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PHASE II

ENVIRONMENTAL SITE ASSESSMENT

4.77 ACRE PROPERTY

AT

Lot 32, O'Brien Station Garden Tracts No. 02
King County
Kent, Washington

PREPARED FOR

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Manager of Regulatory Compliance

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PREPARED BY

STRATUS ENVIRONMENTAL SERVICES
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Project No. 2206.1-T3

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1.0 INTRODUCTION

This report documents the performance of a Phase II Environmental Site Assessment of a 4.77 acre property known as Lot # 32, O'Brien Station Garden Tracts No. 02, between S. 208th Street and S. 206th Street, approximately 300 feet west of 80th Avenue South, in Kent, Washington. A residence on the south boundary of the property has the address 7828 S. 208th Street.. This Phase II Environmental Site Assessment (ESA) has been prepared at the request of Mr. Blair Dominiak, Manager, Regulatory Compliance for TPS Technologies Inc., (TPS). The purpose was (1) to collect and analyze environmental samples from the property and (2) to investigate indications of features that may flag areas of environmental and/or geotechnical concern or may otherwise encumber the proposed use of the subject site. Stratus Environmental Services performed a Phase I ESA for this site and issued the findings to TPS in a report dated July 29, 1994. The Phase I ESA recommended that a soil and ground water sampling program be performed to further explore former site use, as well as investigate for soil and ground water contamination potentially emanating from off-site sources.

2.0 BACKGROUND

TPS has entered into a purchase agreement with the present owner of the property, Mr. Michael Bumstead, to purchase the subject property providing, inter alia, that site environmental conditions are acceptable. The 4.77 acre site comprises "Lot # 32, O'Brien Station Garden Tracts No. 2,", to which King County has attached Assessors Parcel Number (APN) 631500-0440. Figure 2 is a vicinity map of the site.

3.0 SCOPE OF SERVICES

Eleven soil borings were planned, possibly extending to as deep as ten feet. Soil samples were to be collected in each boring for observation and logging purposes. Twenty-seven soil samples were to be selected from the borings, be laboratory composited, and analyzed for a selection of petroleum compounds, volatile and semi-volatile organic compounds, metals, pesticides, herbicides, and general chemistry, dependent on location. We expected to encounter ground water at 10 to 15 feet. Three borings were to be used for "grab" water samples collected from temporary wells. The environmental scope of work was defined in Stratus' proposal and cost estimate dated May 25, 1994, and in the Work Plan dated July 8, 1994. The text of the Work Plan and the Site Health and Emergency Health Plan are attached as Appendix A.

4.0 FIELD INVESTIGATION

4.1 Site Information

The site is rectangular, having a 330 foot frontage on both S. 206th and S. 208th Streets, and an approximate depth of 599 feet on the east and west property boundaries. The site is shown on the USGS Renton, Washington Quadrangle map dated 1949, and most recently revised in 1973. Based on an American Land and Title Association (ALTA) survey provided by Schroeter Land Surveying in 1994, the surface elevation ranges 24 to 26 feet, msl with the greater elevations being along the east boundary.

4.2 Drilling and Soil Sampling

A mobile, model B59, truck-mounted, drilling rig was mobilized to the site on July 8, 1994, and the borings were completed on day two, July 11, 1994. Borings were advanced by 8 inch OD, 3 1/2 inch ID hollow stem augers with a bottom plug. Samples were obtained from the borings by driving a 2 inch ID, 2 1/2 inch OD split barrel sampler driven by a 140 pound, rope/cathead-raised hammer with 30 inch standard fall. One sample, designated B-11, was a surficial sample collected by trowel from the wetland area. Some additional samples were collected from shallow hand-augered borings adjacent to boring locations on July 12 and 15, 1994. The locations of the borings and sample locations are presented on Figure 1. The locations of soil samples and associated geotechnical data collected from borings are presented on the boring logs which are presented in Appendix B.

The drilling equipment was decontaminated by high temperature pressure washing, before commencement of each boring. The split-barrel sampler and other sampling equipment was decontaminated after each sample collection by pressure washing, then scrubbing with Alconox detergent, followed by triple rinsing with distilled, de-ionized water.

Some of the fill soils encountered, were dry and gravely/cobbley, while wet native sands were often free running and in some borings heaved, hampering sample recovery. This necessitated modifying some sample recovery depths from those in the work plan. Table 1 below shows the boring numbers, and sample depth as proposed in the Work Plan, and as collected. The borings were drilled at the locations presented on Figure 1, as in the Work Plan.

