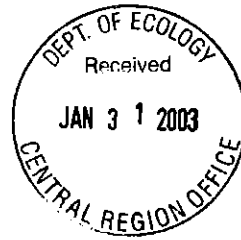


**Senior Citizens Center
at Gailleon Park**



Cleanup Action Report

Prepared for
The City of Yakima
Yakima, Washington

Prepared by
Floyd Snider McCarthy, Inc.
83 South King Street
Suite 614
Seattle, Washington 98104

JANUARY 2003

FINAL

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INTRODUCTION

This report documents the cleanup of arsenic- and lead-contaminated soils at Gailleon Park in Yakima, Washington. The cleanup of Gailleon Park was undertaken voluntarily by the City of Yakima (City) as part of the development of the park into a new Senior Citizens Center. The cleanup was performed consistent with the requirements of the Model Toxics Control Act (Chapter 173-340 WAC; Ecology 2001). This report is being submitted to the Washington State Department of Ecology (Ecology) for review under the Voluntary Cleanup Program.

BACKGROUND

Gailleon Park (Site) is located at the southeast corner of the intersection of the North 65th Avenue and Summitview Avenue in Yakima, Washington. A vicinity map is included as Figure 1. Gailleon Park is a rectangular parcel of grassy land approximately 4.5 acres in size located adjacent to the playfields of Summitview Elementary School. An irrigation canal running west to east crosses the northernmost portion of the Site. There is a steep embankment running along the western boundary of the Site parallel to North 65th Avenue. Appendix A presents several site photographs of the Site taken during the summer of 2002. The surrounding area is zoned for and occupied by single-family residences and the Site lies within a single-family residential (R-1) zone. This Site is designated as a park in the Yakima Urban Area Comprehensive Plan, adopted April 1997.

The land is owned by the City of Yakima. David and Barbara Clevenger gave the land to the City in December 1974 to honor David's parents, Gail and Leona Clevenger. The City has never developed the property. Recently, an anonymous donor approached the City with plans to fund the building of a much-needed Senior Citizens Center if the City could locate a suitable parcel of City-owned land. Gailleon Park was selected as the best location for the development. However, given its past use as a pear orchard, the City was concerned that the soils would contain lead arsenate. The contaminants are likely the remnants of orchard lead arsenate applications in the early-mid 1900s. Figure 2 presents a floor plan for the new Senior Citizens Center.

At the City's request, Ecology conducted a thorough soil testing program at Gailleon Park in the summer of 2002. The testing was done using a portable X-Ray fluorescence (XRF) meter. A subset of the samples was sent to an analytical laboratory to validate the XRF results. Appendix B contains a description of the testing procedures, a map of sample locations, and a summary of the analytical results. The results of Ecology testing indicate that the surface soils south of the irrigation canal are contaminated with lead and arsenic. Arsenic was detected at concentrations up to 99 mg/kg, exceeding the MTCA Method A cleanup standard of 20 mg/kg. Lead was also found at concentrations exceeding the MTCA Method A cleanup standard of 250 mg/kg, with the maximum detected concentration of lead being 799 mg/kg. The samples with the highest concentrations were from the upper 1 foot of soil. Several samples of deeper soil (1 to 2 feet below ground surface) were also collected. Lead concentrations were less than the cleanup level in these samples, but arsenic was detected at concentrations up to 85 mg/kg, in exceedance of the cleanup level. Arsenic and lead levels in samples tested north of the irrigation canal were found to be less than or equal to the associated cleanup levels.

SELECTED CLEANUP ACTION

Excavation of the contaminated soils was considered as a potential cleanup action; however, the volume of soil excavated would be large (approximately 20,000 tons) due to the widespread and deep distribution of arsenic and lead at the Site. The estimated cost to excavate and backfill the estimated 20,000 tons of contaminated soils is approximately \$500,000. Excavation as a potential cleanup action was rejected because of the excessive cost.

Given that the intended redevelopment of the Site as a Senior Citizens Center would leave most of the Site covered by asphalt parking, concrete walkways, or structures, the selected cleanup action is to cover the surface soils of the Site with a minimum of 1 foot¹ of "clean" structural fill (e.g., arsenic and lead at levels less than the cleanup level). After redevelopment, most of the Site would then be permanently covered with pavement or structures to further eliminate direct contact/ingestion of the contaminated soils. Only a limited portion of the Site will be landscaped.

Cleanup Plan

The cleanup plan consisted of the following elements:

- Cover contaminated soils south of the irrigation ditch with a minimum of 1 foot of clean, imported fill. The cover of clean, imported fill would extend right up to the property boundaries to the south, west and east.
- Provide institutional controls that include: a restrictive covenant, regular inspection of the paved and landscaped areas, and a Contaminated Soils Management Plan. Institutional controls are necessary to ensure that the cover soil is not inadvertently breached resulting in exposure to underlying contaminated soil during digging activities.
- Control stormwater so it does not leave the Site boundaries.

The selected option works well with the concurrent engineering requirement, specified in the Site Grading Plan, of filling the Site to meet the subgrade elevations. This was necessary to minimize the steep grade change to the Site interior from the embankment along North 65th Avenue. On-site infiltration of stormwater was also a necessary City requirement.

The cleanup plan described above was verbally approved by Ecology in a meeting held on November 7, 2002. The final grading plan for the Site contains both pre-cleanup and current subgrade elevations. The difference between the two elevations is the fill thickness that was placed on the Site. A copy of this plan is reproduced in Appendix C. The grading plan also called for limited excavation of structurally unsuitable soils beneath the future building and regrading to ensure that the 1-foot minimum fill requirement was met along the Site boundaries.

¹ Based on prior cleanup actions, such as that conducted at Kissel Park in Yakima, Washington, Ecology considers 1 foot of fill an adequate depth for protection from soils contaminated with lead arsenate.

Cleanup Activities and Documentation

The cleanup action was performed in late November through early December 2002. The earthwork contractor was Evans and Sons, Inc. (Evans & Sons) of Yakima Washington. On-site soils regraded prior to filling were redistributed to the south, under future parking areas. No cleanup activity was conducted in the area north of the irrigation canal.

Directly south of the irrigation canal is a right-of-way roadbed for canal maintenance vehicles. It was suspected that imported soils were brought in to create the roadbed. Therefore, it was possible that the roadbed soils were "clean." If so, the grading plan called for leaving the roadbed grade unchanged, a requirement of the right-of-way. At the request of the City, Ecology tested the roadbed soil, which had not been tested originally. Results confirmed that the upper 1 foot of roadbed soil was clean and so could be left ungraded. However, the contractor cut away the upper 1 foot of roadbed as part of the grading of the Site. Apparently, this was done to blend with the overall grading activities and to avoid spreading contaminated soil atop the roadbed from adjacent grading activities. The roadbed was later reestablished to its pre-existing grade with 1 foot of imported fill.

Fill soil brought into the Site originated at the Anderson Pit along Tieton Drive. Evans & Sons collected a sample of the fill soil and had it analyzed for lead and arsenic. Arsenic and lead were not detected. Appendix D contains a copy of the analytical report. No other analytical testing was performed.

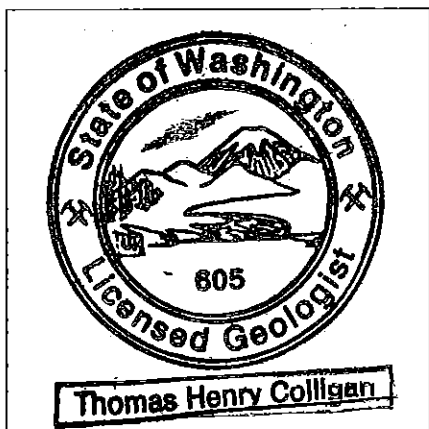
Spot-checking by the City of Yakima construction supervisors and the representative of the donor verified that the final sub grade elevations were achieved. This resulted in compacted fill being placed across the Site at a minimum of 1-foot thickness, in accordance with the cleanup plan. In much of the Site, filling exceeded the minimum 1-foot requirement with up to 4 feet of fill placed in certain areas. Subsurface recharge drains placed were excavated into the fill soils for infiltration of stormwater following site redevelopment.

Construction of the Senior Citizens Center will begin in the spring of 2003. Due to the need to bring in utilities to the Site, some excavation of trenches into the fill and underlying contaminated soil may occur. Should this happen, contaminated soil will be handled in accordance with the Contaminated Soils Management and Inspection Plan in Appendix E. The plan calls for segregation of soil beneath the overlying clean fill and, where possible, placement back into the utility trench (to within 1 foot below grade). Excess soil that cannot be backfilled must be transported off-site for disposal in an approved landfill.

SUMMARY OPINION

It is FSM's opinion that the cleanup described in this report was conducted in substantial compliance with the cleanup action plan and meets the requirements of a voluntary cleanup action conducted under the MTCA.

