MARTIN MARIETTA

Y/SUB/95-99069C/K49/2

SITE STATUS MONITORING REPORT FOR UNDERGROUND STORAGE TANKS 1219-U, 1222-U, 2082-U, AND 2068-U AT THE RUST GARAGE FACILITY, BUILDINGS 9720-15 AND 9754-1

OAK RIDGE Y-12 PLANT
OAK RIDGE, TENNESSEE
FACILITY ID #0-010117

March 1995

Environmental Management Department
Health, Safety, Environment,
and Accountability Organization

DISCLAIMER

MANAGED BY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

contributed to the preparation of this document
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Y/SUB/95-99069C/K49/2

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MARCH 1995

Environmental Management Department
Health, Safety, Environment,
and Accountability Organization

Prepared by

Science Applications International Corporation
Under Subcontract 22B-99069C
for the
Oak Ridge Y-12 Plant
Oak Ridge, Tennessee 37831

Managed by

Martin Marietta Energy Systems, Inc.
for the
U.S. Department of Energy
Under Contract No. DE-AC05-84OR21400

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SITE STATUS MONITORING REPORT

LIST OF FIGURES

TABLES

LIST OF ACRONYMS

BGL	below ground level
BTEX	benzene, toluene, ethylbenzene, and xylene
BTOC	below top of casing
CAP	Corrective Action Plan
LEL	lower explosive limit
MSL	mean sea level
TDEC	Tennessee Department of Environment and Conservation
TOC	top of casing
TPH-DRO	total petroleum hydrocarbons - diesel range organics
TPH-GRO	total petroleum hydrocarbons - gasoline range organics
UST	underground storage tank

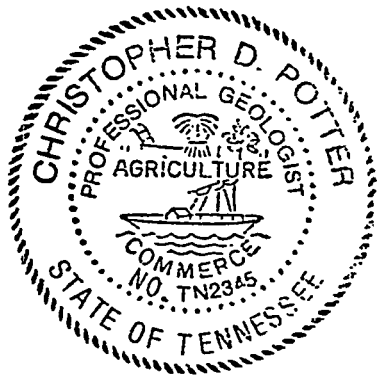
SIGNATURE PAGE

I certify under penalty of law, including but not limited to penalties for perjury, that the information contained in this report and on any attachments, is true, accurate, and complete to the best of my knowledge, information, and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for intentional violations.

See Attached Certification		
Owner/Operator (Print)	Signature	Date
Christopher D. Potter	[signature] TN 2345	3/9/95
P.E. or P.G. (Print)	Signature TN Lic./Reg. #	Date

If a P.E. signs this report, please indicate the area of expertise.

(Print or Type)



(P.E./P.G. Stamp/Seal)

County of Anderson State of Tennessee

Subscribed and Sworn to before me this

9 day of March, 19 95.

Suzanne Knott
Notary Public

My Commission expires: 01-27-96 (Notary Seal)

SITE STATUS MONITORING REPORT FOR UNDERGROUND STORAGE TANKS 1219-U, 1222-U, 2082-U, AND 2068-U AT THE RUST GARAGE FACILITY BUILDINGS 9720-15 AND 9754-1

I certify that this document and all enclosures were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

U.S. Department of Energy
Owner and operator

By: _____ 3/21/95

R.J. Spence — Date Signed
Department of Energy, Y-12 Site Manager

Martin Marietta Energy Systems, Inc.
Co-Operator

Dinah L. Sexton
My commission expires Oct. 4, 1998

By: _____ 3/17/95

T.R. Butz — Date Signed
Martin Marietta Energy Systems, Inc.
Y-12 Plant Manager

Dinah L. Sexton
My commission expires Oct. 4, 1998

NOTARY

(Stamp/Seal)

Note: Both signatures have been notarized per requirements.

94-131P/030995

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

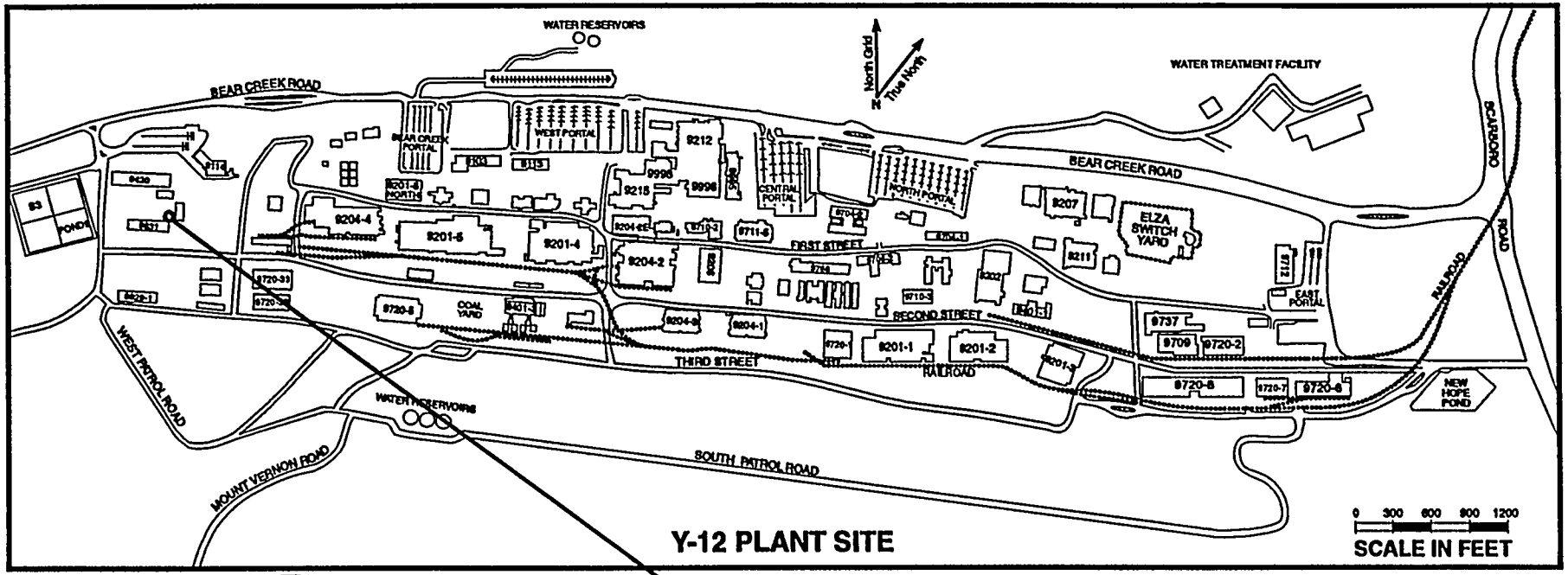
The purpose of this document is to provide hydrogeologic, geochemical, and vapor monitoring data required for site status monitoring of underground storage tanks (UST) 1219-U, 1222-U, 2082-U, and 2068-U at the Rust Garage Facility. Comprehensive monitoring was conducted at the site in May 1994 (Energy Systems 1994) as part of a Monitoring Only program approved by Tennessee Department of Environment and Conservation (TDEC) based on review and approval of Site Ranking (Site Ranking Form dated February 28, 1994). In September 1994, the first semiannual site status monitoring was conducted. This document presents the results of the second semiannual site status monitoring, which was conducted in February 1995. Site status monitoring and preparation of this report have been conducted in accordance with the requirements of the TDEC Rule 1200-1-15, the TDEC UST Reference Handbook, Second Edition (TDEC 1994), and direction from TDEC (letter from Jim Harless to Robert Spence, dated March 7, 1994).

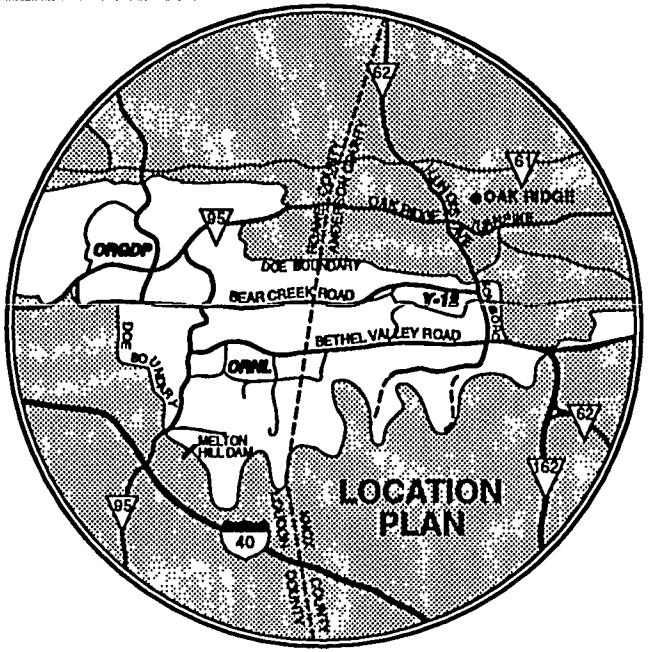
This document is organized into three sections. Section 1 presents introductory information relative to the site including regulatory initiative and a site description. Section 2 includes the results of sampling of monitoring wells GW-508, GW-631, GW-632, and GW-634. Section 3 presents data from vapor monitoring conducted in subsurface utilities present at the site.

