

T E C H N I C A L M E M O R A N D U M

TO: Chris Wend – Washington Department of Ecology (by mail and e-mail)

cc: Merv Wark – Former Owner/Operator, Yakima Steel Fabricators (by e-mail)
Clark Davis – Davis Law Office, PLLC (by e-mail)

FROM: Eric Buer, L.G., L.H.G., Associate Hydrogeologist
Jeff Kaspar, L.G., L.H.G., Principal Geologist

DATE: January 9, 2018

RE: **CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM
AGRI-TECH AND YAKIMA STEEL FABRICATORS SITE
YAKIMA STEEL FABRICATORS
YAKIMA, WASHINGTON
AGREED ORDER NO. DE 6091
FARALLON PN: 765-001**

Farallon Consulting, L.L.C. (Farallon) has prepared this Technical Memorandum to provide the Washington State Department of Ecology (Ecology) with a conceptual site model (CSM) for the property at 6 and 10½ East Washington Avenue in Yakima, Washington (herein referred to as the Site) (Figure 1). The CSM presented in this technical memorandum will support completion of a Feasibility Study for the Site. Farallon has prepared this technical memorandum on behalf of Yakima Steel Fabricators, Inc. (YSF) for the YSF and Agri-Tech, Inc. (Agri-Tech) properties that make up the Site (Figure 2).

The work described in this technical memorandum was performed to meet the requirements of *Agreed Order No. DE 6091* entered into by Ecology and YSF pursuant to the authority of the Washington State Model Toxics Control Act (MTCA) dated October 27, 2008 (Agreed Order), and the *First Amendment to Agreed Order No. DE 6091* dated October 17, 2016. This technical memorandum includes a brief description of the Site and adjacent properties; discussion of confirmed source areas on the Site; identification of constituents of concern (COCs) and their fate and transport; an exposure assessment; proposed cleanup levels; and points of compliance.

BACKGROUND

This section summarizes relevant background information on the historical Site use and use of the west-adjacent Bay Chemical property.

YSF AND AGRI-TECH SITE DESCRIPTION AND HISTORICAL USAGE

The Site consists of Yakima County Tax Parcel Nos. 19133141009 and 19133141409, which total 6.24 acres of land (Figure 2). Two structures currently are present at the Site: one single-story building currently used for steel fabrication and business offices on the YSF property (YSF building); and one single-story warehouse building on the Agri-Tech property (Agri-Tech building). The areas east and south of the YSF building are used for storage of steel and equipment. Currently, the Agri-Tech building is leased by the operator of YSF for steel fabrication operations.

Historical Site uses include the following (Attachment A, Figure 3):

- Construction and operation of a lime and sulfur formulating plant by Yakima Farmers Supply on the Agri-Tech property from approximately 1960 through 1978 to 1982.
- Operation of a fruit packing supplies and equipment company on the Agri-Tech property from 1982 through 1989.
- Operation of a steel fabrication facility on the YSF property from approximately 1980 to the present.

Additional discussion of historical Site uses is provided in the *Revised Remedial Investigation Report, Agri-Tech & Yakima Steel Fabricators, 6 and 10 ½ East Washington Avenue, Yakima Washington* dated June 10, 2004, prepared by Farallon Consulting for Yakima Steel Fabricators (Farallon, 2004) and the technical memorandum regarding Metals Source Evaluation, Agri-Tech and Yakima Steel Fabricators Site, Yakima Steel Fabricators, Yakima, Washington dated June 9, 2017, from Messrs. Eric Buer and Jeff Kaspar of Farallon to Mr. Chris Wend of Ecology (Farallon 2017a) (Metals Source TM).

Based on the historical Site uses and physical characteristics, four areas of investigation have been established on the Site (Figure 2):

- Area 1 includes the former Yakima Farmer Supply lime and sulfur processing plant, and the area of the processing plant's waste pit (also referred to as the Area 1 waste pit).
- Area 2 includes the central and eastern portions of the YSF property between the YSF building and the east-adjacent automobile recycling facility, and is suspected to have included stockpiles of bulk lime and sulfur.
- Area 3 includes the portion of the Site south and southwest of the YSF building. Ecology identified Area 3 as a potential area of metals contamination due to historical activities at the west-adjacent Bay Chemical Company property. Area 3 also includes the Site wetland buffer area.
- Area 4 includes the topographically distinct (i.e., 3 to 5 feet below the surrounding Site topography) wetland on the southern portion of the Site. Area 4 has unique environmental conditions, including seasonal standing water and saturated surface soil, and is subject to sediment criteria that do not apply to other portions of the Site.

BAY CHEMICAL SITE DESCRIPTION AND HISTORICAL USAGE

The property west-adjacent to the Site, Yakima County Tax Parcel No. 19133141010, previously was owned by Northern Pacific Railroad, predecessor of current owner, Burlington-Northern Santa Fe Railroad (BNSF) (Figure 2). This property was leased to Bay Chemical Company, a manufacturer of soil micronutrients, from 1963 to late 1975 or early 1976. The BNSF-leased property makes up a portion of the Former Bay Chemical site (herein referred to as the Bay Chemical site), an Ecology-listed facility.

The Bay Chemical Company manufactured liquid zinc sulfate by reacting dry steel mill flue dust and sulfuric acid in wooden mixing tanks. Additional detail regarding Bay Chemical zinc sulfate production practices is provided in the Metals Source TM.

According to the *Former Bay Chemical Site Remedial Investigation Report, Volume 1* dated March 1997, prepared by ERC/Pacific Groundwater Group (Bay Chemical RI Report), metals associated with the flue dust at the Bay Chemical site included arsenic, antimony, cadmium, chromium, copper, lead, manganese, mercury, and zinc. These metals have been detected in soil and groundwater at the Bay Chemical site and at the Site (Attachment A, Figure 12; Attachment B, Table 7, respectively).

CONCEPTUAL SITE MODEL

This section identifies confirmed source areas of constituents of potential concern (COPCs) that have affected media of concern, including soil, groundwater, and sediment. The nature and extent of contamination, and contaminant fate and transport mechanisms, are also identified and/or discussed.

CONFIRMED SOURCE AREAS

Data collected as part of the remedial investigation (RI) indicates that multiple source areas of COPCs that have affected soil, sediment, and groundwater are present on the Site, off the Site within the Yakima Railroad Area (YRRA), and on the adjacent Bay Chemical site. Source areas that apply to each Area within the Site are discussed below. Additional detail describing the nature and extent of COPCs identified during the RI are provided in the Agri-Tech & Yakima Steel Fabricators *Revised Remedial Investigation Report* (2004).

Area 1: Yakima Farmer Supply Waste Pit and Processing Plant

Confirmed source areas in Area 1 include the former waste pit constructed by Yakima Farmer Supply (Attachment A, Figure 3). Soil analytical data indicate that volatile organic compounds (VOCs) and chlorinated pesticides are present in soil at concentrations that exceed their respective preliminary screening levels for soil (Attachment A, Figures 9 and 10, Table 2). Halogenated volatile organic compounds (HVOCS), including tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE), and vinyl chloride, were detected at concentrations that exceed their respective preliminary screening levels in groundwater samples collected from monitoring well

WDOE-6, which is within the boundaries of the waste pit (Attachment A, Figure 20). HVOCs, including PCE, TCE, cis-1,2-DCE, and vinyl chloride, were also detected at concentrations that exceed their respective preliminary screening levels in groundwater samples collected from monitoring wells MW-2 and MW-6, down-gradient of the waste pit (Attachment A, Figure 9). These data indicate that the northern portion of the waste pit is acting as a source of HVOCs to shallow groundwater.

The results of the Bay Chemical site cleanup also confirmed the conclusion of the Bay Chemical RI Report that metals from the Bay Chemical site previously encroached upon the Site and previously necessitated cleanup in Area 1. The Bay Chemical site cleanup in Area 1 was terminated where the buildings were present and where the waste pit materials were encountered.

PCE concentrations in groundwater exceed the preliminary screening level at monitoring well MW-1; no source has been identified in the overlying soil (Attachment A, Figure 21). Groundwater samples from monitoring well MW-1 have consistently contained concentrations of PCE and associated degradation products since monitoring began, indicating that an up-gradient source of dissolved-phase PCE exists. Ecology has historically agreed that these constituents may be associated with one or more of the up-gradient YRRA facilities north of the Site.

Area 2: Bulk Lime and Sulfur Stockpiles

No source areas of COPCs have been identified for Area 2. Soil analytical results for HVOCs and pesticides are less than preliminary screening levels for soil. The observed HVOC concentrations in soil were not high enough or deep enough to act as a source of HVOCs to groundwater in Area 2.

PCE periodically was detected at concentrations that exceed the preliminary screening level of 5 micrograms per liter ($\mu\text{g/l}$) in groundwater samples collected from monitoring well MW-3 (Attachment A, Figure 19). Monitoring well MW-3 is cross-gradient of the waste pit and its associated down-gradient monitoring wells MW-2 and MW-6. HVOC degradation compounds, including TCE, cis-1,2-DCE, and vinyl chloride, were reported non-detect at the laboratory

practical quantitation limit (PQL) in the groundwater samples collected from monitoring well MW-3. Monitoring well MW-3 is screened at a depth between 9 and 29 feet below ground surface (bgs). These data suggest the HVOC impacts to groundwater in Area 2 are associated with an unknown up-gradient source, possibly associated with the YRRA PCE plume.

Area 3: South Site

The west-adjacent Bay Chemical site had been identified as a source of metals contamination in soil at Area 3 (Farallon 2004; 2017a). Cadmium, lead, manganese, and zinc were detected at concentrations exceeding their respective preliminary screening levels for soil (Attachment A, Figure 3). The west-adjacent Bay Chemical site is a documented source of cadmium, lead, zinc, and other heavy metals associated with dry steel mill flue dust used in production of zinc sulfate.

Wind transport of flue dust and metals-laden settling pond sludge onto the Site occurred throughout the period of active operation on the Bay Chemical site (Farallon, 2017a). Overflow from the Bay Chemical site settling pond, as noted in the Bay Chemical RI Report, resulted in transport of settling pond sludge and metals-contaminated water into the Site wetland (Area 4) and the south-adjacent drainage/irrigation ditch, contaminating Site soils.

Total petroleum hydrocarbons as diesel-range organics (DRO) were detected at a concentration that exceeded the preliminary screening level from the soil sample of 2,000 milligrams per kilogram (mg/kg) in the soil sample collected from test pit I-TP3 at a depth of 3 feet bgs. DRO was reported non-detect at the laboratory PQL in the soil sample collected from test pit I-TP3 at a depth of 7 feet bgs (Attachment B, Table 1). DRO was reported non-detect at the laboratory PQL in the soil samples collected from test pits I-TP4 and I-TP6. The soil sampling data from test pit I-TP3 indicate a localized shallow source area of DRO is present at I-TP3. No other confirmed source areas have been identified for Area 3.

Area 4: Wetland

As noted above, the west-adjacent Bay Chemical site has been identified as a source of metals contamination to sediment in Area 4 (Farallon 2017a, 2017b). Cadmium was detected at concentrations that exceeded the sediment cleanup screening level of 5.4 mg/kg in three sediment

samples collected from Area 4 (Attachment D, Table 1; Attachment D Figure 4). A fourth sediment sample collected from Area 4 exceeded the sediment cleanup objective of 2.1 mg/kg. No other source areas have been identified for Area 4.

CONTAMINANT FATE AND TRANSPORT

This section includes a discussion of the fate and transport characteristics of the COPCs identified in the affected media at the Site that are relevant to the evaluation of potentially feasible remedial technologies.

Volatile Organic Compounds

Groundwater analytical data indicate very slow leaching of HVOCs from the soil matrix within the Area 1 waste pit to groundwater (Figure 3). The PCE identified in soil beneath the Agri-Tech building is present at relatively high concentrations, and is in direct contact with groundwater. Based on soil concentrations, concentrations of PCE in groundwater should exceed those observed at monitoring well WDOE-6 within the waste pit, and down-gradient of monitoring wells MW-2 and MW-6. Farallon previously evaluated VOC contributions to soil using Ecology cleanup level calculation spreadsheets for soil in direct contact with groundwater. The predicted concentrations of VOCs in groundwater using the Ecology spreadsheets exceed the empirical data for monitoring wells WDOE-6, MW-2, and MW-6 (Farallon 2004).

Farallon's analysis and groundwater monitoring data indicate that the VOC contribution to groundwater from the Area 1 waste pit is negligible and is not resulting in an exceedance of relevant preliminary screening levels. Furthermore, the soil and groundwater analytical data indicate that natural attenuation of PCE is occurring in the waste pit, as indicated by the presence of PCE degradation products in groundwater samples collected from monitoring wells WDOE-6, MW-2, and MW-6 (Figure 3). Shallow monitoring wells MW-2, MW-6, and MW-7A are immediately down-gradient of the source of VOCs at the waste pit and historically have contained concentrations of VOCs that have been less than the laboratory PQL, further supporting the supposition that the contribution of contaminant mass from the source of VOCs at the waste pit is minimal.

Water quality and geochemical parameters indicate that conditions in the waste pit, and in the southern portion of Area 3 up-gradient of the Site wetland (Area 4), appear to be conducive to reductive dechlorination of PCE via biodegradation (Attachment A, Table 13). Reductive dechlorination actively degrades PCE to vinyl chloride and eventually to nonhazardous ethene and ethane. Groundwater monitoring performed in June 2011 confirmed that reductive chlorination is ongoing in Site groundwater (Figure 3).

PCE and TCE that are not fully dechlorinated and degraded before being transported into more aerobic groundwater conditions outside the waste pit are subsequently transported down-gradient of and comingled with the dissolved-phase plume attributed to an off-Site source within the YRRA. Isomers of DCE and vinyl chloride that migrate from the waste pit prior to complete anaerobic degradation appear to be degraded aerobically along the groundwater flow path. Concentrations of breakdown products consistently have been less than the preliminary screening levels for groundwater at down-gradient Site monitoring wells MW-4, MW-5, MW-7A, MW-7B, MW-10, and MW-11 (Figure 3).

The monitoring well pair MW-7A and MW-7B were installed to assess the vertical distribution of VOCs in groundwater on the southern portion of the Site. Monitoring well MW-7A is constructed with a well screen at a depth of 7 to 17 feet bgs. Monitoring well MW-7B is constructed with a well screen at a depth of 28 to 33 feet bgs. Cis-1,2-DCE is the only HVOC detected at monitoring well MW-7A; and PCE, TCE, and cis-1,2-DCE have been detected in groundwater at deep monitoring well MW-7B (Figure 3).

Chloroform has been consistently detected in groundwater samples collected from monitoring wells screened at a depth below 20 feet bgs (Attachment A, Table 3), including:

- Monitoring well MW-1 up-gradient of the waste pit;
- Monitoring well MW-3 cross-gradient of the waste pit; and
- Monitoring wells MW-4 and MW-5 down-gradient of the waste pit.

These data suggest a vertical stratification of VOCs in groundwater and that VOCs detected at monitoring well MW-7B are most likely associated with the deeper regional YRRA plume.

Pesticides

Pesticides, including dieldrin, endrin, dichlorodiphenyldichloroethane (DDD), dichlorodiphenyldichloroethylene (DDE), aldrin, alpha-chlordane, and heptachlor epoxide, were detected at concentrations that exceed their respective preliminary screening levels for soil in samples collected from the Area 1 waste pit (Figure 4). Pesticides have strong sorptive properties, have low solubility in water, and are relatively resistant to biodegradation processes. The detected pesticides are not expected to be mobile and likely will persist in the waste pit materials for an extended period of time depending on the mass of each contaminant present. The soil analytical data indicate that dieldrin, endrin, DDD, DDE, aldrin, alpha-chlordane, and heptachlor epoxide are present primarily beneath the Agri-Tech building, with low concentrations identified in the central portion of the waste pit.

Monitoring wells WDOE-6 and MW-2 have been contaminated by dieldrin, DDD, and DDE (Figure 4). Ongoing monitoring found that dieldrin concentrations were reported non-detect at the laboratory PQL or less than the preliminary screening level of 0.0055 µg/l in three of the past six sampling events in monitoring well MW-2; remaining detections, while exceeding the preliminary screening level, have not exceeded 0.102 µg/l. DDE and DDD were detected sporadically at concentrations that exceed their preliminary screening levels in monitoring well WDOE-6, but were reported non-detect at the laboratory PQL for all sampling events in monitoring well MW-2. Dieldrin, DDE, and DDD were reported non-detect at the laboratory PQL in monitoring well MW-6, down-gradient of monitoring wells WDOE-6 and MW-2, for all sampling events. This groundwater data indicates that the area of pesticide-contaminated groundwater is stable, and there is little risk of pesticides migrating down-gradient in groundwater or ultimately discharging to surface water receptors at concentrations that would require further action.

Pesticides have the potential to evaporate off sand and gravelly soil with low organic content. However, the lime and sulfur soil matrix in the waste pit make the probability of evaporation low.

The soil matrix in Area 3 is slightly more conducive to volatilization of these pesticides; however, no buildings are present that would require consideration of vapor intrusion.

Metals

Metals are persistent contaminants that will remain in soil unless physical or chemical processes mobilize the metals. Concentrations of metals in groundwater generally are dictated by the concentrations of metals in soil that are in direct contact with groundwater and other physical and chemical properties that facilitate dissolution of metals from soil to groundwater.

According to the Metals Source TM, cadmium and lead were detected at concentrations that exceed their respective preliminary screening levels in test pits excavated by Ecology in the eastern portion of Area 3 (Attachment D, Table 1). Cadmium, lead, manganese, mercury, and zinc were detected at concentrations that exceed their respective preliminary screening levels in the western portion of Area 3 and were subsequently excavated to a maximum depth of 6 feet bgs as part of the Bay Chemical site cleanup (Figure 3).

Cadmium was detected at concentrations that exceed the sediment cleanup screening level of 5.4 mg/kg dry weight in Area 4 sediment. However, bioassay testing of sediment collected from Area 4 did not exceed biological cleanup screening level criteria. Under Section 520 of Chapter 173-204 of the Washington Administrative Code (WAC 173-204-520), Sediment Management Standards, bioassay results override analytical chemistry results. Therefore, the metals detected do not qualify Area 4 for listing as a contaminated sediment site.

For one sampling event in 2011, both total and dissolved arsenic were detected at concentrations that slightly exceeded the preliminary screening level for groundwater of 5 µg/l in monitoring well MW-7A (Attachment B, Table 7). The source of the arsenic in groundwater is suspected to be naturally occurring and may be related to slightly reducing conditions proximate to Area 4 associated with the wetland area. Arsenic concentrations in soil at the Site and the Bay Chemical site predominantly have been less than levels that are considered to present a risk to groundwater.

No other metals were detected at concentrations that exceed groundwater cleanup levels in groundwater samples collected on the Site.

TERRESTRIAL ECOLOGICAL EVALUATION

A Terrestrial Ecological Evaluation (TEE) is required by WAC 173-340-7490 at any site where there has been a release of a hazardous substance to soil. The regulation requires that one of the following actions be taken:

- Documenting a TEE exclusion using the criteria presented in WAC 173-340-7491;
- Conducting a simplified TEE in accordance with WAC 173-340-7492; or
- Conducting a site-specific TEE in accordance with WAC 173-340-7493.

Farallon has conducted a simplified TEE in accordance with WAC 173-340-7492 and determined the following:

- Chlorinated pesticides were detected at concentrations that exceed the values listed in Table 749-2 for industrial sites. The areas of exceedance are under the concrete floors of the YSF and Agri-Tech buildings and/or other paved areas, which act as engineered barriers and prevent completion of the exposure pathway for terrestrial ecologic receptors under WAC 173-340-7492(2)(b).
- Soil in the areas defined by sampling locations I-TP3, J-TP2, J-TP3, and Pit K; and M-TP1, Pit-M, and TP-8 currently exceed the values identified for metals on industrial sites in Table 749-2 (Figure 5). However, these areas likely will be excavated as part of a future cleanup action, eliminating current ecologic risk posed by the affected soil.

The engineered barriers provided by the YSF and Agri-Tech building floors and surrounding paved areas render the soil exposure pathway incomplete for pesticides in soil that exceed simplified TEE screening criteria on the Site. Remediation of the small area identified above for metals will eliminate the exposure pathway for metals in soil in the central portion of the Site. Institutional controls will be implemented as a component of a future cleanup action to ensure compliance with WAC 173-340-7492(3) and prevent future exposure to plants or soil biota in the event of a change

in land use. The institutional controls may include a restrictive covenant that identifies where pesticides remain in soil below engineered barriers and that places restrictions on accessing areas where contaminated soil remains.

No further analysis is required by WAC 173-340-7490. The Ecology TEE form for the Site is provided in Attachment E.

TECHNICAL ELEMENTS

This section presents the technical elements of the CSM, including applicable or relevant and appropriate requirements (ARARS), media of concern, COCs, and an exposure pathway assessment. These technical elements will be used in the Feasibility Study to evaluate cleanup technologies and alternatives.

APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

Cleanup of contaminated media at the Site will be conducted under the Ecology Agreed Order No. DE 6091. The primary ARARs related to the remedial action include:

- MTCA, Chapter 70.105D of the Revised Code of Washington (RCW 70.105D) and WAC 173-340;
- Washington State Solid Waste Management Laws and Regulations, RCW 70.95, WAC 173-351, and WAC 173-304;
- Washington State Dangerous Waste Regulation, WAC 173-303; and
- Washington State Sediment Management Standards, WAC 173-204.

These primary ARARs are anticipated to be the most applicable to the remedial action, because they provide the framework for the remedial action, including applicable and relevant regulatory guidelines, cleanup standards, waste disposal criteria, references for additional ARARs, and standards for documentation of the remedial action.

Other applicable ARARs for cleanup of the Site include:

- Occupational Safety and Health Act, Part 1910 of Title 29 of the Code of Federal Regulations (29 CFR 1910);
- Safety Standards for Construction Work, WAC 296-155; and
- Accreditation of Environmental Laboratories, WAC 173-50.

EXPOSURE ASSESSMENT

The two types of exposure risk associated with the presence of COPCs at the Site are related to human and terrestrial ecological receptors. This subsection presents the evaluation and conclusions pertaining to the exposure pathways at the Site. The goal of this subsection is to identify potential exposure scenarios that will assist in selection of appropriate cleanup levels for the Site and for evaluation of technically feasible cleanup alternatives during the Feasibility Study.

Soil Pathway

The exposure pathways for shallow soil containing COPCs include the direct contact and inhalation pathways. Direct contact may include dermal contact and ingestion pathways for both human and ecologic receptors. Inhalation pathways may include volatilization of volatile COPCs, or in the case of the nonvolatile COPCs such as metals and pesticides, particulate dust. Completed direct contact and inhalation pathways for soil include direct contact with affected soil in Areas 2 and 3 where soil is exposed or covered with a shallow layer of gravel.

Human and ecologic exposure to the soil in Area 1 with the former waste pit would require compromising either the building structures or the pavement cap overlying the waste pit that currently mitigates exposure to routine site workers and visitors, neither of which is anticipated. Temporary construction workers conducting subsurface work on utilities or other unique services could be at risk of exposure. Therefore, the direct exposure pathway for Area 1 soil is not complete, with the exception of temporary construction workers conducting work that could result

in exposure to affected soil. The inhalation pathway is considered complete for volatile COPCs since no evaluation of soil gas or indoor air has been conducted.

Groundwater Pathway

Potential exposure pathways for COPCs in groundwater include the direct contact (i.e., dermal contact and ingestion) and inhalation pathways. No production or irrigation wells are located on or proximate to the Site, reducing risk of direct contact to standard workers and visitors. Temporary construction workers conducting subsurface work would have exposure risk. Groundwater monitoring analytical data for monitoring wells down-gradient of Area 1 and the YRRA indicate concentrations of COPCs in groundwater, particularly PCE and associated HVOCs, are less than the preliminary screening levels before reaching the Site boundary (Figure 3). The direct contact pathway would be incomplete, with the exception of temporary construction workers conducting subsurface work that could result in exposure to affected groundwater.

The inhalation pathway for groundwater at the Site is considered complete since volatile COPCs are present in Area 1 that may represent a vapor intrusion risk, and that air pathway has not been evaluated during the RI.

CLEANUP STANDARDS

As defined in WAC 173-340-700, cleanup standards include establishing cleanup levels and the points of compliance at which the cleanup levels are to be attained. The cleanup standards for the Site have been established in accordance with WAC 173-340-700 through 173-340-760 to be protective of human health and the environment.

CLEANUP LEVELS

The cleanup levels are the concentrations of COCs that are to be met for each medium of concern at the point of compliance defined for the Site. Cleanup levels for the media of concern, soil, groundwater, and indoor air are presented in Attachment F Cleanup Standards. The selected

cleanup levels provide the basis for evaluation of cleanup alternatives during the Feasibility Study, define the COCs, and define the media of concern.

POINTS OF COMPLIANCE

The point of compliance is defined in WAC 173-340-200 as the location(s) where cleanup levels established in accordance with WAC 173-340-720 through WAC 173-340-760 will be attained to meet the requirements of MTCA.

The point of compliance for soil is defined as all soil at the Site where analytical results of in-situ soil samples report concentrations of COCs exceeding their respective MTCA cleanup (i.e., the standard point of compliance under MTCA). The point of compliance for soil will not exceed the boundary of the Site.

The standard point of compliance for groundwater is defined as the uppermost level of the saturated zone extending vertically to the lowest depth that potentially could be impacted by the COCs throughout the Site (i.e., the standard point of compliance under MTCA). The point of compliance for groundwater will be the Site boundary. The uppermost level of the saturated zone is approximately 2.5 feet bgs. The lowest depth that could be affected by the COCs is approximately 30 feet bgs. Groundwater monitoring wells that may be used as point of compliance wells include monitoring wells MW-3, MW-4, MW-5, MW-7A, and MW-7B (Figure 2).

MEDIA OF CONCERN

The RI work has confirmed that soil and groundwater are media of concern on the Site. Bioassay testing and sampling of shallow groundwater that seasonally discharges to the surface in Area 4 indicate that sediment and surface water are affected media, but are not media of concern. Indoor air has been retained as a media of concern, but has not been confirmed as an affected media. Soil gas and indoor air quality historically have not been evaluated during the RI work due to the absence of regulatory criteria that required evaluation of this pathway/media at the time the RI was completed.

CONSTITUENTS OF CONCERN

The COCs are defined as the chemicals that have been detected at concentrations exceeding their respective cleanup levels, which are presented in Attachment F. Provided below are the COCs identified by medium of concern.

Soil

HVOCs including PCE, TCE, and cis-1,2-DCE; 1,2-dichloropropane; pesticides including aldrin and dieldrin; total petroleum hydrocarbons as DRO; and metals including cadmium, copper, lead, and mercury have been identified as COCs for soil (Table 1).

Groundwater

The HVOCs PCE, TCE, cis-1,2-DCE, vinyl chloride, and 1,2-dichloropropane; the pesticides 4,4-DDD, 4,4-DDE, and dieldrin; and have been identified as COCs for groundwater (Table 2, Figures 3 and 7). Metals have not been retained as COCs for groundwater (Table 2).

Soil Gas and Indoor Air

PCE, TCE, and vinyl chloride have been identified as COCs for soil gas and indoor air based on soil and groundwater data from the waste pit (Table 3).

REFERENCES

ERC/Pacific Groundwater Group. 1997. *Former Bay Chemical Site Remedial Investigation Report, Volume 1*. March.

Farallon Consulting LLC. (Farallon). 2004. *Revised Remedial Investigation Report, Agri-Tech & Yakima Steel Fabricators, 6 and 10 ½ East Washington Avenue, Yakima Washington*. Prepared for Yakima Steel Fabricators. June 10.

———. 2017a. Metals Source Evaluation, Agri-Tech and Yakima Steel Fabricators Site, Yakima Steel Fabricators, Yakima, Washington. Prepared for Yakima Steel Fabricators. June 9.

———. 2017b. Wetland Evaluation Technical Memorandum, Agri-Tech and Yakima Steel Fabricators Site, Yakima, Washington. Prepared for Yakima Steel Fabricators. July 17.

Attachments: Figure 1, *Site Vicinity*
Figure 2, *Site Plan and Tax Parcel Locations*
Figure 3, *Groundwater Analytical Results for Volatile Organic Compounds*
Figure 4, *Groundwater Analytical Results for Organochlorine Pesticides*
Figure 5, *Terrestrial Ecological Evaluation Areas to be Remediated*
Table 1, *Soil and Sediment Constituents of Concern and Cleanup Levels*
Table 2, *Groundwater Constituents of Concern and Cleanup Levels*
Table 3, *Soil Gas and Indoor Air Constituents of Concern and Cleanup Levels*
Attachment A, YSF Remedial Investigation Figures and Tables
Attachment B, Washington Department of Ecology Test Pit Sampling Tables
Attachment C, Metals Source TM Figures and Tables
Attachment D, Wetland Evaluation TM Figures and Tables
Attachment E, Terrestrial Ecological Evaluation Form
Attachment F, Site Cleanup Standards

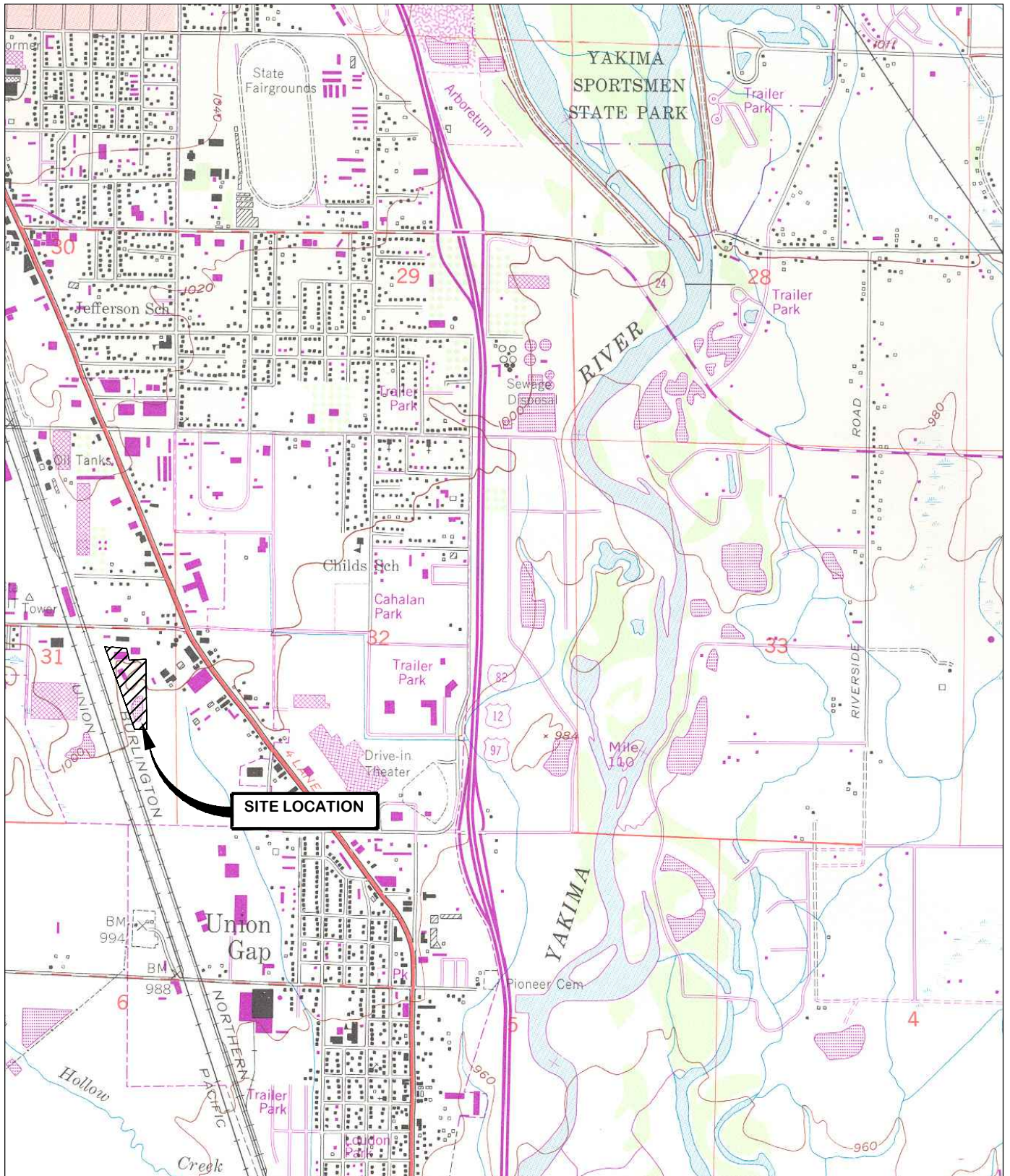
EB:cm

FIGURES

CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM

Agri-Tech and Yakima Steel Fabricators Site
Yakima Steel Fabricators
Yakima, Washington

Farallon PN: 765-001



REFERENCE: 7.5 MINUTE USGS QUADRANGLE YAKIMA SOUTH, WASHINGTON. DATED 1953 AND PHOTOREVISED 1981



WASHINGTON




Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 1

SITE VICINITY MAP
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001


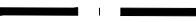
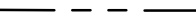

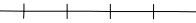

Drawn By: DEW

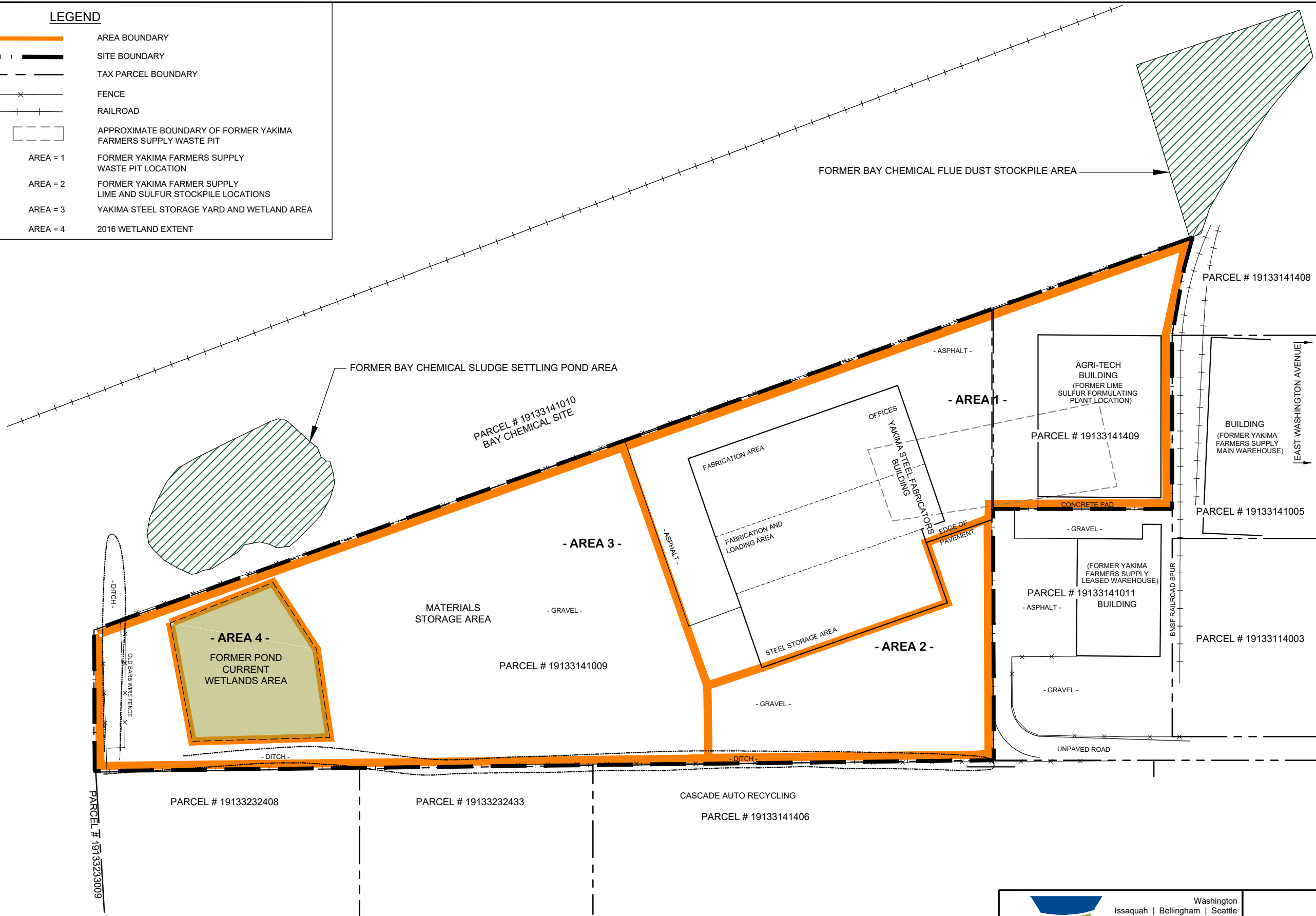
Checked By: HC

Date: 1/25/2016

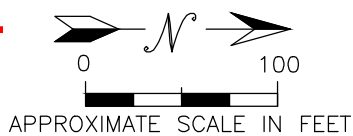
Disk Reference: 765001a

LEGEND

-  AREA BOUNDARY
-  SITE BOUNDARY
-  TAX PARCEL BOUNDARY
-  FENCE
-  RAILROAD
-  APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 YAKIMA STEEL STORAGE YARD AND WETLAND AREA
- AREA = 4 2016 WETLAND EXTENT



DRAFT




Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 2

SITE PLAN AND TAX PARCEL LOCATIONS
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

Drawn By: DEW

Checked By: EB

Date: 1/5/2018

Disk Reference: 765001a

P:\765001\Yakima Steel Fab\Drawings_Plots\765-001.dwg, 1/5/2018 11:56:42 AM, DWG To PDF.pc3

LEGEND

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD
- PCE = TETRACHLOROETHENE
- TCE = TRICHLOROETHENE
- CIS-1,2-DCE = CIS 1,2-DICHLOROETHENE
- VC = VINYL CHLORIDE
- = NOT ANALYZED
- < = INDICATES CONCENTRATIONS NOT DETECTED AT OR ABOVE THE STATED LABORATORY PRACTICAL QUANTITATION LIMIT

- MW-6 SHALLOW BAY CHEMICAL SITE MONITORING WELL INSTALLED BY PACIFIC GROUNDWATER GROUP (1994)
- MW-7A SHALLOW MONITORING WELL INSTALLED BY FARALLON (2002)
- MW-7B DEEP MONITORING WELL INSTALLED BY FARALLON
- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-4 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DECOMMISSIONED WELL DURING BAY CHEMICAL CLEANUP (2007)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- MW-10 BAY CHEMICAL MONITORING WELL (2009)

ESTIMATED LATERAL EXTENT OF TYPE 3 WETLAND (EXISTING POND)

DATE	PCE	TCE	CIS-1,2-DCE	VC
6/1/11	5	3.98	70	0.0292

ANALYTE HIGHLIGHTED IN **BLUE** EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.

DATE	PCE	TCE	CIS-1,2-DCE	VC
6/2/11	1.8	0.10	<0.10	<0.020

DATE	PCE	TCE	CIS-1,2-DCE	VC
6/2/11	1.6	0.22	<0.10	<0.020

DATE	PCE	TCE	CIS-1,2-DCE	VC
12/3/97	3.98	1.1	1	<1.0
3/3/98	2.25	1.02	4.5	<1.0
6/3/98	2.72	<1.0	2.52	<1.0
9/2/98	2.65	0.89	2.87	<1.0
12/4/02	5	<2	<2	<2

DATE	PCE	TCE	CIS-1,2-DCE	VC
12/3/97	<1.0	<1.0	12	<2
6/2/11	1.9	0.44	3.8	<0.020

DATE	PCE	TCE	CIS-1,2-DCE	VC
12/3/02	<2	<2	4	<2
6/2/11	<0.10	<0.10	<0.10	<0.020

DATE	PCE	TCE	CIS-1,2-DCE	VC
12/3/97	<1.0	<1.0	7.68	<1.0
3/3/98	<1.0	<1.0	13.2	<1.0
6/3/98	<1.0	<1.0	13.3	<1.0
9/2/98	<1.0	0.33	7.08	<1.0
12/4/02	6	74	270	4
6/1/11	<0.10	<0.10	6.6	0.20

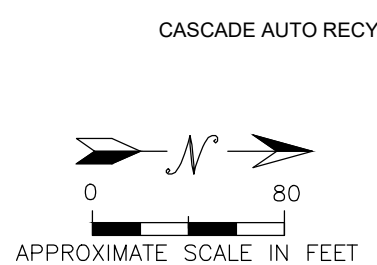
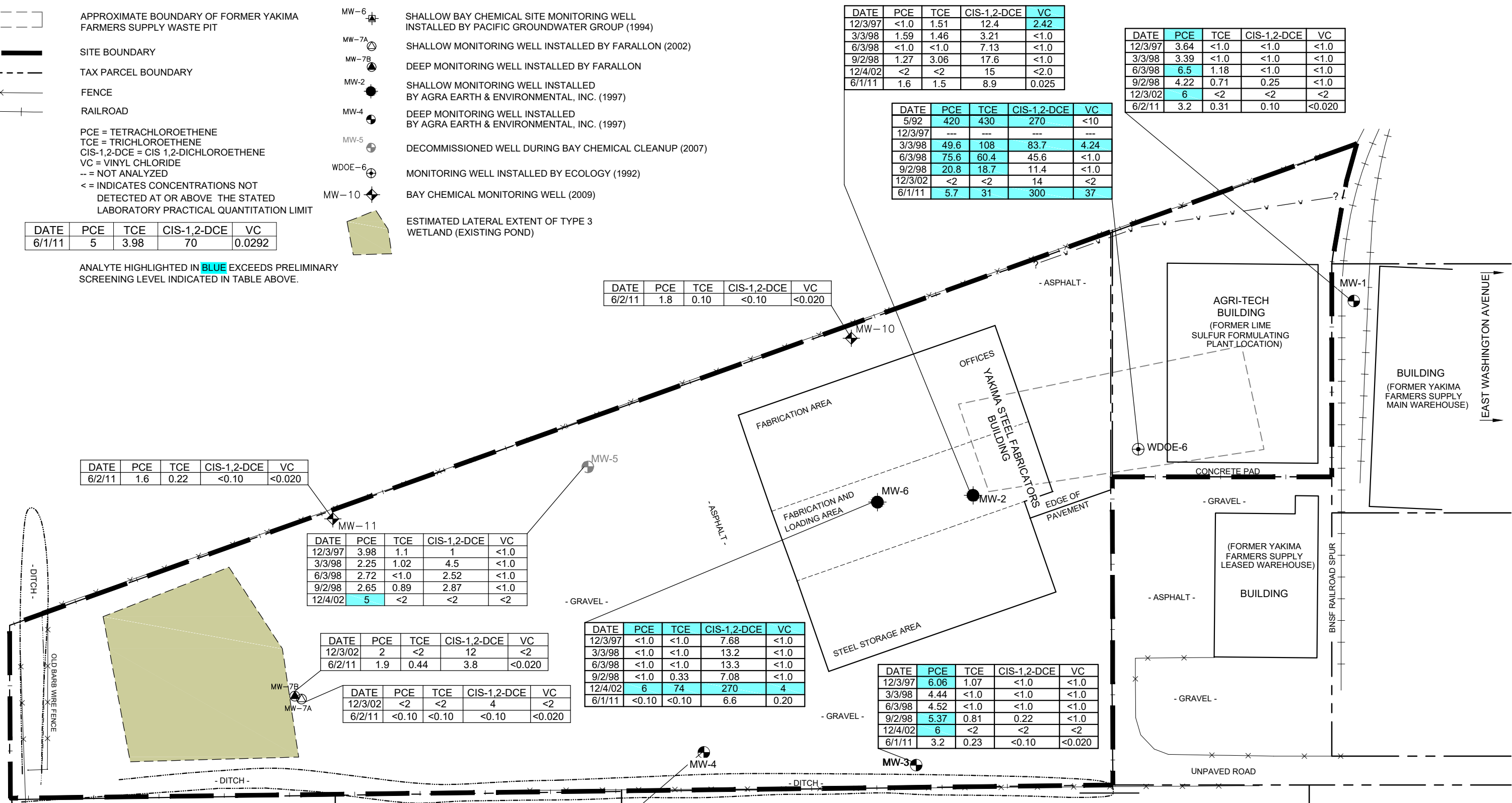
DATE	PCE	TCE	CIS-1,2-DCE	VC
12/3/97	6.06	1.07	<1.0	<1.0
3/3/98	4.44	<1.0	<1.0	<1.0
6/3/98	4.52	<1.0	<1.0	<1.0
9/2/98	5.37	0.81	0.22	<1.0
12/4/02	6	<2	<2	<2
6/1/11	3.2	0.23	<0.10	<0.020

DATE	PCE	TCE	CIS-1,2-DCE	VC
12/3/97	3.32	<1.0	5.23	<1.0
3/3/98	3.78	<1.0	1.64	<1.0
6/3/98	3.86	<1.0	3.25	<1.0
9/2/98	3.12	0.84	4.34	<1.0
12/4/02	5	<2	5	<2
6/1/11	2.2	0.29	0.87	<0.020

DATE	PCE	TCE	CIS-1,2-DCE	VC
12/3/97	<1.0	1.51	12.4	2.42
3/3/98	1.59	1.46	3.21	<1.0
6/3/98	<1.0	<1.0	7.13	<1.0
9/2/98	1.27	3.06	17.6	<1.0
12/4/02	<2	<2	15	<2.0
6/1/11	1.6	1.5	8.9	0.025

DATE	PCE	TCE	CIS-1,2-DCE	VC
5/92	420	430	270	<10
12/3/97	---	---	---	---
3/3/98	49.6	108	83.7	4.24
6/3/98	75.6	60.4	45.6	<1.0
9/2/98	20.8	18.7	11.4	<1.0
12/3/02	<2	<2	14	<2
6/1/11	5.7	31	300	37

DATE	PCE	TCE	CIS-1,2-DCE	VC
12/3/97	3.64	<1.0	<1.0	<1.0
3/3/98	3.39	<1.0	<1.0	<1.0
6/3/98	6.5	1.18	<1.0	<1.0
9/2/98	4.22	0.71	0.25	<1.0
12/3/02	6	<2	<2	<2
6/2/11	3.2	0.31	0.10	<0.020



DRAFT

FARALLON CONSULTING
 Quality Service for Environmental Solutions | farallonconsulting.com
 Washington: Issaquah | Bellingham | Seattle
 Oregon: Portland | Bend | Baker City
 California: Oakland | Sacramento | Irvine

FIGURE 3
 GROUNDWATER ANALYTICAL RESULTS FOR VOLATILE ORGANICS COMPOUNDS
 YSF/AGRI-TECH
 6 & 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON
 FARALLON PN: 765-001

P:\765001 Yakima Steel Fab\Drawings_Plots\765-001.dwg, 1/5/2018 11:59:51 AM, DWG To PDF.pc3

LEGEND

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD
- 4,4-DDD = HEPTACHLOR
- 4,4-DDE = ALPHA-BHC
- = NOT ANALYZED
- <= INDICATES CONCENTRATIONS NOT DETECTED AT OR ABOVE THE STATED LABORATORY PRACTICAL QUANTITATION LIMIT

- MW-6 SHALLOW BAY CHEMICAL SITE MONITORING WELL INSTALLED BY PACIFIC GROUNDWATER GROUP (1994)
- MW-7A SHALLOW MONITORING WELL INSTALLED BY FARALLON (2002)
- MW-7B DEEP MONITORING WELL INSTALLED BY FARALLON
- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-4 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DECOMMISSIONED WELL DURING BAY CHEMICAL CLEANUP (2007)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- MW-10 BAY CHEMICAL MONITORING WELL (2009)

ESTIMATED LATERAL EXTENT OF TYPE 3 WETLAND (EXISTING POND)

DATE	4,4-DDD	DIELDRIN	4,4-DDE
12-3-02	0.365	0.0055	0.257

ANALYTE HIGHLIGHTED IN **BLUE** EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.

DATE	4,4-DDD	DIELDRIN	4,4-DDE
12-3-97	<0.1	<0.1	<0.1
3/3/98	<0.1	<0.1	<0.1
6/3/98	--	--	--
9/2/98	<0.1	<0.1	<0.1
12/4/02	--	--	--
6/1/11	<0.019	<0.019	<0.019

DATE	4,4-DDD	DIELDRIN	4,4-DDE
5/92	0.48	<0.50	1.1
12/3/97	--	--	--
3/3/98	<0.1	0.226	<0.1
6/3/98	0.296	0.242	0.586
9/2/98	0.1	<0.1	0.334
12/4/02	0.13	<0.05	<0.05
6/2/11	0.028	0.063	<0.020

DATE	4,4-DDD	DIELDRIN	4,4-DDE
12/3/97	<0.1	<0.1	<0.1
3/3/98	<0.1	<0.1	<0.1
6/3/98	--	--	--
9/2/98	--	--	--
12/3/02	--	--	--
6/2/11	<0.020	<0.020	<0.020

DATE	4,4-DDD	DIELDRIN	4,4-DDE
12/3/97	<0.1	0.102	0.119
3/3/98	<0.1	<0.1	<0.1
6/3/98	<0.1	<0.1	<0.1
9/2/98	<0.1	<0.1	<0.1
12/4/02	<0.05	0.05	<0.05
6/1/11	<0.021	0.033	<0.021

DATE	4,4-DDD	DIELDRIN	4,4-DDE
6/2/11	<0.020	<0.020	<0.020

DATE	4,4-DDD	DIELDRIN	4,4-DDE
6/2/11	<0.020	<0.020	<0.020

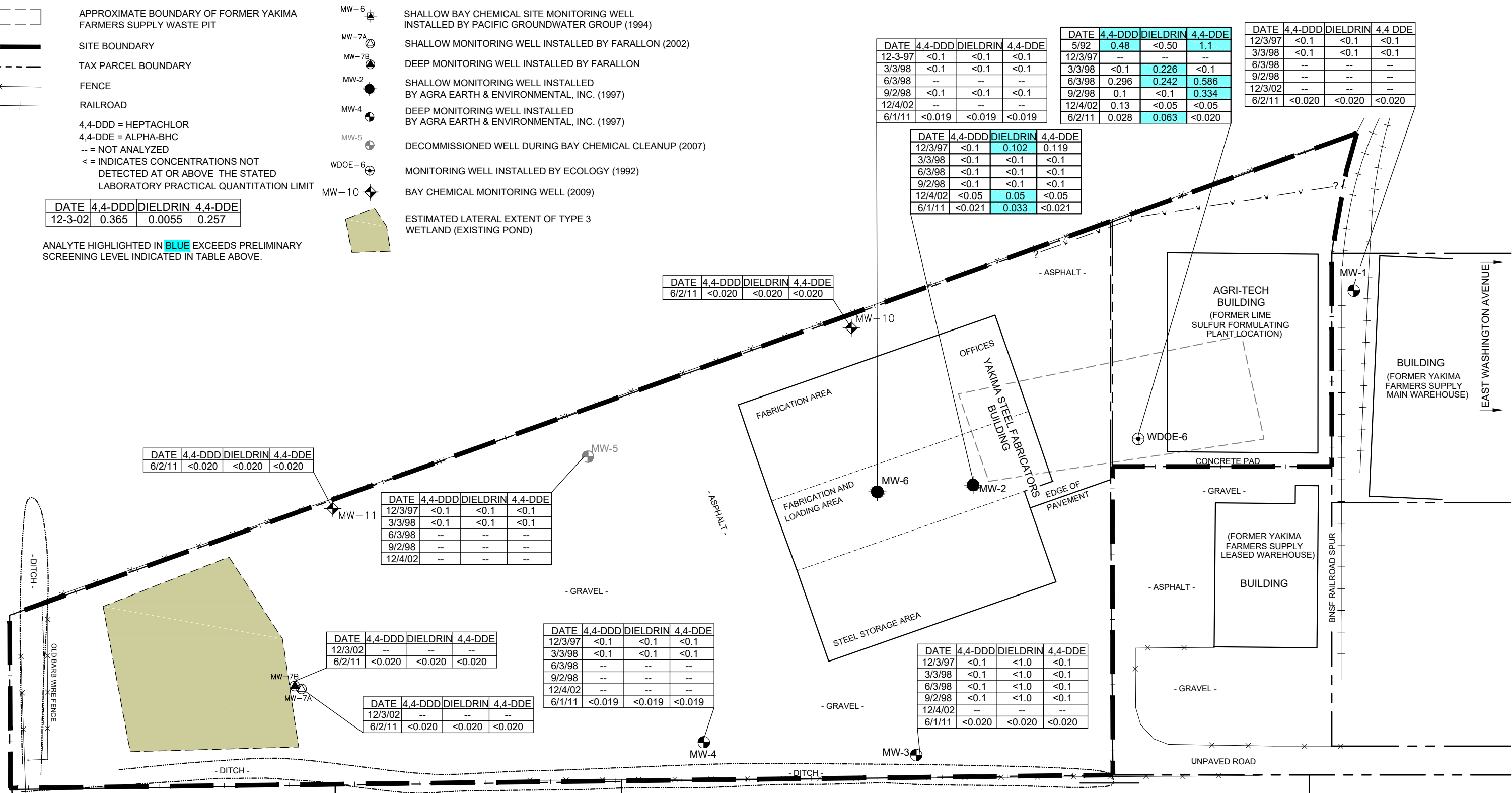
DATE	4,4-DDD	DIELDRIN	4,4-DDE
12/3/97	<0.1	<0.1	<0.1
3/3/98	<0.1	<0.1	<0.1
6/3/98	--	--	--
9/2/98	--	--	--
12/4/02	--	--	--

DATE	4,4-DDD	DIELDRIN	4,4-DDE
12/3/02	--	--	--
6/2/11	<0.020	<0.020	<0.020

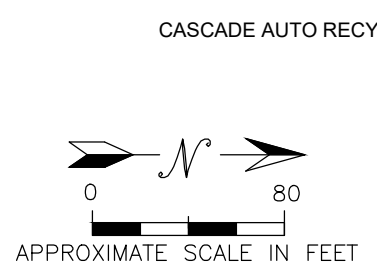
DATE	4,4-DDD	DIELDRIN	4,4-DDE
12/3/02	--	--	--
6/2/11	<0.020	<0.020	<0.020

DATE	4,4-DDD	DIELDRIN	4,4-DDE
12/3/97	<0.1	<0.1	<0.1
3/3/98	<0.1	<0.1	<0.1
6/3/98	--	--	--
9/2/98	--	--	--
12/4/02	--	--	--
6/1/11	<0.019	<0.019	<0.019

DATE	4,4-DDD	DIELDRIN	4,4-DDE
12/3/97	<0.1	<1.0	<0.1
3/3/98	<0.1	<1.0	<0.1
6/3/98	<0.1	<1.0	<0.1
9/2/98	<0.1	<1.0	<0.1
12/4/02	--	--	--
6/1/11	<0.020	<0.020	<0.020



DRAFT



Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 4

GROUNDWATER ANALYTICAL RESULTS FOR
ORGANOCHLORINE PESTICIDES
YSF/AGRI-TECH
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

P:\765001 Yakima Steel Fab\Drawings_Plots\765-001.dwg, 12/18/2017 5:40:32 PM, DWG to PDF.pcf

LEGEND

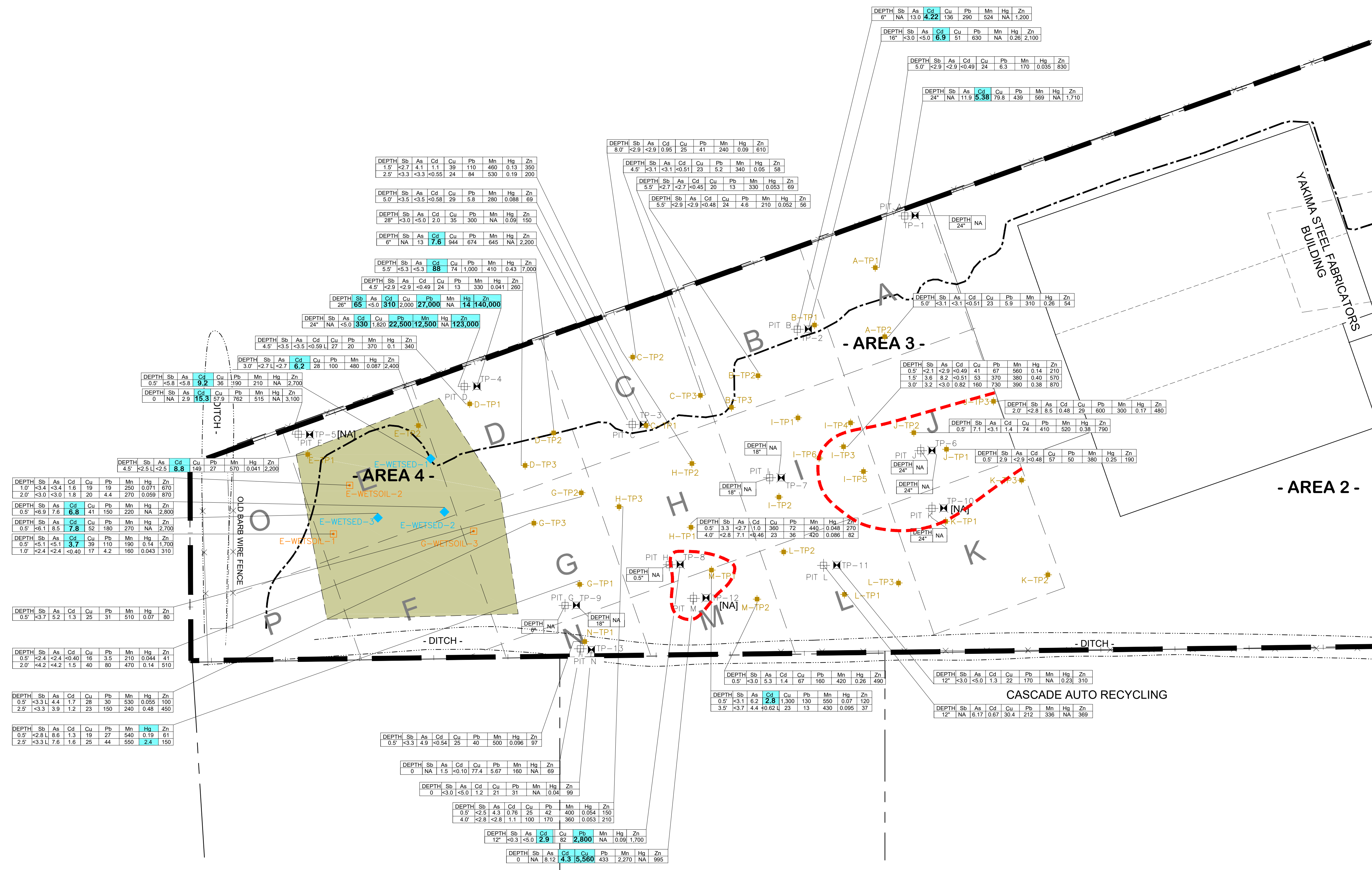
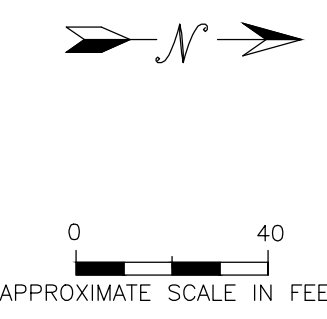
- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA 1** FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA 2** FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA 3** YAKIMA STEEL STORAGE YARD AND WETLAND AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD
- BAY CHEMICAL CLEANUP AREA
- D-TP3 TEST PIT LOCATION FARALLON CONSULTING (2011)
- E-WETSSED-1 WET SEDIMENT SAMPLE LOCATION FARALLON CONSULTING (2011)
- E-WETSSED-2 WET SOIL SAMPLE LOCATION FARALLON CONSULTING (2011)
- PIT B WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGICAL) TEST PIT (2007)
- TP-2 ENVIRONMENTAL PARTNERS, INC. TEST PIT (2007)
- M ECOLOGY SAMPLING GRID DESIGNATION
- ESTIMATED LATERAL EXTENT OF TYPE 3 WETLAND (EXISTING POND)
- AREAS TO BE REMEDIATED IN ACCORDANCE WITH TERRESTRIAL ECOLOGICAL EVALUATION REQUIREMENTS

Sb = ANTIMONY
 As = ARSENIC
 Cd = CADMIUM
 Cu = COPPER
 Pb = LEAD
 Mn = MANGANESE
 Hg = MERCURY
 Zn = ZINC
 NA = NOT ANALYZED
 < = INDICATES CONCENTRATIONS NOT DETECTED AT OR ABOVE THE STATED LABORATORY PRACTICAL QUANTITATION DEPTH IN INCHES BELOW GROUND SURFACE

SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM DEPTH IN INCHES BELOW GROUND SURFACE

Sb	As	Cd	Cu	Pb	Mn	Hg	Zn
32	20	200	2,960	1,000	11,000	2.0	24,000

ANALYTE HIGHLIGHTED IN BLUE EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.



