/8/2006

Volume (L): 948
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 40
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.5796
Analytical Sens. (struc/cc): 0.0007
Dectection Limit. (struc/cc): 0.0021

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	10.4	0.0042	0.00154 - 0.00915 - Poisson	6	
Total Asbestos Structures	10.4	0.0042	0.00154 - 0.00915 - Poisson		6
Asbestos Structures > 5um and 5:1	3.5	0.00441	0.00017 - 0.00506 - Poisson	2	
Asbestos Fibers and Bundles > 5um and 5:1	3.5	0.00441	0.00017 - 0.00506 - Poisson		2
PCM Equivalent Fibers-ISO	3.5	0.00441	0.00017 - 0.00506 - Poisson		2
PCM Equivalent Structures-ISO	3.5	0.00441	0.00017 - 0.00506 - Poisson	2	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S15

Client Sample No.: NR-555
Description:

Analyst(s)	Analysis Date
TM	8/14/2006

Volume (L): 240
Lab Filter Area (mm2): 385
Grid Openings Analyzed: 23
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.33327
Analytical Sens. (struc/cc): 0.00481
Dectection Limit. (struc/cc): 0.01439

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.0048	0 - 0.01776 - Poisson	0	
Total Asbestos Structures	0	< 0.0048	0 - 0.01776 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.0048	0 - 0.01776 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0048	0 - 0.01776 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0048	0 - 0.01776 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0048	0 - 0.01776 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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Asbestos and Environmental Analysis

ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S10

Client Sample No.: NR-550
Description:

Analyst(s)	Analysis Date
JH	8/12/2006
JH	8/13/2006

Volume (L) : 1140
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 23
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.33327
Analytical Sens. (struc/cc) : 0.00101
Dectection Limit. (struc/cc) : 0.00303

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	9	0.00785	0.00063 - 0.00888 - Poisson	3	
Total Asbestos Structures	9	0.00785	0.00063 - 0.00888 - Poisson		3
Asbestos Structures > 5um and 5:1	6	0.00638	0.00025 - 0.00732 - Poisson	2	
Asbestos Fibers and Bundles > 5um and 5:1	3	0.0048	0.00003 - 0.00565 - Poisson		1
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00374 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00374 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S13

Client Sample No.: NR-553
Description:

Analyst(s)	Analysis Date
KM	7/25/2006
TM	8/13/2006
TM	9/8/2006

Volume (L) : 936
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 40
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.5796
Analytical Sens. (struc/cc) : 0.00071
Dectection Limit. (struc/cc) : 0.00212

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	1.7	0.00336	0.00002 - 0.00395 - Poisson	1	
Total Asbestos Structures	1.7	0.00336	0.00002 - 0.00395 - Poisson		1
Asbestos Structures > 5um and 5:1	0	< 0.0007	0 - 0.00262 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.0007	0 - 0.00262 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.0007	0 - 0.00262 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.0007	0 - 0.00262 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S5

Client Sample No.: NR-00545
Description:

Analyst(s)	Analysis Date
JH	7/15/2006

Volume (L) : 1200
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 23
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.33327
Analytical Sens. (struc/cc) : 0.00096
Dectection Limit. (struc/cc) : 0.00288

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.001	0 - 0.00355 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00355 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00355 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00355 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00355 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00355 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S9

Client Sample No.: NR-549
Description:

Analyst(s)	Analysis Date
JH	8/12/2006

Volume (L) : 1200
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 23
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.33327
Analytical Sens. (struc/cc) : 0.00096
Dectection Limit. (struc/cc) : 0.00288

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.001	0 - 0.00355 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00355 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00355 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00355 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00355 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00355 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

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Asbestos and Environmental Analysis

ISO 10312, direct Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Date Received: 6/30/2006

Lab/Cor Sample No.: S1

Client Sample No.: NR-00541
Description:

Analyst(s)	Analysis Date
JH	7/18/2006

Volume (L) : 1180
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 23
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.33327
Analytical Sens. (struc/cc) : 0.00098
Dectection Limit. (struc/cc) : 0.00293

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	0	< 0.001	0 - 0.00361 - Poisson	0	
Total Asbestos Structures	0	< 0.001	0 - 0.00361 - Poisson		0
Asbestos Structures > 5um and 5:1	0	< 0.001	0 - 0.00361 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	0	< 0.001	0 - 0.00361 - Poisson		0
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00361 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00361 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

Lab/Cor Sample No.: S2

Client Sample No.: NR-550
Description:

Analyst(s)	Analysis Date
JH	7/19/2006
JH	7/23/2006
JH	7/26/2006
JH	8/8/2006
JH	9/27/2006
JH	9/29/2006

Volume (L) : 1140
Lab Filter Area (mm2) : 385
Grid Openings Analyzed : 23
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.33327
Analytical Sens. (struc/cc) : 0.00101
Dectection Limit. (struc/cc) : 0.00303

Structure Type	Filter Density (s/mm2)	Concen-tration* (struc/cc)	95% Confidence Interval (struc/cc)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	108	0.03648	0 - 7.59448 - Gaussian	36	
Total Asbestos Structures	132	0.04459	0.0324 - 0.05986 - Poisson		44
Asbestos Structures > 5um and 5:1	54	0.01824	0.01081 - 0.02883 - Poisson	18	
Asbestos Fibers and Bundles > 5um and 5:1	15	0.00507	0.00165 - 0.01182 - Poisson		5
PCM Equivalent Fibers-ISO	0	< 0.001	0 - 0.00374 - Poisson		0
PCM Equivalent Structures-ISO	0	< 0.001	0 - 0.00374 - Poisson	0	

[1] Concentration and 95% Confidence Level are calculated based upon the number showing under the Structure Count header.