1.2 SITE DESCRIPTION

The Rust Garage Facility is located at the western end of the Oak Ridge Y-12 Plant in Oak Ridge, Tennessee (Figure 1-1). The facility site is generally defined by the area surrounding the current locations of Buildings 9720-15 and 9831, and the former location of Building 9754-1 (Figure 1-2). This facility was formerly the location of four underground petroleum product storage tanks and was a fueling point for U.S. Department of Energy fleet vehicles.

The topography of the Rust Garage Facility generally decreases in elevation from north to south across the facility and is defined by two downward stepping terraces. The two terraces are separated by a steep embankment and a similar embankment is located along the northern side of the facility. Given the nature of the surface topography at the Rust Garage Facility, any petroleum product contamination resulting from past operations at the facility would be expected to migrate south away from the source area.





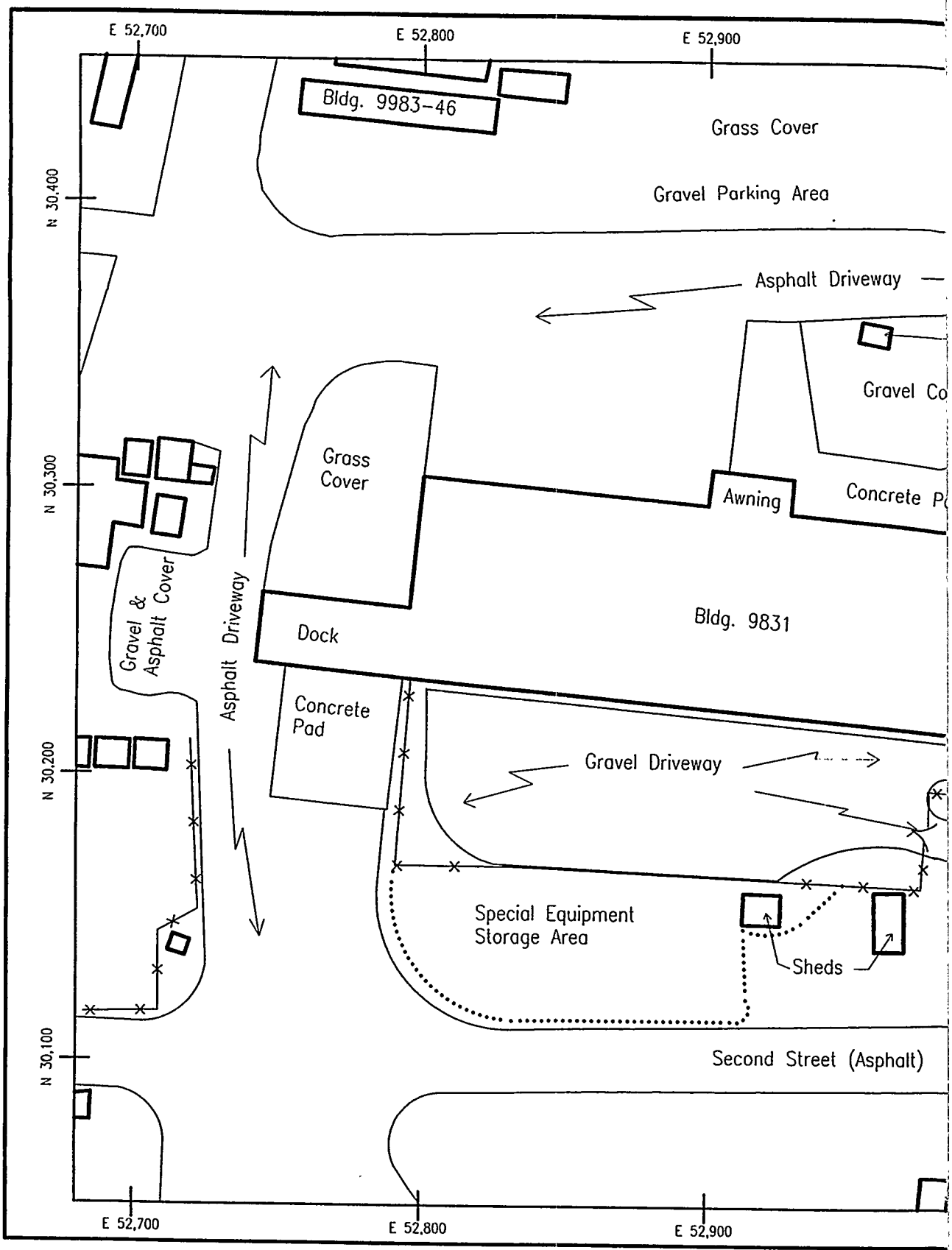
RUST GARAGE FACILITY

FIGURE 1-1

MARTIN MARIETTA ENERGY SYSTEMS, INC.
ENVIRONMENTAL MANAGEMENT DEPARTMENT

LOCATION OF THE RUST GARAGE FACILITY AT THE Y-12 PLANT

Y-12(8) 380-03-115-04(10/90)



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0 25 50 100

SCALE: 1" = 50'

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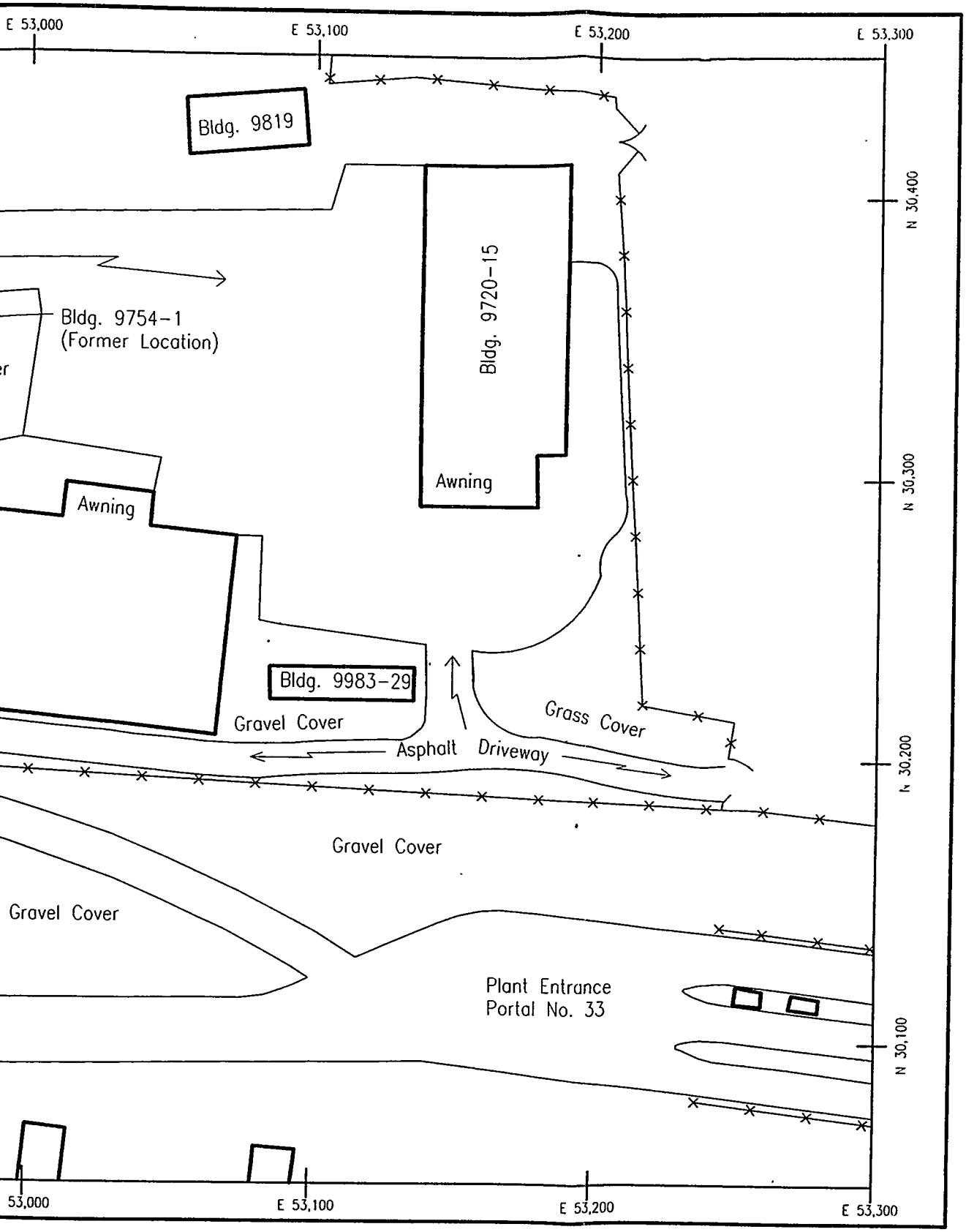
SAIC CAD FILE: 95Z17R3/DWGS/0591-2.DWG

Y12-PLANT NORTH

Legend

- Security Chainlink
- Access Restriction



ence N XX,XXX DOE Reservation Grid
Chain Location System

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Environmental Management Department

FIGURE 1-2

Rust Garage Facility
Site Map

2.0 GROUNDWATER MONITORING

2.1 Groundwater Measurement, Sample Collection, and Analysis

2.1.1 Well Locations

As directed by TDEC, four monitoring wells have been sampled as part of the Monitoring Only program for the site. These wells are GW-508, GW-631, GW-632, and GW-634. The locations of these wells are presented in Figure 2-1. Well installation reports and construction details for these wells are presented in the Corrective Action Plan (CAP) for the Site (*Corrective Action Plan for Underground Storage Tanks 1219-U, 1222-U, 2082-U and 2068-U at the Rust Garage Facility, Buildings 9720-15 and 9754-1*, Appendix E, Martin Marietta Energy Systems, Inc., Y/SUB/92-99928C/1) (Energy Systems 1992).