DRAFT

FARALLON CONSULTING
 Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 5
 TERRESTRIAL ECOLOGICAL EVALUATION
 AREAS TO BE REMEDIATED
 YSFAGRI-TECH
 6 & 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON
 FARALLON PN: 765-001

Washington
 Issaquah | Bellingham | Seattle
 Oregon
 Portland | Bend | Baker City
 California
 Oakland | Sacramento | Irvine

Drawn By: DEW Checked By: JK Date: 12/18/2017 Disk Reference: 765001A

TABLES

CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM

Agri-Tech and Yakima Steel Fabricators Site
Yakima Steel Fabricators
Yakima, Washington

Farallon PN: 765-001

Table 1
Soil and Sediment Constituents of Concern and Cleanup Levels
Yakima Steel Fabricators
Seattle, Washington
Farallon PN: 765-001

Constituent of Potential Concern	Carcinogen or Non-Carcinogen	Soil and Sediment Cleanup Levels										Retained As Constituent of Concern for Feasibility Study	
		Soil											Sediment
		Soil Method A Unrestricted Land Use (mg/kg)	Soil Method A Industrial Properties (mg/kg)	Soil Method B Non-Cancer (mg/kg) ¹	Soil Method B Cancer (mg/kg) ¹	Soil Method B Protective of Groundwater Vadose Zone @ 25 degrees C (mg/kg) ¹	Soil Method B Protective of Groundwater Vadose Zone @ 13 degrees C (mg/kg) ¹	Soil Method B Protection of Groundwater Saturated Zone (mg/kg) ¹	Soil Method C Non-Cancer (mg/kg) ¹	Soil Method C Cancer (mg/kg) ¹	Dry Weight Sediment Cleanup Objective (mg/kg)		
Tetrachloroethene	Carcinogen	0.05	0.05	480	476.19	0.053	0.050	0.0028	21,000	62,500	Not Applicable	Yes	
Trichloroethene	Carcinogen	0.03	0.03	40	12	0.026	0.025	0.0015	1,750	2,853.26	Not Applicable	Yes	
cis-1,2-Dichloroethene	Non-Carcinogen	Not Applicable	Not Applicable	160	Not Applicable	0.080	0.078	0.0052	7,000	Not Applicable	Not Applicable	Yes	
Vinyl chloride	Carcinogen	Not Applicable	Not Applicable	240	0.67	0.002	0.0017	0.0001	10,500	87.50	Not Applicable	No	
1,1-Dichloroethene	Non-Carcinogen	Not Applicable	Not Applicable	4,000	Not Applicable	0.050	0.046	0.0025	175,000	Not Applicable	Not Applicable	No	
1,2-dichloropropane	Carcinogen	Not Applicable	Not Applicable	7,200	27.78	0.026	0.025	0.0017	315,000	3,645.83	Not Applicable	Yes	
4,4-DDE* (DDE)	Carcinogen	Not Applicable	Not Applicable	Not Applicable	2.94	0.45	0.45	0.022	Not Applicable	386.03	Not Applicable	No	
4,4-DDD* (DDD)	Carcinogen	Not Applicable	Not Applicable	Not Applicable	4.17	0.34	Not Applicable	0.017	Not Applicable	546.88	0.31	No	
Dieldrin	Carcinogen	Not Applicable	Not Applicable	4	0.063	0.0028	0.0028	0.0001	175	8.20	0.0049	Yes	
Endrin	Non-Carcinogen	Not Applicable	Not Applicable	24	Not Applicable	0.44	Not Applicable	0.022	1,050	Not Applicable	0.0085	No	
Heptachlor epoxide	Carcinogen	Not Applicable	Not Applicable	1.04	0.11	0.08	Not Applicable	0.0040	45.50	14.42	Not Applicable	No	
Aldrin	Non-Carcinogen	Not Applicable	Not Applicable	2.40	0.059	0.0025	0.0025	0.0001	105	7.72	Not Applicable	Yes	
Alpha chlordane* (chlordane total)	Carcinogen	Not Applicable	Not Applicable	40	2.86	2.06	2.06	0.10	1,750	375	Not Applicable	No	
DRO	Non-Carcinogen	2,000	2,000	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	340	Yes	
ORO	Non-Carcinogen	2,000	2,000	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No	
cPAHs* (TEC)	Carcinogen	0.10	2	Not Applicable	0.14	2.33	Not Applicable	0.12	Not Applicable	17.98	17	No	
Antimony	Non-Carcinogen	Not Applicable	Not Applicable	32	Not Applicable	5.42	5.42	0.27	1,400	Not Applicable	Not Applicable	No	
Arsenic	Carcinogen	20	20	24	0.67	2.92	2.92	0.15	1,050	87.50	14	No	
Cadmium	Non-Carcinogen	2	2	80	Not Applicable	0.69	0.69	0.035	Not Applicable	Not Applicable	2.10	Yes	
Copper	Non-Carcinogen	Not Applicable	Not Applicable	3,200	Not Applicable	284	284	14.26	140,000	Not Applicable	400	Yes	
Lead	Non-Carcinogen	250	1,000	Not Applicable	Not Applicable	3,000	3,000	150	Not Applicable	Not Applicable	360	Yes	
Mercury	Non-Carcinogen	2	2	Not Applicable	Not Applicable	2.09	2.09	0.10	Not Applicable	Not Applicable	0.66	Yes	
Zinc	Non-Carcinogen	Not Applicable	Not Applicable	24,000	Not Applicable	5,971	5,970	298.98	1,050,000	Not Applicable	3,200	No	

NOTES:

Bold denotes selected cleanup level.

¹ Cleanup level is based on standard Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method B (unrestricted land use) or Method C (industrial land use) values from the Cleanup and Risk Calculations tables (CLARC).

"Not Applicable" is used where the constituent of concern will not affect the media of potential concern due to an incomplete pathway or no pertinent standard exists.

C = Celsius

cPAH = carcinogenic polycyclic aromatic hydrocarbons

DDD = dichlorodiphenyldichloroethane

DDE = dichlorodiphenyldichloroethylene

DRO = total petroleum hydrocarbons as diesel range organics

mg/kg = milligrams per kilogram

ORO = total petroleum hydrocarbons as oil-range organics

TEC = toxicity equivalent concentration

Table 2
Groundwater Constituents of Concern and Cleanup Levels
Yakima Steel Fabricators
Seattle, Washington
Farallon PN: 765-001

Constituent of Potential Concern	Carcinogen or Non-Carcinogen	Groundwater Cleanup Levels					Retained As Constituent of Concern for Feasibility Study
		Groundwater Method A (µg/l)	Groundwater Method B Non-Cancer (µg/l) ¹	Groundwater Method B Cancer (µg/l) ¹	Groundwater Method C Non-Cancer (µg/l) ¹	Groundwater Method C Cancer (µg/l) ¹	
Tetrachloroethene	Carcinogen	5	48	20.83	105	208.33	Yes
Trichloroethene	Carcinogen	5	4	0.54	8.75	9.51	Yes
cis-1,2-Dichloroethene	Non-Carcinogen	Not Applicable	16	Not Applicable	35	Not Applicable	Yes
Vinyl chloride	Carcinogen	0.20	24	0.029	52.50	0.29	Yes
1,1-Dichloroethene	Non-Carcinogen	Not Applicable	400	Not Applicable	875	Not Applicable	No
1,2-dichloropropane	Carcinogen	Not Applicable	720	1.22	1,575	12.15	Yes
4,4-DDE* (DDE)	Carcinogen	Not Applicable	Not Applicable	0.26	Not Applicable	2.57	Yes
4,4-DDD* (DDD)	Carcinogen	Not Applicable	Not Applicable	0.36	Not Applicable	3.65	Yes
Dieldrin	Carcinogen	Not Applicable	0.80	0.0055	1.75	0.055	Yes
Endrin	Non-Carcinogen	Not Applicable	4.80	Not Applicable	10.50	Not Applicable	No
Heptachlor epoxide	Carcinogen	Not Applicable	0.10	0.0048	0.23	0.048	No
Aldrin	Non-Carcinogen	Not Applicable	0.24	0.0026	0.53	0.026	No
Alpha chlordane* (chlordane total)	Carcinogen	Not Applicable	8	0.25	17.50	2.50	No
DRO	Non-Carcinogen	500	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
ORO	Non-Carcinogen	500	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
cPAHs* (TEC)	Carcinogen	0.10	Not Applicable	0.012	Not Applicable	0.12	No
Antimony	Non-Carcinogen	Not Applicable	6.40	Not Applicable	14	Not Applicable	No
Arsenic	Carcinogen	5	4.80	0.058	10.50	0.58	No
Cadmium	Non-Carcinogen	5	8	Not Applicable	17.50	Not Applicable	No
Copper	Non-Carcinogen	Not Applicable	Not Applicable	640	Not Applicable	1,400	No
Lead	Non-Carcinogen	15	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Mercury	Non-Carcinogen	2	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Zinc	Non-Carcinogen	Not Applicable	4,800	Not Applicable	10,500	Not Applicable	No

NOTES:

Bold denotes selected cleanup level.

¹Cleanup level is based on standard Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method B (unrestricted land use) or Method C (industrial land use) values from the Cleanup and Risk Calculations tables (CLARC).

"Not Applicable" is used where the constituent of concern will not affect the media of potential concern due to an incomplete pathway or no pertinent standard exists.

cPAH = carcinogenic polycyclic aromatic hydrocarbons

DDD = dichlorodiphenyldichloroethane

DDE = dichlorodiphenyldichloroethylene

DRO = total petroleum hydrocarbons as diesel-range organics

µg/l = micrograms per liter

ORO = total petroleum hydrocarbons as oil-range organics

TEC = toxic equivalent concentration

Table 3
Soil Gas and Indoor Air Constituents of Concern and Cleanup Levels
Yakima Steel Fabricators
Seattle, Washington
Farallon PN: 765-001

Constituent of Potential Concern	Carcinogen or Non-Carcinogen	Air Cleanup Levels				Retained As Constituent of Concern for Feasibility Study
		Air Method B Non-Cancer ($\mu\text{g}/\text{m}^3$) ¹	Air Method B Cancer ($\mu\text{g}/\text{m}^3$) ¹	Air Method C Non-Cancer ($\mu\text{g}/\text{m}^3$) ¹	Air Method C Cancer ($\mu\text{g}/\text{m}^3$) ¹	
Tetrachloroethene	Carcinogen	18.29	9.62	40	96	Yes
Trichloroethene	Carcinogen	0.91	0.37	2	6	Yes
cis-1,2-Dichloroethene	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Vinyl chloride	Carcinogen	45.71	0.28	100	3	Yes
Chloromethane	Non-Carcinogen	41.10	Not Applicable	90.0	Not Applicable	No
1,1-Dichloroethene	Non-Carcinogen	91.43	Not Applicable	200	Not Applicable	No
1,2-dichloropropane	Carcinogen	1.83	0.25	4	3	No
4,4-DDE* (DDE)	Carcinogen	Not Applicable	0.026	Not Applicable	0.26	No
4,4-DDD* (DDD)	Carcinogen	Not Applicable	0.036	Not Applicable	0.36	No
Dieldrin	Carcinogen	Not Applicable	0.00054	Not Applicable	0.01	No
Endrin	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Heptachlor epoxide	Carcinogen	Not Applicable	0.00096	Not Applicable	0.01	No
Aldrin	Non-Carcinogen	Not Applicable	0.00051	Not Applicable	0.01	No
Alpha chlordane* (chlordane total)	Carcinogen	0.32	0.025	0.70	0.25	No
DRO	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
ORO	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
cPAHs* (TEC)	Carcinogen	Not Applicable	0.0023	Not Applicable	0.02	No
Antimony	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Arsenic	Carcinogen	0.007	0.00058	0.015	0.006	No
Cadmium	Non-Carcinogen	0.005	0.0014	0.010	0.014	No
Copper	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Lead	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Mercury	Non-Carcinogen	0.14	Not Applicable	0.30	Not Applicable	No
Zinc	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No

NOTES:

Bold denotes selected cleanup level.

"Not Applicable" is used where the constituent of concern will not affect the media of potential concern due to an incomplete pathway or no pertinent standard exists.

¹Cleanup level is based on standard Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method B (unrestricted land use) or Method C (industrial land use) values from the Cleanup and Risk Calculations tables (CLARC).

cPAH = carcinogenic polycyclic aromatic hydrocarbons

DDD = dichlorodiphenyldichloroethane

DDE = dichlorodiphenyldichloroethylene

DRO = total petroleum hydrocarbons as diesel range organics

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air

ORO = total petroleum hydrocarbons as oil-range organics

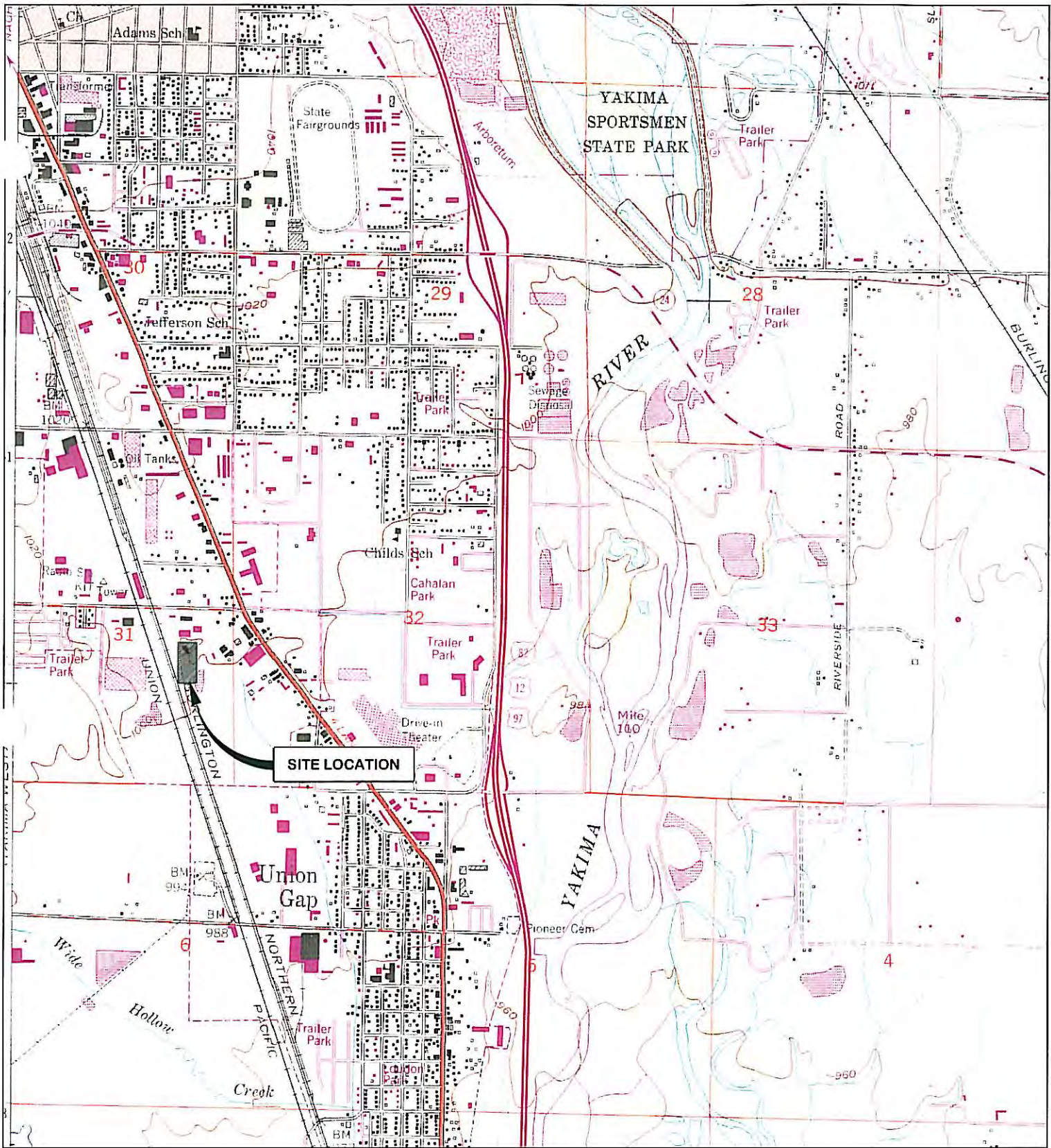
TEC = toxicity equivalent concentration

**ATTACHMENT A
YSF REMEDIAL INVESTIGATION FIGURES AND TABLES**

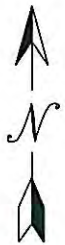
CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM

Agri-Tech and Yakima Steel Fabricators Site
Yakima Steel Fabricators
Yakima, Washington

Farallon PN: 765-001




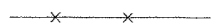
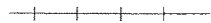
WASHINGTON




FARALLON CONSULTING
 320 3rd Ave. NE
 Issaquah, WA 98027

FIGURE 1
 SITE LOCATION AND REGIONAL
 TOPOGRAPHIC MAP
 YSF/AGRI-TECH REMEDIAL INVESTIGATION
 6 & 10 1/2 EAST WASHINGTON AVNU.E.
 YAKIMA, WASHINGTON
 FARALLON PN: 765-001

LEGEND

-  TAX PARCEL BOUNDARY
-  FENCE
-  RAILROAD

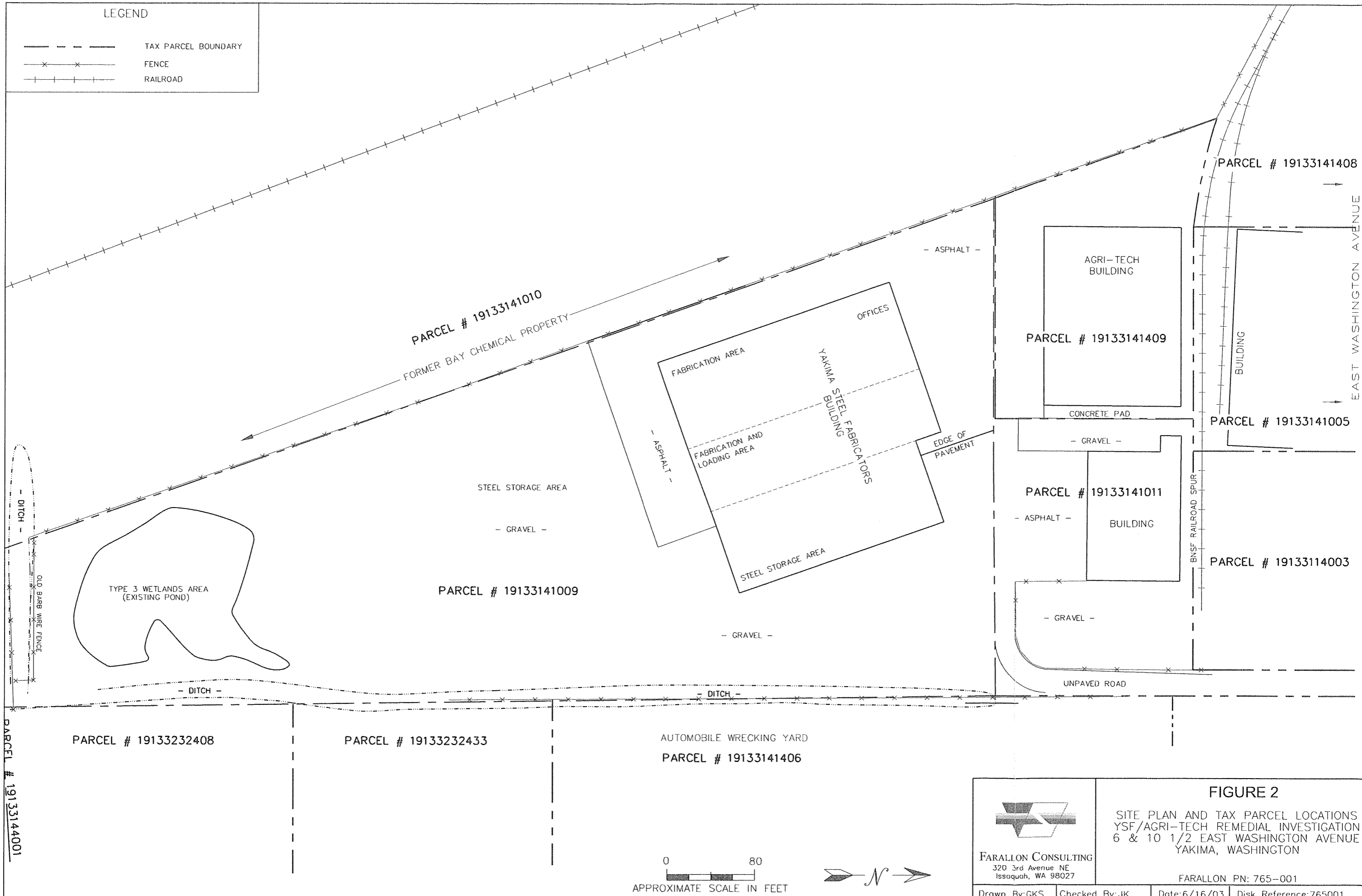


FIGURE 2

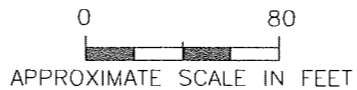
SITE PLAN AND TAX PARCEL LOCATIONS
YSF/AGRI-TECH REMEDIAL INVESTIGATION
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON










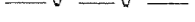

FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

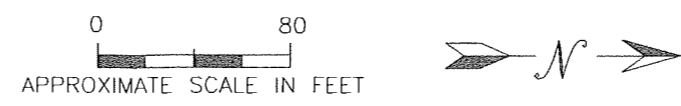
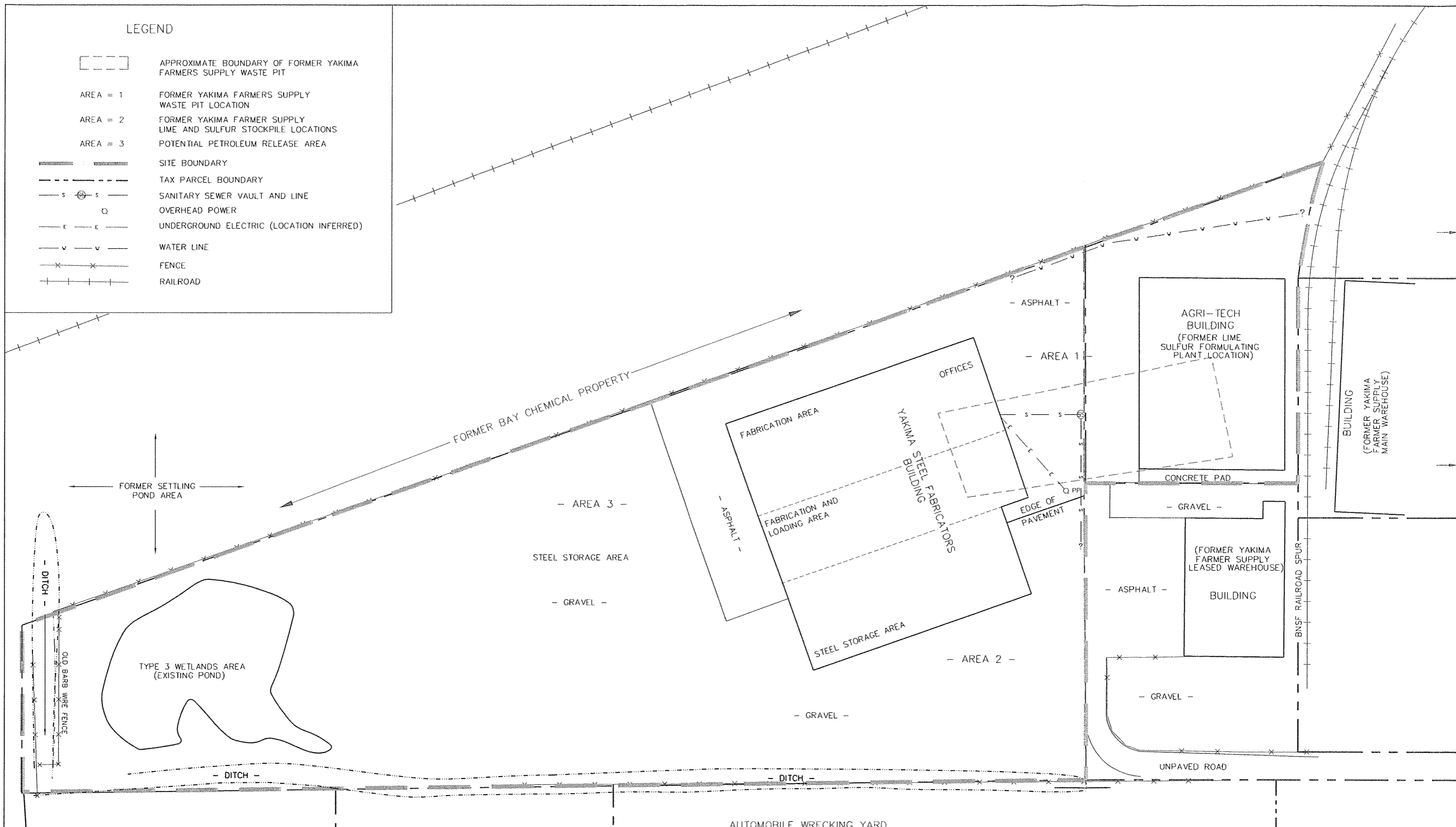
FARALLON PN: 765-001

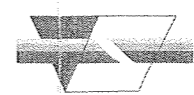
Drawn By:GKS | Checked By:JK | Date:6/16/03 | Disk Reference:765001









LEGEND


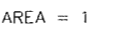
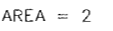
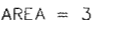




-  APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
-  SITE BOUNDARY
-  TAX PARCEL BOUNDARY
-  SANITARY SEWER VAULT AND LINE
-  OVERHEAD POWER
-  UNDERGROUND ELECTRIC (LOCATION INFERRED)
-  WATER LINE
-  FENCE
-  RAILROAD

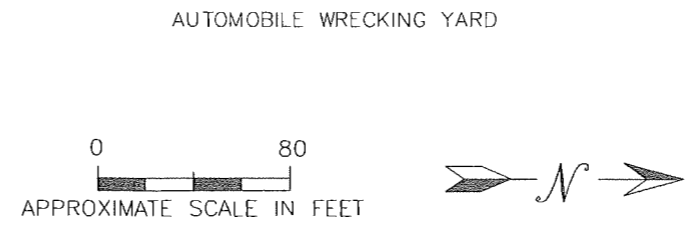
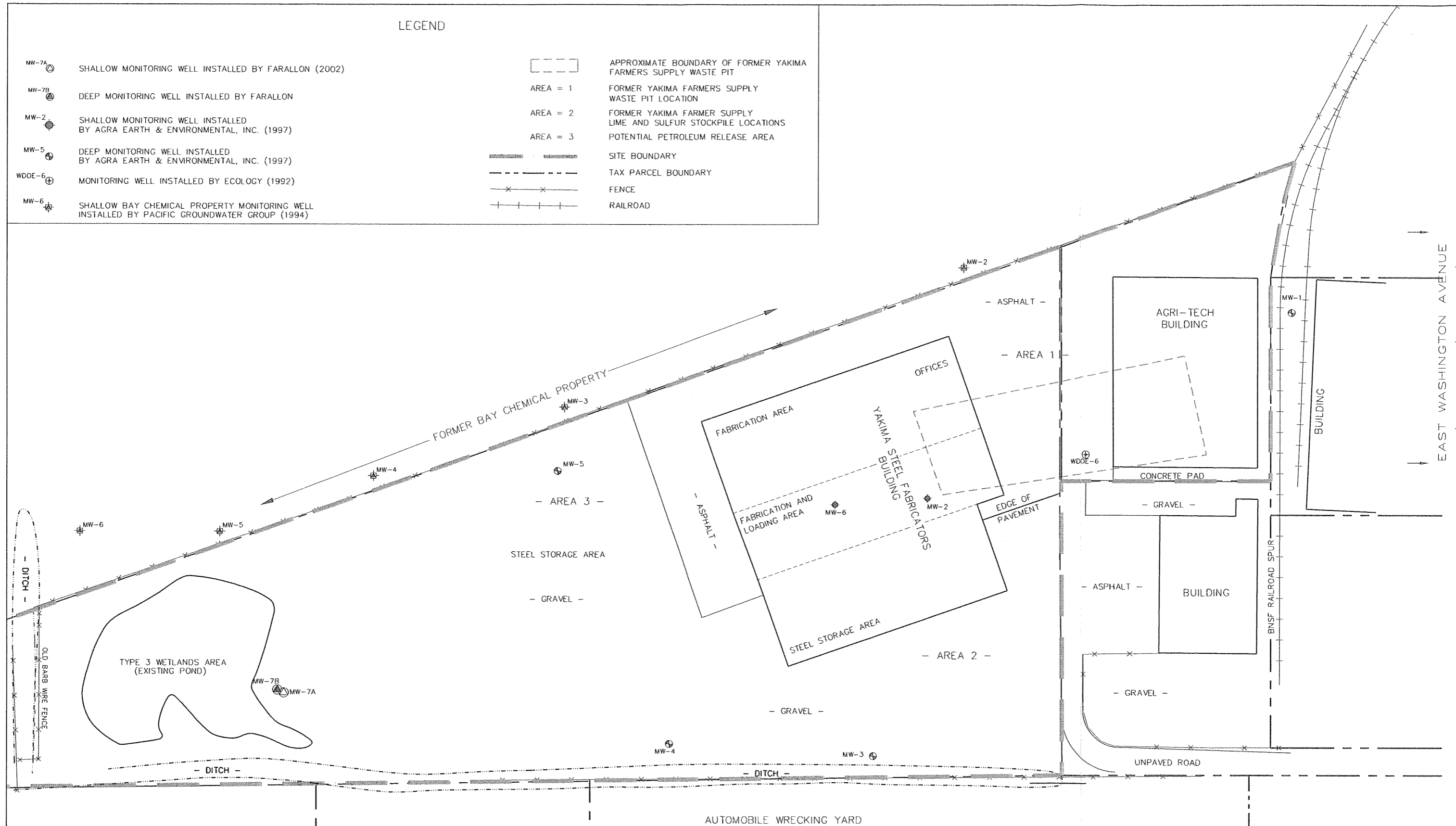



 FARALLON CONSULTING 320 3rd Avenue NE Issaquah, WA 98027	FIGURE 3 SITE PLAN YSF/AGRI-TECH REMEDIAL INVESTIGATION 6 & 10 1/2 EAST WASHINGTON AVENUE YAKIMA, WASHINGTON	
	FARALLON PN: 765-001	
Drawn By: GKS	Checked By: JK	Date: 6/16/03
Disk Reference: 765001		

LEGEND

- MW-7A  SHALLOW MONITORING WELL INSTALLED BY FARALLON (2002)
- MW-7B  DEEP MONITORING WELL INSTALLED BY FARALLON
- MW-2  SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5  DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6  MONITORING WELL INSTALLED BY ECOLOGY (1992)
- MW-6  SHALLOW BAY CHEMICAL PROPERTY MONITORING WELL INSTALLED BY PACIFIC GROUNDWATER GROUP (1994)

-  APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1  FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2  FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3  POTENTIAL PETROLEUM RELEASE AREA
-  SITE BOUNDARY
-  TAX PARCEL BOUNDARY
-  FENCE
-  RAILROAD



 FARALLON CONSULTING 320 3rd Avenue NE Issaquah, WA 98027	FIGURE 4 SITE PLAN WITH GROUNDWATER MONITORING WELL LOCATIONS YSF/AGRI-TECH REMEDIAL INVESTIGATION 6 & 10 1/2 EAST WASHINGTON AVENUE YAKIMA, WASHINGTON FARALLON PN: 765-001
	Drawn By: GKS Checked By: JK Date: 4/11/03 Disk Reference: 765001

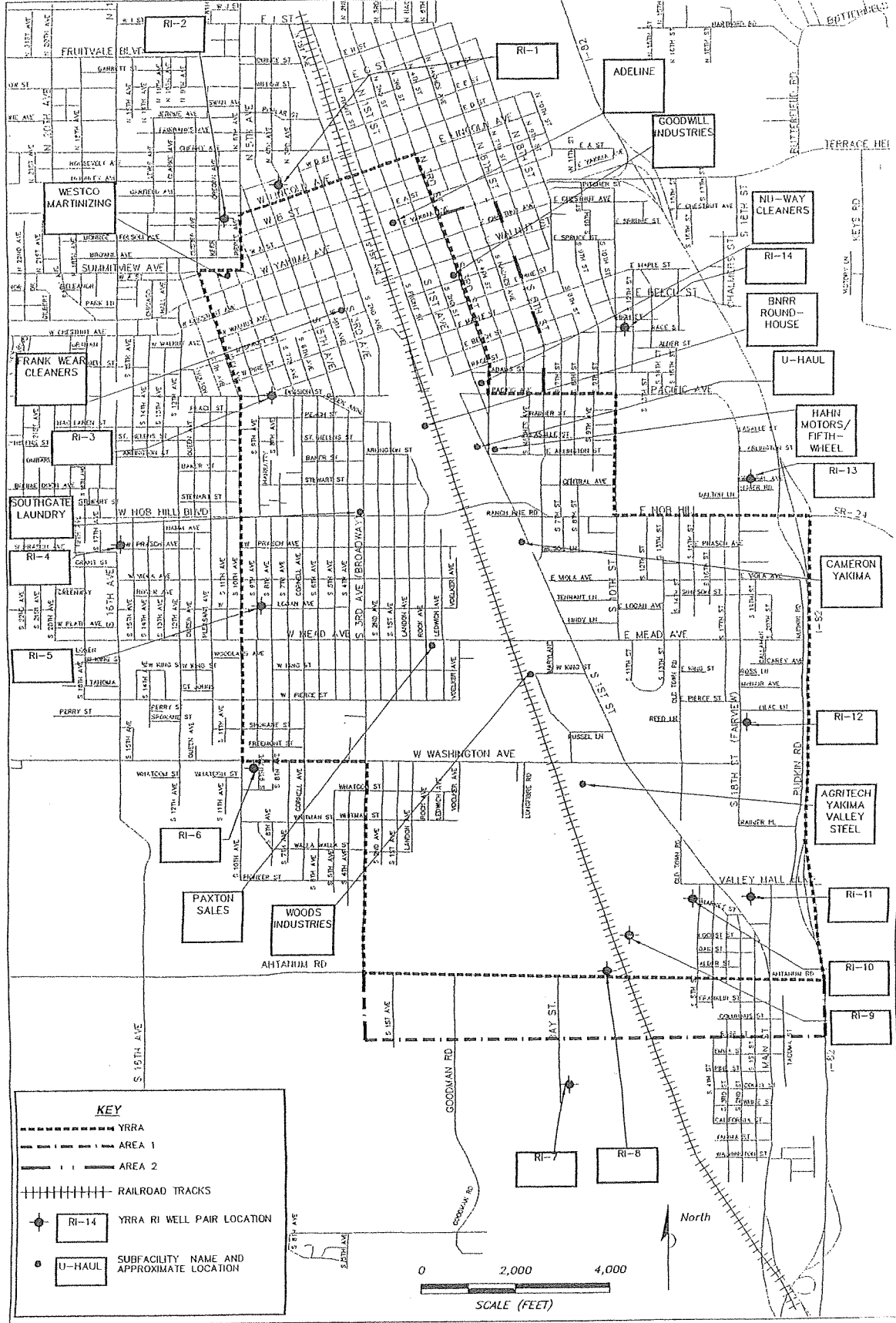


FIGURE 5

SURROUNDING CONFIRMED OR SUSPECTED CONTAMINATED SITES
 YSF/AGRI-TECH REMEDIAL INVESTIGATION
 YAKIMA, WASHINGTON



FARALLON CONSULTING
 320 3rd Ave. NE
 Issaquah, WA 98027

FARALLON PN: 765-001







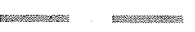

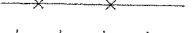

Drawn By: DEW

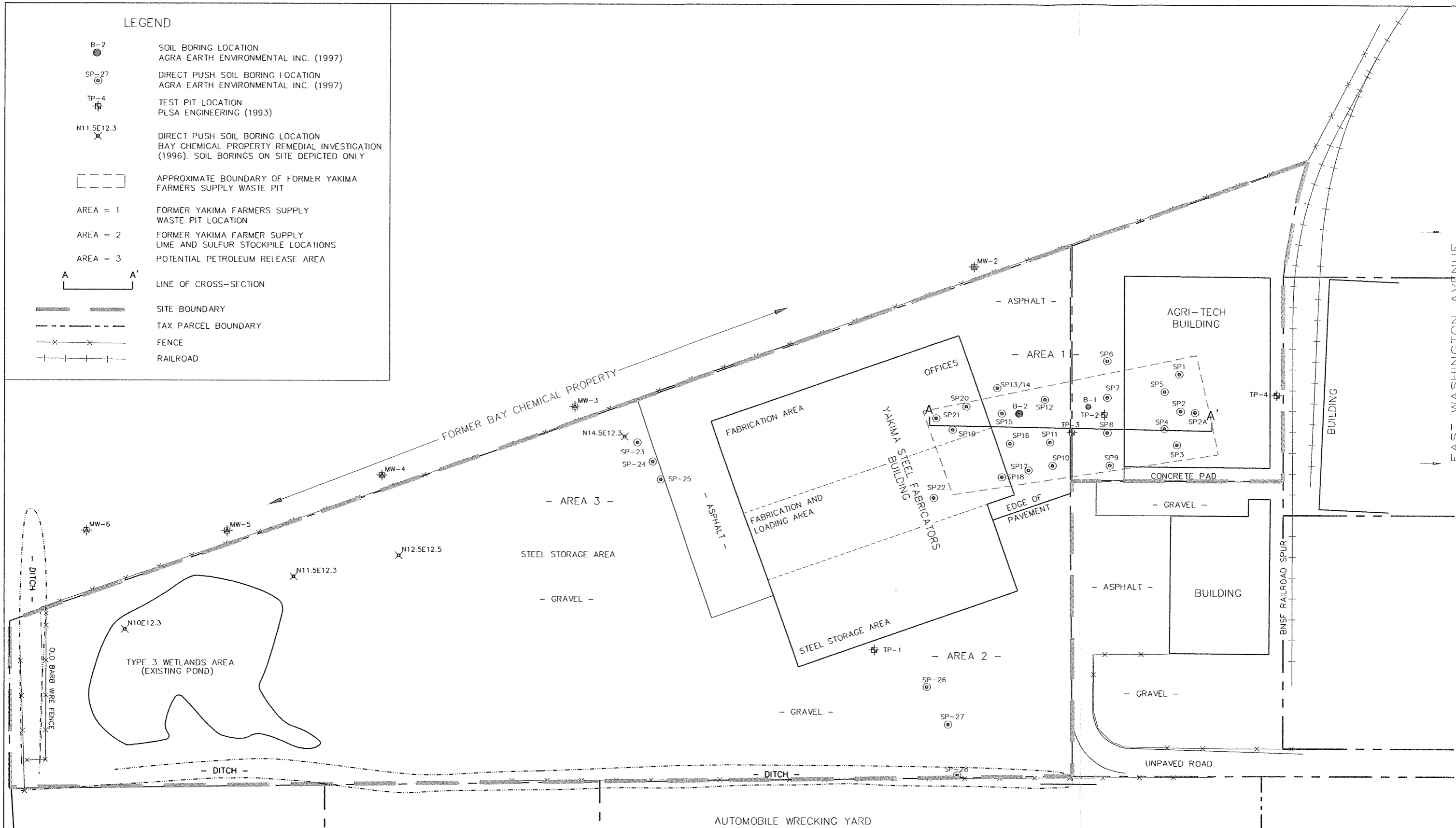
Checked By: JC


Date: 2/28/03

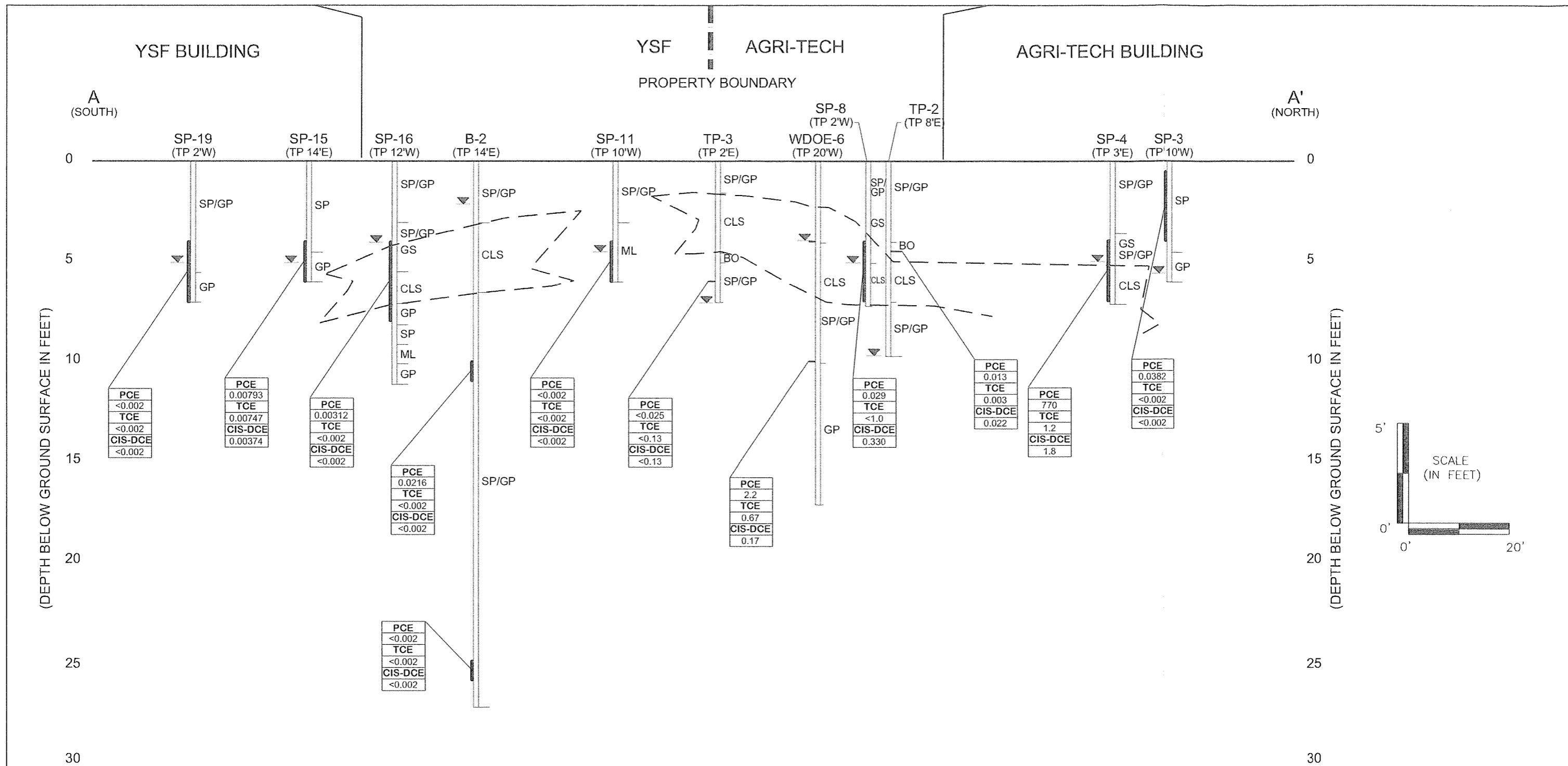
Disk Reference: 765001

LEGEND

-  SOIL BORING LOCATION
AGRA EARTH ENVIRONMENTAL INC. (1997)
-  DIRECT PUSH SOIL BORING LOCATION
AGRA EARTH ENVIRONMENTAL INC. (1997)
-  TEST PIT LOCATION
PLSA ENGINEERING (1993)
-  DIRECT PUSH SOIL BORING LOCATION
BAY CHEMICAL PROPERTY REMEDIAL INVESTIGATION
(1996). SOIL BORINGS ON SITE DEPICTED ONLY
-  APPROXIMATE BOUNDARY OF FORMER YAKIMA
FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY
WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY
LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
-  LINE OF CROSS-SECTION
-  SITE BOUNDARY
-  TAX PARCEL BOUNDARY
-  FENCE
-  RAILROAD



 FARALLON CONSULTING 320 3rd Avenue NE Issaquah, WA 98027	FIGURE 6 SITE PLAN WITH SOIL BORING LOCATIONS YSF/AGRI-TECH REMEDIAL INVESTIGATION 6 & 10 1/2 EAST WASHINGTON AVENUE YAKIMA, WASHINGTON
	FARALLON PN: 765-001 Drawn By:GKS Checked By:JK Date:6/16/03 Disk Reference:765001



LEGEND

<p>SP-8 (TP72'S)</p> <p>BORING LOCATION TRANPOSED (TP) IN FEET, NORTH (N), SOUTH (S), EAST (E), OR WEST (W) TO CROSS SECTION LINE.</p> <p>SOIL SAMPLE INTERVAL</p> <p>BLANK CASING</p> <p>GEOLOGIC CONTACT, INFERRED WHERE QUERIED</p> <p>BORING SAMPLE INTERVAL</p>	<p>SP-19 = DIRECT PUSH SOIL BORING LOCATION</p> <p>B-2 = SOIL BORING LOCATION</p> <p>TP-2 = TEST PIT LOCATION</p> <p>WDOE-6 = MONITORING WELL LOCATION</p> <p>GP = GRAVEL WITH VARYING AMOUNTS OF SAND AND SILT</p> <p>SP = SAND WITH VARYING AMOUNTS OF SILT AND GRAVEL</p> <p>SP/GP = SAND AND GRAVEL WITH VARYING AMOUNTS SILT</p> <p>ML = SILT WITH VARYING AMOUNTS OF SAND AND GRAVEL</p> <p>CLS = CLAYEY SUBSTANCE, GREEN-GREY TO YELLOW-GREY, MAY BE MIXED WITH SP/GP/ML</p> <p>GS = GRANULAR SULFUR, MAY BE MIXED WITH SP/GP/ML</p> <p>BO = BLACK, ORGANIC MATERIAL</p> <p>▽ = DEPTH TO WATER AT TIME OF DRILLING</p>	<table border="1"> <tr><td>PCE</td><td><0.050</td></tr> <tr><td>TCE</td><td><0.050</td></tr> <tr><td>CIS-DCE</td><td>0.132</td></tr> </table> <p>SOIL ANALYTICAL RESULTS IN (MILLIGRAMS PER KILOGRAM)</p> <p>PCE = TETRACHLOROETHENE</p> <p>TCE = TRICHLOROETHENE</p> <p>CIS-DCE = CIS 1,2-DICHLOROETHENE</p>	PCE	<0.050	TCE	<0.050	CIS-DCE	0.132
PCE	<0.050							
TCE	<0.050							
CIS-DCE	0.132							

FIGURE 7

CROSS-SECTION A-A' VOLATILE ORGANIC COMPOUNDS SOIL ANALYTICAL RESULTS
 YSF/AGRI-TECH REMEDIAL INVESTIGATION
 6 & 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON

FARALLON CONSULTING
 320 3rd Avenue NE
 Issaquah, WA 98027

FARALLON PN: 765-001

LEGEND

- B-2 SOIL BORING LOCATION
AGRA EARTH ENVIRONMENTAL INC. (1997)
- SP-27 DIRECT PUSH SOIL BORING LOCATION
AGRA EARTH ENVIRONMENTAL INC. (1997)
- MW-7A SHALLOW MONITORING WELL INSTALLED BY FARALLON (2002) *5-15' screen*
- MW-7B DEEP MONITORING WELL INSTALLED BY FARALLON *25-30' screen*
- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)

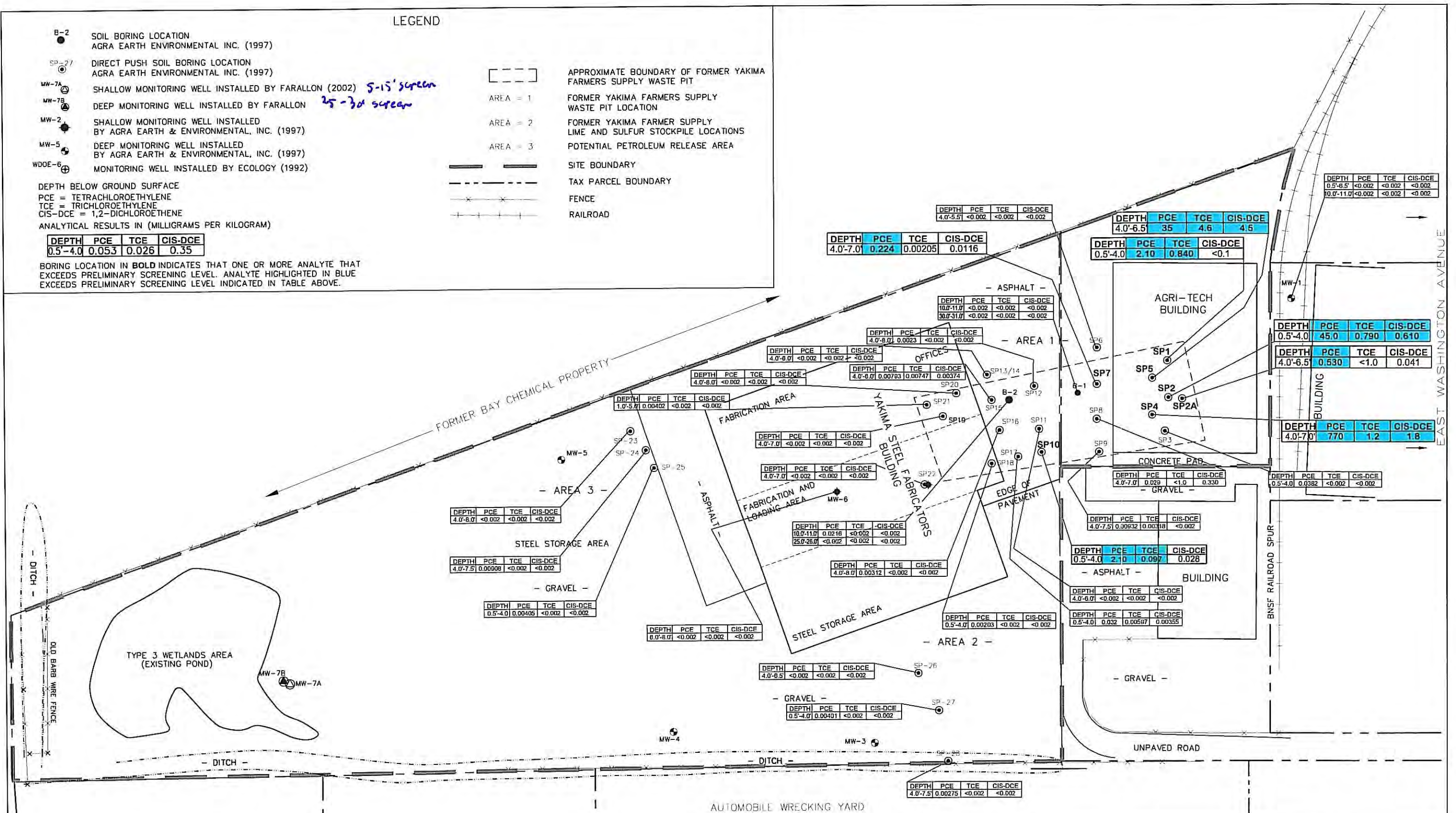
- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD


DEPTH BELOW GROUND SURFACE
PCE = TETRACHLOROETHYLENE
TCE = TRICHLOROETHYLENE
CIS-DCE = 1,2-DICHLOROETHENE

ANALYTICAL RESULTS IN (MILLIGRAMS PER KILOGRAM)

DEPTH	PCE	TCE	CIS-DCE
0.5'-4.0'	0.053	0.026	0.35

BORING LOCATION IN BOLD INDICATES THAT ONE OR MORE ANALYTE THAT EXCEEDS PRELIMINARY SCREENING LEVEL. ANALYTE HIGHLIGHTED IN BLUE EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.





FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FIGURE 9

SOIL ANALYTICAL
RESULTS: VOLATILE ORGANIC COMPOUNDS
YSF/AGRI-TECH REMEDIAL INVESTIGATION
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

Drawn By:GKS
Checked By:JK
Date:4/6/04
Disk Reference:765001

LEGEND

- B-2 SOIL BORING LOCATION
AGRA EARTH ENVIRONMENTAL INC. (1997)
- SP-27 DIRECT PUSH SOIL BORING LOCATION
AGRA EARTH ENVIRONMENTAL INC. (1997)

DEPTH= FEET BELOW GROUND SURFACE
ANALYTICAL RESULTS IN (MILLIGRAMS PER KILOGRAM)

DLD = DIELDRIN

DEPTH	4,4-DDD	4,4-DDE	4,4-DDT	DLD	ENDRIN
4.0'-6.5'	0.3354	0.4459	3.485	0.0028	0.0404

BORING LOCATION IN BOLD INDICATES THAT ONE OR MORE ANALYTE THAT EXCEEDS PRELIMINARY SCREENING LEVEL. ANALYTE HIGHLIGHTED IN BLUE EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.

- [---] APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- — — SITE BOUNDARY
- - - TAX PARCEL BOUNDARY
- x - x - FENCE
- + - + - RAILROAD

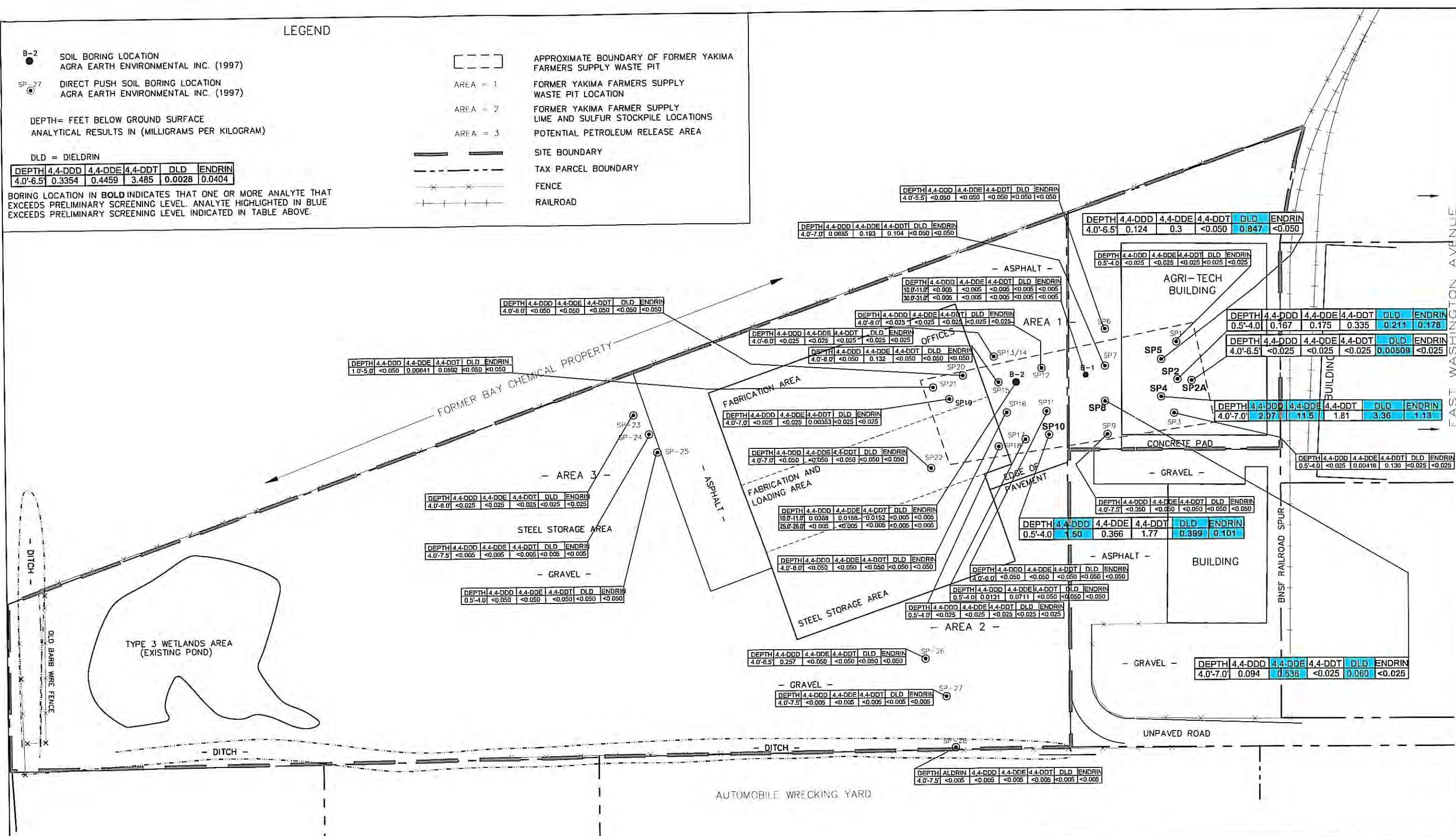


FIGURE 10

SOIL ANALYTICAL RESULTS: PESTICIDES
YSF/AGRI-TECH REMEDIAL INVESTIGATION
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

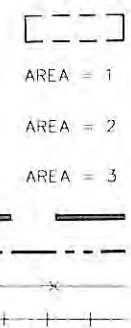
FARALLON PN: 765-001

FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

Drawn By:GKS | Checked By:JK | Date:4/6/04 | Disk Reference:765001

LEGEND

- SP-27 DIRECT PUSH SOIL BORING LOCATION
AGRA EARTH ENVIRONMENTAL INC. (1997)
- MW-E SHALLOW BAY CHEMICAL SITE MONITORING WELL
INSTALLED BY PACIFIC GROUNDWATER GROUP (1994)
- N11.5E12.3 DIRECT PUSH SOIL BORING LOCATION
BAY CHEMICAL SITE REMEDIAL INVESTIGATION
(1996). SOIL BORINGS ON SITE DEPICTED ONLY
- APPROXIMATE BOUNDARY OF FORMER YAKIMA
FARMERS SUPPLY WASTE PIT
- APPROXIMATE BOUNDARY OF FORMER YAKIMA
FARMERS SUPPLY WASTE PIT



- APPROXIMATE BOUNDARY OF FORMER YAKIMA
FARMERS SUPPLY WASTE PIT
- FORMER YAKIMA FARMERS SUPPLY
WASTE PIT LOCATION
- FORMER YAKIMA FARMER SUPPLY
LIME AND SULFUR STOCKPILE LOCATIONS
- POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
4.0'-8.0'	20	2	1,000	2	24,000

DEPTH= FEET BELOW GROUND SURFACE
ANALYTICAL RESULTS (MILLIGRAMS PER KILOGRAM)
-- = NOT ANALYZED

BORING LOCATION IN BOLD INDICATES THAT ONE OR MORE ANALYTE THAT
EXCEEDS PRELIMINARY SCREENING LEVEL. ANALYTE HIGHLIGHTED IN BLUE
EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
0	210	23	970	0.22	5,500
2.5'	110	66	4,300	1.65	16,000
5'	<68	2,000	2,300	0.123	68,000

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
0	<170	510	35,500	17.4	260,000
2.5'	<170	460	29,000	14.6	260,000
5'	<110	77	8,700	1.99	43,000

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
0	4.6	3.8	410	0.234	1,200
7.5'	3.9	3.7	49	0.047	1,700
10'	<2.7	9.7	740	0.312	3,700
15'	7.3	5	650	0.218	1,800

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
0	<140	460	28,000	0.423	290,000
2.5'	<36	330	35,000	8.4	180,000
7.5'	<1.9	30	1,700	0.357	14,000

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
4.0'-7.5'	3.35	23.4	<0.500	5.09	5,750

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
4.0'-8.0'	6.3	5.49	47.7	0.137	3,240

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
0	--	--	420	--	--
1.5'	--	--	140	--	--
3.5'	--	--	130	--	--
5.5'	--	--	20	--	--

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
0	--	--	190	--	--
1.5'	--	--	82	--	--
3.5'	--	--	28	--	--
5.5'	--	--	51	--	--

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
0	--	--	24,000	--	--
1.5'	--	--	1,700	--	--
3.5'	--	--	160	--	--
5.5'	--	--	44	--	--

DEPTH	ARSENIC	CADMIUM	LEAD	MERCURY	ZINC
0	<29	150	12,000	6.23	14,000
2.5'	<2.3	16	640	0.453	3,900
5'	<2.2	2.3	18	0.078	640

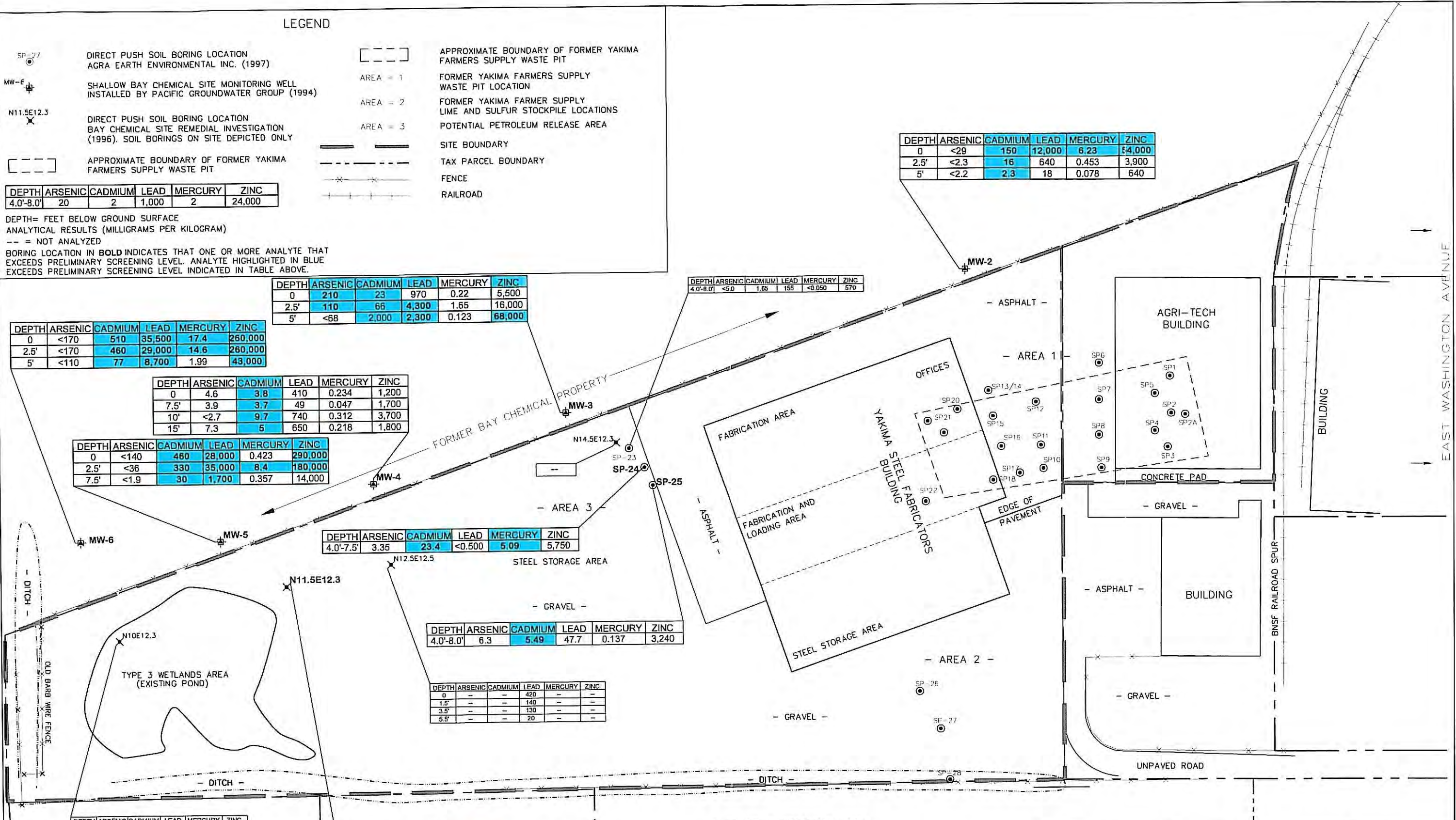


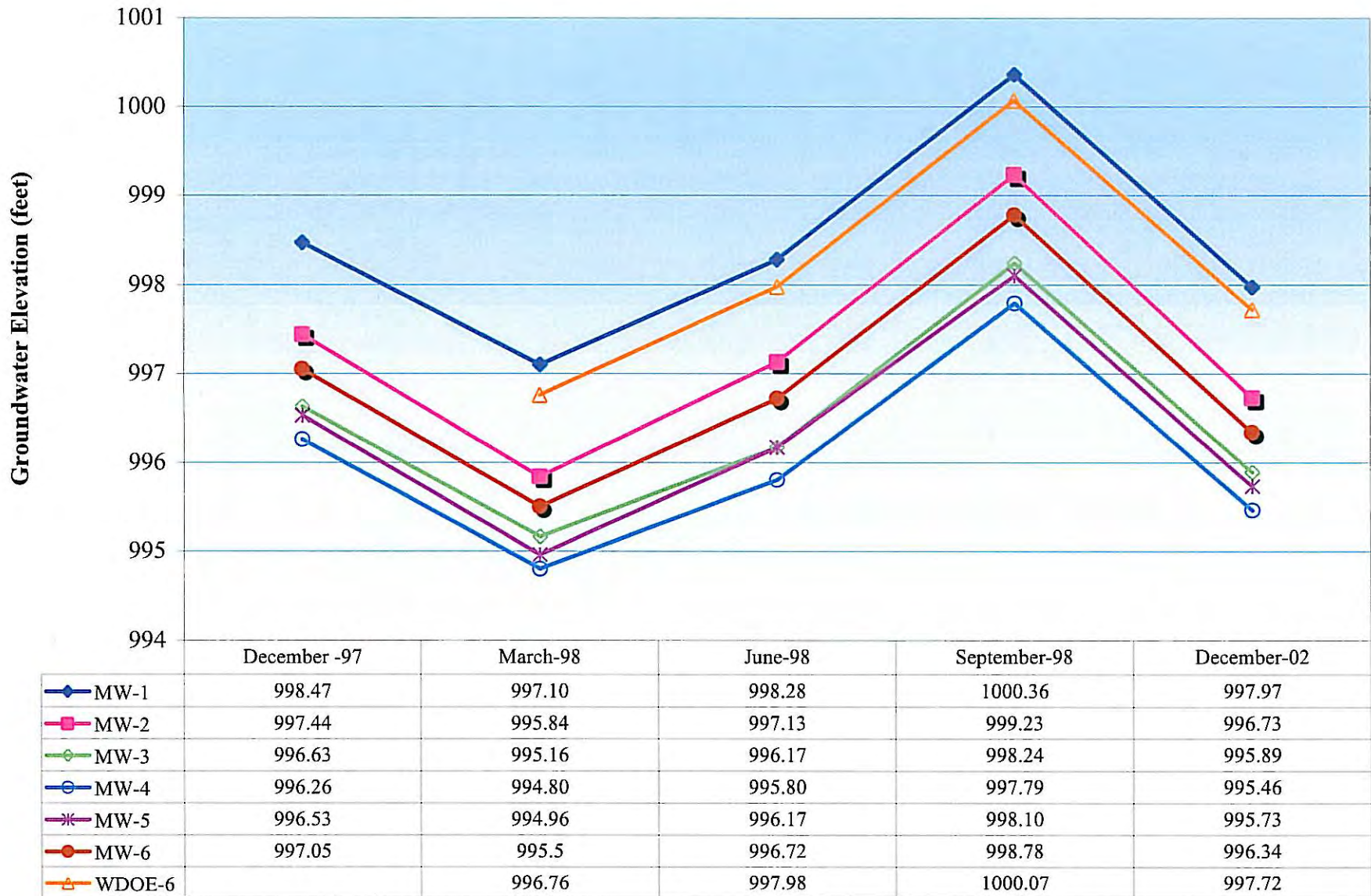
FIGURE 12

SOIL ANALYTICAL RESULTS: METALS
YSF/AGRI-TECH REMEDIAL INVESTIGATION
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FARALLON PN: 765-001