Approved by:



Thomas H. Colligan
Signature

1/28/03
Date

REFERENCES

Washington State Department of Ecology (Ecology). 2001. *Chapter 173-340 WAC, Model Toxics Control Act*. 12 February.

**Senior Citizens Center
at Gailleon Park**

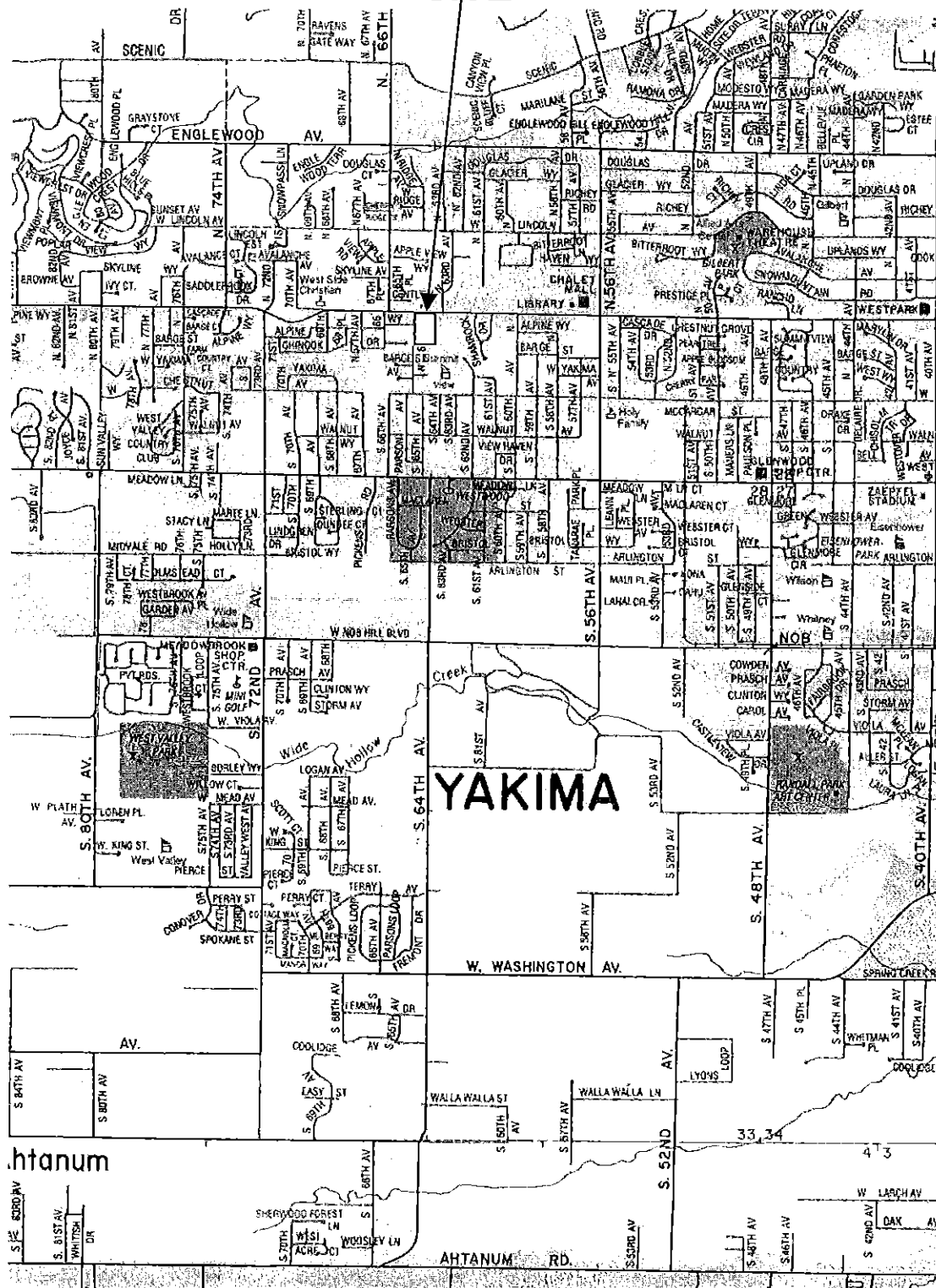
Cleanup Action Report

Figures

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SITE

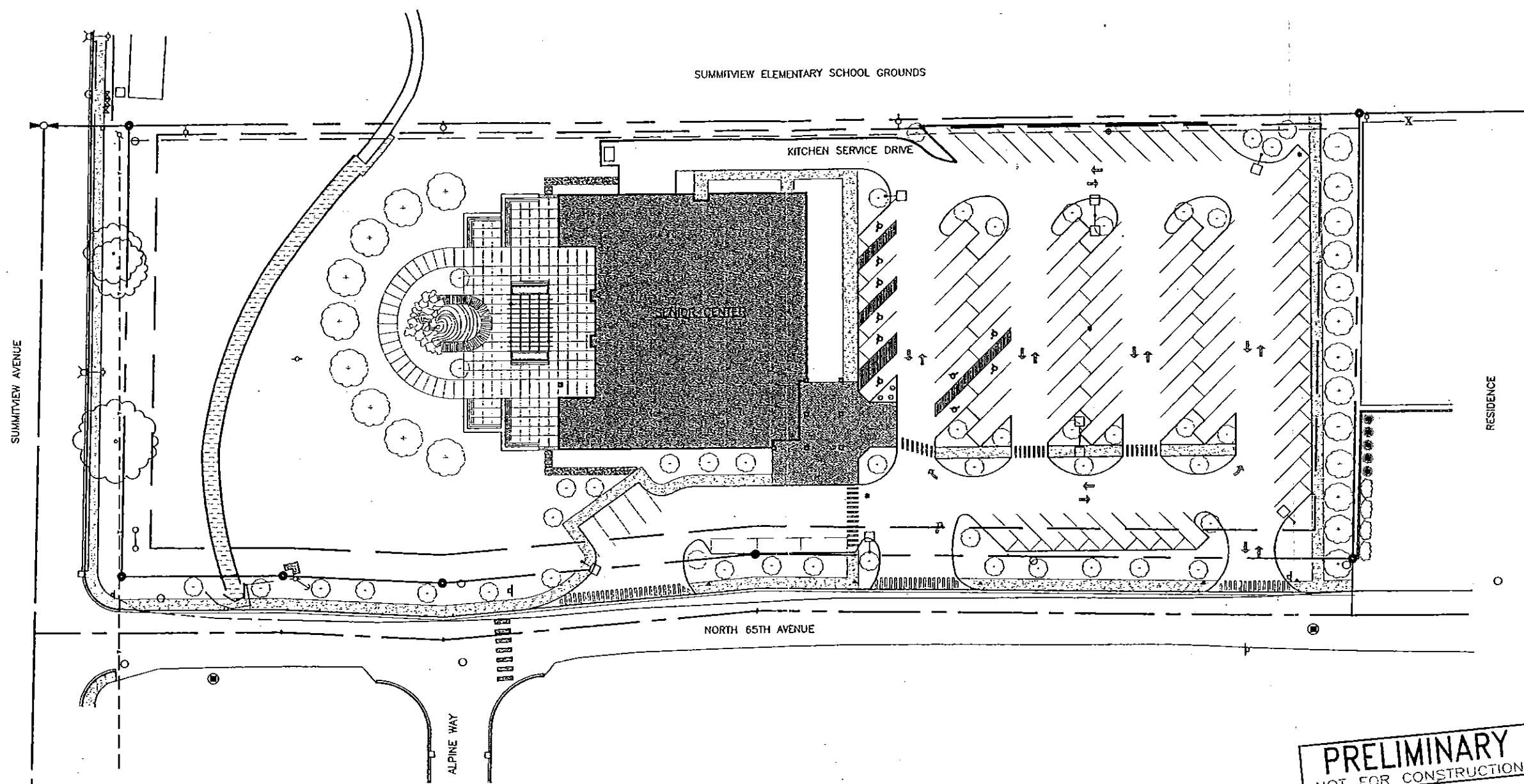



Source: "Yakima: Yakima Valley Recreation" map by King of the Road Maps, Inc., dated 1991.