* One-sided upper 95% Poisson confidence limits are used to calculate sample concentrations ([Struc count] * [Analytical Sensitivity]) when the structure count is below 4. The limits are: 0 str - 2.99, 1 str - 4.74, 2 str - 6.3, 3 str - 7.75

LabCor Portland Inc
Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Final Report

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Asbestos and Environmental Analysis

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Report Date: 9/29/2006

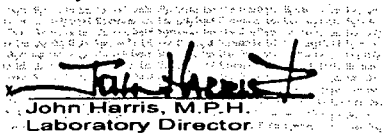
ISO 10312, direct - Preparation and analysis of the above samples was conducted in accordance with the ISO method 10312 (Direct) for the identification of asbestos. Briefly, the samples were collapsed with acetone, then etched in a low temperature plasma etcher to remove the top surface of the filter and other organics. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in acetone until cleared of filter debris.

TEM analysis was performed using a transmission electron microscope equipped with an EDS X ray analyzer. The air samples were analyzed at various approximate screen magnifications of 5,000x for PCM equivalent structures, 10,000x for asbestos structures greater than 5.0 micrometer lengths, and 20,000x for asbestos structures greater than 0.5 micrometer lengths. An accelerating voltage of 100 KV was applied. The sizing of grid openings was performed on the microscope at a magnification of approximately 550X.

Disclaimer The results reported relate only to the samples tested or analyzed. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor Portland, Inc. the opportunity to provide you with the analytical services.

Sincerely,



John Harris, M.P.H.
Laboratory Director

LabCor Portland Inc
Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R02
Report Date: 9/29/2006

060359 - S34	NR-574 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S35	NR-575 -	ISO 10312, direct		6/30/2006
060359 - S36	NR-576 -	ISO 10312, direct		6/30/2006
060359 - S37	NR-577 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S38	NR-578 -	ISO 10312, direct		6/30/2006
060359 - S39	NR-579 -	ISO 10312, direct	Not Analyzed	6/30/2006
060359 - S40	NR-580 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S41	NR-581 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S42	NR-582 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S43	NR-583 -	ISO 10312, direct		6/30/2006
060359 - S44	NR-584 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S45	NR-585 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S46	NR-586 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S47	NR-587 -	ISO 10312, direct		6/30/2006
060359 - S48	NR-588 -	ISO 10312, direct		6/30/2006
060359 - S49	NR-589 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S50	NR-590 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S51	NR-591 -	ISO 10312, direct		6/30/2006
060359 - S52	NR-592 -	ISO 10312, direct		6/30/2006
060359 - S53	NR-593 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S54	NR-594 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S55	NR-595 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S56	NR-596 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S57	NR-597 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S58	NR-598 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S59	NR-599 -	ISO 10312, direct		6/30/2006
060359 - S60	NR-600 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S61	NR-661 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S62	NR-662 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S63	NR-261 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S64	NR-268 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S65	NR-276 -	ISO 10312, direct		6/30/2006
060359 - S66	NR-365 -	ISO 10312, direct		6/30/2006

LabCor Portland Inc

Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Analysis Report Cover

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060359 **PDX**

Report Number: 060359R02

Report Date: 9/29/2006

Client: Parametrix

Address: 700 NE Multnomah, Ste. 1000
Portland, OR 97232-2131

Project Name: Northridge Estates

Project Num: 35430

PO Number:

Sub Project:

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
060359 - S1	NR-00541 -	ISO 10312, direct		6/30/2006
060359 - S2	NR-550 -	ISO 10312, direct		6/30/2006
060359 - S3	NR-551 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Archived Sample	6/30/2006
060359 - S4	NR-552 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S5	NR-00545 -	ISO 10312, direct		6/30/2006
060359 - S6	NR-546 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S7	NR-547 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S8	NR-548 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S9	NR-549 -	ISO 10312, direct		6/30/2006
060359 - S10	NR-550 -	ISO 10312, direct		6/30/2006
060359 - S11	NR-551 -	ISO 10312, direct	Archive Sample	6/30/2006
060359 - S12	NR-542 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S13	NR-553 -	ISO 10312, direct		6/30/2006
060359 - S14	NR-554 -	ISO 10312, direct		6/30/2006
060359 - S15	NR-555 -	ISO 10312, direct	Archive Sample	6/30/2006
060359 - S16	NR-556 -	ISO 10312, direct		6/30/2006
060359 - S17	NR-557 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S18	NR-558 -	ISO 10312, direct		6/30/2006
060359 - S19	NR-559 -	ISO 10312, direct		6/30/2006
060359 - S20	NR-560 -	ISO 10312, direct	Archive Sample	6/30/2006
060359 - S21	NR-561 -	ISO 10312, direct	Not Analyzed Archive Sample	6/30/2006
060359 - S22	NR-562 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S23	NR-563 -	ISO 10312, direct		6/30/2006
060359 - S24	NR-564 -	ISO 10312, direct		6/30/2006
060359 - S25	NR-565 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S26	NR-566 -	ISO 10312, direct		6/30/2006
060359 - S27	NR-567 -	ISO 10312, direct		6/30/2006
060359 - S28	NR-568 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S29	NR-569 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006
060359 - S30	NR-570 -	ISO 10312, direct	REJECTED: Overloaded - Redeposited	6/30/2006
060359 - S31	NR-571 -	ISO 10312, direct		6/30/2006
060359 - S32	NR-572 -	ISO 10312, direct		6/30/2006
060359 - S33	NR-573 -	ISO 10312, direct	Not Analyzed REJECTED: Overloaded - Redeposited, Archive Sample	6/30/2006