2.1.2 Groundwater Measurement and Sampling

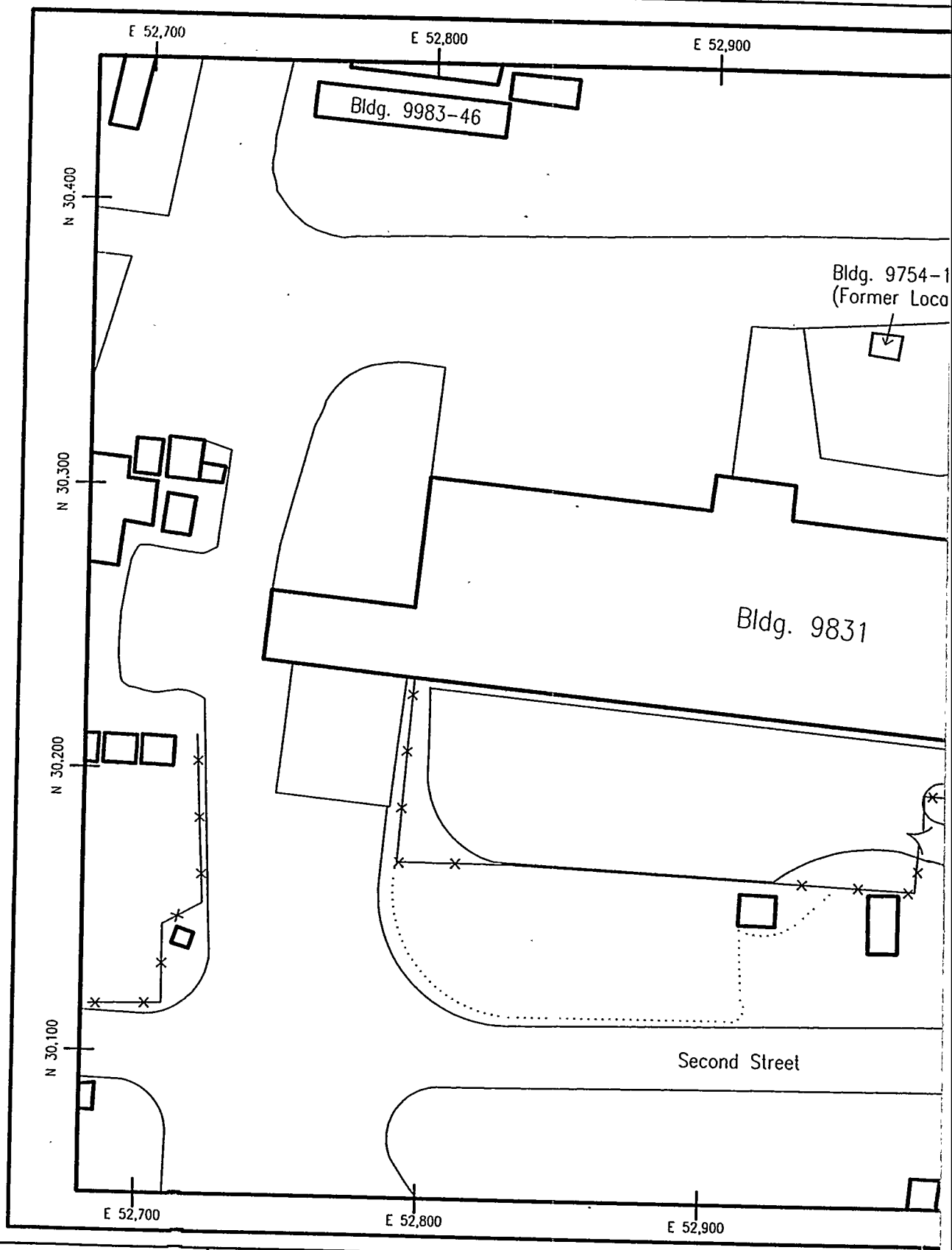
The specified groundwater monitoring wells at the Rust Garage Facility were measured for water level and sampled for the applicable petroleum constituents on February 23, 1995. All wells were measured for static water level and purged prior to sampling. Wells GW-508 and GW-631 and GW-634 were purged of approximately 3 well volumes. GW-632 was purged of approximately 2 well volumes prior to going dry. Field measurement of pH, conductivity, temperature, and dissolved oxygen was conducted during purging to ensure representativeness for sampling. The wells were allowed to recover and samples were collected for analysis in pre-prepared bottles. No measurable free product was encountered during water level measurement or sampling in any of the wells. However, a slight oily sheen and petroleum odor were noted during sampling at well GW-508. A slight fuel odor was also noted at wells GW-632 and GW-634.

2.1.3 Sample Analysis

Samples were analyzed for total petroleum hydrocarbons (TPH) gasoline range organics (TPH-GRO), diesel range organics (TPH-DRO), and for benzene, toluene, ethylbenzene, and xylene (BTEX).

2.2 POTENTIOMETRIC DATA

Potentiometric data for monitoring wells GW-508, GW-631, GW-632, and GW-634 from the site status monitoring and the comprehensive monitoring sample events are presented in Table 2-1. Figures 2-2 and 2-3 present potentiometric maps from these two periods of sampling. These figures illustrate that groundwater movement is generally from north to south across the site with relatively low seasonal variability.



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0 25 50 100

SCALE: 1" = 50'

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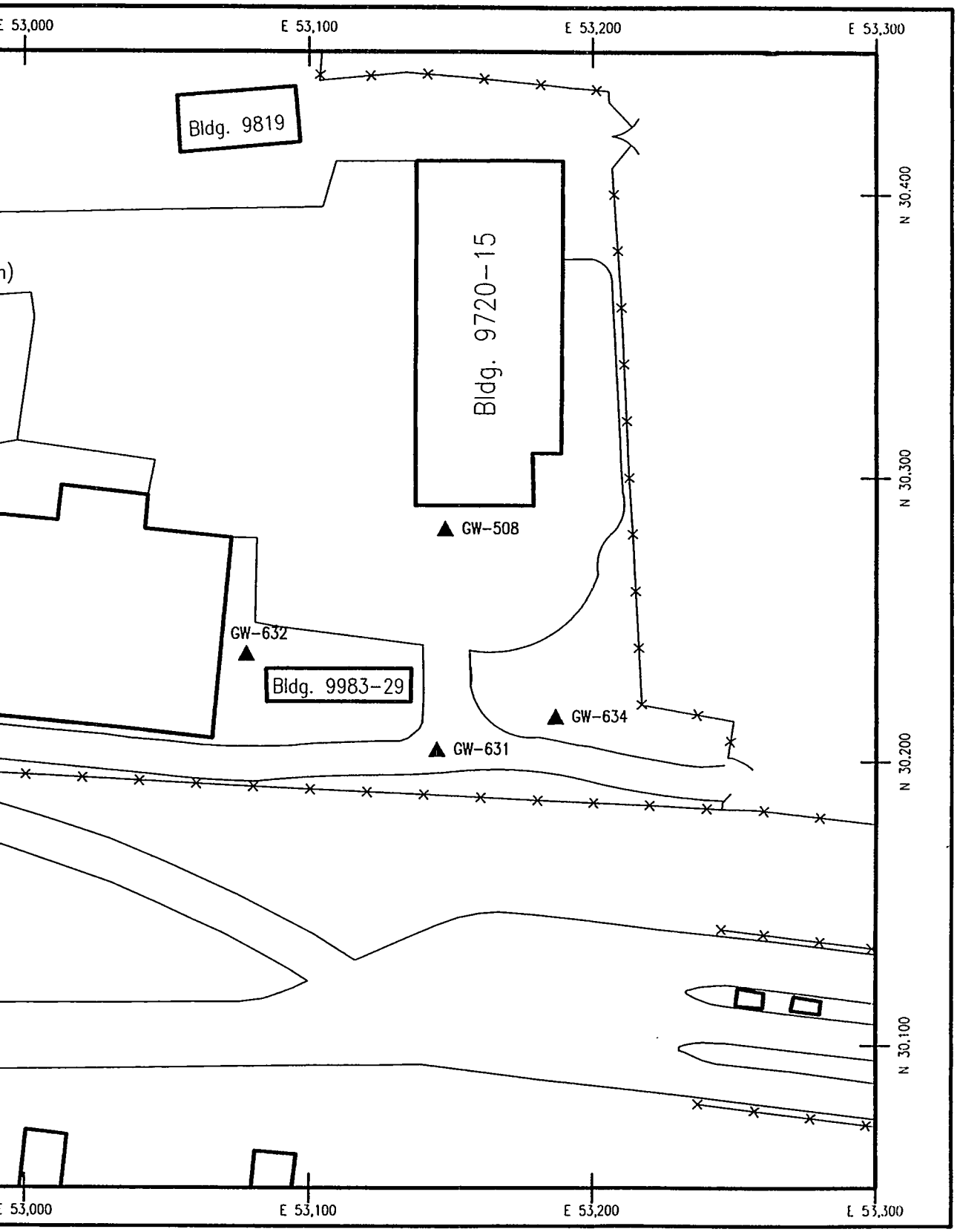
SAIC CAD FILE: 95Z17R3/DWGS/059MW.DWG

