



**DRAFT**

**MAGNETOMETER SURVEY REPORT  
IR PROGRAM SITE 09, ALLEN HARBOR LANDFILL  
NAVAL CONSTRUCTION BATTALION CENTER  
DAVISVILLE, RHODE ISLAND**

Contract No. N62472-92-D-1296  
Contract Task Order No. 0067

*Prepared for*

Department of the Navy, Northern Division  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop No. 82  
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**DRAFT**

**Magnetometer Survey Report  
IR Program Site 09, Allen Harbor Landfill  
Naval Construction Battalion Center  
Davisville, Rhode Island**

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Peter Pellissier,  
CTO Manager

Date

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Sam Morekas,  
Program Manager

Date

March 1997

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1	Record of Field Magnetometer Readings

## 1. INTRODUCTION

Under Contract No. N624-72-92-D-1296, Northern Division, Naval Facilities Engineering Command Contract Task Order (CTO) No. 0067, dated 23 August 1996, EA Engineering, Science, and Technology (EA) was authorized to perform design services tasks for the Closure of Installation Restoration (IR) Program Site 09, Allen Harbor Landfill at the Naval Construction Battalion Center, Davisville, Rhode Island (NCBC Davisville). Task 3 of this CTO consisted of:

- Performance of a Magnetometer Survey in the vicinity of Allen Harbor to evaluate the lateral and vertical extent of the existing landfill related ferrous material within the intertidal zone of Allen Harbor;

This report presents the results and findings of the Magnetometer Survey.

### 1.1 DESCRIPTION OF SITE

#### 1.1.1 Facility Description

NCBC Davisville is located in the Town of North Kingstown, Rhode Island, approximately 18 miles south of the state capitol, Providence. A significant portion of NCBC Davisville Main Center is adjacent to Narragansett Bay. NCBC Davisville is composed of three areas: the Main Center; the West Davisville storage area; and Camp Fogarty, a training facility located approximately four miles west of the Main Center (Figure 1-1). Adjoining NCBC Davisville Main Center's southern boundary is the decommissioned Naval Air Station (NAS) Quonset Point, which was transferred by the Navy to the Rhode Island Port Authority (RIPA) in April 1973 (TRC 1994).

NCBC Davisville was primarily used for training naval seamen in construction operations, and as storage and freight yards for construction materials. As a result, the NCBC is comprised primarily of warehouse space and freight yards, most of which are currently empty. In 1974, the NAS and the Naval Air Rework Facility (NARF) at Quonset Point were decommissioned, and operations at Davisville were greatly reduced pursuant to the Shore Establishment Realignment Act of 1973. In 1984, the Rhode Island Department of Environmental Management (RIDEM) closed Allen Harbor to shellfishing due to suspected contamination by several sources, including Site 09. In 1989, NCBC Davisville was added to the National Priorities List (54 Federal Register 48184, 1989). In 1991, the closure of NCBC Davisville was announced, and operations were phased down to minimum staffing levels for public works, maintenance and security (EA 1996). NCBC Davisville closed on 1 April 1994. Most of the staff and materials have been moved offsite. Currently, facilities management and security staff engaged with base closure remain on base.

### 1.1.2 Site 09 Allen Harbor Landfill

Installation Restoration (IR) Program Site 09, located in the northeastern portion of NCBC Davisville along the western shore of Allen Harbor, is an approximately 15 acre area which was used by the Navy as a landfill. The site is bounded to the east by Allen Harbor, to the west by Sanford Road, and to the north and south by vegetated wetlands (Figures 1-2 and 1-3). Allen Harbor contains two boating marinas and leads to Narrangansett Bay to the east. Allen Harbor is a depositional water body located in an urbanized area and receives storm water runoff from two creeks (North Creek and West Creek) opposite side of Sanford Road, at the edge of the NCBC Davisville boundary.

A 1939 aerial photograph of Allen Harbor area depicts the landfill as an undeveloped open grass field rimmed with shrubs and bushes. From 1946 to 1972, the Allen Harbor Landfill was used for the disposal of waste material generated by NCBC Davisville and NAS Quonset Point. Reportedly, a variety of waste, including large quantities of municipal-type waste, construction debris, rubble, preservatives, paint thinners, degreasers, polychlorinated biphenyls (PCB), asbestos, ash, sewerage sludge, 55-gal drums, used mineral grit, and fuel oil have been placed at the site. The types and quantities of materials disposed of are based upon 1984 interviews of personnel who worked at NCBC Davisville during 1946 to 1972 when Site 09 was active (Fred C. Hart 1984).

In 1972, after landfilling operations had ceased, the landfill was closed in accordance with standard practice at the time by placing a 2 ft soil cap over the fill materials.

## 1.2 SURVEY OBJECTIVES

EA was tasked to perform a magnetometer survey to evaluate the lateral and vertical extent of landfill material (ferrous metal) that may be present in the intertidal zone adjacent to Site 09, in support of landfill capping and closure for the site.

## 2. SCOPE OF SURVEY

In November 1996, EA conducted a Magnetometer Survey to evaluate the extent to which ferrous debris may have been disposed beyond the outer perimeter and toe of the Allen Harbor landfill. The Magnetometer Survey was conducted using a 30 X 30 ft grid pattern and included six (6) survey lines (Figure 2-1). Two (2) of the lines were located in the intertidal zone (Lines 2 and 4) at 30 and 60 ft out from and parallel to the shoreline, respectively to gather magnetic information on metallic landfill debris that may have been buried beneath Allen Harbor. Three (3) lines were conducted to gather comparative magnetic information along the western side of the landfill. These included Line 1 which was located at the base of the landfill between the toe and the shoreline and Lines 6 and 7 which were located on the top of the landfill. One (1) line (Line 3) was conducted 15 ft out from Line 1 and parallel to the shoreline to provide better magnetic definition between Lines 1 and 2.

### 2.1 SEARCH PROCEDURE AND DATA ACQUISITION

A Geometrics G856G Cesium Magnetic Gradiometer was used to conduct the Magnetometer Survey. This instrument is capable of measuring both the total magnetic field and vertical gradient using a dual sensor array. A Global Positioning System (GPS) using a Trimble TDC1 Asset Surveyor was used to locate and document the survey line positions. The location of the survey lines and measurement points/stations are shown on Figure 2-1. Total magnetic field and vertical gradient measurements and the GPS coordinates are presented on Table 1.

#### 2.1.1 Magnetometer Survey

Between 7 and 15 November 1996, EA conducted a Magnetometer Survey at Site 09-Allen Harbor Landfill. The survey included five(5) complete survey lines (Lines 1, 2, 4, 6, and 7) three(3) of which were conducted on land along the western side of the landfill, 2 of which were conducted in the intertidal zone using an aluminum row boat (Figure 2-1).

Where feasible, magnetometer measurements were collected in a 30 X 30 ft grid, at 30 ft positions along each line, and a distance of 30 ft between lines. This 30 X 30 ft grid pattern was selected to provide screening sensitivity to detect a potential source the size of one 55-gal drum at a distance of 15 ft from the magnetometer sensor array. Due to field conditions, EA personnel were unable to collect several of the points at 30 ft intervals. Most notably these included some of the points along Lines 2 and 4 due to the wind and rough water conditions encountered in the harbor at the time of collection. In addition, EA was also unable to collect several points along the southwestern portion of Lines 6 and 7 due to the thick brush encountered in these areas.

Magnetometer measurements were taken at each position location in Total Field (TF) and Vertical Gradients (VG) mode. In addition, VG measurements were also taken in between Lines 1 and 2 (See Figure 2-1; Line 3) at a distance of 15 ft out from the southern end of the landfill toe to provide better definition in this area. The TF mode is useful for gathering

information on deep anomalies. The VG mode was used to more accurately define the location of shallower anomalies. In addition, VG measurements tend to be more specific in delineating individual magnetic properties, whereas, TF measurements tend to be more collective and appeared representative of larger magnetic bodies which can potentially mask the individual components of an anomaly. VG measurements are also essentially unaffected by diurnal variations and other magnetic disturbances.

The top sensor of the magnetic gradiometer, was positioned approximately 4 ft 10 1/2" above ground surface for land readings and 4 ft above water surface for harbor readings.

Total Field and Vertical Gradient measurements were manually recorded in the field on the Record of Field Magnetometer Readings (Table 1) and each position location marked with a pinflag. In addition, observations of visual debris encountered on the ground surface or in the harbor (i.e, metal plates, cables, etc) were also recorded on the Record of Field Magnetometer Readings (Table 1). Where significant amounts of debris were encountered a Record of Visual Debris Form (Appendix A) was filled out to show the relative location of the debris and a photograph was taken. Observations on field and weather conditions during the survey were also noted in a field notebook.

The TF and VG measurements were plotted versus distance (y vs. x axis, respectively) for comparison of the data and to facilitate interpretation of the measurements along each line traveled. (Refer to Figure 2-2, which includes Magnetometer Survey Plots for Lines 1, 2, 3, 4, 6, and 7.) To facilitate comparison of the data among lines, registration points A through D, which are presented on Figures 2-1 and 2-2, can be used to align the plots.

### **2.1.2 Global Positioning System (GPS)**

Global Positioning System using a Trimble TDC1 Asset Surveyor was used to locate each magnetometer position locations. The position locations were later transferred on to the Site Base Map (Figure 2-1).

EA used the Trimble ProXR Differential Global Positioning System (DGPS) receiver in both Real-Time differential mode and Stationary Differential Mode to document position location. Differential mode processes the GPS satellite data with the data from a control station receiving the same satellite data. This differential processing provides greater accuracy by refining the coordinate position from 100-300 foot horizontal to an accuracy of 5-10 feet.

Most of the GPS transect points were recorded in Real Time differential mode. Stationary mode points were logged and collected when transmission with the GPS transmitting station was broken and at control locations to verify procedures and equipment function. During the Real-time differential mode, the receiver was programmed to compute the differential corrections from the transmitting station located at the USCG Station at Montauk Point. During stationary mode data was collected for 3 minutes at 1 second sample rate.