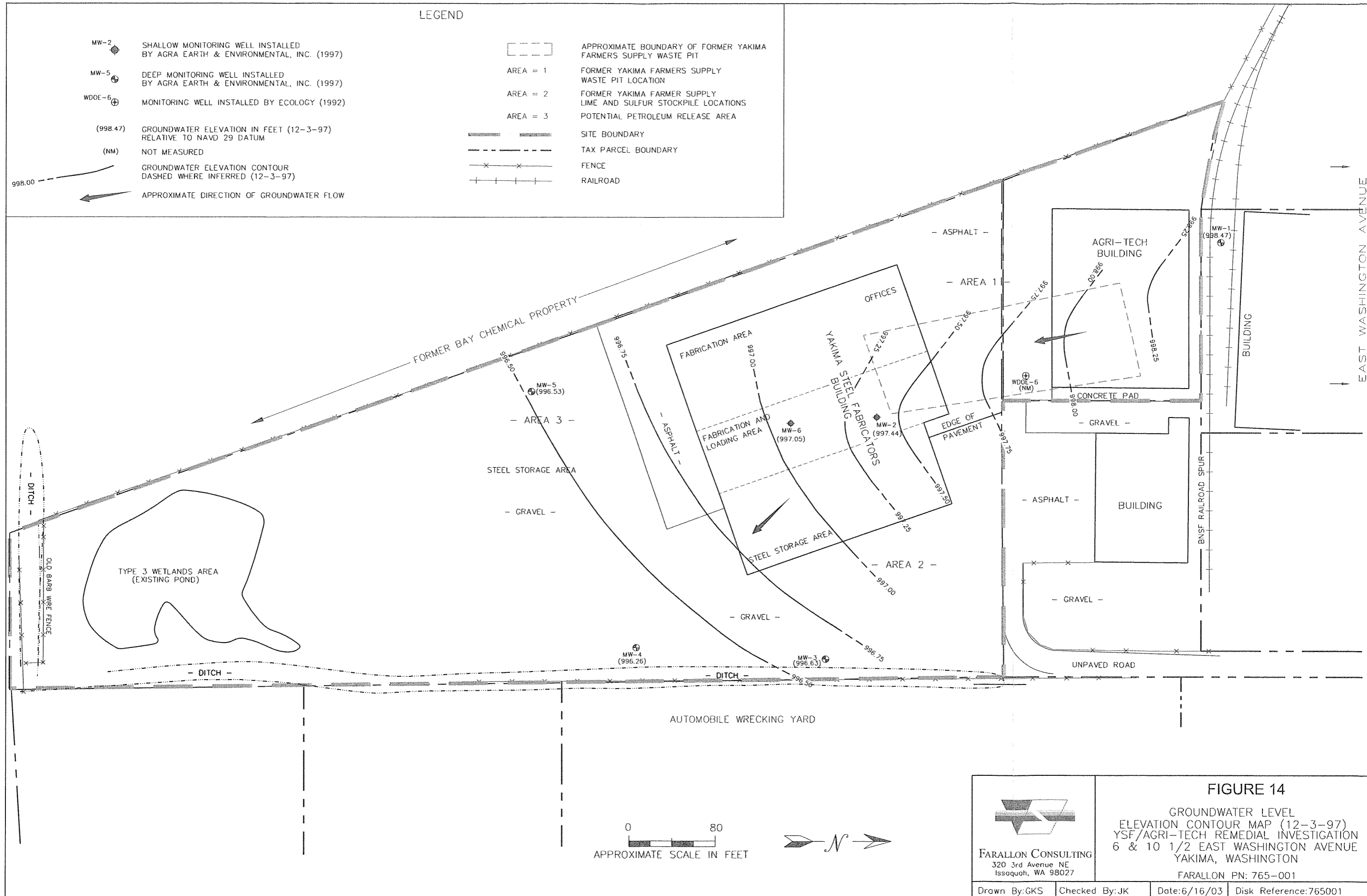
Figure 13- Groundwater Elevation Hydrograph
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

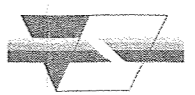


LEGEND

- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- (998.47) GROUNDWATER ELEVATION IN FEET (12-3-97) RELATIVE TO NAVD 29 DATUM
- (NM) NOT MEASURED
- GROUNDWATER ELEVATION CONTOUR DASHED WHERE INFERRED (12-3-97)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD



 FARALLON CONSULTING 320 3rd Avenue NE Issaquah, WA 98027	FIGURE 14 GROUNDWATER LEVEL ELEVATION CONTOUR MAP (12-3-97) YSF/AGRI-TECH REMEDIAL INVESTIGATION 6 & 10 1/2 EAST WASHINGTON AVENUE YAKIMA, WASHINGTON FARALLON PN: 765-001		
	Drawn By:GKS	Checked By:JK	Date:6/16/03

LEGEND

- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- (997.10) GROUNDWATER ELEVATION IN FEET (3-3-98) RELATIVE TO NAVD 29 DATUM
- GROUNDWATER ELEVATION CONTOUR DASHED WHERE INFERRED (3-3-98)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD

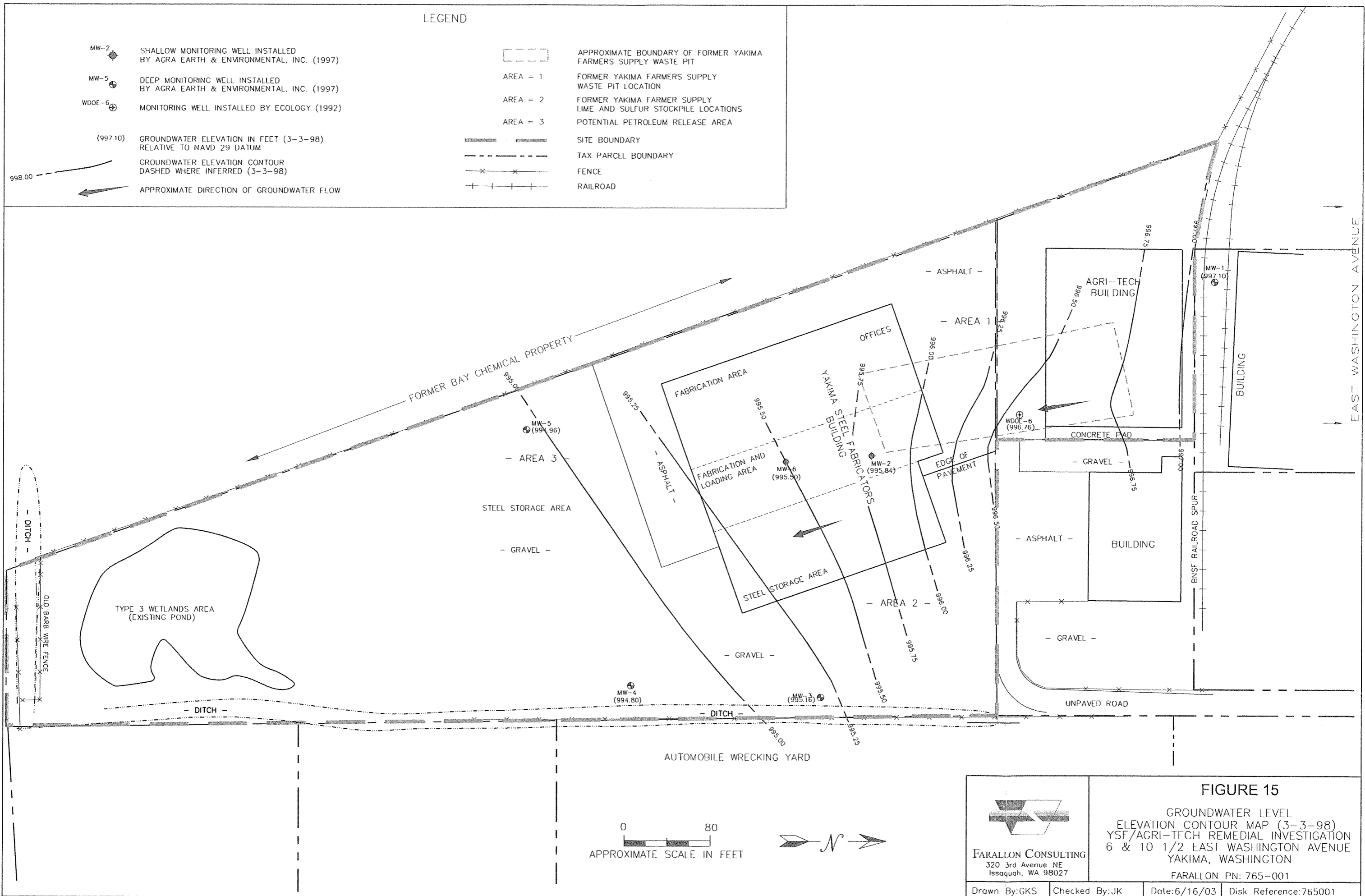


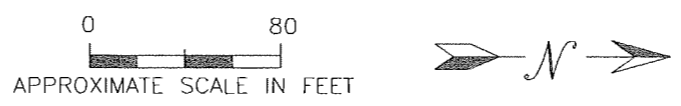
FIGURE 15

GROUNDWATER LEVEL ELEVATION CONTOUR MAP (3-3-98)
 YSF/AGRI-TECH REMEDIAL INVESTIGATION
 6 & 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON

FARALLON CONSULTING
 320 3rd Avenue NE
 Issaquah, WA 98027

FARALLON PN: 765-001

Drawn By:GKS Checked By:JK Date:6/16/03 Disk Reference:765001



LEGEND

- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- (998.28) GROUNDWATER ELEVATION IN FEET (6-3-98) RELATIVE TO NAVD 29 DATUM
- GROUNDWATER ELEVATION CONTOUR DASHED WHERE INFERRED (6-3-98)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD

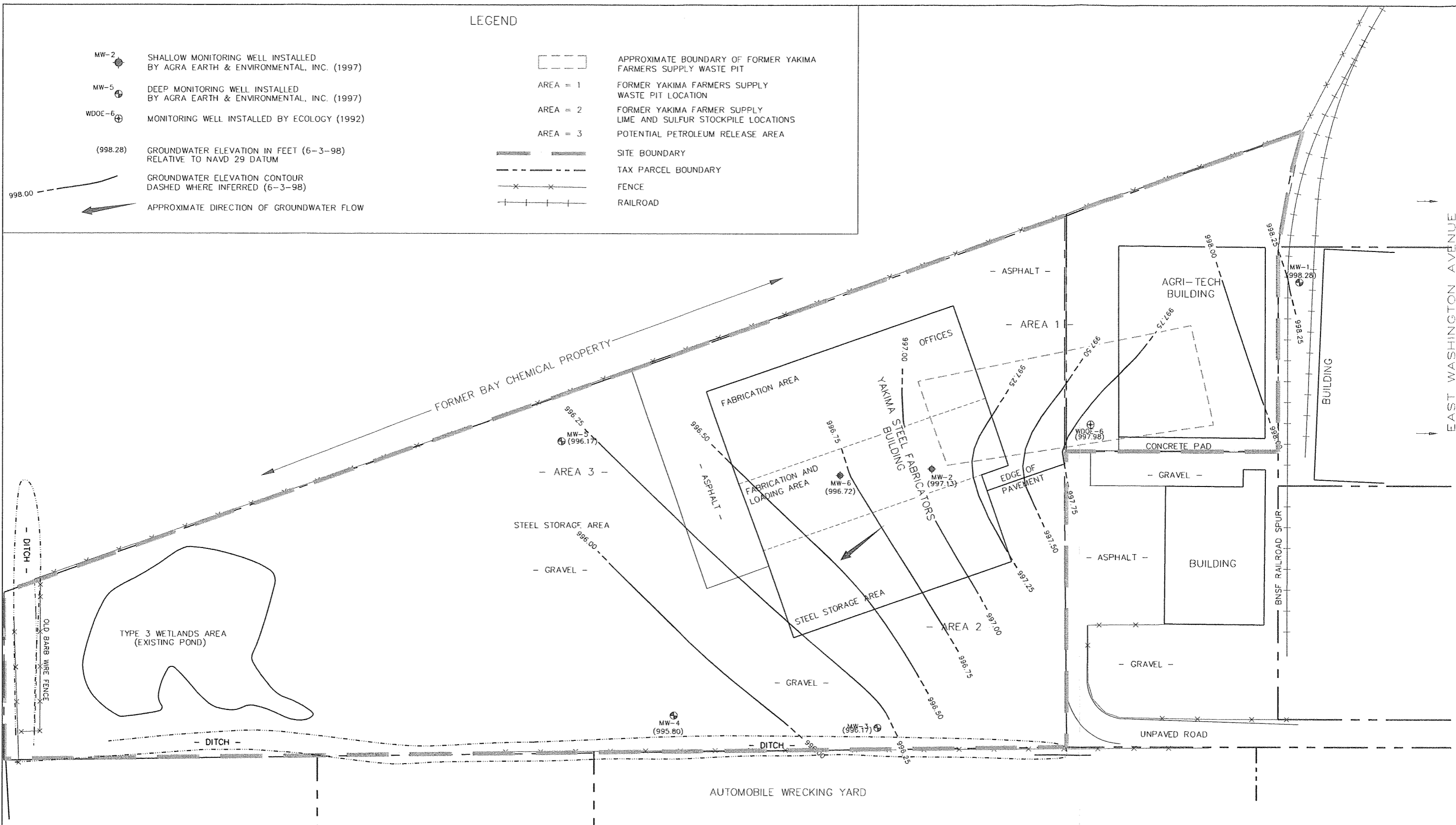


FIGURE 16

GROUNDWATER LEVEL
ELEVATION CONTOUR MAP (6-3-98)
YSF/AGRI-TECH REMEDIAL INVESTIGATION
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON


FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FARALLON PN: 765-001

Drawn By:GKS Checked By:JK Date:6/16/03 Disk Reference:765001

LEGEND

- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- (1000.36) GROUNDWATER ELEVATION IN FEET (9-2-98) RELATIVE TO NAVD 29 DATUM
- GROUNDWATER ELEVATION CONTOUR DASHED WHERE INFERRED (9-2-98)
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD

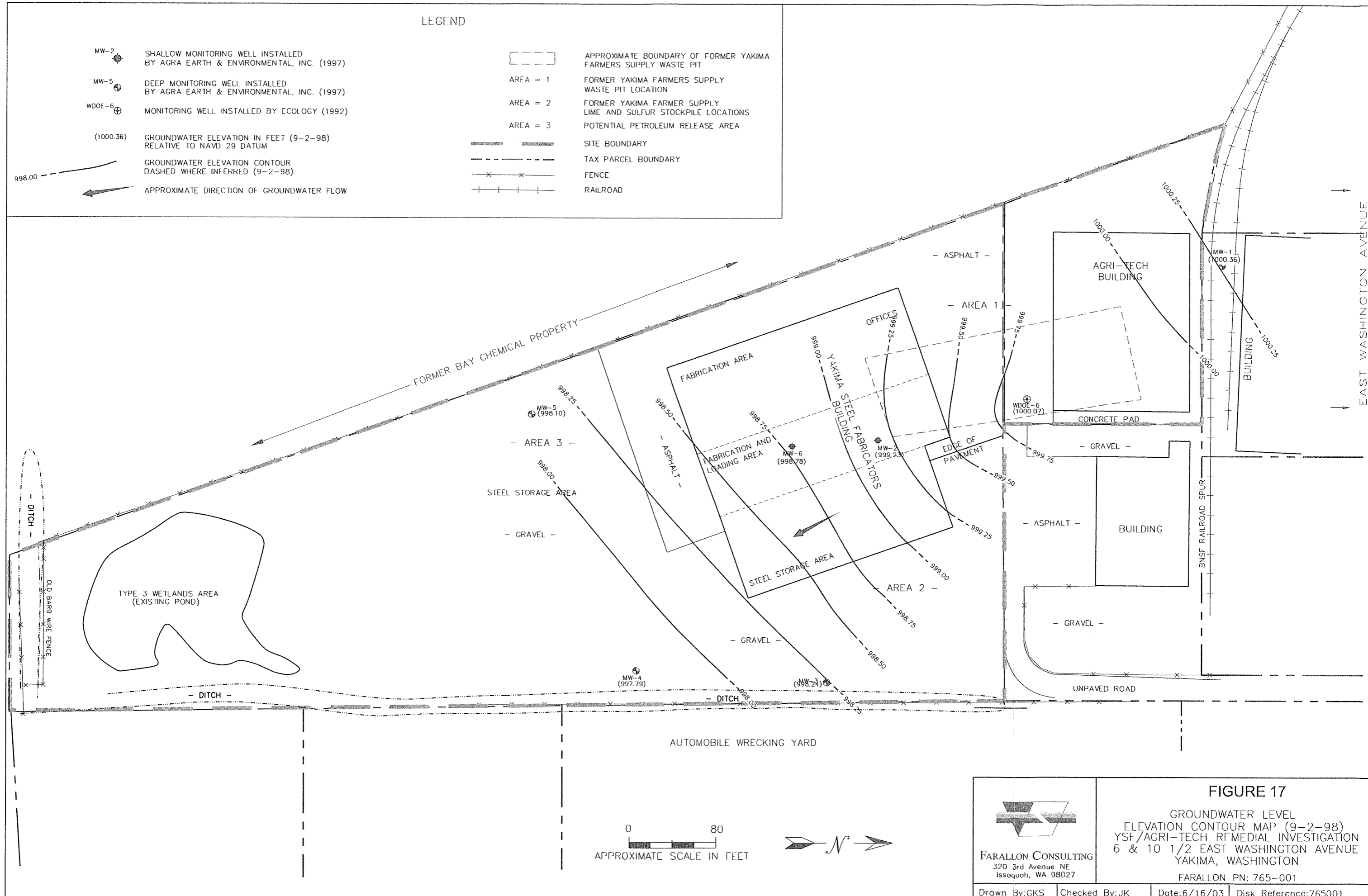


FIGURE 17

GROUNDWATER LEVEL
ELEVATION CONTOUR MAP (9-2-98)
YSF/AGRI-TECH REMEDIAL INVESTIGATION
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027
FARALLON PN: 765-001

Drawn By:GKS Checked By:JK Date:6/16/03 Disk Reference:765001

LEGEND

- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- (997.72) GROUNDWATER ELEVATION IN FEET (12-3/4-03) RELATIVE TO NAVD 29 DATUM
- 998.00 GROUNDWATER ELEVATION CONTOUR DASHED WHERE INFERRED (12-3/4-02)
- ← APPROXIMATE DIRECTION OF GROUNDWATER FLOW

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD

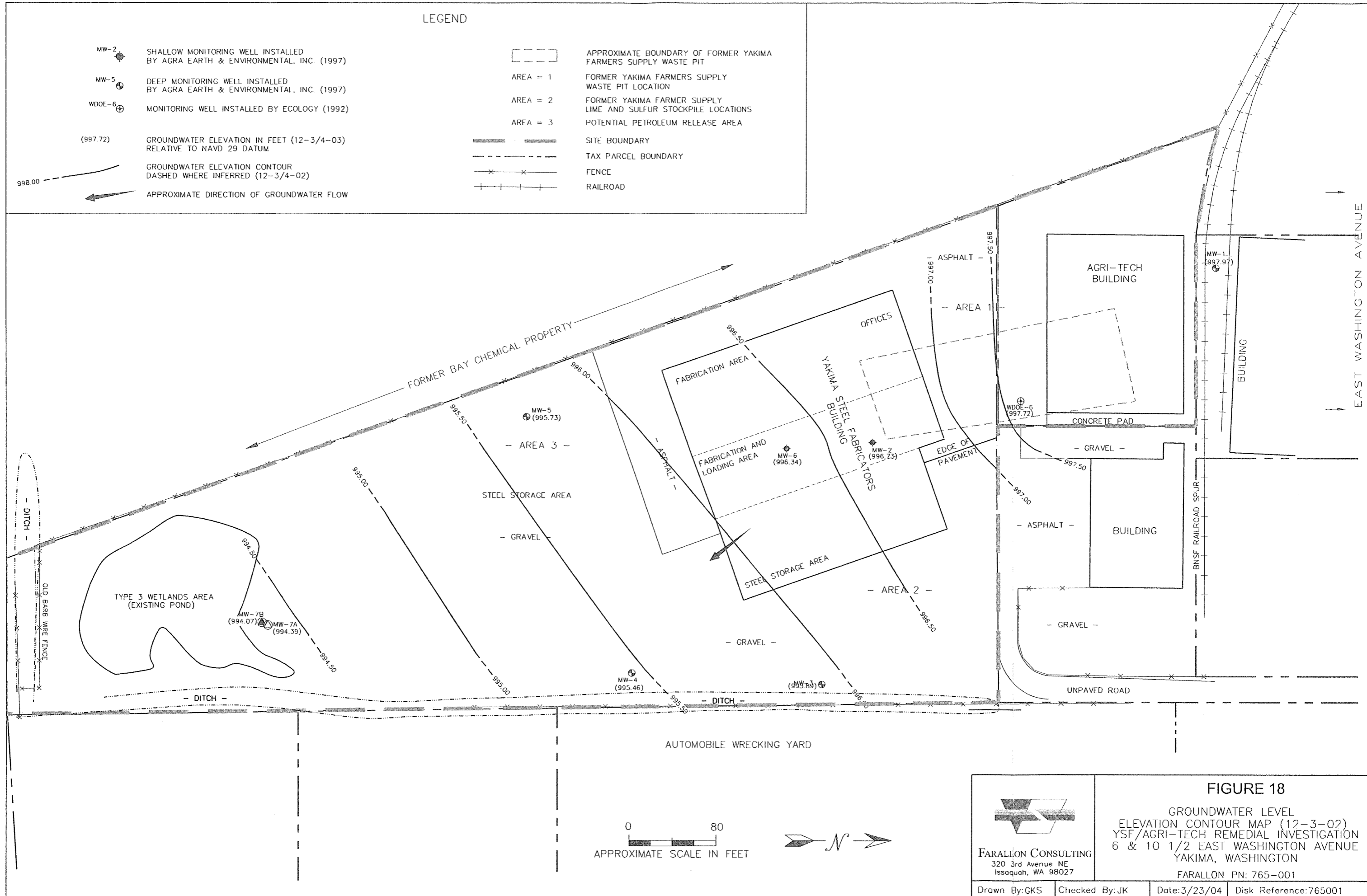


FIGURE 18

GROUNDWATER LEVEL
ELEVATION CONTOUR MAP (12-3-02)
YSF/AGRI-TECH REMEDIAL INVESTIGATION
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FARALLON PN: 765-001

Drawn By:GKS | Checked By:JK | Date:3/23/04 | Disk Reference:765001

- MW-7A SHALLOW MONITORING WELL INSTALLED BY FARALLON (2002) *5-15' SUR*
 - MW-7B DEEP MONITORING WELL INSTALLED BY FARALLON *25-30' SURFACE*
 - MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
 - MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
 - WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- PCE = TETRACHLOROETHYLENE
 TCE = TRICHLOROETHYLENE
 CIS-1,2-DCE = CIS 1,2-DICHLOROETHENE
 VC = VINYL CHLORIDE
 -- = NOT ANALYZED

DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-02	5	3.98	70	0.0292

BORING LOCATION IN BOLD INDICATES THAT ONE OR MORE ANALYTE THAT EXCEEDS PRELIMINARY SCREENING LEVEL. ANALYTE HIGHLIGHTED IN BLUE EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.

LEGEND

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1
- AREA = 2
- AREA = 3
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-97	<1.0	1.51	12.4	2.42
3-3-98	1.59	1.46	3.21	<1.0
6-3-98	<1.0	<1.0	7.13	<1.0
9-2-98	1.27	3.06	17.6	<1.0
12-4-02	<2	<2	15	<2.0

DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-97	3.64	<1.0	<1.0	<1.0
3-3-98	3.39	<1.0	<1.0	<1.0
6-3-98	6.5	1.18	<1.0	<1.0
9-2-98	4.22	0.71	0.25	<1.0
12-3-02	6	<2	<2	<2

DATE	PCE	TCE	CIS-1,2-DCE	VC
5-92	420	430	270	<10
12-3-97	-	-	-	-
3-3-98	49.6	108	83.7	4.24
6-3-98	75.6	60.4	45.6	<1.0
9-2-98	20.8	18.7	11.4	<1.0
12-3-02	<2	<2	14	<2

DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-97	3.98	1.1	1	<1.0
3-3-98	2.25	1.02	4.5	<1.0
6-3-98	2.72	<1.0	2.52	<1.0
9-2-98	2.65	0.89	2.87	<1.0
12-4-02	5	<2	<2	<2

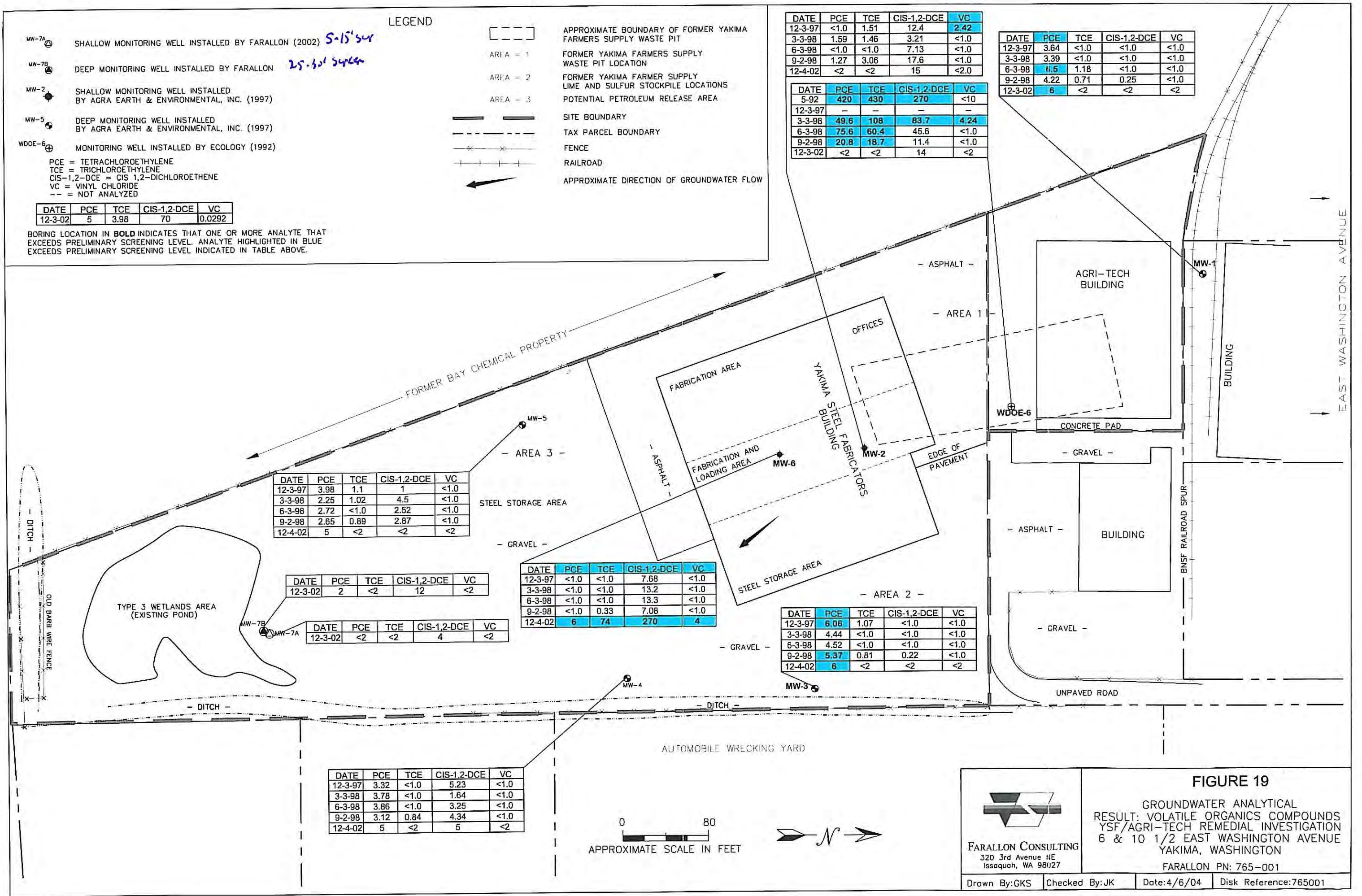
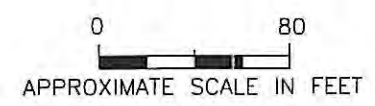
DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-97	<1.0	<1.0	7.68	<1.0
3-3-98	<1.0	<1.0	13.2	<1.0
6-3-98	<1.0	<1.0	13.3	<1.0
9-2-98	<1.0	0.33	7.08	<1.0
12-4-02	6	74	270	4

DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-02	<2	<2	4	<2

DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-97	<1.0	<1.0	7.68	<1.0
3-3-98	<1.0	<1.0	13.2	<1.0
6-3-98	<1.0	<1.0	13.3	<1.0
9-2-98	<1.0	0.33	7.08	<1.0
12-4-02	6	74	270	4

DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-97	6.06	1.07	<1.0	<1.0
3-3-98	4.44	<1.0	<1.0	<1.0
6-3-98	4.52	<1.0	<1.0	<1.0
9-2-98	5.37	0.81	0.22	<1.0
12-4-02	6	<2	<2	<2

DATE	PCE	TCE	CIS-1,2-DCE	VC
12-3-97	3.32	<1.0	5.23	<1.0
3-3-98	3.78	<1.0	1.64	<1.0
6-3-98	3.86	<1.0	3.25	<1.0
9-2-98	3.12	0.84	4.34	<1.0
12-4-02	5	<2	5	<2



FARALLON CONSULTING
 320 3rd Avenue NE
 Issaquah, WA 98027

FIGURE 19
 GROUNDWATER ANALYTICAL
 RESULT: VOLATILE ORGANICS COMPOUNDS
 YSF/AGRI-TECH REMEDIAL INVESTIGATION
 6 & 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON
 FARALLON PN: 765-001

**Figure 20 - Groundwater Analytical Results: Monitoring Well WDOE-6
 YSF/Agri-Tech
 Yakima, Washington
 Farallon PN: 765-001**

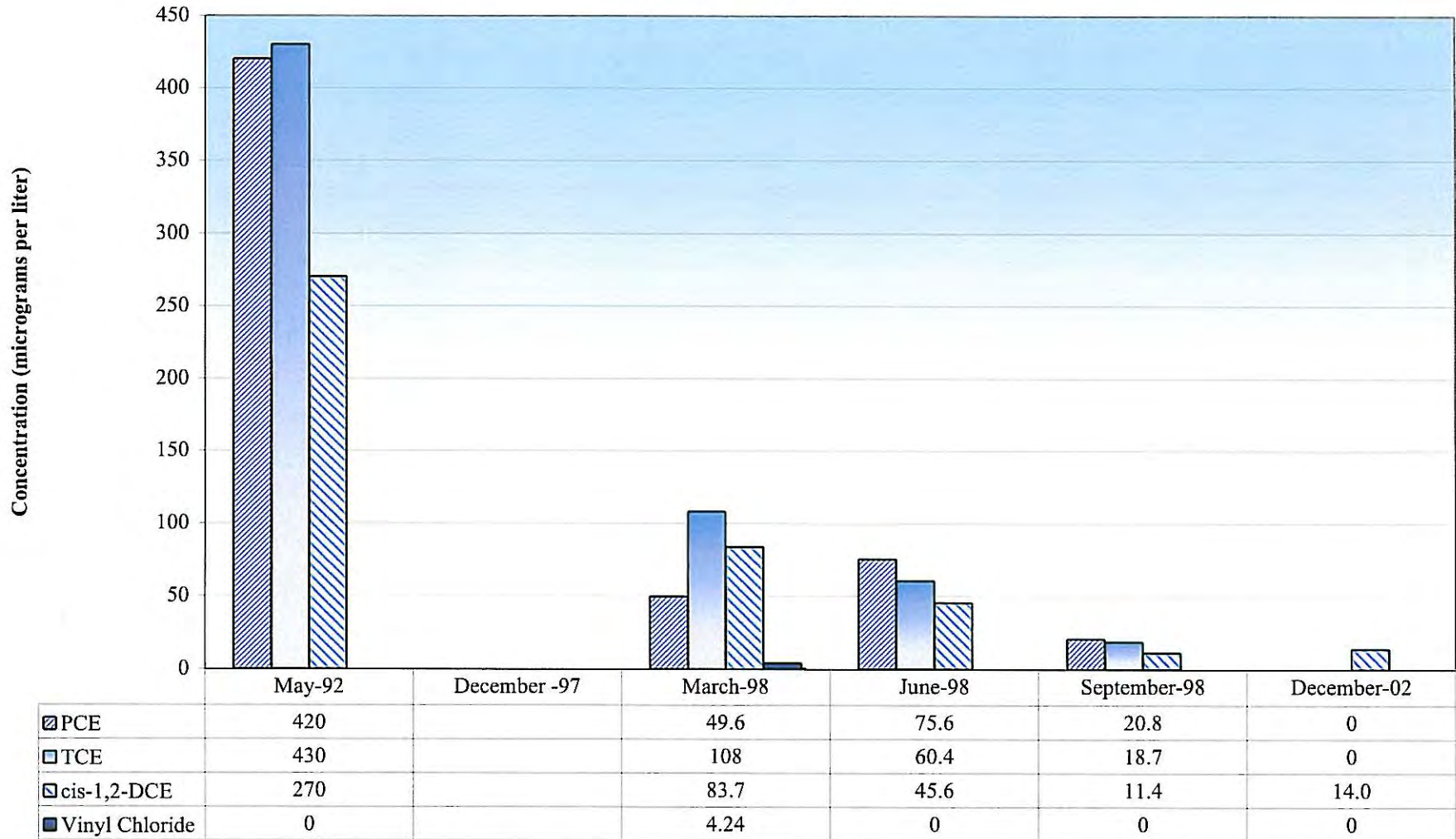
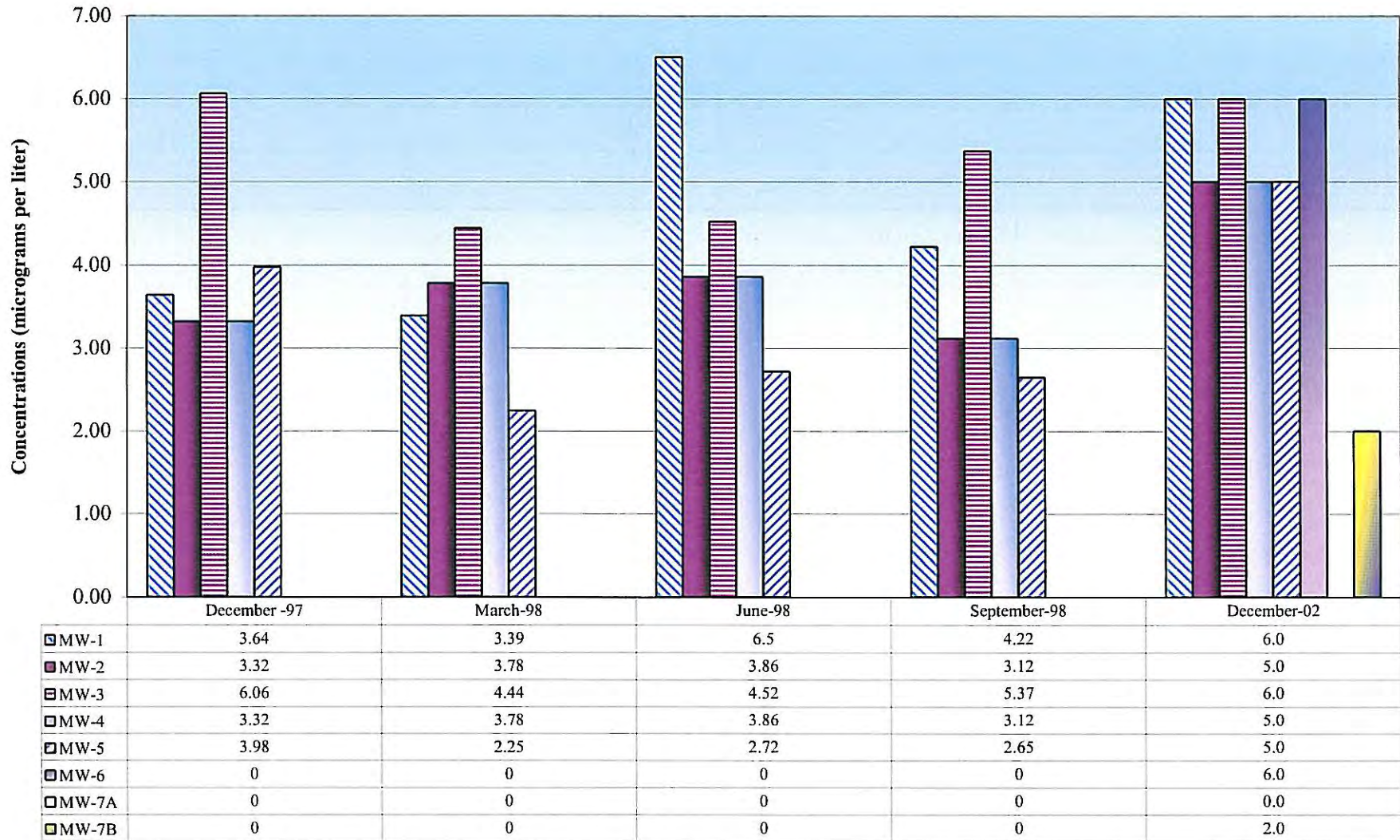


Figure 21 - Groundwater Analytical Results: PCE Concentrations
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001



LEGEND

- MW-7A SHALLOW MONITORING WELL INSTALLED BY FARALLON (2002)
- MW-7B DEEP MONITORING WELL INSTALLED BY FARALLON
- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)
- 4,4'-DDD = HEPTACHLOR
- 4,4'-DDE = ALPHA-BHC
- = NOT ANALYZED

DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-02	0.365	0.055	0.257

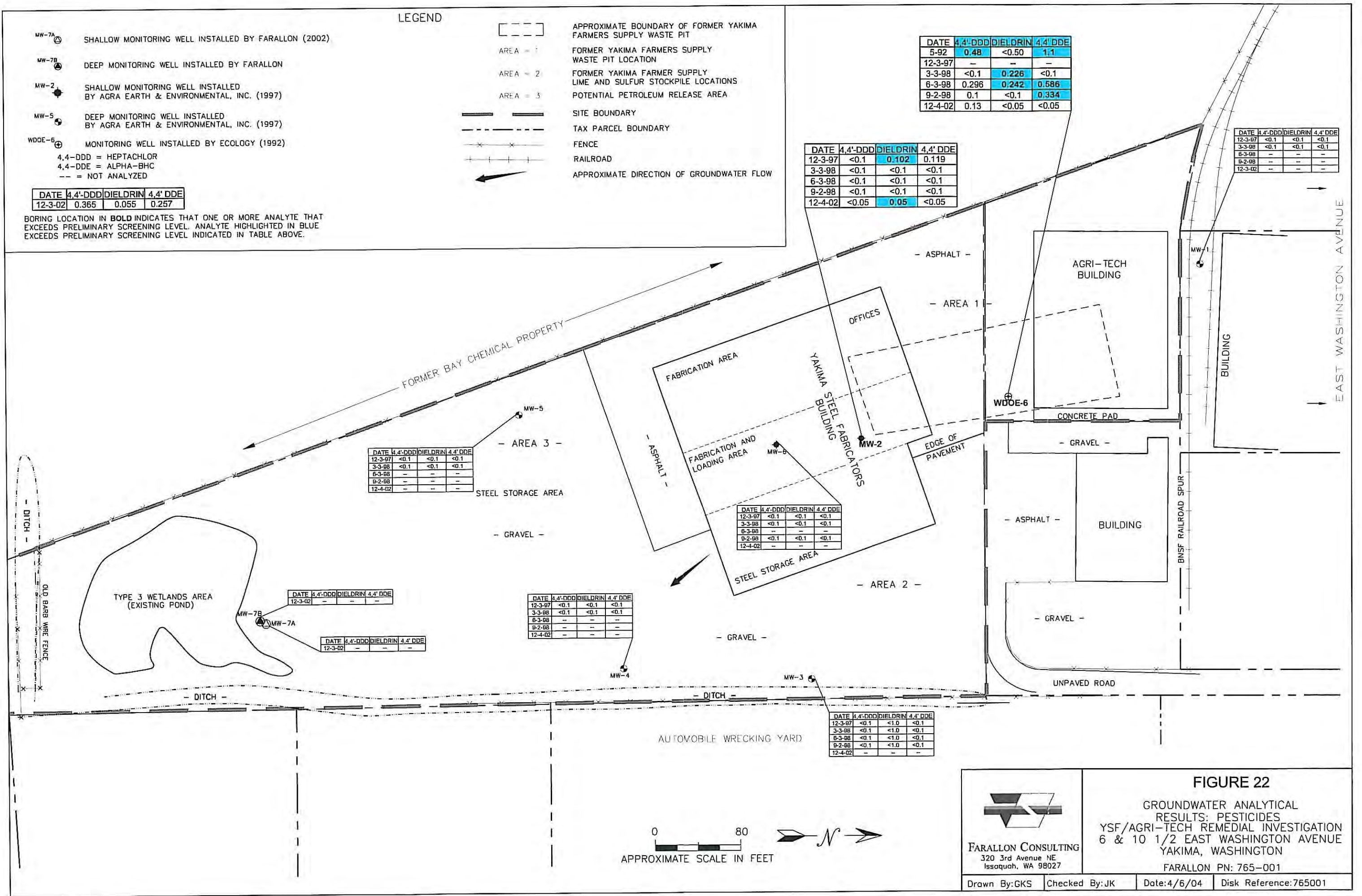
BORING LOCATION IN BOLD INDICATES THAT ONE OR MORE ANALYTE THAT EXCEEDS PRELIMINARY SCREENING LEVEL. ANALYTE HIGHLIGHTED IN BLUE EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

DATE	4,4'-DDD	DIELDRIN	4,4' DDE
5-92	0.48	<0.50	1.1
12-3-97	-	-	-
3-3-98	<0.1	0.226	<0.1
6-3-98	0.296	0.242	0.586
9-2-98	0.1	<0.1	0.334
12-4-02	0.13	<0.05	<0.05

DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-97	<0.1	0.102	0.119
3-3-98	<0.1	<0.1	<0.1
6-3-98	<0.1	<0.1	<0.1
9-2-98	<0.1	<0.1	<0.1
12-4-02	<0.05	0.05	<0.05

DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-07	<0.1	<0.1	<0.1
3-3-08	<0.1	<0.1	<0.1
6-3-08	-	-	-
9-2-08	-	-	-
12-3-02	-	-	-



DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-97	<0.1	<0.1	<0.1
3-3-98	<0.1	<0.1	<0.1
6-3-98	-	-	-
9-2-98	-	-	-
12-4-02	-	-	-

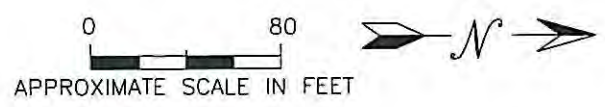
DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-97	<0.1	<0.1	<0.1
3-3-98	<0.1	<0.1	<0.1
6-3-98	-	-	-
9-2-98	<0.1	<0.1	<0.1
12-4-02	-	-	-


DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-02	-	-	-

DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-02	-	-	-

DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-97	<0.1	<0.1	<0.1
3-3-98	<0.1	<0.1	<0.1
6-3-98	-	-	-
9-2-98	-	-	-
12-4-02	-	-	-

DATE	4,4'-DDD	DIELDRIN	4,4' DDE
12-3-97	<0.1	<1.0	<0.1
3-3-98	<0.1	<1.0	<0.1
6-3-98	<0.1	<1.0	<0.1
9-2-98	<0.1	<1.0	<0.1
12-4-02	-	-	-





FARALLON CONSULTING
320 3rd Avenue NE
Issaquah, WA 98027

FIGURE 22

GROUNDWATER ANALYTICAL RESULTS: PESTICIDES
YSF/AGRI-TECH REMEDIAL INVESTIGATION
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

Drawn By: GKS	Checked By: JK	Date: 4/6/04	Disk Reference: 765001
---------------	----------------	--------------	------------------------

- MW-7A SHALLOW MONITORING WELL INSTALLED BY FARALLON (2002)
- MW-7B DEEP MONITORING WELL INSTALLED BY FARALLON
- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)

DATE	DRO	ORO	cPAHs
3/3/98	500	500	0.012

DRO = DIESEL RANGE ORGANICS
 ORO = OIL RANGE ORGANICS
 cPAHs = CARCINOGENIC POLYAROMATIC HYDROCARBONS
 ANALYTICAL RESULTS (MICROGRAMS PER LITER)
 PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.

LEGEND

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW

DATE	DRO	ORO	cPAHs
3/3/98	<0.25	<0.50	<0.1

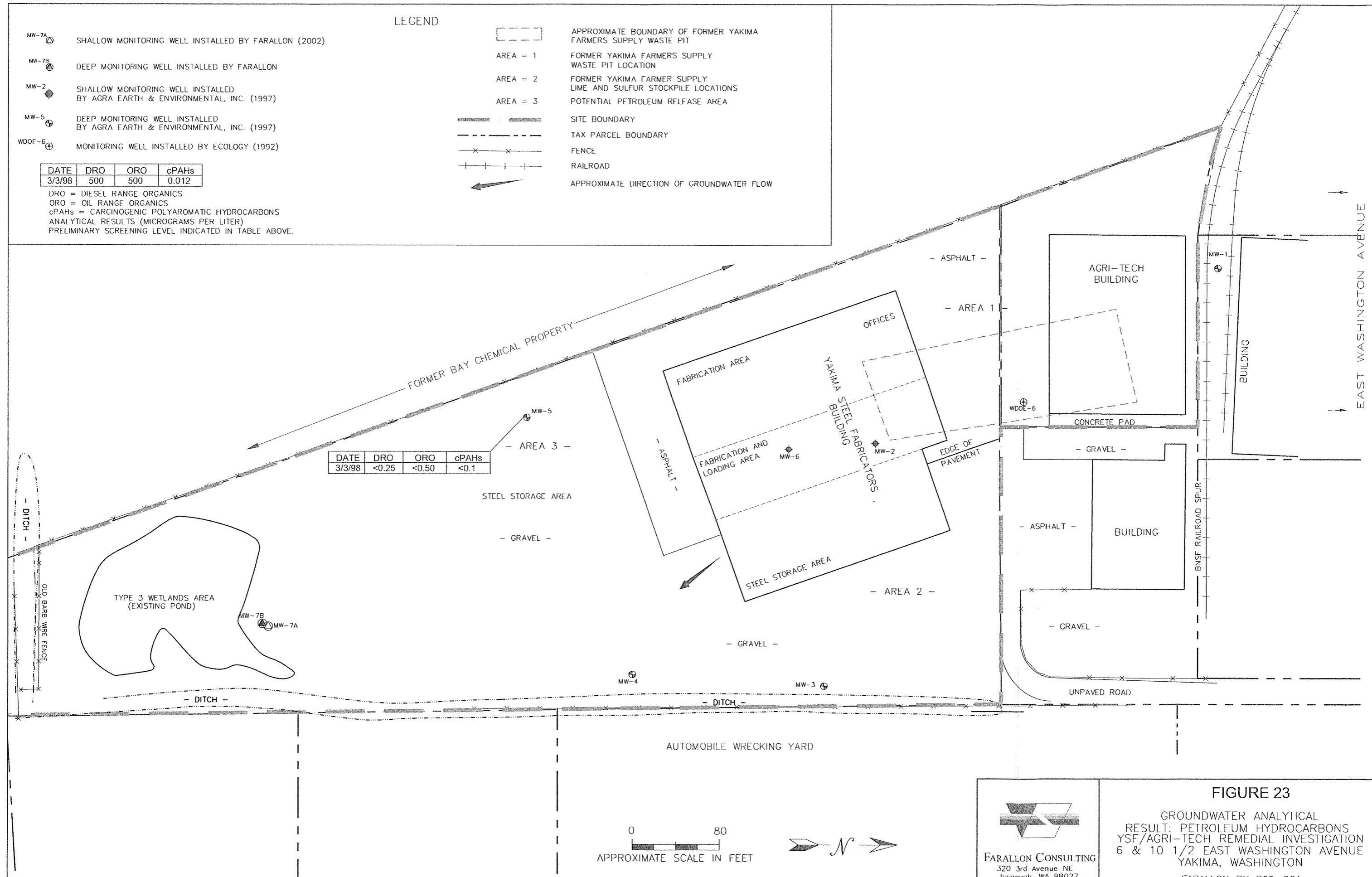


FIGURE 23

GROUNDWATER ANALYTICAL
 RESULT: PETROLEUM HYDROCARBONS
 YSF/AGRI-TECH REMEDIAL INVESTIGATION
 6 & 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON

FARALLON CONSULTING
 320 3rd Avenue NE
 Issaquah, WA 98027

DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
12/3/97	144	--	81.3	--	--	--	--	--	--	--
3/3/98	96.3	--	25.4	--	--	--	--	--	--	--
6/3/98	96	--	20.6	--	--	--	--	--	--	--
9/2/98	102	--	61.1	--	--	--	--	--	--	--
12/3/02	74	12	25	<0.050	2.9	0.2	1.1	0.088	<0.01	<0.01

DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
12/3/97	166	--	134	--	--	--	--	--	--	--
3/3/98	116	--	35.1	--	--	--	--	--	--	--
6/3/98	104	--	59.5	--	--	--	--	--	--	--
9/2/98	84	--	758	--	--	--	--	--	--	--
12/4/02	79	12	46	<0.050	<0.010	0.57	1.8	0.19	0.02	<0.01

LEGEND

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 POTENTIAL PETROLEUM RELEASE AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD

- MW-7A SHALLOW MONITORING WELL INSTALLED BY FARALLON (2002)
- MW-7B DEEP MONITORING WELL INSTALLED BY FARALLON
- MW-2 SHALLOW MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- MW-5 DEEP MONITORING WELL INSTALLED BY AGRA EARTH & ENVIRONMENTAL, INC. (1997)
- WDOE-6 MONITORING WELL INSTALLED BY ECOLOGY (1992)

DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
12/3/97	188	--	52	--	--	--	--	--	--	--

Alk = ALKALINITY P = TOTAL PHOSPHATE
 Cl⁻ = CHLORIDE TOC = TOTAL ORGANIC CARBON
 SO₄ = SULFATE Fe³⁺ = FERROUS IRON
 SO₂ = SULFIDE CH₄ = METHANE
 NO₃ = NITRATE Eth = ETHENE
 -- = NOT ANALYZED

DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
12/3/97	155	--	86.1	--	--	--	--	--	--	--
3/3/98	114	--	50.3	--	--	--	--	--	--	--
6/3/98	103	--	61.9	--	--	--	--	--	--	--
9/2/98	104	--	91.7	--	--	--	--	--	--	--
12/4/02	74	12	42	<0.050	2	0.11	0.75	0.044	<0.01	<0.01

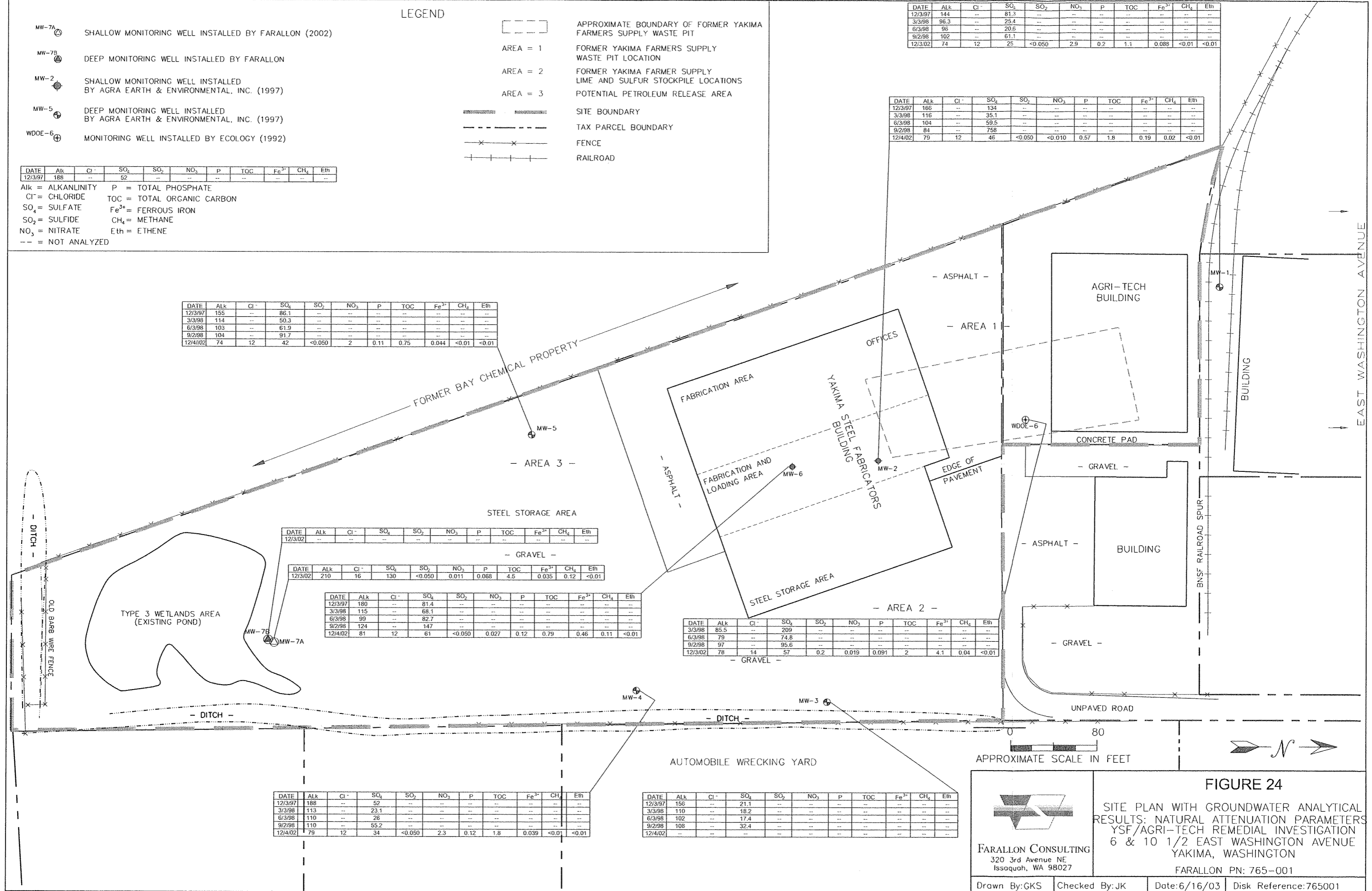
DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
12/3/02	210	16	130	<0.050	0.011	0.068	4.5	0.035	0.12	<0.01

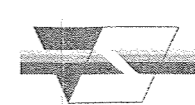
DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
12/3/97	180	--	81.4	--	--	--	--	--	--	--
3/3/98	115	--	68.1	--	--	--	--	--	--	--
6/3/98	99	--	82.7	--	--	--	--	--	--	--
9/2/98	124	--	147	--	--	--	--	--	--	--
12/4/02	81	12	61	<0.050	0.027	0.12	0.79	0.46	0.11	<0.01

DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
3/3/98	85.5	--	209	--	--	--	--	--	--	--
6/3/98	79	--	74.8	--	--	--	--	--	--	--
9/2/98	97	--	95.6	--	--	--	--	--	--	--
12/3/02	78	14	57	0.2	0.019	0.091	2	4.1	0.04	<0.01

DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
12/3/97	188	--	52	--	--	--	--	--	--	--
3/3/98	113	--	23.1	--	--	--	--	--	--	--
6/3/98	110	--	26	--	--	--	--	--	--	--
9/2/98	110	--	55.2	--	--	--	--	--	--	--
12/4/02	79	12	34	<0.050	2.3	0.12	1.8	0.039	<0.01	<0.01

DATE	Alk	Cl ⁻	SO ₄	SO ₂	NO ₃	P	TOC	Fe ³⁺	CH ₄	Eth
12/3/97	156	--	21.1	--	--	--	--	--	--	--
3/3/98	110	--	18.2	--	--	--	--	--	--	--
6/3/98	102	--	17.4	--	--	--	--	--	--	--
9/2/98	108	--	32.4	--	--	--	--	--	--	--
12/4/02	--	--	--	--	--	--	--	--	--	--





FARALLON CONSULTING
 320 3rd Avenue NE
 Issaquah, WA 98027

FIGURE 24

SITE PLAN WITH GROUNDWATER ANALYTICAL RESULTS: NATURAL ATTENUATION PARAMETERS
 YSF/AGRI-TECH REMEDIAL INVESTIGATION
 6 & 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON

FARALLON PN: 765-001

Drawn By:GKS
Checked By:JK
Date:6/16/03
Disk Reference:765001

Table 1
Summary of Soil Analytical Results - Volatile Organic Compounds
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Depth ¹ (feet)	Soil Analytical Results (milligrams per kilogram)															
			Ethylbenzene	m,p-Xylene	o-Xylene	Toluene	4-Isopropyltoluene	n-Propylbenzene	Acetone	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Carbon Disulfide	1,2-Dichloropropane	MEK	PCE	TCE	1,1-Dichloroethene	(cis) 1,2-Dichloroethene
Washington State Department of Ecology (1992), Monitoring Well Boring WDOE-6																		
468110 (WDOE-6)	Nov-92	10	0.0035	0.0072	<0.0014	NA	NA	0.022	NA	NA	0.0019	0.002	<0.0027	2.2	0.67	<0.0014	0.17	
PLSA Engineering (1993), Test Pits TP-1 through TP-4																		
YSF-1 (TP-1)	May-93	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.25	NA	NA	NA	
YSF-2 (TP-1)	May-93	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	
YSF-3 (TP-1)	May-93	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.25	NA	NA	NA	
YSF-4 (TP-2)	May-93	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.13	NA	NA	NA	
YSF-5 (TP-3)	May-93	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.25	NA	NA	NA	
YSF-6 (TP-4)	May-93	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	NA	NA	NA	
Ecology Duplicates of PLSA Test Pit Soil Samples (1993)																		
YSF-1 (TP-1)	May-93	4	<0.13	<0.13	<0.13	0.002	NA	NA	<0.13	NA	NA	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	
YSF-2 (TP-1)	May-93	5	<0.011	<0.011	<0.011	<0.011	NA	NA	0.018	NA	NA	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	
YSF-3 (TP-1)	May-93	8	<0.13	<0.13	<0.13	0.002	NA	NA	0.11	NA	NA	0.008	<0.13	0.022	<0.13	<0.13	<0.13	
YSF-4 (TP-2)	May-93	4.5	0.001	0.005	<0.13	NA	NA	0.17	NA	NA	0.011	0.007	<0.13	0.003	0.003	<0.13	0.022	
YSF-5 (TP-3)	May-93	6	<0.13	<0.13	<0.13	<0.13	NA	NA	0.019	NA	NA	0.008	<0.13	<0.13	<0.13	<0.13	<0.13	
YSF-6 (TP-4)	May-93	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Preliminary Screening Level²			6.048	9.144	9.144	7.271	NA	NA	3.21	NA	NA	5.65	0.0031	22	0.0530	0.026	0.0005	0.35

Table 1
Summary of Soil Analytical Results - Volatile Organic Compounds
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Depth ¹ (feet)	Soil Analytical Results (milligrams per kilogram)															
			Ethylbenzene	m,p-Xylene	o-Xylene	Toluene	4-Isopropyltoluene	n-Propylbenzene	Acetone	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Carbon Disulfide	1,2-Dichloropropane	MEK	PCE	TCE	1,1-Dichloroethene	(cis) 1,2-Dichloroethene
AGRA Earth & Environmental Inc. (1997)																		
Area 1: Former Yakima Farmer Supply Waste Pit Area																		
SP1-4	10/21/1997	0.5-4.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.0	<1.0	<1.0	<0.1	<0.1	<1.0	2.1	0.840	<0.1	<0.1
SP2-4	10/21/1997	0.5-4.0	0.078	0.056	0.030	<0.1	<0.1	<0.1	<2.0	<1.0	<1.0	<0.1	<0.1	<1.0	45.0	0.790	<0.1	0.610
SP2A-6.5	10/21/1997	4.0-6.5	0.030	0.024	<0.1	<0.1	<0.1	<0.1	<2.0	<1.0	<1.0	<0.1	<0.1	<1.0	0.530	<1.0	<0.1	0.041
SP3-4	10/21/1997	0.5-4.0	<0.002	0.00274	<0.002	0.0021	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	0.0382	<0.002	<0.002	<0.002
SP4-7	10/21/1997	4.0-7.0	0.078	0.310	0.110	0.038	<0.1	0.088	<2.0	0.30	0.11	<0.1	<0.1	<1.0	770	1.20	0.029	1.80
SP5-6.5	10/21/1997	4.0-6.5	4.0	0.490	0.036	<0.1	0.031	<0.1	<2.0	0.052	0.052	<0.1	<0.1	<1.0	35.0	4.60	<0.1	4.50
SP6-5.5	10/21/1997	4.0-5.5	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
SP7-7	10/21/1997	4.0-7.0	<0.002	0.00537	0.00259	<0.002	<0.002	<0.002	0.056	0.00278	<0.002	0.010	0.00332	<0.020	0.0224	0.00205	<0.002	0.0116
SP8-7	10/21/1997	4.0-7.0	<0.1	<0.1	<0.1	0.036	<0.1	<0.1	<2.0	<1.0	<1.0	<0.1	<0.1	<1.0	0.0290	<1.0	<0.1	0.330
SP9-7.5	10/21/1997	4.0-7.5	<0.002	0.00359	<0.002	0.00338	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	0.00932	0.00318	<0.002	<0.002
SP10-4	10/21/1997	0.5-4	<0.1	0.032	<0.1	0.084	<0.1	<0.1	<0.04	<1.0	<1.0	<2.0	<0.1	<1.0	2.1	0.097	<0.1	0.028
SP11-6	10/22/1997	4.0-6.0	0.0020	0.00752	0.00362	0.0062	<0.002	<0.002	0.0526	0.00371	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
SP12-8	10/22/1997	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	0.0023	<0.002	<0.002	<0.002
SP13/14-6	10/22/1997	4.0-6.0	<0.002	0.00612	0.00312	0.00341	<0.002	<0.002	<0.04	0.00239	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
SP15-6	10/22/1997	4.0-6.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0426	<0.002	<0.002	<0.002	<0.002	<0.020	0.00793	0.00747	<0.002	0.00374
SP16-8	10/22/1997	4.0-8.0	<0.002	0.00338	<0.002	<0.002	<0.002	<0.002	<0.04	0.00211	<0.002	<0.002	<0.002	<0.020	0.00312	<0.002	<0.002	<0.002
SP17-4	10/22/1997	0.5-4.0	<0.002	0.00540	0.00253	0.00587	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	0.0322	0.00597	<0.002	0.00355
Preliminary Screening Level²			6.048	9.144	9.144	7.271	NA	NA	3.21	NA	NA	5.65	0.0031	22	0.0530	0.026	0.0005	0.35

Table 1
Summary of Soil Analytical Results - Volatile Organic Compounds
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Depth ¹ (feet)	Soil Analytical Results (milligrams per kilogram)															
			Ethylbenzene	m,p-Xylene	o-Xylene	Toluene	4-Isopropyltoluene	n-Propylbenzene	Acetone	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Carbon Disulfide	1,2-Dichloropropane	MEK	PCE	TCE	1,1-Dichloroethene	(cis) 1,2-Dichloroethene
SP18-4	10/22/1997	0.5-4.0	<0.002	0.00333	<0.002	0.00291	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	0.00203	<0.002	<0.002	<0.002
SP19-7	10/22/1997	4.0-7.0	<0.002	0.00384	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
SP20-8	10/22/1997	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
SP21-5	10/22/1997	1.0-5.0	0.00240	0.00520	0.00461	0.00618	<0.002	<0.002	<0.04	0.00216	<0.002	<0.002	<0.002	<0.020	0.00402	<0.002	<0.002	<0.002
SP22-7	10/22/1997	4.0-7.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
MW1-5	10/23/1997	5.0-6.5	<0.002	0.00245	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
MW1-10	10/23/1997	10.0-11.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
MW6-6	10/24/1997	6.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
B1-10	10/28/1997	10.0-11.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	0.00385	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
B1-30	10/28/1997	30.0-31.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
B2-10	10/28/1997	10.0-11.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	0.0216	<0.002	<0.002	<0.002
B2-25	10/28/1997	25.0-26.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
Area 2: Former Yakima Farmer Supply Lime and Sulfur Stockpile Locations																		
SP23-8	10/22/1997	4.0-8.0	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
SP24-7.5	10/22/1997	4.0-7.5	0.00733	0.0254	0.0118	0.0256	<0.002	0.00316	0.150	0.00945	0.00514	0.00525	<0.002	<0.020	0.00908	<0.002	<0.002	<0.002
SP25-4	10/22/1997	0.5-4.0	0.00379	0.0133	0.00536	0.0132	<0.002	<0.002	0.124	0.0043	0.00214	<0.002	<0.002	0.0233	0.00405	<0.002	<0.002	<0.002
Area 3: Potential Petroleum Release Area																		
SP26-6.5	10/22/1997	4.0-6.5	<0.002	0.00303	<0.002	0.00287	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.002
SP27-7.5	10/22/1997	4.0-7.5	<0.002	0.00471	0.00238	0.00351	<0.002	<0.002	0.0597	0.00347	<0.002	<0.002	<0.002	<0.020	0.00401	<0.002	<0.002	<0.002
SP28-7.5	10/22/1997	4.0-7.5	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.020	0.00275	<0.002	<0.002	<0.002
Preliminary Screening Level²			6.048	9.144	9.144	7.271	NA	NA	3.21	NA	NA	5.65	0.0031	22	0.0530	0.026	0.0005	0.35

Table 1
Summary of Soil Analytical Results - Volatile Organic Compounds
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Depth ¹ (feet)	Soil Analytical Results (milligrams per kilogram)															
			Ethylbenzene	m,p-Xylene	o-Xylene	Toluene	4-Isopropyltoluene	n-Propylbenzene	Acetone	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Carbon Disulfide	1,2-Dichloropropane	MEK	PCE	TCE	1,1-Dichloroethene	(cis) 1,2-Dichloroethene
Farallon Consulting, L.L.C. (2002), Monitoring Well Borings MW-7A and MW-7B																		
Drum 1 (MW-7A)	11/21/2002	0 -15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Drum 3 (MW-7B)	11/22/2002	15-25	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Drum 4 (MW-7B)	11/22/2002	25-32	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Preliminary Screening Level²			6.048	9.144	9.144	7.271	NA	NA	3.21	NA	NA	5.65	0.0031	22	0.0530	0.026	0.0005	0.35

NOTE:

All volatile organic compounds analyzed by EPA Method 8240 (PLSA), SW-846 (Ecology), or EPA Method 8260B (AGRA & Farallon).