Y12-PLANT NORTH

Legend

▲ GW-508 Groundwater Mo
Well Location



itoring

Martin Marietta Energy Systems, Inc.
Environmental Management Department

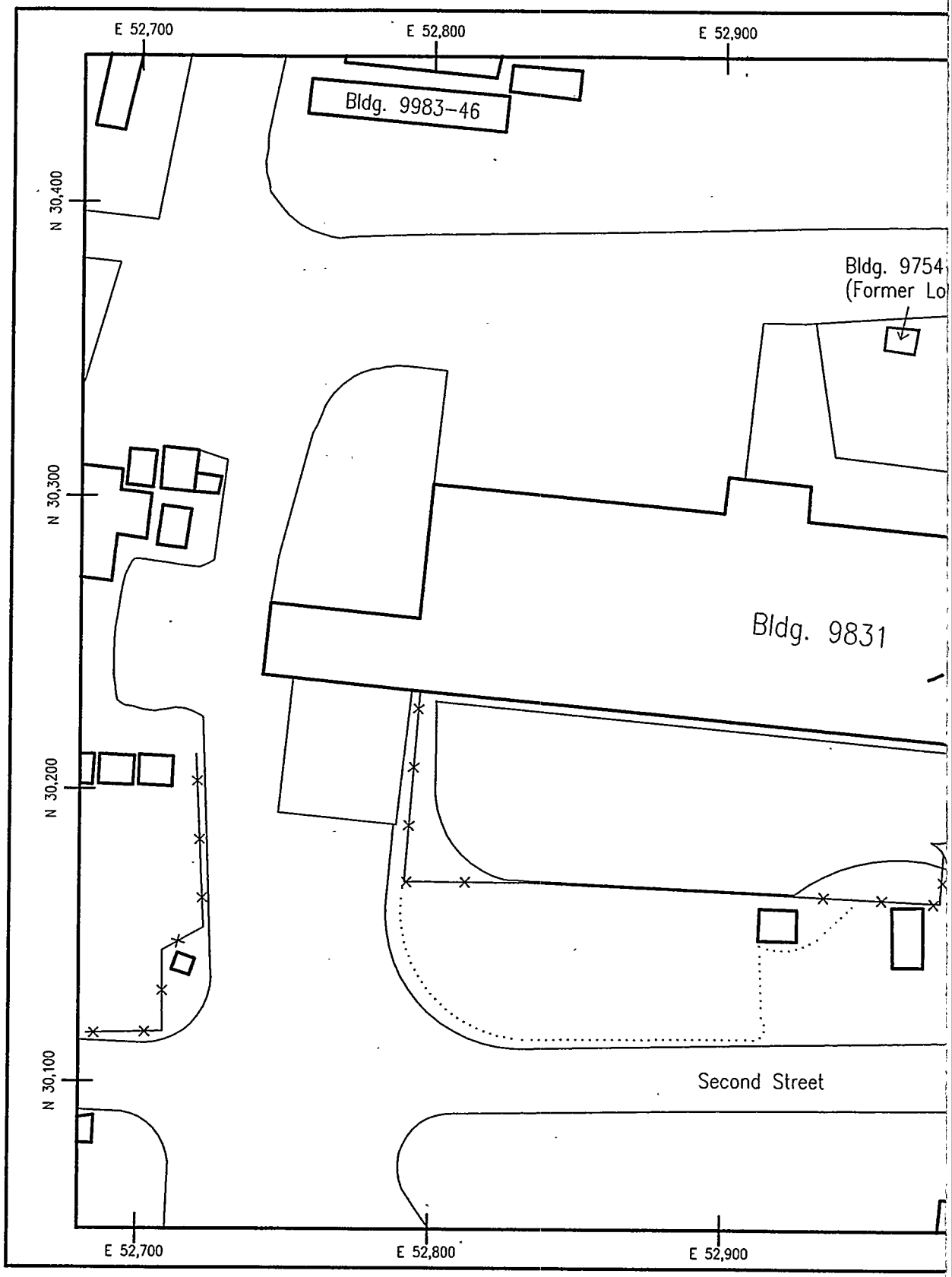
FIGURE 2-1

Rust Garage Facility Site
Monitoring Well
Location Map

Table 2-1. Water Level Measurements at the Rust Garage Facility for the Periods of September 1994 and February 1995

Monitoring Well	Date Measured	Well Depth from (TOC)[1]	Top of Casing (MSL)[2]	Top of Casing to Water Level (BTOC)[3]	Potentiometric Surface (MSL)[2]
GW-508	02/23/95	14.8 ft	1012.5 ft	10.99 ft	1001.51 ft
	09/01/94	14.8 ft	1012.5 ft	10.90 ft	1001.60 ft
GW-631	02/23/95	15.3 ft	1003.99 ft	6.84 ft	997.15 ft
	09/01/94	15.3 ft	1003.99 ft	7.70 ft	996.29 ft
GW-632	02/23/95	15.3 ft	1005.73 ft	7.78 ft	997.95 ft
	09/01/94	15.3 ft	1005.73 ft	7.70 ft	998.03 ft
GW-634	02/23/95	14.8 ft	1007.15 ft	8.53 ft	998.62 ft
	09/01/94	14.8 ft	1007.15 ft	8.48 ft	998.67 ft

[1]MSL - Mean Sea Level
[2]TOC - Top of Casing
[3]BTOC - Below Top of Casing



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SCALE: 1" = 50'

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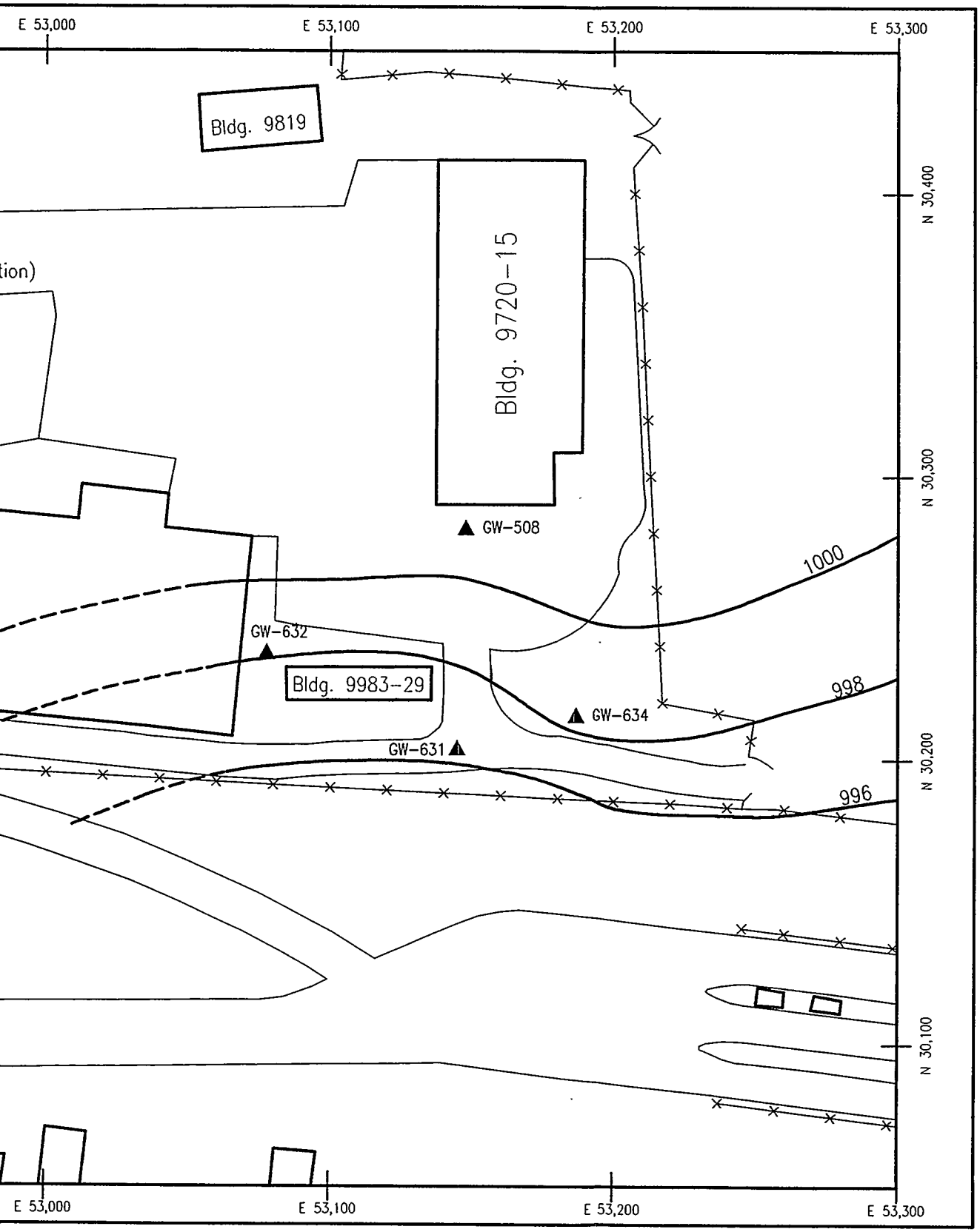
SAIC CAD FILE: 95Z17R3/DWGS/059POTSE.DWG

Y12-PLANT NORTH

Legend

1000 — Groundwater Contour Line in Feet MSL

▲ GW-508 — Groundwater Well Location



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onitoring

Summary of Measured Groundwater Elevations (MSL)

GW-508	1001.60 ft.
GW-631	996.29 ft.
GW-632	998.03 ft.
GW-634	998.67 ft.