Appendix G

Appendix G
2006 Soil Analytical Data Packages

LabCor Portland Inc

Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Analysis Report Cover

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060501 **PDX**

Report Number: 060501R02

Client: Parametrix

Report Date: 10/23/2006

Address: 700 NE Multnomah, Ste. 1000
Portland, OR 97232-2131

Project Name: *Northridge Estates*

Project Num: 35430

PO Number:

Sub Project:

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
060501 - S1	NR-00083 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S2	NR-00096 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S3	NR-00114 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S4	NR-00346 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S5	NR-00349 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S6	NR-00353 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S7	NR-00356 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S8	NR-00401 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S9	NR-00402 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S10	NR-00405 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S11	NR-00418 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S12	NR-00504 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S13	NR-00520 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S14	NR-00201 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S15	NR-00202 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S16	NR-00203 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S17	NR-00220 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S18	NR-00350 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S19	NR-00729 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006
060501 - S20	NR-00730 -	PLM-NESHAP POINT COUNT - 400 fields		6/30/2006

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LabCor Portland Inc

Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060501 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060501R02
Report Date: 10/23/2006

060501 - S21	NR-00731 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S22	NR-00732 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S23	NR-00733 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S24	NR-00423 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S25	NR-00424 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S26	NR-00425 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S27	NR-00426 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S28	NR-00427 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S29	NR-00428 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S30	NR-00429 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S31	NR-00430 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S32	NR-00431 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S33	NR-00432 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S34	NR-00433 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S35	NR-00434 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S36	NR-00435 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S37	NR-00436 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S38	NR-00437 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S39	NR-00438 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S40	NR-00450 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S41	NR-00451 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S42	NR-00452 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S43	NR-00453 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S44	NR-00454 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S45	NR-00524 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006

NVLAP

LabCor Portland Inc
Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060501 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060501R02
Report Date: 10/23/2006

060501 - S46	NR-00525 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S47	NR-00526 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S48	NR-00527 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S49	NR-00528 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S50	NR-00529 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S51	NR-00530 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S52	NR-00531 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S53	NR-00532 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S54	NR-00533 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S55	NR-00534 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S56	NR-00535 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S57	NR-00536 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S58	NR-00537 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S59	NR-00538 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S60	NR-00539 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S61	NR-00540 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S62	NR-00721 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S63	NR-00722 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S64	NR-00723 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S65	NR-00724 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S66	NR-00725 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S67	NR-00726 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S68	NR-00727 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S69	NR-00728 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S70	NR-00603 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006

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LabCor Portland Inc
Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060501 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060501R02
Report Date: 10/23/2006

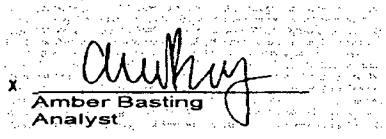
060501 - S71	NR-00627 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S72	NR-00642 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S73	NR-00644 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S74	NR-00652 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S75	NR-00658 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S76	NR-00698 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S77	NR-00711 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S78	NR-00751 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S79	NR-00762 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S80	NR-00782 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006
060501 - S81	NR-00795 -	PLM-NESHAP POINT COUNT - 400 fields	6/30/2006

PLM-NESHAP POINT COUNT - 400 fields -

Disclaimer The results reported relate only to the samples tested or analyzed. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor Portland, Inc. the opportunity to provide you with the analytical services.

Sincerely,



X
Amber Basting
Analyst

NVLAP

LabCor Portland Inc **Lab/Cor Portland, Inc.**
4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Client: Parametrix
700 NE Multnomah, Ste. 1000
Portland, OR 97232-2131

Report Number: 060501R02
Report Date: 10/23/2006

P.O. No: n/a

Job Number: 060501
Project Name: Northridge Estates
Project Number: 35430
Project Notes:

Client Sample ID: NR-00083 **Sample ID:** S1 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields

Client Sample ID: NR-00096 **Sample ID:** S2 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields

Client Sample ID: NR-00114 **Sample ID:** S3 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields

Client Sample ID: NR-00346 **Sample ID:** S4 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields. Chrysotile fibers detected but did not land under cross-hair during point count.