The GPS measurements were collected simultaneously with the TF and VG measurements. The exception to this was on 8 November 1996 during the collection of Line 6 data where a breakage in the Montauk transmission made it impossible to collect GPS data on that date. Line 6 GPS data was instead collected on 11 November 1996. In addition, GPS measurements were not collected at 10 points along Lines 2,4, and 6 due to a corruption in the GPS files and along Line 3 since this line was added after the GPS survey had already been completed. The location of these points were, instead, estimated for the purpose of locating them on the Site Base Map (Figure 2-1).

Following data collection, the data was reviewed by a trained geodesist. All data points were found to have low Position Dilution of Precision (PDOP) and high signal to noise ratios which resulted in an exceedence of the parameter specifications for the equipment and stated accuracies resulting in acquisition of good-to-high quality data.

## **2.2 SITE CONDITIONS OBSERVED DURING THE SURVEY**

During the magnetometer survey, EA personnel observed a significant amount of debris along the top of the landfill along the southern and western landfill slope. The relative amount and types of debris were logged on the Record of Field Magnetometer Readings (Table 1) and Record of Visual Debris Form (Appendix A). The types of debris noted included large concrete blocks, various amounts of ferrous debris including metal piping, metal bedframes, and corroded drums.

The weather conditions during the survey included temperatures ranging from approximately 25-50 degrees over the course of the survey with light-to-heavy winds. The heaviest wind was recorded on 8 November 1996.

## **2.3 DISCUSSION OF SURVEY RESULTS**

Review of the magnetic signatures for Site 09 indicate that the highest measurements obtained during the survey were taken on the landfill (Lines 6 and 7) and at the landfill toe (Line 1). This is what would be expected because ferrous debris was consistently observed along the entire toe of the landfill during the survey.

Examination of both the TF and VG measurements obtained on the landfill (Lines 6 and 7) indicate that buried ferrous objects were detected at depths ranging from 20-30 feet below ground surface. Over seventeen distinct anomalies were identified on Line 6 which was incomplete for position segments 1140 through 1540 due to dense brush encountered at these position locations. The measurements taken on the landfill (Lines 6 and 7) indicate that magnetic anomalies were detected throughout the line traverses. This was also true for the measurements obtained along the toe of the landfill (Line 1).

### Significant Survey Findings

After reviewing the TF and VG data for the points measured several observations can be made which are presented below by their respective line designation.

#### **Lines 6, 7, and 1:**

Review of the magnetic signatures indicate that the majority of the ferrous debris is still located in the landfill (Lines 6 and 7). Metal and ferrous debris was visually observed along the entire landfill slope and was confirmed by magnetic measurements of line and position traverse plots (Figure 2-2) from Line 1 along the toe of the landfill.

#### **Line 2:**

Line 2 which is located 30 feet off and parallel the shoreline and toe of the landfill revealed a deeper magnetic source between position 0720 and 1440 (See Figure 2-2, Line 2 Significant Anomaly (1)). This magnetic signature appears to result from a deeper source because the VG data which is more sensitive to close magnetic disturbances shows little to no variation and/or change in the vertical gradient between these position locations. The TM which is less influenced by close magnetic sources is showing an appreciable magnetic signature measured over a larger distance of six hundred and ninety feet (e.g., between position locations 0720 through 1440). Comparing the VG and TF measurements obtained for these points indicates that the deeper magnetic source is most likely not the result of localized ferrous debris buried at these locations. Two explanations are offered which may explain this deeper and widespread magnetic signature. It may be the result of the decay in the magnetic signature measured along the toe of the landfill (Line 1) between position locations 0720 and 1440. If this was the source the signature observed along Line 2 could be explained by the magnetic decay factor which occurs with distance from the source(s) along Line 1. It is also possible that the bedrock surface topography and composition could in part explain the magnetic signature observed at these locations.

#### **Line 4:**

Line 4 was located approximately 60 feet off the shoreline and toe of the landfill. This line shows little to no indication of localized buried ferrous debris based on review of magnetic signatures with the exception of position locations 0120, 0870, 1050, 1140, and 1230. (See Figure 2-2, Line 4 Significant Anomalies (2), (3), (4), (5), and (6).) These anomalies could not be verified because they are underwater and located in Allen Harbor approximately 60 feet off the shoreline.

### 3. SUMMARY AND CONCLUSIONS

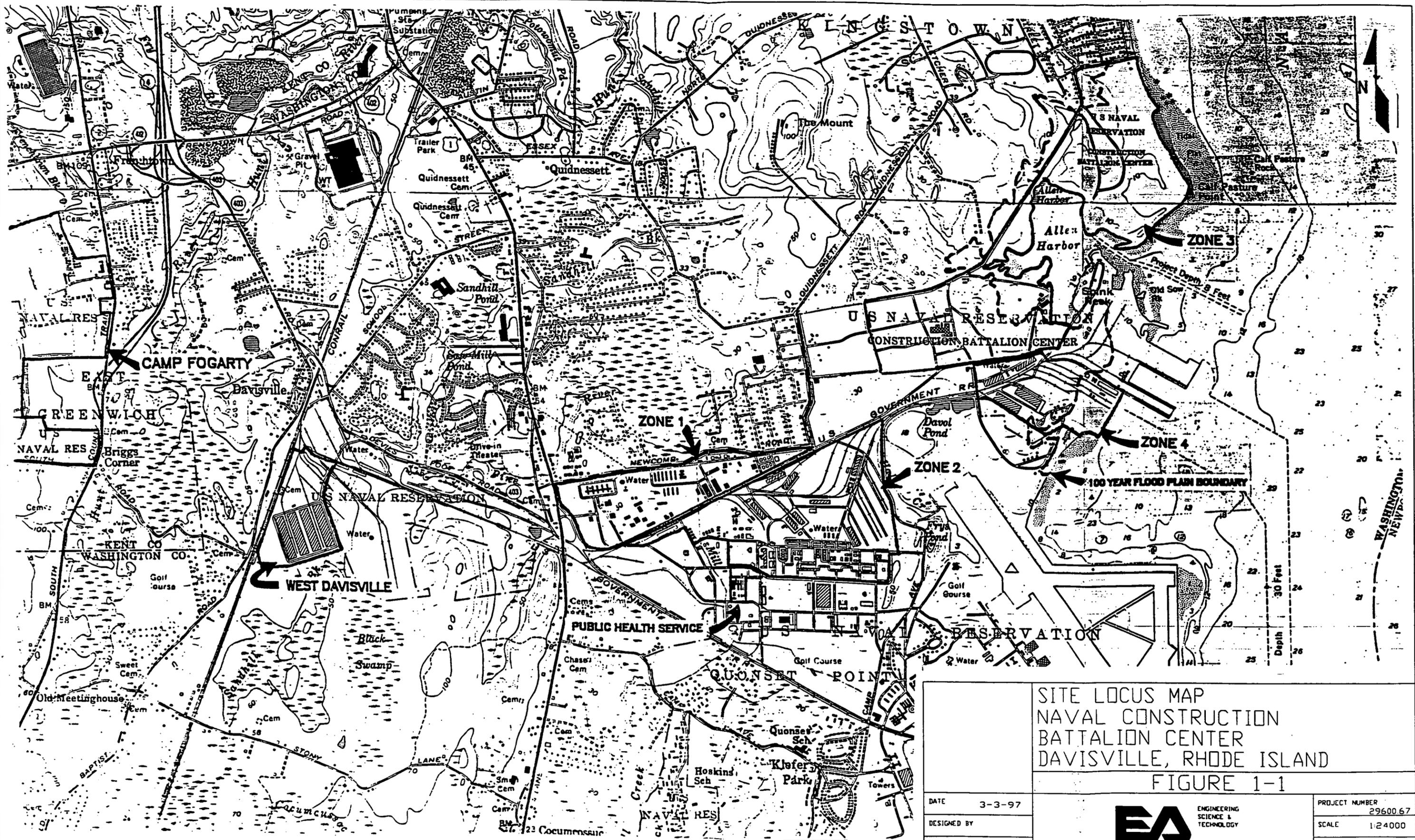
Review of the Site 09 magnetic signatures indicate that numerous steel and iron objects are buried in the landfill and along the slope of the landfill. This is supported by the fact that the magnetic signatures fall off considerably in the direction of the harbor and increase considerably as they approach the landfill. It is concluded from this magnetometer survey that there is little to no indication that buried ferrous waste were disposed of in the harbor or that landfilling operations extended into the harbor beyond the existing outer perimeter of the landfill. The five anomalies identified from Line 4 may have resulted from isolated disposal events, material which eroded from the slope of the landfill resulting from wave action or from severe storm conditions, or non-landfill related disposal activities.

## REFERENCES

Breiner, S., 1973. *Applications Manual for Portable Magnetometers*, GeoMetrics, Sunnyvale, CA.

EA Engineering, Science, and Technology. 1996. *Revised Draft Final Phase III RI Report, IR Program Site 09, Allen Harbor Landfill*. August.

Fred C. Hart Associates, Inc. 1984. *Initial Assessment Study of Naval Construction Battalion Center, Davisville, Rhode Island*. Prepared for U.S. Navy, Department of Assessment and Control of Installation Pollutants, Port Hueneme, CA. Contract No. N62474-83-C6974. September.



BASE MAP: U.S.G.S. EAST GREENWICH AND WICKFORD QUADRANGLE - RHODE ISLAND  
 7.5 MINUTE SERIES (TOPOGRAPHIC) 1942, PHOTOREVISED 1970 & 1975.