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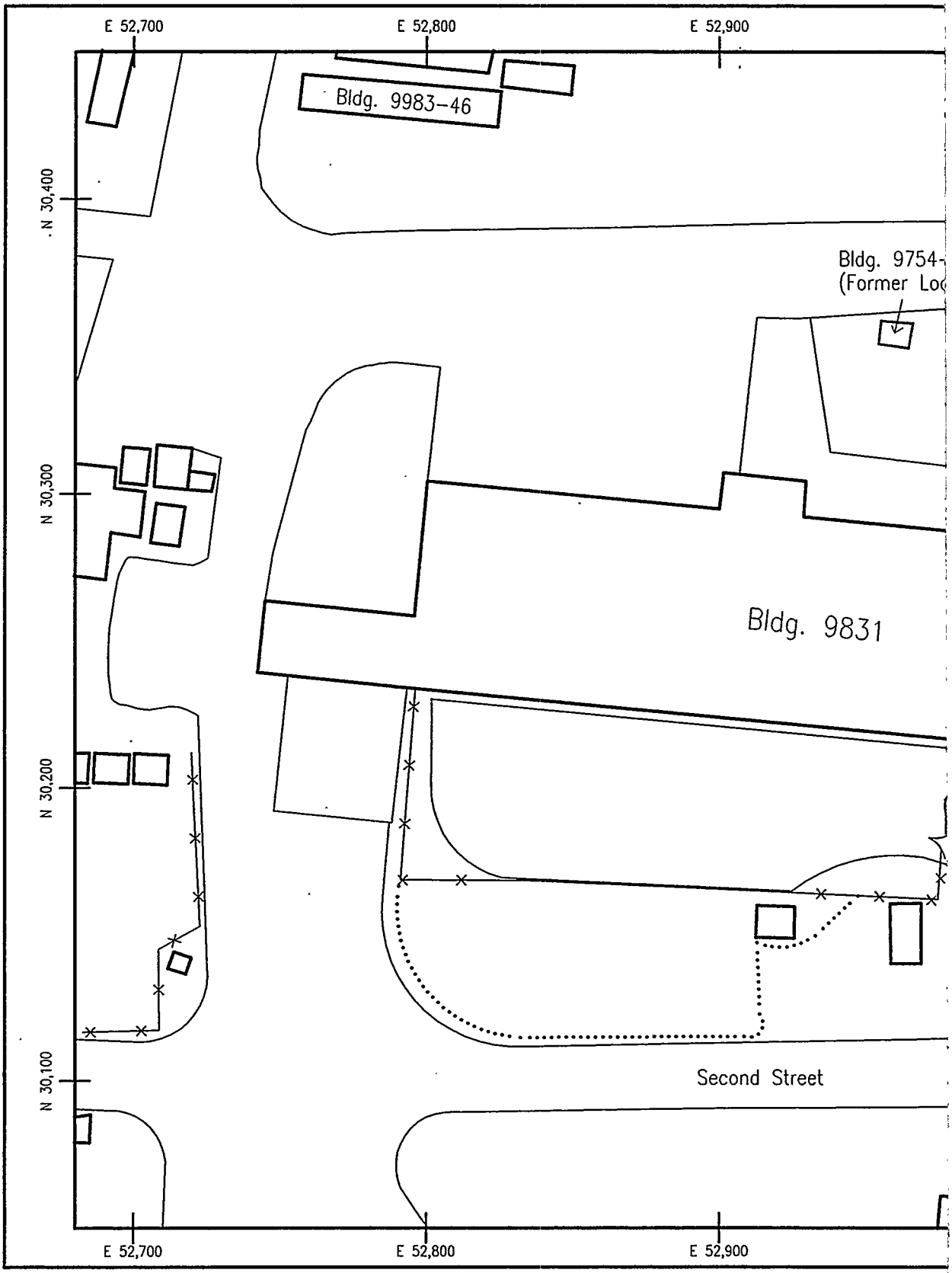
Environmental Management Department

FIGURE 2-2

Rust Garage Facility Site Groundwater Potentiometric Contour Map, September 1994



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SCALE: 1" = 50'

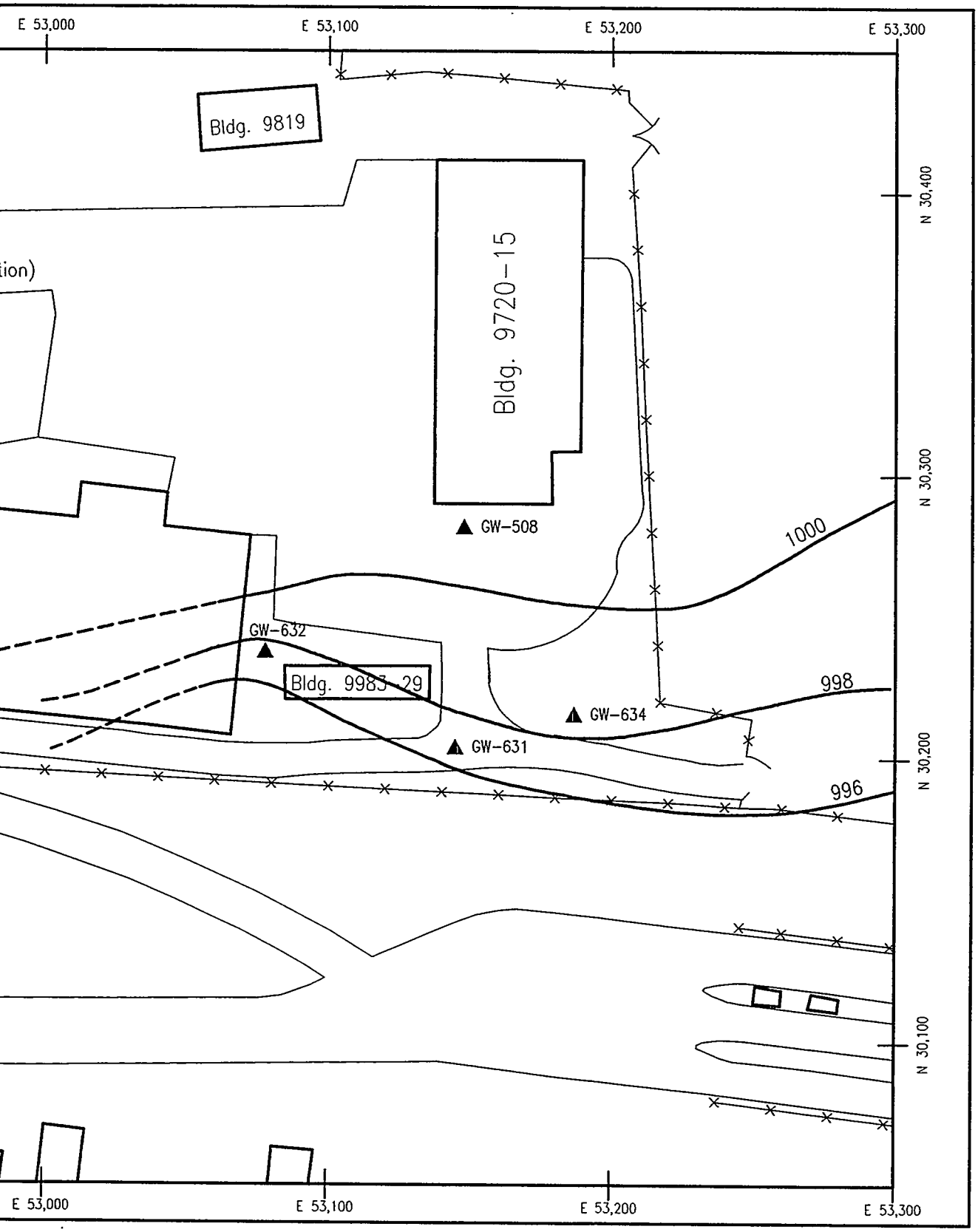
REV. 3 – 03/06/95
SAIC CAD FILE: 95Z17R3/DWGS/059POTGW.DWG

Y12-PLANT NORTH

Legend

1000 Groundwater Contour Line in Feet MSL

▲ GW-508 Groundwater Well Location



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Summary of Measured Groundwater Elevations (MSL)

GW-508	1001.51 ft.
GW-631	997.15 ft.
GW-632	997.95 ft.
GW-634	998.62 ft.