MEK = methyl ethyl ketone

BOLD indicates detection above laboratory practical quantitation limit.

NA = not applicable/not analyzed

Concentration highlighted exceeds preliminary screening level.

PCE = tetrachloroethene

< denotes concentration of compound is not above the laboratory practical quantitation limit indicated.

TCE = trichloroethene

¹Depth below ground surface in feet.

²Preliminary screening level has been selected for preliminary evaluation of analytical data for the Remedial Investigation only.

Table 2
Summary of Soil Analytical Results - Pesticides and Polychlorinated Biphenyls
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Depth ¹ (feet)	Analytical Results (milligrams per kilogram)											
			Aldrin ²	alpha-Chlordane ²	4,4-DDD ²	4,4-DDE ²	4,4-DDT ²	Dieldrin ²	Endosulfan I ²	Endosulfan II ²	Endosulfan sulfate ²	Endrin ²	Heptachlor epoxide ²	PCBs ³
Washington State Department of Ecology (1992), Monitoring Well Boring WDOE-6														
468110 (WDOE-6)	Nov-92	5	<0.0016	<0.0016	0.0021	0.0044	<0.0032	0.0021	<0.0016	<0.0016	0.009	<0.0032	<0.0016	NA
PLSA Engineering (1993), Test Pits TP-1 through TP-4														
YSF-1 (TP-1)	May-93	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-2 (TP-1)	May-93	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-3 (TP-1)	May-93	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-4 (TP-2)	May-93	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-5 (TP-3)	May-93	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-6 (TP-4)	May-93	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ecology Duplicates of PLSA Test Pit Soil Samples (1993)														
YSF-1 (TP-1)	May-93	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-2 (TP-1)	May-93	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-3 (TP-1)	May-93	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-4 (TP-2)	May-93	4.5	<0.004	<0.004	0.27	3.70	0.14	0.13	<0.004	<0.004	<0.004	0.046	0.019	NA
YSF-5 (TP-3)	May-93	6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
YSF-6 (TP-4)	May-93	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AGRA Earth & Environmental Inc. (1997)														
Area 1: Former Yakima Farmer Supply Waste Pit Area														
SP1-4	10/21/1997	0.5-4.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	ND
SP2-4	10/21/1997	0.5-4.0	<0.050	0.564	0.167	0.175	0.335	0.211	<0.050	0.443	0.147	0.178	<0.050	ND
SP2A-6.5	10/21/1997	4.0-6.5	<0.025	<0.025	<0.025	<0.025	<0.025	0.0509	<0.025	<0.025	<0.025	<0.025	<0.025	ND
Preliminary Screening Level⁴			0.00503	0.258	0.335	0.446	3.485	0.0028	4.301	4.301	4.301	0.0404	0.0161	10

Table 2
Summary of Soil Analytical Results - Pesticides and Polychlorinated Biphenyls
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Depth ¹ (feet)	Analytical Results (milligrams per kilogram)											
			Aldrin ²	alpha-Chlordane ²	4,4-DDD ²	4,4-DDE ²	4,4-DDT ²	Dieldrin ²	Endosulfan I ²	Endosulfan II ²	Endosulfan sulfate ²	Endrin ²	Heptachlor epoxide ²	PCBs ³
SP3-4	10/21/1997	0.5-4.0	<0.025	<0.025	<0.025	0.0418	0.130	<0.025	<0.025	0.0499	<0.025	<0.025	<0.025	ND
SP4-7	10/21/1997	4.0-7.0	0.635	0.939	2.07	11.5	1.81	3.36	<0.100	<0.500	<0.100	1.13	0.590	ND
SP5-6.5	10/21/1997	4.0-6.5	<0.050	<0.050	0.124	0.30	<0.050	0.847	<0.050	0.146	<0.050	<0.050	<0.050	ND
SP6-5.5	10/21/1997	4.0-5.5	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP7-7	10/21/1997	4.0-7.0	<0.050	<0.050	0.0685	0.193	0.104	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP8-7	10/21/1997	4.0-7.0	<0.025	<0.025	0.094	0.536	<0.025	0.060	<0.025	<0.025	<0.025	<0.025	<0.025	ND
SP9-7.5	10/21/1997	4.0-7.5	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP10-4	10/21/1997	0.5-4	<0.050	<0.050	1.50	0.366	1.77	0.399	0.306	<0.500	0.165	0.101	<0.050	ND
SP11-6	10/22/1997	4.0-6.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP12-8	10/22/1997	4.0-8.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	ND
SP13/14-6	10/22/1997	4.0-6.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	ND
SP15-6	10/22/1997	4.0-6.0	<0.050	<0.050	<0.050	0.132	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP16-8	10/22/1997	4.0-8.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP17-4	10/22/1997	0.5-4.0	<0.050	<0.050	0.131	0.0711	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP18-4	10/22/1997	0.5-4.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	ND
SP19-7	10/22/1997	4.0-7.0	<0.025	<0.025	<0.025	<0.025	0.0353	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	ND
SP20-8	10/22/1997	4.0-8.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP21-5	10/22/1997	1.0-5.0	<0.050	<0.050	<0.050	0.0641	0.0892	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP22-7	10/22/1997	4.0-7.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
B1-10	10/28/1997	10.0-11.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
Preliminary Screening Level⁴			0.00503	0.258	0.335	0.446	3.485	0.0028	4.301	4.301	4.301	0.0404	0.0161	10

Table 2
Summary of Soil Analytical Results - Pesticides and Polychlorinated Biphenyls
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Depth ¹ (feet)	Analytical Results (milligrams per kilogram)												
			Aldrin ²	alpha-Chlordane ²	4,4-DDD ²	4,4-DDE ²	4,4-DDT ²	Dieldrin ²	Endosulfan I ²	Endosulfan II ²	Endosulfan sulfate ²	Endrin ²	Heptachlor epoxide ²	PCBs ³	
B1-30	10/28/1997	30.0-31.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
B2-10	10/28/1997	10.0-11.0	<0.005	<0.005	0.0388	0.0188	0.0152	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
B2-25	10/28/1997	25.0-26.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
Area 2: Former Yakima Farmer Supply Lime and Sulfur Stockpile Locations															
SP23-8	10/22/1997	4.0-8.0	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	ND
SP24-7.5	10/22/1997	4.0-7.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
SP25-4	10/22/1997	0.5-4.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
Area 3: Potential Petroleum Release Area															
SP26-6.5	10/22/1997	4.0-6.5	<0.050	<0.050	0.257	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	ND
SP27-7.5	10/22/1997	4.0-7.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
SP28-7.5	10/22/1997	4.0-7.5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	ND
Farallon Consulting, L.L.C. (2002), Monitoring Well Borings MW-7A and MW-7B															
Drum 1 (MW-7A)	11/21/2002	0 -15	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Drum 3 (MW-7B)	11/22/2002	15-25	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Drum 4 (MW-7B)	11/22/2002	25-32	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Preliminary Screening Level⁴			0.00503	0.258	0.335	0.446	3.485	0.0028	4.301	4.301	4.301	0.0404	0.0161	10	

NOTE:

BOLD denotes analyte was detected at a concentration above the laboratory practical quantitation limit.

NA = Not Applicable

Concentration highlighted exceeds preliminary screening level.

PCBs = polychlorinated biphenyls

ND denotes not detected above PQL for each PCB aroclor.

< denotes concentration of compound is not above the laboratory practical quantitation limit indicated.

¹Depth below ground surface in feet.

²Pesticides analyzed by EPA Method 8081.

³Polychlorinated biphenyls analyzed by EPA Method 8080.

⁴Preliminary screening level has been selected for preliminary evaluation of analytical data for the Remedial Investigation only.

Table 3
Summary of Groundwater Analytical Results - Volatile Organic Compounds
YSF/AGRI-Tech
Yakima, Washington
Farallon PN: 765-001

Monitoring Well / Sample No.	Date Sampled	Sampled By	Analytical Results (micrograms per liter)											
			PCE	TCE	cis 1,2-DCE	trans 1,2-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	MEK	Acetone	1,2-dichloropropane	Chloroform	Chloromethane
MW-1	12/3/1997	AGRA	3.64	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	3/3/1998	AGRA	3.39	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	6/3/1998	AGRA	6.5	1.18	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	1.12	<1.0
	9/2/1998	AGRA	4.22	0.71	0.25	<1.0	<1.0	<1.0	0.15	<1.0	<1.0	<20	<1.0	1.88
	12/3/2002	Farallon	6.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.0
MW-2	12/3/1997	AGRA	<1.0	1.51	12.4	<1.0	2.42	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	3/3/1998	AGRA	1.59	1.46	3.21	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	6/3/1998	AGRA	<1.0	<1.0	7.13	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	12.1
	9/2/1998	AGRA	1.27	3.06	17.6	0.36	<1.0	<1.0	0.19	<1.0	<20	<1.0	<1.0	<1.0
	12/4/2002	Farallon	<2.0	<2.0	15.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW-3	12/3/1997	AGRA	6.06	1.07	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	3/3/1998	AGRA	4.44	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	6/3/1998	AGRA	4.52	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	1.3	9.24
	9/2/1998	AGRA	5.37	0.81	0.22	<1.0	<1.0	<1.0	<1.0	0.23	<20	<1.0	1.93	<1.0
	12/4/2002	Farallon	6.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	<2.0
MW-4	12/3/1997	AGRA	3.32	<1.0	5.23	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	3/3/1998	AGRA	3.78	<1.0	1.64	<1.0	<1.0	<1.0	<1.0	<1.0	24.1	<1.0	<1.0	<1.0
	6/3/1998	AGRA	3.86	<1.0	3.25	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	2.78
	9/2/1998	AGRA	3.12	0.84	4.34	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	1.15	<1.0
	12/4/2002	Farallon	5.0	<2.0	5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW-5	12/3/1997	AGRA	3.98	1.1	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	3/3/1998	AGRA	2.25	1.02	4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	6/3/1998	AGRA	2.72	<1.0	2.52	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	2.59
	9/2/1998	AGRA	2.65	0.89	2.87	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	0.85	<1.0
	12/4/2002	Farallon	5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
MW-6	12/3/1997	AGRA	<1.0	<1.0	7.68	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	3/3/1998	AGRA	<1.0	<1.0	13.2	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	6/3/1998	AGRA	<1.0	<1.0	13.3	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	9/2/1998	AGRA	<1.0	0.33	7.08	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	12/4/2002	Farallon	6.0	74.0	270	<2.0	4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
WDOE-6	May-92	Ecology	420	430	270	<1.0	<10	<1.0	<1.0	<1.0	<20	<1.0	<5.0	<1.0
	12/3/1997	AGRA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/3/1998	AGRA	49.6	108	83.7	2.34	4.24	<1.0	<1.0	<1.0	<20	1.73	<1.0	<1.0
	6/3/1998	AGRA	75.6	60.4	45.6	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	9/2/1998	AGRA	20.8	18.7	11.4	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	12/3/2002	Farallon	<2.0	<2.0	14.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Preliminary Screening Level⁵			5.0	3.98	70	100	0.0292	7,200	800	4,800	800	0.643	7.17	3.37

Table 3
Summary of Groundwater Analytical Results - Volatile Organic Compounds
YSF/AGRI-Tech
Yakima, Washington
Farallon PN: 765-001

Monitoring Well / Sample No.	Date Sampled	Sampled By	Analytical Results (micrograms per liter)											
			PCE	TCE	cis 1,2-DCE	trans 1,2-DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	MEK	Acetone	1,2-dichloropropane	Chloroform	Chloromethane
MW-7A	12/3/2002	Farallon	<2.0	<2.0	4.0	<1.0	<2.0	<1.0	<1.0	<1.0	<20	<1.0	<2	<2
MW-7B	12/3/2002	Farallon	2.0	<2.0	12.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Quality Assurance and Quality Control Field Samples														
12397QC-D ²	12/3/1997	AGRA	<1.0	<1.0	7.87	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
6398QC-D ⁴	6/3/1998	AGRA	3.54	<1.0	3.29	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
9298QC-D ⁵	9/2/1998	AGRA	20.5	18.8	11.1	<1.0	<1.0	<1.0	0.22	<1.0	<20	<1.0	<1.0	<1.0
RB-120302 ⁶	12/3/2002	Farallon	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
TRIP BLANK	12/3/1997	AGRA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	3/3/1998	AGRA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	6/3/1998	AGRA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
	9/2/1998	AGRA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0
Preliminary Screening Level⁵			5.0	3.98	70	100	0.0292	7,200	800	4,800	800	0.643	7.17	3.37

NOTE:

BOLD denotes analyte was detected at a concentration at or above the laboratory practical quantitation limit.

3.54 Concentration highlighted exceeds preliminary screening level.

< denotes concentration of compound is not at or above the laboratory practical quantitation limit indicated.

¹ Analyzed by EPA Method 8260B.

² Field Duplicate of Groundwater Sample Collected from Monitoring Well MW-6.

³ Field Duplicate of Groundwater Sample Collected from Monitoring Well MW-2

⁴ Field Duplicate of Groundwater Sample Collected from Monitoring Well MW-4

⁵ Field Duplicate of Groundwater Sample Collected from Monitoring Well WDOE-6

⁶ Equipment Rinsate Blank

⁵ Preliminary screening level has been selected for preliminary evaluation of analytical data for the Remedial Investigation only.

cis-1,2-DCE = cis-1,2-dichloroethene

MEK = methyl ethyl ketone

NA = Not Analyzed

PCE = tetrachloroethene

TCE = trichloroethene

trans 1,2-DCE = trans 1,2-dichloroethene

1,1-DCA = 1,1-dichloroethane

1,1,1-TCA = 1,1,1-trichloroethane

Table 4
Summary of Groundwater Analytical Results - Pesticides and Polychlorinated Biphenyls
YSF/AGRI-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Analytical Results (micrograms per liter)			
		4,4-DDD ¹	4,4 DDE ¹	Dieldrin ¹	PCBs ²
MW-1	12/3/1997	<0.1	<0.1	<0.1	ND
	3/3/1998	<0.1	<0.1	<0.1	NA
	6/3/1998	NA	NA	NA	NA
	9/2/1998	NA	NA	NA	NA
	12/3/2002	NA	NA	NA	NA
MW-2	12/3/1997	<0.1	0.119	0.102	ND
	3/3/1998	<0.1	<0.1	<0.1	NA
	6/3/1998	<0.1	<0.1	<0.1	NA
	9/2/1998	<0.1	<0.1	<0.1	NA
	12/4/2002	<0.05	<0.05	0.05	NA
MW-3	12/3/1997	<0.1	<0.1	<1.0	ND
	3/3/1998	<0.1	<0.1	<1.0	NA
	6/3/1998	<0.1	<0.1	<1.0	NA
	9/2/1998	<0.1	<0.1	<1.0	NA
	12/4/2002	NA	NA	NA	NA
MW-4	12/3/1997	<0.1	<0.1	<0.1	ND
	3/3/1998	<0.1	<0.1	<0.1	NA
	6/3/1998	NA	NA	NA	NA
	9/2/1998	NA	NA	NA	NA
	12/4/2002	NA	NA	NA	NA
MW-5	12/3/1997	<0.1	<0.1	<0.1	ND
	3/3/1998	<0.1	<0.1	<0.1	NA
	6/3/1998	NA	NA	NA	NA
	9/2/1998	NA	NA	NA	NA
	12/4/2002	NA	NA	NA	NA
MW-6	12/3/1997	<0.1	<0.1	<0.1	ND
	3/3/1998	<0.1	<0.1	<0.1	NA
	6/3/1998	NA	NA	NA	NA
	9/2/1998	<0.1	<0.1	<0.1	NA
	12/4/2002	NA	NA	NA	NA
WDOE-6	May-92	0.48	<0.50	1.1	<5.0
	12/3/1997	NA	NA	NA	NA
	3/3/1998	<0.1	<0.1	0.226	NA
	6/3/1998	0.296	0.586	0.242	NA
	9/2/1998	0.100	0.334	<0.1	NA
	12/3/2002	0.13	<0.05	<0.05	NA
MW-7A	12/3/2002	NA	NA	NA	NA
MW-7B	12/3/2002	NA	NA	NA	NA
Preliminary Screening Level⁸		0.365	0.257	0.0055	0.1

Table 4
Summary of Groundwater Analytical Results - Pesticides and Polychlorinated Biphenyls
YSF/AGRI-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Analytical Results (micrograms per liter)			
		4,4-DDD ¹	4,4 DDE ¹	Dieldrin ¹	PCBs ²
Quality Assurance and Quality Control Field Samples					
12397QC-D ³	12/3/1997	<0.1	<0.1	<0.1	ND
030398QC-D ⁴	3/3/1998	<0.1	<0.1	<0.1	NA
6398QC-D ⁵	6/3/1998	NA	NA	NA	NA
9298QC-D ⁶	9/2/1998	NA	NA	NA	NA
RB-120302 ⁷	12/3/2002	NA	NA	NA	NA
TRIP BLANK	12/3/1997	<0.1	<0.1	<0.1	ND
	3/3/1998	<0.1	<0.1	<0.1	NA
	9/2/1998	NA	NA	NA	NA
Preliminary Screening Level⁸		0.365	0.257	0.0055	0.1

NOTE:

BOLD Indicates detection above laboratory practical quantitation limit.

NA = Not Analyzed

Concentration highlighted exceeds preliminary screening level.

ND = Not Detected above PQL for each PCB aroclor

< denotes concentration of compound is not above the laboratory practical quantitation limit indicated.

PCBs = polychlorinated biphenyls

¹ Analyzed by EPA Method 8081.

² Analyzed by EPA Method 8080.

³ Field Duplicate of Groundwater Sample Collected from Monitoring Well MW-6.

⁴ Field Duplicate of Groundwater Sample Collected from Monitoring Well MW-2.

⁵ Field Duplicate of Groundwater Sample Collected from Monitoring Well MW-4.

⁶ Field Duplicate of Groundwater Sample Collected from Monitoring Well WDOE-6.

⁷ Equipment Rinse Blank

⁸ Preliminary screening level has been selected for preliminary evaluation of analytical data for the Remedial Investigation only.

Table 5
Soil Screening Level Evaluation
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Constituent of Potential Concern	Frequency of Detection in Soil ¹	Maximum Concentration Detected in Soil (milligram per kilogram)	Carcinogen or Non-Carcinogen (C or NC)	Calculation of Site-Specific Cleanup Levels Performed (Yes or No)	Method A Soil Screening Levels (milligrams per kilogram)		Method B Soil Screening Levels (milligrams per kilogram)				Method C Soil Screening Levels (milligrams per kilogram)				Preliminary Soil Screening Level Selected for Remedial Investigation	COPC Retained as Indicator Hazardous Substance (Yes or No)
					Standard MTCA Method A Cleanup Level for Unrestricted Land Use ²	Standard MTCA Method A Cleanup Level for Industrial Soils ²	Standard Method B ² (Direct Contact/Ingestion Only)	Modified Method B ³ (Direct Contact/Dermal & Ingestion HQ=1.0)	Modified Method B ³ (Direct Contact/Dermal & Ingestion Risk of 1.0E-6)	Modified Method B ³ (Protection of Groundwater)	Standard Method C ² (Direct Contact/Ingestion Only)	Modified Method C ³ (Direct Contact/Dermal & Ingestion HQ=1.0)	Modified Method C ³ (Direct Contact/Dermal & Ingestion Risk of 1.0E-5)	Modified Method C ³ (Protection of Groundwater)		
Volatile Organic Compounds																
Tetrachloroethene (PCE)	24	770	C	Yes	0.05	0.05	19.6	739	18.11	0.05303	8.58	14,550	1,070	0.05303	0.05303	Yes
Trichloroethene (TCE)	11	4.6	C	Yes	0.03	0.03	90.9	Not Available	83.98	0.02631	39.8	Not Available	4,959	0.02631	0.02631	Yes
1,1-dichloroethene	1	0.029	C	Yes	Not Available	Not Available	1.67	719	1.664	0.0005216	219	17,890	124.2	0.0005216	0.0005216	No
cis 1,2-dichloroethene	11	4.5	NC	Yes	Not Available	Not Available	800	798.9	Not Available	0.35	35,000	19,880	Not Available	0.35	0.35	Yes
trans 1,2-dichloroethene	0	ND	NC	No	Not Available	Not Available	1,600	—	—	—	70,000	—	—	—	1,600	No
Vinyl Chloride	0	ND	C	Yes	Not Available	Not Available	0.667	239.7	0.6658	0.0001838	87.5	5,963	49.69	0.0001838	0.0001838	Yes
Ethylbenzene	10	4.0	NC	Yes	6	6	8,000	7,989	Not Available	6.048	350,000	198,800	Not Available	6.048	6.048	No
Toluene	16	0.084	NC	Yes	7	7	16,000	14,780	Not Available	7.271	700,000	290,900	Not Available	7.271	7.271	No
Total xylenes	22	0.526	NC	Yes	9	9	160,000	147,800	Not Available	9.144	7,000,000	2,909,000	Not Available	9.144	9.144	No
n-Propylbenzene	2	0.088	NC	No	Not Available	Not Available	Not Available	—	—	—	Not Available	—	—	—	Not Available	No
1,3,5-trimethylbenzene	4	0.11	NC	No	Not Available	Not Available	Not Available	—	—	—	Not Available	—	—	—	Not Available	No
1,2,4-trimethylbenzene	10	0.30	NC	No	Not Available	Not Available	Not Available	—	—	—	Not Available	—	—	—	Not Available	No
4-isopropyltoluene	1	0.031	NC	No	Not Available	Not Available	Not Available	—	—	—	Not Available	—	—	—	Not Available	No
1,2-dichloropropane	3	0.007	C	Yes	Not Available	Not Available	14.7	Not Available	10.21	0.00305	1,930	Not Available	367.6	0.00305	0.00305	Yes
Acetone	11	0.17	NC	Yes	Not Available	Not Available	8,000	7,989	Not Available	3.211	350,000	198,800	Not Available	3.211	3.211	No
Carbon Disulfide	7	0.011	NC	Yes	Not Available	Not Available	8,000	7,828	Not Available	5.651	350,000	181,800	Not Available	5.651	5.651	No
2-Butanone (MEK)	0	0.023	NC	Yes	Not Available	Not Available	48,000	33,330	Not Available	22	2,100,000	400,000	Not Available	22	22	No
Chloroform	0	ND	C	No	Not Available	Not Available	164	—	—	—	21,500	—	—	—	164	No
Chloromethane	0	ND	C	No	Not Available	Not Available	76.9	—	—	—	10,100	—	—	—	76.9	Yes
1,1,1-trichloroethane	0	ND	NC	No	2	2	72,000	—	—	—	3,150,000	—	—	—	2	No
1,1-dichloroethane	0	ND	NC	No	Not Available	Not Available	800	—	—	—	350,000	—	—	—	800	No
Pesticides and Herbicides																
4,4-DDT	9	1.81	C	Yes	3	4	2.94	27.78	2.042	3.485	386	333.3	73.53	3.485	3.485	No
4,4-DDE	13	11.5	C	Yes	Not Available	Not Available	2.94	Not Available	2.042	0.4459	386	Not Available	73.53	0.4459	0.4459	Yes
4,4-DDD	11	2.07	C	Yes	Not Available	Not Available	4.17	Not Available	2.894	0.3354	547	Not Available	104.2	0.3354	0.3354	Yes
Dieldrin	8	3.36	C	Yes	Not Available	Not Available	0.0625	2.778	0.0434	0.002817	8.2	33.33	1.56	0.002817	0.002817	Yes
Endrin	4	1.13	NC	Yes	Not Available	Not Available	24	16.67	Not Available	0.0404	1,050	200	Not Available	0.0404	0.0404	Yes
Heptachlor epoxide	2	0.59	C	Yes	Not Available	Not Available	0.110	0.7222	0.07631	0.01605	14.4	8.667	2.747	0.01605	0.01605	Yes
Endosulfan compounds	5	0.443	NC	Yes	Not Available	Not Available	480	333.3	Not Available	4.301	21,000	4,000	Not Available	4.301	4.301	No
Aldrin	1	0.635	C	Yes	Not Available	Not Available	0.0588	1.667	0.04085	0.005033	7.72	20.0	1.471	0.005033	0.005033	No
Alpha-chlordane (Chlordane-based)	2	0.939	C	Yes	Not Available	Not Available	2.86	27.78	1.984	0.2576	375	333.3	71.43	0.2576	0.2576	Yes
Ethion	1	0.021	NC	No	Not Available	Not Available	40	—	—	—	1,750	—	—	—	40	No
Metals																
Arsenic	2	6.3	C	No	20	20	0.667	21.62	0.6006	2.92	87.5	400	33.33	2.92	20	No
Antimony	1	0.624	NC	No	Not Available	Not Available	32	28.83	Not Available	5.786	1,400	533.3	Not Available	5.786	32	No
Cadmium	3	23.4	NC	No	2	2	80	72.07	Not Available	0.069	3,500	1,333	Not Available	0.069	2	Yes
Chromium III	3	104	NC	No	2,000	2,000	120,000	108,100	Not Available	1,000	5,250,000	2,000,000	Not Available	1,000	2,000	No
Copper	3	422	NC	No	Not Available	Not Available	2,960	2,667	Not Available	262.8	130,000	49,330	Not Available	262.8	2,960	No
Lead	2	155	C	No	250	1,000	Not Available	Not Available	Not Available	3,000	Not Available	Not Available	Not Available	3,000	1,000	No
Mercury	2	5.09	NC	No	2	2	24	21.62	Not Available	2.088	1,050	400	Not Available	2.088	2	Yes
Nickel	3	88.6	NC	No	Not Available	Not Available	Not Available	—	—	—	Not Available	—	—	—	Not Available	No
Silver	1	3.04	NC	No	Not Available	Not Available	400	360.4	Not Available	13.6	17,500	6,667	Not Available	13.6	400	No
Thallium	1	1.44	NC	No	Not Available	Not Available	Not Available	—	—	—	Not Available	—	—	—	Not Available	No
Zinc	3	5,750	NC	No	Not Available	Not Available	24,000	21,620	Not Available	5,971	1,050,000	400,000	Not Available	5,971	24,000	No

Table 5
Soil Screening Level Evaluation
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Constituent of Potential Concern	Frequency of Detection in Soil ¹	Maximum Concentration Detected in Soil (milligram per kilogram)	Carcinogen or Non-Carcinogen (C or NC)	Calculation of Site-Specific Cleanup Levels Performed (Yes or No)	Method A Soil Screening Levels (milligrams per kilogram)		Method B Soil Screening Levels (milligrams per kilogram)				Method C Soil Screening Levels (milligrams per kilogram)				Preliminary Soil Screening Level Selected for Remedial Investigation	COPC Retained as Indicator Hazardous Substance (Yes or No)
					Standard MTCA Method A Cleanup Level for Unrestricted Land Use ²	Standard MTCA Method A Cleanup Level for Industrial Soils ²	Standard Method B ² (Direct Contact/Ingestion Only)	Modified Method B ³ (Direct Contact/Dermal & Ingestion HQ=1.0)	Modified Method B ³ (Direct Contact/Dermal & Ingestion Risk of 1.0E-6)	Modified Method B ³ (Protection of Groundwater)	Standard Method C ² (Direct Contact/Ingestion Only)	Modified Method C ³ (Direct Contact/Dermal & Ingestion HQ=1.0)	Modified Method C ³ (Direct Contact/Dermal & Ingestion Risk of 1.0E-5)	Modified Method C ³ (Protection of Groundwater)		
Other Hazardous Substances																
PCBs	0	ND	C	No	1	10	Not Available	—	—	—	Not Available	—	—	—	10	No
TPH as Diesel-Range Organics	1	35	NC	No	2,000	2,000	Not Available	—	—	—	Not Available	—	—	—	2,000	No
TPH as Oil-Range Organics	1	260	NC	No	2,000	2,000	Not Available	—	—	—	Not Available	—	—	—	2,000	No
Total Carcinogenic PAHs	2	0.042	C	No	0.1	2	0.137	—	—	—	18	—	—	—	0.137	No

NOTE:

ND denotes not detected above the laboratory Practical Quantitation Limit.

Not Available denotes there was no information in State or Federal regulations available for standard cleanup levels or MCLs or additional parameters needed to calculate site-specific soil or groundwater cleanup levels.

— denotes calculation of cleanup level not performed.

¹ Frequency of detection is based on all soil samples collected between 1992 and 2002. The total number of soil samples is 51.

² Standard Model Toxics Control Act (MTCA) Methods A, B, and C soil (direct contact pathway [ingestion only]) cleanup levels obtained from Ecology Publication, Cleanup levels and Risk Calculations (CLARC) Version 3.1, November 2001.

³ Modified Methods B and C soil and groundwater cleanup levels have been calculated using Ecology worksheet for calculating soil cleanup levels for unrestricted and industrial land use. Modified Methods B and C soil cleanup levels presented are the more stringent cleanup levels for the direct contact, ingestion, and dermal pathways.

COPC = constituent of potential Concern

HQ = hazard quotient

NT = not tested.

PAHs = polycyclic aromatic hydrocarbons

PCBs = polychlorinated biphenyls

TPH = total petroleum hydrocarbons

Table 6
Groundwater Screening Level Evaluation
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Constituent of Potential Concern	Monitoring Wells COPC has been Detected	Maximum Concentration Detected in Groundwater (micrograms per liter)	Carcinogen or Non-Carcinogen (C or NC)	Calculation of Site-Specific Cleanup Levels Performed (Yes or No)	Groundwater Screening Levels (micrograms per liter)						Surface Water Screening Levels (micrograms per liter)		Preliminary Groundwater Screening Level Selected for Remedial Investigation	COPC Retained as Indicator Hazardous Substance (Yes or No)
					Standard Method A ¹	MCL ²	Standard Method B ¹	Modified Method B ³	Standard Method C ¹	Modified Method C ³	Standard Method B ¹	Standard Method C ¹		
Volatile Organic Compounds														
Tetrachloroethene (PCE)	All but MW-7A	420	C	Yes	5.0	5.0	0.858	4.75	8.58	4.75	4.15	104	5.0	Yes
Trichloroethene (TCE)	All but MW-7A/7B	430	C	Yes	5.0	5.0	3.98	3.98	39.8	3.98	55.6	1,390	3.98	Yes
1,1-dichloroethene	None	ND	C	Yes	Not Available	7	0.0729	0.0729	0.729	0.0729	1.93	48.2	0.0729	No
cis 1,2-dichloroethene	All	270	NC	Yes	Not Available	70	80	70	175	80	Not Available	Not Available	70	Yes
trans 1,2-dichloroethene	MW-2/WDOE-6	2.34	NC	No	Not Available	100	160	—	350	—	32,800	82,000	100	No
Vinyl Chloride	MW-2/MW-6/WDOE-6	4.24	C	Yes	0.2	2.0	0.0292	0.0292	0.292	0.0292	3.69	92.3	0.0292	Yes
Ethylbenzene	None	ND	NC	Yes	700	700	800	700.0	1,750	700.0	6,190	17,300	700.0	No
Toluene	None	ND	NC	Yes	1,000	1,000	1,600	1,000	3,500	1,000	48,500	121,000	1,000	No
Total xylenes	None	ND	NC	Yes	1,000	10,000	16,000	10,000	35,000	10,000	Not Available	Not Available	1,000	No
n-Propylbenzene	None	ND	NC	No	Not Available	Not Available	Not Available	—	Not Available	—	Not Available	Not Available	Not Available	No
1,3,5-trimethylbenzene	None	ND	NC	No	Not Available	Not Available	Not Available	—	Not Available	—	Not Available	Not Available	Not Available	No
1,2,4-trimethylbenzene	None	ND	NC	No	Not Available	Not Available	Not Available	—	Not Available	—	Not Available	Not Available	Not Available	No
4-isopropyltoluene	None	ND	NC	No	Not Available	Not Available	Not Available	—	Not Available	—	Not Available	Not Available	Not Available	No
1,2-dichloropropane	WDOE-6	1.73	C	Yes	Not Available	5	0.643	0.643	6.43	0.643	23.2	580	0.643	Yes
Acetone	MW-4	24.1	NC	Yes	Not Available	Not Available	800	800	1,750	800	Not Available	Not Available	800	No
Carbon Disulfide	None	ND	NC	Yes	Not Available	Not Available	800	800	1,750	800	Not Available	Not Available	800	No
2-Butanone (MEK)	MW-3	0.23	NC	Yes	Not Available	Not Available	4,800	4,800	1,400	4,800	Not Available	Not Available	4,800	No
Chloroform	MW-1/MW-3/MW-4/MW-5	3.0	C	No	Not Available	Not Available	7.17	—	71.7	—	283	7,080	7.17	No
Chloromethane	MW-2/MW-3/MW-4/MW-5	12.1	C	No	Not Available	Not Available	3.37	—	33.7	—	133	3,320	3.37	Yes
1,1,1-trichloroethane	MW-1	0.15	NC	No	Not Available	200	7,200	—	15,800	—	417,000	15,800	7,200	No
1,1-dichloroethane	MW-2	0.22	NC	No	Not Available	Not Available	800	—	1,750	—	Not Available	Not Available	800	No
Pesticides and Herbicides														
4,4-DDT	None	ND	C	Yes	0.3	Not Available	0.257	0.254	2.57	0.254	0.000356	0.00889	0.257	No
4,4-DDE	MW-2/WDOE-6	0.586	C	Yes	Not Available	Not Available	0.257	0.257	2.57	0.257	0.000356	0.00889	0.257	Yes
4,4-DDD	WDOE-6	0.48	C	Yes	Not Available	Not Available	0.365	0.365	3.65	0.365	0.000504	0.0126	0.365	Yes
Dieldrin	MW-2/WDOE-6	1.1	C	Yes	Not Available	Not Available	0.00547	0.0055	0.0547	0.0055	0.0000867	0.00217	0.0055	Yes
Endrin	None	ND	NC	Yes	Not Available	2	4.80	2.0	10.5	2.0	0.196	0.490	2.0	No
Heptachlor epoxide	None	ND	C	Yes	Not Available	0.2	0.00962	0.0096	0.0962	0.0096	0.0000636	0.00159	0.0096	No
Endosulfan compounds	None	ND	NC	Yes	Not Available	Not Available	96.0	96.0	210	96.0	57.6	144	96.0	No
Aldrin	None	ND	C	Yes	Not Available	Not Available	0.00515	0.0051	0.0515	0.0051	0.0000816	0.00204	0.0051	No
Alpha-chlordane (Chlordane-based)	None	ND	C	Yes	Not Available	2	0.25	0.250	2.5	0.250	0.00131	0.0328	0.250	No
Ethion	None	ND	NC	No	Not Available	Not Available	8.00	—	17.5	—	Not Available	Not Available	8.00	No

**Table 6
Groundwater Screening Level Evaluation
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001**

Constituent of Potential Concern	Monitoring Wells COPC has been Detected	Maximum Concentration Detected in Groundwater (micrograms per liter)	Carcinogen or Non-Carcinogen (C or NC)	Calculation of Site-Specific Cleanup Levels Performed (Yes or No)	Groundwater Screening Levels (micrograms per liter)						Surface Water Screening Levels (micrograms per liter)		Preliminary Groundwater Screening Level Selected for Remedial Investigation	COPC Retained as Indicator Hazardous Substance (Yes or No)
					Standard Method A ¹	MCL ²	Standard Method B ¹	Modified Method B ³	Standard Method C ¹	Modified Method C ³	Standard Method B ¹	Standard Method C ¹		
Metals														
Arsenic	NT	NT	C	No	5.0	50.0	0.0583	—	0.583	—	0.0982	2.46	5.0	No
Antimony	NT	NT	NC	No	Not Available	6	6.4	—	14.0	—	1,040	2,590	6.4	No
Cadmium	NT	NT	NC	No	5.0	5.0	8.0	—	17.5	—	20.3	50.6	5.0	Yes
Chromium III	NT	NT	NC	No	50.0	100.0	24,000	—	52,500	—	243,000	608,000	50.0	No
Copper	NT	NT	NC	No	Not Available	1,300	592	—	1,300	—	2,660	6,660	592	No
Lead	NT	NT	C	No	15.0	15.0	Not Available	—	Not Available	—	Not Available	Not Available	15.0	No
Mercury	NT	NT	NC	No	2.0	2.0	4.8	—	10.5	—	Not Available	Not Available	2.0	Yes
Nickel	NT	NT	NC	No	Not Available	Not Available	Not Available	—	Not Available	—	Not Available	Not Available	Not Available	No
Silver	NT	NT	NC	No	Not Available	100	80	—	175	—	25,900	64,800	80	No
Thallium	NT	NT	NC	No	Not Available	Not Available	Not Available	—	Not Available	—	Not Available	Not Available	Not Available	No
Zinc	NT	NT	NC	No	Not Available	5,000	4,800	—	10,500	—	16,500	41,400	4,800	No
Other Hazardous Substances														
PCBs	None	ND	C	No	0.1		Not Available	—	Not Available	—	Not Available	Not Available	0.1	No
TPH as Diesel Range Organics	None	ND	NC	No	500		Not Available	—	Not Available	—	Not Available	Not Available	500	No
TPH as Oil Range Organics	None	ND	NC	No	500		Not Available	—	Not Available	—	Not Available	Not Available	500	No
Total Carcinogenic PAHs	None	ND	C	No	0.1		0.0120	—	0.120	—	Not Available	Not Available	0.0120	No

NOTE:

ND denotes not detected above the laboratory Practical Quantitation Limit.

NONE denotes COPC was not detected in any of the groundwater samples collected between 1992 and 2002.

Not Available denotes there was no information in State or Federal regulations available for standard cleanup levels or MCLs or additional parameters needed to calculate site-specific soil or groundwater cleanup levels

— denotes calculation of cleanup level not performed.

¹Standard Model Toxics Control Act (MTCA) Method A, B, and C groundwater cleanup levels obtained from Ecology Publication 94-145, Cleanup Levels and Risk Calculations (CLARC) Version 3.1, November 2001.

²MCLs reported as presented in the CLARC, November 2001 which consider Federal and State ARARs for potable groundwater.

³Modified Method B and C groundwater cleanup levels have been calculated using Ecology worksheet for calculating soil cleanup levels for unrestricted and industrial land use.

COPC = Constituent of Potential Concern

MCL = Maximum Contaminant Level

NT = Not tested. Analysis for the analyte was not performed.

PAHs = Polycyclic Aromatic Hydrocarbons

PCBs = Polychlorinated Biphenyls

TPH = Total petroleum hydrocarbons

Table 7
Average Monthly Climate Data
YSF\Agri-Tech
Yakima, Washington
Farallon PN: 765-001

	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Average Maximum Temperature (Fahrenheit)	37.1	45.7	55.2	63.8	72.6	79.7	87.3	86	77.7	64.1	48.1	38	62.9
Average Minimum Temperature (Fahrenheit)	20.2	25.7	29.9	34.8	42.2	49	53	51.6	44.1	34.7	27.9	22.5	36.3
Average Total Precipitation (Inches)	1.27	0.78	0.68	0.52	0.54	0.69	0.2	0.32	0.36	0.55	1.04	1.27	8.22
Average Total Snowfall (Inches)	8.4	3.2	1.4	0	0	0	0	0	0	0.1	2.7	8.3	24.1

NOTE:

Period of Record: 1946 to 2000 (Data collection provided by Western Regional Climate Center website)

Table 8
Summary of Soil Analytical Results - Petroleum Hydrocarbons
and Polycyclic Aromatic Hydrocarbons
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Sample Date	Depth (feet) ¹	Analytical Results (milligrams per kilogram)									
			ORO ²	DRO ²	Benzo(b)fluoranthene ³	Chrysene ³	Fluoranthene ³	Dibenzo(a,h)anthracene	Benzo(a)anthracene	Indeno(1,2,3-cd)pyrene	Benzo(k)fluoranthene ³	Benzo(a)pyrene
Area 3 Soil Analytical Results without Acid Silica Gel Cleanup for DRO and ORO.												
SP-23-8	10/22/1997	4.0-8.0	<100	<25	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
SP24-7.5	10/22/1997	4.0-7.5	200	37	0.019	0.011	0.012	<0.010	<0.010	<0.010	<0.010	<0.010
SP25-4	10/22/1997	0.5-4.0	580	69	0.018	<0.016	0.020	<0.016	<0.016	<0.016	<0.016	<0.016
Area 3 Soil Analytical Results with Acid Silica Gel Cleanup for DRO and ORO.												
SP-23-8	10/22/1997	4.0-8.0	<100	<25	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
SP24-7.5	10/22/1997	4.0-7.5	<100	<25	0.019	0.011	0.012	<0.010	<0.010	<0.010	<0.010	<0.010
SP25-4	10/22/1997	0.5-4.0	260	35	0.018	<0.016	0.020	<0.016	<0.016	<0.016	<0.016	<0.016
Preliminary Screening Level⁴			2,000	2,000	0.137	0.137	0.137	NA	NA	NA	0.137	NA

NOTE:

BOLD Indicates analyte detected at a concentration above the laboratory practical quantitation limit.

< denotes concentration of compound is not at or above the laboratory practical quantitation limit indicated.

¹Depth below ground surface in feet.

²Analyzed by Ecology Method NWTPH-Dx. Acid silica gel cleanup used to remove contribution of organic materials observed in soil.

³Analyzed by EPA Method 8270-SIM. Carcinogenic PAHs are depicted only.

⁴Preliminary screening level has been selected for preliminary evaluation of analytical data for the Remedial Investigation only.

DRO = TPH as diesel-range organics

NA = Not applicable to noncarcinogenic PAHs

ORO = TPH as heavy-oil-range organics

PAHs = Polycyclic aromatic hydrocarbons

TPH = Total petroleum hydrocarbons

Table 9
Summary of Soil Analytical Results - Metals
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date	Depth ¹ (feet)	Analytical Results (milligrams per kilogram)										
			Total Metals ²										
			Arsenic	Antimony	Cadmium	Chromium	Copper	Lead	Nickel	Mercury	Silver	Thallium	Zinc
Area 3, Potential Petroleum Release Area, and Western Site Boundary with the Bay Chemical Site.													
SP-23-8	10/22/1997	4.0-8.0	<5.0	<0.500	1.65	104	422	155	88.6	<0.050	<1.0	<0.500	579
SP24-7.5	10/22/1997	4.0-7.5	3.35	<0.500	23.4	38.8	119	<0.500	19.6	5.09	3.04	<0.500	5,750
SP25-8	10/22/1997	4.0-8.0	6.3	0.624	5.49	17.5	27.0	47.7	17.0	0.137	<1.0	1.44	3,240
Natural Background Concentrations³			5.0	NA	1	38	27.0	11	46.0	0.05	NA	NA	79
Preliminary Screening Level⁴			20.0	32	2	2,000	2,960	1,000	NA	2	400	NA	24,000

NOTE:
BOLD Indicates analyte detected at a concentration above the laboratory practical quantitation limit.
 Concentration highlighted exceeds preliminary screening level.
 < denotes concentration of compound is not at or above the laboratory practical quantitation limit indicated.
¹Depth below ground surface in feet.
²Analyzed by EPA Method 6000 and 7000 Series Methods.
³Natural Background concentrations of metals for the Yakima Basin as presented in Natural Background Soil Metals Concentrations in Washington State, Ecology Publication 94-115, October 1994.
⁴Preliminary screening level has been selected for preliminary evaluation of analytical data for the Remedial Investigation only.

NA = not applicable, no cleanup levels available

Table 10
Monitoring Well Construction Details
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Monitoring Well Identification	Total Depth of Well (feet below TOC) ¹	Diameter (inches)	Screened Interval (feet bgs) ²	Well Screen Slot Size (inches)	Well Construction Material	Top of Well Casing Elevation (feet MSL) ³	Latitude (degrees-minutes-seconds) ⁴	Longitude (degrees-minutes-seconds) ⁴
MW-1	26	2	6 - 26	0.020	PVC	1002.88	N46-34-12	W120-29-28
MW-2	12	2	2 - 12	0.020	PVC	1002.59	N46-34-08	W120-29-26
MW-3	27	2	7 - 27	0.020	PVC	1000.81	N46-34-08	W120-29-23
MW-4	25	2	5 - 25	0.020	PVC	1000.82	N46-34-06	W120-29-23
MW-5	28	2	8 - 28	0.020	PVC	1001.45	N46-34-05	W120-29-27
MW-6	13	2	3 - 13	0.020	PVC	1002.28	N46-34-05	W120-29-26
MW-7A	17	2	7 - 17	0.020	PVC	999.96	N46-34-02	W120-29-24
MW-7B	33	2	28 - 33	0.020	PVC	999.82	N46-34-02	W120-29-24
WDOE-6	16	2	11 - 16	0.020	Galvanized steel blank/stainless steel well screen	1002.27	N46-34-08	W120-29-26

NOTE:

¹Total depth of well is based on average field measurements between December 1997 and December 2002.

²Screened interval is based on total well depth measurements.

³Top of well casing elevations provided by Upton Surveying, using City of Yakima datum benchmark NAVD29.

⁴Latitude and longitude provided by Upton Surveying, using City of Yakima horizontal datum benchmark NAD83.

bgs = below ground surface

MSL = mean sea level

PVC = polyvinyl chloride

TOC = top of well casing

Table 11
Summary of Groundwater Elevation Data
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Well Number	Date Measured	Measured By	Well Elevation (msl)	Depth to Water (bgs)	Groundwater Elevation (msl)
MW-1	12/3/1997	AGRA	1002.88	4.41	998.47
	3/3/1998	AGRA		5.78	997.10
	6/3/1998	AGRA		4.60	998.28
	9/2/1998	AGRA		2.52	1,000.36
	12/3/2002	Farallon		4.91	997.97
MW-2	12/3/1997	AGRA	1002.59	5.15	997.44
	3/3/1998	AGRA		6.75	995.84
	6/3/1998	AGRA		5.46	997.13
	9/2/1998	AGRA		3.36	999.23
	12/4/2002	Farallon		5.86	996.73
MW-3	12/3/1997	AGRA	1000.81	4.18	996.63
	3/3/1998	AGRA		5.65	995.16
	6/3/1998	AGRA		4.64	996.17
	9/2/1998	AGRA		2.57	998.24
	12/4/2002	Farallon		4.92	995.89
MW-4	12/3/1997	AGRA	1000.82	4.56	996.26
	3/3/1998	AGRA		6.02	994.80
	6/3/1998	AGRA		5.02	995.80
	9/2/1998	AGRA		3.03	997.79
	12/4/2002	Farallon		5.36	995.46
MW-5	12/3/1997	AGRA	1001.45	4.92	996.53
	3/3/1998	AGRA		6.49	994.96
	6/3/1998	AGRA		5.28	996.17
	9/2/1998	AGRA		3.35	998.10
	12/4/2002	Farallon		5.72	995.73
MW-6	12/3/1997	AGRA	1002.28	5.23	997.05
	3/3/1998	AGRA		6.78	995.50
	6/3/1998	AGRA		5.56	996.72
	9/2/1998	AGRA		3.50	998.78
	12/4/2002	Farallon		5.94	996.34
WDOE-6	12/3/1997	AGRA	1002.27	NM	—
	3/3/1998	AGRA		5.51	996.76
	6/3/1998	AGRA		4.29	997.98
	9/2/1998	AGRA		2.20	1,000.07
	12/3/2002	Farallon		4.55	997.72
MW-7A	12/3/2002	Farallon	999.96	5.57	994.39
MW-7B	12/3/2002	Farallon	999.82	5.75	994.07

NOTE:

Wells resurveyed 12/2002

bgs = below ground surface

— denotes data not available.

msl = feet above mean sea level relative to City of Yakima NAVD29 datum/benchmark.

NM = not measured

Table 12
Water Quality Parameters
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Sampled By	Temperature (°C)	Specific Conductance (mS/cm)	Dissolved Oxygen (mg/l)	pH	ORP (mV)
MW-1	12/3/1997	AGRA	14.50	3.30	0.61	6.58	—
	3/3/1998	AGRA	14.30	1.97	2.28	7.10	—
	6/3/1998	AGRA	14.50	—	2.88	7.03	360
	9/2/1998	AGRA	15.70	3.40	2.07	6.90	130
	12/3/2002	Farallon	14.08	—	5.25	6.91	189
MW-2	12/3/1997	AGRA	13.20	5.07	0.41	6.98	—
	3/3/1998	AGRA	13.80	2.03	1.59	7.00	—
	6/3/1998	AGRA	14.40	—	0.50	7.85	205
	9/2/1998	AGRA	20.70	10.92	0.39	6.40	126
	12/4/2002	Farallon	15.52	—	0.92	6.62	21
MW-3	12/3/1997	AGRA	15.00	3.63	0.42	6.00	—
	3/3/1998	AGRA	12.40	1.61	3.58	7.00	—
	6/3/1998	AGRA	14.10	—	4.12	7.48	398
	9/2/1998	AGRA	17.80	3.04	1.45	7.00	143
	12/4/2002	Farallon	13.36	—	4.32	6.82	67
MW-4	12/3/1997	AGRA	14.10	3.04	1.10	6.60	—
	3/3/1998	AGRA	11.70	1.98	1.79	6.90	—
	6/3/1998	AGRA	14.20	—	1.71	8.68	255
	9/2/1998	AGRA	17.90	4.04	0.96	6.80	156
	12/4/2002	Farallon	14.08	—	3.14	6.75	61
MW-5	12/3/1997	AGRA	15.80	4.84	0.58	6.00	—
	3/3/1998	AGRA	12.70	1.70	1.94	7.00	—
	6/3/1998	AGRA	13.90	—	3.10	6.86	333
	9/2/1998	AGRA	17.90	4.19	1.64	6.90	137
	12/4/2002	Farallon	14.06	—	2.94	6.67	58
MW-6	12/3/1997	AGRA	15.70	3.90	1.00	6.30	—
	3/3/1998	AGRA	12.80	3.90	1.46	6.80	—
	6/3/1998	AGRA	13.70	—	1.36	7.90	171
	9/2/1998	AGRA	19.30	5.61	1.01	6.80	90
	12/4/2002	Farallon	15.40	—	1.25	6.70	-1
WDOE-6	May-92	Ecology	—	—	—	—	—
	12/3/1997	AGRA	—	—	—	—	—
	3/3/1998	AGRA	10.80	5.65	1.57	6.40	—
	6/3/1998	AGRA	15.40	—	0.74	8.51	135
	9/2/1998	AGRA	17.00	3.77	0.65	6.80	19
	12/3/2002	Farallon	14.07	—	0.49	6.51	-94
MW-7A	12/3/2002	Farallon	9.13	—	1.20	6.70	-82
MW-7B	12/3/2002	Farallon	12.80	—	1.54	6.83	9

NOTES:

— denotes water quality parameter data not collected

°C - degrees Celsius

mg/l - milligrams per liter

mS/cm - milliSiemens per centimeter

mV - milli volts

ORP = oxidation reduction potential

Table 13
Groundwater Analytical Results - Natural Attenuation Parameters
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Date Sampled	Sampled By	Analytical Results (milligrams per liter)										
			Alkalinity ¹	Sulfate ²	Sulfide ³	Methane ⁴	Ethane ⁴	Ethene ⁴	Ferrous Iron ⁵	Nitrate ⁶	Total Phosphate ⁷	Chloride ⁸	Total Organic Carbon ⁹
MW-1	12/3/1997	AGRA	144	81.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/3/1998	AGRA	96.3	25.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/3/1998	AGRA	96	20.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/2/1998	AGRA	102	61.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/3/2002	Farallon	74	25	<0.050	<0.01	<0.01	<0.01	0.088	2.9	0.2	12	1.1
MW-2	12/3/1997	AGRA	166	134	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/3/1998	AGRA	116	35.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/3/1998	AGRA	104	59.5	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/2/1998	AGRA	84	758	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2002	Farallon	79	46	<0.050	0.02	<0.01	<0.01	0.19	<0.010	0.57	12	1.8
MW-3	12/3/1997	AGRA	156	21.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/3/1998	AGRA	110	18.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/3/1998	AGRA	102	17.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/2/1998	AGRA	108	32.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2002	Farallon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	12/3/1997	AGRA	188	52	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/3/1998	AGRA	113	23.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/3/1998	AGRA	110	26	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/2/1998	AGRA	110	55.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2002	Farallon	79	34	<0.050	<0.01	<0.01	<0.01	0.039	2.3	0.12	12	1.8
MW-5	12/3/1997	AGRA	155	86.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/3/1998	AGRA	114	50.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/3/1998	AGRA	103	61.9	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/2/1998	AGRA	104	91.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2002	Farallon	74	42	<0.050	<0.01	<0.01	<0.01	0.044	2	0.11	12	0.75
MW-6	12/3/1997	AGRA	180	81.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/3/1998	AGRA	115	68.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/3/1998	AGRA	99	82.7	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/2/1998	AGRA	124	147	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/4/2002	Farallon	81	61	<0.050	0.11	<0.01	<0.01	0.46	0.027	0.12	12	0.79
WDOE-6	3/3/1998	AGRA	85.5	209	NA	NA	NA	NA	NA	N	NA	NA	NA
	6/3/1998	AGRA	79	74.8	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/2/1998	AGRA	97	95.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/3/2002	Farallon	78	57	0.2	0.04	<0.01	<0.01	4.1	0.019	0.091	14	2
MW-7A	12/3/2002	Farallon	210	130	<0.050	0.12	<0.01	<0.01	0.035	0.011	0.068	16	4.5
MW-7B	12/3/2002	Farallon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NOTE:

Results in **BOLD** indicate the analyte was not detected at a concentration above the laboratory practical quantitation limit.

NA = Not Analyzed

< denotes concentration of compound is not at or above the laboratory practical quantitation limit initiated.

¹Analyzed by EPA Method 310.1.

⁴Analyzed by Method -GC in house.

⁷Analyzed by EPA Method 365.1.

²Analyzed by EPA Method 375.4.

⁵Analyzed by Method SM18 3500FED.

⁸Analyzed by EPA Method 325.3.

³Analyzed by EPA Method 376.1.

⁶Analyzed by EPA Method 353.2, 354.1.

⁹Analyzed by EPA Method 415.2.

Table 14
Locations that Exceed Preliminary Soil and Groundwater Screening Levels
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Depth ¹ (feet)	Indicator Hazardous Substance ²													
		Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis 1,2- dichloroethene	Vinyl Chloride	1,2- dichloropropane	Chloromethane	4,4-DDE	4,4-DDD	Dieldrin	Endrin	Heptachlor epoxide	Alpha- chlordane	Cadmium	Mercury
SOIL															
Area 1: Former Yakima Farmer Supply Waste Pit Area															
468110 (WDOE-6)	10	Yes	Yes	No	No	No	No	No	No	No	No	No	No	NA	NA
YSF-1 (TP-1)	4	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
YSF-2 (TP-1)	5	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
YSF-3 (TP-1)	8	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
YSF-4 (TP-2)	4.5	Yes	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No	NA	NA
YSF-5 (TP-3)	6	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
YSF-6 (TP-4)	7.5	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP1-4	0.5-4.0	Yes	Yes	No	No	No	No	No	No	No	No	No	No	NA	NA
SP2-4	0.5-4.0	Yes	Yes	Yes	No	No	No	No	No	Yes	Yes	No	Yes	NA	NA
SP2A-6.5	4.0-6.5	Yes	No	No	No	No	No	No	No	Yes	No	No	No	NA	NA
SP3-4	0.5-4.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP4-7	4.0-7.0	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	NA	NA
SP5-6.5	4.0-6.5	Yes	Yes	Yes	No	No	No	No	No	Yes	No	No	No	NA	NA
SP6-5.5	4.0-5.5	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP7-7	4.0-7.0	Yes	No	No	No	Yes	No	No	No	No	No	No	No	NA	NA
SP8-7	4.0-7.0	No	No	No	No	No	No	Yes	No	Yes	No	No	No	NA	NA
SP9-7.5	4.0-7.5	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP10-4	0.5-4	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	No	No	NA	NA
SP11-6	4.0-6.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP12-8	4.0-8.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP13/14-6	4.0-6.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP15-6	4.0-6.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP16-8	4.0-8.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP17-4	0.5-4.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP18-4	0.5-4.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP19-7	4.0-7.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP20-8	4.0-8.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP21-5	1.0-5.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP22-7	4.0-7.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
MW1-5	5.0-6.5	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
MW1-10	10.0-11.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
MW6-6	6.0-8.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
B1-10	10.0-11.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
B1-30	30.0-31.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
B2-10	10.0-11.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
Preliminary Screening Level (milligrams per kilogram)		0.053	0.02631	0.35	0.0001838	0.00305	76.9	0.4459	0.3354	0.002817	0.0404	0.01605	0.2576	2	2

Table 14
Locations that Exceed Preliminary Soil and Groundwater Screening Levels
YSF/Agri-Tech
Yakima, Washington
Farallon PN: 765-001

Sample Number	Depth ¹ (feet)	Indicator Hazardous Substance ²													
		Tetrachloroethene (PCE)	Trichloroethene (TCE)	cis 1,2-dichloroethene	Vinyl Chloride	1,2-dichloropropane	Chloromethane	4,4-DDE	4,4-DDD	Dieldrin	Endrin	Heptachlor epoxide	Alpha-chlordane	Cadmium	Mercury
Area 2: Former Yakima Farmer Supply Lime and Sulfur Stockpile Locations															
SP23-8	4.0-8.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP24-7.5	4.0-7.5	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
SP25-4	0.5-4.0	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
Area 3: Potential Petroleum Release Area															
SP26-6.5	4.0-6.5	No	No	No	No	No	No	No	No	No	No	No	No	No	No
SP27-7.5	4.0-7.5	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes
SP28-7.5	4.0-7.5	No	No	No	No	No	No	No	No	No	No	No	No	Yes	No
Type 3 Wetlands Area															
Drum 1 (MW-7A)	0 -15	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
Drum 3 (MW-7B)	15-25	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
Drum 4 (MW-7B)	25-32	0	No	No	No	No	No	No	No	No	No	No	No	NA	NA
Preliminary Screening Level (milligrams per kilogram)		0.053	0.02631	0.35	0.0001838	0.00305	76.9	0.4459	0.3354	0.002817	0.0404	0.01605	0.2576	2	2
GROUNDWATER															
MW-1	Deep	Yes	No	No	No	No	No	No	No	No	No	No	No	NA	NA
MW-2	Shallow	No	No	No	Yes	No	Yes	No	No	Yes	No	No	No	NA	NA
MW-3	Deep	Yes	No	No	No	No	Yes	No	No	No	No	No	No	NA	NA
MW-4	Deep	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
MW-5	Deep	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
MW-6	Shallow	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	NA	NA
WDOE-6	Shallow	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	No	NA	NA
MW-7A	Shallow	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
MW-7B	Deep	No	No	No	No	No	No	No	No	No	No	No	No	NA	NA
Preliminary Screening Level (micrograms per liter)		5.0	3.98	70	0.0292	0.643	3.37	0.257	0.365	0.0055	2.0	0.0096	0.250	5.0	2.0

NOTE:

Highlighted analyte exceeds preliminary screening level.