SITE LOCUS MAP  
 NAVAL CONSTRUCTION  
 BATTALION CENTER  
 DAVISVILLE, RHODE ISLAND  
 FIGURE 1-1

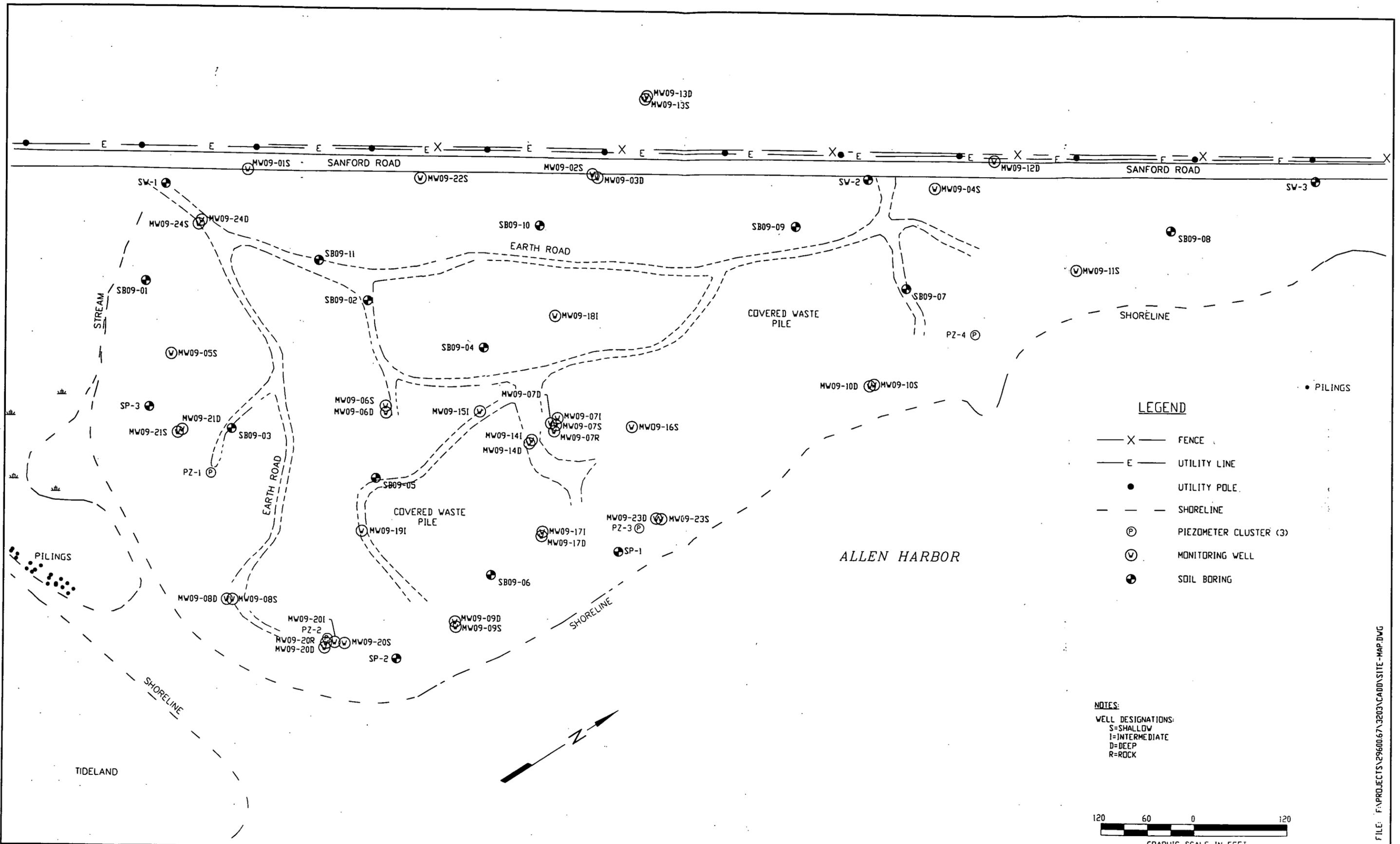
DATE	3-3-97
DESIGNED BY	
DRAWN BY	JFW
CHECKED BY	RLA
PROJECT MANAGER	JAS



ENGINEERING  
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 TECHNOLOGY

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 2 COMMERCIAL STREET, SUITE 106  
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 (617) 784-1767

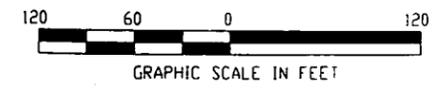
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DRAWING NUMBER	
SHEET NUMBER	



**LEGEND**

- X — FENCE
- E — UTILITY LINE
- UTILITY POLE
- - - SHORELINE
- ⊕ PIEZOMETER CLUSTER (3)
- ⊙ MONITORING WELL
- ⊕ SOIL BORING
- PILINGS

**NOTES:**  
 WELL DESIGNATIONS:  
 S=SHALLOW  
 I=INTERMEDIATE  
 D=DEEP  
 R=ROCK



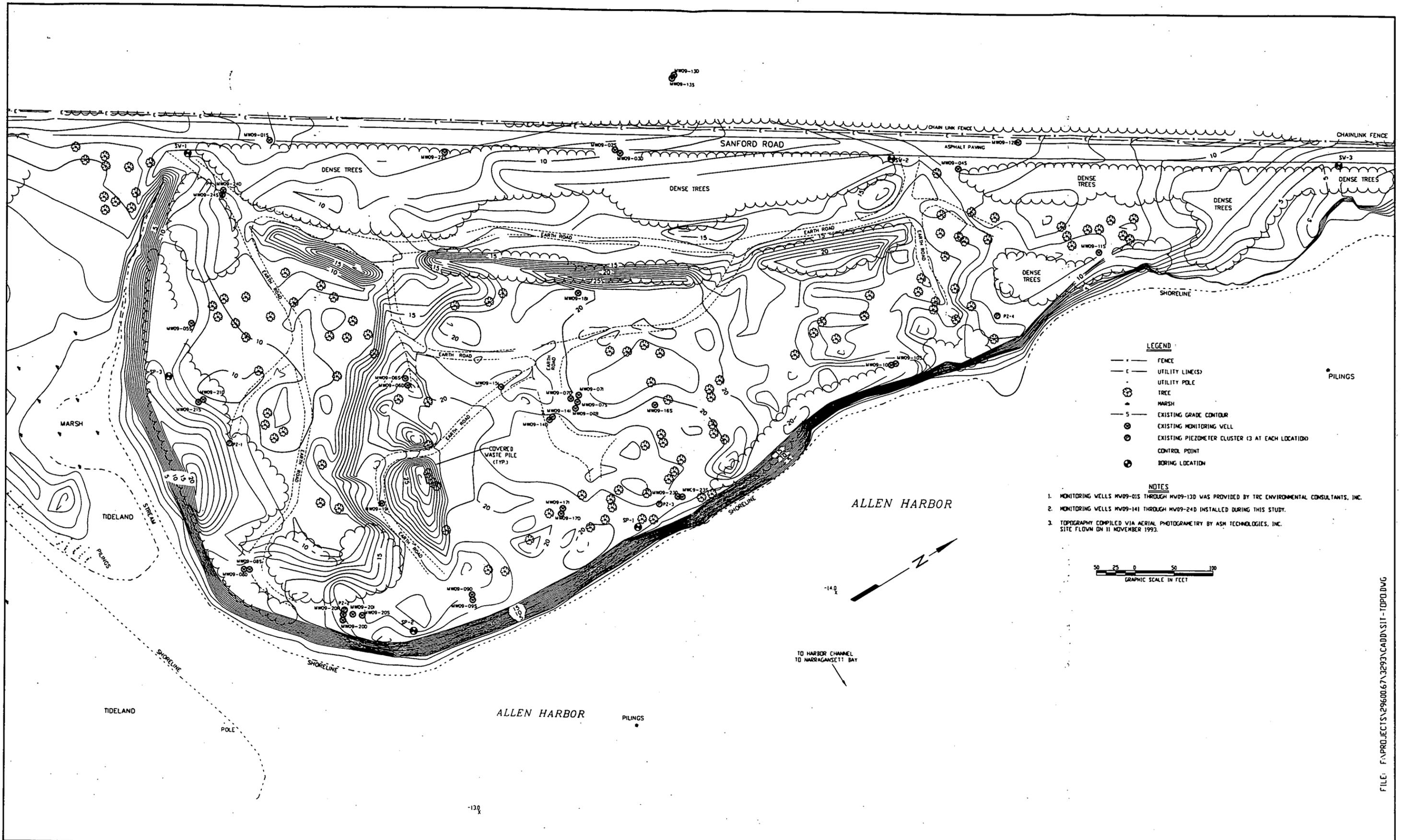
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MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NCBC DAVISVILLE, RHODE ISLAND

SITE MAP



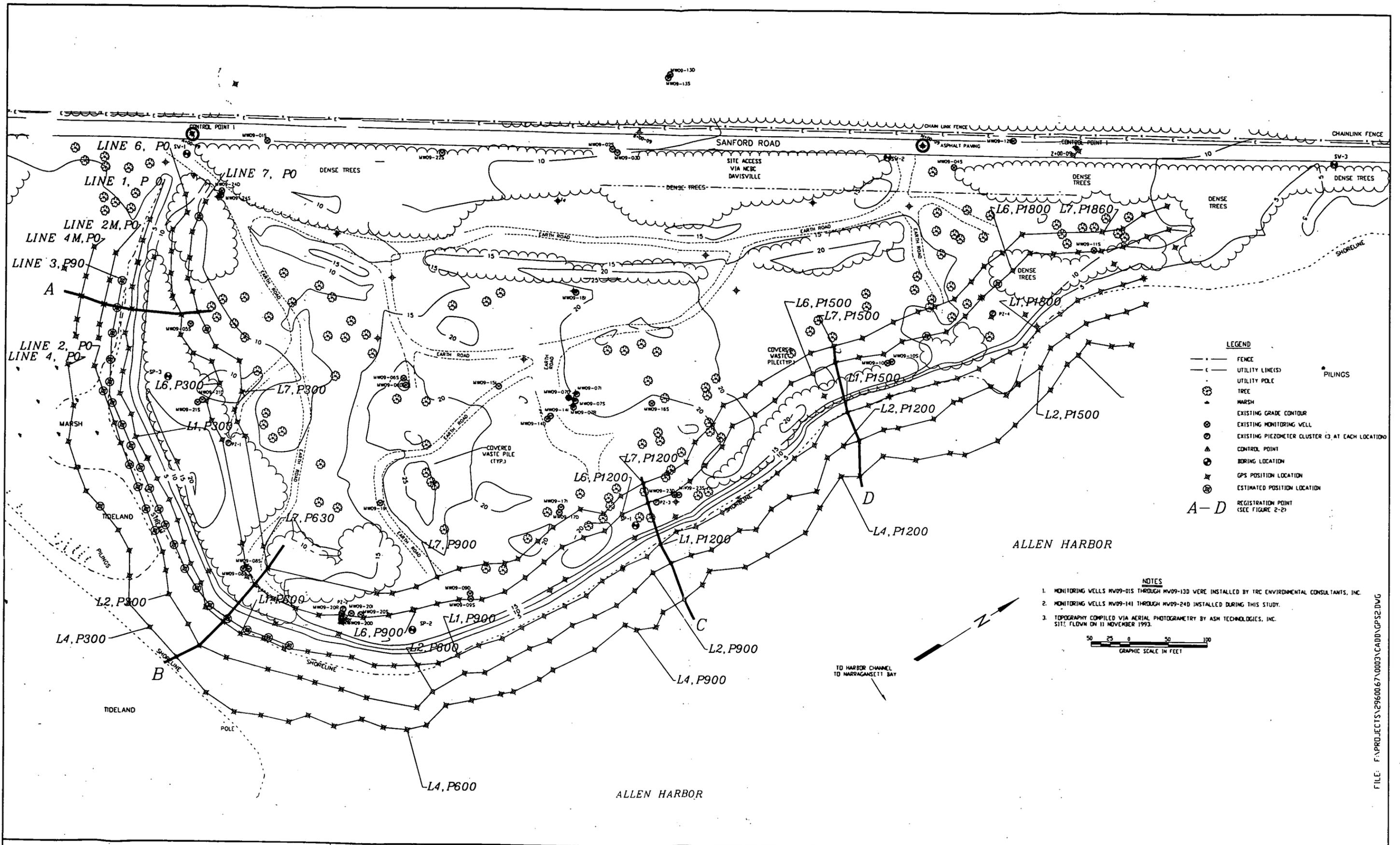
- LEGEND**
- FENCE
  - UTILITY LINES
  - UTILITY POLE
  - TREE
  - MARSH
  - EXISTING GRADE CONTOUR
  - ⊙ EXISTING MONITORING WELL
  - ⊙ EXISTING PIEZOMETER CLUSTER (3 AT EACH LOCATION)
  - CONTROL POINT
  - BORING LOCATION