4.3 Ground Water Sampling

Three grab ground water samples were collected from stainless steel well point tubes installed in the plan-designated borings (B-4, B-5 and B-8). The 0.010 inch ("10-slot") factory-slotted section of well screen was installed beyond the bottom of the auger stem after collection of planned soil samples. These grab water samples were collected in the first significant water zone which was encountered at approximately 4 to 8 feet depth. The actual depths are shown on the boring logs which are presented in Appendix B.

4.4 Sediment Sampling

One sample of sediment and a grab sample of water was collected from the open ditch that lies to the south of the S. 208th Street pavement. These samples were added to the program by the Project Engineer following receipt of preliminary analytical results from borings in this area. The ditch is about 40 feet wide and about 10 feet deep, including about 2 feet of standing water in cat-tails. The sample was obtained by pushing a stainless steel trowel into the ditch bottom at the location shown on Figure 1. The water sample was collected from the ditch by submersion of the sample containers.

5.0 SUBSURFACE CONDITIONS

5.1 Soil Conditions

The eight of the eleven borings drilled for this project extended to 11 feet depth. One was a surficial sample, and two others extended deeper for geotechnical purposes. The materials recovered revealed a surface cover of loose sandy silt over the majority of the site, including some areas that had low density, indicative of regrading or

agriculture. In the northwest corner, vicinity of Boring B-8, the fill material included gravel and cobble-sized non-native materials. Surficial silts extended down to eight feet depth, though the surficial layer was more typically two to three feet thick. Underlying the surficial silt and/or fill were loose to medium dense, fine grained, clean to slightly silty sands, in which are layers of silty sand and silts, including some organic silt. The deeper borings showed significant thicknesses of fine, non-cohesive sand.

5.2 Ground Water Conditions

Ground water was encountered in all borings during drilling at from three to eight feet below the site surface. Interpolating site elevations at the boring locations from the ALTA survey map by Schroeter, the ground water surface is essentially level at about elevation 19 feet. A westerly gradient was perceived, though should be confirmed. While ground water was encountered in all borings, the flow into temporary wells (Borings B-4, B-5, and B-8) was slow, indicative of less pervious, silty, surficial soils. Ground water samples were collected from inside stainless steel pipe sections to which 0.010 inch ("10-slot") screened ends were attached. these were set in the auger stem and the water allowed to recharge. The field geologist recorded "slow well recovery."

6.0 ANALYTICAL RESULTS

6.1 Laboratory Program and Procedures

The laboratory analysis program for soils, ground water, and sediment generally followed the work plan. Boring locations, sample depths, compositing plans and analytes were selected to collect a summary reading of potential contamination due to a potential point or non-point source of contamination that had potential to impact the site. This rationale was presented in the Work Plan.

Samples were documented in the field, placed in ice-charged coolers, and shipped to the laboratory by overnight courier. Chemical analysis was subcontracted to Centrum Analytical Laboratories, Inc. of Redlands, California. Centrum issued test results to the project team promptly by fax, later followed by hard copy certificates.

The laboratory program was generally conducted in accordance with the work plan. The exceptions were: (a) some sample depths were modified based on encountered field conditions, including actual soil conditions and depth to ground water; and (b) some samples were analyzed based on laboratory test results. EPA "holding times" for sample analyses necessitated an accelerated laboratory turn-around time. Discrete analyses were ordered on some samples. Based on initial results presented at specific locations, the project team added additional sampling and analysis to attempt identification and /or location of a source. In particular, a test result provided for a soil sample collected from boring B-4 and a water sample result in B-5 triggered collection of additional samples of water and sediment from the drainage ditch located on the south side of South 208th Avenue.

6.2 Analytical Results: Soil and Sediment

In the soil and sediment testing program, many of the soil samples were analyzed as composites for the group(s) of analytes on Table 2. The results of this initial round of analysis are summarized on Table 3.1, printed on two sheets. Table 3.1a contains results of organics and hazardous waste metals analyses. Table 3.1b contains results of

inorganic chemistry analyses. The laboratory certificates of analysis, details of the analytical procedures, and quality assurance reports are included in Appendix C.

Some composited soil sample results showed the presence of substances at levels of concern in regard to regulations and guidelines. New specimens taken from each of the individual samples of the particular composite, were analyzed for the particular substance(s) of concern. In one instance, one sample member of a composite (B-6 in Composite A7) had insufficient soil remaining. for discrete analysis. However, the analyte of concern was present in the partner sample (on which discrete analysis was performed), and at greater concentration than revealed in the composite. Where discrete analyses were performed, the composite result is provided with an asterisk in Table 3.1.

