ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

April 5, 1996

STID 5541

REMEDIAL ACTION COMPLETION CERTIFICATION

Jim de Vos
Alameda County General Services Agency
Engineering & Environmental Management Department
1401 Lakeside Drive, 11th Floor
Oakland, CA 94612

RE: "CENTRAL PARCEL" - SANTA RITA REHABILITATION CENTER

Dear Mr. de Vos:

This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Specifically, the subject tanks are: USTs 1, 2, and 3 ("old boiler plant"); and, USTs 4, 4A, and 4B ("4th and Madigan site"). Enclosed are the Case Closure Summaries for the two tank locations at the referenced site for your records.

Based upon the available information, including current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, California Code of Regulations, Division 3, Chapter 16, Section 2721(e). If a change in land use is proposed, the owner must promptly notify this agency.

Please contact Scott Seery at (510) 567-6783 if you have any questions regarding this matter.

Sincerely,

Jun Makishima

Jun Makishima
Acting Director of Environmental Services

enclosures

cc: Gordon Coleman, Acting Chief, Env. Protection Division
Kevin Graves, RWQCB
Mike Harper, SWRCB
Rod Freitag, GSA

Files

- SIGNED COPY -

* 07-2394 *

CALIFORNIA REGIONAL WATER

MAR 0 6 1996

QUALITY CONTROL BOARD

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION **Date: 03/01/96**

Agency name: **Alameda County-EPD** Address: **1131 Harbor Bay Pkwy #250**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Scott Seery** Title: **Sr. Haz. Materials Spec.**

II. CASE INFORMATION

Site facility name: **Santa Rita - Central Parcel**
"4th and Madigan site" (UST # 4, 4A, 4B)
Site facility address: **0 Dublin Blvd. extension, Dublin, CA**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **5541**
URF filing date: **12/15/92** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
Alameda Co. GSA Engineering & Env. Management Dept. Attn: Jim de Vos	1401 Lakeside Dr., 11th Fl. Oakland, CA 94612	510/208-9520

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	10,000 gallon	Bunker C	removed	05/18/92
2	~8000 "	"	"	"
3	~3000 "	Diesel	"	"

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: (probable) overfilling

Site characterization complete? YES

Date approved by oversight agency: 02/29/96

Monitoring Wells installed? NO Number: 4 soil borings / 2 HP points

Proper screened interval? NA

Highest GW depth below ground surface: UNK; however, GW reached @ 39' BG during drilling

Lowest depth: NA

Flow direction: UNK

Most sensitive current use: (planned) school site

Are drinking water wells affected? NO Aquifer name: Camp Subbasin

Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)
Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Is surface water affected? NO Nearest affected SW name: NA

Off-site beneficial use impacts (addresses/locations): NONE

Report(s) on file? **YES** Where is report filed? **Alameda County**
1131 Harbor Bay Pkwy
Alameda CA 94502

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	(10K; 8K; 3K gal)	Disposal - Erickson, Inc. Richmond, CA	5/18/92 - 5/20/92
Piping	UNK (presumed as above)		
Product	500 gals	Recycle - Gibson Oil Redwood City, CA	3/18/92
	100 gals	Recycle - PRC Patterson, CA	6/12/92
Soil	~ 500 yds^3	Re-use on site	May 1995
Groundwater	NA		
Barrels	NA		

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After[1]	Before	After[2]
TPH (Gas)	NA	NA	NA	NA
TPH (Diesel)	15,000	ND	"	84
Benzene	ND	"	"	ND
Toluene	"	"	"	"
Xylene	"	"	"	"
Ethylbenzene	"	"	"	"
Oil & Grease	5300	"	"	NA

Notes: 1) "After" soil sample results from Sept. 1995 site assessment.

2) "After" water sample results from Sept. 1995 site assessment.

Comments (Depth of Remediation, etc.):

Beginning March 1992 through May 1992, two (2) Bunker C fuel oil and one (1) diesel fuel USTs were removed from this Santa Rita-Central subsite ("4th & Madigan"). Although the tanks did not appear to have leaked, there

was evident subsurface contamination noted in the UST pit, particularly at the west end of the excavation near tank 4, and upon the soil bed located on top of the concrete hold down pad at the base of the excavation.