- NOTES**
1. MONITORING WELLS MW09-015 THROUGH MW09-130 WAS PROVIDED BY TRC ENVIRONMENTAL CONSULTANTS, INC.
  2. MONITORING WELLS MW09-141 THROUGH MW09-240 INSTALLED DURING THIS STUDY.
  3. TOPOGRAPHY COMPILED VIA AERIAL PHOTOGRAMMETRY BY ASM TECHNOLOGIES, INC. SITE FLOWN ON 11 NOVEMBER 1993.



FILE: F:\PROJECTS\2960067\3293\CADD\SIT-TOPO.DWG

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	CHECKED BY	PROJECT MGR.	SCALE	FILE NAME		
	RLA	JAS	AS SHOWN	SIT-TOPO		FIGURE 1-3



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EA ENGINEERING,  
SCIENCE, AND  
TECHNOLOGY, INC.

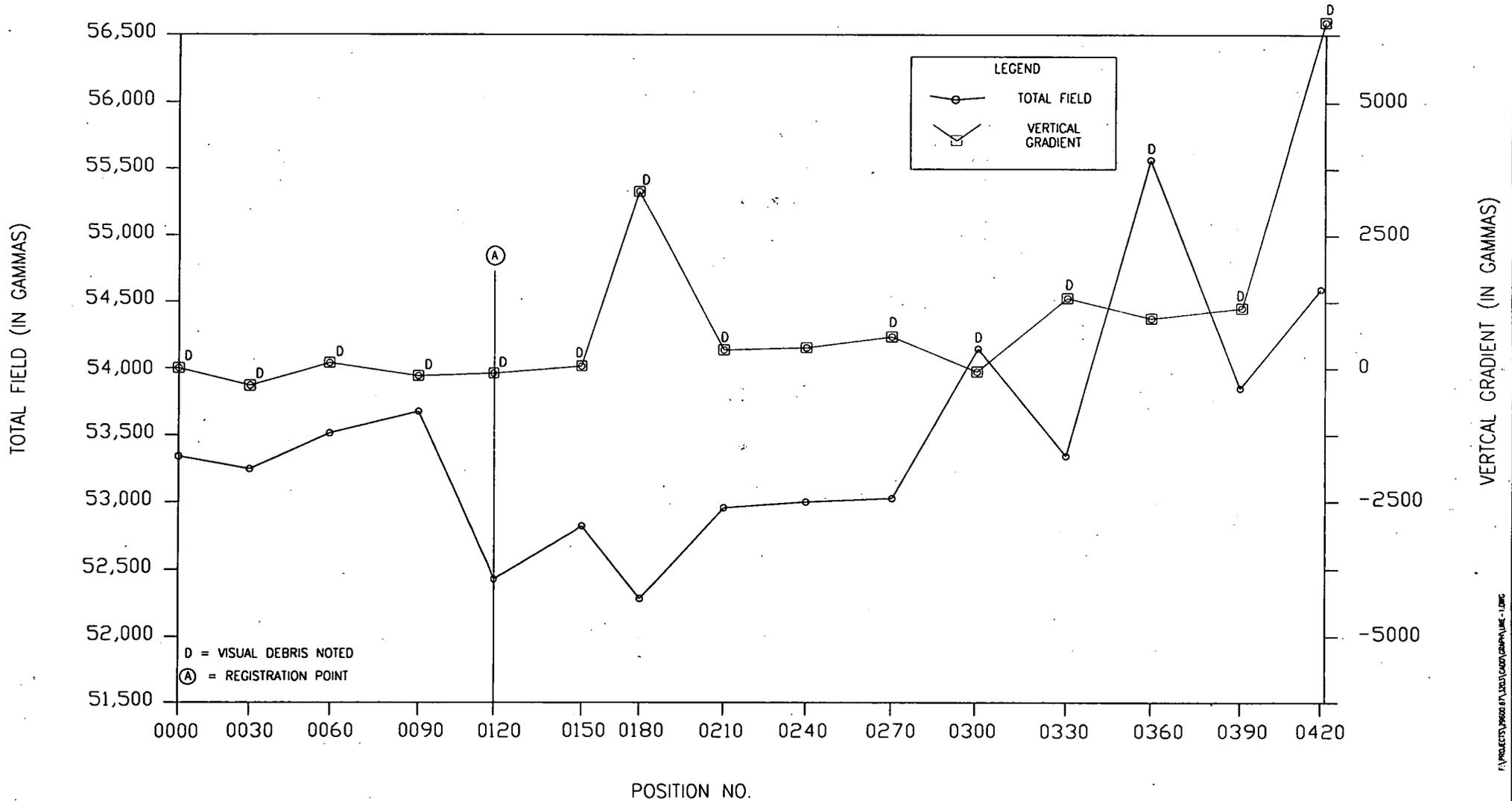
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MAGNETOMETER SURVEY  
REPORT  
SITE 09 ALLEN HARBOR LANDFILL  
NCBC DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY TRAVERSES  
SITE 09, ALLEN HARBOR LANDFILL

FIGURE 2-1

### MAGNETOMETER SURVEY PLOT - LINE 1

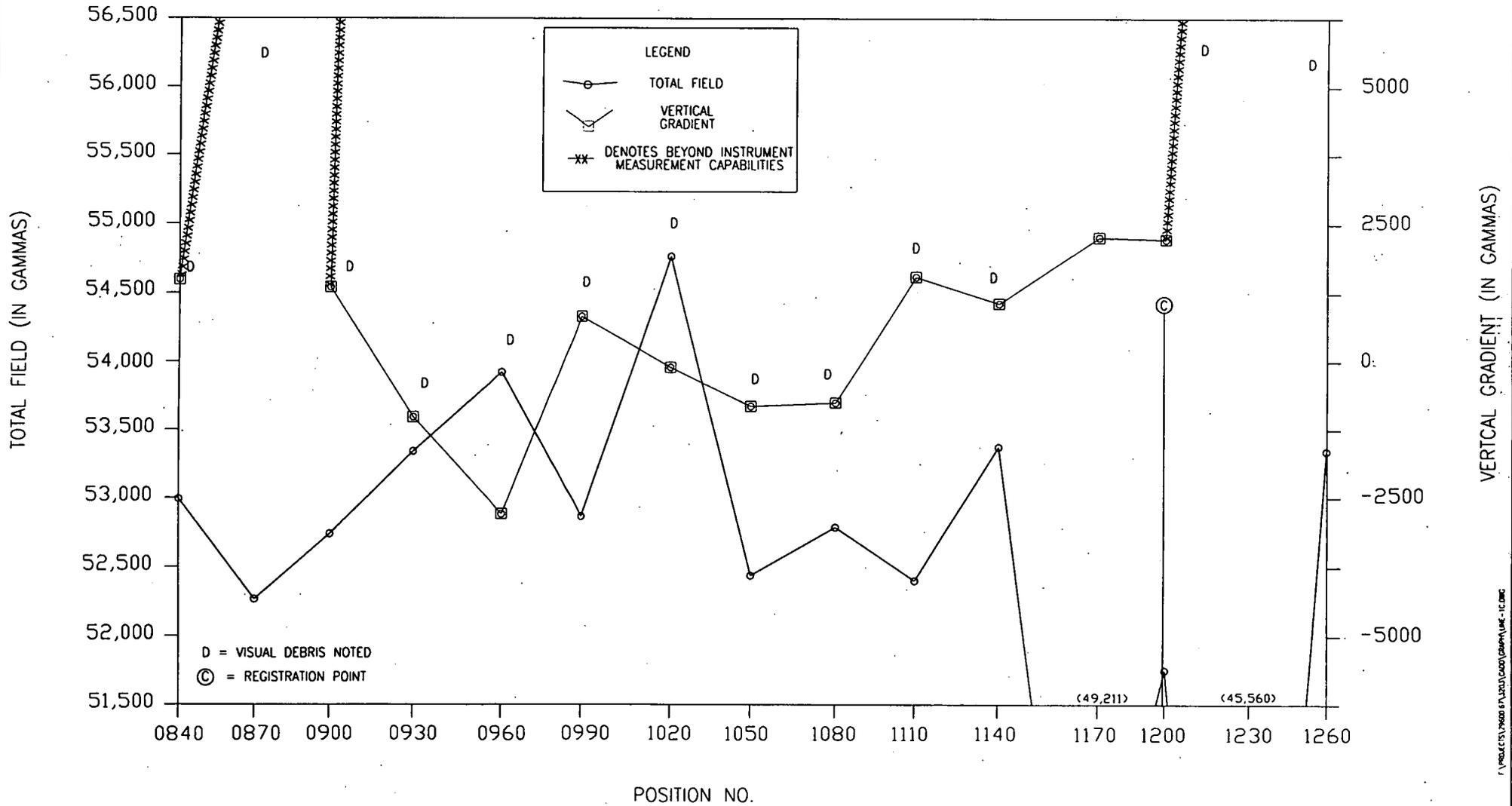


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### MAGNETOMETER SURVEY PLOT - LINE 1