The screening criteria used for discrete sample analysis was guided by regulatory criteria, but levels of interest were discretionary based on our judgment. Values were used for substances specifically listed by the State of Washington's Model Toxics Control Act, Model B Values and WAC 173-200 "Water Quality Standards for Ground Waters of the State of Washington" or WAC 173-201A "Water Quality Standards for Surface Waters of the State of Washington". The US EPA's regulations were also used in this evaluation.

In summary, very few organic substances were found to be present. There were no petroleum hydrocarbons, herbicides or pesticides revealed in the soil borings sampled. In the volatile organics analysis, scans showed single analytes present on various scans at very low concentrations, less than 20 ug/kg (ppb). Methylene chloride, also known as dichloromethane (DCM) was indicated in six of seven volatile analyses. Five were at these low levels and one composite, A4 had DCM presence at 47 ppb. DCM is a common laboratory solvent. This wide spread indication of a man made chemical at this low level in soil is considered an aberration. It is most unlikely that this substance would be present during TPS' planned site usage. Another substance present in minute quantity was in the sample collected from the ditch. Carbon disulfide, with presence indicated at 14 ppb, is, in its pure form, a highly reactive, and foul smelling industrial chemical (gas) with many uses. However, the presence at close to the 16 ppb odor threshold is well below toxic levels.

The test result for volatile organics in boring B-4, at 6 feet depth indicated xylene was present at 60 ug/kg. discrete analysis of composite partners, from 1.5 and 6.0 feet depth, and the sample from 10 feet revealed no other xylene presence, and total absence of other Volatile Organic Carbons (VOC) listed analytes. Thus, this presence is attributed to an aberration. The test result for semi-volatile organics in Composite A1, from boring B-4, indicated "unidentified aliphatic and acyclic hydrocarbons present at 210 ug/kg. However, the Hydrocarbon Identification (HCID) scan for petroleum hydrocarbons did not detect such a presence.

The results for RCRA hazardous waste-list metals are all below levels of concern. Of interest are the high, though consistent levels of aluminum and iron, which are often soil constituents. Also of interest was a consistent level of selenium at about 50 ppm. This level is of interest since selenium has a low TCLP threshold of only 1 ppm. The TCLP extraction run on the two highest samples did not detect a soluble presence.

General inorganic chemical analysis was run in an attempt to quantify background and to gauge whether the high salt concentration in waste piles and low pH seen on the nearby Maralco Superfund site may have become present on the subject property. Results are presented in Table 3.1b.

6.3 Analytical Results: Water

Ground water samples were collected from three borings (B-4, B-5, and B-8, designated as W4, W5, and W8), and from an irrigation well located at the north side of the house on the south east portion of the subject property. Additionally, a surface water sample was collected from the drainage ditch that is south of S. 208th Street. The sample locations are shown on Figure 1. The test results, are summarized on Table 3.2, printed on two sheets. Table 3.2a contains results of organics and hazardous waste metals analyses. Table 3.2b contains results of inorganic chemistry analyses. We included in Table 3.2 a listing of EPA Maximum Contaminant Levels for drinking water (MCLs) for the various analytes. The laboratory certificates of analysis, details of the analytical procedures, and quality assurance reports are included in Appendix C.

The test results show an absence of organic compounds, excepting for spurious DCM results in VOA analyses, as with the soils, these are considered an aberration. RCRA metals for the temporary well analyses did not reveal contaminants of concern. A high result for aluminum in sample W5 at the south west corner of the site triggered sampling of the drainage ditch. The sample was filtered and a soluble analysis was performed. The result was low, and the high result was resolved to be due to a high sediment content in the well sample, aluminum being a typical soil constituent and not regulated.

Of note in the irrigation well analysis for RCRA metals, both lead, present at 0.713 ppm, and cadmium, present at 0.265 ppm, exceed the EPA's MCLs by a factor of 50 times.

The general chemistry results showed consistent levels of dissolved anions. The results showed that the waters were slightly acidic, and relatively soft, as measured by specific conductance, total dissolved solids, and hardness.

7.0 CONCLUSIONS

The investigation did not indicate chemical contamination that will in our opinion, impact the site development and use as proposed, except in the vicinity of borings B-6 and B-7. In the samples represented by these two borings, a very low level of the volatile organic compounds (VOCs) toluene, ethyl benzene and xylenes were indicated in one sample. These compounds are common marker constituents of gasoline an other light-end petroleum fuels. When found together they generally indicate a presence of gasoline contamination. These two borings were sited to identify a potential source of contamination resultant from an equipment wash rack and detention pond on the adjacent property. Runoff water containing a low level of gasoline from the adjacent site on the west boundary may be a source of this contaminant or possible dumping by others.