Because the subject USTs were constructed on a concrete pad, initial soil samples were collected at the west and east ends of each tank, ~ 2' below the pad's edge, at a reported depth of approximately 14' BG. Up to 15,000 ppm TPH-D and 5300 ppm oil and grease were identified in sampled soil. BTEX concentrations were below laboratory detection limits in all samples.

Approximately 500 yds^3 of soil material was eventually generated during closure activities. The resultant excavation was approximately 26 x 32 x 12' deep.

During November 1993, the stockpile was sampled at a frequency of one discrete sample per 50 yds^3 to determine options for its final disposition. Based on the analytical results of this sampling effort (<10 - 100 ppm TPH-D; < 0.01 ppm total xylenes) a *SESOIL* analysis was performed to determine whether this material would pose a threat to underlying GW resources should it be reintroduced to the site at grade. The conclusion following completion of the *SESOIL* analysis was that reintroduction of the stockpiled material *would not* pose such a risk. Permission to reintroduce this material at grade was granted by ACDEH on July 18, 1994. On May 25, 1995, the subject stockpile was spread in 8 - 10" lifts on the west side of Madigan Ave., just south of the UST site, over a reported area of ~ 180 x 40'.

During January 1996, out of concerns regarding potential development of a portion of this site as an elementary school, the (now) spread stockpile was again sampled and analyzed for the presence of SVOC. All 5 samples were below laboratory detection limits for SVOC.

As of this writing, the UST excavation has not yet been restored to grade.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Undetermined

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Undetermined

Does corrective action protect public health for current land use? YES
Site management requirements: NA

Should corrective action be reviewed if land use changes? **NO**

Leaking Underground Fuel Storage Tank Program

Monitoring wells Decommisioned: NA

Number Decommisioned: NA Number Retained: NA

List enforcement actions taken: NONE

List enforcement actions rescinded: NONE

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Scott Seery Title: Sr. Haz Mat Specialist
Signature: Date: 3/5/96

