WASHINGTON STATE DEPARTMENT OF ECOLOGY

INITIAL INVESTIGATION FIELD REPORT

ERTS Number: 645086
Parcel #(s): 0420241152
COUNTY: Pierce

SITE INFORMATION

Site Name (e.g., Co. name over door): Fleischmann Industrial Park	Site Address (including City and Zip+4): 1115 Zehnder Street Sumner, WA 98390	Site Phone: none
Site Contact and Title: Robert Code, property owner	Site Contact Address (including City and Zip+4): 6900 Fox Avenue S. Seattle, Wa 98108	Site Contact Phone: 206/282-6334
Site Owner: same as above	Site Owner Address (including City and Zip+4): same as above	Site Owner Phone: same as above
Site Owner Contact:	Site Owner Contact Address (including City and Zip+4):	Owner Contact Phone:
Alternate Site Name(s):	Comments:	
Previous Site Owner(s):	Comments:	

Latitude (Decimal Degrees): 47.20970
Longitude (Decimal Degrees): -122.23962

INSPECTION INFORMATION

Inspection Conducted? Yes ☒ No ☐ Date/Time: 11.12.13 Entry Notice: Announced ☐ Unannounced ☒

Photographs taken? Yes ☒ No ☐

Samples collected? Yes ☐ No ☒ If *Yes*, be sure to include a figure/sketch showing sample locations.

RECOMMENDATION

No Further Action (Check appropriate box below):

- Release or threatened release does not pose a threat ☐
- No release or threatened release ☐
- Refer to program/agency (Name: _____) ☐
- Independent Cleanup Action Completed (i.e., contamination removed) ☐

LIST on Confirmed and Suspected Contaminated Sites List: ☒

COMPLAINT (Brief Summary of ERTS Complaint):
Former USTs containing diesel and bunker C oil, and a diesel fuel AST leaked contents to soil and groundwater at this site.

CURRENT SITE STATUS (Brief Summary of why Site is recommended for Listing or NFA):
Some of the soil contamination was removed in 2000, but contaminated soil remains in areas that were not accessible. A proper groundwater investigation with required analytes and spanning an entire hydrological cycle is warranted.

Investigator: S. Bell Date Submitted: 12.18.13

OBSERVATIONS

Description (please be sure to include the following: site observations, site features and cover, chronology of events, sources/past practices likely responsible for contamination, presence of water supply wells and other potential exposure pathways, etc.):

Much of the following information has been distilled from the Tacoma-Pierce County Health Department's UST file.

The site is part of the former Fleischmann Yeast and Vinegar Plant property, located at 1115 Zehnder Street in Sumner, on what is now parcel #0420241152. It is approximately 60 feet above mean sea level and is within the City of Sumner's Aquifer Recharge Area. The White River is located about 500 feet west. Geology in this general area is described as quaternary alluvium deposits composed of stratified clay, silt, sand, and gravels, with groundwater encountered at shallow depths ranging from 4 to 18 feet bgs.

Fleischmann previously owned and operated a yeast and vinegar plant on two adjacent parcels, 0420242079 and 0420241150. The latter parcel, 0420241150, has since been subdivided into two parcels, 0420241152 and 0420241153. Parcel 0420241152 was retained as part of the Fleischmann property, but parcel 0420241153 was transferred to the City of Sumner. The Yeast Plant operated on 12 acres of land, encompassing most of the original site. The Vinegar Plant operated on approximately 2 acres in the northeast corner of the property, and continues to do so as a tenant.

Two underground heating oil tanks were located on the east side of the power plant, within a concrete vault on the Vinegar Plant section of the property. Both tanks were 15,000 gallon capacity, held diesel and bunker C for use as heating oil, and were reportedly in operation from 1913 until the 1970's. A more recent vintage 500 gallon diesel AST used to fuel the backup generator was also located on the vinegar plant section of the site, about 100 feet southwest of the USTs.

Multiple site investigations were conducted in the late 1990's:

- 1998: Hart Crowser conducted a Phase II ESA. 4 borings were conducted, soil and groundwater was sampled.
- 1998: Dames & Moore conducted additional sampling to evaluate the vertical and horizontal extent of contamination.
- 1999: Hart Crowser conducted 10 more borings in a Supplemental Phase II ESA to further evaluate the extent of contamination.