The irrigation well on the property had levels of lead and cadmium in water at 50 times the US EPA's Maximum Contaminant Levels for drinking water. These two metals may result from sources in the well construction materials, and not from ground water contamination, per se.

The significant thickness of lower density fine sands that exist below the shallow ground water table renders the site subject to liquefaction. Should a significant seismic event occur during the life of the planned improvements, liquefaction could seriously impact proposed operations and damage the planned improvements unless adequate engineered improvements be designed into the site and structures in advance. .

8.0 RECOMMENDATIONS

Should TPS complete the acquisition, we recommend the following:

1. The VOC finding from borings 6 & 7 need to be brought to the attention of the property owner prior to TPS property transfer and/or performing any site work.

2. The water from the irrigation well may result in human ingestion, or runoff to waters of the state. Should TPS have an interest in making beneficial use of the ground water a more thorough investigation of the presence and source of these two metals should be made. Should TPS decide to abandon the subject well, proper well closure is required (King County Health Department, (206) 296-4666).

3. The subject of liquefaction and the potential impact on the planned improvements should be addressed during geotechnical investigations and the subsequent structural design phase.

9.0 LIMITATIONS

This investigation has been performed according to generally accepted geologic, geotechnical and environmental engineering principles and practices. No other warranty, either expressed or implied is made. The chemical analysis was performed by an independent environmental laboratory. Evaluations of the chemical analyses, results reported, conclusions and recommendations made therefrom are thus implicitly dependent on the accuracy of the analyses. The work plan used to develop the sampling plan was based on the review of various documents relevant to the site conditions as known at the time of its preparation. Changes in the information or data gained from any of these sources could result in changes in our conclusions and recommendations. If such changes are subsequently found to occur, we should be advised so that we can review our report in light of these changes.

*** ***** ***

Kent, Washington

TABLE 1
SOIL SAMPLING PLAN

Boring #	Depth (ft.)	Analytes & *Composites		Rationale
1	1 - 2.5	B1		Spill from Boeing/Kent Benaroya Facility
	4.5 - 6	B1		
	9.5 - 11	B1		HOLD for results from shallow sample
				See Note #1
2	1 - 2.5	A4		Washrack on DPK & predecessor
	4.5 - 6	A4		
	9.5 - 11	A5		Analyze if not wet, & shallow are contaminated
3	1 - 2.5	A4		Washrack on DPK & predecessor
	4.5 - 6	A4		
	9.5 - 11	A5		See Note #1
4	1 - 2.5	A1	D2	Drainage Ditch/ Boeing background
	4.5 - 6	A1	D2	
	9.5 - 11	A1	D2	See Note #1
	Water	W		Upgradient Well water
5	1 - 2.5	A2		Drainage Ditch/ Boeing & Malcolm background
	4.5 - 6	A2		
	9.5 - 11	A2		See Note #1
	Water	W		Downgradient well water
6	1 - 2.5	A6		Washrack on Malcolm Drilling
	4.5 - 6	A6		
	9.5 - 11	A7		See Note #1
7	1 - 2.5	A6		Washrack & Detention Pond/ Malcolm
	4.5 - 6	A6		
	9.5 - 11	A7		See Note #1
8	1 - 2.5	A3, C1, D1		MARALCO/ downgradient well/ background
	4.5 - 6	A3	D1	
	9.5 - 11	A3	D1	See Note #1
	Water	W		
9	1 - 2.5	C2		Pesticide/ Herbicide
	5 - 30+			Geotech @ 5' intervals/ no analysis See Note #4
10	1 - 2.5	C2		Pesticide/ Herbicide
	5 - 30+			Geotech @ 5' intervals/ no analysis See Note #4
11	1.0 - 2.5	C2	D3	Wetland Surface Sample/MARALCO
				Pesticide/ Herbicide

NOTES: (1) DO NOT analyze soil sample until results from the shallow samples have been reviewed and further analysis is approved by the STRATUS.Notify the client if the holding time for specific secondary analysis is critical.DO NOT analyze if the sample is wet. Environmental soil samples will not be taken from beneath ground water level.

(2) Estimated Number of Containers: Soil:*35 + 5 extra; Water: 3 plus 7 extra.*

(3) Soil Compositing information can be found in Table 3.