Reviewed by
Name: Dale Klettke Title: Haz Mat Specialist
Signature: Date: 3/4/96

Name: Amy Leech Title: Haz Mat Specialist
Signature: Date: 3/4/96

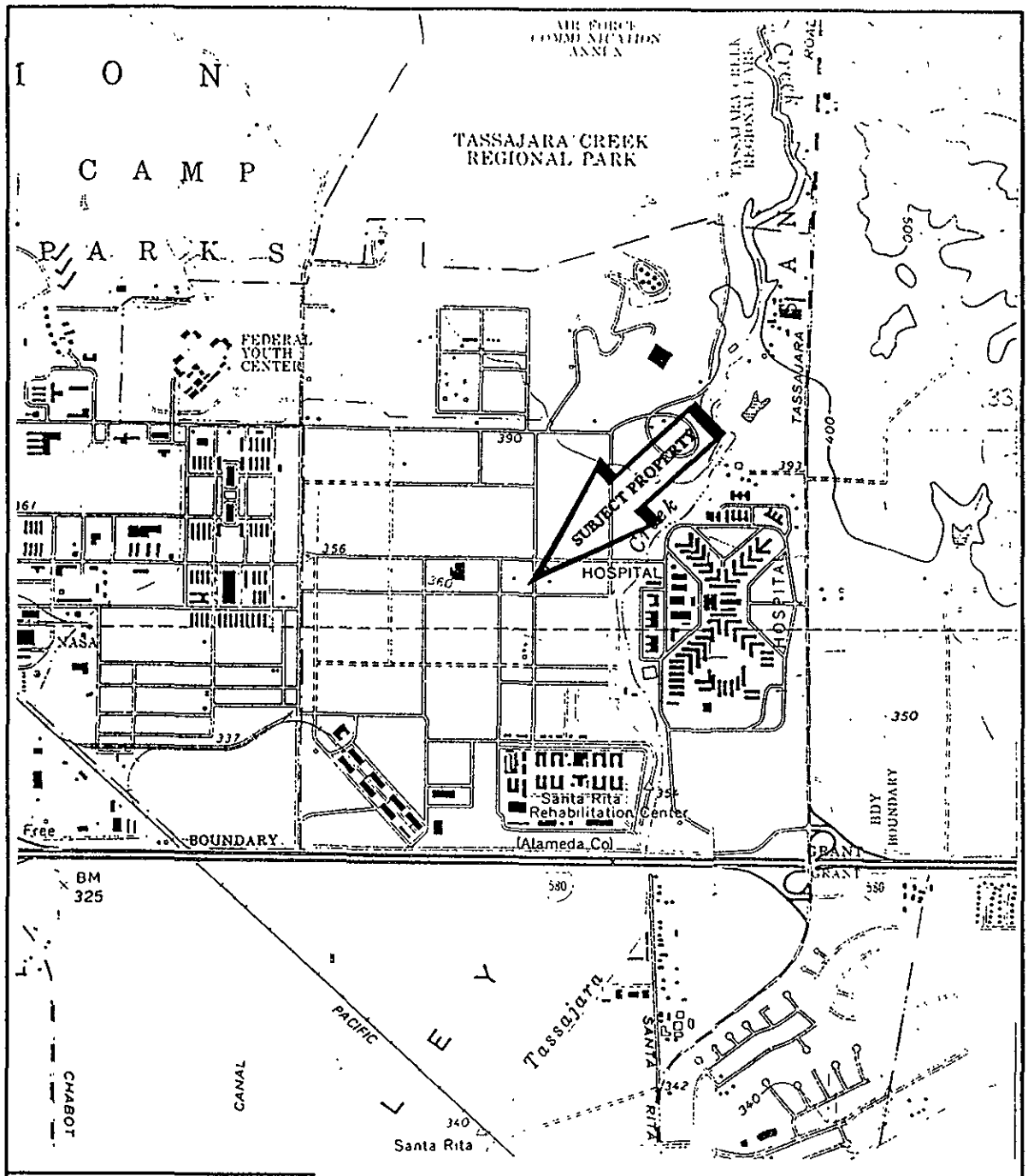
VI. RWQCB NOTIFICATION

Date Submitted to RB: 3/5/96 RB Response: Approved
RWQCB Staff Name: Kevin Graves Title: San. Eng. Assoc. Date: 3/26/96

VII. ADDITIONAL COMMENTS, DATA, ETC.

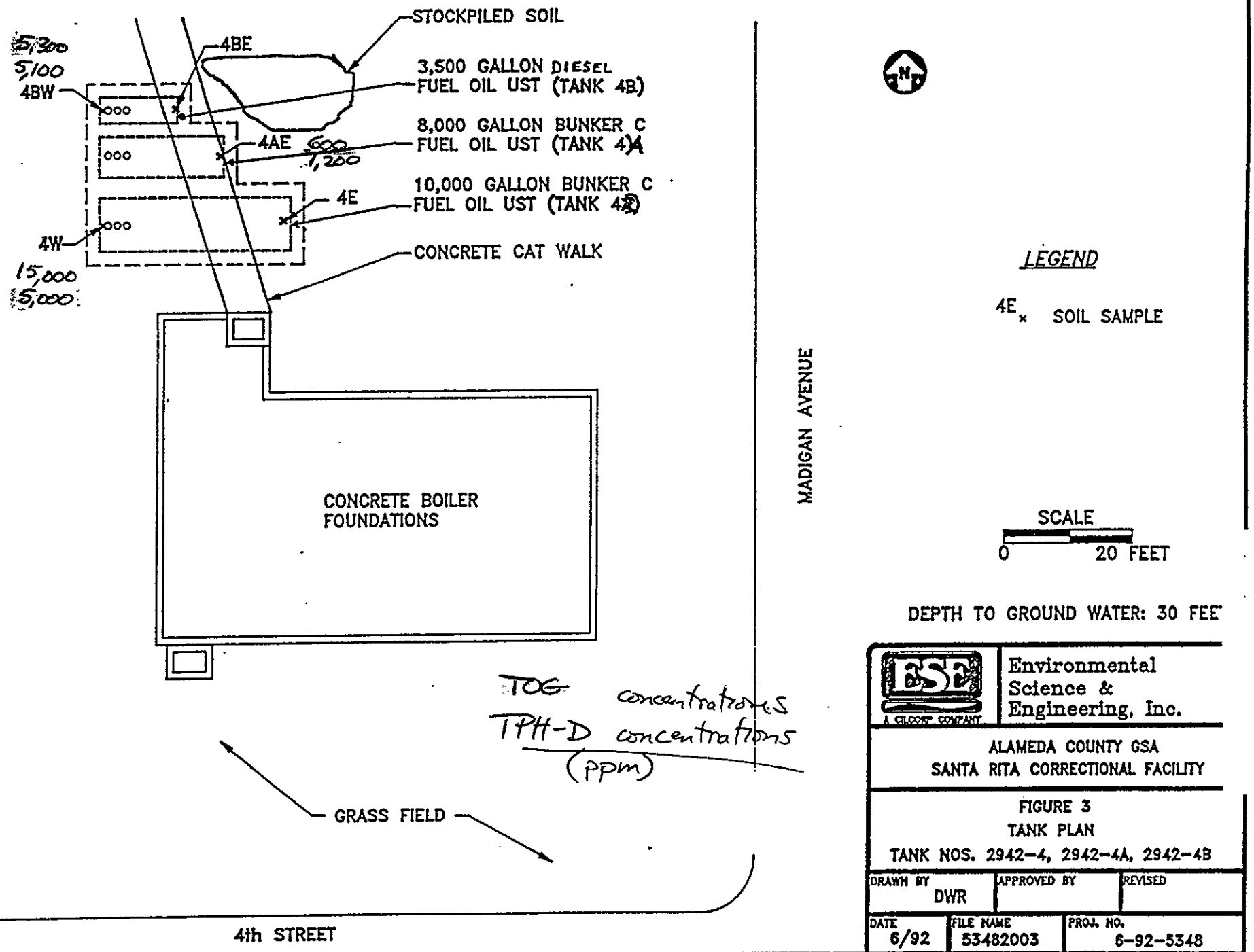
During September 1995, four soil borings were drilled to depths ranging from ~ 25 - 40' BG in areas around the former UST cluster where the highest concentrations of fuel compounds were detected during the previous UST closures. Soil samples were collected from all borings during advancement. Ground water samples were additionally collected from two (2) of the borings, B2 and B3, located at the southwest corner of the UST pit.