NVLAP

LabCor Portland Inc
Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

BULK SAMPLE ASBESTOS ANALYSIS

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060501

Report Number: 060501R02
Report Date: 10/23/2006

Client Sample ID: NR-00349 **Sample ID:** S5 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate.	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00353 **Sample ID:** S6 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00356 **Sample ID:** S7 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00401 **Sample ID:** S8 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Job Number: 060501

Report Number: 060501R02
Report Date: 10/23/2006

Client Sample ID: NR-00402 **Sample ID:** S9 **Date Analyzed:** 08/21/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate	99.9 %	-	-	-			**< 0.25%**
Layer 02			**Point Count:**	**0**	**Point Count Fields:**		
ACM	0.15 %	60 %	-	-			**60 %**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	100 %	0 %
Layer 02	-	-	-	-	-	-	40 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00405 **Sample ID:** S10 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
	-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00418 **Sample ID:** S11 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
	-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00504 **Sample ID:** S12 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
	-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00520 **Sample ID:** S13 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate.	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00201 **Sample ID:** S14 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00202 **Sample ID:** S15 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00203 **Sample ID:** S16 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00220 **Sample ID:** S17 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00350 **Sample ID:** S18 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00729 **Sample ID:** S19 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			***Point Count:***	***0 Point Count Fields:*** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00730 **Sample ID:** S20 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00731 **Sample ID:** S21 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00732 **Sample ID:** S22 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00733 **Sample ID:** S23 **Date Analyzed:** 08/22/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00423 **Sample ID:** S24 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00424 **Sample ID:** S25 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00425 **Sample ID:** S26 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00426 **Sample ID:** S27 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00427 **Sample ID:** S28 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00428 **Sample ID:** S29 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00429 **Sample ID:** S30 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00430 **Sample ID:** S31 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00431 **Sample ID:** S32 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00432 **Sample ID:** S33 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00433 **Sample ID:** S34 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00434 **Sample ID:** S35 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00435 **Sample ID:** S36 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields. Asbestosform amphibole detected but did not land under cross-hair during point count. Presence of amphibole could not be confirmed due to limitation of point count method, as only one oil is used for preparation.

Client Sample ID: NR-00436 **Sample ID:** S37 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** **400**	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00437 **Sample ID:** S38 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00438 **Sample ID:** S39 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00450 **Sample ID:** S40 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00451 **Sample ID:** S41 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00452 **Sample ID:** S42 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00453 **Sample ID:** S43 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00454 **Sample ID:** S44 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00524 **Sample ID:** S45 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00525 **Sample ID:** S46 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00526 **Sample ID:** S47 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Report Date: 10/23/2006

Client Sample ID: NR-00527 **Sample ID:** S48 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:**	**400**		
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00528 **Sample ID:** S49 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:**	**400**		
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00529 **Sample ID:** S50 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:**	**400**		
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00530 **Sample ID:** S51 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:**	**400**		
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Job Number: 060501

Report Number: 060501R02
Report Date: 10/23/2006

Client Sample ID: NR-00531 **Sample ID:** S52 **Date Analyzed:** 08/23/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate	99.9 %	-	-	-			**< 0.25%**
Layer 02			**Point Count:**		**Point Count Fields:**		
ACM	0.11 %	30 %	40 %	-			**70 %**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	100 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields. Chrysotile and Amosite fibers detected but did not land under cross-hair during point count.

Client Sample ID: NR-00532 **Sample ID:** S53 **Date Analyzed:** 08/25/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**3**	**Point Count Fields:**	**400**	
loose particulate	100 %	-	0.75 %	-			**0.75 %**
Layer 02			**Point Count:**		**Point Count Fields:**		
ACM	0.04 %	30 %	70 %	-			**100 %**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	99.25 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 3 asbestos points / 400 fields.

Client Sample ID: NR-00533 **Sample ID:** S54 **Date Analyzed:** 08/25/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate	99.8 %	-	-	-			**< 0.25%**
Layer 02			**Point Count:**	**0**	**Point Count Fields:**	**0**	
ACM	0.23 %	50 %	50 %	-			**100 %**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	100 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00534 **Sample ID:** S55 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	400	
loose particulate	99.8 %	-	-	-			**< 0.25%**
Layer 02			**Point Count:**	**0**	**Point Count Fields:**	0	
ACM	0.16 %	50 %	50 %	-			**100 %**

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00535 **Sample ID:** S56 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	400	
loose particulate	100 %	-	-	-			**< 0.25%**
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	0	
ACM	0 %	100 %	-	-			**100 %**

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 01	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00536 **Sample ID:** S57 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	400	
loose particulate	89 %	-	-	-			**< 0.25%**
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	0	
ACM	11.0 %	40 %	-	-			**40 %**

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 01	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00537 **Sample ID:** S58 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	400	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
	-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00538 **Sample ID:** S59 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01			**Point Count:**	**0 Point Count Fields:**	**400**	
loose particulate	91.1 %	-	-	-		**< 0.25%**
Layer 02			**Point Count:**	**0 Point Count Fields:**	**0**	
ACM	8.88 %	40 %	-	-		**40 %**

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00539 **Sample ID:** S60 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-		**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00540 **Sample ID:** S61 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
			Point Count:	**0 Point Count Fields:**	**0**	
	%	-	-	-		
Homogeneous			**Point Count:**	**0 Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-		**< 0.25%**

Other Fibers

Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
-	-	-	-	-	-	0 %	0 %
-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00721 **Sample ID:** S62 **Date Analyzed:** 08/24/2006
Client Sample Description: **Analyst:** Amber Basting

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite		Percent Asbestos:
Layer 01			**Point Count:**	**0 Point Count Fields:**	**400**	
loose particulate	100 %	-	-	-		**< 0.25%**
Layer 02			**Point Count:**	**0 Point Count Fields:**	**0**	
ACM	0 %	-	-	-	Actinolite- 95 %	**95 %**