City of Yakima Gailleon Park Yakima, Washington

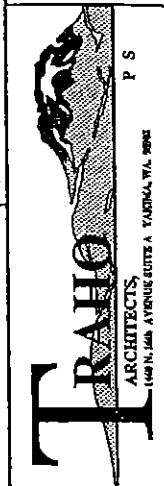
Figure 1
Vicinity Map





 SCALE: 1" = 30'

PRELIMINARY
 NOT FOR CONSTRUCTION



SENIOR CENTER
 GALLEON PARK
 YAKIMA, WASHINGTON

FLOOR PLAN

DATE	SEP. 19, 2002
JOB	02-23
SCALE	N.T.S.
C001	

**Senior Citizens Center
at Gailleon Park**

Cleanup Action Report

**Appendix A
Site Photographs**

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Site Photo #1: Irrigation ditch along Fruitvale



Site Photo #2: Looking east



Site Photo #3: Looking due east



Site Photo #4: Looking southeast

**Senior Citizens Center
at Gailleon Park**

Cleanup Action Report

**Appendix B
X-Ray Fluorescence Procedures and
Results**

FINAL



OCT 28 2002

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

15 West Yakima Avenue, Suite 200 • Yakima, Washington 98902-3452 • (509) 575-2490

October 24, 2002

Ms. Denise Nichols
City of Yakima
Department of Public Works
Parks & Recreation Division
2301 Fruitvale Blvd
Yakima, WA 98902

Mr. Tom Colligan
Floyd Snider McCarthy, Inc.
83 S. King Street, Suite 614
Seattle, WA 98104

Dear Ms. Nichols and Mr. Colligan:

Enclosed is the sampling data package conducted by Ecology for the Gailleon Park Project. The Gailleon Park project samples were taken to assist the City's Consulting Engineer in determining appropriate remediation options for the Site.

Gailleon Park samples were collected on July 8, 2002 using a 1-1/8" x 24" unslotted stainless steel probe with butyrate plastic liner or 3" stainless steel auger. The soil sample was removed from the 1-1/8" probe and the ends of the plastic liner capped or the 3" auger sample placed in a stainless steel bowl and mixed. The probe and auger were decontaminated using a soap water solution, drinking water rinse, and a final deionized water rinse. A new butyrate plastic liner was used for 1-1/8" probe sample. The samples were stored at 4 degree centigrade awaiting sample preparation and laboratory ICP and XRF analysis. The sample locations are shown in attachment 1 with the depth of sample achieved at each location and corresponding lead/arsenic concentrations. A complete data package is enclosed for your records (attachment 2).

Laboratory XRF Analysis Procedure

Laboratory NITON XRF analysis was performed using procedures described in EPA Method 6200, Field Portable X-Ray Fluorescence Spectrometry for the Determination of Elemental Concentrations in Soil and Sediment.

If you have any questions or need clarification, please contact me at (509) 457-7127.

Sincerely,

Norman T. Hepner, P.E.
Toxics Cleanup Program

Enclosure



Galeon Park

HOUSE

FENCE

4	Depth	Pb	As	3	Depth	Pb	As	2	Depth	Pb	As	1	Depth	Pb	As
A	0-9"	245	24	A	0-6"	304	21	A	0-6"	281	18	A	0-4"	140	15
				B	6-13"	197	38	B	6-28"	44	23	B	6-23"	37	13

100'

100'

5	Depth	Pb	As	6	Depth	Pb	As	7	Depth	Pb	As	8	Depth	Pb	As
A	0-8"	612	69	A	0-11"	799	80	A	0-6"	404	25	A	0-4"	471	41
								B	6-22"	48	26	B	6-20"	10	40

slope

12	Depth	Pb	As	11	Depth	Pb	As	10	Depth	Pb	As	9	Depth	Pb	As
A	0-6"	542	43	A	0-6"	729	99	A	0-6"	420	48	A	0-5"	786	38
B	6-26"	53	48	B	6-23"	84	76	B	6-18"	219	56	B	6-26"	43	61

15'
10'

13	Depth	Pb	As	14	Depth	Pb	As	15	Depth	Pb	As	16	Depth	Pb	As
A	0-6"	320	37	A	0-6"	345	86	A	0-6"	699	76	A	0-5"	439	48
B	6-26"	29	32	B	6-25"	232	82	B	6-24"	237	94	B	6-24"	74	43

20	Depth	Pb	As	19	Depth	Pb	As	18	Depth	Pb	As	17	Depth	Pb	As
A	0-6"	114	18	A	0-6"	491	49	A	0-6"	439	42	A	0-6"	341	44
B	6-12"	58	21	B	6-12"	452	78	B	6-12"	191	77	B	6-12"	19	66
C	12-18"	23	LOD	C	12-18"	32	76	C	12-20"	26	40	C	12-18"	11	51
D	18-24"	13	LOD	D	18-25"	23	85					D	18-24"	12	30

Playfield

slope

75'

22	Depth	Pb	As	23	Depth	Pb	As	24	Depth	Pb	As
A	0-6"	91	LOD	A	0-6"	144	16	A	0-6"	88	18
B	6-12"	69	10								
C	12-18"	41	20								
D	18-24"	21	9								

25	Depth	Pb	As	26	Depth	Pb	As
A	0-6"	246	20	A	0-6"	196	20

65th AVE.

SUMMITVIEW AVE.

IRRIGATION CANAL

ATCH 2: LAB XRF

Serial #XL700-U35737059LY

BULK

Header:

Site: <none>

No	Site	Elv	Side	Source	Ssec	Date/Time	Pb	Pb Error	As	As Error	Note:
1	YAKIMA	GALEON	GENPL	BLANK	121.8	7/9/2002 8:39	<LOD	10.35	<LOD	10.65	
2	YAKIMA	GALEON	GENPL	LOW1	162.5	7/9/2002 8:44	18.1	8.6	21.8	9.4	
3	YAKIMA	GALEON	GENPL	LOW2	122.3	7/9/2002 8:48	24.4	10.4	<LOD	16.2	
4	YAKIMA	GALEON	GENPL	LOW3	122.8	7/9/2002 8:52	25.7	10.5	<LOD	16.35	
5	YAKIMA	GALEON	GENPL	D-1A	412.8	7/9/2002 9:27	140.1	9.4	15	9.1	A=0"-6"
6	YAKIMA	GALEON	GENPL	D-1B	401.1	7/9/2002 9:42	37.2	6.3	13	6.5	B=6"-20"
7	YAKIMA	GALEON	GENPL	D-2A	393.4	7/9/2002 10:00	281.2	12.2	18.2	11.3	A=0"-6"
8	YAKIMA	GALEON	GENPL	D-2B	384.7	7/9/2002 10:12	43.6	6.6	23.2	7	B=6"-23"
9	YAKIMA	GALEON	GENPL	D-3A	386.2	7/9/2002 10:25	304.4	12.7	21.1	11.8	A=0"-6"
10	YAKIMA	GALEON	GENPL	D-3B	424.2	7/9/2002 10:39	197.3	10.1	38.4	9.9	B=6"-13"
11	YAKIMA	GALEON	GENPL	D-4A	390.1	7/9/2002 11:15	245.4	11	23.7	10.4	A=0"-9"
12	YAKIMA	GALEON	GENPL	D-5A	406	7/9/2002 11:35	612	16.4	69.4	15.2	A=0"-8"
13	YAKIMA	GALEON	GENPL	D-6A	396.9	7/9/2002 11:48	798.8	19	80.4	17.3	A=0"-11"
14	YAKIMA	GALEON	GENPL	D-7A	434.4	7/9/2002 12:02	403.6	13.4	24.9	12.3	A=0"-6"
15	YAKIMA	GALEON	GENPL	D-7B	411.3	7/9/2002 12:14	47.8	6.4	26.2	6.7	B=6"-22"
16	YAKIMA	GALEON	GENPL	D-8A	405.1	7/9/2002 12:26	470.8	14.7	41.1	13.6	A=0"-6"
17	YAKIMA	GALEON	GENPL	D-8B	390.2	7/9/2002 12:39	10.3	5.3	39.9	6.4	B=6"-20"
18	YAKIMA	GALEON	GENPL	D-9A	407.5	7/9/2002 13:36	786.4	19	37.6	17	A=0"-6"
19	YAKIMA	GALEON	GENPL	D-9B	417.5	7/9/2002 13:50	43.1	6.3	60.7	7.4	B=6"-26"
22	YAKIMA	GALEON	GENPL	D-10A	433.5	7/9/2002 14:02	420	13.8	48	12.9	A=0"-6"
23	YAKIMA	GALEON	GENPL	D-10B	401.7	7/9/2002 14:15	219.4	10.6	56.1	10.5	B=6"-19
24	YAKIMA	GALEON	GENPL	D-11A	401.5	7/9/2002 14:28	729.2	18.4	99	17.1	A=0"-6"
25	YAKIMA	GALEON	GENPL	D-11B	346.3	7/9/2002 14:40	84.4	8.2	75.5	9.3	B=6"-23"
26	YAKIMA	GALEON	GENPL	BLANK	134.4	7/9/2002 14:51	<LOD	9.75	<LOD	9.75	
27	YAKIMA	GALEON	GENPL	LOW1	123	7/9/2002 14:55	22.9	10.3	<LOD	16.35	
28	YAKIMA	GALEON	GENPL	LOW2	124.6	7/9/2002 15:27	22.3	10.2	<LOD	15.45	
29	YAKIMA	GALEON	GENPL	LOW3	141.1	7/9/2002 15:30	22.5	9.6	18.1	10.2	
30	YAKIMA	GALEON	GENPL	D-12A	406.1	7/9/2002 15:35	541.6	15.6	43.1	14.3	A=0"-6"
31	YAKIMA	GALEON	GENPL	D-12B	417.8	7/9/2002 15:46	53.4	6.7	47.7	7.4	B=6"-26"
32	YAKIMA	GALEON	GENPL	D-13A	438.4	7/9/2002 15:57	319.6	11.8	37	11.1	A=0"-6"