(4) Keep Geotech samples cool, DO NOT FREEZE.

TPS Technologies Inc.
Phase II,WORK PLAN
Kent, Washington

TABLE 2

COMPOSITE MATRIX

Composite the soil at the designated depth listed below for each boring location. Assign the Soil Composite I.D. number at the left. The alpha indicates the type of analyses (see Assignment of Analyses, below). The alpha-numeric indicates the respective composite number for that depth and/or location(s). Vertical & horizontal composites are used in this sampling plan. See Figure 2 for boring locations.

DEPTH (FT.)	1 - 2.5'	4.5 - 6'	9.5 - 11'	Comments
Soil Composite I.D.	Boring Locations			Composite Type Borings
A1	4	4	*	2 Depths 1
A2	5	5	*	2 Depths 1
A3	8	8	*	2 Depths 1
A4	2,3	2,3	*	2 Depths 2
A5	—	—	2,3	1 Depth 2
A6	6,7	6,7	—	2 Depths 2
A7	—	—	6,7	1 Depth 2
B1	1	1	*	2 Depths 1
C1	8	—	—	No Composite
C2	9,10,11	—	—	1 Depth 3
D1	8	8	*	2 Depths 1
D2	4	4	*	2 Depths 1
D3	11	—	—	1 Depth 1

* Hold sample for analysis until resul's have been reviewed by client. Notify client of time remaining (holding times) for specific analyses.

— No analysis scheduled for the listed alpha numeric

ASSIGNMENT OF ANALYSIS

SOIL COMPOSITE I.D.	TYPE OF ANALYSIS
A 1 - 7	TPH, VOLATILES, SEMI-VOLATILES AND METALS (COMPOSITES)
B 1	TPH
C1	PESTICIDES (8080) & HERBICIDES (8150)
C2	PESTICIDES & HERBICIDES (HORIZONTAL COMPOSITE)
D1-3	GENERAL CHEMISTRY
WATER SAMPLES	
W	NO COMPOSITES: TPH, VOLATILES, SEMI-VOLATILES, METALS, GENERAL CHEMISTRY.

TABLE 3.1a
ANALYTICAL RESULTS FOR SOILS AND SEDIMENT
Organics and RCRA Metals

ANALYSIS	BORINGS:	Composite A1 B4	Composite A2 B5	Composite A3 B8	Composite A4 B2, B3	Composite A5 B2, B3	Composite A6 B6, B7	Composite A7 B6, B7	Composite B1 B1	Composite C1 B8	Composite C2 B9, B10, B11	Ditch Sediment
TPH as (WA HCID)	C6 - C10	ND	ND	ND	ND	NA	ND	ND	ND	NA	NA	ND
	C10 - C28	ND	ND	ND	ND	NA	ND	ND	ND	NA	NA	ND
	C28 - C30	ND	ND	ND	ND	NA	ND	ND	ND	NA	NA	ND
VOA (EPA 8240)		ND* exc xylenes @ .05	ND exc DCM @ .0 ND exc toluene @.0011	DCM @ .0076	ND exc DCM @ .0047	NA	ND* exc DCM @ .0 ND* exc DCM @ .006	DCM @ .020	NA	NA	NA	ND exc. CS@ @.014ppm DCM @ .0011ppm
Semi Volatiles,BNA (EPA 8270)		ND exc 0.21ppm C12-C32 aliphatic&alicyclic HCs	ND	ND	ND	NA	ND	ND	NA	NA	NA	ND
Pesticides	(EPA 8080)	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA
Herbicides	(EPA 8150)	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	NA
Metals, RCRA 13												
Aluminum		10,000	11,000*	7,500	5600	NA	9,600	9,700	NA	NA	NA	6,800
Arsenic		ND	ND	ND	ND	NA	ND	ND	NA	NA	NA	ND
Barium		62	62	39	24	NA	53	55	NA	NA	NA	36
Cadmium		ND	2.1	ND	ND	NA	ND	ND	NA	NA	NA	ND
Chromium		14	8.4	18	11	NA	14	15	NA	NA	NA	4.2
Copper		22	24	20	12	NA	21	23	NA	NA	NA	14
Iron		14,000	17,000	11,000	10,000	NA	16,000	14,000	NA	NA	NA	13,000
Manganese		160	320	130	100	NA	260	230	NA	NA	NA	100
Lead		ND	ND	ND	ND	NA	ND	ND	NA	NA	NA	ND
Mercury		ND	0.65	ND	ND	NA	0.48	1.4	NA	NA	NA	ND
Selenium		51	67*	41	ND	NA	58*	52	NA	NA	NA	42
Silver		ND	ND	ND	ND	NA	ND	ND	NA	NA	NA	ND
Zinc		40	41	28	23	NA	32	37	NA	NA	NA	58