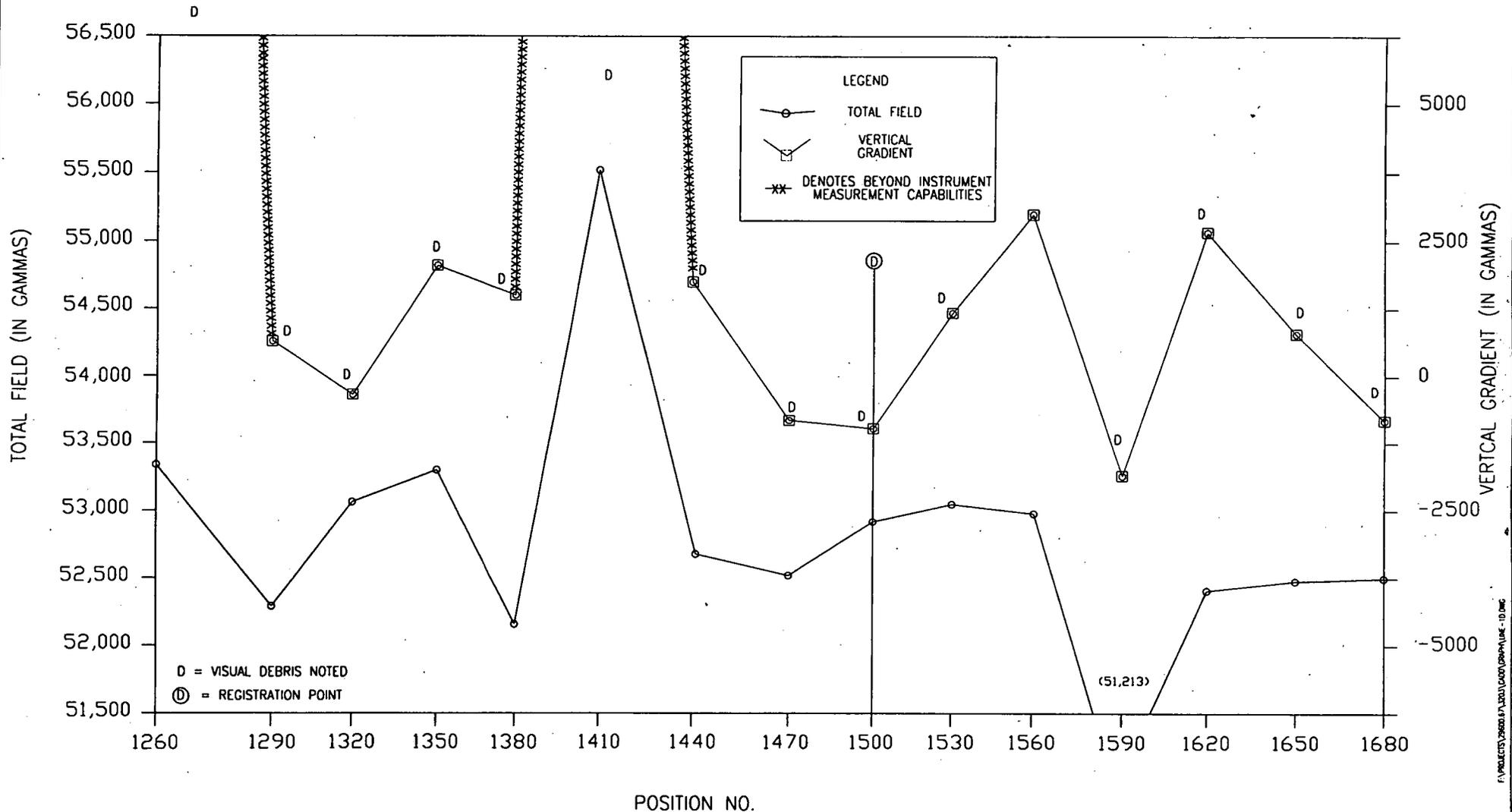
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MAGNETOMETER SURVEY REPORT  
SITE 09 ALLEN HARBOR LANDFILL  
NORC DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
LINE 1

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MAGNETOMETER SURVEY PLOT - LINE 1



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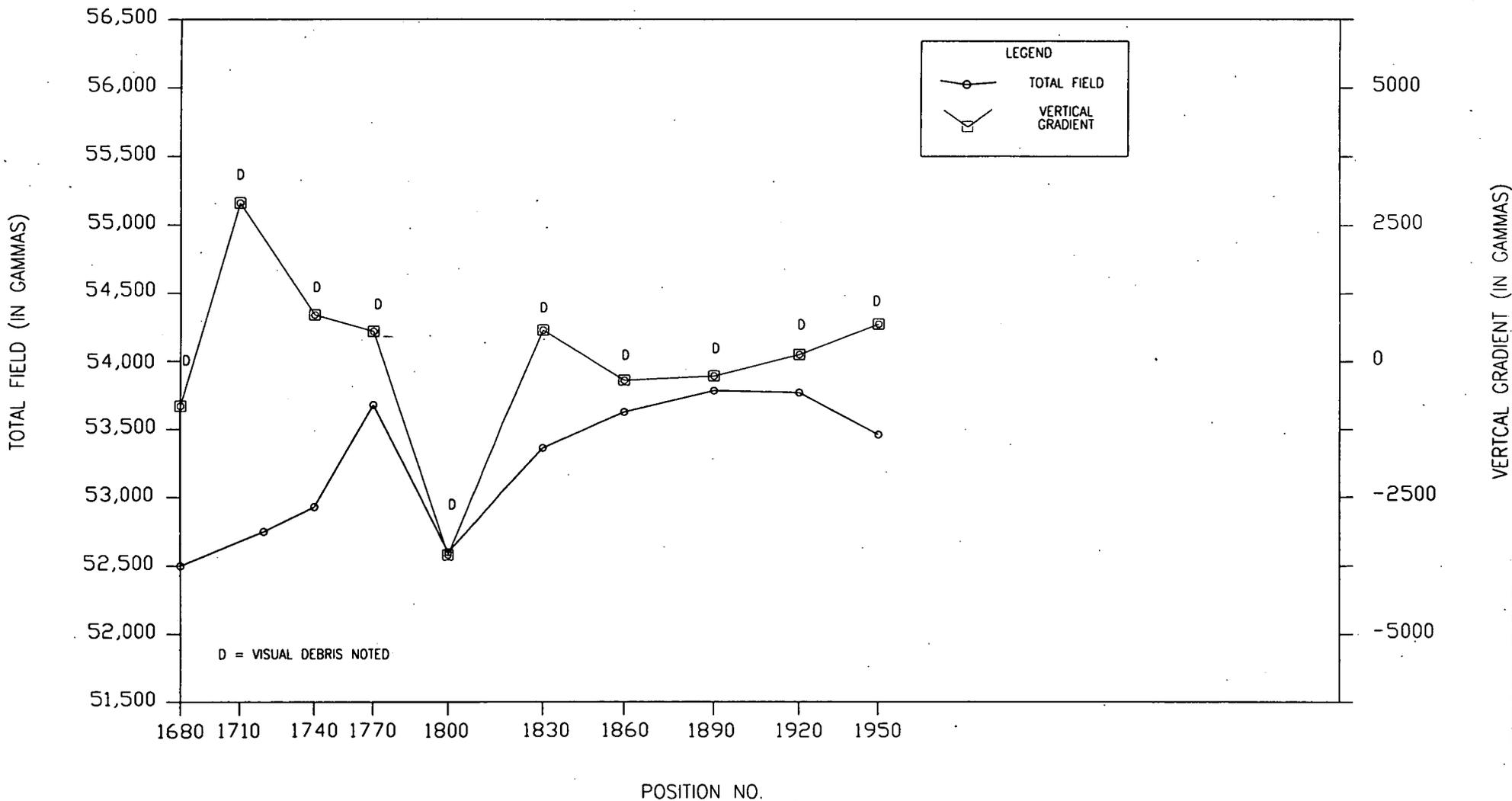


MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NBCB DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
 LINE 1

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CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