70	YAKIMA GALEON	GENPL	D-20B	423.5	7/11/2002 9:03	58	6.6	21.4	6.8	B=6"-12"
71	YAKIMA GALEON	GENPL	D-20C	458.6	7/11/2002 9:15	21.7	5.3	<LOD	8.1	C=12"-18"
72	YAKIMA GALEON	GENPL	D-20D	407.7	7/11/2002 9:27	12.8	5.4	<LOD	8.4	D=18"-24"
73	YAKIMA GALEON	GENPL	D-22A	412.5	7/11/2002 9:39	91.2	7.6	<LOD	10.95	A=0-6"
74	YAKIMA GALEON	GENPL	D-22B	455.7	7/11/2002 9:50	69.1	6.5	10.4	6.4	B=6"-12"
75	YAKIMA GALEON	GENPL	D-22C	499.9	7/11/2002 10:03	40.7	5.4	19.8	5.7	C=12"-18"
76	YAKIMA GALEON	GENPL	D-22D	469.8	7/11/2002 10:16	20.5	5.1	8.7	5.2	D=18"-24"
77	YAKIMA GALEON	GENPL	D-23A	413.6	7/11/2002 10:29	143.7	8.7	16.1	8.3	A=0-8"
78	YAKIMA GALEON	GENPL	D-24A	407.6	7/11/2002 10:40	88.4	7.6	17.6	7.5	A=0-8"
79	YAKIMA GALEON	GENPL	D-25A	406.6	7/11/2002 10:52	246.4	10.7	19.8	10.1	A=0-8"
80	YAKIMA GALEON	GENPL	D-26A	415.8	7/11/2002 11:03	195.7	9.7	19.9	9.2	A=0-8"
81	YAKIMA GALEON	GENPL	BLANK	121.7	7/11/2002 11:14	<LOD	10.35	<LOD	10.65	
82	YAKIMA GALEON	GENPL	LOW1	121.8	7/11/2002 11:18	20.4	9.9	23.2	10.8	
83	YAKIMA GALEON	GENPL	LOW2	121.9	7/11/2002 11:21	15.9	9.9	15.8	10.5	
84	YAKIMA GALEON	GENPL	LOW3	121.9	7/11/2002 11:24	27.9	10.5	<LOD	16.35	

AMTEST

LABORATORIES

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Tel: 425.885.1664
Fax: 425.883.3495
www.amtestlab.com

Professional
Analytical
Services

Aug 19 2002
Department of Ecology
C/O Bay Zinc
15 W Yakima Ave, Suite 200
Yakima, WA 98902
Attention: Norman Hepner

Dear Norman Hepner:

Enclosed please find the analytical data for your Bay Zinc project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AM TEST ID	TEST
DR-1	Water	02-A009033	MET,
K-1	Soil	02-A009034	CONV, MET,
K-10	Soil	02-A009035	CONV, MET,
K-14	Soil	02-A009036	CONV, MET,
D-1A	Soil	02-A009037	CONV, MET,
D-2A	Soil	02-A009038	CONV, MET,
D-3B	Soil	02-A009039	CONV, MET,
D-4A	Soil	02-A009040	CONV, MET,
D-5A	Soil	02-A009041	CONV, MET,
D-6A	Soil	02-A009042	CONV, MET,
D-7A	Soil	02-A009043	CONV, MET,
D-8A	Soil	02-A009044	CONV, MET,
D-9A	Soil	02-A009045	CONV, MET,
D-10B	Soil	02-A009046	CONV, MET,
D-11A	Soil	02-A009047	CONV, MET,
D-12A	Soil	02-A009048	CONV, MET,
D-13A	Soil	02-A009049	CONV, MET,
D-14A	Soil	02-A009050	CONV, MET,
D-15Bs	Soil	02-A009051	CONV, MET,
D-16A	Soil	02-A009052	CONV, MET,
D-17B	Soil	02-A009053	CONV, MET,
D-18B	Soil	02-A009054	CONV, MET,
D-19B	Soil	02-A009055	CONV, MET,
D-20A	Soil	02-A009056	CONV, MET,
D-22C	Soil	02-A009057	CONV, MET,
D-23A	Soil	02-A009058	CONV, MET,
D-24A	Soil	02-A009059	CONV, MET,
D-25A	Soil	02-A009060	CONV, MET,
D-26A	Soil	02-A009061	CONV, MET,
D-20D	Soil	02-A009062	CONV, MET,
D-1B	Soil	02-A009063	CONV, MET,

At the time of receipt, the samples were logged in and properly maintained prior to their subsequent analyses.

AMTEST
LABORATORIES

ATTN 2
LAB ICP

Professional
Analytical
Service

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Norm Hepner
Tel: 425.885.1001
Fax: 425.883.0995
www.amteslab.com

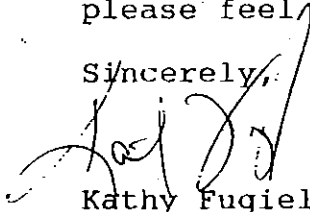
The analytical procedures used at Am Test are well documented, and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the QC results and "Methodology Report". This table includes information relative to the detection limits, analyses dates and method references.

Please note that the detection limits that are listed in the body of the report refer to the Method Detection Limits (MDL's), as opposed to Practical Quantitation Limits (PQL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,


Kathy Fugiel
Director of Inorganic Laboratory

Project #: Bay Zinc

BACT = Bacteriological
CONV = Conventional

MET = Metals
ORG = Organics

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Tel: 425.885.1664
Fax: 425.883.3495
www.amtestlab.com

ANALYSIS REPORT

Department of Ecology
C/O Bay Zinc
15 W Yakima Ave, Suite 200
Yakima, WA 98902
Attention: Norman Hepner

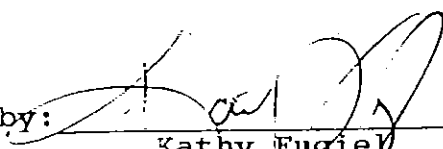
Date Received: 7/12/02
Date Reported: 8/19/02

Project Name: Bay Zinc
Project #: Bay Zinc

Water Samples

PARAMETER	UNITS	RESULT
02-A009033		
Client ID: DR-1		
Date Sampled: ,		
METALS		
Arsenic	mg/l	< 0.01
Lead	mg/l	0.02

Reported by:


Kathy Fugiel

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Tel: 425.885.1664
Fax: 425.883.3495
www.amtestlab.com

ANALYSIS REPORT

Department of Ecology
C/O Bay Zinc
15 W Yakima Ave, Suite 200
Yakima, WA 98902
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

Project Name: Bay Zinc
Project #: Bay Zinc

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009034

Client ID: K-1

Date Sampled: ,

Total Solids	%	91.
--------------	---	-----

METALS

Arsenic	ug/g	26.
---------	------	-----

Lead	ug/g	110
------	------	-----

Metals reported on a "dry weight basis".

02-A009035

Client ID: K-10

Date Sampled: ,

Total Solids	%	87.
--------------	---	-----

METALS

Arsenic	ug/g	15.
---------	------	-----

Lead	ug/g	64.
------	------	-----

Metals reported on a "dry weight basis".

02-A009036

Client ID: K-14

Date Sampled: ,

Total Solids	%	82.
--------------	---	-----

METALS

Arsenic	ug/g	6.0
---------	------	-----

Lead	ug/g	23.
------	------	-----

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES

ANALYSIS REPORT

Professional
Analytical
Services

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Tel: 425.883.1604
Fax: 425.883.3495
www.ecy.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009037

Client ID: D-1A

Date Sampled: ,

Total Solids	%	94.
--------------	---	-----

METALS

Arsenic	ug/g	8.2
---------	------	-----

Lead	ug/g	160
------	------	-----

Metals reported on a "dry weight basis".

02-A009038

Client ID: D-2A

Date Sampled: ,

Total Solids	%	95.
--------------	---	-----

METALS

Arsenic	ug/g	22.
---------	------	-----

Lead	ug/g	310
------	------	-----

Metals reported on a "dry weight basis".

02-A009039

Client ID: D-3B

Date Sampled: ,

Total Solids	%	94.
--------------	---	-----

METALS

Arsenic	ug/g	35.
---------	------	-----

Lead	ug/g	220
------	------	-----

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES
ANALYSIS REPORT

Professional
Analytical
Services

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Tel: 425.865.1604
Fax: 425.883.3495
www.ecy.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009040

Client ID: D-4A

Date Sampled: ,

Total Solids	%	93.
--------------	---	-----

METALS

Arsenic	ug/g	18.
---------	------	-----

Lead	ug/g	220
------	------	-----

Metals reported on a "dry weight basis".