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FIGURE 2-3

Rust Garage Facility Site Groundwater Potentiometric Contour Map, February 1995

2.3 ANALYTICAL DATA

Analytical data for groundwater sampled at the site during site status monitoring, comprehensive monitoring and for the last two rounds of groundwater sampling for the 1993 Y-12 Plant Groundwater Protection Program is summarized in Table 2-2. Sample values in this table for total TPH represent summations of TPH-GRO and TPH-DRO values. Where a TPH-GRO or TPH-DRO result is qualified as a non-detect (U qualifier) and the detection limit is given, the detection limit is used for calculation of total TPH. Where estimated values are used to calculate total TPH, the J qualifier is assigned to the total value. Laboratory analytical sheets for the February 1995 groundwater analyses are presented in Appendix A.

Table 2-2 demonstrates that petroleum contamination remains present in monitoring wells GW-508, GW-632, and GW-634 above TDEC non-drinking water Closure Action Limits (0.07 ppm benzene and 1.0 ppm TPH). These wells have historically produced values in excess of these closure limits. Site status monitoring results indicate some variability in contaminant concentrations over time that are probably related to rainfall totals and fluctuations in the water table. In general, contaminant concentrations in these wells appear to be stable or slightly falling off over time.

Table 2-2. Analytical Results for Groundwater Collected During Site Status Monitoring, Comprehensive Monitoring, and 1993 Y-12 UEFPC Groundwater Quality Assessment Sampling

Sampling Event	TPH-DRO (ppm)	TPH-GRO (ppm)	Total TPH (ppm)	Benzene (ppm)	Ethyl benzene (ppm)	Toluene (ppm)	Xylene (ppm)
			GW-508				
Site Status Monitoring (2/23/95)	14.000	58.000	72.000	4.000	2.500	23.000	7.300
Site Status Monitoring (9/1/94)[1]	1.900	58.000	59.900	4.200	2.000	20.000	13.000
Comprehensive Monitoring (4/5/94)	60.000	69.000	129.000	5.6000	2.200	26.000	15.000
1993 Qtr 4	21.49	27.800	49.29	0.1529	—	0.002*	1.271
1993 Qtr 3	88.08	42.900	130.98	6.346	—	8.064	12.919
			GW-631				
Site Status Monitoring (2/23/95)	0.210	0.120	0.330	<0.010	0.010U	0.010U	0.010U
Site Status Monitoring (9/1/94)	<0.200	<0.100	<0.300	<0.010	<0.010	0.040	0.014
Site Status Monitoring (Duplicate)	0.230	<0.100	<0.330	<0.010	0.010U	0.023	0.011
Comprehensive Monitoring (4/5/94)	0.057J	0.0100U	0.557J	0.010U	0.010U	0.010U	0.010U
1993 Qtr 4	0.002	0.0051	0.0071	<0.005	—	<0.005	<0.005
1993 Qtr 3	0	0.0078	0.0078	<0.005	—	<0.005	<0.005
			GW-632				
Site Status Monitoring (2/23/95)	1.700	16.000	17.700	7.300	0.046	0.410	1.100

Table 2-2 (continued)

Sampling Event	TPH-DRO (ppm)	TPH-GRO (ppm)	Total TPH (ppm)	Benzene (ppm)	Ethyl benzene (ppm)	Toluene (ppm)	Xylene (ppm)
Site Status Monitoring (9/1/94)[1]	26.000	20.000	46.000	7.600	0.150J	1.400	1.800
Comprehensive Monitoring (4/5/94)	14.000	27.000	41.000	9.200	2.000U	2.600	3.200
1993 Qtr 4	4.2	4.461	8.661	0.4529	—	0.2614	0.165
1993 Qtr 3	2.61	15.420	18.030	4.329	—	0.580	2.891
			GW-634				
Site Status Monitoring (2/23/95)	3.100	8.200	11.300	0.170	0.720	0.250	2.000
Site Status Monitoring (9/1/94)	8.500	7.500	16.000	0.200	0.460	0.160	1.400
Comprehensive Monitoring (4/5/94)	11.000	8.600	19.600	0.260	0.500	0.340	1.900
1993 Qtr 4	5.16	3.933	9.093	0.0568	—	0.597	0.1096
1993 Qtr 3	2.48	8.031	10.511	0.309	—	0.3215	1.2656

U - Compound not detected at the reported minimum attainable detection limit.
< - Compound not detected at the reported minimum attainable detection limit.
J - Estimated Value.
* Interference Peak

[1]Sample identification error suspected. Site Status Monitoring sample results (9/1/94) for wells GW-508 and GW-632 have been transposed to correct the error.

3.0 VAPOR MONITORING

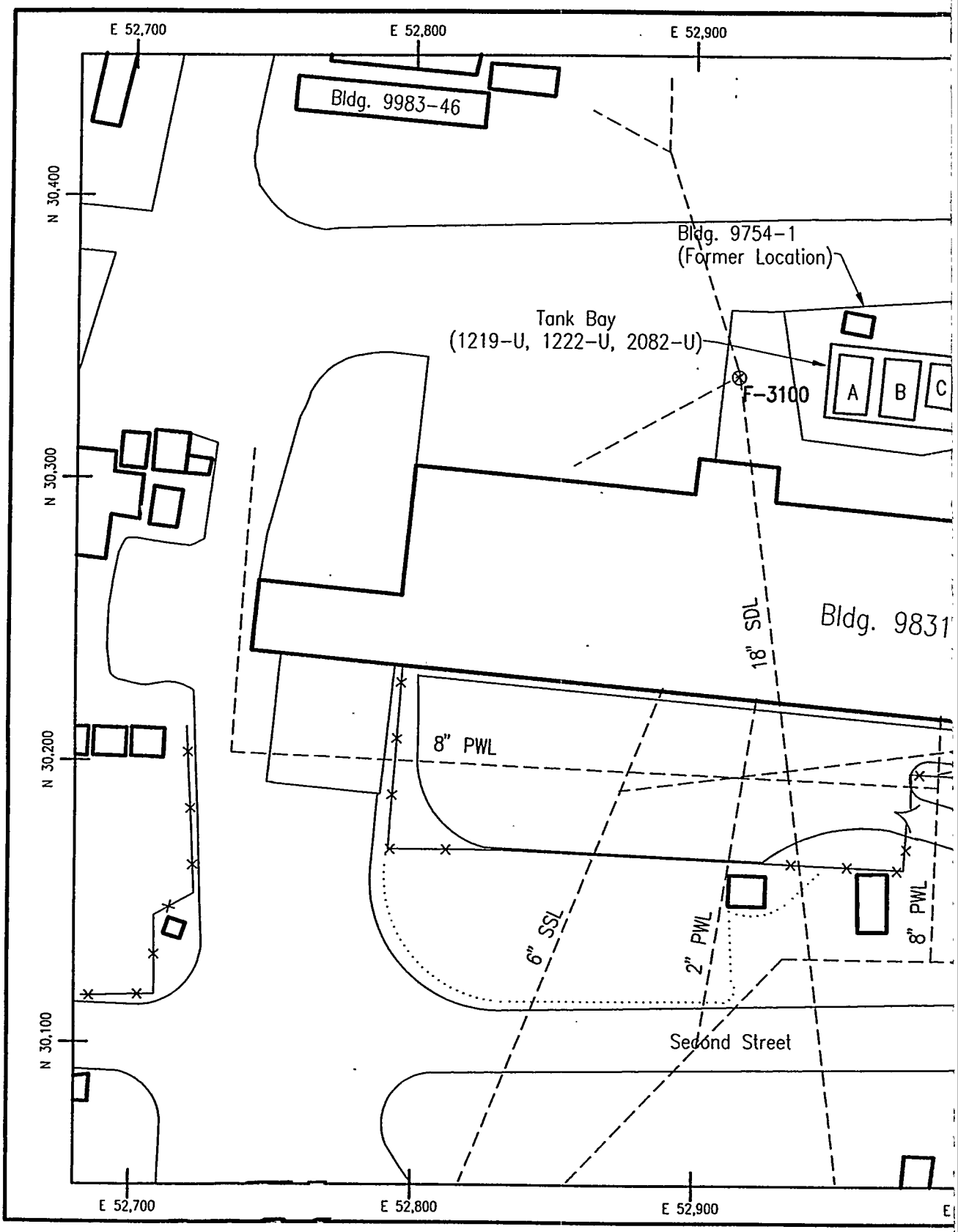
3.1 MONITORING METHOD AND LOCATIONS

Vapor monitoring as part of site status monitoring was conducted on February 28, 1995. Access points for three storm sewers and one sanitary sewer were monitored. The locations of sampling points are illustrated on Figure 3-1. Locations F-305C and F-3105 are the only accessible substructures within the delineated groundwater contamination plume.

At each location, organic vapors were monitored using direct-reading instruments. Organic vapors were monitored using a Thermo Environmental™ organic vapor meter. Lower explosive limit (LEL) was monitored using a GX-4000.

3.2 VAPOR MONITORING RESULTS

The results of vapor monitoring at the Rust Garage Facility are presented in Table 3-1. LEL readings of 0 % at all the monitored sites indicate that an explosion hazard does not exist within the monitored utilities. With the exception of monitoring results for location F-3109, organic vapor readings are near or equal to background readings.