Twenty soil samples were collected in total and <u>all</u> were below laboratory detection limits for targeted compounds (TPH-D, BTEX). As a result, SVOC analysis was not performed. Of the two ground water samples, only that sample collected from boring B2 exhibited any detectable compounds where 84 ug/l TPH-D was noted.



NOTE: Base map from USGS Dublin, California and Livermore, California Quadrangles, 7.5 minute series (Topographic) 1961. Photorevised 1980.

SITE LOCATION MAP	County of Alameda - G.S.A. Santa Rita Site 4th & Madigan Dublin, California	January 1994 Versar Project: 2241-014 F:\GRAPHIC\2241-14F	FIGURE 1 Not To Scale



Environmental Science & Engineering, Inc.

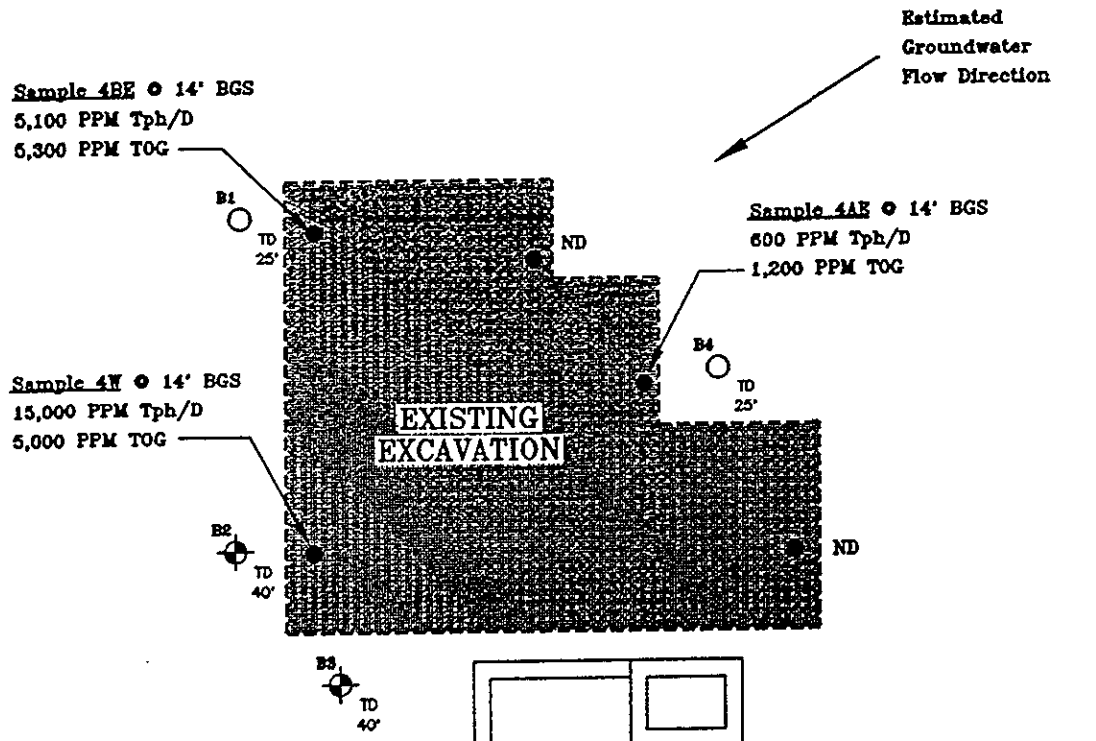
ALAMEDA COUNTY GSA
SANTA RITA CORRECTIONAL FACILITY

FIGURE 3