02-A009041

Client ID: D-5A

Date Sampled: ,

Total Solids	%	92.
--------------	---	-----

METALS

Arsenic	ug/g	58.
---------	------	-----

Lead	ug/g	700
------	------	-----

Metals reported on a "dry weight basis".

02-A009042

Client ID: D-6A

Date Sampled: ,

Total Solids	%	92.
--------------	---	-----

METALS

Arsenic	ug/g	89.
---------	------	-----

Lead	ug/g	1000
------	------	------

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES

ANALYSIS REPORT

Professional
Analytical
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Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology

Tel: 425.883.1604

Fax: 425.883.3495

www.ecy.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02

Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009043

Client ID: D-7A

Date Sampled: ,

Total Solids	%	95.
--------------	---	-----

METALS

Arsenic	ug/g	25.
---------	------	-----

Lead	ug/g	450
------	------	-----

Metals reported on a "dry weight basis".

02-A009044

Client ID: D-8A

Date Sampled: ,

Total Solids	%	92.
--------------	---	-----

METALS

Arsenic	ug/g	45.
---------	------	-----

Lead	ug/g	570
------	------	-----

Metals reported on a "dry weight basis".

02-A009045

Client ID: D-9A

Date Sampled: ,

Total Solids	%	95.
--------------	---	-----

METALS

Arsenic	ug/g	50.
---------	------	-----

Lead	ug/g	920
------	------	-----

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES

ANALYSIS REPORT

Professional
Analytical
Services

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Tel: 425.883.1804
Fax: 425.883.3495
www.ecology.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009046

Client ID: D-10B

Date Sampled: ,

Total Solids	%	97.
--------------	---	-----

METALS

Arsenic	ug/g	50.
---------	------	-----

Lead	ug/g	260
------	------	-----

Metals reported on a "dry weight basis".

02-A009047

Client ID: D-11A

Date Sampled: ,

Total Solids	%	94.
--------------	---	-----

METALS

Arsenic	ug/g	94.
---------	------	-----

Lead	ug/g	810
------	------	-----

Metals reported on a "dry weight basis".

02-A009048

Client ID: D-12A

Date Sampled: ,

Total Solids	%	93.
--------------	---	-----

METALS

Arsenic	ug/g	35.
---------	------	-----

Lead	ug/g	460
------	------	-----

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES

ANALYSIS REPORT

Professional
Analytical
Services

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Tel: 425.885.1664
Fax: 425.883.3495
www.ecy.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009049

Client ID: D-13A

Date Sampled: ,

Total Solids	%	93.
--------------	---	-----

METALS

Arsenic	ug/g	33.
---------	------	-----

Lead	ug/g	310
------	------	-----

Metals reported on a "dry weight basis".

02-A009050

Client ID: D-14A

Date Sampled: ,

Total Solids	%	94.
--------------	---	-----

METALS

Arsenic	ug/g	79.
---------	------	-----

Lead	ug/g	400
------	------	-----

Metals reported on a "dry weight basis".

02-A009051

Client ID: D-15Bs

Date Sampled: ,

Total Solids	%	95.
--------------	---	-----

METALS

Arsenic	ug/g	97.
---------	------	-----

Lead	ug/g	280
------	------	-----

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES
ANALYSIS REPORT

Profess na:
Analyti /
Services

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Tel: 425.883.1664
Fax: 425.883.3495
www.ecy.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009052

Client ID: D-16A

Date Sampled: ,

Total Solids	%	94.
--------------	---	-----

METALS

Arsenic	ug/g	72.
---------	------	-----

Lead	ug/g	330
------	------	-----

Metals reported on a "dry weight basis".

02-A009053

Client ID: D-17B

Date Sampled: ,

Total Solids	%	92.
--------------	---	-----

METALS

Arsenic	ug/g	64.
---------	------	-----

Lead	ug/g	20.
------	------	-----

Metals reported on a "dry weight basis".

02-A009054

Client ID: D-18B

Date Sampled: ,

Total Solids	%	94.
--------------	---	-----

METALS

Arsenic	ug/g	78.
---------	------	-----

Lead	ug/g	210
------	------	-----

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES

ANALYSIS REPORT

Professional
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Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Tel: 425.883.1664
Fax: 425.883.3495
www.ecy.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009055

Client ID: D-19B

Date Sampled: ,

Total Solids	%	92.
--------------	---	-----

METALS

Arsenic	ug/g	84.
---------	------	-----

Lead	ug/g	560
------	------	-----

Metals reported on a "dry weight basis".

02-A009056

Client ID: D-20A

Date Sampled: ,

Total Solids	%	93.
--------------	---	-----

METALS

Arsenic	ug/g	16.
---------	------	-----

Lead	ug/g	130
------	------	-----

Metals reported on a "dry weight basis".

02-A009057

Client ID: D-22C

Date Sampled: ,

Total Solids	%	93.
--------------	---	-----

METALS

Arsenic	ug/g	20.
---------	------	-----

Lead	ug/g	37.
------	------	-----

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES

ANALYSIS REPORT

Professional
Analytical
Services

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Tel: 425.885.1664
Fax: 425.883.3495
www.ecy.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009058

Client ID: D-23A

Date Sampled: ,

Total Solids	%	94.
--------------	---	-----

METALS

Arsenic	ug/g	15.
---------	------	-----

Lead	ug/g	150
------	------	-----

Metals reported on a "dry weight basis".

02-A009059

Client ID: D-24A

Date Sampled: ,

Total Solids	%	94.
--------------	---	-----

METALS

Arsenic	ug/g	12.
---------	------	-----

Lead	ug/g	95.
------	------	-----

Metals reported on a "dry weight basis".

02-A009060

Client ID: D-25A

Date Sampled: ,

Total Solids	%	93.
--------------	---	-----

METALS

Arsenic	ug/g	23.
---------	------	-----

Lead	ug/g	300
------	------	-----

Metals reported on a "dry weight basis".

AMTEST

LABORATORIES
ANALYSIS REPORT

Professional
Analytical
Services

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Department of Ecology
Tel: 425.883.1864
Fax: 425.883.3495
www.ecy.wa.gov
Attention: Norm Hepner

Date Received: 7/12/02
Date Reported: 8/19/02

SOIL SAMPLES

PARAMETER	Units	Result
-----------	-------	--------

02-A009061

Client ID: D-26A

Date Sampled: ,

Total Solids	%	92.
--------------	---	-----

METALS

Arsenic	ug/g	27.
---------	------	-----

Lead	ug/g	240
------	------	-----

Metals reported on a "dry weight basis".

02-A009062

Client ID: D-20D

Date Sampled: ,

Total Solids	%	88.
--------------	---	-----

METALS

Arsenic	ug/g	< 6.6
---------	------	-------

Lead	ug/g	22.
------	------	-----

Metals reported on a "dry weight basis".

02-A009063

Client ID: D-1B

Date Sampled: ,

Total Solids	%	89.
--------------	---	-----

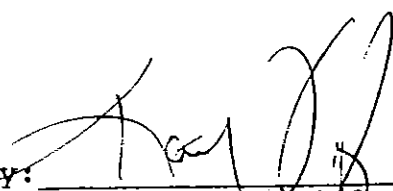
METALS

Arsenic	ug/g	12.
---------	------	-----

Lead	ug/g	32.
------	------	-----

Metals reported on a "dry weight basis".

Reported by:


Kathy Fugiel

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Tel: 425.885.1664
Fax: 425.885.0495
www.amtestlab.com
02-A009033

Quality Control Summary

DUPLICATES

sample	duplicate	RPD
value	value	%

STANDARD REFERENCE MATERIALS

measured	true	Recovery
value	value	%

Known	SRM: Arsenic	mg/l	0.50	0.50	100.
Known	SRM: Arsenic	mg/l	0.50	0.50	100.
Known	SRM: Lead	mg/l	0.50	0.50	100.
Known	SRM: Lead	mg/l	0.50	0.50	100.