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	100 %	0 %
Layer 02	-	-	-	-	-	-	5 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00722 **Sample ID:** S63 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			Point Count:	0	Point Count Fields:	400	
loose particulate	100 %	-	-	-			< 0.25%
Layer 02			Point Count:	0	Point Count Fields:	0	
ACM	0 %	100 %	-	-			100 %

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00723 **Sample ID:** S64 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			Point Count:	0	Point Count Fields:	400	
loose particulate	100 %	-	-	-			< 0.25%
Layer 02			Point Count:	0	Point Count Fields:	0	
ACM	0 %	100 %	-	-			100 %

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00724 **Sample ID:** S65 **Date Analyzed:** 08/26/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			Point Count:	0	Point Count Fields:	400	
loose particles	100 %	-	-	-			< 0.25%
Layer 02			Point Count:	0	Point Count Fields:	0	
ACM	0.05 %	60 %	-	-			60 %

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00725 **Sample ID:** S66 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate	99.9 %	-	-	-			**< 0.25%**
Layer 02			**Point Count:**	**0**	**Point Count Fields:**	**0**	
ACM	0.08 %	60 %	-	-			**60 %**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00726 **Sample ID:** S67 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particles	100 %	-	-	-			**< 0.25%**
Layer 02			**Point Count:**	**0**	**Point Count Fields:**	**0**	
ACM	0 %	60 %	-	-			**60 %**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00727 **Sample ID:** S68 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate	100 %	-	-	-			**< 0.25%**
Layer 02			**Point Count:**	**0**	**Point Count Fields:**	**0**	
ACM	0.01 %	60 %	-	-			**60 %**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
Layer 01	-	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00728 **Sample ID:** S69 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other		Matrix	
	-	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00603 **Sample ID:** S70 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00627 **Sample ID:** S71 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00642 **Sample ID:** S72 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00644 **Sample ID:** S73 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00652 **Sample ID:** S74 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			**Point Count:**	**0 Point Count Fields:** 400	
loose particulate,	100 %	-	-	-	**< 0.25%**

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Client Sample ID: NR-00658 **Sample ID:** S75 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00698 **Sample ID:** S76 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00711 **Sample ID:** S77 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00751 **Sample ID:** S78 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00762 **Sample ID:** S79 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite	Percent Asbestos:
Homogeneous			Point Count: 0	Point Count Fields: 400	
loose particulate,	100 %	-	-	-	< 0.25%

Other Fibers	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
	-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

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Report Date: 10/23/2006

Client Sample ID: NR-00782 **Sample ID:** S80 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Layer 01			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate	100 %	-	-	-			**< 0.25%**
Layer 02			**Point Count:**	**0**	**Point Count Fields:**	**0**	
ACM	0 %	60 %	-	-			**60 %**

Other Fibers

	Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
Layer 01	-	-	-	-	-	0 %	0 %
Layer 02	-	-	-	-	-	0 %	0 %

Comments: 0 asbestos points / 400 fields.

Client Sample ID: NR-00795 **Sample ID:** S81 **Date Analyzed:** 08/27/2006
Client Sample Description: **Analyst:** Carrie Babcock

Asbestos Mineral Fibers	Percent of Sample:	Chrysotile	Amosite	Crocidolite			Percent Asbestos:
Homogeneous			**Point Count:**	**0**	**Point Count Fields:**	**400**	
loose particulate,	100 %	-	-	-			**< 0.25%**

Other Fibers

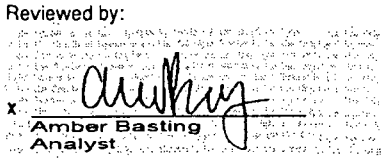
Fibrous Glass	Cellulose	Mineral Wool	Synthetic	Other	Matrix	
-	-	-	-	-	100 %	0 %

Comments: 0 asbestos points / 400 fields.

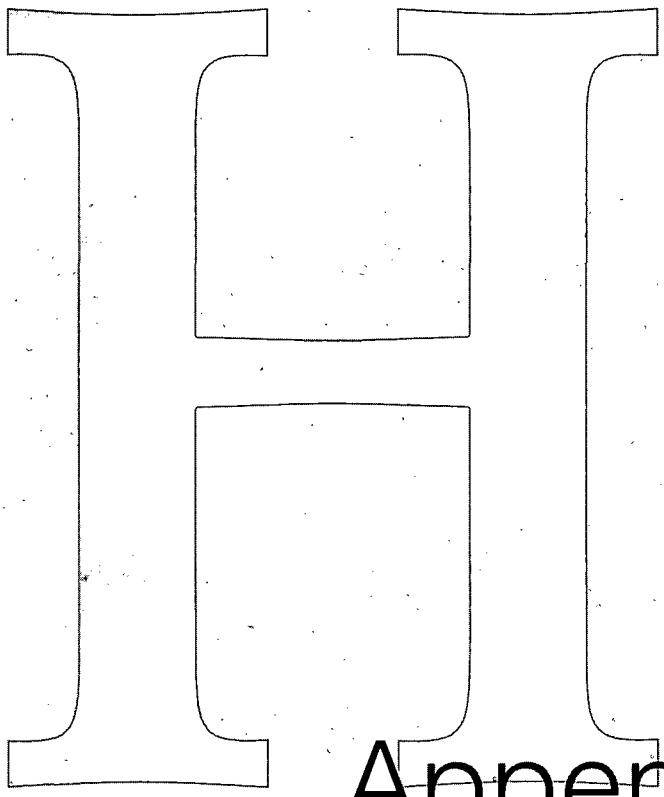
This laboratory participates in the National Voluntary Laboratory Accreditation Program (NVLAP).
Testing method is per 40 CFR 763 Subpart F, Appendix A, PLM.