Deep denotes the groundwater monitoring well was designed to monitor deeper regional groundwater up to a depth of 33 feet bgs.

NA denotes that the soil or groundwater sample was not analyzed for this substance.

No denotes compound has not been detected at a concentration above the preliminary screening level selected for the Remedial Investigation.

Shallow denotes the groundwater monitoring well was designed to monitor shallow groundwater in direct contact with the waste pit materials.

Yes denotes that the compound has been detected at a concentration above the preliminary screening level selected for the Remedial Investigation.

¹Depth below ground surface in feet.

²Indicator Hazardous Substances represent those constituents of potential concern that have been detected in two or more soil samples or have been detected at a minimum frequency of one groundwater sampling event for groundwater samples. The concentrations of these substances have also exceeded the preliminary screening level selected for the Remedial Investigation.

**ATTACHMENT B
WASHINGTON DEPARTMENT OF ECOLOGY TEST PIT SAMPLING
TABLES**

CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM

Agri-Tech and Yakima Steel Fabricators Site
Yakima Steel Fabricators
Yakima, Washington

Farallon PN: 765-001

Table 1
Soil Analytical Results for Petroleum Hydrocarbons
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Sample Identification	Lab Report	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²		Benzene ³	Toluene ³	Ethyl-benzene ³	Xylenes ³
						DRO ³	ORO ³				
Soil Samples											
I	3	I-TP3-052411-3.0	580-26377-1	5/24/2011	3.0	4600 Y	220	<0.00099	<0.002	0.029	0.036
		I-TP3-052411-7.5	580-26377-1	5/24/2011	7.5	390 Y	<60	<0.00095	<0.0019	0.0056	<0.00285
	4	I-TP4-052711-2.5	580-26530-1	5/27/2011	2.5	120 Y	930	<0.0011	<0.0023	<0.0011	<0.0034
	6	I-TP6-052711-4.5	580-26530-1	5/27/2011	4.5	98 Y	91	<0.0018	<0.0036	<0.0018	<0.0084
Preliminary Screening Levels⁴						2,000	2,000	NE	7.271	6.048	9.144

NOTES:

Results in **bold** denote concentrations above applicable cleanup levels.

< denotes analyte not detected at or above the laboratory reporting limit listed.

¹ Depth in feet below ground surface.

² Analyzed by Northwest Method NWTPH-Dx.

³ Compound was not retained as a COPC following completion of the June 2004 Revised Remedial Investigation Report.

⁴ Preliminary screening level as identified in the May 2011 Feasibility Study Work Plan.

COPC = constituent of potential concern

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

ORO = TPH as oil-range organics

Y = The chromatographic response resembles a typical fuel pattern.

Table 2
Soil Analytical Results for Volatile Organic Compounds
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Sample Identification	Lab Report	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²												
						Benzene ³	Ethyl-benzene ³	m,p-Xylene ³	o-Xylene ³	Toluene ³	Naphthalene ³	n-Butylbenzene ³	Sec-Butylbenzene ³	Isopropylbenzene ³	Methylene Chloride ³	4-Methyl-2-Pentanone ³	4-Isopropyltoluene ³	n-Propylbenzene ³
Soil Samples																		
B	1	B-TP1-052611-6.0	580-26451-1	5/26/2011	6.0	<0.0012 H	0.0012 H	0.0049 H	0.0017 H	<0.0025 H	<0.0062 H	<0.0025 H	<0.0025 H	<0.0025 H	<0.019 H	<0.0062 H	<0.0025 H	<0.0012 H
		B-TP1-052611-6.5	580-26451-1	5/26/2011	6.5	<0.00088	<0.00088	<0.0018	<0.00088	<0.0018	<0.0044	<0.0018	<0.0018	<0.0018	<0.013	<0.0044	<0.0018	<0.00088
	2	B-TP2-052611-5.5	580-26451-1	5/26/2011	5.5	<0.00096	<0.00096	<0.0019	<0.00096	<0.0019	<0.0048	<0.0019	<0.0019	<0.0019	<0.014	<0.0048	<0.0019	<0.00096
	3	B-TP3-052611-5.5	580-26451-1	5/26/2011	5.5	<0.00094	<0.00094	<0.0019	<0.0019	<0.0019	<0.0047	<0.0019	<0.0019	<0.0019	<0.014	<0.0047	<0.0019	<0.00094
H	1	H-TP1-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.00094	<0.00094	<0.0019	0.0021	<0.0019	<0.0047	<0.0019	<0.0019	<0.0019	<0.014	<0.0047	<0.0019	<0.00094
		H-TP1-052611-3.5-4.0	580-26451-1	5/26/2011	4.0	<0.0011	<0.0011	<0.0021	<0.0011	<0.0021	<0.0053	<0.0021	<0.0021	<0.0021	<0.016	<0.0053	<0.0021	<0.0011
	2	H-TP2-052611-1.0-1.5	580-26451-1	5/26/2011	1.5	<0.0011	<0.0011	<0.0022	<0.0011	<0.0022	<0.0055	<0.0022	<0.0022	<0.0022	<0.016	<0.0055	<0.0022	<0.0011
		H-TP2-052611-2.0-2.5	580-26451-1	5/26/2011	2.5	<0.0011 H	0.0024 H	0.011 H	0.004 H	0.0042 H	<0.0057 H	<0.0023 H	<0.0023 H	<0.0023 H	<0.017 H	<0.0057 H	<0.0023 H	<0.0011 H
	3	H-TP3-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.0011 H	<0.0011 H	<0.0022 H	<0.0011 H	<0.0022 H	<0.0056 H	<0.0022 H	<0.0022 H	<0.0022 H	<0.017 H	<0.0056 H	<0.0022 H	<0.0011 H
		H-TP3-052611-3.5-4.0	580-26451-1	5/26/2011	4.0	<0.00093	<0.00093	<0.0019	<0.00093	<0.0019	<0.0047	<0.0019	<0.0019	<0.0019	<0.014	<0.0047	<0.0019	<0.00093
I	3	I-TP3-052411-3.0	580-26377-1	5/24/2011	3.0	<0.00099	0.029	0.013	0.023	<0.002	1.7 H	0.230 H	0.320 H	0.15	<0.015	<0.0050	0.250 H	0.180 H
		I-TP3-052411-7.5	580-26377-1	5/24/2011	7.5	<0.00095	0.0056	<0.0019	<0.00095	<0.0019	0.12	0.091	0.029	0.015	<0.014	<0.0047	0.032	0.030
	4	I-TP4-052711-2.5	580-26530-1	5/27/2011	2.5	<0.0011	<0.0011	<0.0023	<0.0011	<0.0023	<0.0056	<0.0023	<0.0023	<0.0023	<0.017	<0.0056	<0.0023	<0.0011
		I-TP4-052711-8.0	580-26530-1	5/27/2011	8.0	<0.0011	<0.0011	<0.0023	<0.0011	<0.0023	<0.0057	<0.0023	<0.0023	<0.0023	<0.017	<0.0057	<0.0023	<0.0011
	5	I-TP5-052711-4.5	580-26530-1	5/27/2011	4.5	<0.0014	<0.0014	<0.0029	<0.0014	<0.0029	<0.0072	<0.0029	<0.0029	<0.0029	<0.021	<0.0072	<0.0029	<0.0014
		I-TP6-052711-4.5	580-26530-1	5/27/2011	4.5	<0.0018	<0.0018	<0.0036	<0.0018	<0.0036	<0.0089	<0.0036	<0.0036	<0.0036	<0.027	<0.0089	<0.0036	<0.0018
Wetland Samples																		
E	Wetsoil	E-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.0019	<0.0019*	<0.0038 *	<0.0019 *	<0.0038	<0.0094 *	<0.0038 *	<0.0038 *	<0.0038 *	<0.028	<0.0094	<0.0038 *	<0.0019 *
		E-wetsoil-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<0.0012 H	<0.0012 H	<0.0024 H	<0.0012 H	<0.0024 H	<0.0060 H	<0.0024 H	<0.0024 H	<0.0024 H	<0.018 H	<0.0060 H	<0.0024 H	<0.0012 H
	Wetsoil-2	E-wetsoil-2-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<0.00091 H	<0.00091 H	<0.0018 H	<0.00091 H	<0.0018 H	<0.0045 H	<0.0018 H	<0.0018 H	<0.0018 H	<0.014 H	<0.0045 H	<0.0018 H	<0.00091 H
		E-wetsoil-2-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<0.0013 H	<0.0013 H	<0.0026 H	<0.0013 H	<0.0026 H	<0.0065 H	<0.0026 H	<0.0026 H	<0.0026 H	<0.019 H	<0.0065 H	<0.0026 H	<0.0013 H
	Wetsed	E-wetsed-1-053111	580-26502-1	5/23/2011	0.5	<0.0027	<0.0027	<0.0054	<0.0027	<0.0054	<0.014	<0.0054	<0.0054	<0.0054	<0.054	<0.014	<0.0054	<0.0027
		E-wetsed-2-053111	580-26502-1	5/23/2011	0.5	<0.0026	<0.0026	<0.0052	<0.0026	<0.0052	<0.013	<0.0052	<0.0052	<0.0052	<0.039	<0.013	<0.0052	<0.0026
E-wetsed-3-053111		580-26502-1	5/23/2011	0.5	<0.0033	<0.0033	<0.0066	<0.0033	<0.0066	<0.017	<0.0066	<0.0066	<0.0066	<0.050	<0.017	<0.0066	<0.0033	
G	Wetsoil	G-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.0013 H	<0.0013 H	<0.0025 H	<0.0013 H	<0.0025 H	<0.0064 H	<0.0025 H	<0.0025 H	<0.019 H	<0.0064 H	<0.0025 H	<0.0013 H	
		G-wetsoil-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<0.00094	<0.00094	<0.0019	<0.00094	<0.0019	<0.0047	<0.0019	<0.0019	<0.0019	<0.014	<0.0047	<0.0019	<0.00094
Preliminary Screening Level						180⁶	6.048⁵	9.144⁵	9.144⁵	7.271⁵	1,600⁶	NE	NE	NE	1300⁶	NE	NE	NE

NOTES:

Results in **bold** denote concentrations above applicable cleanup levels.

< denotes analyte not detected at or above the reporting limit listed.

¹ Depth in feet below ground surface.

² Analyzed by U.S. Environmental Protection Agency Method 8260B.

³ Compound was not retained as a COPC following completion of the 2004 Revised Remedial Investigation Report.

⁴ Identified and retained as a COPC in the June 2004 Remedial Investigation Report.

⁵ Preliminary screening level as identified in the May 2011 Feasibility Study Work Plan.

⁶ Washington State Department of Ecology Cleanup Levels and Risk Calculations under the Washington State Model Toxics Control Act Cleanup Regulation, Version 3.1 Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, <https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx>

-- = The initial calibration curve was outside acceptance criteria for Carbon Disulfide. As Carbon Disulfide was not requested analyte at the time of sample analysis, it cannot be reported.

* = ISTD response or retention time outside acceptable limits.

COPC = constituent of potential concern

H = Sample was prepped or analyzed beyond specified holding time.

MEK = 2 butatnone

NE = not established

PCE = tetrachloroethene

TCE = trichloroethene

VOCs = volatile organic compounds

Table 2
Soil Analytical Results for Volatile Organic Compounds
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Sample Identification	Lab Report	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²												
						Acetone ³	1,2,4-Trimethylbenzene ³	1,3,5-Trimethylbenzene ³	Carbon Disulfide ³	1,2-Dichloropropane ⁴	MEK ³	Chloroform ³	Tetrachloroethene ⁴	Trichloroethene ⁴	1,1-Dichloroethene ³	(cis) 1,2-Dichloroethene ⁴	tert-Butylbenzene ³	
Soil Samples																		
B	1	B-TP1-052611-6.0	580-26451-1	5/26/2011	6.0	<0.019 H	<0.0025 H	<0.0062 H	<0.0012 H	<0.0012 H	<0.0062 H	<0.0012 H	<0.0012 H	<0.0012 H	<0.0062 H	<0.0012 H	<0.0025 H	
		B-TP1-052611-6.5	580-26451-1	5/26/2011	6.5	<0.013	<0.0018	<0.0044	<0.00088	<0.00088	<0.0044	<0.00088	<0.00088	<0.00088	<0.00088	<0.0044	<0.00088	<0.0018
	2	B-TP2-052611-5.5	580-26451-1	5/26/2011	5.5	0.036	<0.0019	<0.0048	<0.00096	<0.00096	0.0055	<0.00096	<0.00096	<0.00096	<0.00096	<0.0048	<0.00096	<0.0019
	3	B-TP3-052611-5.5	580-26451-1	5/26/2011	5.5	<0.014	<0.0019	<0.0047	<0.00094	<0.00094	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	<0.0047	<0.00094	<0.0019
H	1	H-TP1-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.014	<0.0019	<0.0047	<0.00094	<0.00094	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	<0.0047	<0.00094	<0.0019
		H-TP1-052611-3.5-4.0	580-26451-1	5/26/2011	4.0	<0.016	<0.0021	<0.0053	<0.0011	<0.0011	<0.0053	<0.0011	<0.0011	<0.0011	<0.0011	<0.0053	<0.0011	<0.0021
	2	H-TP2-052611-1.0-1.5	580-26451-1	5/26/2011	1.5	<0.016	<0.0022	<0.0055	<0.0011	<0.0011	<0.0055	<0.0011	<0.0011	<0.0011	<0.0011	<0.0055	<0.0011	<0.0022
		H-TP2-052611-2.0-2.5	580-26451-1	5/26/2011	2.5	<0.017 H	<0.0023 H	<0.0057 H	<0.0011 H	<0.0011 H	<0.0057 H	<0.0011 H	<0.0011 H	0.0020 H	<0.0011 H	<0.0057 H	<0.0011 H	<0.0023 H
	3	H-TP3-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.017 H	<0.0022 H	<0.0056 H	<0.0011 H	<0.0011 H	<0.0056 H	<0.0011 H	<0.0011 H	<0.0011 H	<0.0011 H	<0.0056 H	<0.0011 H	<0.0022 H
		H-TP3-052611-3.5-4.0	580-26451-1	5/26/2011	4.0	<0.014	<0.0019	<0.0047	<0.00093	<0.00093	<0.0047	<0.00093	<0.00093	<0.00093	<0.00093	<0.0047	<0.00093	<0.0019
I	3	I-TP3-052411-3.0	580-26377-1	5/24/2011	3.0	0.390	0.760 H	0.15	--	<0.00099	0.068	<0.00099	<0.0099	<0.00099	<0.0050	<0.00099	0.032	
		I-TP3-052411-7.5	580-26377-1	5/24/2011	7.5	0.029	0.140	0.023	--	<0.00095	0.065	<0.00095	<0.0095	<0.00095	<0.0047	<0.00095	0.022	
	4	I-TP4-052711-2.5	580-26530-1	5/27/2011	2.5	<0.017	<0.0023	<0.0056	<0.0011	<0.0011	<0.0056	<0.0011	<0.0011	<0.0011	<0.0056	<0.0011	<0.0023	
		I-TP4-052711-8.0	580-26530-1	5/27/2011	8.0	<0.017	<0.0023	<0.0057	<0.0011	<0.0011	<0.0057	<0.0011	<0.0011	<0.0011	<0.0057	<0.0011	<0.0023	
	5	I-TP5-052711-4.5	580-26530-1	5/27/2011	4.5	<0.021	<0.0029	<0.0072	<0.0014	<0.0014	<0.0072	<0.0014	<0.0014	<0.0014	<0.0072	<0.0014	<0.0029	
		I-TP6-052711-4.5	580-26530-1	5/27/2011	4.5	<0.027	<0.0036	<0.0089	0.0019	<0.0018	<0.0089	<0.0018	<0.0018	<0.0018	<0.0089	<0.0018	<0.0036	
Wetland Samples																		
E	Wetsoil	E-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	0.094	<0.0038 *	<0.0094 *	0.0064	<0.0019	0.010	<0.0019	<0.0019	<0.0019	<0.0094	<0.0019	<0.0038 *	
		E-wetsoil-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<0.018 H	<0.0024 H	<0.0060 H	<0.0012 H	<0.0012 H	<0.0060 H	<0.0012 H	<0.0012 H	<0.0012 H	<0.0060 H	<0.0012 H	<0.0024 H	
	Wetsoil-2	E-wetsoil-2-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	0.029 H	<0.0018 H	<0.0045 H	0.0010 H	<0.00091 H	<0.0045 H	<0.00091 H	<0.00091 H	<0.00091 H	<0.0045 H	<0.00091 H	<0.0018 H	
		E-wetsoil-2-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	0.038 H	<0.0026 H	<0.0065 H	<0.0013 H	<0.0013 H	<0.0065 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0065 H	<0.0013 H	<0.0026 H	
	Wetsed	E-wetsed-1-053111	580-26502-1	5/23/2011	0.5	0.082	<0.0054	<0.014	<0.0027	<0.0027	<0.014	<0.0027	<0.0027	<0.0027	<0.014	<0.0027	<0.0054	
		E-wetsed-2-053111	580-26502-1	5/23/2011	0.5	<0.039	<0.0052	<0.013	0.0032	<0.0026	<0.013	<0.0026	<0.0026	<0.0026	<0.013	<0.0026	<0.0052	
E-wetsed-3-053111		580-26502-1	5/23/2011	0.5	0.110	<0.0066	<0.017	<0.0033	<0.0033	0.025	<0.0033	<0.0033	<0.0033	<0.017	<0.0033	<0.0066		
G	Wetsoil	G-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.019 H	<0.0025 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0064 H	<0.0013 H	<0.0025 H		
		G-wetsoil-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<0.014	<0.0019	<0.0047	<0.00094	<0.00094	<0.0047	<0.00094	<0.00094	<0.00094	<0.0047	<0.00094	<0.0019	
Preliminary Screening Level						3.21⁵	NE	NE	5.651⁵	0.00305⁵	22⁵	164⁵	0.05303⁵	0.02631⁵	0.0005216⁵	0.35⁵	NE	

NOTES:

Results in **bold** denote concentrations above applicable cleanup levels.

< denotes analyte not detected at or above the reporting limit listed.

¹ Depth in feet below ground surface.

² Analyzed by U.S. Environmental Protection Agency Method 8260B.

³ Compound was not retained as a COPC following completion of the 2004 Revised Remedial Investigation Report.

⁴ Identified and retained as a COPC in the June 2004 Remedial Investigation Report.

⁵ Preliminary screening level as identified in the May 2011 Feasibility Study Work Plan.

⁶ Washington State Department of Ecology Cleanup Levels and Risk Calculations under the Washington State Model Toxics Control Act Cleanup Regulation, Version 3.1 Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, <https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx>

-- = The initial calibration curve was outside acceptance criteria for Carbon Disulfide. As Carbon Disulfide was not requested analyte at the time of sample analysis, it cannot be reported.

* = ISTD response or retention time outside acceptable limits.

COPC = constituent of potential concern

H = Sample was prepped or analyzed beyond specified holding time.

MEK = 2 butanone

NE = not established

PCE = tetrachloroethene

TCE = trichloroethene

VOCs = volatile organic compounds

Table 3
Soil Analytical Results for Metals
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Sample Identification	Laboratory Report	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²							
						Antimony ³	Arsenic ³	Cadmium ⁴	Copper ³	Lead ³	Manganese ³	Mercury ⁴	Zinc ³
Soil Samples													
A	1	A-TP1-052711-5.0	580-26530-1	5/27/2011	5.0	<2.9	<2.9	<0.49	24	6.3	170	0.035	830
	2	A-TP2-052711-5.0	580-26530-1	5/27/2011	5.0	<3.1	<3.1	<0.51	23	5.9	310	0.26	54
B	2	B-TP2-052611-5.5	580-26451-1	5/26/2011	5.5	<2.9	<2.9	<0.48	24	4.6	210	0.052	56
	3	B-TP3-052611-5.5	580-26451-1	5/26/2011	5.5	<2.7	<2.7	<0.45	20	13	330	0.053	69
C	1	C-TP1-052611-5.0	580-26451-1	5/26/2011	5.0	<3.5	<3.5	<0.58	29	5.8	280	0.088	69
	2	C-TP2-052611-8.0	580-26451-1	5/26/2011	8.0	<2.9	<2.9	0.95	25	41	240	0.09	610
	3	C-TP3-052611-4.5	580-26451-1	5/26/2011	4.5	<3.1	<3.1	<0.51	23	5.2	340	0.05	58
D	1	D-TP1-052511-4.5	580-26451-1	5/25/2011	4.5	<3.5	<3.5	<0.59 L	27	20	370	0.1	340
	2	D-TP2-052511-5.5	580-26451-1	5/25/2011	5.5	<5.3	<5.3	88	74	1,000	410	0.43	7,000
	3	D-TP3-052611-4.5	580-26451-1	5/26/2011	4.5	<2.9	<2.9	<0.49	24	13	330	0.041	260
E	1	E-TP1-052511-4.5	580-26451-1	5/25/2011	4.5	<2.5 L	<2.5	8.8	19	27	570	0.041	2,200
	2	E-TP2-052511-3.0	580-26451-1	5/25/2011	3.0	<2.7 L	<2.7	6.2	28	100	480	0.087	2,400
G	1	G-TP1-052511-0.0-0.5	580-26451-1	5/25/2011	0.5	<2.8 L	8.6	1.3	19	27	540	0.19	61
		G-TP1-052511-2.0-2.5	580-26451-1	5/25/2011	2.5	<3.3 L	7.6	1.6	25	44	550	2.4	150
	2	G-TP2-052511-0.0-0.5	580-26451-1	5/25/2011	0.5	<3.7	5.2	1.3	25	31	510	0.07	80
		G-TP3-052511-0.0-0.5	580-26451-1	5/25/2011	0.5	<3.3 L	4.4	1.7	28	30	530	0.055	100
H	1	H-TP1-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	3.3	<2.7	1.0	360	72	440	0.048	270
		H-TP1-052611-3.5-4.0	580-26451-1	5/26/2011	4.0	<2.8	7.1	<0.46	23	36	420	0.086	82
	2	H-TP2-052611-1.0-1.5	580-26451-1	5/26/2011	1.5	<2.7	4.1	1.1	39	110	460	0.13	350
		H-TP2-052611-2.0-2.5	580-26451-1	5/26/2011	2.5	<3.3	<3.3	<0.55	24	84	530	0.19	200
3	H-TP3-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<2.5	4.3	0.76	25	42	400	0.054	150	
	H-TP3-052611-3.5-4.0	580-26451-1	5/26/2011	4.0	<2.8	<2.8	1.1	100	170	360	0.053	210	
I	3	I-TP3-052411-0.0-0.5	580-26377-1	5/24/2011	0.5	<2.1	<2.9	<0.49	41	67	560	0.14	210
		I-TP3-052411-1.5	580-26377-1	5/24/2011	1.5	3.6	8.2	<0.51	53	370	380	0.40	570
		I-TP3-052411-3.0	580-26377-1	5/24/2011	3.0	3.2	<3.0	0.82	160	730	390	0.38	870
J	1	J-TP1-052411-0.0-0.5	580-26377-1	5/24/2011	0.5	2.9	<2.9	<0.48	57	50	380	0.25	190
	2	J-TP2-052411-0.0-0.5	580-26377-1	5/24/2011	0.5	7.1	<3.1	1.4	74	410	520	0.38	790
	3	J-TP3-052511-1.5-2.0	580-26451-1	5/25/2011	2.0	<2.8	8.5	0.48	29	600	300	0.17	480
M	1	M-TP1-052511-0.0-0.5	580-26451-1	5/25/2011	0.5	<3.1	6.2	2.8	1,300	130	550	0.07	120
		M-TP1-052511-3.0-3.5	580-26451-1	5/25/2011	3.5	<3.7	4.4	<0.62 L	23	13	430	0.095	37
N	1	M-TP2-052511-0.0-0.5	580-26451-1	5/25/2011	0.5	<3.0	5.3	1.4	67	160	420	0.26	490
		N-TP1-052411-0.0-0.5	580-26377-1	5/24/2011	0.5	<3.3	4.9	<0.54 L	25	40	500	0.096	97
Wetland Samples													
E	WetSoil	E-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<5.1	<5.1	3.7	39	110	190	0.14	1,700
		E-wetsoil-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<2.4	<2.4	<0.40	17	4.2	160	0.043	310
		E-wetsoil-2-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<3.4	<3.4	1.6	19	19	250	0.071	670
		E-wetsoil-2-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<3.0	<3.0	1.8	20	4.4	270	0.059	870
	Wetsed	E-wetsed-1-053111	580-26360-1	5/23/2011	0.5	<5.8	<5.8	9.2	36	190	210	-	2,700
		E-wetsed-2-053111	580-26360-1	5/23/2011	0.5	<6.9	7.6	6.8	41	150	220	-	2,800
E-wetsed-3-053111		580-26360-1	5/23/2011	0.5	<6.1	8.5	7.8	52	180	270	-	2,700	
G	WetSoil	G-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<2.4	<2.4	<0.40	16	3.5	210	0.044	41
		G-wetsoil-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<4.2	<4.2	1.5	40	80	470	0.14	510
Preliminary Screening Levels						32⁵	20⁵	2.0⁵	2,960⁵	1,000⁵	11,000⁶	2⁵	24,000⁵

NOTES:

Results in **bold** denote concentrations above applicable cleanup levels.

- = denotes sample not analyzed

< denotes analyte not detected at or above the laboratory reporting limit listed.

¹ Depth in feet below ground surface.

² Analyzed by U.S. Environmental Protection Agency Methods 6000/6010/7000 Series.

³ Constituent was not retained as a COPC following completion of the June 2004 Revised Remedial Investigation Report.

⁴ Identified and retained as COPC in June 2004 Revised Remedial Investigation Report.

⁵ Preliminary screening level as identified in the May 2011 Feasibility Study Work Plan.

⁶ Washington State Department of Ecology Cleanup Levels and Risk Calculations under the Washington State Model Toxics Control Act Cleanup Regulation, Version 3.1 Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, <https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx>

COPC = constituent of potential concern

L = A negative instrument reading had an absolute value greater than the reporting limit.

Table 4
Soil Analytical Results for Pesticides
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Lab Report	Sample Identification	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²													
						Aldrin ³	Alpha Chlordane ⁴	4,4'-DDD ⁴	4,4'-DDE ⁴	4,4'-DDT ³	Dieldrin ⁴	Endosulfan Sulfate ³	Endrin ⁴	Heptachlor Epoxide ⁴	Endrin Aldehyde ³	Gamma Chlordane ³	Heptachlor ³	Endosulfan II	
Soil Samples																			
A	1	580-26530-1	A-TP1-052711-5.0	5/27/2011	5.0	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023 ^	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<0.0023	
	2	580-26530-1	A-TP2-052711-5.0	5/27/2011	5.0	<0.0012	<0.0012	<0.0023	<0.0023	<0.0023 ^	<0.0023	<0.0023	<0.0023	<0.0012	<0.0023	<0.0012	<0.0012	<0.0023	
B	2	580-26451-1	B-TP2-052611-5.5	5/26/2011	5.5	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<0.0023	
	3	580-26451-1	B-TP3-052611-5.5	5/26/2011	5.5	<0.0012	<0.0012	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.0012	<0.0024	<0.0012	<0.0012	<0.0024	
C	1	580-26451-1	C-TP1-052611-5.0	5/26/2011	5.0	<0.0012	<0.0012	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0012	<0.0025	<0.0012	<0.0012	<0.0025	
	2	580-26451-1	C-TP2-052611-8.0	5/26/2011	8.0	<0.0012	<0.0012	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0012	<0.0025	<0.0012	<0.0012	<0.0025	
	3	580-26451-1	C-TP3-052611-4.5	5/26/2011	4.5	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<0.0023	
D	1	580-26451-1	D-TP1-052511-4.5	5/25/2011	4.5	<0.0013	<0.0013	<0.0025	<0.0025	<0.0025 ^	<0.0025	<0.0025 ^	<0.0025	<0.0013	<0.0025 ^	<0.0013	<0.0013	<0.0025 ^	
	2	580-26451-1	D-TP2-052511-5.5	5/25/2011	5.5	<0.0018	<0.0018	<0.0036	<0.0036	<0.0036 ^	<0.0036	<0.0036 ^	<0.0036	<0.0018	<0.0036 ^	<0.0018	<0.0018	<0.0036 ^	
	3	580-26451-1	D-TP3-052611-4.5	5/26/2011	4.5	<0.0012	<0.0012	<0.0024	0.0048	<0.0024	<0.0024	<0.0024	<0.0024	<0.0012	<0.0024	<0.0012	<0.0012	<0.0024	
G	1	580-26451-1	G-TP1-052511-0.0-0.5	5/25/2011	0.5	<0.0011 H	<0.0011 H	<0.0022 H	0.0073 H	0.0062 H^	<0.0022 H	<0.0022 H	0.0066 H	<0.0011 H	<0.0022 H	0.0018 H	<0.0011 H	<0.0022 H	
			G-TP1-052511-2.0-2.5	5/25/2011	2.5	<0.0011 H	<0.0011 H	0.010 H	0.061 H	0.0036 H^	<0.0022 H	<0.0022 H	0.0044 H	<0.0011 H	<0.0022 H	<0.0011 H	<0.0011 H	<0.0022 H	
	2	580-26451-1	G-TP2-052511-0.0-0.5	5/25/2011	0.5	<0.0012 H	0.0050 H	0.0035 H	0.059 H	0.0082 H^	0.039 H	<0.0024 H	<0.0024 H	<0.0012 H	<0.0024 H	0.0029 H	<0.0012 H	<0.0012 H	<0.0024 H
			G-TP2-052511-2.0-2.5	5/25/2011	2.5	<0.0011 H	<0.0011 H	0.0065 H	0.032 H	<0.0022 H^	<0.0022 H	<0.0022 H	<0.0022 H	<0.0011 H	<0.0022 H	<0.0011 H	<0.0011 H	<0.0022 H	
	3	580-26451-1	G-TP3-052511-0.0-0.5	5/25/2011	0.5	<0.0011 H	<0.0011 H	<0.0022 H	<0.0022 H	<0.0022 H^	<0.0022 H	<0.0022 H	<0.0022 H	<0.0011 H	<0.0022 H	<0.0011 H	<0.0011 H	<0.0022 H	
			G-TP3-052511-3.5-4.0	5/25/2011	4.0	<0.0011	<0.0011	0.0038	0.0087	0.0075 ^	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011 ^	0.031	
H	1	580-26451-1	H-TP1-052611-0.0-0.5	5/26/2011	0.5	<0.0011	<0.0011	<0.0021	0.0075	0.012 ^	<0.0021 ^	<0.0021 ^	<0.0021	<0.0011	<0.0021 ^	<0.0011	<0.0011	<0.0021 ^	
			H-TP1-052611-3.5-4.0	5/26/2011	4.0	<0.0012	0.0017	0.0064	0.022	0.0055 ^	<0.0023	<0.0023 ^	<0.0023	<0.0012	<0.0023 ^	0.0019	<0.0012	<0.0023 ^	
	2	580-26451-1	H-TP2-052611-1.0-1.5	5/26/2011	1.5	<0.0011	0.0028	<0.0021	0.013	0.026 ^	0.0040	<0.0021 ^	<0.0021	<0.0011	<0.0021 ^	0.0019	<0.0011	<0.0021 ^	
			H-TP2-052611-2.0-2.5	5/26/2011	2.5	<0.0012	<0.0012	<0.0024	0.0056	0.0045 ^	<0.0024	<0.0024 ^	<0.0024	<0.0012 ^	<0.0024 ^	<0.0012	<0.0012	<0.0024	
	3	580-26451-1	H-TP3-052611-0.0-0.5	5/26/2011	0.5	<0.0010	0.0032	0.0030	0.0044	0.0031	0.0030	<0.0021	<0.0021	<0.0010	<0.0021	0.0038	<0.0010	<0.0021	
			H-TP3-052611-3.5-4.0	5/26/2011	4.0	<0.0011	<0.0011	0.0065	0.0042	<0.0022	<0.0022	<0.0022	<0.0022	<0.0011	<0.0022	<0.0011	<0.0011	<0.0022	
I	1	580-26377-1	I-TP1-052411-0.0-0.5	5/24/2011	0.5	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023 ^	<0.0023	<0.0023 ^	<0.0023	<0.0011	<0.0023 ^	<0.0011	<0.0011	<0.0023 ^	
			I-TP1-052411-6.0	5/24/2011	6.0	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023 ^	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<0.0023	
	2	580-26377-1	I-TP2-052411-0.0-0.5	5/24/2011	0.5	<0.0010	<0.0010	<0.0020	0.0037	0.0035 ^	<0.0020	<0.0020 ^	<0.0020	<0.0010	<0.0020 ^	<0.0010	<0.0010	<0.0020	
			I-TP2-052411-2.0-2.5	5/24/2011	2.5	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023 ^	<0.0023	<0.0023 ^	<0.0023	<0.0011	<0.0023 ^	<0.0011	<0.0011	<0.0023	
	3	580-26377-1	I-TP3-052411-0.0-0.5	5/24/2011	0.5	<0.0010	<0.0010	0.0052	0.0052	0.0022 ^	<0.0020	<0.0020 ^	<0.0020	<0.0010	<0.0020 ^	<0.0010	<0.0010	<0.0020	
			I-TP3-052411-1.5	5/24/2011	1.5	<0.0011	<0.0011	0.028 P	<0.0022	<0.0022 ^	<0.0022	<0.0022 ^	<0.0022	<0.0011	<0.0022 ^	<0.0011	<0.0011	<0.0022	
J	1	580-26377-1	J-TP1-052411-0.0-0.5	5/24/2011	0.5	<0.0010	<0.0010	0.0024	0.010	<0.0021 ^	<0.0021	<0.0021 ^	<0.0021	<0.0010	<0.0021 ^	<0.0010	<0.0010	<0.0021 ^	
			J-TP1-052411-3.0-3.5	5/24/2011	3.5	<0.0016	<0.0016	<0.0033	<0.0033	<0.0033 ^	<0.0033	<0.0033 ^	<0.0033	<0.0016	<0.0033 ^	<0.0016	<0.0016	<0.0033 ^	
	2	580-26377-1	J-TP2-052411-0.0-0.5	5/24/2011	0.5	<0.0011	<0.0011	<0.0021	0.024	0.030 ^	<0.0021	<0.0021 ^	0.0028	<0.0011	<0.0021 ^	<0.0011	<0.0011	<0.0021	
			J-TP2-052411-2.0-2.5	5/24/2011	2.5	<0.0010 ^	0.0030 P^	<0.0021	0.0050 ^	0.022 P^	<0.0021 ^	<0.0021 ^	<0.0021	<0.0010	<0.0021 ^	0.0038 P^	<0.0010	<0.0021 ^	
	3	580-26451-1	J-TP3-052511-0.5-1.0	5/25/2011	1.0	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020 ^	<0.0020	<0.0020 ^	<0.0020	<0.0010	<0.0020 ^	<0.0010	<0.0010	<0.0020 ^	
			J-TP3-052511-3.5-4.0	5/25/2011	4.0	<0.0016	<0.0016	<0.0032	<0.0032	<0.0032 ^	<0.0032	<0.0032 ^	<0.0032	<0.0016	<0.0032 ^	<0.0016	<0.0016	<0.0032 ^	
K	1	580-26377-1	K-TP1-052311-0.0-0.5	5/23/2011	0.5	<0.0011	<0.0011	<0.0022	0.0091	0.013 ^	0.0029	<0.0022 ^	<0.0022	<0.0011	<0.0022 ^	<0.0011	<0.0011	<0.0022 ^	
			K-TP1-052311-2.0-2.5	5/23/2011	2.5	<0.0011	0.0086 P	<0.0022	<0.0022	<0.0022 ^	<0.0022	<0.0022 ^	<0.0022	<0.0011	<0.0022 ^	0.0095	<0.0011	<0.0022 ^	
	2	580-26377-1	K-TP2-052311-1.0-1.5	5/23/2011	1.5	<0.0010	<0.0010	<0.0021	<0.0021	<0.0021 ^	<0.0021	<0.0021 ^	<0.0021	<0.0010	<0.0021 ^	<0.0010	<0.0010	<0.0021 ^	
			K-TP2-052311-3.5-4.0	5/23/2011	4.0	<0.0012	<0.0012	<0.0023	<0.0023	<0.0023 ^	<0.0023	<0.0023 ^	<0.0023	<0.0012	<0.0023 ^	<0.0012	<0.0012	<0.0023 ^	
	3	580-26377-1	K-TP3-052311-0.0-0.5	5/23/2011	0.5	<0.0010	<0.0010	<0.0021	0.0081	0.0038 ^	<0.0021	<0.0021 ^	<0.0021	<0.0010	<0.0021 ^	<0.0010	<0.0010	<0.0021 ^	
			K-TP3-052311-2.0-2.5	5/23/2011	2.5	<0.0011	0.036 P	0.0051 P	0.0087	0.022 ^	0.0055 ^P	<0.0021 ^	<0.0021	0.0016 P	<0.0021 ^	0.041 P	<0.0011	<0.0021 ^	
Preliminary Screening Levels						0.00503⁵	0.2576⁵	0.3354⁵	0.4459⁵	3.485⁵	0.002817⁵	4.301⁵	0.0404⁵	0.01605⁵	NE	NE	0.22⁶	4,301⁵	

Table 4
Soil Analytical Results for Pesticides
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Lab Report	Sample Identification	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²													
						Aldrin ³	Alpha Chlordane ⁴	4,4'-DDD ⁴	4,4'-DDE ⁴	4,4'-DDT ³	Dieldrin ⁴	Endosulfan Sulfate ³	Endrin ⁴	Heptachlor Epoxide ⁴	Endrin Aldehyde ³	Gamma Chlordane ³	Heptachlor ³	Endosulfan II	
L	1	580-26377-1	L-TP1-052311-0.0-0.5	5/23/2011	0.5	<0.0011	<0.0011	<0.0021	<0.0021	<0.0021 ^	<0.0021	<0.0021 ^	<0.0021	<0.0011	<0.0021 ^	<0.0011	<0.0011	<0.0021 ^	
			L-TP1-052311-3.0-3.5	5/23/2011	3.5	<0.0043	<0.0043	<0.0085	<0.0085	<0.0085 ^	<0.0085	<0.0085 ^	<0.0085	<0.0043	<0.0085 ^	<0.0043	<0.0043	<0.0085 ^	
	2	580-26377-1	L-TP2-052311-0.0-0.5	5/23/2011	0.5	<0.0011	0.0029 P	0.0044	0.0059	0.013 ^	0.0029	<0.0021 ^	<0.0021	0.0024 P	<0.0021 ^	0.0027 P	<0.0011	0.0036 ^	
			L-TP2-052311-2.0-2.5	5/23/2011	2.5	<0.0011	0.0017 P	0.0030	0.0035	0.0032 ^	<0.0021	<0.0021 ^	<0.0021	<0.0011	<0.0021 ^	0.0017	<0.0011	<0.0021 ^	
	3	580-26377-1	L-TP3-052411-0.0-0.5	5/24/2011	0.5	<0.0010	0.013	0.0050	0.028	0.0041 ^	<0.0020	<0.0020 ^	0.0026	0.0023 P	<0.0020 ^	0.012	<0.0010	<0.0020 ^	
			L-TP3-052511-2.0-2.5	5/24/2011	2.5	<0.0010	<0.0010	<0.0021	<0.0021	<0.0021 ^	<0.0021	<0.0021 ^	<0.0021	<0.0010	<0.0021 ^	<0.0010	<0.0010	<0.0021 ^	
M	1	580-26451-1	M-TP1-052511-0.0-0.5	5/25/2011	0.5	<0.0011	<0.0011	0.0029	0.025	0.014 ^	<0.0022	<0.0022	<0.0022	<0.0011	<0.0022	<0.0011	<0.0011 ^	<0.0022	
			M-TP1-052511-3.0-3.5	5/25/2011	3.5	<0.0012	<0.0012	<0.0024	0.0034	<0.0024 ^	<0.0024	<0.0024	<0.0024	<0.0012	<0.0024	<0.0012	<0.0012 ^	<0.0024	
	2	580-26451-1	M-TP2-052511-0.0-0.5	5/25/2011	0.5	<0.0010	<0.0010	<0.0020	0.0035	0.019 ^	<0.0020	<0.0020 ^	<0.0020	<0.0010	<0.0020 ^	<0.0010	<0.0010	<0.0020 ^	
			M-TP2-052511-3.5-4.0	5/25/2011	4.0	0.0054	0.0018 P	0.0049	0.0089	0.0038 ^	0.014	<0.0026 ^	<0.0026	<0.0013	<0.0026 ^	0.0022	<0.0013	<0.0026 ^	
N	1	580-26377-1	N-TP1-052411-0.0-0.5	5/24/2011	0.5	<0.0011 ^	<0.0011 ^	<0.0022	<0.0022 ^	0.0046 ^	<0.0022 ^	<0.0022 ^	<0.0022	<0.0011	<0.0022 ^	<0.0011 ^	<0.0011	<0.0022 ^	
			N-TP1-052411-2.0-2.5	5/24/2011	2.5	<0.0011	<0.0011	<0.0021	0.0024	0.0029 ^	<0.0021	<0.0021 ^	<0.0021	<0.0011	<0.0021 ^	<0.0011	<0.0011	<0.0021	
Wetland Samples																			
E	WetSoil	580-26451-1	E-wetsoil-052611-0.0-0.5	5/26/2011	0.5	<0.0019	<0.0019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0019	<0.0038	<0.0019	<0.0019	<0.0038	
			E-wetsoil-052611-0.5-1.0	5/26/2011	1.0	<0.0011	<0.0011	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0011	<0.0022	<0.0011	<0.0011	<0.0022	
	WetSoil-2	580-26451-1	E-wetsoil-2-052611-0.5-1.0	5/26/2011	1.0	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<0.0023	
			E-wetsoil-2-052611-1.0-2.0	5/26/2011	2.0	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<0.0023	
	Wetsed	580-26360-1	E-wetsed-1-053111	5/23/2011	0.5	<0.0021 H	<0.0021 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0021 H*	<0.0042 H	<0.0021 H	<0.0021 H	<0.0042 H
			E-wetsed-2-053111	5/23/2011	0.5	<0.0022 H	<0.0022 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0022 H*	<0.0044 H	<0.0022 H	<0.0022 H	<0.0044 H
E-wetsed-3-053111			5/23/2011	0.5	<0.0023 H	<0.0023 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0023 H*	<0.0047 H	<0.0023 H	<0.0023 H	<0.0047 H	
G	WetSoil	580-26451-1	G-wetsoil-052611-0.0-0.5	5/26/2011	0.5	<0.0012	<0.0012	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.0012	<0.0024	<0.0012	<0.0012	<0.0024	
			G-wetsoil-052611-1.0-2.0	5/26/2011	2.0	<0.0016	<0.0016	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0016	<0.0031	<0.0016	<0.0016	<0.0031	
Preliminary Screening Levels						0.00503⁵	0.2576⁵	0.3354⁵	0.4459⁵	3.485⁵	0.002817⁵	4.301⁵	0.0404⁵	0.01605⁵	NE	NE	0.22⁶	4,301⁵	

NOTES:

Results in **bold** denote concentrations at or above the Preliminary Screening Level indicated.

< denotes analyte not detected at or above the reporting limit listed.

¹ Depth in feet below ground surface.

² Analyzed by U.S. Environmental Protection Agency Method 8081.

³ Compound was not retained as a COPC following completion of the June 2004 Revised Remedial Investigation.

⁴ Identified and retained as a COPC in the June 2004 Revised Remedial Investigation Report.

⁵ Preliminary screening level as identified in the May 2011 Feasibility Study Work Plan.

⁶ Washington State Department of Ecology Cleanup Levels and Risk Calculations under the Washington State Model Toxics Control Act Cleanup Regulation, Version 3.1 Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, <https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx>

^ = Instrument-related quality control exceeds the control limits.

* = Response or retention time outside acceptable limits.

COPC = constituent of potential concern

H = Sample was prepped or analyzed beyond the specified holding time.

NE = Not established

P = The analyte was detected on both chromatographic columns, but the quantified values differ by ≥40 percent relative percent difference with no obvious chromatographic interference.

Table 5
Summary Groundwater Elevation Data
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

DRAFT - Issued for Client Review

Well Number	Date Measured	Well Elevation ¹	Depth to Water (bgs)	Groundwater Elevation
MW-1	12/3/1997	1002.88	4.41	998.47
	3/3/1998		5.78	997.10
	6/3/1998		4.60	998.28
	9/2/1998		2.52	1,000.36
	12/3/2002		4.91	997.97
	6/1/2011		5.79	997.09
MW-2	12/3/1997	1002.59	5.15	997.44
	3/3/1998		6.75	995.84
	6/3/1998		5.46	997.13
	9/2/1998		3.36	999.23
	12/4/2002		5.86	996.73
	6/1/2011		6.93	995.66
MW-3	12/3/1997	1000.81	4.18	996.63
	3/3/1998		5.65	995.16
	6/3/1998		4.64	996.17
	9/2/1998		2.57	998.24
	12/4/2002		4.92	995.89
	6/1/2011		6.00	994.81
MW-4	12/3/1997	1000.82	4.56	996.26
	3/3/1998		6.02	994.80
	6/3/1998		5.02	995.80
	9/2/1998		3.03	997.79
	12/4/2002		5.36	995.46
	6/1/2011		6.45	994.37
MW-5	12/3/1997	1001.45	4.92	996.53
	3/3/1998		6.49	994.96
	6/3/1998		5.28	996.17
	9/2/1998		3.35	998.10
	12/4/2002		5.72	995.73
MW-6	12/3/1997	1002.28	5.23	997.05
	3/3/1998		6.78	995.50
	6/3/1998		5.56	996.72
	9/2/1998		3.50	998.78
	12/4/2002		5.94	996.34
	6/1/2011		7.06	995.22
WDOE-6	12/3/1997	1002.27	--	--
	3/3/1998		5.51	996.76
	6/3/1998		4.29	997.98
	9/2/1998		2.20	1,000.07
	12/3/2002		4.55	997.72
	6/1/2011		5.50	996.77
MW-7A	12/3/2002	999.96	5.57	994.39
	6/1/2011		6.83	993.13
MW-7B	12/3/2002	999.82	5.75	994.07
	6/1/2011		6.95	992.87
MW-10	6/1/2011	1002.99	7.31	995.68
MW-11	6/1/2011	1000.51	6.75	993.76

NOTES:

¹Based on survey relative to City of Yakima NAVD29.

bgs = below ground surface

-- = not measured

Table 6
Groundwater Analytical Results for Volatile Organic Compounds
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Location	Lab Report	Sample Date	Analytical Results (micrograms per liter) ¹												
			PCE ³	TCE ³	cis 1,2-DCE ³	trans 1,2-DCE ²	Vinyl Chloride ³	1,1,1-TCA ²	1,1-DCA ²	MEK ²	Acetone ²	1,2-dichloropropane ³	Chloroform ²	Chloromethane ³	
MW-1	580-26540-1	12/3/1997	3.64	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		3/3/1998	3.39	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		6/3/1998	6.5	1.18	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	1.12	<1.0	
		9/2/1998	4.22	0.71	0.25	<1.0	<1.0	<1.0	0.15	<1.0	<1.0	<20	<1.0	1.88	
		12/3/2002	6.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.0	<2.0
		6/2/2011	3.2	0.31	0.10	<0.10	<0.020	<0.10	<0.10	<2.0	<2.0	<2.0	<0.10	2.2	<0.10
MW-2	580-26520-1	12/3/1997	<1.0	1.51	12.4	<1.0	2.42	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		3/3/1998	1.59	1.46	3.21	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		6/3/1998	<1.0	<1.0	7.13	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	12.1	
		9/2/1998	1.27	3.06	17.6	0.36	<1.0	<1.0	0.19	<1.0	<20	<1.0	<1.0	<1.0	
		12/4/2002	<2.0	<2.0	15.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
		6/1/2011	1.6	1.5	8.9	<0.10	0.025	<0.10	<0.10	<2.0	<2.0	<2.0	<0.10	0.52	<0.10
MW-3	580-26520-1	12/3/1997	6.06	1.07	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		3/3/1998	4.44	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		6/3/1998	4.52	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	1.3	9.24	
		9/2/1998	5.37	0.81	0.22	<1.0	<1.0	<1.0	<1.0	0.23	<20	<1.0	1.93	<1.0	
		12/4/2002	6.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	<2.0
		6/1/2011	3.2	0.23	<0.10	<0.10	<0.020	<0.10	<0.10	<2.0	<2.0	<2.0	<0.10	1.9	<0.10
MW-4	580-26520-1	12/3/1997	3.32	<1.0	5.23	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		3/3/1998	3.78	<1.0	1.64	<1.0	<1.0	<1.0	<1.0	<1.0	24.1	<1.0	<1.0	<1.0	
		6/3/1998	3.86	<1.0	3.25	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	2.78	
		9/2/1998	3.12	0.84	4.34	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	1.15	<1.0	
		12/4/2002	5.0	<2.0	5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
		6/1/2011	2.2	0.29	0.87	<0.10	<0.020	<0.10	<0.10	<2.0	<2.0	<2.0	<0.10	1.7	<0.10
MW-5 ⁵	NA	12/3/1997	3.98	1.10	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		3/3/1998	2.25	1.02	4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		6/3/1998	2.72	<1.0	2.52	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	2.59	
		9/2/1998	2.65	0.89	2.87	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	0.85	<1.0	
		12/4/2002	5.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
MW-6	580-26520-1	12/3/1997	<1.0	<1.0	7.68	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		3/3/1998	<1.0	<1.0	13.2	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		6/3/1998	<1.0	<1.0	13.3	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		9/2/1998	<1.0	0.33	7.08	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		12/4/2002	6.0	74.0	270	<2.0	4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
		6/1/2011	<0.10	<0.10	6.6	<0.10	0.20	<0.10	<0.10	<2.0	<2.0	<2.0	<0.10	<0.10	<0.10
Preliminary Screening Level⁴			5.0	3.98	70	100	0.0292	7,200	800	4,800	800	0.643	7.17	3.37	

Table 6
Groundwater Analytical Results for Volatile Organic Compounds
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Location	Lab Report	Sample Date	Analytical Results (micrograms per liter) ¹												
			PCE ³	TCE ³	cis 1,2-DCE ³	trans 1,2-DCE ²	Vinyl Chloride ³	1,1,1-TCA ²	1,1-DCA ²	MEK ²	Acetone ²	1,2-dichloropropane ³	Chloroform ²	Chloromethane ³	
WDOE-6	580-26540-1	May-92	420	430	270	<1.0	<10	<1.0	<1.0	<1.0	<20	<1.0	<5.0	<1.0	
		12/3/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		3/3/1998	49.6	108	83.7	2.34	4.24	<1.0	<1.0	<1.0	<20	1.73	<1.0	<1.0	
		6/3/1998	75.6	60.4	45.6	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		9/2/1998	20.8	18.7	11.4	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<1.0	
		12/3/2002	<2.0	<2.0	14.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
		6/1/2011	5.7	31	300	0.57	37	<0.10	3.1	<2.0	<2.0	<0.10	<0.10	<0.10	
MW-7A	580-26540-1	12/3/2002	<2.0	<2.0	4.0	<1.0	<2.0	<1.0	<1.0	<1.0	<20	<1.0	<2	<2	
		6/2/2011	<0.10	<0.10	<0.10	<0.10	<0.020	<0.10	<0.10	<2.0	<2.0	<0.10	<0.10	<0.10	
MW-7B	580-26540-1	12/3/2002	2.0	<2.0	12.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	
		6/2/2011	1.9	0.44	3.8	<0.10	<0.020	<0.10	<0.10	<2.0	<2.0	<0.10	1.1	<0.10	
MW-10	580-26540-1	6/2/2011	1.8	0.10	<0.10	<0.10	<0.020	<0.10	<0.10	<2.0	<2.0	<0.10	1.5	<0.10	
MW-11	580-26540-1	6/2/2011	1.6	0.22	<0.10	<0.10	<0.020	<0.10	<0.10	<2.0	<2.0	<0.10	1.3	<0.10	
Preliminary Screening Level⁴			5.0	3.98	70	100	0.0292	7,200	800	4,800	800	0.643	7.17	3.37	

NOTES:

Results in **bold** denote concentrations above preliminary screening levels.

< denotes analyte not detected at or above the reporting limit listed.

¹Analyzed by U.S. Environmental Protection Agency Method 8260B.

²Compound was not retained as a COPC following completion of the 2004 Revised Remedial Investigation Report.

³Identified and retained as a COPC in the June 2004 Remedial Investigation Report.

⁴Preliminary screening level as identified in the June 2004 Revised Remedial Investigation Report.

⁵Monitoring well MW-5 was decommissioned in 2007 during Bay Chemical Cleanup.

1,1-DCA = 1,1-dichloroethane

1,1,1-TCA = 1,1,1-trichloroethane

cis-1,2-DCE = cis-1,2-dichloroethane

COPC = constituent of potential concern

MEK = methyl ethyl ketone

NA = not analyzed

PCE = tetrachloroethene

TCE = trichloroethene

trans 1,2-DCE = trans 1,2-dichloroethene

**Table 7
Groundwater Analytical Results for Metals
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001**

Location	Lab Report	Sample Date	Analytical Results (micrograms per liter)															
			Antimony ^{1,3}		Arsenic ^{1,3}		Cadmium ^{1,4}		Copper ^{1,3}		Lead ^{1,3}		Manganese ^{1,3}		Mercury ^{2,4}		Zinc ^{1,3}	
			Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
MW-1	580-26540-1	6/2/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<2.0	<2.0	70	<2.0	<0.20	<0.20	<7.0	<7.0
MW-2	580-26520-1	6/1/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<2.0	<2.0	180	190	<0.20	<0.20	540	550
MW-3	580-26520-1	6/1/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<0.20	<0.20	7.3	<7.0
MW-4	580-26520-1	6/1/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<2.0	<2.0	11	<2.0	<0.20	<0.20	<7.0	<7.0
MW-6	580-26520-1	6/1/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<2.0	<2.0	280	280	<0.20	<0.20	<7.0	<7.0
WDOE-6	580-26540-1	6/2/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<2.0	<2.0	400	420	<0.20	<0.20	450	99
MW-7A	580-26540-1	6/2/2011	5.4	5.4	6.4	6.0	<2.0	<2.0	6.3	6.0	<2.0	<2.0	5.3	3.5	<0.20	<0.20	37	40
MW-7B	580-26540-1	6/2/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<0.20	<0.20	<7.0	11
MW-10	580-26540-1	6/2/2011	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<2.0	<2.0	<2.0	<2.0	<0.20	<0.20	70	72
MW-11	580-26540-1	6/2/2011	<2.0	<2.0	<2.0	<2.0	22	22	<5.0	<5.0	3.8	<2.0	180	18	<0.20	<0.20	7,700	7,500
Preliminary Screening Level			6.4⁵		5.0⁵		5.0⁵		592⁵		15⁵		2,200⁶		2.0⁵		4,800⁵	

NOTES:

Results in **bold** denote concentrations above preliminary screening levels.

COPC = constituent of potential concern

< denotes analyte not detected at or above the reporting limit listed.

¹Analyzed by U.S. Environmental Protection Agency Method 6020.

²Analyzed by U.S. Environmental Protection Agency Method 7470A.

³Constituent was not retained as a COPC following completion of the June 2004 Revised Remedial Investigation Report.

⁴Identified and retained as COPC in June 2004 Revised Remedial Investigation Report.

⁵Preliminary screening level as identified in the June 2004 Revised Remedial Investigation Report.

⁶Washington State Department of Ecology Cleanup Levels and Risk Calculations under the Washington State Model Toxics Control Act Cleanup Regulation, Version 3.1 Standard Method B Formula Values for Soil (Unrestricted Land Use) - Direct Contact (Ingestion Only) and Leaching Pathway, <https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx>

Table 8
Groundwater Analytical Results for Organochlorine Pesticides
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

DRAFT - Issued for Client Review

Location	Lab Report	Sample Date	Analytical Results (micrograms per liter) ¹			
			4,4-DDD ³	4,4-DDE ³	Dieldrin ³	gamma-Chlordane ²
MW-1	580-26540-1	12/3/1997	<0.1	<0.1	<0.1	--
		3/3/1998	<0.1	<0.1	<0.1	--
		6/3/1998	--	--	--	--
		9/2/1998	--	--	--	--
		12/3/2002	--	--	--	--
		6/2/2011	<0.020	<0.020	<0.020	<0.010
MW-2	580-26520-1	12/3/1997	<0.1	0.119	0.102	--
		3/3/1998	<0.1	<0.1	<0.1	--
		6/3/1998	<0.1	<0.1	<0.1	--
		9/2/1998	<0.1	<0.1	<0.1	--
		12/4/2002	<0.05	<0.05	0.05	--
		6/1/2011	<0.021	<0.021	0.033	<0.010
MW-3	580-26520-1	12/3/1997	<0.1	<0.1	<1.0	--
		3/3/1998	<0.1	<0.1	<1.0	--
		6/3/1998	<0.1	<0.1	<1.0	--
		9/2/1998	<0.1	<0.1	<1.0	--
		12/4/2002	--	--	--	--
		6/1/2011	<0.020	<0.020	<0.020	<0.010
MW-4	580-26520-1	12/3/1997	<0.1	<0.1	<0.1	--
		3/3/1998	<0.1	<0.1	<0.1	--
		6/3/1998	--	--	--	--
		9/2/1998	--	--	--	--
		12/4/2002	--	--	--	--
		6/1/2011	<0.019	<0.019	<0.019	<0.0097
MW-5 ⁴	NA	12/3/1997	<0.1	<0.1	<0.1	--
		3/3/1998	<0.1	<0.1	<0.1	--
		6/3/1998	--	--	--	--
		9/2/1998	--	--	--	--
		12/4/2002	--	--	--	--
MW-6	580-26520-1	12/3/1997	<0.1	<0.1	<0.1	--
		3/3/1998	<0.1	<0.1	<0.1	--
		6/3/1998	--	--	--	--
		9/2/1998	<0.1	<0.1	<0.1	--
		12/4/2002	--	--	--	--
		6/1/2011	<0.019	<0.019	<0.019	<0.0097
WDOE-6	580-26540-1	May-92	0.48	<0.50	1.1	--
		12/3/1997	--	--	--	--
		3/3/1998	<0.1	<0.1	0.226	--
		6/3/1998	0.296	0.586	0.242	--
		9/2/1998	0.100	0.334	<0.1	--
		12/3/2002	0.13	<0.05	<0.05	--
		6/2/2011	0.028	<0.020	0.063	0.011
MW-7A	580-26540-1	12/3/2002	--	--	--	--
		6/2/2011	<0.020	<0.020	<0.020	<0.0099
MW-7B	580-26540-1	12/3/2002	--	--	--	--
		6/2/2011	<0.020	<0.020	<0.020	<0.010
MW-10	580-26540-1	6/2/2011	<0.020	<0.020	<0.020	<0.010
MW-11	580-26540-1	6/2/2011	<0.020	<0.020	<0.020	<0.010
Preliminary Screening Level⁵			0.365	0.257	0.0055	0.25

Notes:

Results in **bold** denote concentrations above preliminary screening levels.

COPC = constituent of potential concern

< denotes analyte not detected at or above the reporting limit listed.

-- denotes sample not analyzed

¹Analyzed by U.S. Environmental Protection Agency Method 8081A.

²Constituent was not retained as a COPC following completion of the June 2004 Revised Remedial Investigation Report.

³Identified and retained as COPC in June 2004 Revised Remedial Investigation Report.

⁴Monitoring well MW-5 was decommissioned in 2007 during bay Chemical Cleanup.

⁵Preliminary screening level as identified in the June 2004 Revised Remedial Investigation Report.