BLANKS

Result

BLANK: Arsenic	mg/l	< 0.01
BLANK: Arsenic	mg/l	< 0.01
BLANK: Arsenic	mg/l	< 0.01
BLANK: Arsenic	mg/l	< 0.01
BLANK: Lead	mg/l	< 0.01
BLANK: Lead	mg/l	< 0.01
BLANK: Lead	mg/l	< 0.01
BLANK: Lead	mg/l	< 0.01

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Tel: 425.885.1664
Fax: 425.885.4495
www.amtestlab.com

Quality Control Summary (continued)

02-A009034
02-A009035
02-A009036
02-A009037
02-A009038
02-A009039
02-A009040
02-A009041
02-A009042
02-A009043
02-A009044
02-A009045
02-A009046
02-A009047
02-A009048
02-A009049
02-A009050
02-A009051
02-A009052
02-A009053
02-A009054
02-A009055
02-A009056
02-A009057
02-A009058
02-A009059
02-A009060
02-A009061
02-A009062
02-A009063

DUPLICATES

		sample value	duplicate value	RPD 3
02-A008857 DUP: Total Solids	%	16.	17.	6.1
02-A009036 DUP: Total Solids	%	82.	82.	0.00
02-A009046 DUP: Total Solids	%	97.	96.	1.0
02-A009056 DUP: Total Solids	%	93.	93.	0.00
02-A009275 DUP: Total Solids	%	1.3	1.3	0.00
02-A009873 DUP: Total Solids	%	17.	16.	5.1
02-A009034 DUP: Arsenic	ug/g	23.5	21.2	10.
02-A009045 DUP: Arsenic	ug/g	47.2	48.6	2.9
02-A009055 DUP: Arsenic	ug/g	77.7	73.0	5.2
02-A009034 DUP: Lead	ug/g	101.	94.6	18.
02-A009045 DUP: Lead	ug/g	972.	994.	2.5
02-A009055 DUP: Lead	ug/g	518.	504.	2.7
02-A009036 SPIKE: Arsenic	ug/g	4.90	19.0	12.0 118.
02-A009056 SPIKE: Arsenic	ug/g	14.8	18.5	12.0 114.
02-A009036 SPIKE: Lead	ug/g	19.2	28.0	12.0 73.3
02-A009056 SPIKE: Lead	ug/g	121.	130.	12.0 75.0

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

Tel: 425.885.1664
Fax: 425.885.3495
www.amtestlab.com

Quality Control Summary (continued)

STANDARD REFERENCE MATERIALS			measured	true	Recovery
			value	value	%
Known	SRM: Arsenic	ug/g	70.5	66.9	105.
Known	SRM: Arsenic	ug/g	70.8	66.9	106.
Known	SRM: Arsenic	ug/g	81.9	66.9	95.5
Known	SRM: Arsenic	ug/g	70.5	66.9	105.
Known	SRM: Lead	ug/g	133.	133.	100.
Known	SRM: Lead	ug/g	136.	133.	102.
Known	SRM: Lead	ug/g	120.	133.	90.2
Known	SRM: Lead	ug/g	133.	133.	100.
BLANKS				Result	
	BLANK: Total Solids			< 0.1	
	BLANK: Arsenic	ug/g		< 0.5	
	BLANK: Arsenic	ug/g		< 0.5	
	BLANK: Arsenic	ug/g		< 0.5	
	BLANK: Lead	ug/g		< 0.5	
	BLANK: Lead	ug/g		< 0.5	
	BLANK: Lead	ug/g		< 0.5	

Metals values in the QC tables are expressed on an "as received basis".
Refer to the attached table for additional information relative to the SRM's.

AMTEST

LABORATORIES

Professional
Analytical
Services

Am Test Inc.
14603 N.E. 87th St.
Redmond, WA
98052

METHODOLOGY REPORT

Tel: 425.885.1664
Fax: 425.883.3495

AMTEST Lab ID 02-A009034
CLIENT ID K-1

MATRIX : Soil
SAMPLED:

ANALYTE	UNITS	METHOD NUMBER	METHOD REFERENCE	DETECTION LIMIT *	DATE OF ANALYSIS
Total Solids	%	2540B	SM	0.10	8/ 1/02
Acid Digestion for Soils		3050B	SW-846		8/13/02
Arsenic	ug/g	5010	SW-846	1.0	8/ 5/02
Lead	ug/g	6010	SW-846	1.0	8/ 5/02

SM = Standard Methods for the Examination of Water and Wastewater 18th ed.
SW-846 = Test Methods for Evaluating Solid Waste Physical/Chemical Methods
EPA = Methods for Chemical Analysis of Water and Wastes 1983
* Instrument Detection Limit

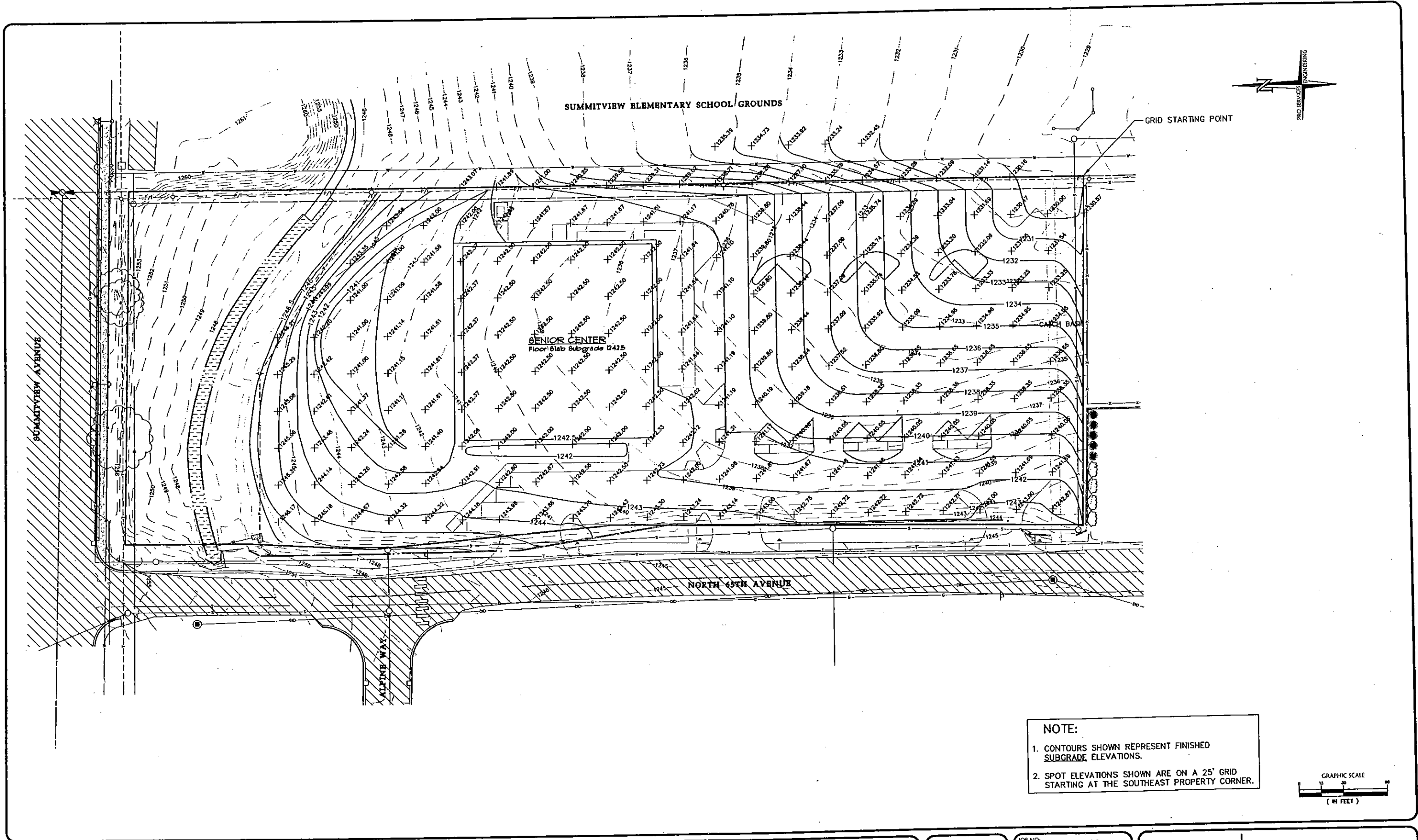
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**Senior Citizens Center
at Gailleon Park**

Cleanup Action Report

**Appendix C
Final Grading Plan**

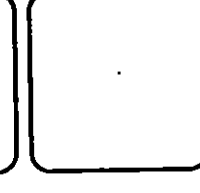
FINAL



REVISED BY	REVISION	DATE

DATE: OCTOBER, 2002
PLOT DATE: 12/05/02 - 9:19 A

DRAWING:	YAKIMA SENIOR CENTER SUBGRADE GRADING PLAN
LOCATION:	N. 65TH AVE & SUMMITVIEW AVE, YAKIMA, WA
PREPARED FOR:	TRAHO ARCHITECTS 1450 N. 16TH AVENUE, SUITE A, YAKIMA, WA 98902 (509) 452-0609



JOB NO:	41702
SCALE:	SEE SCALE BAR
SHEET:	1 OF 1

PRO SERVICES ENGINEERING CORP., p.s.
PROFESSIONAL SERVICES IN CIVIL AND STRUCTURAL ENGINEERING 701 NORTH 1st STREET, SUITE 100 YAKIMA, WA 98901 (509) 249-8850

**Senior Citizens Center
at Gailleon Park**

Cleanup Action Report

**Appendix D
Laboratory Analytical Report**

FINAL



Alliance Analytical Laboratories LLC

Analytical and Consulting Services

Certificate of Analysis

Client: Evans & Sons, Inc.
2206 terrace Heights Drive
Yakima, WA 98901

Attn: Jim Evans

Date Received: 11/19/02

Date of Report: 11/21/02

Sample Identification:

Lab ID	Sample Description	Date and Time Received
101031-001	Sample #1 (Tleton Dr); As & Pb	11/19/2002 1:40 PM

Comments:

Soil sample results reported on a dry-weight basis.