The analyses performed appear to have been limited to petroleum hydrocarbons. Diesel and oil range hydrocarbons were detected in both soil and groundwater at concentrations exceeding both the cleanup levels in use at that time, as well as the 2001 revised cleanup levels. The contamination was attributed to historic releases from the two heating oil USTs and the diesel AST. Gasoline was also reported in soil at concentrations of 37 and 56 mg/kg, and in groundwater at 540 ug/L in tabled results titled "Summary of Historical ... Analytical Results" provided by Dames & Moore. No further investigation into gasoline contamination has been reported for the site, nor was a source ever attributed.

URS conducted tank removal and cleanup in 2000. The tanks, associated concrete pads, vaults, and piping were removed. The USTs were housed in a subsurface concrete vault; some of the vault was apparently left in place, including the bottom. The vault contained water that required removal prior to the tank excavation. URS reported that a total of 20,600 gallons of water was eventually pumped from the tank excavation for offsite treatment and disposal. 1226 tons of PCS was also removed from the site for treatment by thermal desorption. The cleanup action report notes that utilities and aboveground structures prevented complete removal of petroleum impacted soil to the north and south of the UST locations. The data table provided in the cleanup report shows six analytical results above the 2001 revised cleanup levels for diesel and/or oil. One additional result shows an exceedance when diesel and oil results are combined. Two of the soil exceedances are in the AST location, two are north of the UST excavation, the remaining two locations are not annotated on the sample location map. The original impact areas, excavations, and residual contamination are located in the NE corner of current parcel number 0420241152.

URS installed 5 monitoring wells, completed at 15 feet bgs, at locations surrounding the USTs/AST location to assess groundwater quality. Groundwater was measured at 5.8 to 6.6 ft bgs and the wells were screened between 5 and 15 ft bgs. Flow direction was mapped to the south. Groundwater sampling was conducted in November 2000 with the samples submitted for diesel and oil range analyses. The analytical results were non-detect.

Additional groundwater sampling was conducted in December 2003 by Environmental Resolutions, Inc (ERI). The samples were submitted for analysis of volatiles, gasoline, diesel and oil, semi-volatiles, and dissolved metals. No contaminants were found in concentrations exceeding MTCA cleanup levels.

G-Logics installed three more monitoring wells in 2004, described as "shallow-groundwater monitoring wells", but no well logs or information were provided so screened and completion depths are not known. Samples were collected in March 2004 and analyzed for volatiles, gasoline, diesel and oil, and dissolved arsenic. No contaminants were detected in concentrations above cleanup levels.

The Fleischmann property was recently purchased by Bob Code for the proposed Northstar Chemical Facility Project. A draft EIS for the project references three existing wells associated with the site that provide industrial process water. The wells reportedly draw from a deep alluvial confined aquifer, ranging from 300 to 572 feet bgs.

1.12.13 Site Inspection:
Four monitoring wells were visible throughout the south half of the two parcels making up the Fleischmann Industrial Park. The monitoring wells were marked by orange traffic cones and contained within aboveground monuments. None of the wells were properly secured with locks.

Two of the industrial process wells were visible. The City of Sumner installed a municipal production well about 300 feet south of the former UST basin. The Sumner well is screened from 397 feet bgs to 460 feet bgs, in a confined aquifer, and is not currently being used.

Summary:
Leaking tanks have been removed from the site along with a large volume of contaminated soil and groundwater. Some contaminated soil remains in areas that were inaccessible at the time of the cleanup. Groundwater sampling conducted by URS in November 2000, by ERI in December 2003, and G-Logics in March 2004 has not detected any residual contamination in groundwater.

The environmental work conducted at this site has been a bit chaotic with numerous consultants employed, and incomplete information provided. Because groundwater contamination was documented, and uniform sampling and analysis over a complete hydrological year has not been captured, further groundwater monitoring is needed to provide compelling evidence to support a No Further Action recommendation at this site. In addition, the historical note about gasoline detected at the site indicates the need to include this parameter, along with the full suite of parameters required in Table 830-1 (BTEX and cPAH's), in the prescribed analyses for groundwater monitoring.

The contamination at this site was never reported to Ecology, although the tank removals were conducted in compliance with TPCHD regulations. The TPCHD recommends including this site now on the Confirmed and Suspected Contaminated Sites List, with any subsequent investigation or cleanup submitted to Ecology's Voluntary Cleanup Program in order to ensure that a complete hydrogeological review is conducted.