TANK PLAN
TANK NOS. 2942-4, 2942-4A, 2942-4B

DRAWN BY	APPROVED BY	REVISED
DWR		

DATE	FILE NAME	PROJ. NO.
6/92	53482003	6-92-5348

UST closure sample locations



LEGEND

- Approximate Limits of Excavation
- Previous Soil Boring Locations
- B1 Soil Boring
- Hydropunch Groundwater Sample
- TD Total Boring Depth, Feet Below Ground Surface (BGS)

SCALE

0 5 10

NOTE:
ALL DIMENSIONS AND LOCATIONS ARE APPROXIMATE

Versar INC. ENVIRONMENTAL RISK MANAGEMENT	SITE MAP Ref. Map Adopted from ESE Site Map	County of Alameda – G.S.A. Santa Rita Site 4th & Madigan Dublin, California	August 1995 Versar Project: 2241-014	N	FIGURE 2

INITIAL STOCKPILE ANALYSIS
(PRIOR TO SESOIL MODELING)

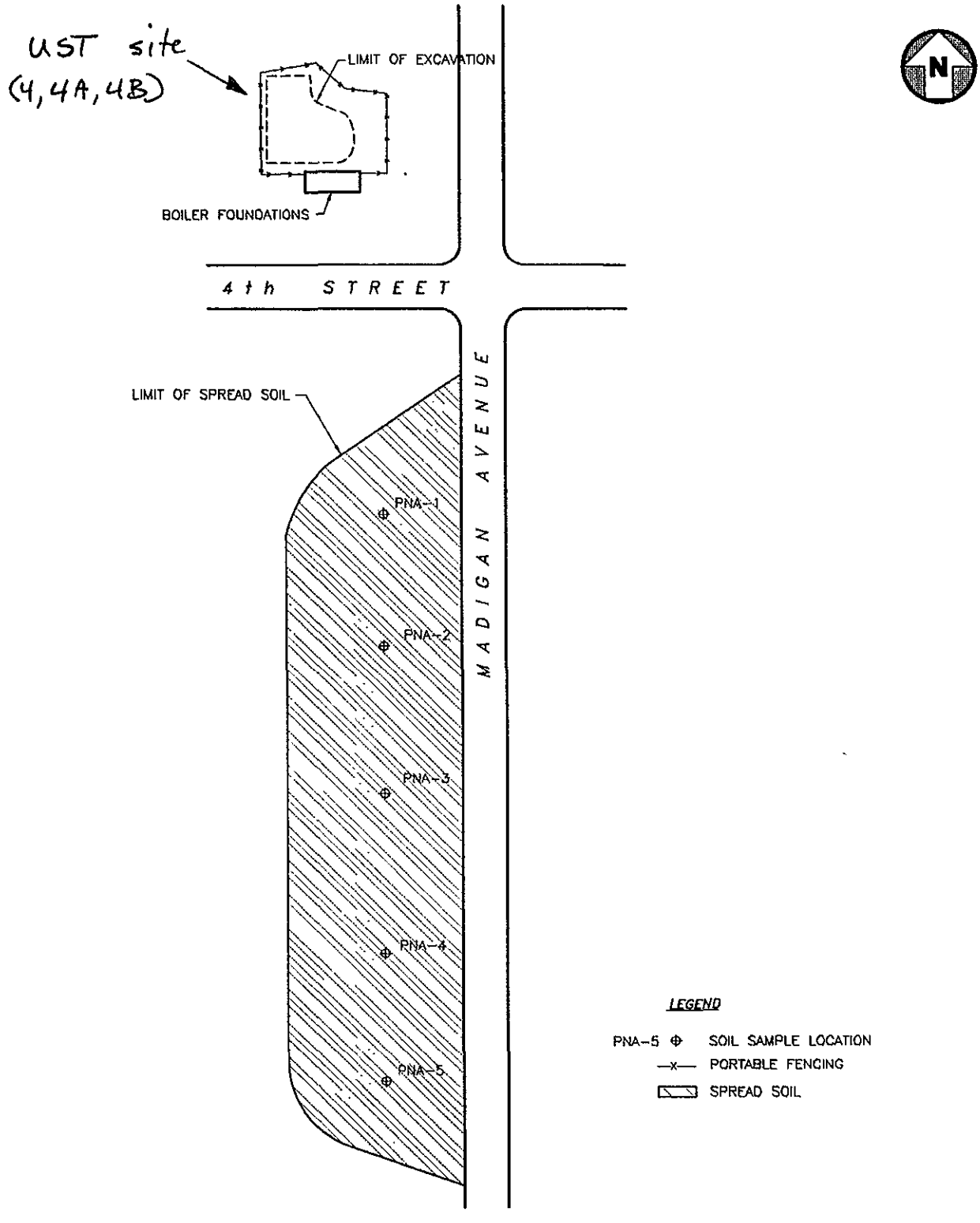
TABLE 1. SOIL SAMPLE TPH-D AND BTEX ANALYTICAL RESULTS (NOVEMBER 5, 1993)