### MAGNETOMETER SURVEY PLOT - LINE 1



PROJECTS DESIGNED BY: EASTMAN GRAPHIC CORP. - LEUNG

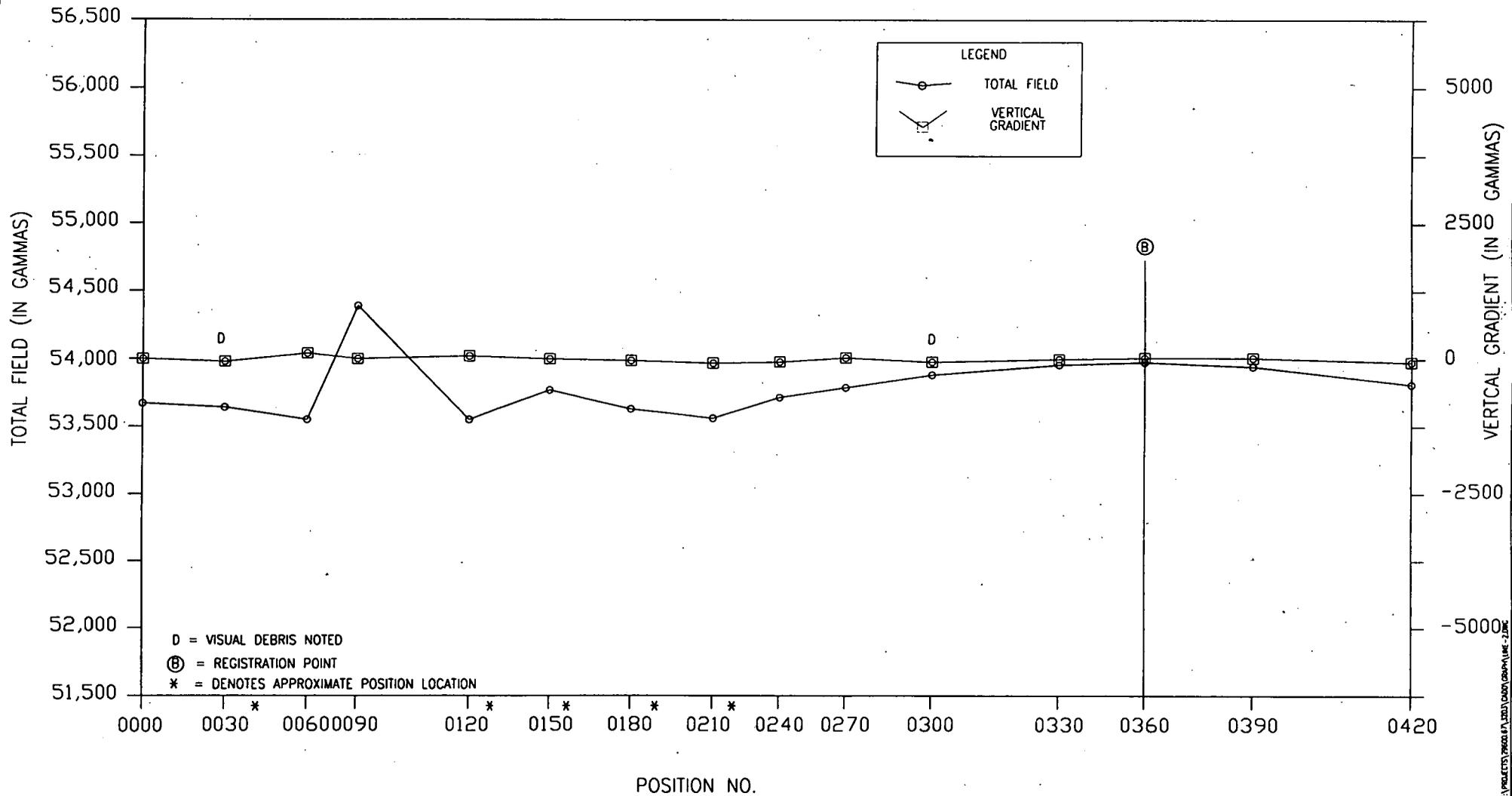


MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NBCS DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
 LINE 1

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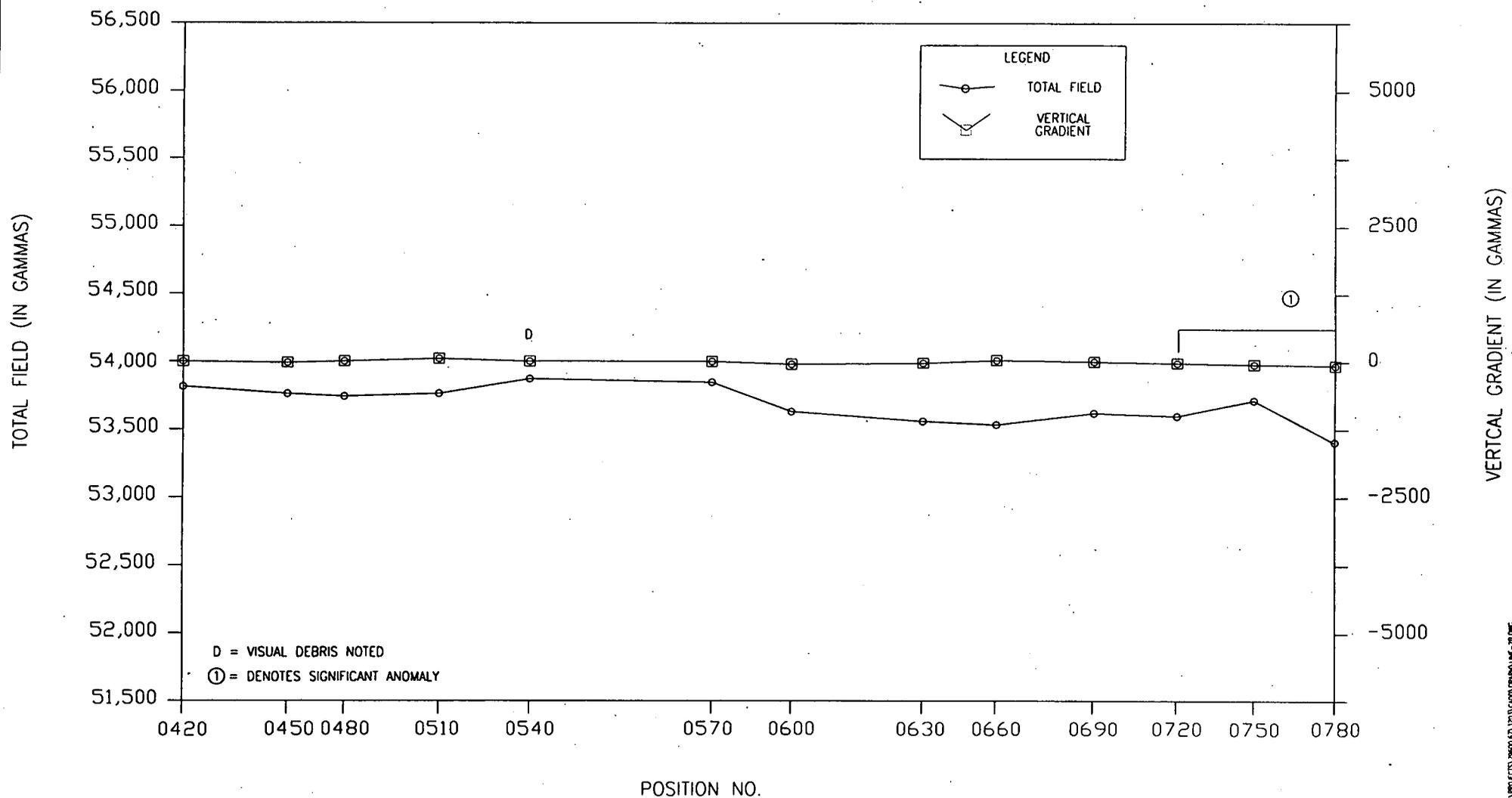
MAGNETOMETER SURVEY PLOT - LINE 2