(fill in contaminant matrix below with appropriate status choice from the key below the table)

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
Non-Halogenated Organics	Phenolic Compounds						Compounds containing phenols (Examples: phenol; 4-methylphenol; 2-methylphenol)
	Non-Halogenated Solvents						Organic solvents, typically volatile or semi-volatile, not containing any halogens. To determine if a product has halogens, search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is not a Cl, I, Br, F in the formula, it's not halogenated. (Examples: acetone, benzene, toluene, xylenes, methyl ethyl ketone, ethyl acetate, methanol, ethanol, isopropranol, formic acid, acetic acid, stoddard solvent, Naptha). *Use this when TEX contaminants are present independently of gasoline.*
	Polynuclear Aromatic Hydrocarbons (PAH)						Hydrocarbons composed of two or more benzene rings.
	Tributyltin						The main active ingredients in biocides used to control a broad spectrum of organisms. Found in antifouling marine paint, antifungal action in textiles and industrial water systems. (Examples: Tributyltin; monobutyltin; dibutyltin)
	Methyl tertiary-butyl ether						MTBE is a volatile oxygen-containing organic compound that was formerly used as a gasoline additive to promote complete combustion and help reduce air pollution.
	Benzene						Benzene
	Other Non-Halogenated Organics						Other Non-Halogenated Organics (Example: Phthalates)
	Petroleum Diesel	C	C				Petroleum Diesel
	Petroleum Gasoline	S	S				Petroleum Gasoline
	Petroleum Other	C	C				Crude oil and any fraction thereof. Petroleum products that are not specifically Gasoline or Diesel.
Halogenated Organics (see notes at bottom)	PBDE						Polybrominated di-phenyl ether
	Other Halogenated Organics						Other organic compounds with halogens (chlorine, fluorine, bromine, iodine). search HSDB (http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB) and look at the Chemical/Physical Properties, and Molecular Formula. If there is a Cl, I, Br, F in the formula, it is halogenated. (Examples: Hexachlorobutadiene; hexachlorobenzene; pentachlorophenol)
	Halogenated solvents						Solvents containing halogens (Halogen is typically chlorine, but can also be fluorine, bromine, iodine), and their breakdown products (Examples: Trichloroethylene; Tetrachloroethylene (aka Perchloroethylene); TCE; TCA; trans and cis 1,2 dichloroethylene; vinyl chloride)
	Polychlorinated Biphenyls (PCB)						Any of a family of industrial compounds produced by chlorination of biphenyl, noted primarily as an environmental pollutant that accumulates in animal tissue with resultant pathogenic and teratogenic effects
	Dioxin/dibenzofuran compounds (see notes at bottom)						A family of more than 70 compounds of chlorinated dioxins or furans. (Examples: Dioxin; Furan; Dioxin TEQ; PCDD; PCDF; TCDD; TCDF; OCDD; OCDF). *Do not use for 'dibenzofuran', which is a non-chlorinated compound that is detected using the semivolatile organics analysis 8270*
Metals	Metals - Other						Metals other than arsenic, lead, or mercury. (Examples: cadmium, antimony, zinc, copper, silver)
	Lead						Lead
	Mercury						Mercury

CONTAMINANT GROUP	CONTAMINANT	SOIL	GROUNDWATER	SURFACE WATER	AIR	BEDROCK	DESCRIPTION
	Arsenic						Arsenic
Pesticides	Non-halogenated pesticides						Pesticides without halogens (Examples: parathion, malathion, diazinon, phosmet, carbaryl (sevin), fenoxycarb, aldicarb)
	Halogenated pesticides						Pesticides with halogens (Examples: DDT; DDE; Chlordane; Heptachlor; alpha-beta and delta BHC; Aldrin; Endosulfan, dieldrin, endrin)
Other Contaminants	Radioactive Wastes						Wastes that emit more than background levels of radiation.
	Conventional Contaminants, Organic						Unspecified organic matter that imposes an oxygen demand during its decomposition (Example: Total Organic Carbon)
	Conventional Contaminants, Inorganic						Non-metallic inorganic substances or indicator parameters that may indicate the existence of contamination if present at unusual levels (Examples: Sulfides, ammonia)
	Asbestos						All forms of Asbestos. Asbestos fibers have been used in products such as building materials, friction products and heat-resistant materials.
	Other Deleterious Substances						Other contaminants or substances that cause subtle or unexpected harm to sediments (Examples: Wood debris; garbage (e.g., dumped in sediments))
	Benthic Failures						Failures of the benthic analysis standards from the Sediment Management Standards.
	Bioassay Failures						For sediments, a failure to meet bioassay criteria from the Sediment Management Standards. For soils, a failure to meet TEE bioassay criteria for plant, animal or soil biota toxicity.
Reactive Wastes	Unexploded Ordinance						Weapons that failed to detonate or discarded shells containing volatile material.
	Other Reactive Wastes						Other Reactive Wastes (Examples: phosphorous, lithium metal, sodium metal)
	Corrosive Wastes						Corrosive wastes are acidic or alkaline (basic) wastes that can readily corrode or dissolve materials they come into contact with. Wastes that are highly corrosive as defined by the Dangerous Waste Regulation (WAC 173-303-090(6)). (Examples: Hydrochloric acid; sulfuric acid; caustic soda)