Table 9
Groundwater Analytical Results for Natural Attenuation Parameters
Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001

Location	Lab Report	Sample Identification	Sampled By	Sample Date	Analytical Results (milligrams per liter)										
					Alkalinity ¹	Sulfate ²	Sulfide ³	Methane ⁴	Ethane ⁴	Ethylene ⁴	Ferrous Iron ⁵	Nitrate ⁶	Total Phosphate ⁷	Chloride ⁸	Total Organic Carbon ⁹
MW-1	580-26540-1	MW-1-060211	AGRA	12/3/1997	144	81.3	--	--	--	--	--	--	--	--	--
			AGRA	3/3/1998	96.3	25.4	--	--	--	--	--	--	--	--	--
			AGRA	6/3/1998	96	20.6	--	--	--	--	--	--	--	--	--
			AGRA	9/2/1998	102	61.1	--	--	--	--	--	--	--	--	--
			Farallon	12/3/2002	74	25	<0.050	<0.01	<0.01	<0.01	0.088	2.9	0.2	12	1.1
			Farallon	6/2/2011	81	16	--	<0.00058	<0.0011	<0.001	--	4.0	--	22	1.4
MW-2	580-26520-1	MW-2-060111	AGRA	12/3/1997	166	134	--	--	--	--	--	--	--	--	
			AGRA	3/3/1998	116	35.1	--	--	--	--	--	--	--	--	
			AGRA	6/3/1998	104	59.5	--	--	--	--	--	--	--	--	
			AGRA	9/2/1998	84	758	--	--	--	--	--	--	--	--	
			Farallon	12/4/2002	79	46	<0.050	0.02	<0.01	<0.01	0.19	<0.010	0.57	12	1.8
			Farallon	6/1/2011	97	39	--	<0.00058	<0.0011	<0.001	--	1.7	--	20	1.5
MW-3	580-26520-1	MW-3-060111	AGRA	12/3/1997	156	21.1	--	--	--	--	--	--	--	--	
			AGRA	3/3/1998	110	18.2	--	--	--	--	--	--	--	--	
			AGRA	6/3/1998	102	17.4	--	--	--	--	--	--	--	--	
			AGRA	9/2/1998	108	32.4	--	--	--	--	--	--	--	--	
			Farallon	12/4/2002	NA	NA	--	--	--	--	--	--	--	--	
			Farallon	6/1/2011	NA	NA	--	--	--	--	--	--	--	--	
MW-4	580-26520-1	MW-4-060111	AGRA	12/3/1997	188	52	--	--	--	--	--	--	--	--	
			AGRA	3/3/1998	113	23.1	--	--	--	--	--	--	--	--	
			AGRA	6/3/1998	110	26	--	--	--	--	--	--	--	--	
			AGRA	9/2/1998	110	55.2	--	--	--	--	--	--	--	--	
			Farallon	12/4/2002	79	34	<0.050	<0.01	<0.01	<0.01	0.039	2.3	0.12	12	1.8
			Farallon	6/1/2011	--	--	--	--	--	--	--	--	--	--	
MW-5 ¹⁰	NA	MW-5	AGRA	12/3/1997	155	86.1	--	--	--	--	--	--	--	--	
			AGRA	3/3/1998	114	50.3	--	--	--	--	--	--	--	--	
			AGRA	6/3/1998	103	61.9	--	--	--	--	--	--	--	--	
			AGRA	9/2/1998	104	91.7	--	--	--	--	--	--	--	--	
			Farallon	12/4/2002	74	42	<0.050	<0.01	<0.01	<0.01	0.044	2	0.11	12	0.75
MW-6	580-26520-1	MW-6-060111	AGRA	12/3/1997	180	81.4	--	--	--	--	--	--	--	--	
			AGRA	3/3/1998	115	68.1	--	--	--	--	--	--	--	--	
			AGRA	6/3/1998	99	82.7	--	--	--	--	--	--	--	--	
			AGRA	9/2/1998	124	147	--	--	--	--	--	--	--	--	
			Farallon	12/4/2002	81	61	<0.050	0.11	<0.01	<0.01	0.46	0.027	0.12	12	0.79
			Farallon	6/1/2011	72	120	--	0.0017	<0.0011	<0.001	--	<0.90	--	20	1.1
WDOE-6	580-26540-1	WDOE-6-060211	AGRA	3/3/1998	85.5	209	--	--	--	--	--	--	--	--	
			AGRA	6/3/1998	79	74.8	--	--	--	--	--	--	--	--	
			AGRA	9/2/1998	97	95.6	--	--	--	--	--	--	--	--	
			Farallon	12/3/2002	78	57	0.2	0.04	<0.01	<0.01	4.1	0.019	0.091	14	2
			Farallon	6/2/2011	36	160	--	0.0039	<0.0011	<0.001	--	<0.90	--	21	1.3
MW-7A	580-26540-1	MW-7A-060211	Farallon	12/3/2002	210	130	<0.050	0.12	<0.01	<0.01	0.035	0.011	0.068	16	4.5
			Farallon	6/2/2011	160	150	--	0.0017	<0.0011	<0.001	--	4.7	--	11	7.8
MW-7B	580-26540-1	MW-7B-060211	Farallon	12/3/2002	--	--	--	--	--	--	--	--	--	--	
MW-10	580-26540-1	MW-10-060211	Farallon	6/2/2011	--	--	--	--	--	--	--	--	--	--	
MW-11	580-26540-1	MW-11-060211	Farallon	6/2/2011	--	--	--	--	--	--	--	--	--	--	

NOTES:

Results in **bold** denote analyte not detected above the laboratory practical quantitation limit.
 < denotes concentration not detected at or above the laboratory practical quantitation limit initiated.
 -- = denotes sample not analyzed
 EPA = U.S. Environmental Protection Agency

¹Analyzed by EPA Method 310.1.
²Analyzed by EPA Method 375.4.
³Analyzed by EPA Method 376.1.

⁴Analyzed by Method -GC in house.
⁵Analyzed by Method SM18 3500FED.
⁶Analyzed by EPA Method 353.2, 354.1.

⁷Analyzed by EPA Method 365.1.
⁸Analyzed by EPA Method 325.3.
⁹Analyzed by EPA Method 415.2.

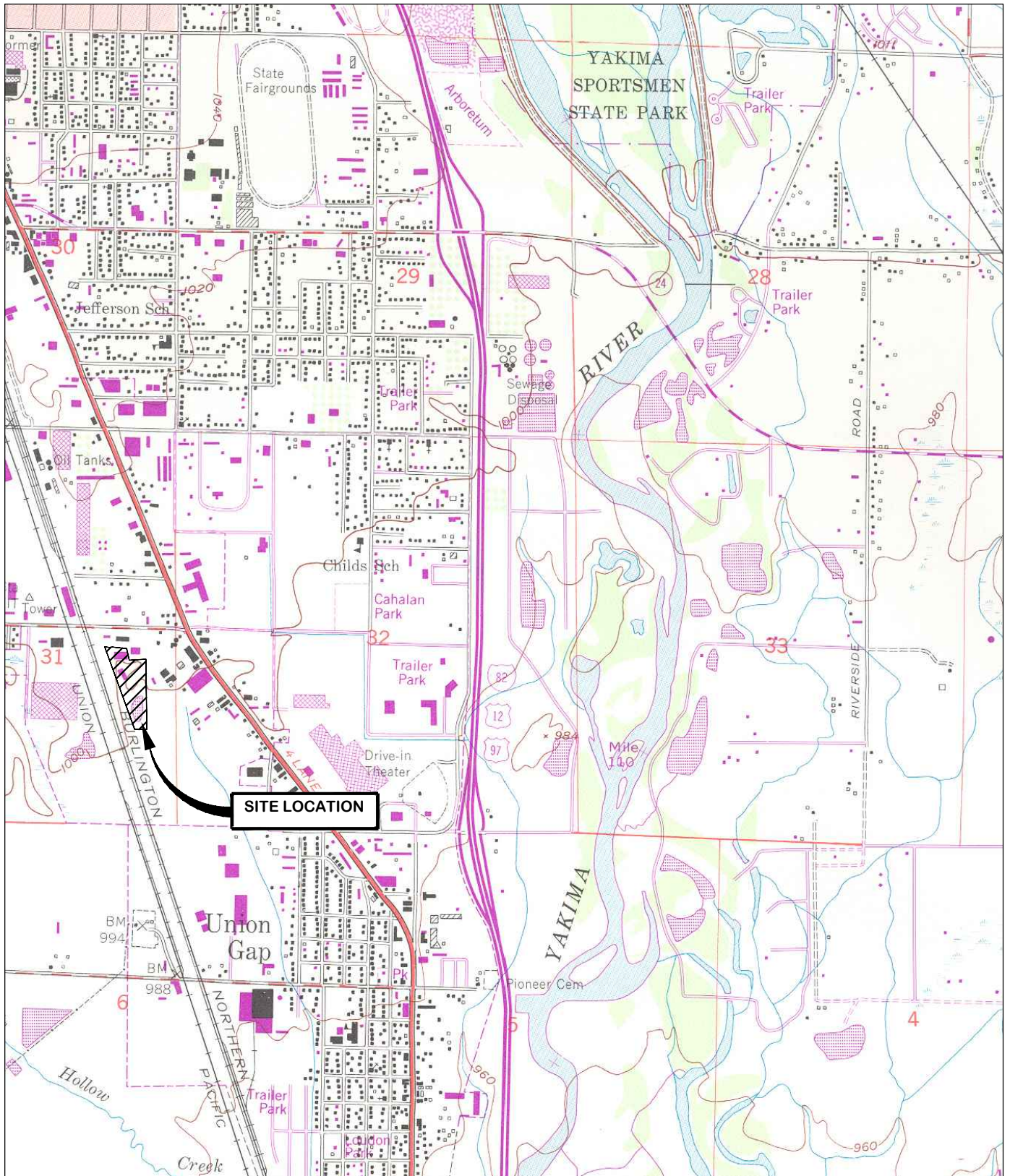
¹⁰ Monitoring well MW-5 decommissioned in 2007 during Bay Chemical Cleanup.

**ATTACHMENT C
METALS SOURCE TM FIGURES AND TABLES**

CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM

Agri-Tech and Yakima Steel Fabricators Site
Yakima Steel Fabricators
Yakima, Washington

Farallon PN: 765-001



REFERENCE: 7.5 MINUTE USGS QUADRANGLE YAKIMA SOUTH, WASHINGTON. DATED 1953 AND PHOTOREVISED 1981



WASHINGTON




Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Drawn By: DEW

Checked By: HC

Date: 1/25/2016





Disk Reference: 765001a

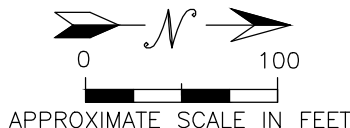
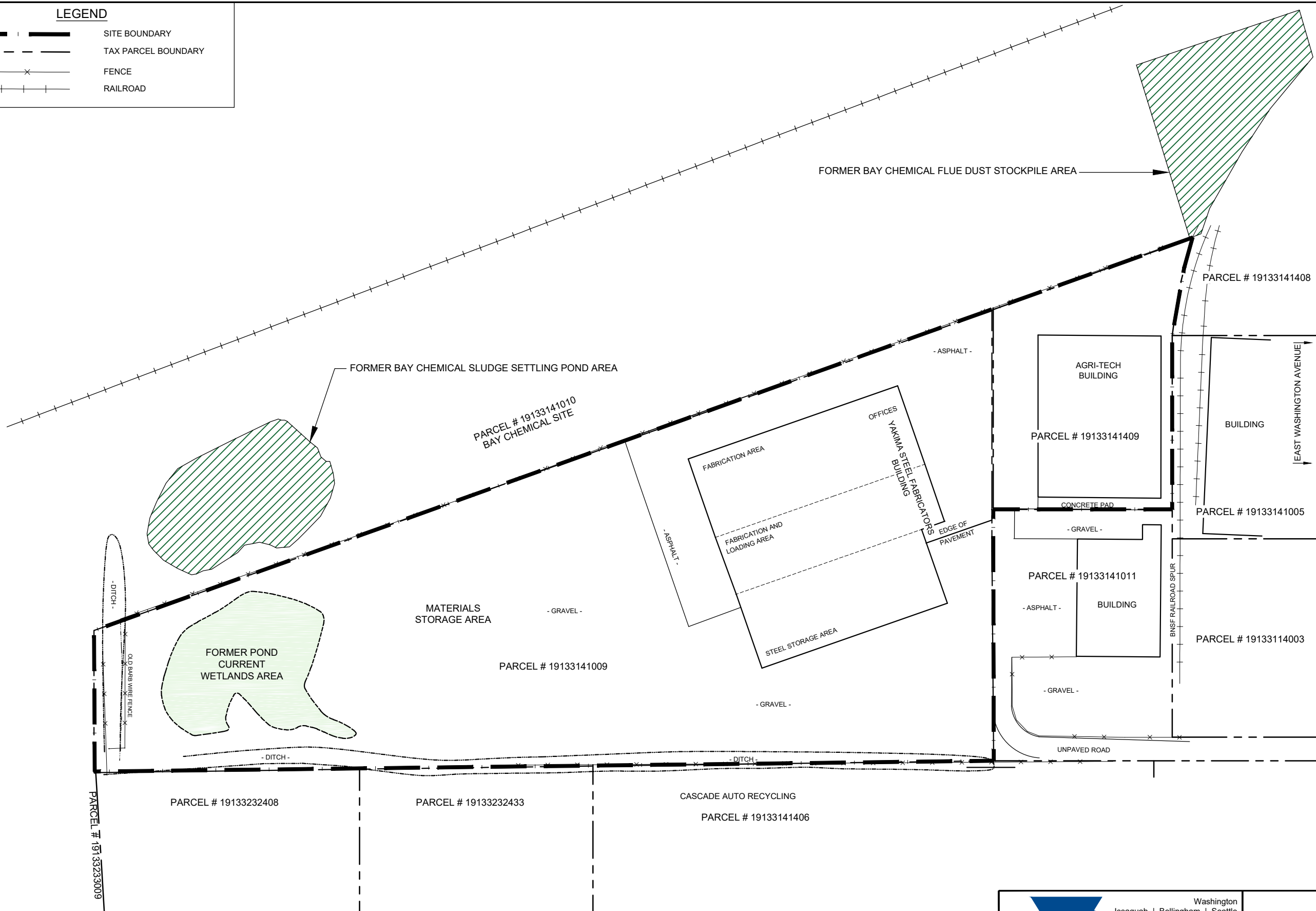
FIGURE 1

SITE VICINITY MAP
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

LEGEND

-  SITE BOUNDARY
-  TAX PARCEL BOUNDARY
-  FENCE
-  RAILROAD




FARALLON
CONSULTING

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 2
SITE PLAN AND TAX PARCEL LOCATIONS
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

LEGEND

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA 1** FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA 2** FORMER YAKIMA FARMERS SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA 3** YAKIMA STEEL STORAGE YARD AND WETLAND AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD
- PIT B
- TP-2
- SP-25
- ECOLOGY SAMPLING GRID DESIGNATION
- BOLD** = INDICATES CONCENTRATION EXCEEDS WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION METHOD B CLEANUP LEVELS PRESENTED IN THE REMEDIAL INVESTIGATION REPORT (FARALLON 2004)
- < = INDICATES CONCENTRATIONS NOT DETECTED AT OR ABOVE THE STATED LABORATORY PRACTICAL QUANTITATION LIMIT
- NA = NOT ANALYZED

- BAY CHEMICAL CLEANUP AREA**
APPROXIMATE EXCAVATION DEPTH IN FEET BELOW GROUND SURFACE
- 0-2
 - 2-4
 - 4-6
 - >6
- NOTE:**
- LOCATIONS OF ALL TEST PITS BY ECOLOGY ARE APPROXIMATED. COORDINATES PROVIDED BY ECOLOGY DID NOT PLOT IN CORRESPONDING SAMPLING GRID IN ALL CASES. FARALLON SHIFTED TEST PIT LOCATIONS TO THE APPROPRIATE SAMPLING GRID AND ESTIMATED THE TEST PIT LOCATION ON BEST AVAILABLE INFORMATION.
 - FIGURE INCLUDES INFORMATION PRESENTED IN COLOR. PHOTOCOPYING MAY NOT BE APPROPRIATE.

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
0	NA	2.9	15.3	NA	57.9	762	515	NA	NA	NA	NA	3,100
24"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
24"	NA	<5.0	330	NA	1,820	22,500	12,500	NA	NA	NA	NA	123,000
26"	65	<5.0	310	490	2,000	27,000	NA	14	110	43	39	140,000

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
6"	NA	13	7.6	NA	944	674	645	NA	NA	NA	NA	2,200
28"	<3.0	<5.0	2.0	6.7	35	300	NA	0.09	18	<5.0	<10	150
6"	NA	13.0	4.22	NA	136	290	524	NA	NA	NA	NA	1,200
16"	<3.0	<5.0	6.9	16	51	630	NA	0.26	18	<5.0	<10	2,100

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
24"	NA	11.9	5.38	NA	79.8	439	569	NA	NA	NA	NA	1,710
24"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
24"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
24"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

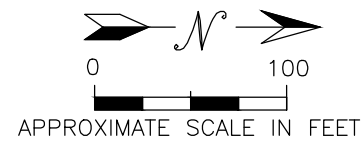
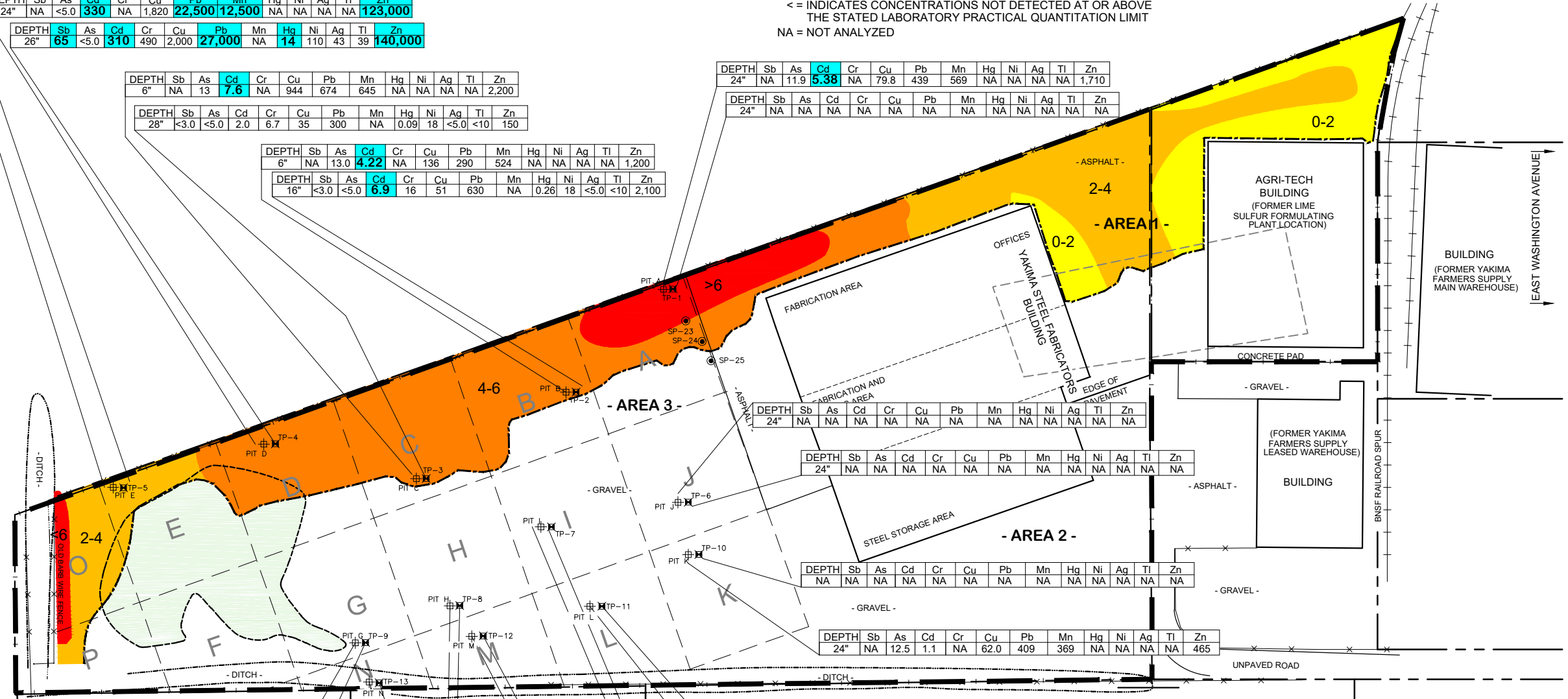
DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
24"	NA	12.5	1.1	NA	62.0	409	369	NA	NA	NA	NA	465
24"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
6"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
0	NA	1.5	<0.10	NA	77.4	5.67	160	NA	NA	NA	NA	69
0	<3.0	<5.0	1.2	8.6	21	31	NA	0.04	21	<5.0	<10	99

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
0.5"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
12"	<0.3	<5.0	2.9	15	82	2,800	NA	0.09	22	<5.0	<10	1,700

DEPTH	Sb	As	Cd	Cr	Cu	Pb	Mn	Hg	Ni	Ag	Tl	Zn
18"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
18"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
0	NA	8.12	4.3	NA	5,560	433	2,270	NA	NA	NA	NA	995



FARALLON CONSULTING
Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FIGURE 3
PRE-2011 SAMPLING LOCATIONS AND BAY CHEMICAL SOIL REMOVAL AREA YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE YAKIMA, WASHINGTON
FARALLON PN: 765-001

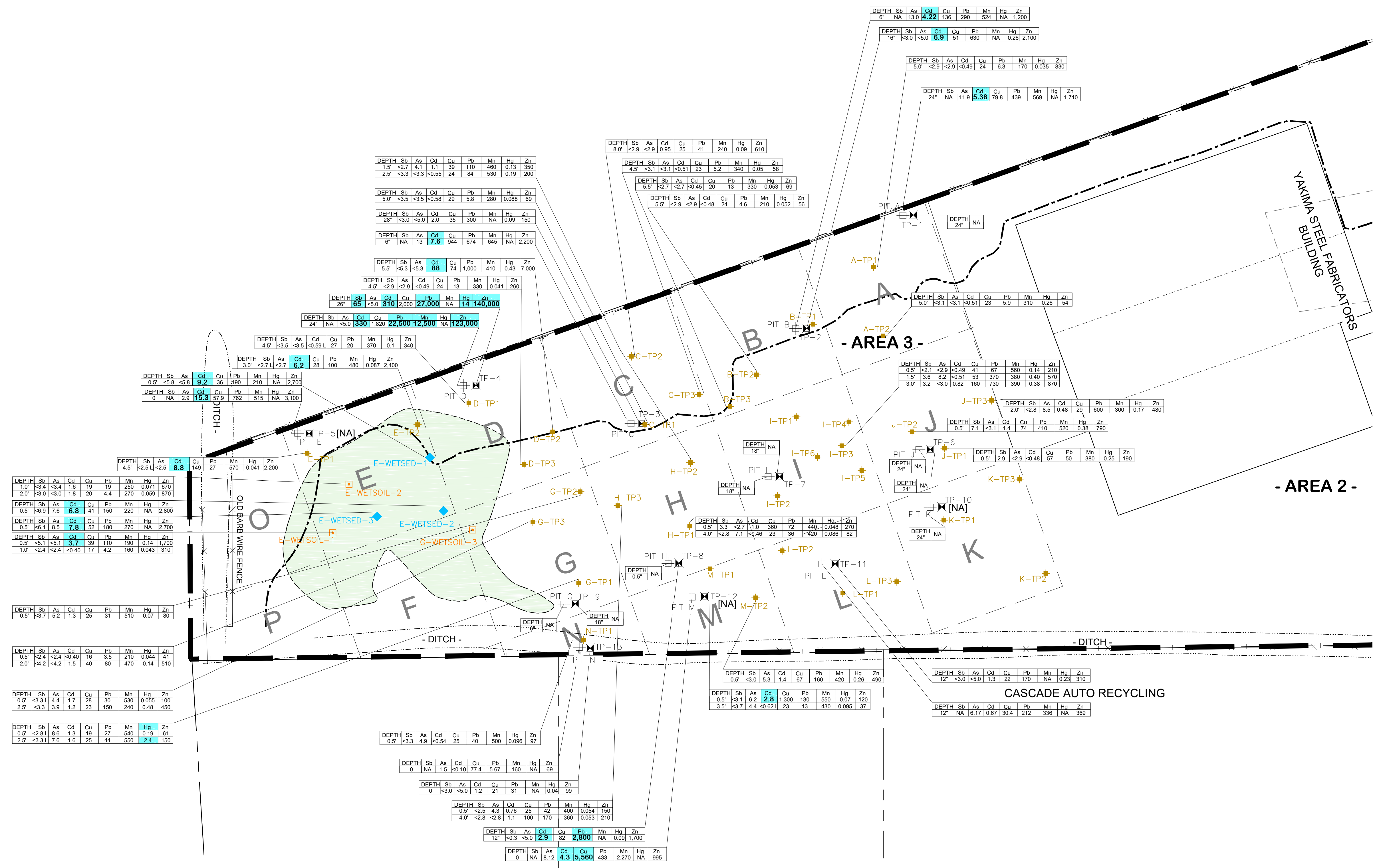
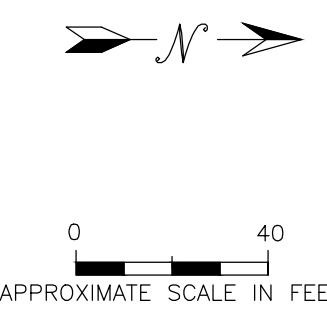
LEGEND

- APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA 1** FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA 2** FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA 3** YAKIMA STEEL STORAGE YARD AND WETLAND AREA
- SITE BOUNDARY
- TAX PARCEL BOUNDARY
- FENCE
- RAILROAD
- BAY CHEMICAL CLEANUP AREA
- D-TP3 TEST PIT LOCATION FARALLON CONSULTING (2011)
- E-WETSSED-1 WET SEDIMENT SAMPLE LOCATION FARALLON CONSULTING (2011)
- E-WETSSED-2 WET SOIL SAMPLE LOCATION FARALLON CONSULTING (2011)
- PIT B WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOTOLOGY) TEST PIT (2007)
- TP-2 ENVIRONMENTAL PARTNERS, INC. TEST PIT (2007)
- M ECOLOGY SAMPLING GRID DESIGNATION
- ESTIMATED LATERAL EXTENT OF TYPE 3 WETLAND (EXISTING POND)

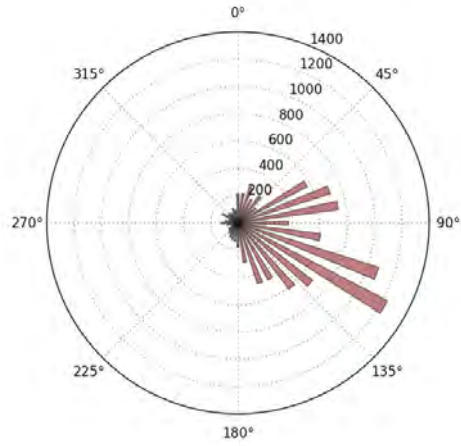
Sb = ANTIMONY
 As = ARSENIC
 Cd = CADMIUM
 Cu = COPPER
 Pb = LEAD
 Mn = MANGANESE
 Hg = MERCURY
 Zn = ZINC
 NA = NOT ANALYZED
 <= INDICATES CONCENTRATIONS NOT DETECTED AT OR ABOVE THE STATED LABORATORY PRACTICAL QUANTITATION LIMIT
 SOIL ANALYTICAL RESULTS IN MILLIGRAMS PER KILOGRAM DEPTH IN INCHES BELOW GROUND SURFACE

Sb	As	Cd	Cu	Pb	Mn	Hg	Zn
32	20	200	2,960	1,000	11,000	2.0	24,000

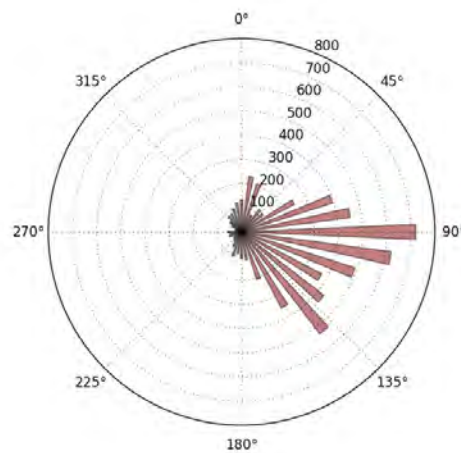
ANALYTE HIGHLIGHTED IN BLUE EXCEEDS PRELIMINARY SCREENING LEVEL INDICATED IN TABLE ABOVE.



**WIND 1-MINUTE MAXIMUM SPEED
PLOT OF DIRECTION OF TRANSPORT**



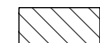

**WIND 2-MINUTE MAXIMUM SPEED
PLOT OF DIRECTION OF TRANSPORT**

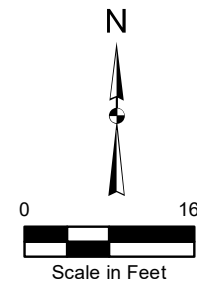


NOTE:
ROSE DIAGRAMS SHOW THE DIRECTION OF TRANSPORT FOR THE FASTEST 1- AND 2-MINUTE WIND INTERVAL RECORDED EACH DAY. 1-MINUTE DATA COVERS THE PERIOD FROM 1965 TO 2015. 2-MINUTE DATA COVERS THE PERIOD FROM 1995 TO 2015. THE LENGTH OF EACH PETAL ON THE ROSE REFLECTS THE TOTAL NUMBER OF DAYS THE MAXIMUM WIND WAS RECORDED BLOWING THAT DIRECTION.



LEGEND

-  FORMER BAY CHEMICAL SITE FEATURES
-  YAKIMA STEEL FABRICATORS/AGRI-TECH APPROXIMATE SITE BOUNDARY




Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 5
WIND TRANSPORT DATA FOR SITE VICINITY
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

1979 OBLIQUE AERIAL PHOTOGRAPH

DRAINAGE/
IRRIGATION DITCH

RAILROAD

APPROXIMATE AREA OF
FORMER BAY CHEMICAL
SLUDGE SETTLING POND

BAY
CHEMICAL
SITE

APPROXIMATE RANGE
OF DIRECTIONS FOR
WIND TRANSPORT

WAREHOUSE
BUILDINGS

FORMER LIME
SULFUR PLANT

APPROXIMATE AREA OF
FORMER BAY CHEMICAL
FLUE DUST STOCKPILE

FORMER YAKIMA
FARMERS SUPPLY

APPROXIMATE YSF/AGRI-TECH
SITE BOUNDARY

LEGEND

 APPROXIMATE SITE BOUNDARY



NOT TO SCALE



Quality Service for Environmental Solutions | farallonconsulting.com

Drawn By: tperrin

Checked By: HC

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

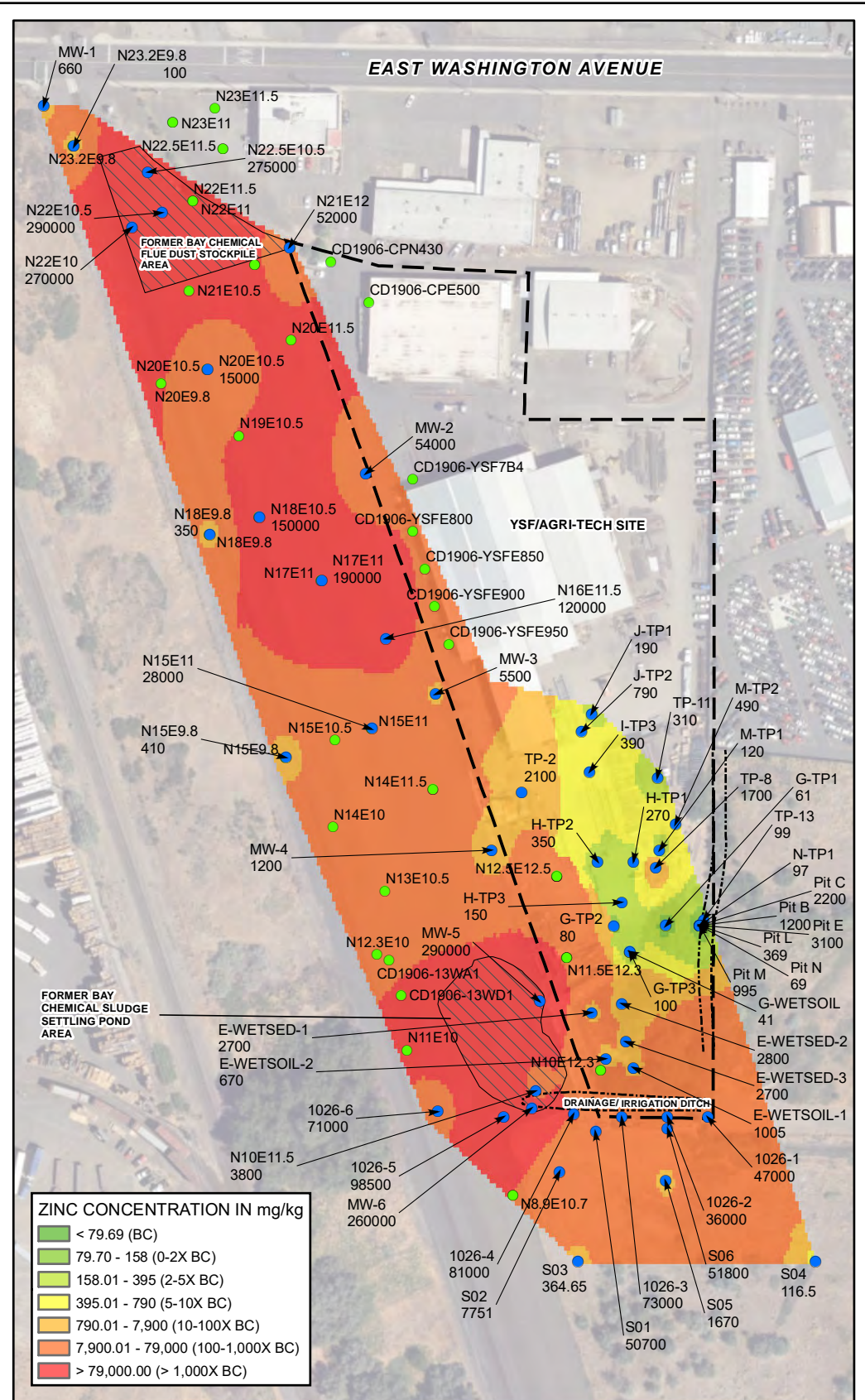
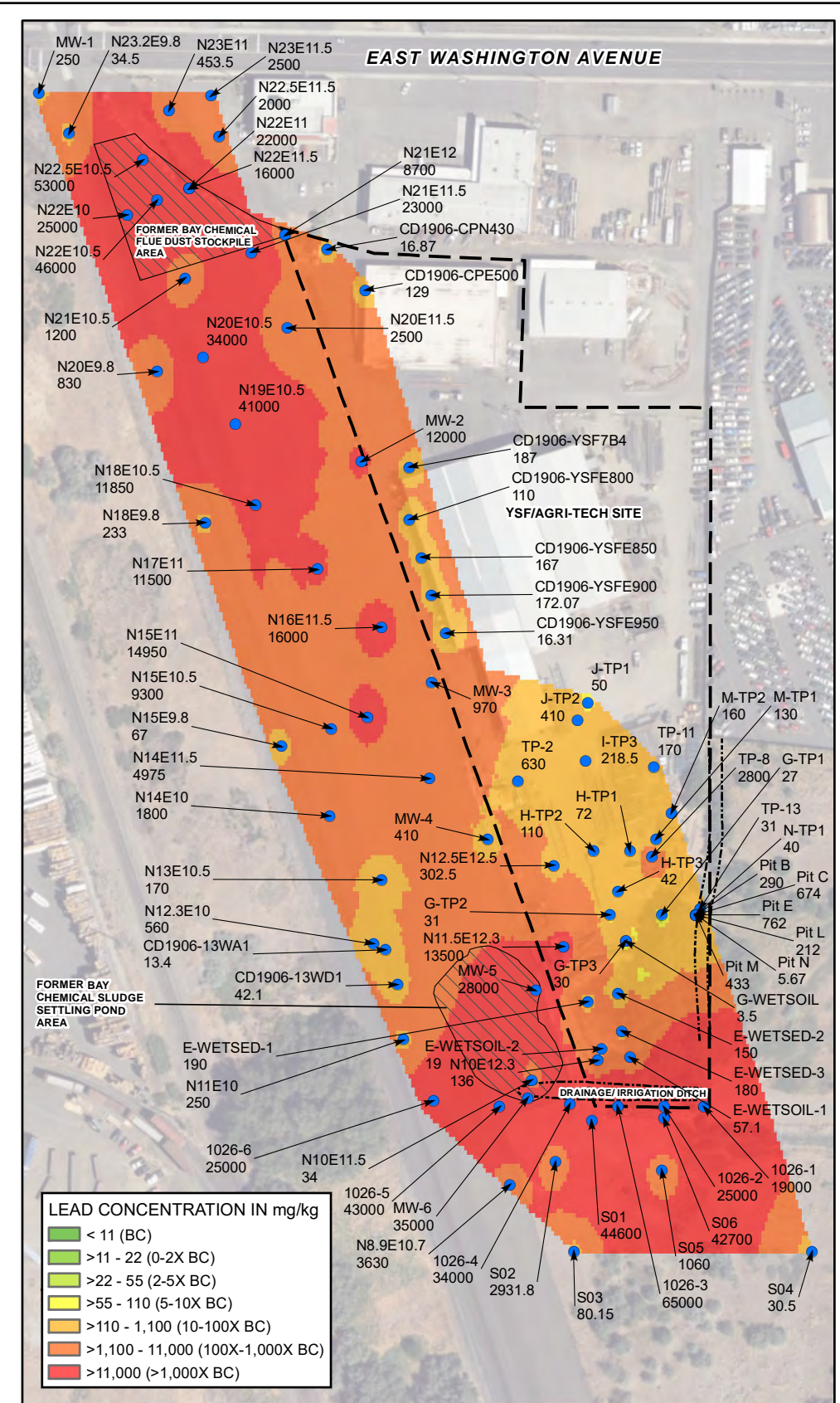
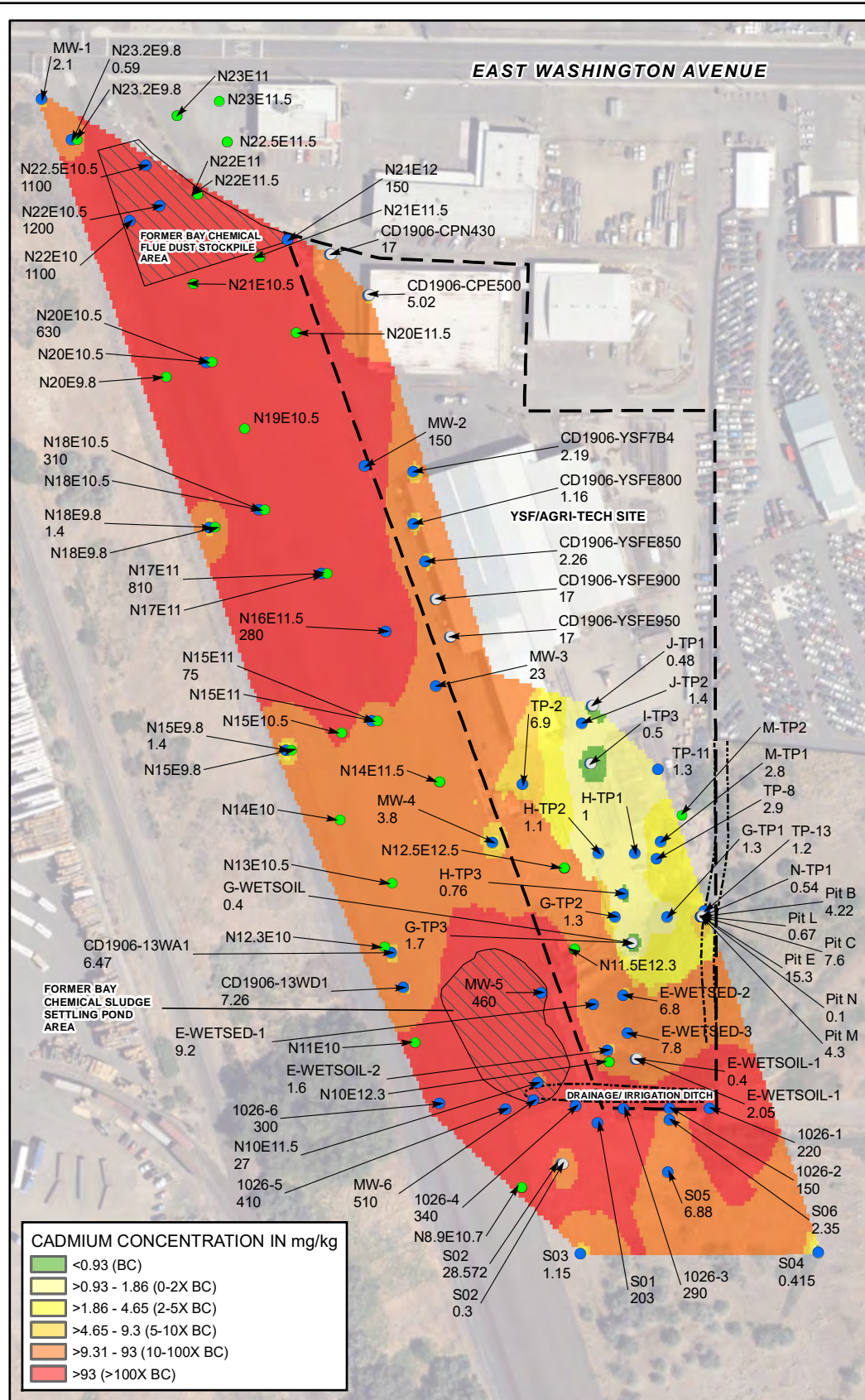
FIGURE 6

1979 OBLIQUE AERIAL PHOTOGRAPH OF SITE
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

Date: 1/25/2016

Disc Reference:
Document Path: G:\Projects\765001 Yakima Steel Fab\GIS\Mapfiles\Figure_1979_Oblique.mxd



LEGEND

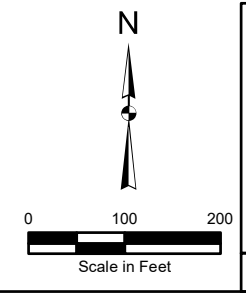
- YAKIMA STEEL FABRICATORS/AGRI-TECH SAMPLE LOCATION
- NON DETECT SAMPLE
- NO DATA SAMPLE
- ▭ FORMER BAY CHEMICAL SITE FEATURES
- ▭ YAKIMA STEEL FABRICATORS/AGRI-TECH APPROXIMATE SITE BOUNDARY

BC - BACKGROUND CONCENTRATION
mg/kg - MILLIGRAMS PER KILOGRAM

NATURAL BACKGROUND CONCENTRATIONS *

	0	2X	5X	10X	100X
CADMIUM	0.93	1.86	4.65	9.3	93
LEAD	11	22	55	110	1,100
ZINC	79	158	395	790	7,900

* FROM NATURAL BACKGROUND SOIL METALS CONCENTRATIONS IN WASHINGTON STATE, WASHINGTON STATE DEPARTMENT OF ECOLOGY PUBLICATION NO. 94-115, (OCTOBER 1994).



FARALLON CONSULTING
Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

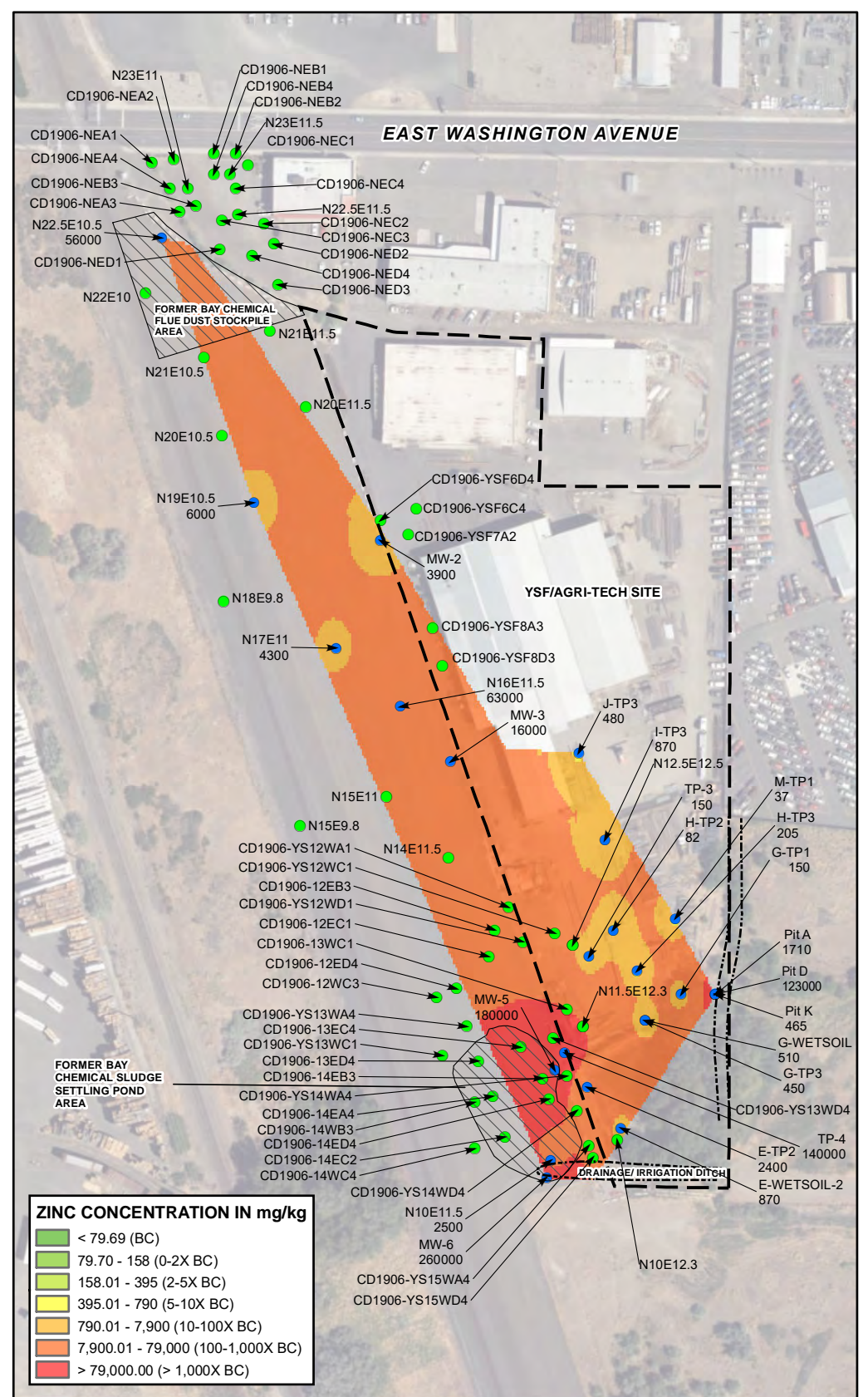
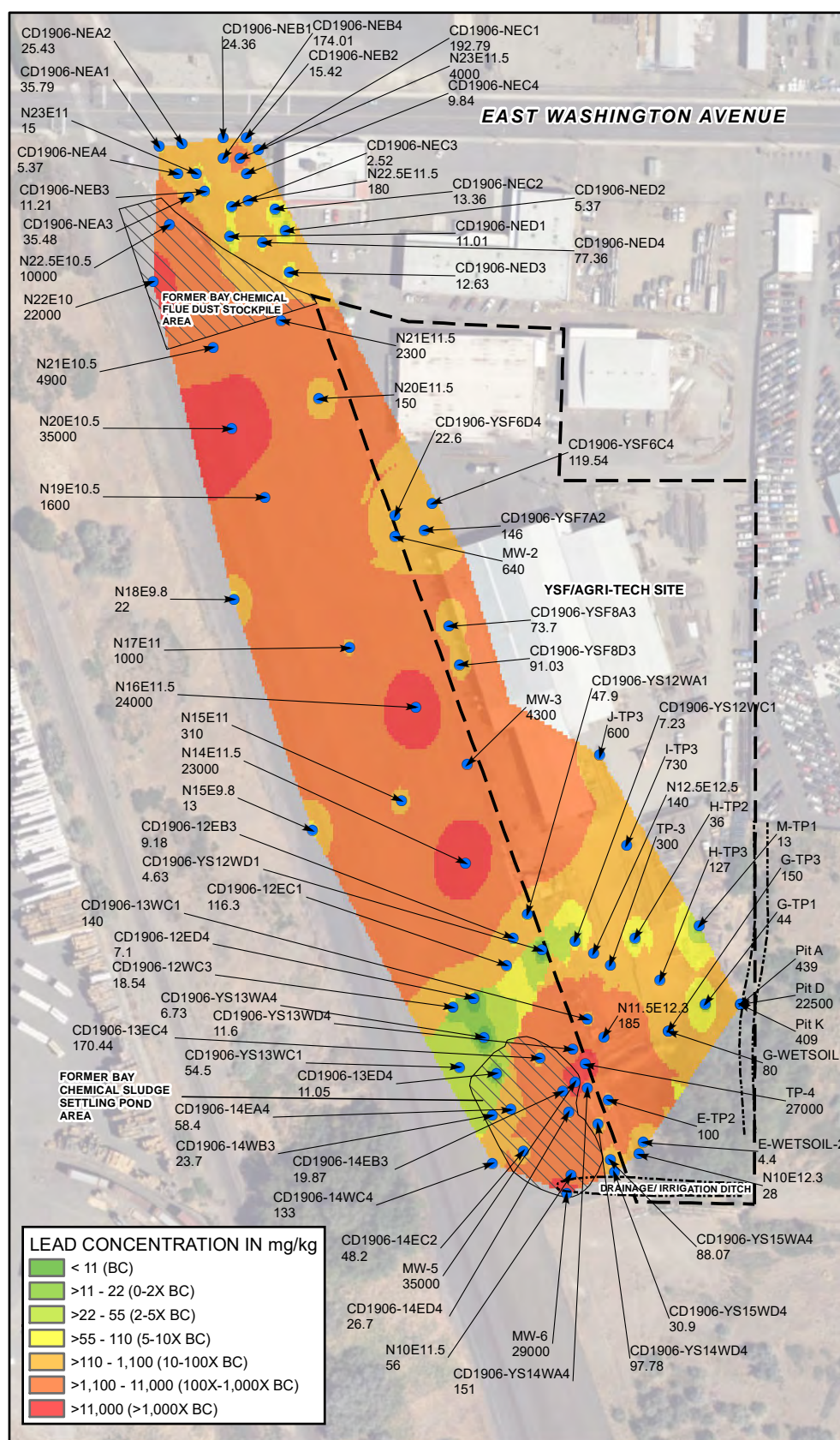
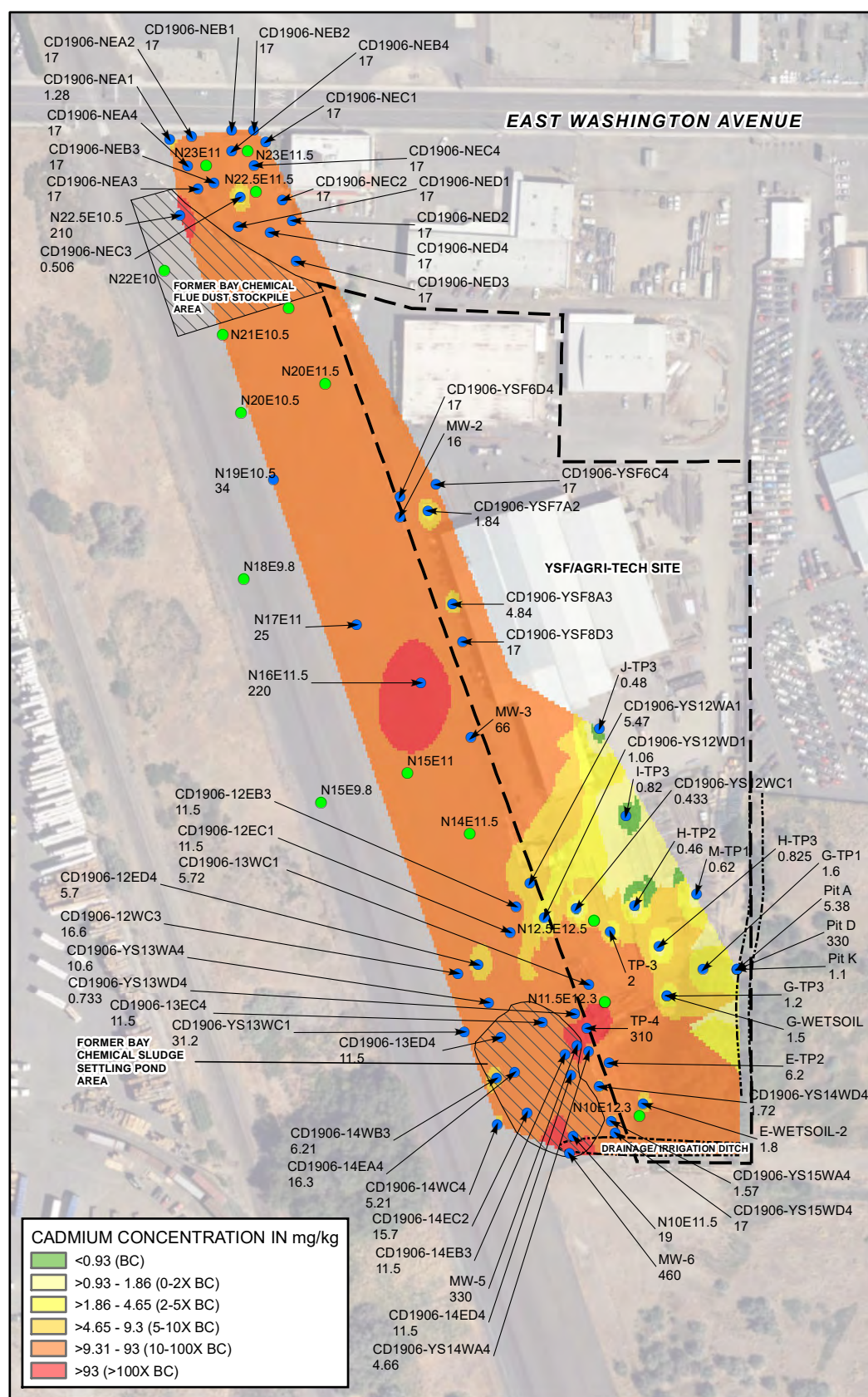
FIGURE 7A

CADMIUM, LEAD, AND ZINC ESTIMATED DISTRIBUTION IN SOIL 0 - 2 FT BGS
YSF/AGRI-TECH SITE

6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

Disc Reference:
Document Path: G:\Projects\765001 Yakima Steel Fab\GIS\Revised\TM Maps\Figure05a 0-2 Soil Cad-Lead-Zinc.mxd



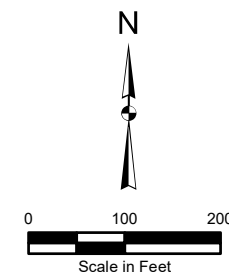
LEGEND

- YAKIMA STEEL FABRICATORS/AGRI-TECH SAMPLE LOCATION
- NON DETECT SAMPLE
- NO DATA SAMPLE
- FORMER BAY CHEMICAL SITE FEATURES
- YAKIMA STEEL FABRICATORS/AGRI-TECH APPROXIMATE SITE BOUNDARY

BC - BACKGROUND CONCENTRATION
mg/kg - MILLIGRAMS PER KILOGRAM

NATURAL BACKGROUND CONCENTRATIONS *					
	0	2X	5X	10X	100X
CADMIUM	0.93	1.86	4.65	9.3	93
LEAD	11	22	55	110	1,100
ZINC	79	158	395	790	7,900

* FROM NATURAL BACKGROUND SOIL METALS CONCENTRATIONS IN WASHINGTON STATE, WASHINGTON STATE DEPARTMENT OF ECOLOGY PUBLICATION NO. 94-115, (OCTOBER 1994).



Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

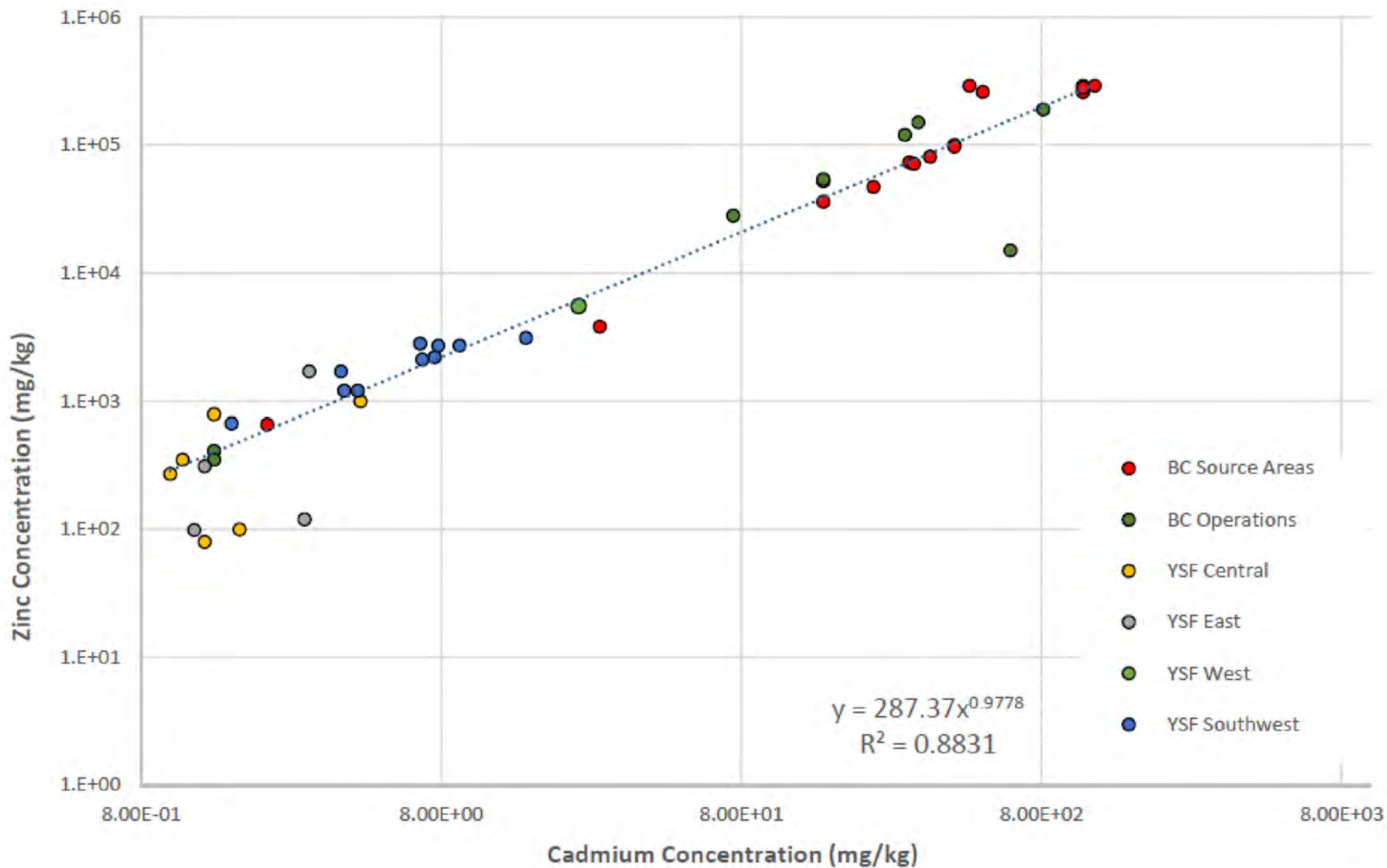
California
Oakland | Sacramento | Irvine

Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 7B
CADMIUM, LEAD, AND ZINC ESTIMATED DISTRIBUTION IN SOIL 2 - 4 FT BGS
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

Disc Reference:
Document Path: G:\Projects\765001 Yakima Steel Fab\GIS\Revised\TM Maps\Figure05b_2-4_Soil_Cad-Lead-Zinc.mxd



NOTES:

mg/kg = MILLIGRAMS PER KILOGRAM

BC = BAY CHEMICAL SITE

BGS = BELOW GROUND SURFACE

YSF = YAKIMA STEEL FABRICATORS / AGRI-TECH SITE

SOURCE AREA DATA INCLUDES BAY CHEMICAL FLUE DUST AREA, SLUDGE SETTLING POND, AND SLUDGE SEDIMENT



FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FIGURE 8A

RATIO OF CADMIUM TO ZINC IN SOIL 0-2 FEET BGS
YSF/AGRI-TECH SITE
6 AND 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

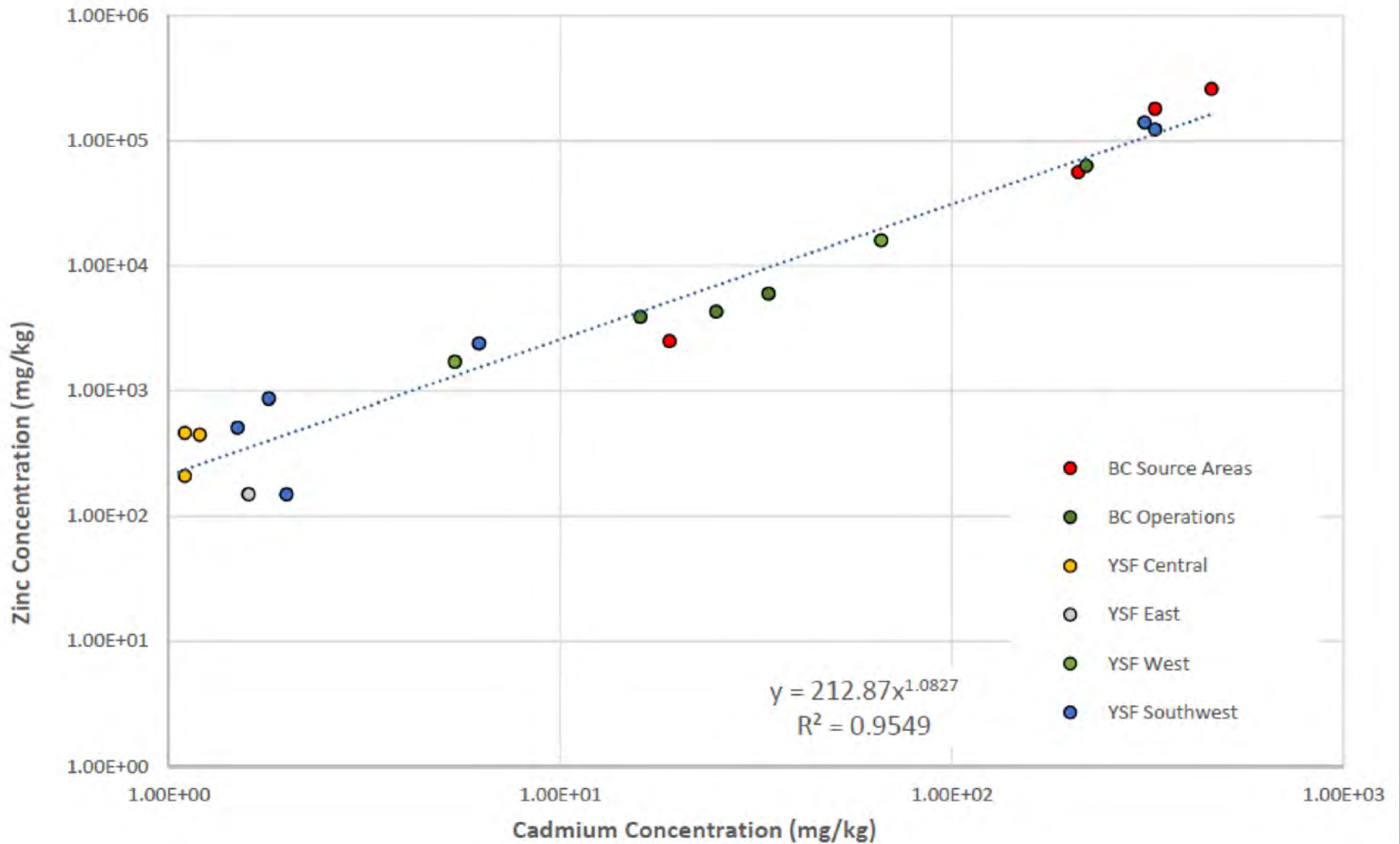
Drawn By: tperrin

Checked By: JK

Date: 9/23/2016

Disc Reference:

Document Path: G:\Projects\765001 Yakima Steel Fab\GIS\Tables\Charts\charts_titleblock_v2.mxd



NOTES:

mg/kg = MILLIGRAMS PER KILOGRAM
 BC = BAY CHEMICAL SITE
 BGS = BELOW GROUND SURFACE
 YSF = YAKIMA STEEL FABRICATORS / AGRI-TECH SITE
 SOURCE AREA DATA INCLUDES BAY CHEMICAL FLUE DUST AREA,
 SLUDGE SETTLING POND, AND SLUDGE SEDIMENT



FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FIGURE 8B

RATIO OF CADMIUM TO ZINC IN SOIL 2-4 FEET BGS
 YSF/AGRI-TECH SITE
 6 AND 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON

FARALLON PN: 765-001

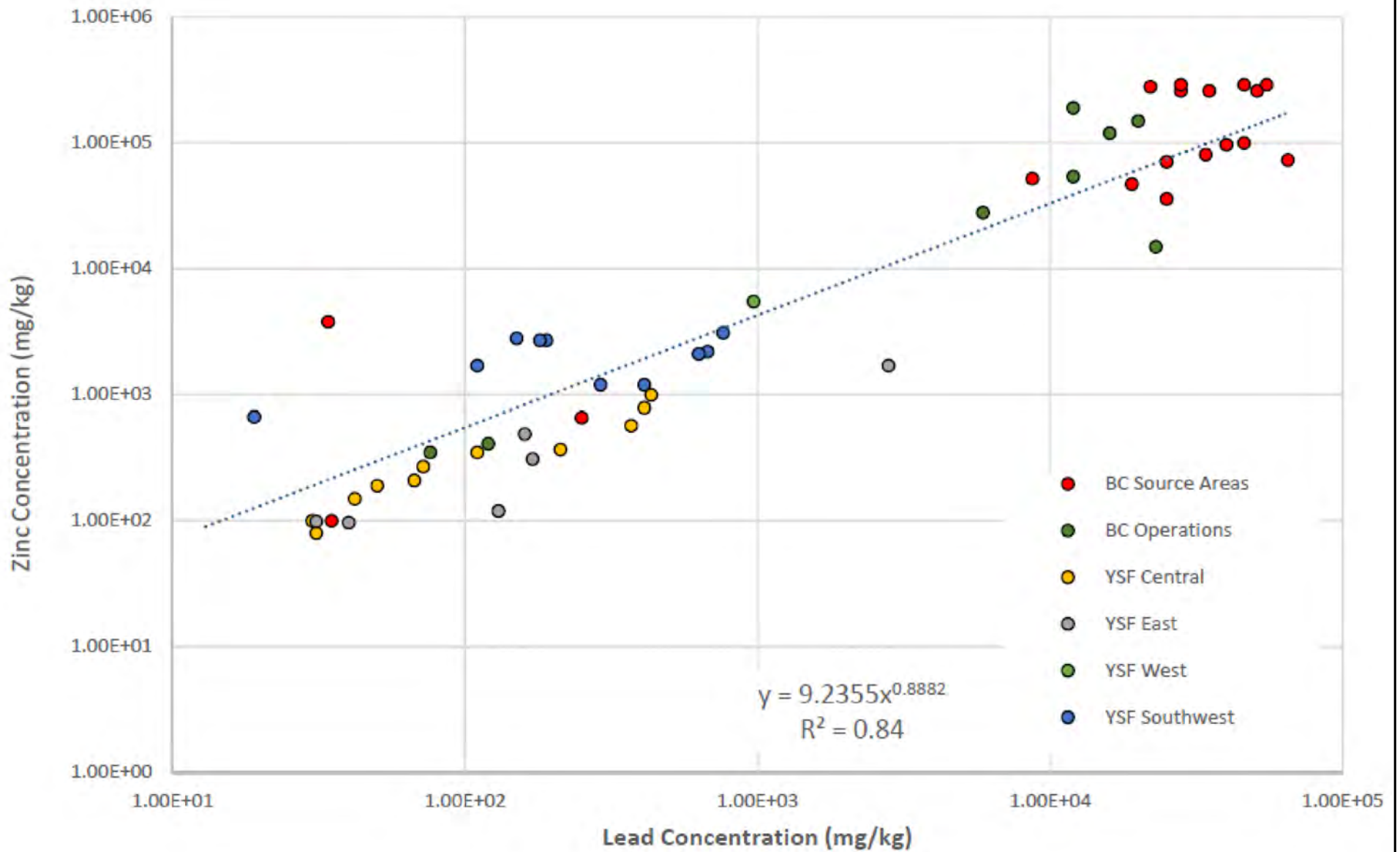
Drawn By: tperrin

Checked By: JK

Date: 9/23/2016

Disc Reference:

Document Path: G:\Projects\765001 Yakima Steel Fab\GIS\Tables\Charts\charts_titleblock_v2.mxd



NOTES:

mg/kg = MILLIGRAMS PER KILOGRAM

BC = BAY CHEMICAL SITE

BGS = BELOW GROUND SURFACE

YSF = YAKIMA STEEL FABRICATORS / AGRI-TECH SITE

SOURCE AREA DATA INCLUDES BAY CHEMICAL FLUE DUST AREA, SLUDGE SETTLING POND, AND SLUDGE SEDIMENT



FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FIGURE 9A

**RATIO OF LEAD TO ZINC IN SOIL 0-2 FEET BGS
YSF/AGRI-TECH SITE
6 AND 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON**

FARALLON PN: 765-001

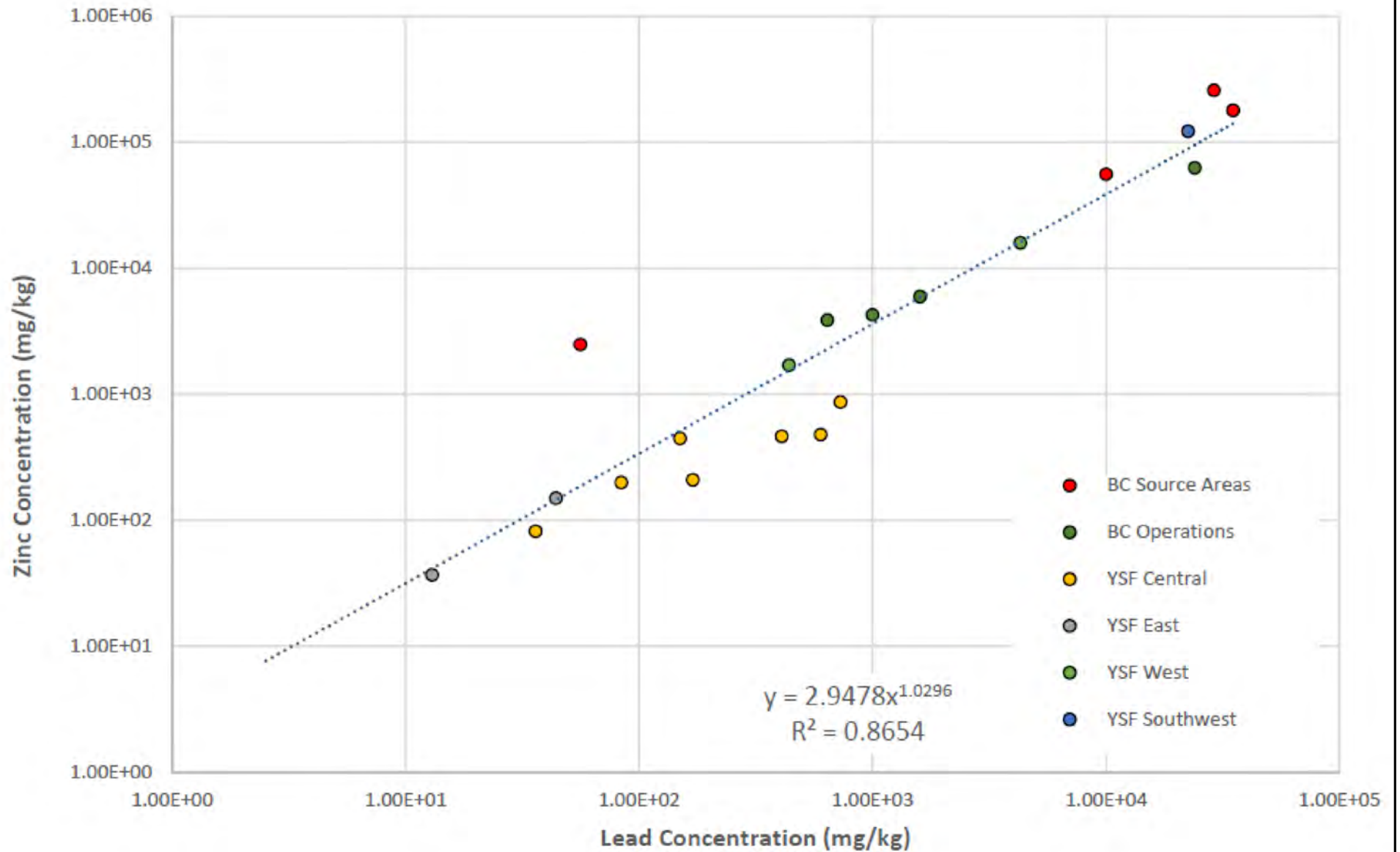
Drawn By: tperrin

Checked By: JC

Date: 9/23/2016

Disc Reference:

Document Path: G:\Projects\765001 Yakima Steel Fab\GIS\Tables\Charts\charts_titleblock_v2.mxd



NOTES:

mg/kg = MILLIGRAMS PER KILOGRAM
 BC = BAY CHEMICAL SITE
 BGS = BELOW GROUND SURFACE
 YSF = YAKIMA STEEL FABRICATORS / AGRI-TECH SITE
 SOURCE AREA DATA INCLUDES BAY CHEMICAL FLUE DUST AREA,
 SLUDGE SETTLING POND, AND SLUDGE SEDIMENT



FARALLON
 CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington
 Issaquah | Bellingham | Seattle

Oregon
 Portland | Bend | Baker City

California
 Oakland | Sacramento | Irvine

FIGURE 9B
 RATIO OF LEAD TO ZINC IN SOIL 2-4 FEET BGS
 YSF/AGRI-TECH SITE
 6 AND 10 1/2 EAST WASHINGTON AVENUE
 YAKIMA, WASHINGTON

FARALLON PN: 765-001

Drawn By: tperrin

Checked By: JC

Date: 9/23/2016

Disc Reference:

Document Path: G:\Projects\765001 Yakima Steel Fab\GIS\Tables\Charts\charts_titleblock_v2.mxd

**Table B-1
Yakima Steel Facility and Bay Chemical Site Metals Data
Agri-Tech and Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001**

Data Source ¹	Sample Location	Sample ID	Sample Date	Sample Depth (Feet bgs) ²	Analytical Results (micrograms per gram) ³									Longitude (Decimal Degrees)	Latitude (Decimal Degrees)	Sample Excluded ⁴	Zone Assigned in Ratio Analysis ⁵
					Antimony	Arsenic	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Zinc				
Bay_Chem_RI	MW-1	MW-1-0	3/28/94	0	3.6	<2.8	2.1	20	40	250	510	0.075	660	-120.493009	46.570363	0	Flue Dust Area
Bay_Chem_RI	MW-1	MW-1-5.0	3/28/94	5	2.3	3.6	1.2	19	36	130	480	0.061	340	-120.493009	46.570363	0	Flue Dust Area
Bay_Chem_RI	MW-1	MW-1-7.5	3/28/94	7.5	<1.4	<2	0.41	25	19	14	380	0.041	56	-120.493009	46.570363	0	Flue Dust Area
Bay_Chem_RI	MW-2	MW-2-0	3/28/94	0	27	<29	150	220	650	12,000	4,300	6.23	54,000	-120.491402	46.569091	0	BC Operations Area
Bay_Chem_RI	MW-2	MW-2-2.5	3/28/94	2.5	<1.5	<2.3	16	28	150	640	690	0.453	3,900	-120.491402	46.569091	0	BC Operations Area
Bay_Chem_RI	MW-2	MW-2-7.5	3/28/94	7.5	<1.5	<2.2	2.3	92	67	18	460	0.078	640	-120.491402	46.569091	0	BC Operations Area
Bay_Chem_RI	MW-3	MW-3-0	3/28/94	0	37	210	23	59	410	970	800	0.22	5,500	-120.491046	46.56833	0	YSF West
Bay_Chem_RI	MW-3	MW-3-2.5	3/28/94	2.5	27	110	66	100	410	4,300	1,800	1.65	16,000	-120.491046	46.56833	0	YSF West
Bay_Chem_RI	MW-3	MW-3-5.0	3/28/94	5	<45	<68	2,000	180	320	2,300	2,300	0.123	68,000	-120.491046	46.56833	0	YSF West
Bay_Chem_RI	MW-4	MW-4-0	3/28/94	0	2.6	4.6	3.8	24	51	410	650	0.234	1,200	-120.49077	46.567794	0	YSF Southwest
Bay_Chem_RI	MW-4	MW-4-7.5	3/28/94	7.5	<1.5	3.9	3.7	14	21	49	390	0.047	1,700	-120.49077	46.567794	0	YSF Southwest
Bay_Chem_RI	MW-4	MW-4-10.0	3/28/94	10	2.1	<2.7	9.7	24	110	740	740	0.312	3,700	-120.49077	46.567794	0	YSF Southwest
Bay_Chem_RI	MW-4	MW-4-D	3/28/94	15	2.1	7.3	5	30	79	650	790	0.218	1,800	-120.49077	46.567794	0	YSF Southwest
Bay_Chem_RI	MW-5	MW-5-0	3/28/94	0	140	<140	460	760	2,300	28,000	23,000	0.423	290,000	-120.490528	46.567272	0	Settling Pond
Bay_Chem_RI	MW-5	MW-5-2.5	3/28/94	2.5	82	<36	330	640	1,800	35,000	13,000	8.4	180,000	-120.490528	46.567272	0	Settling Pond
Bay_Chem_RI	MW-5	MW-5-7.5	3/28/94	7.5	3.4	<1.9	30	52	130	1,700	1,300	0.357	14,000	-120.490528	46.567272	0	Settling Pond
Bay_Chem_RI	MW-6	MW-6-0	3/28/94	0	140	<170	510	900	2,700	35,000	17,000	17.4	260,000	-120.490565	46.566905	0	Settling Pond
Bay_Chem_RI	MW-6	MW-6-2.5	3/28/94	2.5	210	<170	460	880	2,600	29,000	18,000	14.6	260,000	-120.490565	46.566905	0	Settling Pond
Bay_Chem_RI	MW-6	MW-6-5.0	3/28/94	5	<78	<110	77	140	680	8,700	3,700	1.99	43,000	-120.490565	46.566905	0	Settling Pond
Bay_Chem_RI	N10E11.5	N10E11.5-1	11/8/95	1	<2.3	<3.4	27	19	29	34	54	<1.1	3,800B	-120.490547	46.566958	0	Settling Pond
Bay_Chem_RI	N10E11.5	N10E11.5-2	11/8/95	2	<1.7	<2.5	19	15	20	56	340	<0.83	2,500B	-120.490547	46.566958	0	Settling Pond
Bay_Chem_RI	N10E12.3	N10E12.3(0-0.5)	10/3/96	0	--	--	--	--	--	190	--	--	--	-120.490218	46.567034	0	YSF Southwest
Bay_Chem_RI	N10E12.3	N10E12.3(1.5-2)	10/3/96	1.5	--	--	--	--	--	82	--	--	--	-120.490218	46.567034	0	YSF Southwest
Bay_Chem_RI	N10E12.3	N10E12.3(3.5-4)	10/3/96	3.5	--	--	--	--	--	28	--	--	--	-120.490218	46.567034	0	YSF Southwest
Bay_Chem_RI	N10E12.3	N10E12.3(5.5-6)	10/3/96	5.5	--	--	--	--	--	51	--	--	--	-120.490218	46.567034	0	YSF Southwest
Bay_Chem_RI	N11.5E12.3	N11.5E12.3(0-0.5)	10/3/96	0	--	--	--	--	--	24,000	--	--	--	-120.49039	46.567422	0	YSF Southwest
Bay_Chem_RI	N11.5E12.3	N11.5E12.3(0-0.5) SPLIT	10/3/96	0	--	--	--	--	--	27,000	--	--	--	-120.49039	46.567422	0	YSF Southwest
Bay_Chem_RI	N11.5E12.3	N11.5E12.3(1.5-2)	10/3/96	1.5	--	--	--	--	--	1,700	--	--	--	-120.49039	46.567422	0	YSF Southwest
Bay_Chem_RI	N11.5E12.3	N11.5E12.3(1.5-2) SPLIT	10/3/96	1.5	--	--	--	--	--	1,300	--	--	--	-120.49039	46.567422	0	YSF Southwest
Bay_Chem_RI	N11.5E12.3	N11.5E12.3(3.5-4)	10/3/96	3.5	--	--	--	--	--	160	--	--	--	-120.49039	46.567422	0	YSF Southwest
Bay_Chem_RI	N11.5E12.3	N11.5E12.3(3.5-4) SPLIT	10/3/96	3.5	--	--	--	--	--	210	--	--	--	-120.49039	46.567422	0	YSF Southwest
Bay_Chem_RI	N11.5E12.3	N11.5E12.3(5.5-6)	10/3/96	5.5	--	--	--	--	--	44	--	--	--	-120.49039	46.567422	0	YSF Southwest
Bay_Chem_RI	N11.5E12.3	N11.5E12.3(5.5-6) SPLIT	10/3/96	5.5	--	--	--	--	--	45	--	--	--	-120.49039	46.567422	0	YSF Southwest
Bay_Chem_RI	N11E10	N11E10-0	5/20/94	0	1.9	--	--	--	--	250	--	--	--	-120.491191	46.567095	0	BC Operations Area
Bay_Chem_RI	N12.3E10	N12.3E10-0	5/20/94	0	--	--	--	--	--	560	--	--	--	-120.491343	46.56743	0	BC Operations Area
Bay_Chem_RI	N12.5E12.5	N12.5E12.5(0-0.5)	10/4/96	0	--	--	--	--	--	420	--	--	--	-120.490442	46.567703	0	YSF Southwest
Bay_Chem_RI	N12.5E12.5	N12.5E12.5(0-0.5) SPLIT	10/4/96	0	--	--	--	--	--	510	--	--	--	-120.490442	46.567703	0	YSF Southwest
Bay_Chem_RI	N12.5E12.5	N12.5E12.5(1.5-2)	10/4/96	1.5	--	--	--	--	--	140	--	--	--	-120.490442	46.567703	0	YSF Southwest
Bay_Chem_RI	N12.5E12.5	N12.5E12.5(1.5-2) SPLIT	10/4/96	1.5	--	--	--	--	--	140	--	--	--	-120.490442	46.567703	0	YSF Southwest
Bay_Chem_RI	N12.5E12.5	N12.5E12.5(3.5-4)	10/4/96	3.5	--	--	--	--	--	130	--	--	--	-120.490442	46.567703	0	YSF Southwest
Bay_Chem_RI	N12.5E12.5	N12.5E12.5(3.5-4) SPLIT	10/4/96	3.5	--	--	--	--	--	150	--	--	--	-120.490442	46.567703	0	YSF Southwest
Bay_Chem_RI	N12.5E12.5	N12.5E12.5(5.5-6)	10/4/96	5.5	--	--	--	--	--	20	--	--	--	-120.490442	46.567703	0	YSF Southwest
Bay_Chem_RI	N12.5E12.5	N12.5E12.5(5.5-6) SPLIT	10/4/96	5.5	--	--	--	--	--	11	--	--	--	-120.490442	46.567703	0	YSF Southwest
Bay_Chem_RI	N13E10.5	N13E10.5-0	5/20/94	0	--	--	--	--	--	170	--	--	--	-120.491302	46.56765	0	BC Operations Area
Bay_Chem_RI	N14E10	N14E10-0	5/20/94	0	--	--	--	--	--	1,800	--	--	--	-120.491558	46.567872	0	BC Operations Area
Bay_Chem_RI	N14E11.5	N14E11.5-0	5/20/94	0	--	--	--	--	--	850	--	--	--	-120.491059	46.567996	0	BC Operations Area
Bay_Chem_RI	N14E11.5	N14E11.5-E-1.5	10/25/94	1.5	<20	<31	--	--	--	9,100	--	0.648	--	-120.491059	46.567996	0	BC Operations Area
Bay_Chem_RI	N14E11.5	N14E11.5-E-3.5	10/25/94	3.5	--	--	--	--	--	23,000	--	--	--	-120.491059	46.567996	0	BC Operations Area
Bay_Chem_RI	N14E11.5	N14E11.5-E-5.5	10/25/94	5.5	<22	<31	78	20	57	120	490	0.097	8,600	-120.491059	46.567996	0	BC Operations Area
Bay_Chem_RI	N15E10.5	N15E10.5-0	5/20/94	0	--	--	--	--	--	9,300	--	--	--	-120.491554	46.56817	0	BC Operations Area
Bay_Chem_RI	N15E11	N15E11-0	5/20/94	0	--	--	--	--	--	24,000	--	--	--	-120.491365	46.568214	0	BC Operations Area
Bay_Chem_RI	N15E11	N15E11-N-1.5	10/25/94	1.5	<20	<30	75	110	340	5,900	2,800	1.01	28,000	-120.491365	46.568214	0	BC Operations Area
Bay_Chem_RI	N15E11	N15E11-N-3.5	10/25/94	3.5	--	--	--	--	--	310	--	--	--	-120.491365	46.568214	0	BC Operations Area
Bay_Chem_RI	N15E11	N15E11-N-5.5	10/25/94	5.5	--	--	--	--	--	97	--	--	--	-120.491365	46.568214	0	BC Operations Area
Bay_Chem_RI	N15E9.8	N15E9.8(0-0.5)	10/4/96	0	0.95	2.4	1.4	14	37	120	410	0.04	410	-120.491803	46.568113	0	BC Operations Area
Bay_Chem_RI	N15E9.8	N15E9.8(1.5-2)	10/4/96	1.5	--	--	--	--	--	14	--	--	--	-120.491803	46.568113	0	BC Operations Area
Bay_Chem_RI	N15E9.8	N15E9.8(3.5-4)	10/4/96	3.5	--	--	--	--	--	13	--	--	--	-120.491803	46.568113	0	BC Operations Area

**Table B-1
Yakima Steel Facility and Bay Chemical Site Metals Data
Agri-Tech and Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001**

Data Source ¹	Sample Location	Sample ID	Sample Date	Sample Depth (Feet bgs) ²	Analytical Results (micrograms per gram) ³									Longitude (Decimal Degrees)	Latitude (Decimal Degrees)	Sample Excluded ⁴	Zone Assigned in Ratio Analysis ⁵
					Antimony	Arsenic	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Zinc				
Bay_Chem_RI	N15E9.8	N15E9.8(5.5-6)	10/4/96	5.5	--	--	--	--	--	12	--	--	--	-120.491803	46.568113	0	BC Operations Area
Bay_Chem_RI	N16E10	N16E10-0	5/20/94	20	14	--	--	--	--	6,700	--	1.58	--	-120.491811	46.568387	0	BC Operations Area
Bay_Chem_RI	N16E11.5	N16E11.5-0	5/20/94	1.5	33	<3.8	280	480	1,300	16,000	9,400	5	120,000	-120.491302	46.568518	0	BC Operations Area
Bay_Chem_RI	N16E11.5	N16E11.5-3.5	10/25/94	3.5	36	<31	220	380	1,300	24,000	7,200	54.4	63,000	-120.491302	46.568518	0	BC Operations Area
Bay_Chem_RI	N16E11.5	N16E11.5-5.5	10/25/94	5.5	<19	<29	18	30	100	940	1000	2.6	3,400	-120.491302	46.568518	0	BC Operations Area
Bay_Chem_RI	N16E11.5	N16E11.5-6.5	10/25/94	6.5	<17	<26	--	--	--	200	--	6.93	--	-120.491302	46.568518	0	BC Operations Area
Bay_Chem_RI	N17E11	N17E11-0	5/20/94	0	69	<3	810	780	2,100	12,000	17,000	7.24	190,000	-120.491622	46.568718	0	BC Operations Area
Bay_Chem_RI	N17E11	N17E11-W-1.5	10/25/94	1.5	--	--	--	--	--	11,000	--	--	--	-120.491622	46.568718	0	BC Operations Area
Bay_Chem_RI	N17E11	N17E11-W-3.5	10/25/94	3.5	<20	<30	25	34	100	1000	840	1.22	4,300	-120.491622	46.568718	0	BC Operations Area
Bay_Chem_RI	N17E11	N17E11-W-6.5	10/25/94	6.5	<17	<24	17	28	87	810	870	41	3,300	-120.491622	46.568718	0	BC Operations Area
Bay_Chem_RI	N18E10.5	N18E10.5-0	5/20/94	0	110	<3.9	310	520	1,700	20,000	13,000	5.23	150,000	-120.491929	46.56894	0	BC Operations Area
Bay_Chem_RI	N18E10.5	N18E11.5-0	5/20/94	0	--	--	--	--	--	3,700	--	--	--	-120.491929	46.56894	0	BC Operations Area
Bay_Chem_RI	N18E9.8	N18E9.8(0-0.5)	10/4/96	0	--	--	--	--	--	390	--	--	--	-120.492182	46.568878	0	BC Operations Area
Bay_Chem_RI	N18E9.8	N18E9.8(1.5-2.0)	10/4/96	1.5	0.35	2.4	1.4	13	22	76	500	<0.01	350	-120.492182	46.568878	0	BC Operations Area
Bay_Chem_RI	N18E9.8	N18E9.8(3.5-4)	10/4/96	3.5	--	--	--	--	--	22	--	--	--	-120.492182	46.568878	0	BC Operations Area
Bay_Chem_RI	N18E9.8	N18E9.8(5.5-6)	10/4/96	5.5	0.13	1.4	0.33	16	14	19	320	<0.02	66	-120.492182	46.568878	0	BC Operations Area
Bay_Chem_RI	N19E10.5	N19E10.5-1	11/8/95	1	--	--	--	--	--	41,000	--	--	--	-120.492027	46.569217	0	BC Operations Area
Bay_Chem_RI	N19E10.5	N19E10.5-2	11/8/95	2	<2.3	<3.5	34	39	120	1,600	1000	<1.2	6,000	-120.492027	46.569217	0	BC Operations Area
Bay_Chem_RI	N20E10.5	N20E10.5-0	5/20/94	0	100	<3.5	--	--	--	45,000	--	--	--	-120.492186	46.569445	0	BC Operations Area
Bay_Chem_RI	N20E10.5	N20E10.5-S-1.5	10/25/94	1.5	130	<37	630	840	2,700	23,000	16,000	102	15,000	-120.492186	46.569445	0	BC Operations Area
Bay_Chem_RI	N20E10.5	N20E10.5-S-3.5	10/25/94	3.5	--	--	--	--	--	35,000	--	--	--	-120.492186	46.569445	0	BC Operations Area
Bay_Chem_RI	N20E10.5	N20E10.5-S-6	10/25/94	6	<19	<30	28	69	260	3,900	1,400	20.2	8,600	-120.492186	46.569445	0	BC Operations Area
Bay_Chem_RI	N20E11.5	N20E11.5-1	11/8/95	1	--	--	--	--	--	2,500	--	--	--	-120.491772	46.56955	0	BC Operations Area
Bay_Chem_RI	N20E11.5	N20E11.5-2	11/8/95	2	--	--	--	--	--	150	--	--	--	-120.491772	46.56955	0	BC Operations Area
Bay_Chem_RI	N20E9.8	N20E9.8(0-0.5)	10/4/96	0	--	--	--	--	--	830	--	--	--	-120.492424	46.569401	0	BC Operations Area
Bay_Chem_RI	N21E10.5	N21E10.5-1	11/8/95	1	--	--	--	--	--	1,200	--	--	--	-120.492283	46.569723	0	Flue Dust Area
Bay_Chem_RI	N21E10.5	N21E10.5-2	11/8/95	2	--	--	--	--	--	4,900	--	--	--	-120.492283	46.569723	0	Flue Dust Area
Bay_Chem_RI	N21E11.5	N21E11.5-0	5/20/94	0	160	<3.8	--	--	--	22,000	--	2.52	--	-120.491952	46.569813	0	Flue Dust Area
Bay_Chem_RI	N21E11.5	N21E11.5-W-1.5	10/25/94	1.5	100	<31	--	--	--	24,000	--	10.6	--	-120.491952	46.569813	0	Flue Dust Area
Bay_Chem_RI	N21E11.5	N21E11.5-W-3.5	10/25/94	3.5	<18	<28	--	--	--	2,300	--	1.19	--	-120.491952	46.569813	0	Flue Dust Area
Bay_Chem_RI	N21E12	N21E12-0	5/20/94	0	24	<4.3	150	150	480	8,700	3,800	5.1	52,000	-120.491778	46.569867	0	Flue Dust Area
Bay_Chem_RI	N22.5E11.5	N22.5E11.5 (0-0.5)	10/3/96	0	--	--	--	--	--	2,000	--	--	--	-120.49211	46.570211	0	Flue Dust Area
Bay_Chem_RI	N22.5E11.5	N22.5E11.5 (1.5-2)	10/3/96	1.5	--	--	--	--	--	2,000	--	--	--	-120.49211	46.570211	0	Flue Dust Area
Bay_Chem_RI	N22.5E11.5	N22.5E11.5 (3.5-4)	10/3/96	3.5	--	--	--	--	--	180	--	--	--	-120.49211	46.570211	0	Flue Dust Area
Bay_Chem_RI	N22.5E11.5	N22.5E11.5 (5.5-6)	10/3/96	5.5	--	--	--	--	--	23	--	--	--	-120.49211	46.570211	0	Flue Dust Area
Bay_Chem_RI	N22.5E10.5	N22.5E10.5	11/7/95	0	<49	<74	1,100	850	2,600	510,00J	5,100	<25	260,000B	-120.49249	46.570127	0	Flue Dust Area
Bay_Chem_RI	N22.5E10.5	N22.5E10.5-1	11/7/95	1	<48	<72	1,100	930	2,800	55,000J	23,000	<24	290,000B	-120.49249	46.570127	0	Flue Dust Area
Bay_Chem_RI	N22.5E10.5	N22.5E10.5-2	11/7/95	2	<45	<67	210	170	520	10,000J	4,900	<22	560,000B	-120.49249	46.570127	0	Flue Dust Area
Bay_Chem_RI	N22E10	N22E10-0	5/20/94	0	110	<4.2	1,100	870	2,400	28,000	27,000	0.42	260,000	-120.492568	46.569935	0	Flue Dust Area
Bay_Chem_RI	N22E10	N22E10E-1.5	10/25/94	1.5	60	<28	1,100	790	2,500	22,000	21,000	0.706	280,000	-120.492568	46.569935	0	Flue Dust Area
Bay_Chem_RI	N22E10	N22E10E-3	10/25/94	3	<21	<32	--	--	--	22,000	--	0.323	--	-120.492568	46.569935	0	Flue Dust Area
Bay_Chem_RI	N22E10	N22E10-E-5.5	10/25/94	5.5	<17	<24	11	21	160	270	540	0.171	2,000	-120.492568	46.569935	0	Flue Dust Area
Bay_Chem_RI	N22E10.5	N22E10.5-1	11/7/95	0	<47	<71	1,200	960	2,800	46,000J	24,000	<24	290,000B	-120.492421	46.569994	0	Flue Dust Area
Bay_Chem_RI	N22E11	N22E11-0	5/20/94	0	--	--	--	--	--	22,000	--	--	--	-120.492263	46.57003	0	Flue Dust Area
Bay_Chem_RI	N22E11.5	N22E11.5(0-0.5)	10/3/96	0	--	--	--	--	--	16,000	--	--	--	-120.492263	46.57003	0	Flue Dust Area
Bay_Chem_RI	N23E11.5	N23E11.5(1.5-2)	10/3/96	1.5	--	--	--	--	--	2,500	--	--	--	-120.492151	46.570352	0	Flue Dust Area
Bay_Chem_RI	N23E11.5	N23E11.5(3.5-4)	10/3/96	3.5	--	--	--	--	--	4,000	--	--	--	-120.492151	46.570352	0	Flue Dust Area
Bay_Chem_RI	N23.2E9.8	N23.2E9.8(0-0.5)	10/4/96	0	--	--	--	--	--	34	--	--	--	-120.49286	46.570218	0	Flue Dust Area
Bay_Chem_RI	N23.2E9.8	N23.2E9.8(1.5-2)	10/4/96	1.5	0.51	2.9	0.59	21	21	35	650	<0.01	100	-120.49286	46.570218	0	Flue Dust Area
Bay_Chem_RI	N23E11	N23E11(0.5) DUPLICATE	10/3/96	0	--	--	--	--	--	810	--	--	--	-120.49236	46.570297	0	Flue Dust Area
Bay_Chem_RI	N23E11	N23E11(1.5-2)	10/3/96	1.5	--	--	--	--	--	97	--	--	--	-120.49236	46.570297	0	Flue Dust Area
Bay_Chem_RI	N23E11	N23E11(3.5-4)	10/3/96	3.5	--	--	--	--	--	15	--	--	--	-120.49236	46.570297	0	Flue Dust Area
Bay_Chem_RI	N23E11	N23E11(5.5-6)	10/3/96	5.5	--	--	--	--	--	11	--	--	--	-120.49236	46.570297	0	Flue Dust Area
Bay_Chem_RI	N8.9E10.7	N8.9E10.7-0	11/11/96	0	--	--	--	--	--	260	--	--	--	-120.490658	46.566596	0	BC South
Bay_Chem_RI	N8.9E10.7	N9.75E10.3-0	11/11/96	0	--	--	--	--	--	7,000	--	--	--	-120.490658	46.566596	0	BC South
Bay_Chem_RI	S01	S01A	1/31/96	0	16J	<8	203	705	--	44,600	11,300	--	50,700	-120.490251	46.566824	0	BC South

**Table B-1
Yakima Steel Facility and Bay Chemical Site Metals Data
Agri-Tech and Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001**

Data Source ¹	Sample Location	Sample ID	Sample Date	Sample Depth (Feet bgs) ²	Analytical Results (micrograms per gram) ³									Longitude (Decimal Degrees)	Latitude (Decimal Degrees)	Sample Excluded ⁴	Zone Assigned in Ratio Analysis ⁵
					Antimony	Arsenic	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Zinc				
Bay_Chem_RI	S02	S02B	1/31/96	0	<4J	21	73.9	173	--	10,600	3,020	--	18,000	-120.490434	46.56668	0	BC South
Bay_Chem_RI	S02	S02A	1/31/96	0	<3J	<8	39.7	41.2	79.8	1,090	299	--	4,180	-120.490434	46.56668	0	BC South
Bay_Chem_RI	S02	S02B	1/31/96	0	<3J	10	0.39	13.8	28.4	23.2	191	--	520	-120.490434	46.56668	0	BC South
Bay_Chem_RI	S02	S02C	1/31/96	0	<4J	12	<0.3	14.8	28	14	583	--	8,304	-120.490434	46.56668	0	BC South
Bay_Chem_RI	S03	S03A	1/31/96	0	<3J	11	2	14.3	34.1	151	890	--	655	-120.490335	46.566366	0	BC South
Bay_Chem_RI	S03	S03B	1/31/96	0	<4J	11	0.3	14.8	26.9	9.3	410	--	74	-120.490335	46.566366	0	BC South
Bay_Chem_RI	S04	S04A	1/31/96	0	<3J	<8	0.53	12.3	23.7	48	749	--	126	-120.489147	46.566367	0	BC South
Bay_Chem_RI	S04	S04B	1/31/96	0	<3J	14	0.3	13.6	35.5	13	886	--	107	-120.489147	46.566367	0	BC South
Bay_Chem_RI	S05	S05A	1/31/96	0	<3J	12	6.88	23.9	--	1,060	--	--	1,670	-120.489905	46.566653	0	BC South
Bay_Chem_RI	S06	S06A	1/31/96	0	5.5J	<8	2.35	651	--	42,700	--	--	51,800	-120.489892	46.566827	0	BC South
Bay_Chem_RI	1026-1	SED1026-1	10/26/94	0	45	<20	220	630	1,400	19,000	9,800	9.94	47,000	-120.489687	46.566868	0	Sludge Sediment
Bay_Chem_RI	1026-2	SED1026-2	10/26/94	0	<32	<48	150	540	1,200	25,000	6,800	10	36,000	-120.489886	46.566865	0	Sludge Sediment
Bay_Chem_RI	1026-3	SED1026-3	10/26/94	0	<33	<50	290	1,100	2,700	65,000	18,000	27.3	73,000	-120.490118	46.566867	0	Sludge Sediment
Bay_Chem_RI	1026-4	SED1026-4	10/26/94	0	<140	<220	340	1,300	3,000	34,000	22,000	36	81,000	-120.490361	46.566878	0	Sludge Sediment
Bay_Chem_RI	1026-5	SED1026-5A	10/26/94	0	310	100	410	1,500	3,800	46,000	27,000	32.7	100,000	-120.49071	46.566869	0	Sludge Sediment
Bay_Chem_RI	1026-5	SED1026-5B	10/26/94	0	290	100	410	1,500	3,400	40,000	26,000	21.9	97,000	-120.49071	46.566869	0	Sludge Sediment
Bay_Chem_RI	1026-6	SED1026-6	10/26/94	0	170	<17	300	1,200	2,700	25,000	21,000	16.7	71,000	-120.491036	46.566894	0	Sludge Sediment
Farallon_Sup_RI	A-TP1	A-TP1-052711-5.0	5/27/11	5	<2.9	<2.9	<0.49	--	24	6.3	170	0.035	830	-120.4908	46.568129	0	YSF West
Farallon_Sup_RI	A-TP2	A-TP2-052711-5.0	5/27/11	5	<3.1	<3.1	<0.51	--	23	5.9	310	0.26	54	-120.4906	46.568145	0	YSF West
Farallon_Sup_RI	B-TP2	B-TP2-052611-5.5	5/26/11	5.5	<2.9	<2.9	<0.48	--	24	4.6	210	0.052	56	-120.490493	46.56789	0	YSF Southwest
Farallon_Sup_RI	B-TP3	B-TP3-052611-5.5	5/26/11	5.5	<2.7	<2.7	<0.45	--	20	13	330	0.053	69	-120.490403	46.567836	0	YSF Southwest
Farallon_Sup_RI	C-TP1	C-TP1-052611-5.0	5/26/11	5	<3.5	<3.5	<0.58	--	29	5.8	280	0.088	69	-120.490355	46.567665	0	YSF Southwest
Farallon_Sup_RI	C-TP2	C-TP2-052611-8.0	5/26/11	8	<2.9	<2.9	0.95	--	25	41	240	0.09	610	-120.490554	46.567641	0	YSF Southwest
Farallon_Sup_RI	C-TP3	C-TP3-052611-4.5	5/26/11	4.5	<3.1	<3.1	<0.51	--	23	5.2	340	0.05	58	-120.49044	46.567775	0	YSF Southwest
Farallon_Sup_RI	D-TP1	D-TP1-052511-4.5	5/25/11	4.5	<3.5	<3.5	<0.59L	--	27	20	370	0.1	340	-120.490427	46.567313	0	YSF Southwest
Farallon_Sup_RI	D-TP2	D-TP2-052511-5.5	5/25/11	5.5	<5.3	<5.3	88	--	74	1000	410	0.43	7,000	-120.490339	46.56748	0	YSF Southwest
Farallon_Sup_RI	D-TP3	D-TP3-052611-4.5	5/26/11	4.5	<2.9	<2.9	<0.49	--	24	13	330	0.041	260	-120.490246	46.567422	0	YSF Southwest
Farallon_Sup_RI	E-TP1	E-TP1-052511-4.5	5/25/11	4.5	<2.5L	<2.5	8.8	--	19	27	570	0.041	2,200	-120.49029	46.566988	0	YSF Southwest
Farallon_Sup_RI	E-TP2	E-TP2-052511-3.0	5/25/11	3	<2.7L	<2.7	6.2	--	28	100	480	0.087	2,400	-120.490367	46.56721	0	YSF Southwest
Farallon_Sup_RI	G-TP1	G-TP1-052511-0.0-0.5	5/25/11	0.5	<2.8L	8.6	1.3	--	19	27	540	0.19	61	-120.489899	46.567526	0	YSF East
Farallon_Sup_RI	G-TP1	G-TP1-052511-2.0-2.5	5/25/11	2.5	<3.3L	7.6	1.6	--	25	44	550	2.4	150	-120.489899	46.567526	0	YSF East
Farallon_Sup_RI	G-TP2	G-TP2-052511-0.0-0.5	5/25/11	0.5	<3.7	5.2	1.3	--	25	31	510	0.07	80	-120.490164	46.567533	0	YSF Central
Farallon_Sup_RI	G-TP3	G-TP3-052511-0.0-0.5	5/25/11	0.5	<3.3L	4.4	1.7	--	28	30	530	0.055	100	-120.490078	46.567437	0	YSF Central
Farallon_Sup_RI	G-TP3	G-TP3-052511-2.0-2.5	5/25/11	2.5	<3.3	3.9	1.2	--	23	150	240	0.48	450	-120.490078	46.567437	0	YSF Central
Farallon_Sup_RI	H-TP1	H-TP1-052611-0.0-0.5	5/26/11	0.5	3.3	<2.7	1	--	360	72	440	0.048	270	-120.490058	46.567751	0	YSF Central
Farallon_Sup_RI	H-TP2	H-TP1-052611-3.5-4.0	5/26/11	4	<2.8	7.1	<0.46	--	23	36	420	0.086	82	-120.490242	46.567755	0	YSF Central
Farallon_Sup_RI	H-TP2	H-TP2-052611-1.0-1.5	5/26/11	1.5	<2.7	4.1	1.1	--	39	110	460	0.13	350	-120.490242	46.567755	0	YSF Central
Farallon_Sup_RI	H-TP3	H-TP2-052611-2.0-2.5	5/26/11	2.5	<3.3	<3.3	<0.55	--	24	84	530	0.19	200	-120.490121	46.567608	0	YSF Central
Farallon_Sup_RI	H-TP3	H-TP3-052611-0.0-0.5	5/26/11	0.5	<2.5	4.3	0.76	--	25	42	400	0.054	150	-120.490121	46.567608	0	YSF Central
Farallon_Sup_RI	H-TP3	H-TP3-052611-3.5-4.0	5/26/11	4	<2.8	<2.8	1.1	--	100	170	360	0.053	210	-120.490121	46.567608	0	YSF Central
Farallon_Sup_RI	I-TP3	I-TP3-052411-0.0-0.5	5/24/11	0.5	<2.1	<2.9	<0.49	--	41	67	560	0.14	210	-120.490283	46.568058	0	YSF Central
Farallon_Sup_RI	I-TP3	I-TP3-052411-1.5	5/24/11	1.5	3.6	8.2	<0.51	--	53	370	380	0.4	570	-120.490283	46.568058	0	YSF Central
Farallon_Sup_RI	I-TP3	I-TP3-052411-3.0	5/24/11	3	3.2	<3	0.82	--	160	730	390	0.38	870	-120.490283	46.568058	0	YSF Central
Farallon_Sup_RI	J-TP1	J-TP1-052411-0.0-0.5	5/24/11	0.5	2.9	<2.9	<0.48	--	57	50	380	0.25	190	-120.49027	46.568264	0	YSF Central
Farallon_Sup_RI	J-TP2	J-TP2-052411-0.0-0.5	5/24/11	0.5	7.1	<3.1	1.4	--	74	410	520	0.38	790	-120.49032	46.568199	0	YSF Central
Farallon_Sup_RI	J-TP3	J-TP3-052511-1.5-2.0	5/25/11	2	<2.8	8.5	0.48	--	29	600	300	0.17	480	-120.490406	46.56836	0	YSF Central
Farallon_Sup_RI	M-TP1	M-TP1-052511-0.0-0.5	5/25/11	0.5	<3.1	6.2	2.8	--	1,300	130	550	0.07	120	-120.489933	46.56779	0	YSF East
Farallon_Sup_RI	M-TP1	M-TP1-052511-3.0-3.5	5/25/11	3.5	<3.7	4.4	<0.62L	--	23	13	430	0.095	37	-120.489933	46.56779	0	YSF East
Farallon_Sup_RI	M-TP2	M-TP2-052511-0.0-0.5	5/25/11	0.5	<3	5.3	--	--	67	160	420	0.26	490	-120.489846	46.56788	0	YSF East
Farallon_Sup_RI	N-TP1	N-TP1-052411-0.0-0.5	5/24/11	0.5	<3.3	4.9	<0.54L	--	25	40	500	0.096	97	-120.489733	46.567534	0	YSF East
ECY_EPI_Sampling	Pit A		7/9/07	2	--	11.9	5.38	79.8	--	439	569	--	1,710	-120.489733	46.567534	0	YSF West
ECY_EPI_Sampling	Pit B		7/9/07	0.5	--	13	4.22	136	--	290	524	--	1,200	-120.489733	46.567534	0	YSF Southwest
ECY_EPI_Sampling	Pit C		7/9/07	0.5	--	13	7.6	944	--	674	645	--	2,200	-120.489733	46.567534	0	YSF Southwest
ECY_EPI_Sampling	Pit D		7/9/07	2	--	55	330	1,820	--	22,500	12,500	--	123,000	-120.489733	46.567534	0	YSF Southwest
ECY_EPI_Sampling	Pit E		7/9/07	0	--	2.9	15.3	57.9	--	762	515J	--	3,100	-120.489733	46.567534	0	YSF Southwest
ECY_EPI_Sampling	Pit K		7/9/07	2	--	12.5	1.1	62	--	409	369	--	465	-120.489733	46.567534	0	YSF Central

**Table B-1
Yakima Steel Facility and Bay Chemical Site Metals Data
Agri-Tech and Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001**

Data Source ¹	Sample Location	Sample ID	Sample Date	Sample Depth (Feet bgs) ²	Analytical Results (micrograms per gram) ³									Longitude (Decimal Degrees)	Latitude (Decimal Degrees)	Sample Excluded ⁴	Zone Assigned in Ratio Analysis ⁵
					Antimony	Arsenic	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Zinc				
ECY_EPI_Sampling	Pit L		7/9/07	1	--	6.17	0.67	30.4	--	212	336	--	369	-120.489733	46.567534	0	YSF Central
ECY_EPI_Sampling	Pit M		7/9/07	0	--	8.12	4.3	5,560	--	433	2,270	--	995	-120.489733	46.567534	0	YSF Central
ECY_EPI_Sampling	Pit N		7/9/07	0	--	1.5	<0.1	77.4J	--	5.67	160	--	69	-120.489733	46.567534	0	YSF Southwest
ECY_EPI_Sampling	TP-2		7/9/07	1.25	<3	<5	6.9	51	16	630	--	0.26	2,100	-120.490625	46.567993	0	YSF Southwest
ECY_EPI_Sampling	TP-3		7/9/07	2.25	<3	<5	2	35	6.7	300	--	0.09	150	-120.490358	46.567659	0	YSF Southwest
ECY_EPI_Sampling	TP-4		7/9/07	2	65	<5	310	2,000	490	27,000	--	14	140,000	-120.490478	46.567328	0	YSF Southwest
ECY_EPI_Sampling	TP-8		7/9/07	1	<3	<5	2.9	82	15	2,800	--	0.09	1,700	-120.489951	46.567728	0	YSF East
ECY_EPI_Sampling	TP-11		7/9/07	1	<3	<5	1.3	22	15	170	--	0.23	310	-120.48994	46.568041	0	YSF East
ECY_EPI_Sampling	TP-13		7/9/07	0	<3	<5	1.2	21	8.6	31	--	0.04	99	-120.489709	46.567547	0	YSF East
Farallon_Sup_RI	E-WETSOIL-1	E-wetsoil-052611-0.0-0.5	5/26/11	0.5	<5.1	<5.1	3.7	--	39	110	190	0.14	1,700	-120.490058	46.567036	0	YSF Southwest
Farallon_Sup_RI	E-WETSOIL-1	E-wetsoil-052611-0.5-1.0	5/26/11	1	<2.4	<2.4	<0.4	--	17	4.2	160	0.043	310	-120.490058	46.567036	0	YSF Southwest
Farallon_Sup_RI	E-WETSOIL-2	E-wetsoil-2-052611-0.5-1.0	5/26/11	1	<3.4	<3.4	1.6	--	19	19	250	0.071	670	-120.490198	46.56707	0	YSF Southwest
Farallon_Sup_RI	E-WETSOIL-2	E-wetsoil-2-052611-1.0-2.0	5/26/11	2	<3	<3	1.8	--	20	4.4	270	0.059	870	-120.490198	46.56707	0	YSF Southwest
Farallon_Sup_RI	E-WETSED-1	E-wetsed-1-053111	5/23/11	0.5	<5.8	<5.8	9.2	--	36	190	210	--	2,700	-120.490271	46.567233	0	YSF Southwest
Farallon_Sup_RI	E-WETSED-2	E-wetsed-2-053111	5/23/11	0.5	<6.9	7.6	6.8	--	41	150	220	--	2,800	-120.490116	46.567259	0	YSF Southwest
Farallon_Sup_RI	E-WETSED-3	E-wetsed-3-053111	5/23/11	0.5	<6.1	8.5	7.8	--	52	180	270	--	2,700	-120.490103	46.567126	0	YSF Southwest
Farallon_Sup_RI	G-WETSOIL	G-wetsoil-052611-0.0-0.5	5/26/11	0.5	<2.4	<2.4	<0.4	--	16	3.5	210	0.044	41	-120.490078	46.567437	0	YSF Southwest
Farallon_Sup_RI	G-WETSOIL	G-wetsoil-052611-1.0-2.0	5/26/11	2	<4.2	<4.2	1.5	--	40	80	470	0.14	510	-120.490078	46.567437	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YSF7B4	BC-082907-YSF-7B4	8/29/07	0	--	6.81	2.19	19.4	37.3	187	642	0.134	--	-120.4911566	46.56907284	0	YSF Northwest
YSF_Soil_Data_EIM	CD1906-YSFE800	BC-083007-YSF-E800	8/30/07	0	--	1.43	1.16	88.31	<19	110	500	5.44	--	-120.491161	46.5688865	0	YSF West
YSF_Soil_Data_EIM	CD1906-YSFE850	BC-083007-YSF-E850	8/30/07	0	--	6.26	2.26	165.62	43.1	167	420	0.175	--	-120.4911047	46.56875857	0	YSF West
YSF_Soil_Data_EIM	CD1906-YSFE900	BC-083007-YSF-E900	8/30/07	0	--	5.39	<17	78.52	40.94	172.07	438.53	<0.113	--	-120.4910484	46.56863173	0	YSF West
YSF_Soil_Data_EIM	CD1906-YSFE950	BC-083007-YSF-E950	8/30/07	0	--	3.57	<17	24.1	48.04	16.31	669.06	10.2	--	-120.4909803	46.56850162	0	YSF West
YSF_Soil_Data_EIM	CD1906-CP6A2	BC-091407-CP-6A2	9/14/07	0	--	8.37	<17	15	25	90.2	749	0.114	--	-120.491388	46.56935943	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CP6B3	BC-091407-CP-6B3	9/14/07	0	--	6.79	<5.44	104.95	13.7	11.2	1,317	<5	--	-120.4911987	46.56934918	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CPE650	BC-091407-CP-E650	9/14/07	0	--	<6	<6	42.2	77.9	1,169	417	0.819	--	-120.4910573	46.56935858	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CPE6A4	BC-091407-CP-E6A4	9/14/07	0	--	<5.4	<5.4	8.7	11.6	7.13	252	<5	--	-120.4910896	46.56936376	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CPN100	BC-091407-CP-N100	9/14/07	0	--	<5.14	<5.14	12.4	30.9	175	145	<5	--	-120.4911357	46.56939988	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CPN50	BC-091407-CP-N50	9/14/07	0	--	<5.38	<5.38	13.2	25	172.73	662	5.18	--	-120.4913308	46.56940224	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CPN75	BC-091407-CP-N75	9/14/07	0	--	<5.34	<17	18.8	31.23	231.71	444.23	5.38	--	-120.4912208	46.56939852	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CP5A1	BC-092107-CP-5A1	9/21/07	0	--	<5.36	<5.36	17.8	23.9	42.5	635	<5	--	-120.4915993	46.56959261	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CP5B1	BC-092107-CP-5B1	9/21/07	0	--	<6	<17	104.72	23.1	11.57	510.51	<5	--	-120.491421	46.5696315	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CP5D2	BC-092107-CP-5D2	9/21/07	0	--	<5.44	<5.44	14.8	31.61	<5.44	289	6.92	--	-120.4914535	46.56948485	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CP4B4	BC-092407-CP-4B4	9/24/07	0	--	<5.18	<5.18	15.8	<19	95.78	408	7.18	--	-120.4915052	46.56979152	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CP4C4	BC-092407-CP-4C4	9/24/07	0	--	<6	<17	15	25.8	123	448	0.286	--	-120.4914457	46.56970002	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-YSF7EB2	BC-092407-YSF-7EB2	9/24/07	0	--	<5.66	<17	61.94	20.92	75.92	738.56	0.156	--	-120.4909826	46.56919286	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CPE500	BC-092507-CP-E500	9/25/07	0	--	5.17	<5.02	20	<19	129	502	<0.0972	--	-120.4913777	46.56968257	0	YSF Northwest
YSF_Soil_Data_EIM	CD1906-CPN430	BC-092507-CP-N430	9/25/07	0	--	<5.24	<17	<55	<19	16.87	867.44	<5	--	-120.4915706	46.56981706	0	YSF Northwest
YSF_Soil_Data_EIM	CD1906-YSFE750	BC-092507-YSF-E750	9/25/07	0	--	<5.35	<5.35	15.9	12.5	21.8	430	<5	--	-120.491209	46.56901565	1	YSF West
YSF_Soil_Data_EIM	CD1906-YSE1425W	BC-092707-YS-E1425W	9/27/07	0	--	8.8	<4.81	97.16	29.2	74.4	431	<5	--	-120.4903222	46.56736712	1	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YSF758	BC-092807-YSF-S758	9/28/07	0	--	<6	<5.74	13.8	16.9	27.8	411	<5	--	-120.4910072	46.5691057	1	YSF Northwest
YSF_Soil_Data_EIM	CD1906-YS12WA1	BC-080307-YS-12W-A1	8/3/07	4	--	2.56	5.47	17	28.3	47.9	610	<0.112	--	-120.4907591	46.56782687	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YS12WC1	BC-080307-YS-12W-C1	8/3/07	4	--	2.64	<0.433	<55	<19	7.23	231	<0.118	--	-120.490527	46.56774259	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YS12WD1	BC-080307-YS-12W-D1	8/3/07	4	--	2.18	1.06	17.1	37.31	4.63	318	<0.114	--	-120.4906947	46.56770893	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YS13WD4	BC-080307-YS-13W-D4	8/3/07	4	--	1.65	0.733	18.3	30.8	11.6	382	<5	--	-120.4905443	46.5673754	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YS14WA4	BC-080307-YS-14W-A4	8/3/07	4	--	9.17	4.66	14.9	24.92	151	603	0.123	--	-120.490473	46.56724873	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YS14WD4	BC-080307-YS-14W-D4	8/3/07	4	--	2.85	1.72	78.04	<19	97.78	451	6.26	--	-120.4904157	46.56712926	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YS15WA4	BC-080307-YS-15W-A4	8/3/07	4	--	2.54	1.57	<55	26.6	88.07	334	<0.102	--	-120.4903602	46.56701448	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YS15WD4	BC-080307-YS-15W-D4	8/3/07	4	--	2.56	<17	17	21.8	30.9	449	11.23	--	-120.490339	46.5669706	0	YSF Southwest
YSF_Soil_Data_EIM	CD1906-YSF6C4	BC-082907-YSF-6C4	8/29/07	4	--	2.45	<17	108.93	<19	119.54	780.52	6.89	--	-120.4912205	46.56919869	0	YSF Northwest
YSF_Soil_Data_EIM	CD1906-YSF6D4	BC-082907-YSF-6D4	8/29/07	4	--	<6	<17	72.26	<19	22.6	820.4	<5	--	-120.491404	46.56916118	0	YSF Northwest
YSF_Soil_Data_EIM	CD1906-YSF7A2	BC-082907-YSF-7A2	8/29/07	4	--	19.88	1.84	15.9	28.1	146	670.53	0.0969	--	-120.4912637	46.56911166	0	YSF Northwest
YSF_Soil_Data_EIM	CD1906-YSF8A3	BC-083007-YSF-8A3	8/30/07	4	--	22.46	<4.84	16.9	28.2	73.7	884.31	10.43	--	-120.4911419	46.56878699	0	YSF West
YSF_Soil_Data_EIM	CD1906-YSF8D3	BC-083007-YSF-8D3	8/30/07	4	--	13.98	<17	127.04	<19	91.03	712	<5	--	-120.4910918	46.56866317	0	YSF West
YSF_Soil_Data_EIM	CD1906-YSF10B1	BC-090507-YSF-10B1	9/5/07	4	--	<5.57	<5.57	15.2	28.3	8.58	443	6.22	--	-120.4908464	46.56838123	1	YSF West
YSF_Soil_Data_EIM	CD1906-YSF10C4	BC-090507-YSF-10C4	9/5/07	4	--	<6	<6.17	13.3	26.5	14.4	312	<5	--	-120.4907552	46.56816853	1	YSF West
YSF_Soil_Data_EIM	CD1906-YSF11A2	BC-090507-YSF-11A2	9/5/07	4	--	7.82	<6.36	11.7	20.9	11.7	266	<0.139	--	-120.4908115	46.56809212	1	YSF West

**Table B-1
Yakima Steel Facility and Bay Chemical Site Metals Data
Agri-Tech and Yakima Steel Fabricators
Yakima, Washington
Farallon PN: 765-001**

Data Source ¹	Sample Location	Sample ID	Sample Date	Sample Depth (Feet bgs) ²	Analytical Results (micrograms per gram) ³									Longitude (Decimal Degrees)	Latitude (Decimal Degrees)	Sample Excluded ⁴	Zone Assigned in Ratio Analysis ⁵
					Antimony	Arsenic	Cadmium	Chromium	Copper	Lead	Manganese	Mercury	Zinc				
BC_Soil_Data_EIM	CD1906-14EB3	BC-041207-14E-B3	4/12/07	4	--	<5.03	<11.5	13.7	21.4	19.87	1,320	<0.0957	--	-120.4905909	46.56723603	0	Settling Pond
BC_Soil_Data_EIM	CD1906-14EC2	BC-041207-14E-C2	4/12/07	4	--	<4.62	15.7	14.2	31.63	48.2	578	<0.102	--	-120.4907785	46.56704312	0	Settling Pond
BC_Soil_Data_EIM	CD1906-14ED4	BC-041207-14E-D4	4/12/07	4	--	4.89	<11.5	73	19.4	26.7	705	7.49	--	-120.4905616	46.56717153	0	Settling Pond
BC_Soil_Data_EIM	CD1906-14WB3	BC-041307-14W-B3	4/13/07	4	--	4.02	6.21	17.9	18.7	23.7	1,170	<3.7	--	-120.4909313	46.56715819	0	Settling Pond
BC_Soil_Data_EIM	CD1906-14WC4	BC-041307-14W-C4	4/13/07	4	--	<3.7	<5.21	15.6	16.9	133	788	<0.114	--	-120.4909269	46.5670047	0	BC Operations Area

NOTES:

-- denotes sample not analyzed.

< denotes analyte not detected at or exceeding the laboratory reporting limit listed.

B denotes blank contamination.

L denotes a negative instrument reading with an absolute value exceeding the reporting limit.

J denotes the associated value is an estimated quantity.

<J denotes the material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.

¹Data transcribed from the following sources:

Bay_Chem_RI = Table 6, *Bay Chemical Site RI Soil Data Used for Analysis*, provided in the *Former Bay Chemical Site Remedial Investigation Report, Volume 1* dated March 1997, prepared by ERC/Pacific Groundwater Group.

ECY_EPI_Sampling = Results of soil sampling conducted by the Washington State Department of Ecology and Environmental Partners Inc of Issaquah, Washington in 2007.

Farallon_Sup_RI = Results of soil sampling conducted by Farallon in 2011.

BC_Soil_Data_EIM = Sampling results provided in *Completion and Compliance Monitoring Report, Bay Chemical Site, Yakima, Washington* dated November 17, 2009, prepared by Farallon.

YSF_Soil_Data_EIM = Sampling results provided in *Completion and Compliance Monitoring Report, Bay Chemical Site, Yakima, Washington* dated November 17, 2009, prepared by Farallon.

²Depth in feet below ground surface (bgs).

³Analyzed by U.S. Environmental Protection Agency Methods 6000/6010/7000 Series.

⁴Excluded samples include those located within the remediation footprint collected after September 1, 2007.

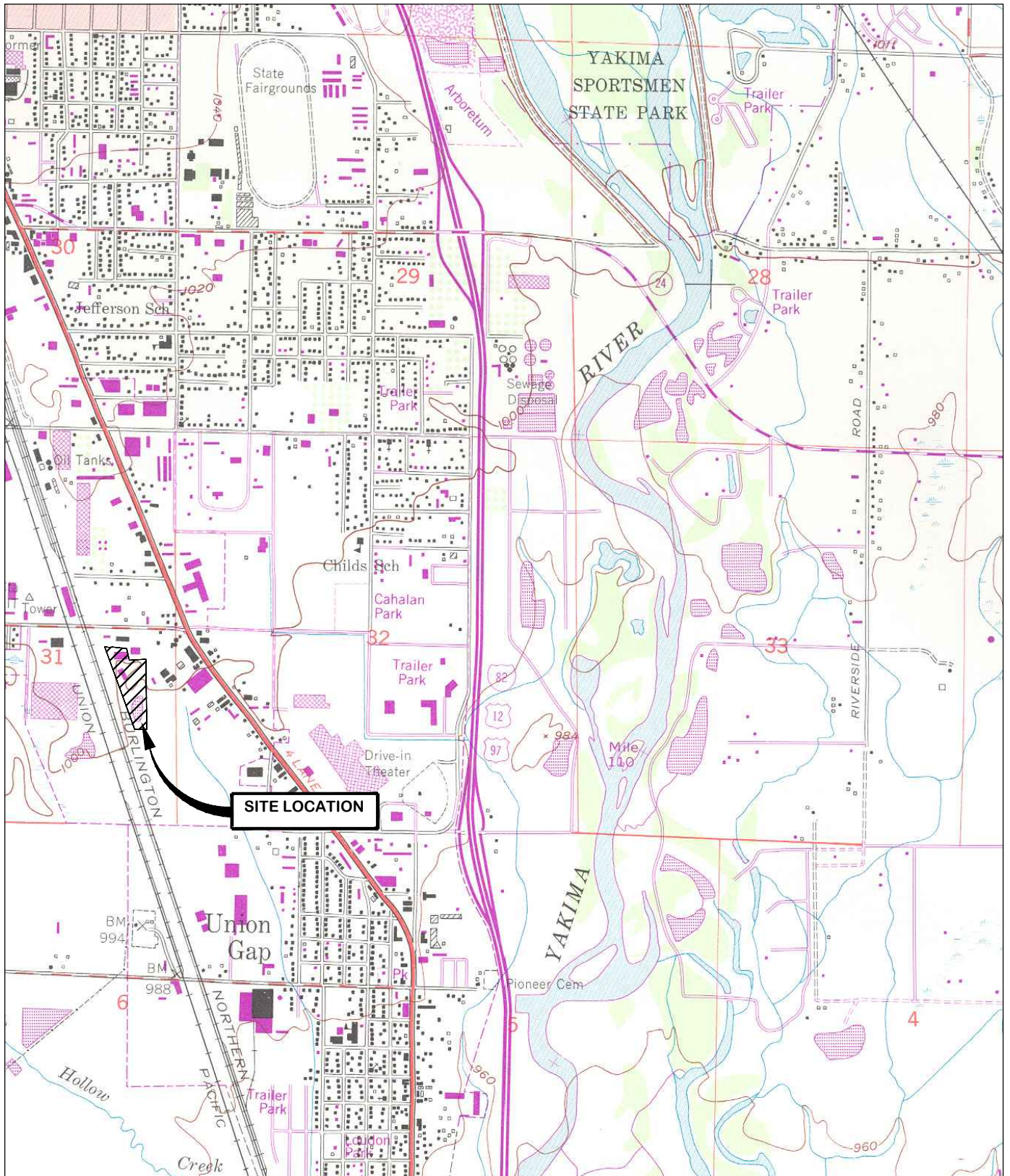
⁵Zones are used to group points plotted in ratio analysis shown in Figures 6 and 7.