NOTES:
1. Refer to Table 1 for compositing details
2. Analytical methods presented on Table 2. Information on laboratory procedures is presented with the laboratory certificates in Appendix C.
3. All results in mg/kg (ppm) unless noted
4. NA indicates analysis not requested; ND indicates analyte(s) not detected. Refer to laboratory certificates for detection limits for each sample.
5. * Indicates that discrete analyses were performed on this composite group. For results, refer to laboratory certificates in Appendix C

TABLE 3.1b
ANALYTICAL RESULTS FOR SOILS AND SEDIMENT
General Chemistry

ANALYSIS		Composite D1	Composite D2	Composite D3	Ditch Sediment
	BORINGS:	B8	B4	B11	
Cations:					
	Calcium	3,300	3,900	4,100	2,700
	Magnesium	2,500	3,300	3,800	1,900
	Potassium	400	570	340	2,200
	Sodium	370	460	380	380
Anions:					
	Nitrate	18	20	3.1	ND
	Nitrite	0.6	0.4	0.37	3.82
	Chloride	10	69	69	11.3
	Sulfate	17	ND	16.2	ND
	Phosphorus/ Orthophosphates	ND	0.1	1.6	ND
Physical Parameters					
	pH	5.65	5.61	5.84	6.39
	Specific Conductance	NA	NA	NA	339
	Total Dissolved Solids	NA	NA	NA	148
	Hardness (asHCO3)	40	55	NA	NA
	Alkalinity	11	26	NA	22

TABLE 3.2a
ANALYTICAL RESULTS FOR WATER
SAMPLED FROM TEMPORARY WELLS IN BORINGS

Organics and RCRA Metals Anatysis				W4	W5	W8	Ditch Water	Irrig.Well	US EPA MCL
TPH	C6-C10			ND	ND	ND	ND	ND	no standard
	C10-C28			ND	ND	ND	ND	ND	no standard
(WA HCID)	C28-C30			ND	ND	ND	ND	ND	no standard
VOA	(EPA 8240)			ND	ND	ND	ND exc. DCM @ 4.7 mg/l		Various
Semi Volatiles,BNA (EPA 625)		mg/l		ND	ND	ND exc. .019mg/L 2-methylphenol	ND		Various
Pesticide, (EPA 8080)		mg/l		NA	NA	ND	ND		Various
Metals, RCRA 13		NTCA A	NTCA B						
Aluminum		-	NA	211	1800 (9.9)	210	0.533	0.855	1
Arsenic		.005	0.005 DCM	ND	0.029	0.025	ND	0.0148	0.05
Barium		-	4.20	0.869	5.59	1.07	0.02	0.011	1
Cadmium		0.005	0.008	ND	0.174	ND	ND	0.265	0.005
Chromium		0.050	0.080	0.389	1.82	0.312	ND	ND	0.1
Copper		-	0.592	0.481	2.99	0.822	ND	0.179	1.3
Iron		-	NA	285	2.200	309	12.2	62.6	0.3 (2ndary)
Manganese		-	0.080	1.86	9.85	4.64	1.02	0.209	0.05 (*)
Lead		0.005	NA	ND	ND	ND	ND	0.713	0.015
Mercury		0.002	48	ND	ND	ND	ND	ND	0.002
Selenium		-	0.080	ND	ND	ND	ND	0.0073	0.05
Silver			0.048	ND	ND	ND	ND	ND	0.05
Zinc			4,200	3.44	5.72	2.17	.047	24.8	5 (2ndary)