Status choices for contaminants	
Contaminant Status	**Definition**
B - Below Cleanup Levels (Confirmed)	The contaminant was tested and found to be below cleanup levels. (Generally, we would not enter each and every contaminant that was tested; for example if an SVOC analysis was done we would not enter each SVOC with a status of "below". We would use this for contaminants that were believed likely to be present but were found to be below standards when tested
S - Suspected	The contaminant is suspected to be present; based on some knowledge about the history of the site, knowledge of regional contaminants, or based on other contaminants known to be present
C - Confirmed Above Cleanup Levels	The contaminant is confirmed to be present above any cleanup level. For example - above MTCA method A, B, or C; above Sediment Quality Standards; or above a presumed site-specific cleanup level (such as human health criteria for a sediment contaminant).
RA - Remediated - Above	The contaminant was remediated, but remains on site above the cleanup standards (for example - capped area).
RB - Remediated - Below	The contaminant was remediated, and no area of the site contains this contaminant above cleanup standards (for example - complete removal of contaminated soils).

Halogenated chemicals and solvents: Any chemical compound with chloro, bromo, iodo or fluoro is halogenated; those with eight or fewer carbons are generally solvents (e.g. halogenated methane, ethane, propane, butane, pentane, hexane, heptane or octane) and may also be used for or registered as pesticides or fumigants. Most are dangerous wastes, either listed or categorical. Organic compounds with more carbons are almost always halogenated pesticides or a contaminant or derivitive. Referral to the HSDB is recommended you are unfamiliar with a chemical name or compound, as it contains useful information about synonyms, uses, trade names, waste codes, and other regulatory information about most toxic or potentially toxic chemicals.

FOR ECOLOGY USE ONLY (For Listing Sites):

How did the Site come to be known:
- ☐ **Site Discovery (received a report):** _____ (Date Report Received)
- ☑ **ERTS Complaint**
- ☐ **Other (please explain):** _____

Does an Early Notice Letter need to be sent: ☑ Yes ☐ No
If *No*, please explain why: _____

NAICS Code (if known): _____
Otherwise, briefly explain how property is/was used (i.e., gas station, dry cleaner, paint shop, vacant land, etc.):
_____

Site Unit(s) to be created (Unit Type): ☑ Upland (includes VCP & LUST) ☐ Sediment

If multiple Units needed, please explain why: _____

Cleanup Process Type (for the Unit):
- ☑ No Process
- ☐ Voluntary Cleanup Program
- ☐ Federal-supervised or conducted
- ☐ Independent Action
- ☐ Ecology-supervised or conducted

Site Status:
- ☑ Awaiting Cleanup
- ☐ Cleanup Started
- ☐ No Further Action Required
- ☐ Construction Complete – Performance Monitoring
- ☐ Cleanup Complete – Active O&M/Monitoring

Site Manager (Default: Southwest Region): _____

Specific confirmed contaminants include:

Facility/Site ID No. (if known):
_____

✓ in Soil Diesel + oil

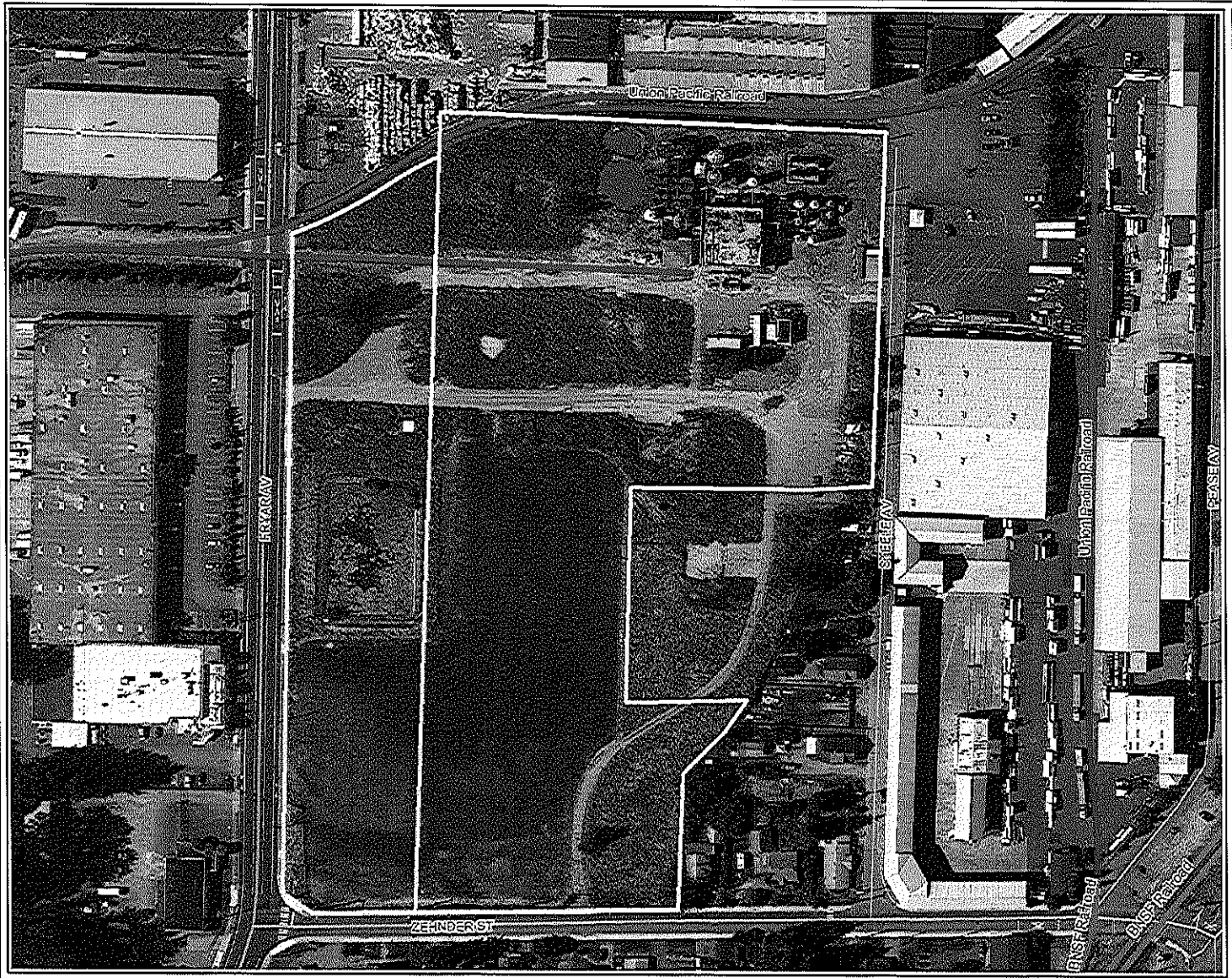
_____ in Groundwater

_____ in Other (specify matrix: _____)

COUNTY ASSESSOR INFO:

Please attach to this report a copy of the tax parcel/ownership information for each parcel associated with the site, as well as a parcel map illustrating the parcel boundary and location.

ERTS 645086, Fleischmann Industrial Park, 1115 Zehnder St., Sumner



Map Legend

Highlighted Tax Parcels

Railroads - sidings

- BNSF Railroad
- Fort Lewis Rail
- Meeker Southern Railroad
- Private Industry
- Sound Transit
- Tacoma Link
- Tacoma Rail
- Tacoma Rail Mountain Div
- Union Pacific Railroad

Railroads - mains

- BNSF Railroad
- Fort Lewis Rail
- Meeker Southern Railroad
- Private Industry
- Sound Transit
- Sound Transit Proposed
- Tacoma Link
- Tacoma Rail
- Tacoma Rail Mountain Div
- Union Pacific Railroad

Roads

- Interstate
- Limited Access State Routes
- Other State Routes
- Ramps
- Major Arterial
- Collector
- Local Access

County - 2011 - Ortho

Scale 1:2,262

0 95 190 ft.