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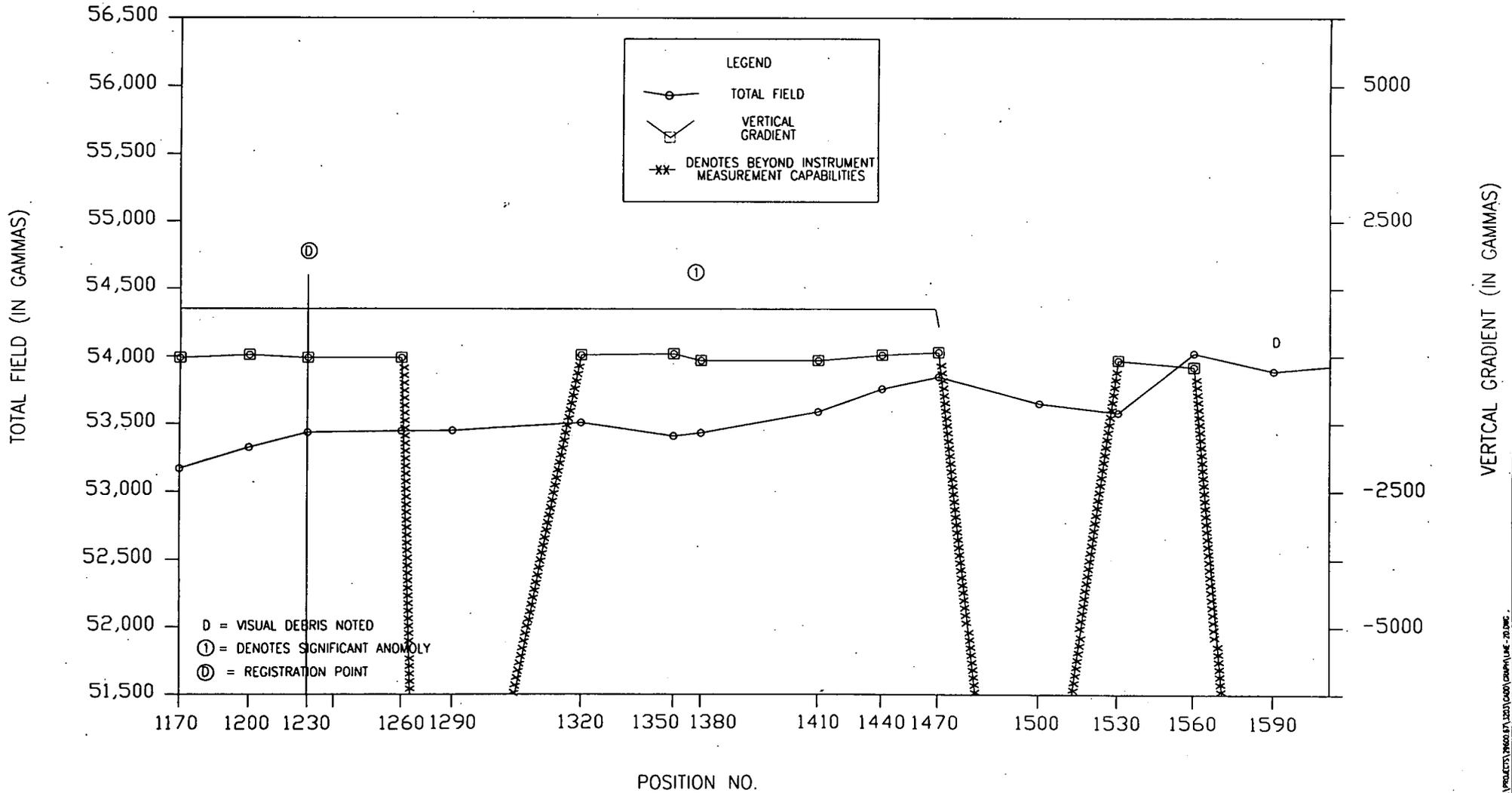
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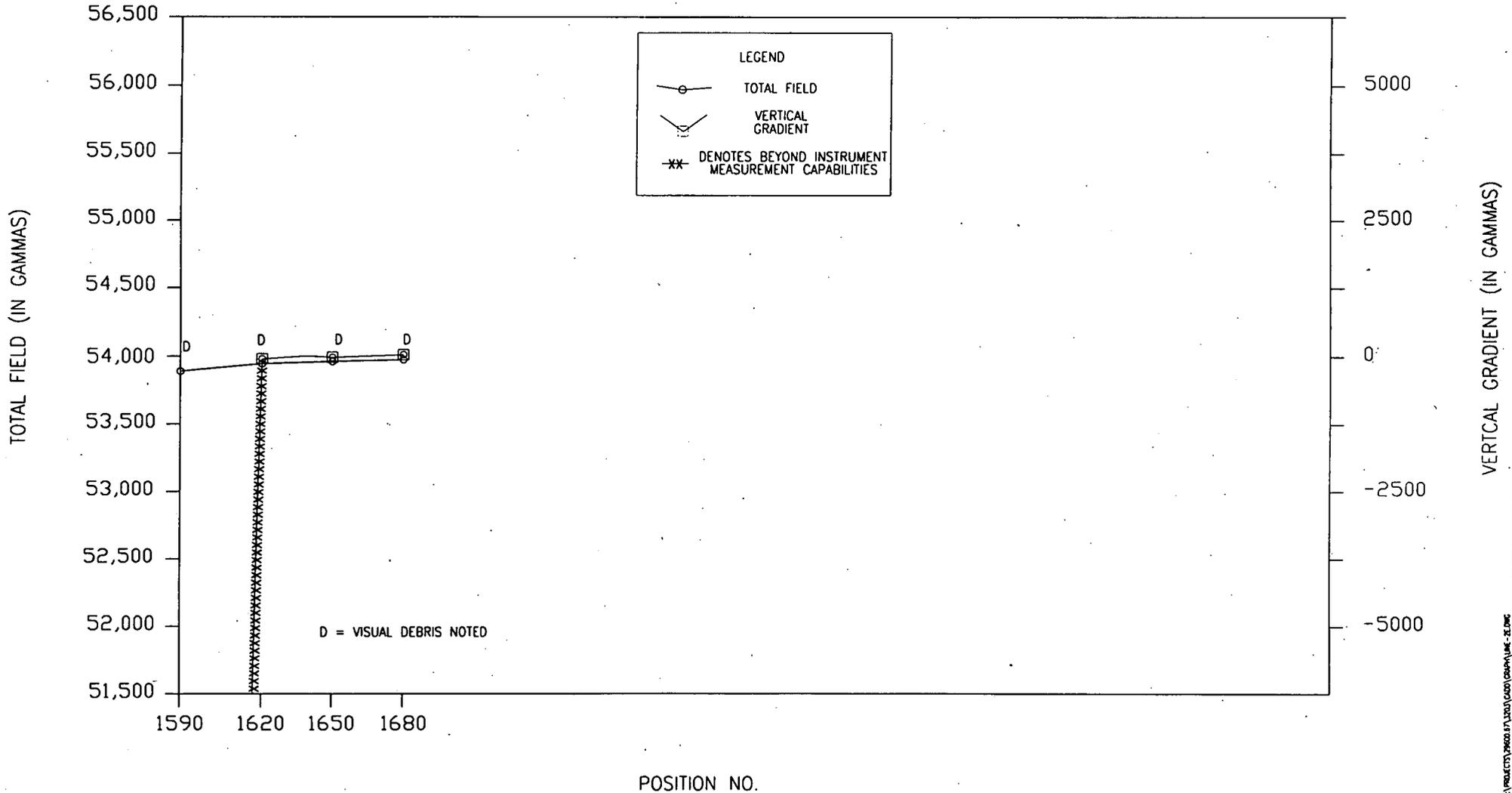
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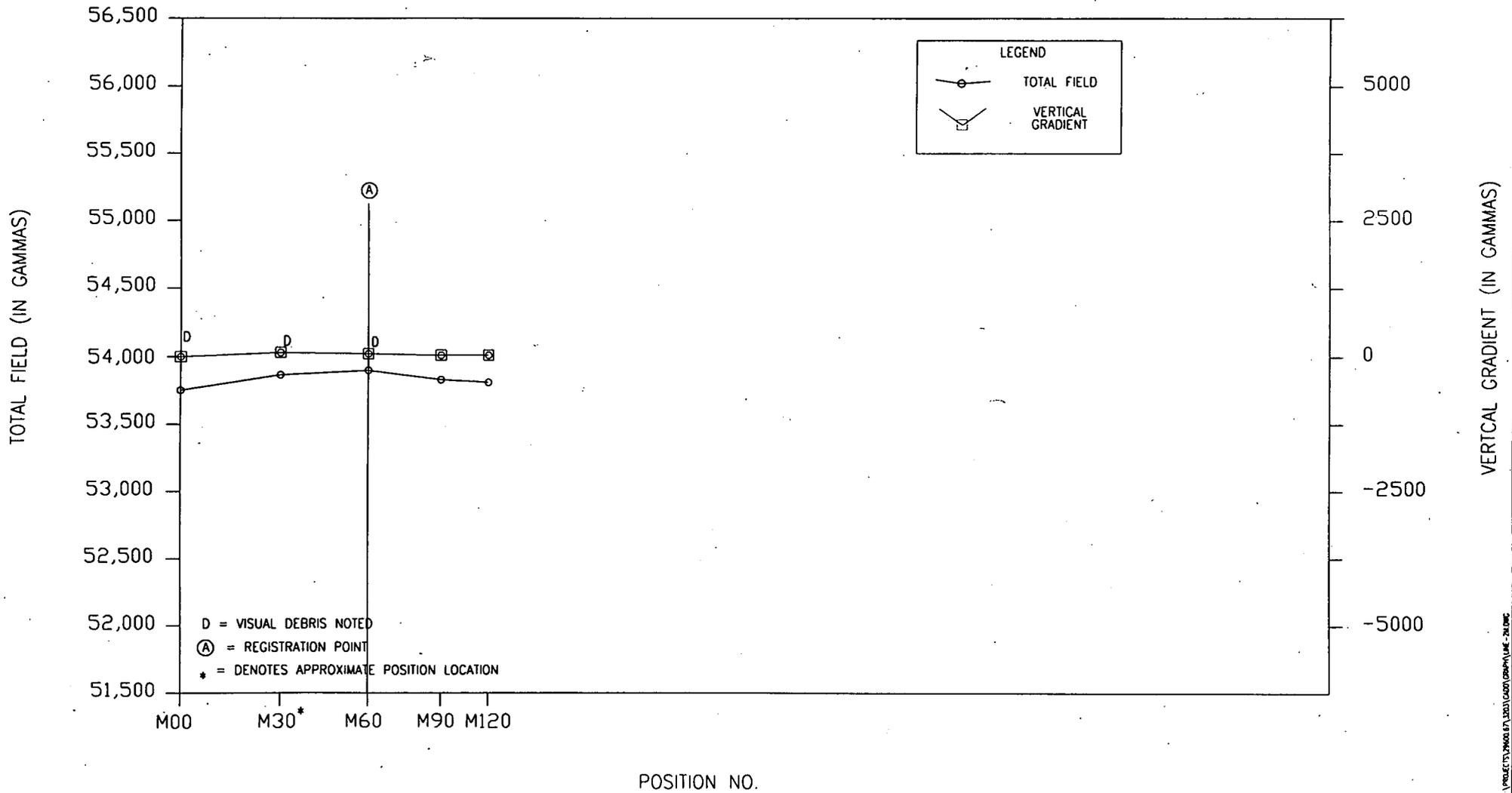
### MAGNETOMETER SURVEY PLOT - LINE 2