Sample No. (with depth)	TPH-D (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)
FM-SP-1-2.5'	23	ND	ND	ND	ND
FM-SP-2-1.5'	100	ND	ND	ND	0.008
FM-SP-3-2.0'	46	ND	ND	ND	ND
FM-SP-4-4.0'	ND	ND	ND	ND	ND
FM-SP-5-2.0'	ND	ND	ND	ND	ND
FM-SP-6-3.0'	ND	ND	ND	ND	ND
FM-SP-7-2.0'	ND	ND	ND	ND	ND
FM-SP-8-2.5'	26	ND	ND	ND	ND
FM-SP-9-0.5'	ND	ND	ND	ND	ND
FM-SP-10-O.5'	20	ND	ND	ND	ND

NOTES:

- *TPH-D refers to Total Petroleum Hydrocarbons as Diesel detected using EPA analytical method 8015 (modified per CA LUFT);*
- *Benzene, Toluene, Ethylbenzene, and Total Xylenes analyzed using EPA analytical method 8020;*
- *mg/kg refers to milligrams per kilogram;*
- *ND refers to not detected at method detection limit.*

SVOC Stockpile Sampling plot



Environmental Science & Engineering, Inc. 4090 NELSON AVENUE, SUITE J CONCORD, CA 94520	DATE 1/30/96 REVISED CAD FILE 65601201	SITE PLAN WITH SOIL SAMPLE LOCATIONS ALAMEDA COUNTY GSA SANTA RITA CORRECTIONAL FACILITY DUBLIN, CALIFORNIA	FIGURE NO. 1 PROJ. NO. 65-96-012

GROUND WATER LAB RESULTS FROM HYDRO PUNCH STUDY

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Versar 1255 Harbor Bay Pkwy, # 100 Alameda, CA 94502	Client Project ID: # 2241-014; 4th & Madigan, Santa Rita	Date Sampled: 09/01/95
		Date Received: 09/01/95
	Client Contact: John Bird	Date Extracted: 09/01/95
	Client P.O:	Date Analyzed: 09/01-09/02/95

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	% Recovery Surrogate
55993	B3-25	S	ND	95
55994	B3-30	S	ND	96
55995	B3-35	S	ND	96
55996	B3W	W	ND	99
55997	B2W	W	84,b	98
55998	B4-10	S	ND	97
55999	B4-15	S	ND	97
56000	B4-20	S	ND	96
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

* water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment.