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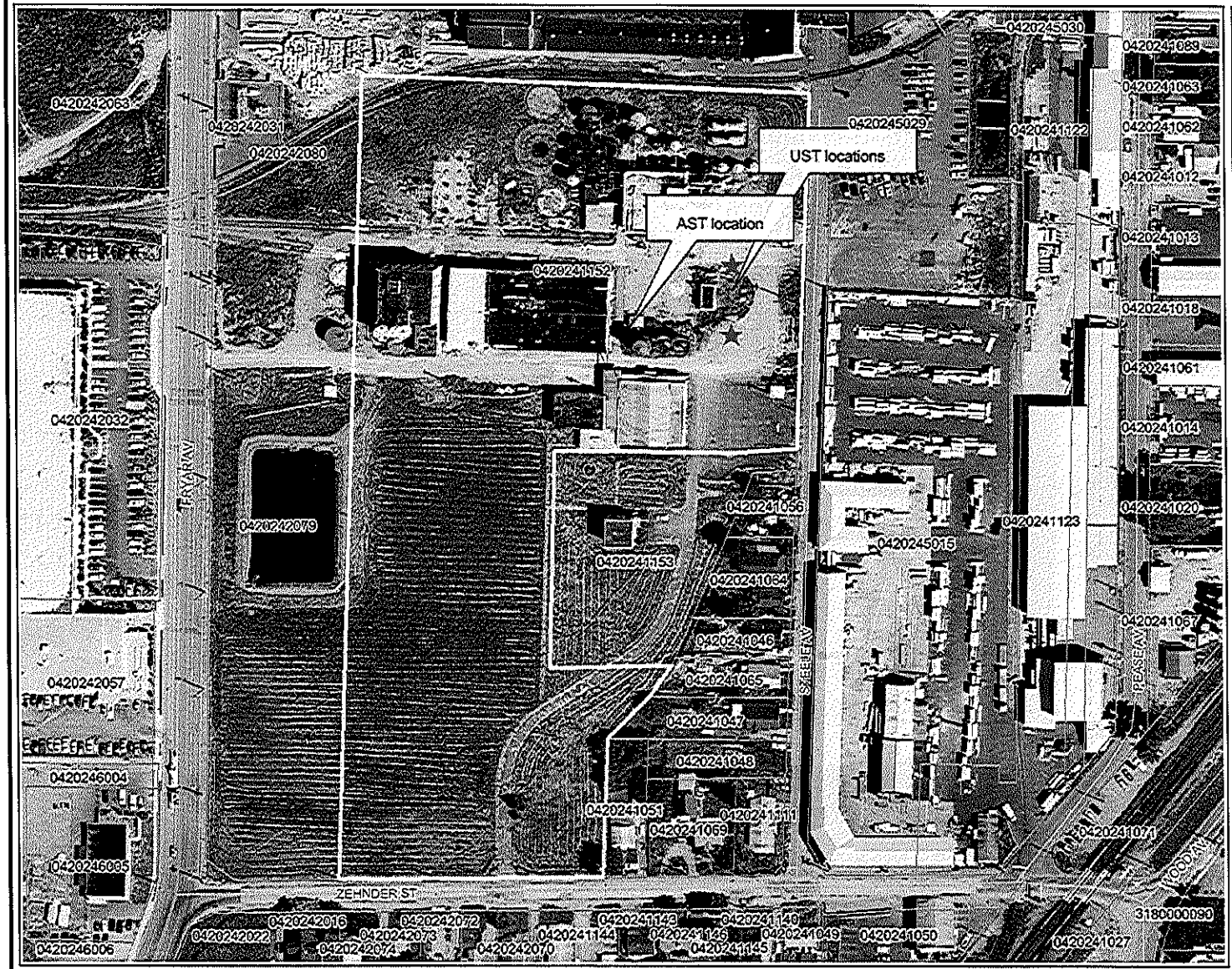
ERTS 645086, Fleischmann's Industrial Park, 1115 Zehnder Street, Sumner

1998 Orthophoto - red stars denote approximate locations of historical groundwater contamination



Map Legend

- Highlighted Tax Parcels
- Tax Parcels
- Base Parcel
- Condominium
- Other
- Roads
- Interstate
- Limited Access State Routes
- Other State Routes
- Ramps
- Major Arterial
- Collector
- Local Access
- County - 1999 - Ortho (Rural)
- County - 1998 - Ortho (Urban)

Scale 1:2,233

0 90 180 ft.

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