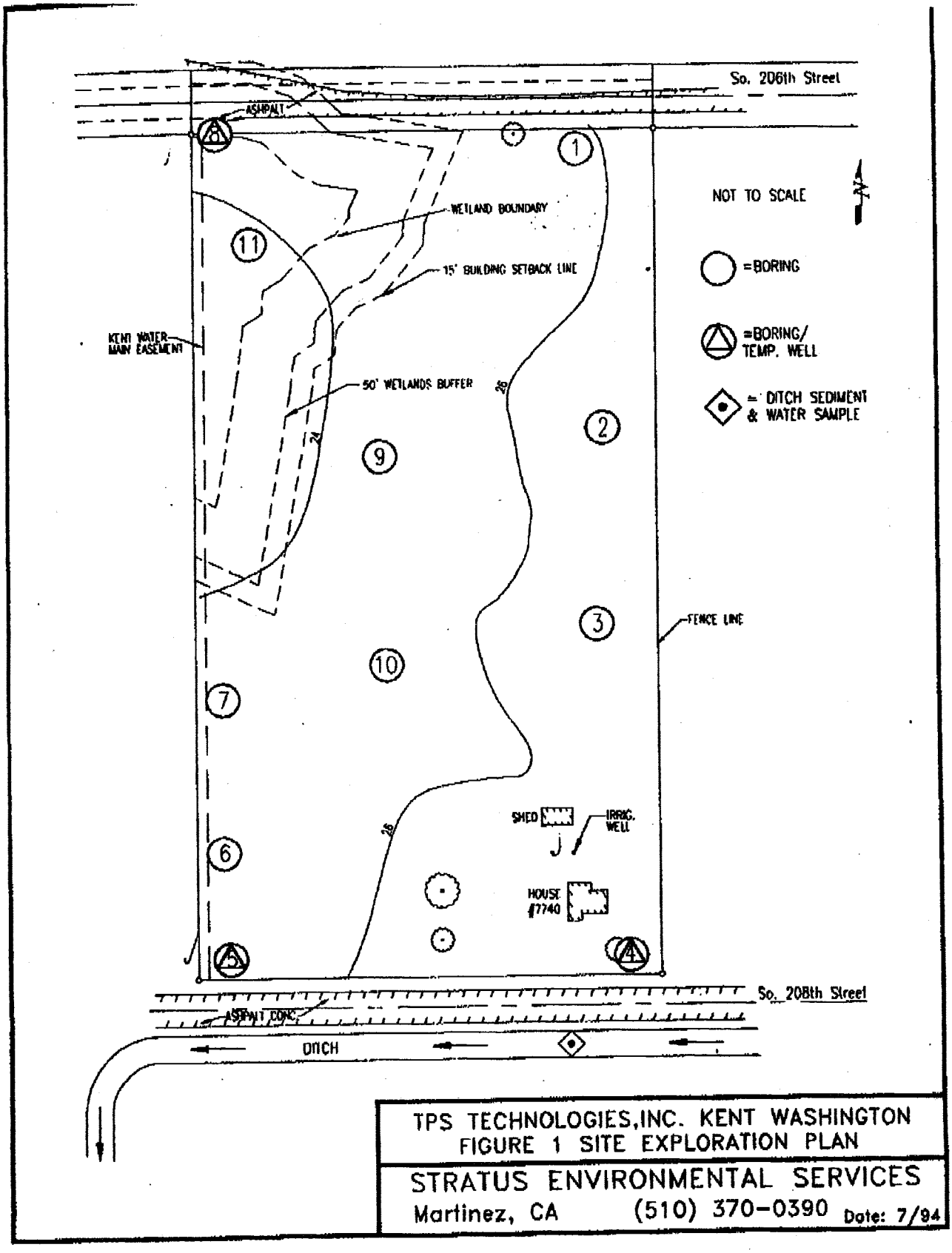
NOTES:
1. Analytical methods presented on Table 2. Information on laboratory procedures is presented with the laboratory certificates in Appendix C.
2. All results in mg/kg (ppm) unless noted
3. Samples were not filtered prior to analysis, excepting for soluble fraction, when ordered.
4. NA indicates analysis not requested; ND indicates analyte(s) not detected. Refer to laboratory certificates for detection limits for each sample.

Table 3.2b

ANALYTICAL RESULTS FOR WATER SAMPLED FROM TEMPORARY WELLS IN BORINGS

General Chemistry

ANALYSIS		W4	W5	W8	Ditch Water	Irrig.Well	EPA MCL
Cations:							
	Calcium	94.2	916	90.3	16	5.73	no standard
	Magnesium	139	762	100	4.85	3.26	no standard
	Potassium	11.4	59.5	13.6	ND	2.22	no standard
	Sodium	40.8	113	27.7	6.4	11.5	no standard
(EPA 60*0)							
							EPA, 2ndary
Anions:							[illegible]
	Nitrate	ND	0.04	0.03	ND		-10
	Nitrite	3.3	3.7	3.5	ND		250
	Chloride	10	2	15	10.1		250
	Sulfate	0.41	ND	ND	ND		no standard
	Phosphorus/ Orthophosphates	ND	0.03	0.04	ND		
Physical Parameters							
	pH	6.23	6.31	6.12	6.52	7.67	6.5 - 8.5
	Specific Conductance(	124	62.6	280	141	114	no standard
	Total Disolved Solids	114	134	248	337	70	500
	Hardness (asHCO3)	101	64	57		44	no standard
	Alkalinity	117	72	94	85		no standard