DHS Certification No. 1644

Edward Hamilton, Lab Director

Versar Inc.	DRILLING LOG	PROJECT NO. 2241-014
Supervising Geologist: I. Bird		Site Name: Santa Rita - Alameda County
Log By: M. Harrison		Boring No: B1
Date: 9/1/95		Boring Diameter: 8-inch
Drilling Contractor: West Hazmat Drilling Corp.		Boring Depth: 25-feet
Contractor Lic. No. C57-554979		Boring Location: See figure
Rig Type: CME-75		
Driller: George DeJesus		

Depth (ft)	Advanced/ Recovered	Blow Counts	First Water/ Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION / SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, ROUNDING, SORTING, PERCENT: GRAVEL, SANDS, FINES COLOR, MOISTURE, DENSITY, SECONDARY POROSITY, ODORS, STAINING GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
2							Road Base.	
4					SM		Silty Sand - poorly sorted with trace gravel; moist; dense.	
6								
8								
10		17					Sand - angular to subangular, poorly sorted, fine to medium grains with trace silt; moist; dense; no odor or staining; no organics.	0
12		20 24			SW			
14								
16		22 50/5"			CL		Brown Clay - trace silt and sand; moist; hard; no odor or staining; calcite striations. (sample no. B1 -15')	0
18								
20		14					Brown Clay with sand - trace silt; moist; very stiff; medium plasticity; no odor or staining. (sample no. B1 - 20')	
22		14 17						0

Versar Inc.	DRILLING LOG	PROJECT NO. 2241-014
Supervising Geologist: I. Bird		Site Name: Santa Rita - Alameda County
Log By: M. Harrison		Boring No: B1
Date: 9/1/95		Boring Diameter: 8-inch
Drilling Contractor: West Hazmat Drilling Corp.		Boring Depth: 25-feet
Contractor Lic. No. C57-554979		Boring Location: See figure
Rig Type: CME-75		
Driller: George DeJesus		

Depth (ft)	Advanced/ Recovered	Blow Counts	First Water/ Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION / SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, ROUNDING, SORTING, PERCENT: GRAVEL, SANDS, FINES COLOR, MOISTURE, DENSITY, SECONDARY POROSITY, ODORS, STAINING GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
24								
26	⊠	20 30 50/5"			CL		Brown Clay; poorly sorted; trace to some sand; trace silt; moist; hard; no staining or odor (Sample No. B1 - 25'). TD = 25'.	0
28								
30								
32								
34								
36								
38								
40								
42								
44								

Versar Inc.	DRILLING LOG	PROJECT NO. 2241-014
Supervising Geologist: J. Bird		Site Name: Santa Rita - Alameda County
Log By: M. Harrison		Boring No: B2
Date: 9/1/95		Boring Diameter: 8-inch
Drilling Contractor: West Hazmat Drilling Corp.		Boring Depth: 40-feet
Contractor Lic. No. C57-554979		Boring Location: See figure
Rig Type: CME-75		
Driller: George DeJesus		

Depth (ft)	Advanced/ Recovered	Blow Counts	First Water/ Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION / SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, ROUNDING, SORTING, PERCENT: GRAVEL, SANDS, FINES COLOR, MOISTURE, DENSITY, SECONDARY POROSITY, ODORS, STAINING GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
2					Fill		Fill - poorly sorted sand and gravel to 4 feet bgs.	
4								
6					SM		Silty Sand - with gravel; poorly sorted; moist.	
8								
10		21 38 40			CL		Brown clay, moist, trace sand and silt, calcite deposits, no odor or staining.	0
12								
14								
16		24 50/5"			CL		Dense brown clay, trace silt, moist, silty clay, no odor or staining.	0
18								
20		20 20 22			CL		Brown clay, trace silt and sand; calcite deposits, trace silt, no odor or staining.	
22								0

Versar Inc.	**DRILLING LOG**	PROJECT NO. 2241-014
Supervising Geologist: I. Bird		Site Name: Santa Rita - Alameda County
Log By: M. Harrison		Boring No: B2
Date: 9/1/95		Boring Diameter: 8-inch
Drilling Contractor: West Hazmat Drilling Corp.		Boring Depth: 40-feet
Contractor Lic. No. C57-554979		Boring Location: See figure
Rig Type: CME-75		
Driller: George DeJesus		

Depth (ft)	Advanced/ Recovered	Blow Counts	First Water/ Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION / SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, ROUNDING, SORTING, PERCENT: GRAVEL, SANDS, FINES COLOR, MOISTURE, DENSITY, SECONDARY POROSITY, ODORS, STAINING GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
24								
26		16 24 27			CL		Brown clay, trace silt, trace sand, no odor or staining, moist.	0
28								
30		16 30 30					Interspersed sand and clay, brown, trace silt, soft, moist, poorly sorted, no odor or staining.	0
32								
34								
36		16 16 32			SM		Silty sand, no odor or staining, moist.	0
38								
40		6	▼				Groundwater at 39'	
42		9 11					Silty sand, no odor or staining.	0
44							40' End of borehole. Groundwater sample collected.	