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0 25 50 100

SCALE: 1" = 50'

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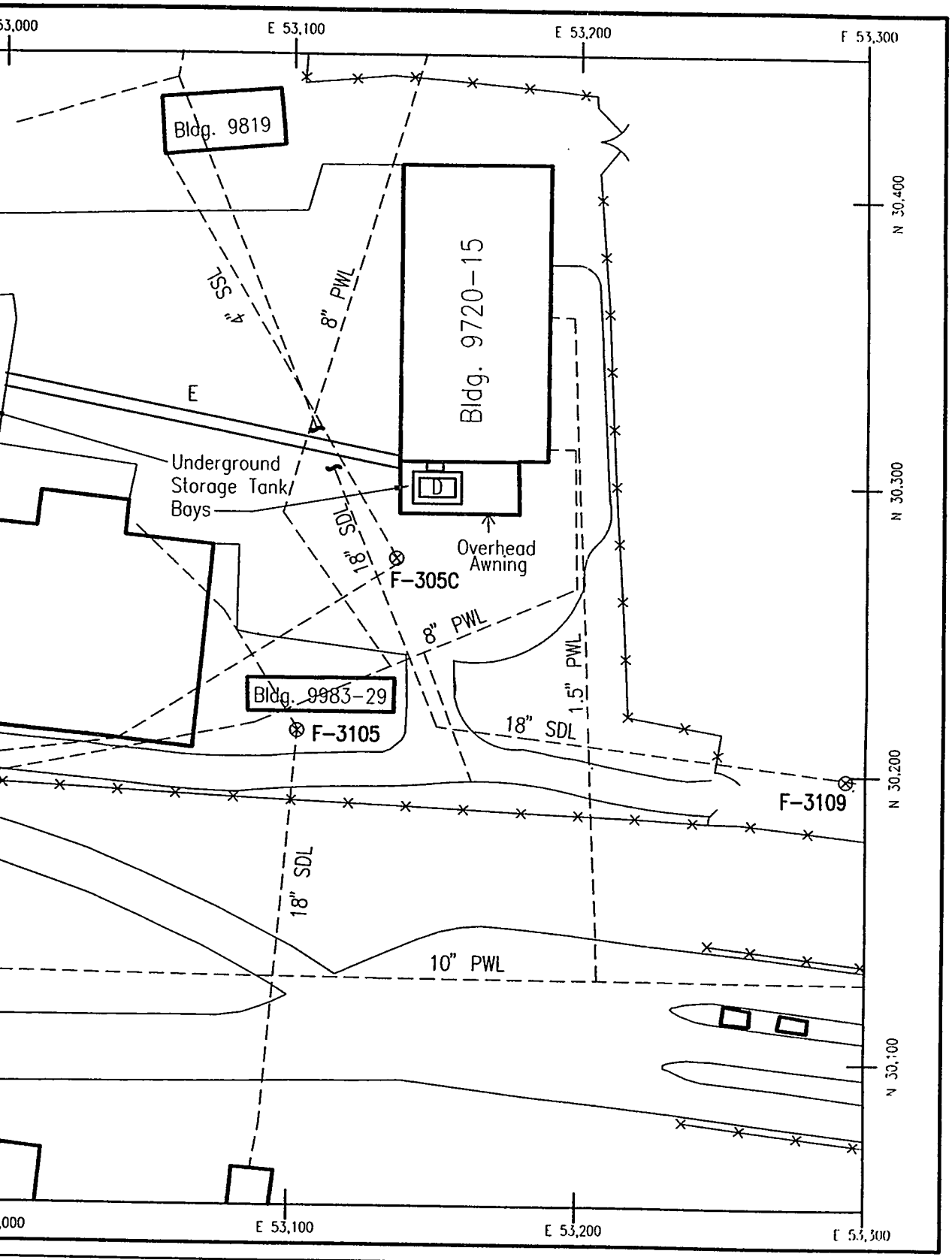
Y12-PLANT NORTH

Legend

⊗ – Vapor Monitoring Sampling Point

A – Tank 1219-U, 12000 Gallon Diesel UST



- Tank 1222-U, 12000 Gallon UST
- Tank 2082-U, 8000 Gallon Gasoline UST
- Tank 2068-U, 1000 Gallon Gasoline, UST
- Underground Gasoline Transfer Pipeline

SDL — Underground Stormwater Drainage Line

SSL — Underground Sanitary Sewer Line

PWL — Underground Potable Water Line

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Environmental Management Department

FIGURE 3-1

Rust Garage Facility Vapor Monitoring Sample Point Location Map

Table 3-1. Vapor Monitoring Results for the Rust Garage Facility Site Status Monitoring 2/28/95

Sampling Location	LEL (%)	Maximum Organic Vapors (ppm)	Background Organic Vapors (ppm)
F-3100	0	0.000	0.000
F-305C	0	0.300	0.100
F-3105	0	0.006	0.000
F-3109	0	0.600	0.000

REFERENCES

Harless, J., personal communication to R. Spence, March 7, 1994.

Energy Systems (Martin Marietta Energy Systems) 1992. *Corrective Action Plan for Underground Storage Tanks 1219-U, 1222-U, 2082-U, and 2068-U at the Rust Garage Facility, Buildings 9720-15 and 9754-1*, Appendix E, Martin Marietta Energy Systems, Inc. Y/SUB/9299928C/1.

Energy Systems 1994. *Calendar Year 1993 Groundwater Quality Report for the Upper East Fork Poplar Creek Hydrologic Regime, Y-12 Plant, Oak Ridge, Tennessee: 1993 Groundwater Quality Data and Calculated Rate of Contaminant Migration.*

Energy Systems 1994. *Comprehensive Monitoring Report for Underground Storage Tanks 1219-U, 1222-U, 2082-U, and 2068-U at the Rust Garage Facility, Buildings 9720-15 and 9754-1.*

TDEC (Tennessee Department of Conservation) 1994. The TDEC UST Reference Handbook, 2nd ed.

APPENDIX A

LABORATORY ANALYTICAL RESULTS FOR SITE STATUS MONITORING (2/23/95)

DOE Y-12 PLANT CHAIN OF CUSTODY FORM

№ 20420

SAMPLER: (Signature) J. L. Stitzlein

Dept. 2366

Building/Phone 9207/4-9496

RAST UST WELLS

REQUISITION NUMBER	SAMPLING DATE	SAMPLING TIME	COMP.	GRAB	SAMPLE LOCATION	NO. OF CONTAINERS	WATER	OIL	SOIL	SOLVENT	SLUDGE	OTHER	REMARKS
	2/23/95	0835		✓	GW-631	5	✓						BETX, TPH/GRO, TPH/DRO E950530080
	2/23/95	0930		✓	GW-632	5	✓						E950530082
	2/23/95	1015		✓	GW-634	5	✓						E950530083
	2/23/95	1040		✓	GW-508	5	✓						E950530084
	2/23/95	0710		✓	Bldg. 9207 TRIP BLANK	2	✓						E950530085
													for Don Bohrma
													1 week turnaround

UCN-15487 (2 10-84)

Signatures Required on Back

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Date / Time	Dept.	Building	Phone
J. L. Fitzler	2/23/95 1100		23FEB 95 1100			
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Date / Time	Dept.	Building	Phone
Relinquished By. (Signature)	Date / Time	Received By: (Signature)	Date / Time	Dept.	Building	Phone
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Date / Time	Dept.	Building	Phone
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Date / Time	Dept.	Building	Phone
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Date / Time	Dept.	Building	Phone

REMARKS:

RETURN TO: ENVIRONMENTAL MONITORING, 9704-1, MS - 1, 4-3980.

CORRECTION REPORT

03/03/95 12:24:03 Y-12 ANALYTICAL SERVICES ORGANIZATION PAGE 1 OF 1

SUBMITTER	ADDRESS	CUSTOMER ID	REQ NO	SAMPLE NO	MTC	STATUS
Bohrman, Donald Edwa	Building 9115 MS 8219	RUST UST WELL		E950530080	8601	APPROVED

DATE SAMPLED: 02/23/95 08:35:00 DATE NEEDED: 03/02/95 LOCATION: GW-631 CHARGE #: S2205F28
DATE RECEIVED: 02/23/95 DATE COMPLETED: 03/03/95 PROJECT CODE: CASE: 1057
SAMPLER: 29776 SAMPLE DESCRIPTION: GRAB FINAL APPROVAL: Marie Mesaros

COMMENTS: RUST UST GW-631 (1ST SAMPLE OF 1995, 1 WK. TURNAROUND); FACILITY ID #0-010117

TEST: DRO_W TPH Diesel Range Organics Water (TN UST METHOD) REPLICATE: 1 STATUS: APPROVED
PREP MTH: PROC MTH: TN UST METH PHASE: TIME ANALYZED: 02/28/95 13:16:00 APPROVER: E030124
COMMENTS: Results are provisional due to an exceeded holding time

CAS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
	Diesel Range Organics		210		ug/L
	QUANTITATION LIMITS		100		ug/L
	DRO in Blank		NONE		ug/L

TEST: GRO TPH Gasoline Range Organics Including BTEX REPLICATE: 1 STATUS: APPROVED
PREP MTH: PROC MTH: SW846 8020 PHASE: TIME ANALYZED: 02/27/95 11:59:00 APPROVER: E030124