William R. Rice

William R. Rice
Laboratory Director

Post-It® Fax Note 7671

To	JIM EVANS	Date	11-22-02	# of Pages	6
Co/Dept	CITY YAKIMA	From	WAMIE		
Phone #		Co.	EVANS & SONS		
Fax #		Phone #	509-575-1105		
		Fax #	509-575-0156		

Nov-22-02 08:41A Evans & Son, Inc.

509-575-1105

P.02



Alliance Analytical Laboratories LLC

Analytical and Consulting Services

Evans & Son, Inc.
2208 Terrace Heights Drive
Yakima, WA 98901

Project: Metals, Soil
Date Received: 11/19/2002
Date Completed: 11/20/2002
Date Reported: 11/21/2002

Lab Sample ID: 101031-001

Lab Sample ID	Sample ID/Desc	Analyte	Method	% Moisture	Result	Dup Result	RPD	Units	MDL
Method Blank		Arsenic	EPA 200.7		ND			mg/L	0.02
		Lead	EPA 200.7		ND			mg/L	0.2
101031-001	#1, Tilton Dr	Arsenic	EPA 200.7	5.6	ND			mg/Kg	0.020
		Lead	EPA 200.7	5.6	ND			mg/Kg	0.2

401 East S Street

Yakima, WA 98901

509-469-2400

Fax 509-469-9476



Alliance Analytical Laboratories LLC

Analytical and Consulting Services

Evans & Son, Inc.
2206 Terrace Heights Drive
Yakima, WA 98901

Project: Metals, Soil
Date Received: 11/19/2002
Date Completed: 11/20/2002
Date Reported: 11/21/2002

Lab Sample ID: 101031-001

Lab Sample ID	Analyte	Method	True Value	Result	% Rec	Units	MDL
101032-001 MS	Arsenic	EPA 200.7	5.0	4.62	92.4	mg/L	0.02
	Lead	EPA 200.7	5.0	5.50	95.5	mg/L	0.2
IPC Std	Arsenic	EPA 200.7	2.0	1.93	96.3	mg/L	0.02
	Lead	EPA 200.7	2.0	2.01	100.0	mg/L	0.2
QCS Std	Arsenic	EPA 200.7	1.5	1.49	99.2	mg/L	0.02
	Lead	EPA 200.7	1.5	1.54	102.9	mg/L	0.2



Alliance Analytical Laboratories LLC

Analytical and Consulting Services

Evans & Sons, Inc.
2206 Terrace Heights Drive
Yakima, WA 98901

Project: Metals, Soil
Date Received: 11/19/2002
Date Completed: 11/20/2002
Date Reported: 11/21/2002

Lab Sample ID: 101031-001

Lab Sample ID	Sample ID/Desc	Analyte	Method	% Moisture	Result	Dup Result	RPD	Units	MDL
Method Blank		Arsenic	EPA 200.7		ND			mg/L	0.02
		Lead	EPA 200.7		ND			mg/L	0.2
101031-001	#1, Tieton Dr	Arsenic	EPA 200.7	5.6	NO			mg/Kg	0.02
		Lead	EPA 200.7	5.6	NC			mg/Kg	0.2

NON-DETERMINABLE

TALKED TO BILL @ 4:10, 11/21/02 JRE
CANNOT DETECT ANY, SAMPLE OK.

Nov-22-02 08:41A Evans & Son, Inc.

509-575-1105

P.06



Alliance Analytical Laboratories LLC

Analytical and Consulting Services

Evans & Son, Inc.
2206 Terrace Heights Drive
Yakima, WA 98901

Project: Metals, Soil
Date Received: 11/19/2002
Date Completed: 11/20/2002
Date Reported: 11/21/2002

Lab Sample ID: 101031-001

Lab Sample ID	Analyte	Method	True Value	Result	% Rec.	Units	MDL
101032-001 MS	Arsenic	EPA 200.7	5.0	4.82	92.4	mg/L	0.02
	Lead	EPA 200.7	5.0	5.50	95.5	mg/L	0.2
IPC Std	Arsenic	EPA 200.7	2.0	1.93	95.3	mg/L	0.02
	Lead	EPA 200.7	2.0	2.01	100.6	mg/L	0.2
QCS Std	Arsenic	EPA 200.7	1.5	1.49	99.2	mg/L	0.02
	Lead	EPA 200.7	1.5	1.54	102.9	mg/L	0.2

401 East S Street

Yakima, WA 98901

509-469-2400

Fax 509-469-9476

**Alliance Analytical Laboratories LLC**

Analytical and Consulting Services

To: Donna Evans-Evans & Sons, Inc. **From:** Jeremy Penwell
Fax: 509-575-1105 **Date:** 11-21-02
Phone: 509-966-5559 **Pages:** 4 (including cover sheet)
Re: Test Results **CC:**
☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☒ Please Recycle

Attached are your test results for your review. Thank you for choosing Alliance Analytical Laboratories.

Sincerely,

Jeremy Penwell
Sample Supervisor
Alliance Analytical Laboratories, LLC

**Senior Citizens Center
at Gailleon Park**

Cleanup Action Report

**Appendix E
Contaminated Soils Management and
Inspection Plan**

FINAL

Contaminated Soils Management and Inspection Plan

The Senior Citizens Center (formerly Gailleon Park) will be located on former orchard land in Yakima, Washington. As a result, arsenic and lead were found in the surface soils at concentrations greater than the Washington State Department of Ecology (Ecology) cleanup levels. To clean up the surface soils in the area, the City of Yakima (City) conducted a cleanup during the construction of the Yakima Senior Citizens Center at Gailleon Park in 2002. The Cleanup Action Report (FSM 2002) contains specific details regarding the cleanup action.

The contaminated soils in these areas are now covered either by structures, pavement, or turf. Under these areas is between 1 and 4 feet of uncontaminated structural fill soils. Over time, however, both pavement and turf can wear down and lose their ability to adequately protect visitors for exposure to contaminated soils. For example, turf may die causing erosion of underlying clean soil to the point where the underlying contaminated soils are within 1 foot of ground surface. As a result, institutional controls that provide for the regular maintenance and inspection of the pavement and turf must be implemented indefinitely. The following sections describe the specific institutional controls that must be followed.

LANDSCAPING

The following procedures must be performed to keep the turf healthy in landscaped areas:

- Turf must be seasonally fertilized and irrigated.
- The irrigation system must be maintained in accordance the City's Parks Department policies (winterization, testing, repainting, updating, use of rainfall sensors).
- Dead turf areas must be resodded or reseeded.
- Turf must be mowed in accordance with the general requirements of Parks and Recreation.
- Over-irrigation leading to ponding must not be allowed to occur. A rain sensor will allow for shutdown of the irrigation system during time of rainfall.

In addition, fertilization and weed control shall be performed at the discretion of the Parks Department with the objective to maintain healthy and weed-free turf.

HANDLING OF CONTAMINATED SOILS

Future improvements or repairs may result in breaching of the clean fill overlying contaminated soils. The distinction between the clean fill (gravelly) and the underlying contaminated (silty) should be clear. If not, the final grading plan can be used to determine how thick the clean fill soil is across the site. Should digging occur to levels below the clean fill, and contaminated soils brought to the surface, the City and/or its contractors shall take the following actions:

- Plastic sheeting shall be used to contain the soil brought up from below the clean fill.

- Following completion of the digging activities, to the extent possible, the contaminated soil contained upon the plastic sheeting shall be returned to a depth of NO LESS THAN 1 FOOT from the ground surface, compacted, and the clean fill replaced, and resodded or patched.
- If any contaminated soil remains after filling is complete, then it shall be transported off-site to a county landfill permitted to accept such soils (e.g., any Municipal Solid Waste Landfill including Terrace Heights and Cheyne County landfills).

YEARLY INSPECTION

Once a year, an inspection of the turf and paving must occur. Any City employee can perform the inspection. The inspector shall walk over the site, describing each of the following items in a field report:

- Overall condition of the pavement (excellent, good, fair, poor)
- Presence of any potholes or large cracks or other signs of pavement deterioration
- Cracking or spalling of the asphalt along the edges of the parking lot
- Overall condition of the turf (excellent, fair, poor)
- Areas of dead or dying sod
- Exposure of soil underneath clean fill
- Areas where inadvertent digging has occurred

Should the presence of base course gravels underlying any area of asphalt be noted, then repairs shall be implemented. It is expected that when the asphalt degrades to an overall poor condition, repaving of the parking lot will occur. Should dead areas of turf be noted, they shall be reseeded or resodded.