Layered samples are considered non-homogeneous."Misc" is miscellaneous. "NAD" is No Asbestos Detected.
Asbestos consists of the following minerals: chrysotile, amosite, crocidolite, tremolite, actinolite, anthophyllite.
Small diameter fibers such as those found in vinyl floor tiles, may not be detected by PLM.
Asbestos detection interferences may result from material binders.
Qualitative and quantitative TEM analysis may be recommended for difficult samples.
Quantitative analysis by PLM point count or TEM is recommended for samples testing at < or = to 1% asbestos.
The following estimate of error for this method by visual estimation of asbestos percent are as follows:
1% asbestos: 0-3% error, 5% asbestos: 1-9% error, 10% asbestos: 5-15% error, 20% asbestos: 10-30% error.
This report pertains only to the samples listed on the report. Report considered valid only when signed by analyst.

Reviewed by:



NVLAP



Appendix H

Appendix H
2006 Dust Analytical Data Packages

LabCor Portland Inc
Lab/Cor Portland, Inc.
4321 SW Corbett Ave., Ste A
Portland, OR 97239

Analysis Report Cover

Final Report

Asbestos and Environmental Analysis

Phone: (503) 224-5055
Fax: (503) 228-8282
http://www.labcorpdx.net

Job Number: 060359 **PDX**

Report Number: 060359R03

Report Date: 9/29/2006

Client: Parametrix

Address: 700 NE Multnomah, Ste. 1000
Portland, OR 97232-2131

Project Name: Northridge Estates

Project Num: 35430

PO Number:

Sub Project:

Enclosed please find results for samples submitted to our laboratory. A list of samples and analyses follows:

Lab/Cor Sample #	Client Sample # and Description	Analysis	Analysis Notes	Date Received:
060359 - S67	NR-00140 -	ASTM, surface dust - ISO		6/30/2006
060359 - S68	NR-00262 -	ASTM, surface dust - ISO		6/30/2006
060359 - S69	NR-00263 -	ASTM, surface dust - ISO		6/30/2006
060359 - S70	NR-00264 -	ASTM, surface dust - ISO		6/30/2006
060359 - S71	NR-00265 -	ASTM, surface dust - ISO		6/30/2006
060359 - S72	NR-00266 -	ASTM, surface dust - ISO		6/30/2006
060359 - S73	NR-00267 -	ASTM, surface dust - ISO		6/30/2006
060359 - S74	NR-00269 -	ASTM, surface dust - ISO		6/30/2006
060359 - S75	NR-00270 -	ASTM, surface dust - ISO		6/30/2006
060359 - S76	NR-00271 -	ASTM, surface dust - ISO		6/30/2006
060359 - S77	NR-00272 -	ASTM, surface dust - ISO		6/30/2006
060359 - S78	NR-00273 -	ASTM, surface dust - ISO		6/30/2006
060359 - S79	NR-00274 -	ASTM, surface dust - ISO		6/30/2006
060359 - S80	NR-00275 -	ASTM, surface dust - ISO		6/30/2006
060359 - S81	NR-00366 -	ASTM, surface dust - ISO		6/30/2006
060359 - S82	NR-00367 -	ASTM, surface dust - ISO		6/30/2006

ASTM, surface dust - ISO - Ref. ISO 13794

Preparation and analysis of the above samples was conducted in accordance with the ASTM # D-5755-03 for the identification of asbestos in surface dust. Samples were collected with a microvac technique onto 0.45 µm pore size mixed cellulose ester (MCE) filters. Sample cassettes were rinsed in distilled, particle-free water, sonicated lightly to homogenize and removed particulates. Aliquots were taken and filtered onto 0.22 µm pore size mixed cellulose ester filters, then air-dried. The samples were carbon coated at high vacuum with a thin layer of carbon, placed on 200 mesh copper grids and allowed to dissolve in N,N-Dimethlyformamide / Acetone baths until cleared of filter debris.

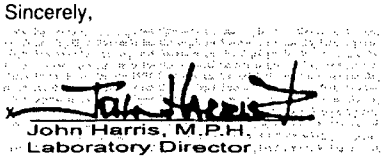
TEM analysis was performed using a transmission electron microscope operated at 100KV equipped with an EDS X-ray analyzer. The air samples were analyzed at a screen magnification of approximately 15,000x - 20,000x using an accelerating voltage of 100 KV. The sizing of grid openings was performed on the microscope at a magnification of approximately 550X. Counting rules and structure classification for this method follow the ISO 13794 indirect method.

Disclaimer

The results reported relate only to the samples tested or analyzed. Interpretation of these results is the sole responsibility of the client.

If further clarification of these results is needed, please call us. Thank you for allowing the staff at Lab/Cor Portland, Inc. the opportunity to provide you with the analytical services.