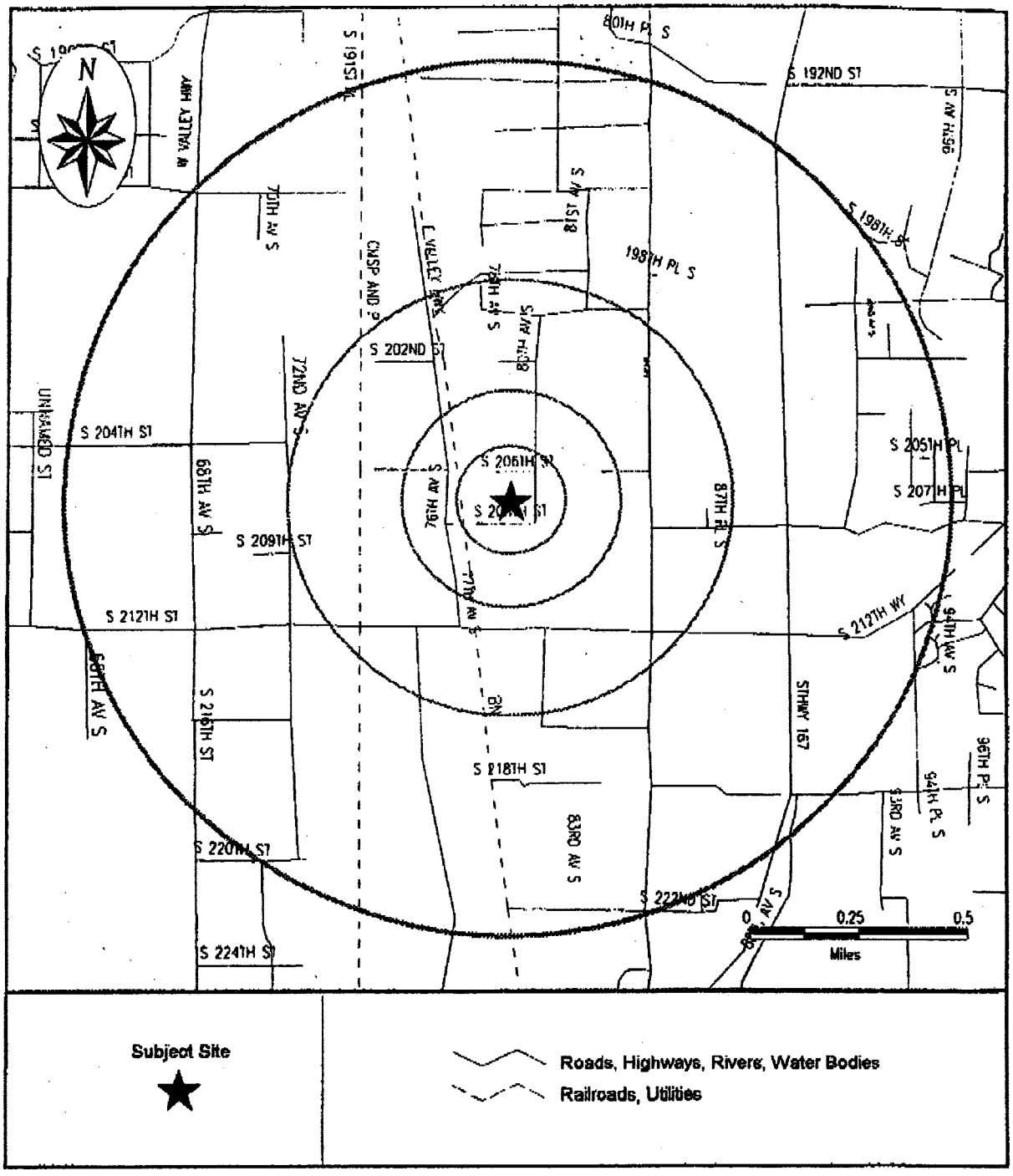
TPS TECHNOLOGIES,INC. KENT WASHINGTON
FIGURE 1 SITE EXPLORATION PLAN

STRATUS ENVIRONMENTAL SERVICES
Martinez, CA (510) 370-0390 Date: 7/94

VISTA

SITE ASSESSMENT REPORT

Street Map



For More Information Call VISTA Environmental Information at 1 - 800 - 767 - 0403

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Figure 2