**ATTACHMENT D
WETLAND EVALUATION TM FIGURES AND TABLES**

CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM

Agri-Tech and Yakima Steel Fabricators Site
Yakima Steel Fabricators
Yakima, Washington

Farallon PN: 765-001



REFERENCE: 7.5 MINUTE USGS QUADRANGLE YAKIMA SOUTH, WASHINGTON. DATED 1953 AND PHOTOREVISED 1981



WASHINGTON




Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 1

SITE VICINITY MAP
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001





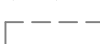
Drawn By: DEW

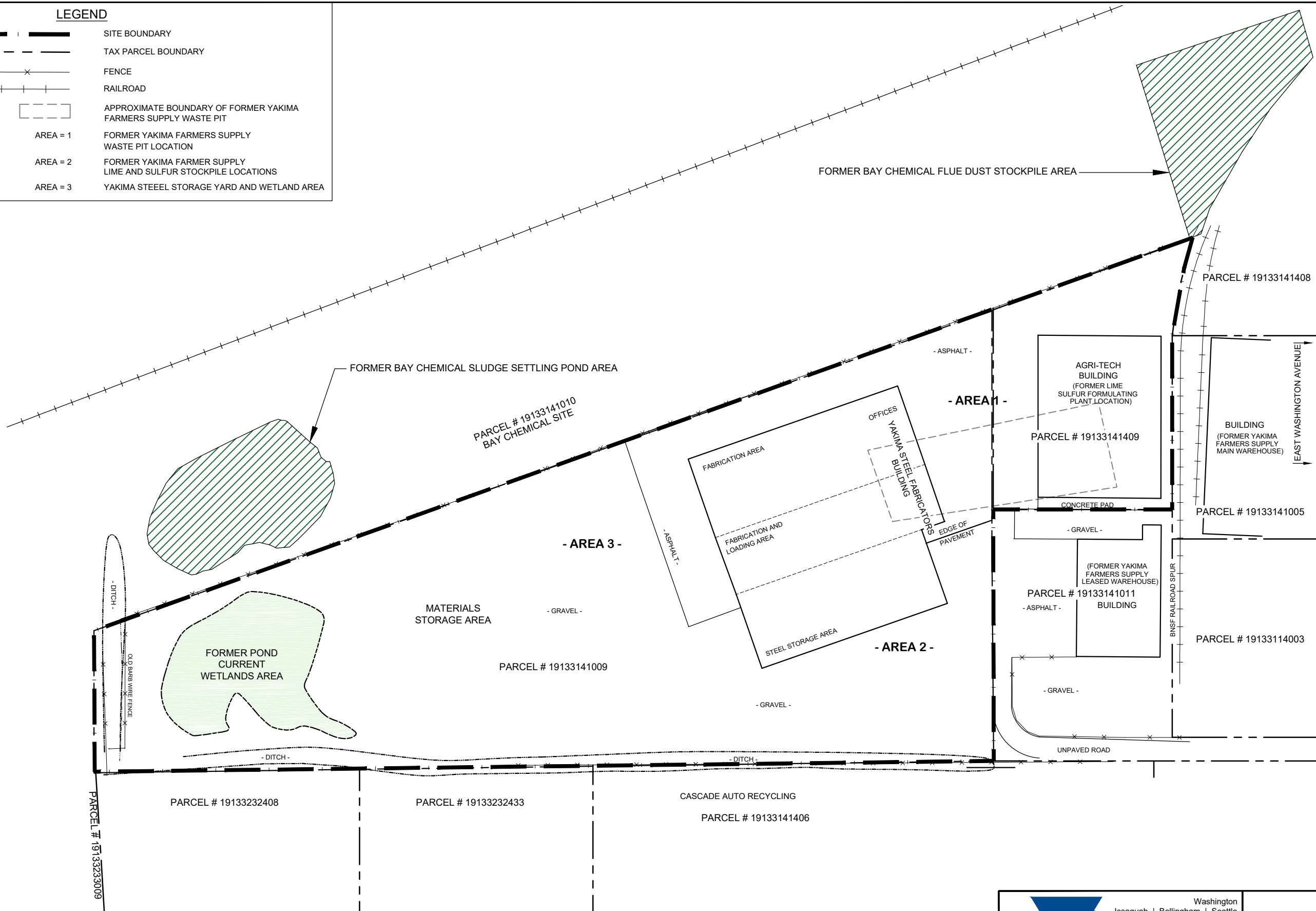
Checked By: HC

Date: 1/25/2016

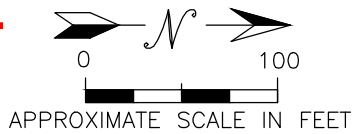
Disk Reference: 765001a

LEGEND

-  SITE BOUNDARY
-  TAX PARCEL BOUNDARY
-  FENCE
-  RAILROAD
-  APPROXIMATE BOUNDARY OF FORMER YAKIMA FARMERS SUPPLY WASTE PIT
- AREA = 1 FORMER YAKIMA FARMERS SUPPLY WASTE PIT LOCATION
- AREA = 2 FORMER YAKIMA FARMER SUPPLY LIME AND SULFUR STOCKPILE LOCATIONS
- AREA = 3 YAKIMA STEEL STORAGE YARD AND WETLAND AREA



DRAFT




Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

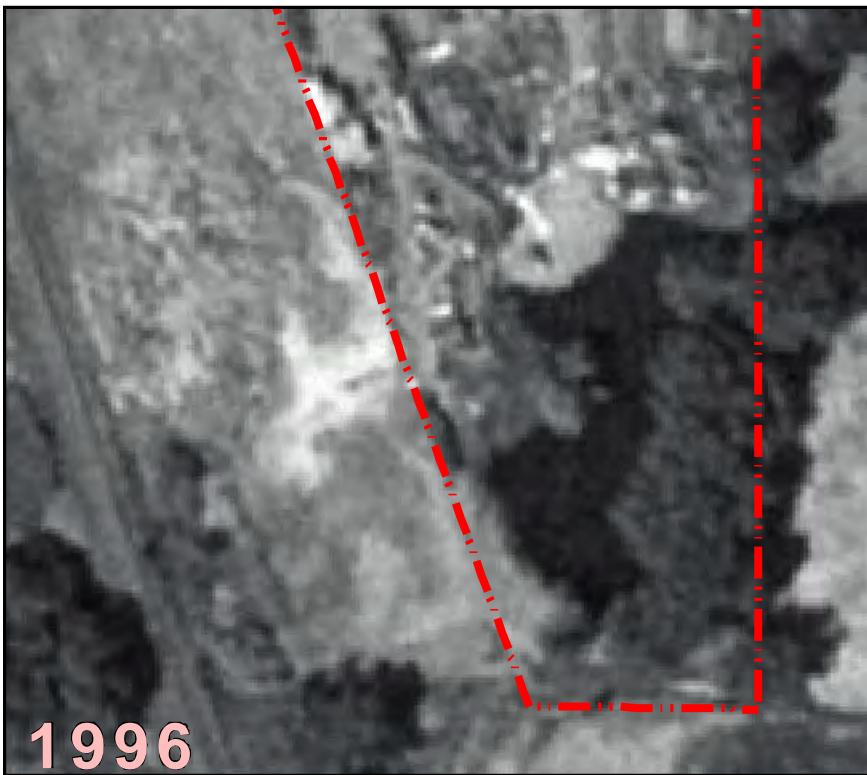
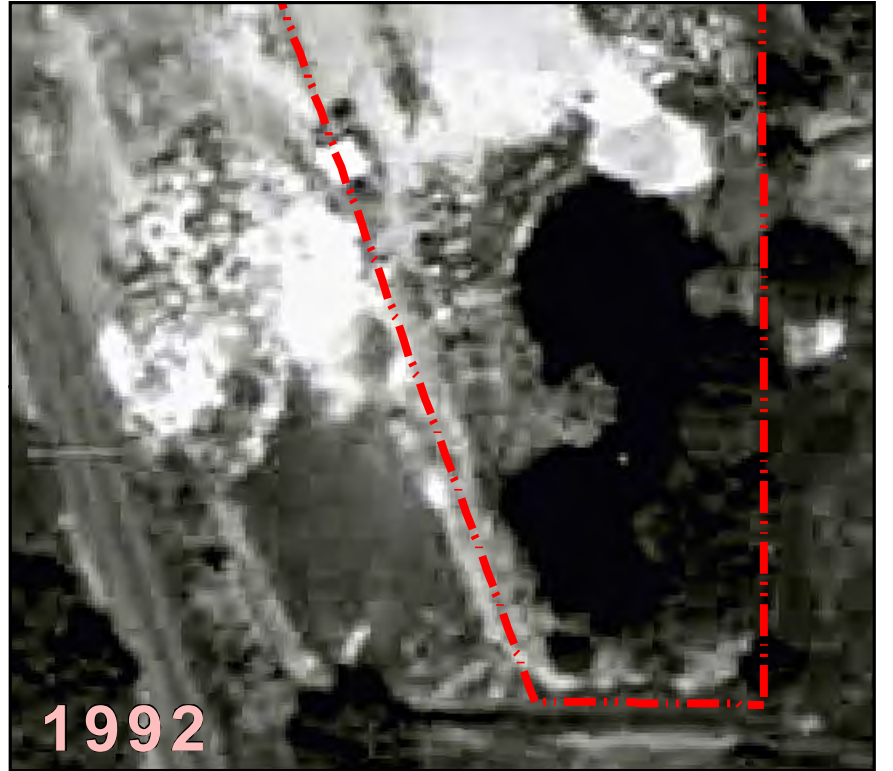
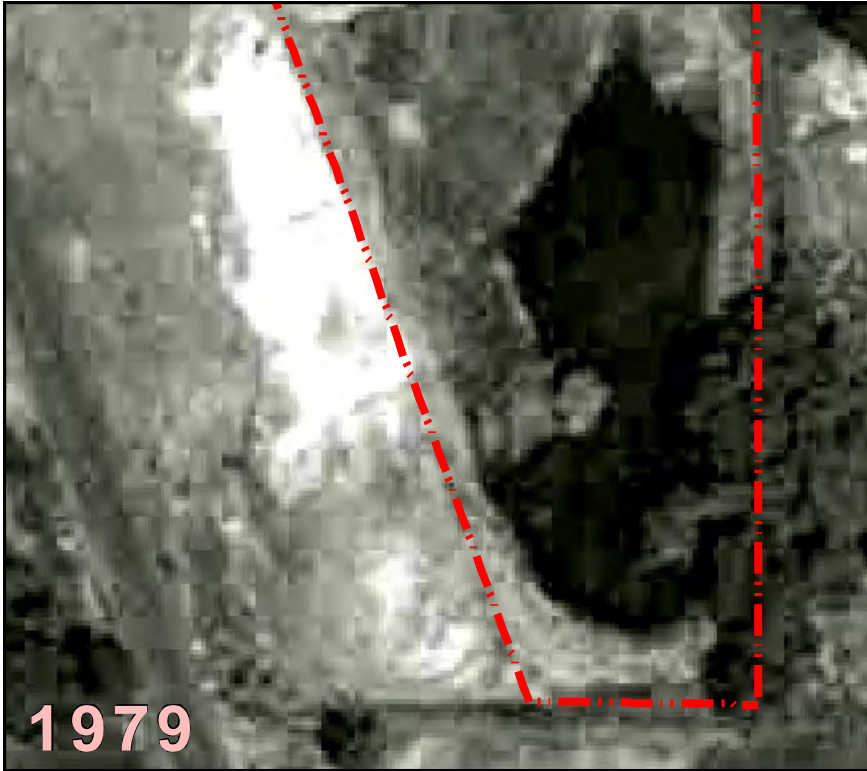
California
Oakland | Sacramento | Irvine

FARALLON
CONSULTING


Quality Service for Environmental Solutions | farallonconsulting.com

FIGURE 2
SITE PLAN AND TAX PARCEL LOCATIONS
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001



LEGEND

 SITE BOUNDARY

0 100
SCALE IN FEET




FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FIGURE 3
HISTORICAL WETLAND EXTENT
YSF/AGRI-TECH SITE
6 & 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 765-001

Drawn By: ebuer

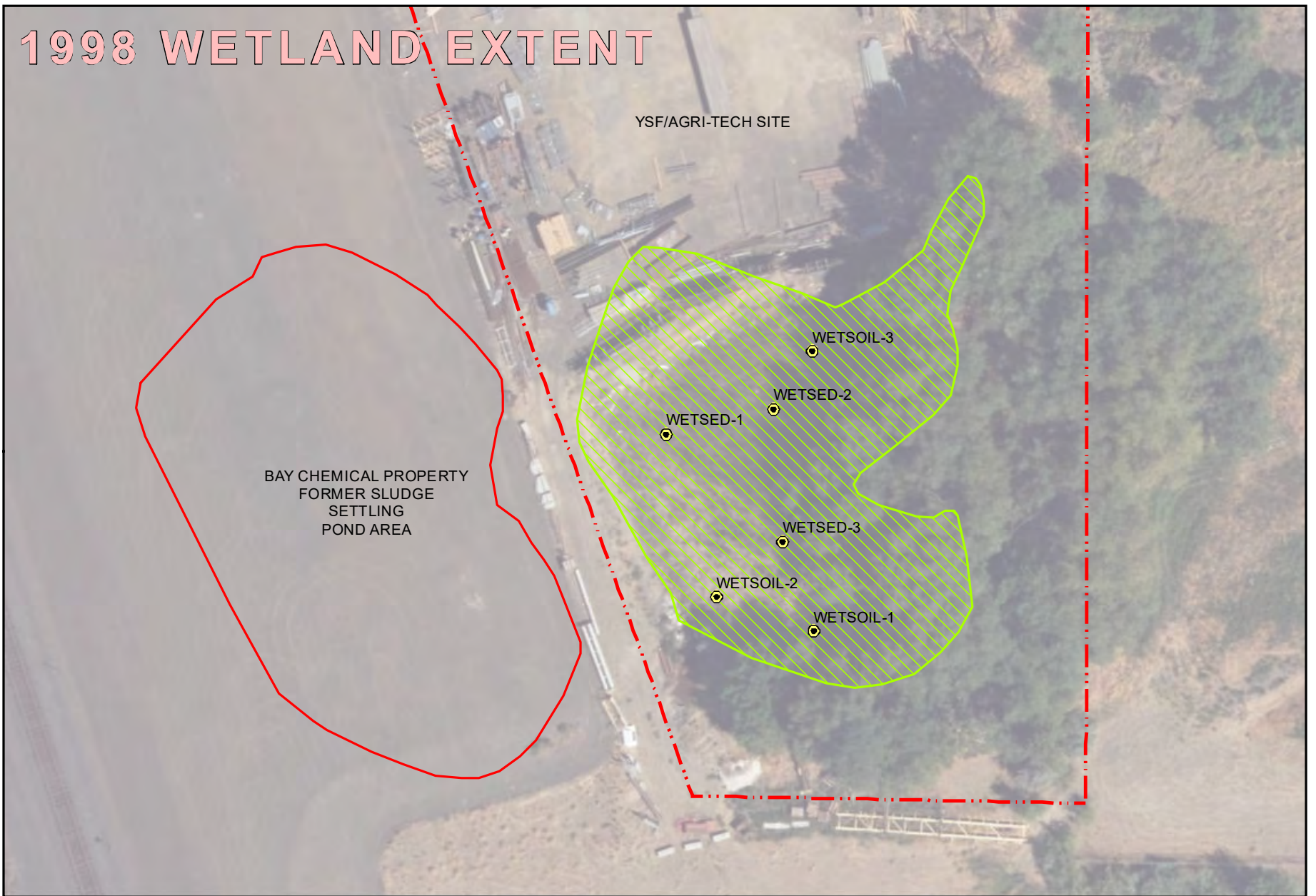
Checked By: JC

Date: 1/31/2017

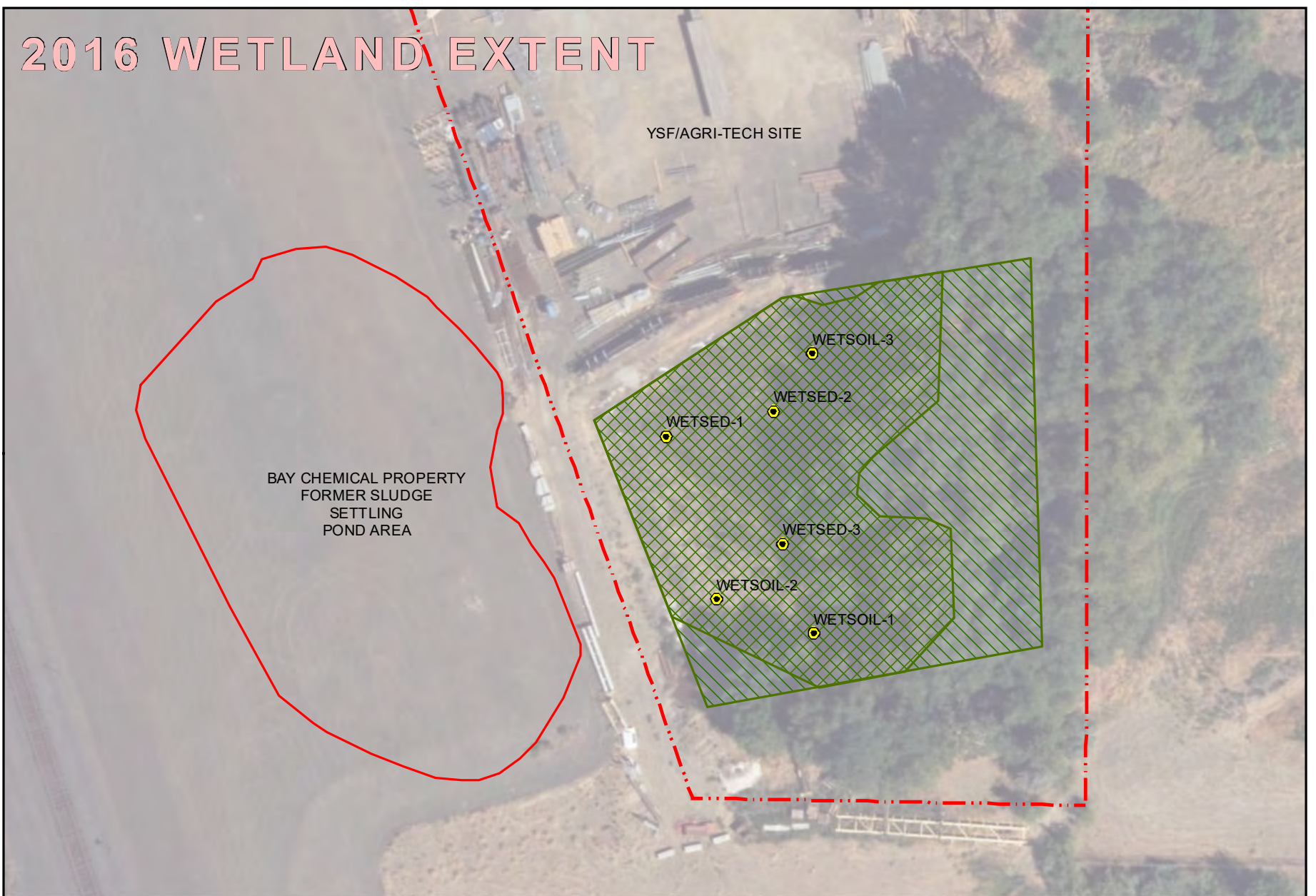
Disc Reference:

Document Path: G:\Projects\765001 Yakima Steel Fab\GISMapfiles\Wetland\Wetland_TimeLapse.mxd






1998 WETLAND EXTENT



2016 WETLAND EXTENT



LEGEND

-  SAMPLE LOCATION
-  FORMER SLUDGE SETTLING POND AREA
-  YSF/AGRI-TECH SITE
-  1998 WETLAND EXTENT
-  2016 EMERGENT WETLAND
-  2016 WETLAND EXTENT




FARALLON
CONSULTING

Quality Service for Environmental Solutions | farallonconsulting.com

Washington
Issaquah | Bellingham | Seattle

Oregon
Portland | Bend | Baker City

California
Oakland | Sacramento | Irvine

FIGURE 4
WETLAND BOUNDARIES
YSF/AGRI-TECH SITE
6 AND 10 1/2 EAST WASHINGTON AVENUE
YAKIMA, WASHINGTON

FARALLON PN: 555-001

Drawn By: ebuer

Checked By: JC

Date: 1/31/2017

Disc Reference:

Document Path: G:\Projects\765001 Yakima Steel Fab\GISMapfiles\Wetland\Figure_03.mxd

Table 1
Analytical Results for Metals
Agri-Tech and Yakima Steel Fabricators Site
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Sample Identification	Laboratory Report	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²							
						Antimony ³	Arsenic ³	Cadmium ⁴	Copper ³	Lead ³	Manganese ³	Mercury ⁴	Zinc ³
Wetland Samples													
E	WetSoil-1	E-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<5.1	<5.1	3.7	39	110	190	0.14	1,700
		E-wetsoil-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<2.4	<2.4	<0.40	17	4.2	160	0.043	310
	WetSoil-2	E-wetsoil-2-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<3.4	<3.4	1.6	19	19	250	0.071	670
		E-wetsoil-2-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<3.0	<3.0	1.8	20	4.4	270	0.059	870
	WetSed-1	E-wetsed-1-053111	580-26360-1	5/23/2011	0.5	<5.8	<5.8	9.2	36	190	210	–	2,700
	WetSed-2	E-wetsed-2-053111	580-26360-1	5/23/2011	0.5	<6.9	7.6	6.8	41	150	220	–	2,800
WetSed-3	E-wetsed-3-053111	580-26360-1	5/23/2011	0.5	<6.1	8.5	7.8	52	180	270	–	2,700	
G	WetSoil-3	G-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<2.4	<2.4	<0.40	16	3.5	210	0.044	41
		G-wetsoil-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<4.2	<4.2	1.5	40	80	470	0.14	510
Sediment Cleanup Objective⁵						--	14	2.1	400	360	--	0.7	3,200
Sediment Cleanup Screening Level⁵						--	120	5.4	1,200	1,300	--	0.8	4,200

NOTES:

Results in **bold** denote concentrations exceeding applicable cleanup levels.

Result exceeds the sediment cleanup objective.

Result exceeds the sediment cleanup screening level.

– = denotes sample not analyzed

< denotes analyte not detected at or exceeding the laboratory reporting limit listed.

¹ Depth in feet below ground surface.

² Analyzed by U.S. Environmental Protection Agency Methods 6000/6010/7000 Series.

³ Constituent was not retained as a COPC following completion of the *Revised Remedial Investigation Report, Agri-Tech & Yakima Steel Fabricators*, 6 and 10 1/2 East Washington Avenue, Yakima, Washington dated June 10, 2004, prepared by Farallon Consulting, L.L.C. (Revised RI Report).

⁴ Identified and retained as COPC in the Revised RI Report.

⁵ Table VI, *Freshwater Sediment Cleanup Objectives and Cleanup Screening Levels Chemical Criteria*, of Section 563 of Chapter 173-204 of the Washington Administrative Code (WAC 173-204-563).

COPC = constituent of potential concern

L = a negative instrument reading had an absolute value greater than the reporting limit

Table 2
Analytical Results for Petroleum Hydrocarbons
Agri-Tech and Yakima Steel Fabricators Site
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Sample Identification	Lab Report	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram)						
						GRO ²	DRO ³	ORO ³	Benzene ³	Toluene ³	Ethylbenzene ³	Xylenes ³
Wetland Samples												
E	Wetsoil-1	E-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<36	<90	<180	<0.0019	<0.0038	<0.0019*	<0.0047*
		E-wetsoil-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<22	<54	<110	<0.0012 ^H	<0.0024 ^H	<0.0012 ^H	<0.0036 ^H
	Wetsoil-2	E-wetsoil-2-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<22	<55	<110	<0.00091 ^H	<0.0018 ^H	<0.00091 ^H	<0.00271 ^H
		E-wetsoil-2-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<23	<58	<120	<0.0013 ^H	<0.0026 ^H	<0.0013 ^H	<0.0039 ^H
	WetSed-1	E-wetsed-1-052311	580-26502-1	5/23/2011	0.5	--	-	-	<0.0027	<0.0054	<0.0027	<0.0081
	WetSed-2	E-wetsed-2-052311	580-26502-1	5/23/2011	0.5	--	-	-	<0.0026	<0.0052	<0.0026	<0.0078
WetSed-3	E-wetsed-3-052311	580-26502-1	5/23/2011	0.5	--	-	-	<0.0033	<0.0066	<0.0033	<0.0099	
G	Wetsoil-3	G-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<24	<60	<120	<0.0013 ^H	<0.0025 ^H	<0.0013 ^H	<0.0038 ^H
		G-wetsoil-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<30	<74	<150	<0.00094	<0.0019	<0.00094	<0.00284
Sediment Cleanup Objective⁴						--	340	3,600	--	--	--	--
Sediment Cleanup Screening Level⁴						--	510	4,400	--	--	--	--

NOTES:

Results in **bold** denote concentrations exceeding applicable cleanup levels.

< denotes analyte not detected at or exceeding the laboratory reporting limit listed.

¹Depth in feet below ground surface.

²Analyzed by Northwest Method NWTPH-HCID.

³Analyzed by Northwest Method NWTPH-Dx.

⁴Table VI, *Freshwater Sediment Cleanup Objectives and Cleanup Screening Levels Chemical Criteria*, of Section 563 of Chapter 173-204 of the Washington Administrative Code (WAC 173-204-563).

COPC = constituent of potential concern

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

ORO = TPH as oil-range organics

H = sample was prepared or analyzed beyond the specified holding time

Table 3
Analytical Results for Volatile Organic Compounds
Agri-Tech and Yakima Steel Fabricators Site
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Sample Identification	Lab Report	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²													
						Benzene ³	Ethyl-benzene ³	m,p-Xylene ³	o-Xylene ³	Toluene ³	Naphthalene ³	n-Butylbenzene ³	Sec-Butylbenzene ³	Isopropylbenzene ³	Methylene Chloride ³	4-Methyl-2-Pentanone ³	4-Isopropyltoluene ³	n-Propylbenzene ³	
Wetland Samples																			
E	Wetsoil-1	E-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.0019	<0.0019*	<0.0038 *	<0.0019 *	<0.0038	<0.0094 *	<0.0038 *	<0.0038 *	<0.0038 *	<0.028	<0.0094	<0.0038 *	<0.0019 *	
		E-wetsoil-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<0.0012 H	<0.0012 H	<0.0024 H	<0.0012 H	<0.0024 H	<0.0060 H	<0.0024 H	<0.0024 H	<0.0024 H	<0.018 H	<0.0060 H	<0.0024 H	<0.0012 H	
	Wetsoil-2	E-wetsoil-2-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<0.00091 H	<0.00091 H	<0.0018 H	<0.00091 H	<0.0018 H	<0.0045 H	<0.0018 H	<0.0018 H	<0.0018 H	<0.014 H	<0.0045 H	<0.0018 H	<0.00091 H	
		E-wetsoil-2-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<0.0013 H	<0.0013 H	<0.0026 H	<0.0013 H	<0.0026 H	<0.0065 H	<0.0026 H	<0.0026 H	<0.0026 H	<0.019 H	<0.0065 H	<0.0026 H	<0.0013 H	
	WetSed-1	E-wetsed-1-053111	580-26502-1	5/23/2011	0.5	<0.0027	<0.0027	<0.0054	<0.0027	<0.0054	<0.014	<0.0054	<0.0054	<0.054	<0.041	<0.014	<0.0054	<0.0027	
	WetSed-2	E-wetsed-2-053111	580-26502-1	5/23/2011	0.5	<0.0026	<0.0026	<0.0052	<0.0026	<0.0052	<0.013	<0.0052	<0.0052	<0.0052	<0.039	<0.013	<0.0052	<0.0026	
WetSed-3	E-wetsed-3-053111	580-26502-1	5/23/2011	0.5	<0.0033	<0.0033	<0.0066	<0.0033	<0.0066	<0.017	<0.0066	<0.0066	<0.0066	<0.050	<0.017	<0.0066	<0.0033		
G	Wetsoil-3	G-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.0013 H	<0.0013 H	<0.0025 H	<0.0013 H	<0.0025 H	<0.0064 H	<0.0025 H	<0.0025 H	<0.0025 H	<0.019 H	<0.0064 H	<0.0025 H	<0.0013 H	
		G-wetsoil-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<0.00094	<0.00094	<0.0019	<0.00094	<0.0019	<0.0047	<0.0019	<0.0019	<0.0019	<0.014	<0.0047	<0.0019	<0.00094	
Sediment Cleanup Objective⁵						--	--	--	--	--	--	--	--	--	--	--	--	--	
Sediment Cleanup Screening Level⁵						--	--	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:

Results in **bold** denote concentrations exceeding applicable cleanup levels.

< denotes analyte not detected at or exceeding the reporting limit listed.

-- Denotes the initial calibration curve was outside acceptance criteria for Carbon Disulfide. As Carbon Disulfide was not a requested analyte at the time of sample analysis, it cannot be reported.

* Denotes Internal Standard response or retention time outside acceptable limits.

¹ Depth in feet below ground surface.

² Analyzed by U.S. Environmental Protection Agency Method 8260B.

³ Compound was not retained as a COPC following completion of the *Revised Remedial Investigation Report, Agri-Tech & Yakima Steel Fabricators, 6 and 10 1/2 East Washington Avenue, Yakima, Washington* dated June 10, 2004, prepared by Farallon Consulting, L.L.C. (Revised RI Report).

⁴ Identified and retained as a COPC in the Revised RI Report.

⁵ Table VI, *Freshwater Sediment Cleanup Objectives and Cleanup Screening Levels Chemical Criteria*, of Section 563 of Chapter 173-204 of the Washington Administrative Code (WAC 173-204-563).

COPC = constituent of potential concern

H = sample was prepared or analyzed beyond specified holding time

MEK = 2-butanone

NE = not established

PCE = tetrachloroethene

TCE = trichloroethene

VOCs = volatile organic compounds

**Table 3
Analytical Results for Volatile Organic Compounds
Agri-Tech and Yakima Steel Fabricators Site
Yakima, Washington
Farallon PN: 765-001**

Grid	Test Pit	Sample Identification	Lab Report	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²											
						Acetone ³	1,2,4-Trimethylbenzene ³	1,3,5-Trimethylbenzene ³	Carbon Disulfide ³	1,2-Dichloropropane ⁴	MEK ³	Chloroform ³	Tetrachloroethene ⁴	Trichloroethene ⁴	1,1-Dichloroethene ³	(cis) 1,2-Dichloroethene ⁴	tert-Butylbenzene ³
						Wetland Samples											
E	Wetsoil-1	E-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	0.094	<0.0038 *	<0.0094 *	0.0064	<0.0019	0.010	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0038 *
		E-wetsoil-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	<0.018 H	<0.0024 H	<0.0060 H	<0.0012 H	<0.0012 H	<0.0060 H	<0.0012 H	<0.0012 H	<0.0012 H	<0.0012 H	<0.0012 H	<0.0024 H
	Wetsoil-2	E-wetsoil-2-052611-0.5-1.0	580-26451-1	5/26/2011	1.0	0.029 H	<0.0018 H	<0.0045 H	0.0010 H	<0.00091 H	<0.0045 H	<0.00091 H	<0.00091 H	<0.00091 H	<0.00091 H	<0.00091 H	<0.0018 H
		E-wetsoil-2-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	0.038 H	<0.0026 H	<0.0065 H	<0.0013 H	<0.0013 H	<0.0065 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0026 H	
	WetSed-1	E-wetsed-1-053111	580-26502-1	5/23/2011	0.5	0.082	<0.0054	<0.014	<0.0027	<0.0027	<0.014	<0.0027	<0.0027	<0.0027	<0.0027	<0.014	<0.0054
	WetSed-2	E-wetsed-2-053111	580-26502-1	5/23/2011	0.5	<0.039	<0.0052	<0.013	0.0032	<0.0026	<0.013	<0.0026	<0.0026	<0.0026	<0.0026	<0.013	<0.0052
WetSed-3	E-wetsed-3-053111	580-26502-1	5/23/2011	0.5	0.110	<0.0066	<0.017	<0.0033	<0.0033	0.025	<0.0033	<0.0033	<0.0033	<0.0033	<0.017	<0.0066	
G	Wetsoil-3	G-wetsoil-052611-0.0-0.5	580-26451-1	5/26/2011	0.5	<0.019 H	<0.0025 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0064 H	<0.0013 H	<0.0013 H	<0.0013 H	<0.0064 H	<0.0013 H	
		G-wetsoil-052611-1.0-2.0	580-26451-1	5/26/2011	2.0	<0.014	<0.0019	<0.0047	<0.00094	<0.00094	<0.0047	<0.00094	<0.00094	<0.00094	<0.00094	<0.0047	<0.0019
Sediment Cleanup Objective⁵						--	--	--	--	--	--	--	--	--	--	--	
Sediment Cleanup Screening Level⁵						--	--	--	--	--	--	--	--	--	--	--	--

NOTES:

Results in **bold** denote concentrations exceeding applicable cleanup levels.
 < denotes analyte not detected at or exceeding the reporting limit listed.
 -- Denotes the initial calibration curve was outside acceptance criteria for Carbon Disulfide. As Carbon Disulfide was not a requested analyte at the time of sample analysis, it cannot be reported.
 * Denotes Internal Standard response or retention time outside acceptable limits.
¹ Depth in feet below ground surface.
² Analyzed by U.S. Environmental Protection Agency Method 8260B.
³ Compound was not retained as a COPC following completion of the *Revised Remedial Investigation Report, Agri-Tech & Yakima Steel Fabricators, 6 and 10 1/2 East Washington Avenue, Yakima, Washington* dated June 10, 2004, prepared by Farallon Consulting, L.L.C. (Revised RI Report).
⁴ Identified and retained as a COPC in the Revised RI Report.
⁵ Table VI, *Freshwater Sediment Cleanup Objectives and Cleanup Screening Levels Chemical Criteria*, of Section 563 of Chapter 173-204 of the Washington Administrative Code (WAC 173-204-563).

COPC = constituent of potential concern
 H = sample was prepared or analyzed beyond specified holding time
 MEK = 2-butanone
 NE = not established
 PCE = tetrachloroethene
 TCE = trichloroethene
 VOCs = volatile organic compounds

Table 4
Analytical Results for Pesticides
Agri-Tech and Yakima Steel Fabricators Site
Yakima, Washington
Farallon PN: 765-001

Grid	Test Pit	Lab Report	Sample Identification	Sample Date	Sample Depth (feet) ¹	Analytical Results (milligrams per kilogram) ²												
						Aldrin ³	Alpha Chlordane ⁴	4,4'-DDD ⁴	4,4'-DDE ⁴	4,4'-DDT ³	Dieldrin ⁴	Endosulfan Sulfate ³	Endrin ⁴	Heptachlor Epoxide ⁴	Endrin Aldehyde ³	Gamma Chlordane ³	Heptachlor ³	Endosulfan II
Wetland Samples																		
E	WetSoil-1	580-26451-1	E-wetsoil-052611-0.0-0.5	5/26/2011	0.5	<0.0019	<0.0019	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0038	<0.0019	<0.0038	<0.0019	<0.0019	<0.0038
			E-wetsoil-052611-0.5-1.0	5/26/2011	1.0	<0.0011	<0.0011	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0011	<0.0022	<0.0011	<0.0011
	WetSoil-2	580-26451-1	E-wetsoil-2-052611-0.5-1.0	5/26/2011	1.0	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<0.0023
			E-wetsoil-2-052611-1.0-2.0	5/26/2011	2.0	<0.0011	<0.0011	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0023	<0.0011	<0.0023	<0.0011	<0.0011	<0.0023
	WetSed-1	580-26360-1	E-wetsed-1-053111	5/23/2011	0.5	<0.0021 H	<0.0021 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0042 H	<0.0021 H*	<0.0042 H	<0.0021 H	<0.0021 H	<0.0042 H
WetSed-2	580-26360-1	E-wetsed-2-053111	5/23/2011	0.5	<0.0022 H	<0.0022 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0044 H	<0.0022 H*	<0.0044 H	<0.0022 H	<0.0022 H	<0.0044 H	
WetSed-3	580-26360-1	E-wetsed-3-053111	5/23/2011	0.5	<0.0023 H	<0.0023 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0047 H	<0.0023 H*	<0.0047 H	<0.0023 H	<0.0023 H	<0.0047 H	
G	WetSoil-3	580-26451-1	G-wetsoil-052611-0.0-0.5	5/26/2011	0.5	<0.0012	<0.0012	<0.0024	<0.0024	<0.0024	<0.0024	<0.0024	<0.0012	<0.0024	<0.0012	<0.0012	<0.0024	
			G-wetsoil-052611-1.0-2.0	5/26/2011	2.0	<0.0016	<0.0016	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0031	<0.0016	<0.0031	<0.0016	<0.0016	<0.0031
Sediment Cleanup Objective⁵						--	--	0.31	0.31	0.10	4.9	--	--	--	--	--	--	--
Sediment Cleanup Screening Level⁵						--	--	0.86	0.9	8.1	9.3	--	--	--	--	--	--	--

NOTES:

Results in **bold** denote concentrations at or exceeding the Preliminary Screening Level indicated.

< denotes analyte not detected at or above the reporting limit listed.

¹ Depth in feet below ground surface.

² Analyzed by U.S. Environmental Protection Agency Method 8081.

³ Constituent was not retained as a COPC following completion of the *Revised Remedial Investigation Report, Agri-Tech & Yakima Steel*

Fabricators, 6 and 10 1/2 East Washington Avenue, Yakima, Washington dated June 10, 2004, prepared by Farallon Consulting, L.L.C. (Revised RI Report).

⁴ Identified and retained as a COPC in the Revised RI Report.

⁵ Table VI, *Freshwater Sediment Cleanup Objectives and Cleanup Screening Levels Chemical Criteria*, of Section 563 of Chapter 173-204 of the Washington Administrative Code (WAC 173-204-563).

* = Response or retention time outside acceptable limits.

COPC = constituent of potential concern

H = sample was prepared or analyzed beyond the specified holding time

NE = not established

Table 5
Bioassay Results Summary
Agri-Tech and Yakima Steel Fabricators Site
Yakima, Washington
Farallon PN: 765-001

Bioassay Evaluation	Screening Criteria		WETSED-1		WETSED-2		WETSED-3	
	SCO	CSL	Nautilus	Environ	Nautilus	Environ	Nautilus	Environ
10-day <i>H. azteca</i> Mortality ($M_T - M_C$)	>15%	>25%	100%	91%	14%	-4%	4%	-4%
20-day <i>C. dilutus</i> Mortality ($M_T - M_C$)	>15%	>25%	15%	14%	18%	17%	58%	20%
20-day <i>C. dilutus</i> Growth ($MIG_C - MIG_T$)/ MIG_C	>0.25	>0.40	-0.22	0.12	0.04	-0.31	0.34	-0.01

Table based on Attachment C, Table 24, Summary of Sediment Chemistry and Test Results, Agri-Tech/YSF, 2011 and 2013.

NOTES:

- Result exceeds sediment cleanup objective.
- Result exceeds sediment cleanup screening level.

CSL = Cleanup Screening Level
 Environ = Ramboll-Environ Corporation
 M_C = Control group mortality
 MIG_C = Control group mean individual growth
 MIG_T = Test group mean individual growth
 M_T = Test group mortality
 Nautilus = Nautilus Environmental
 SCO = Sediment Cleanup Objective

**ATTACHMENT E
TERRESTRIAL ECOLOGICAL EVALUATION FORM**

CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM

Agri-Tech and Yakima Steel Fabricators Site
Yakima Steel Fabricators
Yakima, Washington

Farallon PN: 765-001



Voluntary Cleanup Program

Washington State Department of Ecology
Toxics Cleanup Program

TERRESTRIAL ECOLOGICAL EVALUATION FORM

Under the Model Toxics Control Act (MTCA), a terrestrial ecological evaluation is necessary if hazardous substances are released into the soils at a Site. In the event of such a release, you must take one of the following three actions as part of your investigation and cleanup of the Site:

1. Document an exclusion from further evaluation using the criteria in WAC 173-340-7491.
2. Conduct a simplified evaluation as set forth in WAC 173-340-7492.
3. Conduct a site-specific evaluation as set forth in WAC 173-340-7493.

When requesting a written opinion under the Voluntary Cleanup Program (VCP), you must complete this form and submit it to the Department of Ecology (Ecology). The form documents the type and results of your evaluation.

Completion of this form is not sufficient to document your evaluation. You still need to document your analysis and the basis for your conclusion in your cleanup plan or report.

If you have questions about how to conduct a terrestrial ecological evaluation, please contact the Ecology site manager assigned to your Site. For additional guidance, please refer to www.ecy.wa.gov/programs/tcp/policies/terrestrial/TEEHome.htm.

Step 1: IDENTIFY HAZARDOUS WASTE SITE	
Please identify below the hazardous waste site for which you are documenting an evaluation.	
Facility/Site Name: Agri-Tech/Yakima Steel Fabricators	
Facility/Site Address: 6 and 10 1/2 East Washington Avenue, Yakima, Washington	
Facility/Site No: 479	VCP Project No.:

Step 2: IDENTIFY EVALUATOR		
Please identify below the person who conducted the evaluation and their contact information.		
Name: Eric Buer	Title: Associate Geologist	
Organization: Farallon Consulting, LLC		
Mailing address: 1809 7 th Avenue		
City: Seattle	State: WA	Zip code: 98101
Phone: (424)394-4418	Fax: (425)295-0850	E-mail: ebuer@farallonconsulting.com

Step 3: DOCUMENT EVALUATION TYPE AND RESULTS

A. Exclusion from further evaluation.

1. Does the Site qualify for an exclusion from further evaluation?

- Yes *If you answered "YES," then answer **Question 2**.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3B** of this form.*

2. What is the basis for the exclusion? Check all that apply. Then skip to **Step 4** of this form.

Point of Compliance: WAC 173-340-7491(1)(a)

- All soil contamination is, or will be,* at least 15 feet below the surface.
- All soil contamination is, or will be,* at least 6 feet below the surface (or alternative depth if approved by Ecology), and institutional controls are used to manage remaining contamination.

Barriers to Exposure: WAC 173-340-7491(1)(b)

- All contaminated soil, is or will be,* covered by physical barriers (such as buildings or paved roads) that prevent exposure to plants and wildlife, and institutional controls are used to manage remaining contamination.

Undeveloped Land: WAC 173-340-7491(1)(c)

- There is less than 0.25 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site and any of the following chemicals is present: chlorinated dioxins or furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, heptachlor epoxide, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, or pentachlorobenzene.
- For sites not containing any of the chemicals mentioned above, there is less than 1.5 acres of contiguous# undeveloped± land on or within 500 feet of any area of the Site.

Background Concentrations: WAC 173-340-7491(1)(d)

- Concentrations of hazardous substances in soil do not exceed natural background levels as described in WAC 173-340-200 and 173-340-709.

* An exclusion based on future land use must have a completion date for future development that is acceptable to Ecology.

± "Undeveloped land" is land that is not covered by building, roads, paved areas, or other barriers that would prevent wildlife from feeding on plants, earthworms, insects, or other food in or on the soil.

"Contiguous" undeveloped land is an area of undeveloped land that is not divided into smaller areas of highways, extensive paving, or similar structures that are likely to reduce the potential use of the overall area by wildlife.

B. Simplified evaluation.

1. Does the Site qualify for a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 2** below.*
- No or Unknown *If you answered "NO" or "UNKNOWN," then skip to **Step 3C** of this form.*

2. Did you conduct a simplified evaluation?

- Yes *If you answered "YES," then answer **Question 3** below.*
- No *If you answered "NO," then skip to **Step 3C** of this form.*

3. Was further evaluation necessary?

- Yes *If you answered "YES," then answer **Question 4** below.*
- No *If you answered "NO," then answer **Question 5** below.*

4. If further evaluation was necessary, what did you do?

- Used the concentrations listed in Table 749-2 as cleanup levels. *If so, then skip to **Step 4** of this form.*
- Conducted a site-specific evaluation. *If so, then skip to **Step 3C** of this form.*

5. If no further evaluation was necessary, what was the reason? Check all that apply. Then skip to **Step 4** of this form.

Exposure Analysis: WAC 173-340-7492(2)(a)

- Area of soil contamination at the Site is not more than 350 square feet.
- Current or planned land use makes wildlife exposure unlikely. Used Table 749-1.

Pathway Analysis: WAC 173-340-7492(2)(b)

- No potential exposure pathways from soil contamination to ecological receptors.

Contaminant Analysis: WAC 173-340-7492(2)(c)

- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations that exceed the values listed in Table 749-2.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations that exceed the values listed in Table 749-2, and institutional controls are used to manage remaining contamination.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 15 feet at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays.
- No contaminant listed in Table 749-2 is, or will be, present in the upper 6 feet (or alternative depth if approved by Ecology) at concentrations likely to be toxic or have the potential to bioaccumulate as determined using Ecology-approved bioassays, and institutional controls are used to manage remaining contamination.

C. Site-specific evaluation. A site-specific evaluation process consists of two parts: (1) formulating the problem, and (2) selecting the methods for addressing the identified problem. Both steps require consultation with and approval by Ecology. See WAC 173-340-7493(1)(c).

1. Was there a problem? See WAC 173-340-7493(2).

- Yes *If you answered “YES,” then answer **Question 2** below.*
- No *If you answered “NO,” then identify the reason here and then skip to **Question 5** below:*
- No issues were identified during the problem formulation step.
 - While issues were identified, those issues were addressed by the cleanup actions for protecting human health.

2. What did you do to resolve the problem? See WAC 173-340-7493(3).

- Used the concentrations listed in Table 749-3 as cleanup levels. *If so, then skip to **Question 5** below.*
- Used one or more of the methods listed in WAC 173-340-7493(3) to evaluate and address the identified problem. *If so, then answer **Questions 3 and 4** below.*

3. If you conducted further site-specific evaluations, what methods did you use?

Check all that apply. See WAC 173-340-7493(3).

- Literature surveys.
- Soil bioassays.
- Wildlife exposure model.
- Biomarkers.
- Site-specific field studies.
- Weight of evidence.
- Other methods approved by Ecology. If so, please specify:

4. What was the result of those evaluations?

- Confirmed there was no problem.
- Confirmed there was a problem and established site-specific cleanup levels.

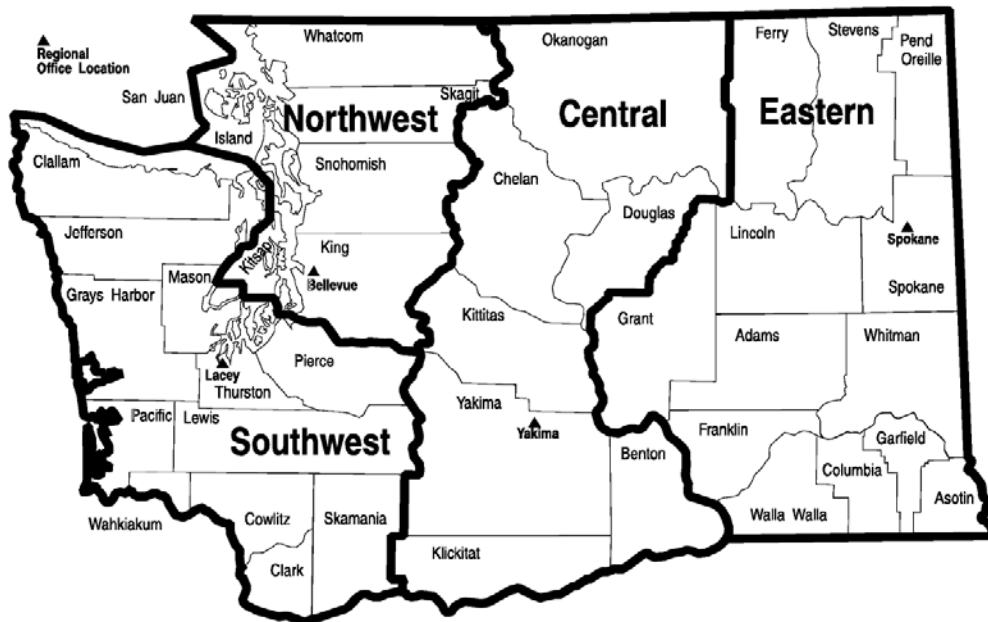
5. Have you already obtained Ecology’s approval of both your problem formulation and problem resolution steps?

- Yes If so, please identify the Ecology staff who approved those steps:
- No

Step 4: SUBMITTAL

Please mail your completed form to the Ecology site manager assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.

<p>Northwest Region: Attn: VCP Coordinator 3190 160th Ave. SE Bellevue, WA 98008-5452</p>	<p>Central Region: Attn: VCP Coordinator 1250 West Alder St. Union Gap, WA 98903-0009</p>
<p>Southwest Region: Attn: VCP Coordinator P.O. Box 47775 Olympia, WA 98504-7775</p>	<p>Eastern Region: Attn: VCP Coordinator N. 4601 Monroe Spokane WA 99205-1295</p>



**ATTACHMENT F
SITE CLEANUP STANDARDS**

CONCEPTUAL SITE MODEL TECHNICAL MEMORANDUM

Agri-Tech and Yakima Steel Fabricators Site
Yakima Steel Fabricators
Yakima, Washington

Farallon PN: 765-001

Table F-1
Soil and Sediment Constituents of Concern and Cleanup Levels
Yakima Steel Fabricators
Seattle, Washington
Farallon PN: 765-001

Constituent of Potential Concern	Carcinogen or Non-Carcinogen	Soil and Sediment Cleanup Levels										Retained As Constituent of Concern for Feasibility Study
		Soil									Sediment	
		Soil Method A Unrestricted Land Use (mg/kg)	Soil Method A Industrial Properties (mg/kg)	Soil Method B Non-Cancer (mg/kg)	Soil Method B Cancer (mg/kg)	Soil Method B Protective of Groundwater Vadose Zone @ 25 degrees C (mg/kg)	Soil Method B Protective of Groundwater Vadose Zone @ 13 degrees C (mg/kg)	Soil Method B Protection of Groundwater Saturated Zone (mg/kg)	Soil Method C Non-Cancer (mg/kg)	Soil Method C Cancer (mg/kg)	Dry Weight Sediment Cleanup Objective (mg/kg)	
Tetrachloroethene	Carcinogen	0.05	0.05	480	476.19	0.053	0.050	0.0028	21,000	62,500	Not Applicable	Yes
Trichloroethene	Carcinogen	0.03	0.03	40	12	0.026	0.025	0.0015	1,750	2,853.26	Not Applicable	Yes
cis-1,2-Dichloroethene	Non-Carcinogen	Not Applicable	Not Applicable	160	Not Applicable	0.080	0.078	0.0052	7,000	Not Applicable	Not Applicable	Yes
Vinyl chloride	Carcinogen	Not Applicable	Not Applicable	240	0.67	0.002	0.0017	0.0001	10,500	87.50	Not Applicable	No
1,1-Dichloroethene	Non-Carcinogen	Not Applicable	Not Applicable	4,000	Not Applicable	0.050	0.046	0.0025	175,000	Not Applicable	Not Applicable	No
1,2-dichloropropane	Carcinogen	Not Applicable	Not Applicable	7,200	27.78	0.026	0.025	0.0017	315,000	3,645.83	Not Applicable	Yes
4,4-DDE* (DDE)	Carcinogen	Not Applicable	Not Applicable	Not Applicable	2.94	0.45	0.45	0.022	Not Applicable	386.03	Not Applicable	No
4,4-DDD* (DDD)	Carcinogen	Not Applicable	Not Applicable	Not Applicable	4.17	0.34	Not Applicable	0.017	Not Applicable	546.88	0.31	No
Dieldrin	Carcinogen	Not Applicable	Not Applicable	4	0.063	0.0028	0.0028	0.0001	175	8.20	0.0049	Yes
Endrin	Non-Carcinogen	Not Applicable	Not Applicable	24	Not Applicable	0.44	Not Applicable	0.022	1,050	Not Applicable	0.0085	No
Heptachlor epoxide	Carcinogen	Not Applicable	Not Applicable	1.04	0.11	0.08	Not Applicable	0.0040	45.50	14.42	Not Applicable	No
Aldrin	Non-Carcinogen	Not Applicable	Not Applicable	2.40	0.059	0.0025	0.0025	0.0001	105	7.72	Not Applicable	Yes
Alpha chlordane* (chlordane total)	Carcinogen	Not Applicable	Not Applicable	40	2.86	2.06	2.06	0.10	1,750	375	Not Applicable	No
DRO	Non-Carcinogen	2,000	2,000	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	340	Yes
ORO	Non-Carcinogen	2,000	2,000	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
cPAHs* (TEC) toxicity equivalent concentration	Carcinogen	0.10	2	Not Applicable	0.14	2.33	Not Applicable	0.12	Not Applicable	17.98	17	No
Antimony	Non-Carcinogen	Not Applicable	Not Applicable	32	Not Applicable	5.42	5.42	0.27	1,400	Not Applicable	Not Applicable	No
Arsenic	Carcinogen	20	20	24	0.67	2.92	2.92	0.15	1,050	87.50	14	No
Cadmium	Non-Carcinogen	2	2	80	Not Applicable	0.69	0.69	0.035	Not Applicable	Not Applicable	2.10	Yes
Copper	Non-Carcinogen	Not Applicable	Not Applicable	3,200	Not Applicable	284	284	14.26	140,000	Not Applicable	400	Yes
Lead	Non-Carcinogen	250	1,000	Not Applicable	Not Applicable	3,000	3,000	150	Not Applicable	Not Applicable	360	Yes
Mercury	Non-Carcinogen	2	2	Not Applicable	Not Applicable	2.09	2.09	0.10	Not Applicable	Not Applicable	0.66	Yes
Zinc	Non-Carcinogen	Not Applicable	Not Applicable	24,000	Not Applicable	5,971	5,970	298.98	1,050,000	Not Applicable	3,200	No

NOTES:

Bold = selected cleanup level

¹ Soil cleanup levels for protection of surface water quality are preliminary values only. Values are calculated using Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Equation 747-1 where the groundwater cleanup level protective of surface water in this table was used as Cw.

² Soil cleanup levels for protection of air quality are preliminary values only. Values are calculated using MTCA Equation 747-1 where the potable Method B groundwater cleanup level was used as Cw. Concentrations of hazardous substances in soil that meet the potable groundwater protection standard currently are considered sufficiently protective of the air pathway for unrestricted and industrial land uses.

³ Cleanup level is based on standard MTCA Method B (unrestricted land use) or Method C (industrial land use) values from the Cleanup and Risk Calculations tables (CLARC).

"Not Applicable" is used where the constituent of concern will not affect the media of potential concern due to an incomplete pathway or no pertinent standard exists.

"Not Researched" denotes that no regulatory standards or toxicity information are available for the constituent of concern to derive a cleanup level for the medium of potential concern.

**Table F-2
Groundwater Constituents of Concern and Cleanup Levels
Yakima Steel Fabricators
Seattle, Washington
Farallon PN: 765-001**

Constituent of Potential Concern	Carcinogen or Non-Carcinogen	Groundwater Cleanup Levels					Retained As Constituent of Concern for Feasibility Study
		Groundwater Method A (µg/L)	Groundwater Method B Non-Cancer (µg/L)	Groundwater Method B Cancer (µg/L)	Groundwater Method C Non-Cancer (µg/L)	Groundwater Method C Cancer (µg/L)	
Tetrachloroethene	Carcinogen	5	48	20.83	105	208.33	Yes
Trichloroethene	Carcinogen	5	4	0.54	8.75	9.51	Yes
cis-1,2-Dichloroethene	Non-Carcinogen	Not Applicable	16	Not Applicable	35	Not Applicable	Yes
Vinyl chloride	Carcinogen	0.20	24	0.029	52.50	0.29	Yes
1,1-Dichloroethene	Non-Carcinogen	Not Applicable	400	Not Applicable	875	Not Applicable	No
1,2-dichloropropane	Carcinogen	Not Applicable	720	1.22	1,575	12.15	Yes
4,4-DDE* (DDE)	Carcinogen	Not Applicable	Not Applicable	0.26	Not Applicable	2.57	Yes
4,4-DDD* (DDD)	Carcinogen	Not Applicable	Not Applicable	0.36	Not Applicable	3.65	Yes
Dieldrin	Carcinogen	Not Applicable	0.80	0.0055	1.75	0.055	Yes
Endrin	Non-Carcinogen	Not Applicable	4.80	Not Applicable	10.50	Not Applicable	No
Heptachlor epoxide	Carcinogen	Not Applicable	0.10	0.0048	0.23	0.048	No
Aldrin	Non-Carcinogen	Not Applicable	0.24	0.0026	0.53	0.026	No
Alpha chlordane* (chlordane total)	Carcinogen	Not Applicable	8	0.25	17.50	2.50	No
DRO	Non-Carcinogen	500	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
ORO	Non-Carcinogen	500	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
cPAHs* (TEC) toxicity equivalent concentration	Carcinogen	0.10	Not Applicable	0.012	Not Applicable	0.12	No
Antimony	Non-Carcinogen	Not Applicable	6.40	Not Applicable	14	Not Applicable	No
Arsenic	Carcinogen	5	4.80	0.058	10.50	0.58	No
Cadmium	Non-Carcinogen	5	8	Not Applicable	17.50	Not Applicable	No
Copper	Non-Carcinogen	Not Applicable	Not Applicable	640	Not Applicable	1,400	No
Lead	Non-Carcinogen	15	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Mercury	Non-Carcinogen	2	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Zinc	Non-Carcinogen	Not Applicable	4,800	Not Applicable	10,500	Not Applicable	No

NOTES:

Bold = selected cleanup level

¹ Groundwater cleanup levels protective of the air pathway for unrestricted land use (residential and commercial sites) and industrial land use were derived using the following equation: $Gwcul = Aircul/GIVF$.

² Cleanup level is based on standard Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method B default values from the Cleanup and Risk Calculations tables (CLARC).

³ MTCA Cleanup Levels and Risk Calculations Method B Modified based on Asian Pacific Island (API) Exposure scenarios for the consumption of fish for the groundwater-to-surface water pathway using MTCA Equations 730-1 (non-carcinogens) or 730-2

⁴ Cleanup levels based on MTCA Equation 730-1 (non-carcinogens) or 730-2 (carcinogens). Default values used with exception of:

Equation 730-1 - Average Body Weight (81.8 kilograms), Fish Consumption Rate (97.5 grams/day), Fish Diet Fraction (1), Averaging Time (64 years), and Exposure Duration (64 years)

Equation 730-2 - Averaging time of 70 years, and inputs for Equation 730-1 above

⁶ Lowest MTCA ARAR set forth in CLARC

"Not Applicable" is used where the constituent of concern will not affect the media of potential concern due to an incomplete pathway or no pertinent standard exists.

"Not Researched" denotes that no regulatory standards or toxicity information are available for the constituent of concern to derive a cleanup level for the media of potential concern.

Table F-3
Air Constituents of Concern and Cleanup Levels
Yakima Steel Fabricators
Seattle, Washington
Farallon PN: 765-001

Constituent of Potential Concern	Carcinogen or Non-Carcinogen	Air Cleanup Levels				Retained As Constituent of Concern for Feasibility Study
		Air Method B Non-Cancer (µg/m³)	Air Method B Cancer (µg/m³)	Air Method C Non-Cancer (µg/m³)	Air Method C Cancer (µg/m³)	
Tetrachloroethene	Carcinogen	18.29	9.62	40	96	Yes
Trichloroethene	Carcinogen	0.91	0.37	2	6	Yes
cis-1,2-Dichloroethene	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Vinyl chloride	Carcinogen	45.71	0.28	100	3	Yes
Chloromethane	Non-Carcinogen	41.10	Not Applicable	90.0	Not Applicable	No
1,1-Dichloroethene	Non-Carcinogen	91.43	Not Applicable	200	Not Applicable	No
1,2-dichloropropane	Carcinogen	1.83	0.25	4	3	No
4,4-DDE* (DDE)	Carcinogen	Not Applicable	0.026	Not Applicable	0.26	No
4,4-DDD* (DDD)	Carcinogen	Not Applicable	0.036	Not Applicable	0.36	No
Dieldrin	Carcinogen	Not Applicable	0.00054	Not Applicable	0.01	No
Endrin	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Heptachlor epoxide	Carcinogen	Not Applicable	0.00096	Not Applicable	0.01	No
Aldrin	Non-Carcinogen	Not Applicable	0.00051	Not Applicable	0.01	No
Alpha chlordane* (chlordane total)	Carcinogen	0.32	0.025	0.70	0.25	No
DRO	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
ORO	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
cPAHs* (TEC) toxicity equivalent concentration	Carcinogen	Not Applicable	0.0023	Not Applicable	0.02	No
Antimony	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Arsenic	Carcinogen	0.007	0.00058	0.015	0.006	No
Cadmium	Non-Carcinogen	0.005	0.0014	0.010	0.014	No
Copper	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Lead	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No
Mercury	Non-Carcinogen	0.14	Not Applicable	0.30	Not Applicable	No
Zinc	Non-Carcinogen	Not Applicable	Not Applicable	Not Applicable	Not Applicable	No

NOTES:

Bold = selected cleanup level

¹ Cleanup level is based on standard Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method B (unrestricted land use) or Method C (industrial land use) values from the Cleanup and Risk Calculations tables (CLARC).

"Not Applicable" is used where the constituent of concern will not affect the media of potential concern due to an incomplete pathway or no pertinent standard exists.