CAS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
	Gasoline Range Organics		120		ug/L
71432	Benzene		<10		ug/L
100414	Ethylbenzene		10 U		ug/L
108883	Toluene		10 U		ug/L
1330207	Xylene		10 U		ug/L
	GRO Quantitation Limit		100		ug/L
	BTEX Quantitation Limit		10		ug/L
	GRO Amount in Blank		NONE		ug/L

CORRECTION REPORT

3/07/95 15:04:15 Y-12 ANALYTICAL SERVICES ORGANIZATION PAGE 1 OF 1

UBMITTER	ADDRESS	CUSTOMER ID	REQ NO	SAMPLE NO	MTC	STATUS
ohrman, Donald Edwa	Building 9115 MS 8219	RUST UST WELL		E950530082	8601	APPROVED

ATE SAMPLED: 02/23/95 09:30:00 DATE NEEDED: 03/02/95 LOCATION: GW-632 CHARGE #: S2205F28
ATE RECEIVED: 02/23/95 DATE COMPLETED: 03/07/95 PROJECT CODE: CASE: 1057
AMPLER: 29776 SAMPLE DESCRIPTION: GRAB FINAL APPROVAL:

OMMENTS: RUST UST GW-632 (1ST SAMPLE OF 1995, 1 WK. TURNAROUND); FACILITY ID #0-010117

EST: DRO_W TPH Diesel Range Organics Water (TN UST METHOD) REPLICATE: 1 STATUS: APPROVED
REP MTH: PROC MTH: TN UST METH PHASE: TIME ANALYZED: 02/28/95 15:20:00 APPROVER: E030124

AS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
	Diesel Range Organics		1700		ug/L
	QUANTITATION LIMITS		100		ug/L
	DRO in Blank		NONE		ug/L

EST: GRO TPH Gasoline Range Organics Including BTEX REPLICATE: 1 STATUS: APPROVED
REP MTH: PROC MTH: SW846 8020 PHASE: TIME ANALYZED: 02/27/95 15:17:00 APPROVER: E030124
OMMENTS: BENZENE RESULTS FROM 1:50 DILUTION RUN ON 2/27/95 16:53, LDL=500

AS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
	Gasoline Range Organics		16000		ug/L
1432	Benzene		7300		ug/L
00414	Ethylbenzene		46		ug/L
08883	Toluene		410		ug/L
330207	Xylene		1100		ug/L
	GRO Quantitation Limit		1000		ug/L
	BTEX Quantitation Limit		10		ug/L
	GRO Amount in Blank		NONE		ug/L

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CORRECTION REPORT

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SUBMITTER	ADDRESS	CUSTOMER ID	REQ NO	SAMPLE NO	MTC	STATUS
Johrman, Donald Edwa	Building 9115 MS 8219	RUST UST WELL		E950530083	8601	APPROVED

)ATE SAMPLED: 02/23/95 10:15:00 DATE NEEDED: 03/02/95 LOCATION: GW- 634 CHARGE #: S2205F28
)ATE RECEIVED: 02/23/95 DATE COMPLETED: 03/03/95 PROJECT CODE: CASE: 1057
SAMPLER: 29776 SAMPLE DESCRIPTION: GRAB FINAL APPROVAL: Marie Mesaros

COMMENTS: RUST UST GW-634. 1ST SAMPLE FOR 1995 1 WK. TURNAROUND; FACILITY ID # 0-010117

'EST: DRO_W TPH Diesel Range Organics Water (TN UST METHOD) REPLICATE: 1 STATUS: APPROVED
'REP MTH: PROC MTH: TN UST METH PHASE: TIME ANALYZED: 03/01/95 12:36:00 APPROVER: E030124

AS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
	Diesel Range Organics		3100		ug/L
	QUANTITATION LIMITS		200		ug/L
	DRO in Blank		NONE		ug/L

'EST: GRO TPH Gasoline Range Organics Including BTEX REPLICATE: 1 STATUS: APPROVED
'REP MTH: PROC MTH: SW846 8020 PHASE: TIME ANALYZED: 02/28/95 12:04:00 APPROVER: E030124

AS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
	Gasoline Range Organics		8200		ug/L
'1432	Benzene		170		ug/L
00414	Ethylbenzene		720		ug/L
08883	Toluene		250		ug/L
330207	Xylene		2000		ug/L
	GRO Quantitation Limit		500		ug/L
	BTEX Quantitation Limit		50		ug/L
	GRO Amount in Blank		NONE		ug/L

CORRECTION REPORT

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UBMITTER	ADDRESS	CUSTOMER ID	REQ NO	SAMPLE NO	MTC	STATUS
ohrman, Donald Edwa	Building 9115 MS 8219	RUST UST WELL		E950530084	8601	APPROVED

ATE SAMPLED: 02/23/95 10:40:00 DATE NEEDED: 03/02/95 LOCATION: GW-508 CHARGE #: S2205F28
ATE RECEIVED: 02/23/95 DATE COMPLETED: 03/03/95 PROJECT CODE: CASE: 1057
AMPLER: 29776 SAMPLE DESCRIPTION: GRAB FINAL APPROVAL: Marie Mesaros

OMMENTS: RUST UST GW-508. FIRST SAMPLE OF 1995, 1 WK. TURNAROUND; FACILITY ID # 0-010117

EST: DRO_W TPH Diesel Range Organics Water (TN UST METHOD) REPLICATE: 1 STATUS: APPROVED
REP MTH: PROC MTH: TN UST METH PHASE: TIME ANALYZED: 03/01/95 15:48:00 APPROVER: E030124

AS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
	Diesel Range Organics		14000		ug/L
	QUANTITATION LIMITS		1000		ug/L
	DRO in Blank		NONE		ug/L

EST: GRO TPH Gasoline Range Organics Including BTEX REPLICATE: 1 STATUS: APPROVED
REP MTH: PROC MTH: SW846 8020 PHASE: TIME ANALYZED: 02/28/95 14:26:00 APPROVER: E030124
OMMENTS: TOLUENE RESULTS ARE FROM 1:200 DILUTION RUN ON 2/28/95 AT 15:34, LDL=2000

AS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
	Gasoline Range Organics		58000		ug/L
1432	Benzene		4000		ug/L
00414	Ethylbenzene		2500		ug/L
08883	Toluene		23000		ug/L
530207	Xylene		7300		ug/L
	GRO Quantitation Limit		5000		ug/L
	BTEX Quantitation Limit		500		ug/L
	GRO Amount in Blank		NONE		ug/L

OFFICIAL REPORT

3/01/95 15:46:00 Y-12 ANALYTICAL SERVICES ORGANIZATION PAGE 1 OF 1

UBMITTER	ADDRESS	CUSTOMER ID	REQ NO	SAMPLE NO	MTC	STATUS
ohrman, Donald Edwa	Building 9115 MS 8219	RUST UST WELLS		E950530085	8601	APPROVED

ATE SAMPLED: 02/23/95 07:10:00 DATE NEEDED: 03/02/95 LOCATION: BLDG. 9207 T. B. CHARGE #: S2211601
ATE RECEIVED: 02/23/95 DATE COMPLETED: 03/01/95 PROJECT CODE: CASE: SQT001
AMPLER: 29776 SAMPLE DESCRIPTION: GRAB FINAL APPROVAL: L. T. Emerson

OMMENTS: RUST UST WELLS TRIP BLANK FOR DON BOHRMAN. CHG.#S2205F28, PJN#1057

EST: VOA624 Volatile Organics by GC/MS (EPA 624) REPLICATE: 1 STATUS: APPROVED
REP MTH: EPA624 PROC MTH: EPA 624 PHASE: TIME ANALYZED: 02/28/95 17:17:00 APPROVER: E030124

AS NUMBER	DETERMINATION	DT	RESULT	CONFIDENCE	UNIT
4873	Chloromethane		10 U		ug/L
4839	Bromomethane		10 U		ug/L
5014	Vinyl chloride		10 U		ug/L
5003	Chloroethane		10 U		ug/L
5694	Trichlorofluoromethane		10 U		ug/L
5092	Methylene chloride		2 BJ		ug/L
5354	1,1-Dichloroethene		10 U		ug/L
5343	1,1-Dichloroethane		10 U		ug/L
56605	trans-1,2-Dichloroethene		10 U		ug/L
7663	Chloroform		10 U		ug/L
07062	1,2-Dichloroethane		10 U		ug/L
1556	1,1,1-Trichloroethane		10 U		ug/L
5235	Carbon tetrachloride		10 U		ug/L
5274	Bromodichloromethane		10 U		ug/L
10758	2-Chloroethylvinyl ether		10 U		ug/L
8875	1,2-Dichloropropane		10 U		ug/L
0061015	cis-1,3-Dichloropropene		10 U		ug/L
9016	Trichloroethene		10 U		ug/L
24481	Dibromochloromethane		10 U		ug/L
9005	1,1,2-Trichloroethane		10 U		ug/L
1432	Benzene		10 U		ug/L
0061026	trans-1,3-Dichloropropene		10 U		ug/L
5252	Bromoform		10 U		ug/L
27184	Tetrachloroethene		10 U		ug/L
9345	1,1,2,2,-Tetrachloroethane		10 U		ug/L
08883	Toluene		10 U		ug/L
08907	Chlorobenzene		10 U		ug/L
00414	Ethylbenzene		10 U		ug/L

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