Sincerely,



John Harris, M.P.H.
Laboratory Director

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Final Report

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ASTM, surface dust - ISO Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R03
Date Received: 6/30/2006

Lab/Cor Sample No.: S67
Client Sample No.: NR-00140
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 3
Aliquot Dilution: 0.15
Final Dilution: 0.0225

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 59.19791
Dectection Limit. (struc/cm2) : 177.00176

Analyst(s)	Analysis Date
JH	8/24/2006
JH	8/25/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	5.92E+01	1.48E+00 - 3.30E+02 - Poisson	1	
Total Asbestos Structures	5.92E+01	1.48E+00 - 3.30E+02 - Poisson		1
Asbestos Structures > 5um and 5:1	< 5.92E+01	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 5.92E+01	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 5.92E+01	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 5.92E+01	0.00E+00 - 3.69E+00 - Poisson	0	

Lab/Cor Sample No.: S68
Client Sample No.: NR-00262
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1
Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s)	Analysis Date
JH	8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

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Final Report

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R03
Date Received: 6/30/2006

Lab/Cor Sample No.: S69
Client Sample No.: NR-00263
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH
Analysis Date 8/24/2006

Structure Type	Concentration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim	Total
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

Lab/Cor Sample No.: S70
Client Sample No.: NR-00264
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 4
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.05796
Analytical Sens. (struc/cm2) : 221.99218
Dectection Limit. (struc/cm2) : 663.75661

Analyst(s) JH
Analysis Date 8/24/2006

Structure Type	Concentration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim	Total
Primary Asbestos Structures	< 2.22E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 2.22E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 2.22E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 2.22E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 2.22E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 2.22E+02	0.00E+00 - 3.69E+00 - Poisson	0	

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Final Report

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ASTM, surface dust - ISO Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R03
Date Received: 6/30/2006

Lab/Cor Sample No.: S71
Client Sample No.: NR-00265
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH
Analysis Date 8/24/2006

Structure Type	Concentration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

Lab/Cor Sample No.: S72
Client Sample No.: NR-00266
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH
Analysis Date 8/24/2006

Structure Type	Concentration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R03
Date Received: 6/30/2006

Lab/Cor Sample No.: S73
Client Sample No.: NR-00267
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH
Analysis Date 8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

Lab/Cor Sample No.: S74
Client Sample No.: NR-00269
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH
Analysis Date 8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

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Final Report

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ASTM, surface dust - ISO Summary Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R03
Date Received: 6/30/2006

Lab/Cor Sample No.: S75
Client Sample No.: NR-00270
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH
Analysis Date 8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

Lab/Cor Sample No.: S76
Client Sample No.: NR-00271
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH
Analysis Date 8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim	Structure Count[1] Total
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R03
Date Received: 6/30/2006

Lab/Cor Sample No.: S77
Client Sample No.: NR-00272
Description:
Filter Fraction: 1 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.0025
Volume Taken: 1

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH **Analysis Date** 8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

Lab/Cor Sample No.: S78
Client Sample No.: NR-00273
Description:
Filter Fraction: 1 **Aliquot Dilution:** 0.05
Residual Ash Vol: 20 **Final Dilution:** 0.0025
Volume Taken: 1

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s) JH **Analysis Date** 8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

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ASTM, surface dust - ISO Summary Data

Job Number: 060359 PDX
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R03
Date Received: 6/30/2006

Lab/Cor Sample No.: S79
Client Sample No.: NR-00274
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2): 300
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 5
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.07245
Analytical Sens. (struc/cm2): 177.59374
Dectection Limit. (struc/cm2): 531.00529

Analyst(s)	Analysis Date
JH	8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

Lab/Cor Sample No.: S80
Client Sample No.: NR-00275
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2): 300
Lab Filter Area (mm2): 193
Grid Openings Analyzed: 5
Average Grid Opening Area: 0.01449
Area Analyzed (mm2): 0.07245
Analytical Sens. (struc/cm2): 177.59374
Dectection Limit. (struc/cm2): 531.00529

Analyst(s)	Analysis Date
JH	8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Summary Data

Job Number: 060359 **PDX**
Client: Parametrix
Project Name: Northridge Estates

Report Number: 060359R03
Date Received: 6/30/2006

Lab/Cor Sample No.: S81
Client Sample No.: NR-00366
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s)	Analysis Date
JH	8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

Lab/Cor Sample No.: S82
Client Sample No.: NR-00367
Description:
Filter Fraction: 1
Residual Ash Vol: 20
Volume Taken: 1

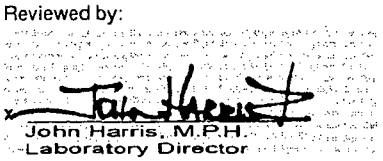
Aliquot Dilution: 0.05
Final Dilution: 0.0025

Sample Area/Mass/Volume (cm2) : 300
Lab Filter Area (mm2) : 193
Grid Openings Analyzed : 5
Average Grid Opening Area : 0.01449
Area Analyzed (mm2) : 0.07245
Analytical Sens. (struc/cm2) : 177.59374
Dectection Limit. (struc/cm2) : 531.00529

Analyst(s)	Analysis Date
JH	8/24/2006

Structure Type	Concen-tration (struc/cm2)	95% Confidence Interval (struc/cm2)	Structure Count[1] Prim/Total	
Primary Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Total Asbestos Structures	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
Asbestos Structures > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	
Asbestos Fibers and Bundles > 5um and 5:1	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Fibers-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson		0
PCM Equivalent Structures-ISO	< 1.78E+02	0.00E+00 - 3.69E+00 - Poisson	0	