Recommendations for any follow up work noted as a result of the inspection should be made on the report form. A copy of the field inspection report shall be forwarded to Ecology, to the attention of:

Norman T. Hepner, P.E.
Washington State Department of Ecology
Toxics Cleanup Program
15 W. Yakima Ave, Suite 200
Yakima, WA 98902
Phone: 509 457-7127
Fax: 509 575-2809

**Senior Citizens Center
at Gailleon Park**

Cleanup Action Report

**Appendix F
Restrictive Covenant**

FINAL

ORDINANCE NO. 2003- _____

AN ORDINANCE concerning land use and environmental regulation and imposing a restrictive covenant on real property owned by the City of Yakima commonly known as Kissel Park and Gailleon Park (the "Parks") as a part of the City's environmental remediation of arsenic- and lead-contaminated soils located at the Parks, undertaken in conjunction with the Washington State Department of Ecology's Toxics Cleanup Program.

WHEREAS, both Kissel Park and Gailleon Park have been identified as being the sites of soils contaminated with arsenic and lead at levels in excess of those permitted by the Model Toxics Control Act due to agricultural activities predating the use of the Parks for recreational purposes; and

WHEREAS, the City has worked cooperatively with the Washington State Department of Ecology to reach an agreed plan for remediating the soil contamination at the Parks, which plan calls for a variety of controls and safeguards to reduce the effect of the soil contamination on the environment and on public health; and

WHEREAS, an integral component of the plan for remediating the soil contamination at the Parks is the recording of restrictive covenants in the forms attached hereto as Exhibits "A" and "B" to serve as institutional controls on the future use of the Parks and to avoid uses of the Parks which otherwise might inadvertently result in the exposure of underlying contaminated soil; and

WHEREAS, the City Council finds that it is in the best interest of the City to enact the following; now therefore:

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF YAKIMA, WASHINGTON:

Section 1. The City Manager of the City of Yakima is hereby instructed and directed to execute the restrictive covenants attached hereto as Exhibits "A" and "B" and incorporated herein by this reference and further to record the same with the

Yakima County Auditor against the City's real property title for Kissel Park and Gailleon Park.

Section 2. Severability: If any section, subsection, paragraph, sentence, clause or phrase of this ordinance is declared invalid or unconstitutional for any reason, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. This ordinance shall be in full force and effect 30 days after its passage, approval, and publication as provided by law and by the City Charter.

PASSED BY THE CITY COUNCIL at a regular meeting and signed and approved this _____ day of January, 2003.

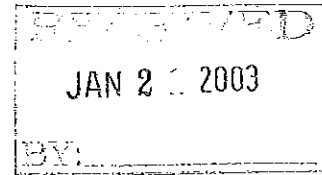
Mary Place, Mayor

ATTEST:

City Clerk

Publication Date: _____

Effective Date: _____



WHEN RECORDED RETURN TO:

City of Yakima Clerks Office
129 North Second Street
Yakima, WA 98901

RESTRICTIVE COVENANT

Grantor: CITY OF YAKIMA, WASHINGTON

Grantee: WASHINGTON DEPARTMENT OF ECOLOGY

Legal Description: Beginning at the NE corner of the NE quarter of the SE quarter of S 20, T 13 N, R 18, E. WM; thence S along the E line of said subdivision 695.5 feet;

Full legal description shown in Exhibit A.

Assessor's Property Tax Parcel Account Number(s):
181329-41001



LYNN QUESENBURY

COV

\$25.00

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Yakima Co, WA

RESTRICTIVE COVENANT

City of Yakima, Gailleon Park

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by the City of Yakima, Washington, and its successors and assigns (hereinafter the "City"), and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

Remedial action occurred at the property that is the subject of this Restrictive Covenant (hereinafter the "Remedial Action"). The Remedial Action conducted at the property is described in a Cleanup Action Report and associated materials (hereinafter "Remedial Action Documents"). These documents are on file at Ecology's Central Regional Office in Yakima, Washington.

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of lead and arsenic which exceed the Model Toxics Control Act Method A Residential Cleanup Levels for soil established under WAC 173-340-740(2). The contaminated soil is contained on-site underneath a minimum of 12 inches of non-contaminated soil covered by pavement or other ground cover.

The undersigned, City of Yakima, is the fee owner of real property (hereafter "Property") in the County of Yakima, State of Washington, that is subject to this Restrictive Covenant. The Property is legally described in Exhibit A (legal description) and shown on Exhibit B (grading plan) of this Restrictive Covenant, both of which exhibits are made a part hereof by this reference. The Property is located near the intersection of N. 65th Ave. and Summitview Ave. in Yakima, WA.

The City makes the following declaration as to limitations, restrictions, and uses to which the Property may be put, and specifies that such declarations shall constitute covenants to run with the land, as provided by law, and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereinafter the "Owner").

Section 1. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. The Owner will maintain the Property consistent with a Contaminated Soils Management and Inspection Plan, as may be updated from time to time, that contains the following institutional controls to prevent recontamination from occurring:



LYNN QUESENBURY

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Yakima Co, WA

a) Appropriate ground cover or landscaping shall be maintained by Owner for all unpaved surfaces.

b) An Inspection Plan for inspection and maintenance of paved areas and ground cover. The inspection must look for cracks, potholes and other damage to the paved areas. In landscaped areas, patches of dead vegetation or sod must be noted and maintained as necessary. The Owner must implement and follow this plan which must include yearly inspections by Parks and Recreation personnel. Should the Property be conveyed to a third party, Ecology may designate another party to make quarterly inspections.

c) A Soil Management Plan implemented by the Owner for properly managing soil brought up by digging activities. Such planned digging activities may include trenching for additional utilities, adding light standards, drilling and other activities.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner of the Property must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease or other interest in the Property shall be consummated by the Owner without adequate and complete provision for the continued operation, maintenance and monitoring of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

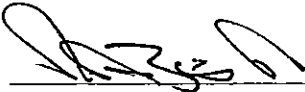
Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the Property, and to inspect records that are related to the Remedial Action.



Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

CITY OF YAKIMA

By: 
Its City Manager, R.A. Zais, Jr.

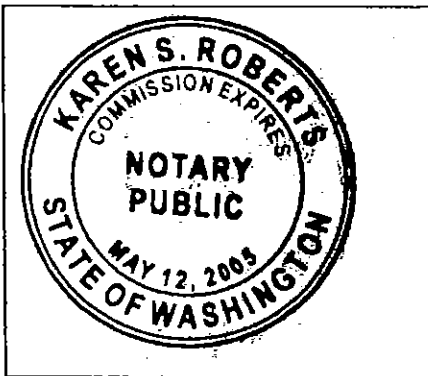
Dated: 1-08-2003



STATE OF WASHINGTON)
) ss.
COUNTY OF YAKIMA)

I certify that I know or have satisfactory evidence that R. A. Zais, Jr.
is the person who appeared before me, and said person acknowledged that s/he signed this
instrument, on oath stated that s/he was authorized to execute the instrument and
acknowledged it to as the City Manager of the CITY OF YAKIMA to be the free
and voluntary act of such party for the uses and purposes mentioned in the instrument.

Dated: January 8, 2003



(Use this space for notarial stamp/seal)

Karen S Roberts
Notary Public
Print Name Karen S. Roberts
My commission expires 5-12-2005

K:\25722\00006\KJL\KJL_A216E



EXHIBIT A
LEGAL DESCRIPTION

The following premises situated in the City of Yakima, County of Yakima, State of Washington, described as follows:

Beginning at the Northeast corner of the Northeast quarter of the Southeast quarter of Section 20, Township 13 North, Range 18, E.W.M.; thence South along the East line of said subdivision 695.5 feet; thence North 88 ° 45' West 330 feet, more or less, to the right-of-way of the Yakima Valley Canal; thence Northerly and Easterly along said right-of-way to a point on the South line of said right-of-way 300 feet West of the East line of said subdivision; thence North and crossing said canal, a distance of 130 feet, more or less, to the North line of said subdivision at appoint 300 feet West of the Northeast corner of said subdivision; thence East along the North line of said subdivision to the point of beginning,

Except the North 45 feet for County Road,

Except right-of-way for County Road 60 feet in width as conveyed by instrument recorded in Volume 902 of Official Records of Yakima County, Washington, Auditor's File No.2338437, and

Except right-of-way for Yakima Valley Canal.



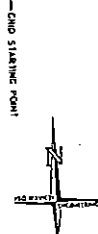


EXHIBIT B

CAUTION: READ
INSTRUCTIONS
(on page 1)

PRO SERVICES
ENGINEERING CORP., P.S.
NOTIFICATIONS DEPARTMENT, Civil and Structural Engineering
7011 North W. 10th St.
Tulsa, WA 74110 1571-1444