Versar Inc.	DRILLING LOG	PROJECT NO. 2241-014
Supervising Geologist: I. Bird		Site Name: Santa Rita - Alameda County
Log By: M. Harrison		Boring No: B3
Date: 9/1/95		Boring Diameter: 8-inch
Drilling Contractor: West Hazmat Drilling Corp.		Boring Depth: 40-feet
Contractor Lic. No. C57-554979		Boring Location: See figure
Rig Type: CME-75		
Driller: George DeJesus		

Depth (ft)	Advanced/ Recovered	Blow Counts	First Water/ Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION / SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, ROUNDING, SORTING, PERCENT: GRAVEL, SANDS, FINES COLOR, MOISTURE, DENSITY, SECONDARY POROSITY, ODORS, STAINING GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
2					SM		Fill- brown gravel to 3 feet bgs, transition to brown unconsolidated silty sands with depth	0
4								
6								
8								
10		16 24 30			CL		Brown silty clay, moist, hard, medium plasticity, no odor or staining (Sample Number B3-10)	0
12								
14		12						
16		16 20			CL		Brown silty clay, moist, calcite striations, dense, no odor or staining.	0
18								
20		21 21 25					Sandy clay, moist, calcite, brown striations, no odor or staining.	
22					CL			0

Versar Inc.	DRILLING LOG	PROJECT NO. 2241-014
Supervising Geologist: J. Bird		Site Name: Santa Rita - Alameda County
Log By: M. Harrison		Boring No: B3
Date: 9/1/95		Boring Diameter: 8-inch
Drilling Contractor: West Hazmat Drilling Corp.		Boring Depth: 40-feet
Contractor Lic. No. C57-554979		Boring Location: See figure
Rig Type: CME-75		
Driller: George DeJesus		

Depth (ft)	Advanced/ Recovered	Blow Counts	First Water/ Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION / SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, ROUNDING, SORTING, PERCENT: GRAVEL, SANDS, FINES COLOR, MOISTURE, DENSITY, SECONDARY POROSITY, ODORS, STAINING GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
24		16			CL		Sandy clay, trace silt, moist, calcite striations, no odor or staining, brown.	
26		19 23						0
28								
30		10 10			CL		Silty clay, moist, brown, no odor or staining.	0
32		15						
34		7						
36		11 17			SM		Silty sand, light brown, moderately sorted, no odor or staining.	0
38								
40			▽				Groundwater at 39' 40' - End of borehole. Groundwater sample collected.	
42								
44								

Versar Inc.	DRILLING LOG	PROJECT NO. 2241-014

Supervising Geologist: I. Bird	Site Name: Santa Rita - Alameda County
Log By: M. Harrison	Boring No: B4
Date: 9/1/95	Boring Diameter: 8-inch
Drilling Contractor: West Hazmat Drilling Corp.	Boring Depth: 25-feet
Contractor Lic. No. C57-554979	Boring Location: See figure
Rig Type: CME-75	
Driller: George DeJesus	

Depth (ft)	Advanced/ Recovered	Blow Counts	First Water/ Water Table	Well Construction	USCS Group	Lithology	USCS SOIL DESCRIPTION / SOIL CONDITION AND GEOLOGIC INTERPRETATION SOIL TYPE, ROUNDING, SORTING, PERCENT: GRAVEL, SANDS, FINES COLOR, MOISTURE, DENSITY, SECONDARY POROSITY, ODORS, STAINING GEOLOGY: FILL, ALLUVIUM, BEDROCK	Headspace (ppm)
2							Fill - gravel grading to unconsolidated brown silty sand with depth	
4								
6								
8								
10		18 18 18			SP/ SM		Brown-Sand to silty sandy clay, poorly sorted, medium dense, no odor or staining.	0
12								
14		7						
16		9 11			SM		Silty sand, moderately sorted, medium dense, no odor or staining, moist.	0
18								
20		6 8 13			CL		Brown-sandy clay, brown, moist, trace silt, no odor or staining.	0
22							25' End of borehole.	