Reviewed by:



John Harris, M.P.H.
Laboratory Director

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ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref. ISO 13794** **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00140** Lab/Cor Sample No: **S67**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G4	1	A21				NSD							
G4	2	B2				NSD							
G5	3	C22				NSD							
G5	4	A10	CD	1	1	F	0.9	0.06	15	Chrysotile		too close to grid bar for EDS	

ItemType	ItemNum	Confirmed	Comment
Diffraction	261	JH 8/24/2006	
Brightfield	262		

G5	5	D41				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref. ISO 13794** **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00262** Lab/Cor Sample No: **S68**

Client Description: **Date Sampled: 6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	B31				NSD							
G1	2	D20				NSD							
G1	3	A2				NSD							
G2	4	B30				NSD							
G2	5	D23				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00263** Lab/Cor Sample No: **S69**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	C12				NSD							
G1	2	D13				NSD							
G1	3	A32				NSD							
G2	4	D40				NSD							
G2	5	B3				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00264** Lab/Cor Sample No: **S70**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	C2				NSD							
G1	2	D10				NSD							
G2	3	D42				NSD							
G2	4	A10				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00265** Lab/Cor Sample No: **S71**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A20				NSD							
G1	2	C22				NSD							
G1	3	B21				NSD							
G2	4	D11				NSD							
G2	5	B2				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00266** Lab/Cor Sample No: **S72**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A2				NSD							
G1	2	B11				NSD							
G1	3	C30				NSD							
G2	4	B23				NSD							
G2	5	C30				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref. ISO 13794** **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00267** Lab/Cor Sample No: **S73**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A13				NSD							
G1	2	D10				NSD							
G1	3	D32				NSD							
G2	4	C4				NSD							
G2	5	C14				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref. ISO 13794** **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00269** Lab/Cor Sample No: **S74**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A30				NSD							
G1	2	C21				NSD							
G1	3	A23				NSD							
G2	4	B20				NSD							
G2	5	D2				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00270** Lab/Cor Sample No: **S75**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	D11				NSD							
G1	2	A20				NSD							
G1	3	B3				NSD							
G2	4	C10				NSD							
G2	5	B32				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref. ISO 13794**

Report Number: 060359R03

Client: *Parametrix*

Date Received: 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00271** Lab/Cor Sample No: **S76**

Client Description: **Date Sampled: 6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	C11				NSD							
G1	2	A22				NSD							
G1	3	B2				NSD							
G2	4	C11				NSD							
G2	5	D2				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref. ISO 13794** **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00272** Lab/Cor Sample No: **S77**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	D21				NSD							
G1	2	C2				NSD							
G1	3	B10				NSD							
G2	4	A13				NSD							
G2	5	D20				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00273** Lab/Cor Sample No: **S78**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A1				NSD							
G1	2	D2				NSD							
G1	3	C21				NSD							
G2	4	B13				NSD							
G2	5	D1				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	*Primary Asbestos Structures*	PCMEF-ISO	*PCM Equivalent Fibers-ISO*
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00274** Lab/Cor Sample No: **S79**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	D20				NSD							
G1	2	A23				NSD							
G1	3	C10				NSD							
G2	4	C1				NSD							
G2	5	D21				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref. ISO** 13794 **Report Number:** 060359R03
Client: Parametrix **Date Received:** 6/30/2006
Project Name: Northridge Estates

Client Sample No: **NR-00275** Lab/Cor Sample No: **S80**
Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A22				NSD							
G1	2	B30				NSD							
G1	3	C32				NSD							
G2	4	D22				NSD							
G2	5	C13				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00366** Lab/Cor Sample No: **S81**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G1	1	A22				NSD							
G1	2	D1				NSD							
G1	3	C12				NSD							
G2	4	A12				NSD							
G2	5	A32				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref.** ISO 13794 **Report Number:** 060359R03

Client: Parametrix **Date Received:** 6/30/2006

Project Name: Northridge Estates

Client Sample No: **NR-00367** Lab/Cor Sample No: **S82**

Client Description: **Date Sampled:** **6/22/2006**

Gr	No.	Loc.	ID	Prim	Tot	Class	Len	Wid	Asp	Analyte	Elements	Comment	Count Categories
G4	1	B21				NSD							
G4	2	C20				NSD							
G4	3	D23				NSD							
G5	4	A10				NSD							
G5	5	C11				NSD							

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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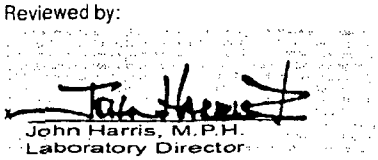
Asbestos and Environmental Analysis

ASTM, surface dust - ISO Raw Data

Job Number: 060359 **PDX** **Ref. ISO 13794** **Report Number:** 060359R03
Client: Parametrix **Date Received:** 6/30/2006
Project Name: Northridge Estates

Reviewed by:



John Harris, M.P.H.
Laboratory Director

Count Categories

AFB>5	Asbestos Fibers and Bundles > 5um and	AS>5	Asbestos Structures > 5um and 5:1
PAS	Primary Asbestos Structures	PCMEF-ISO	PCM Equivalent Fibers-ISO
PCMES-ISO	PCM Equivalent Structures-ISO	TAS	Total Asbestos Structures

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