MAGNETOMETER SURVEY PLOT - LINE 2



MAGNETOMETER SURVEY PLOT -- LINE 2M



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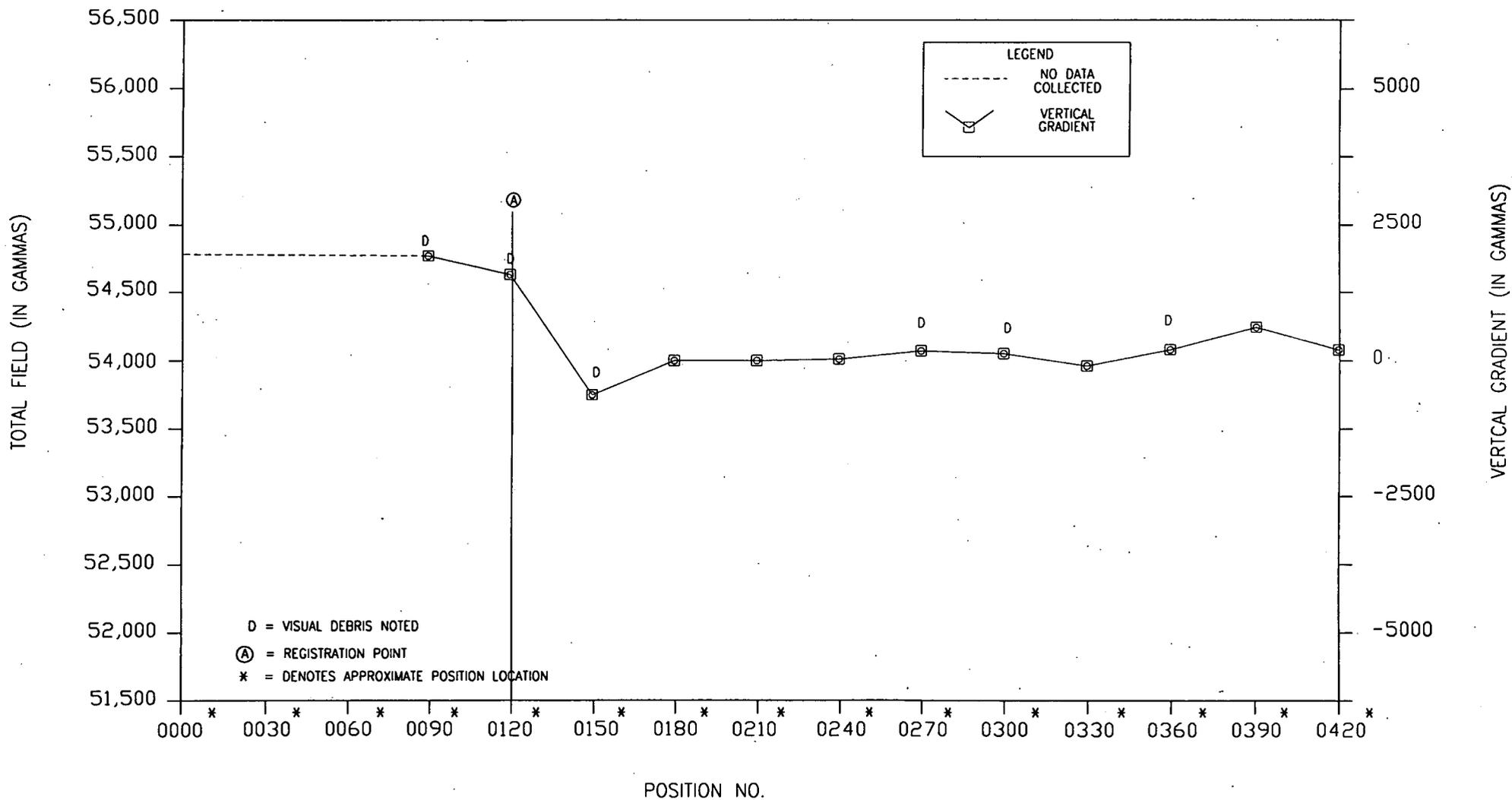
MAGNETOMETER SURVEY REPORT  
SITE 09 ALLEN HARBOR LANDFILL  
NBC DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
LINE 2

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MAGNETOMETER SURVEY PLOT - LINE 3



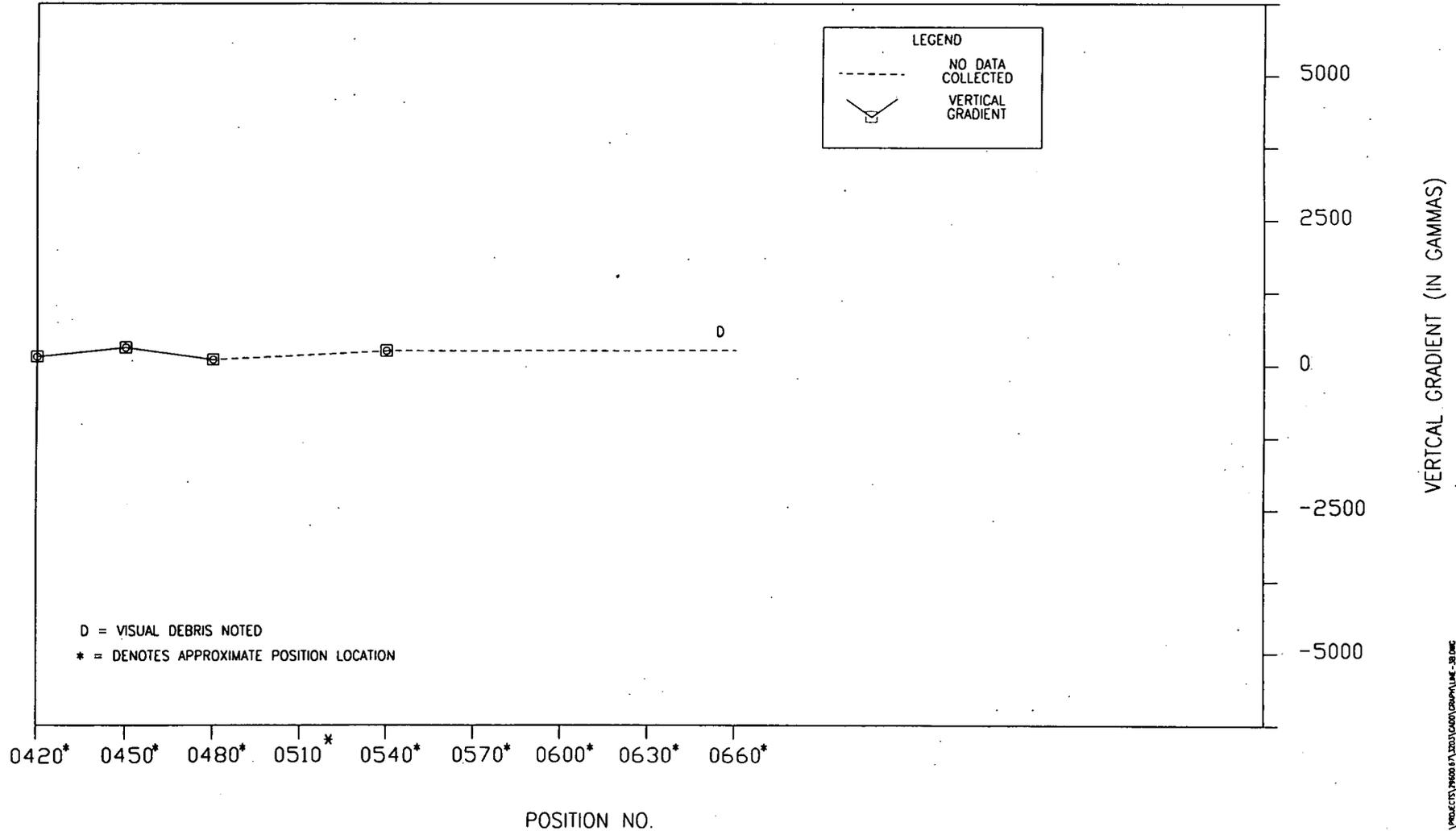
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MAGNETOMETER SURVEY REPORT  
SITE 09 ALLEN HARBOR LANDFILL  
NBCS DAVISVILLE, RHODE ISLAND

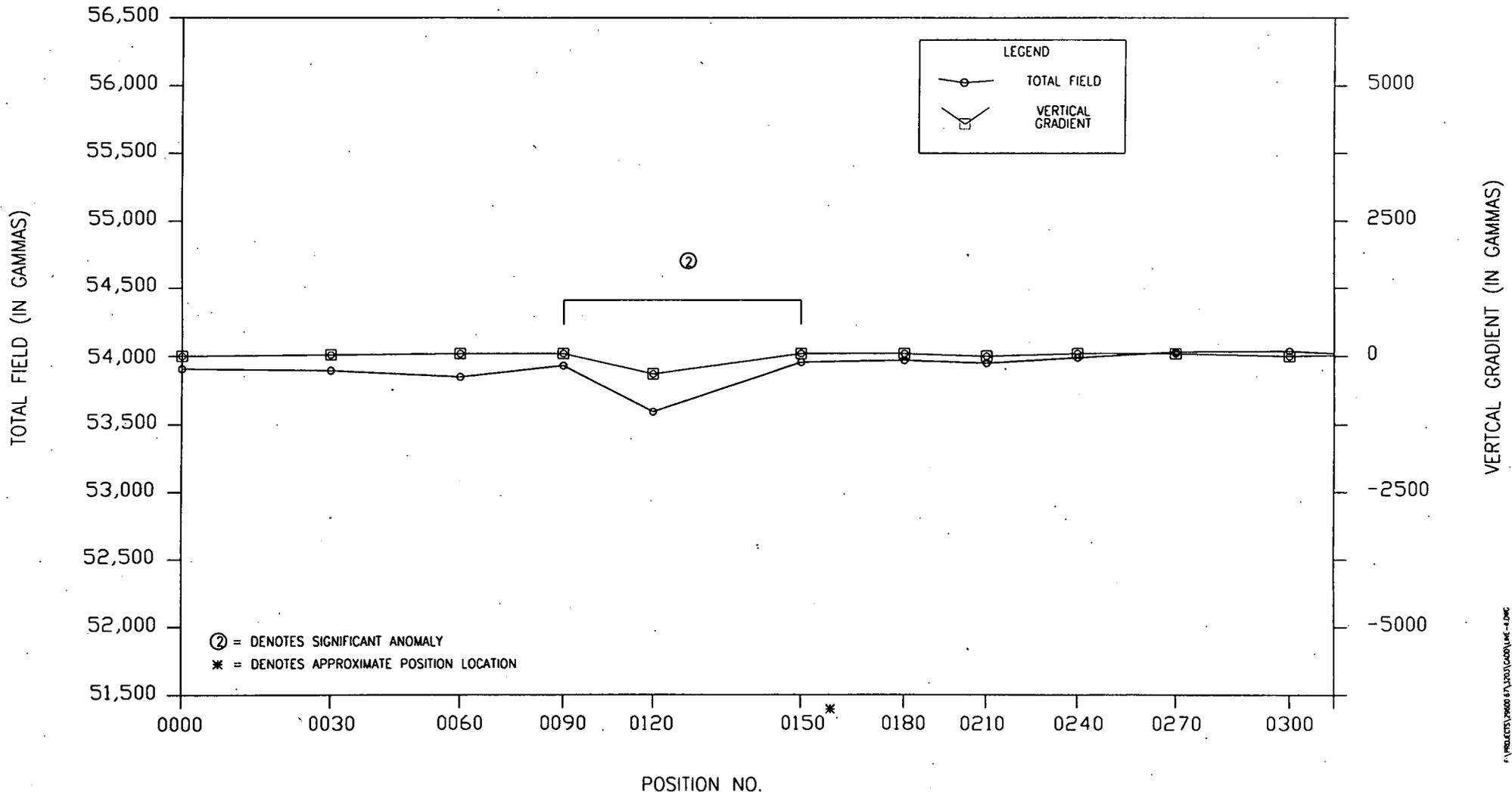
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LINE 3

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CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

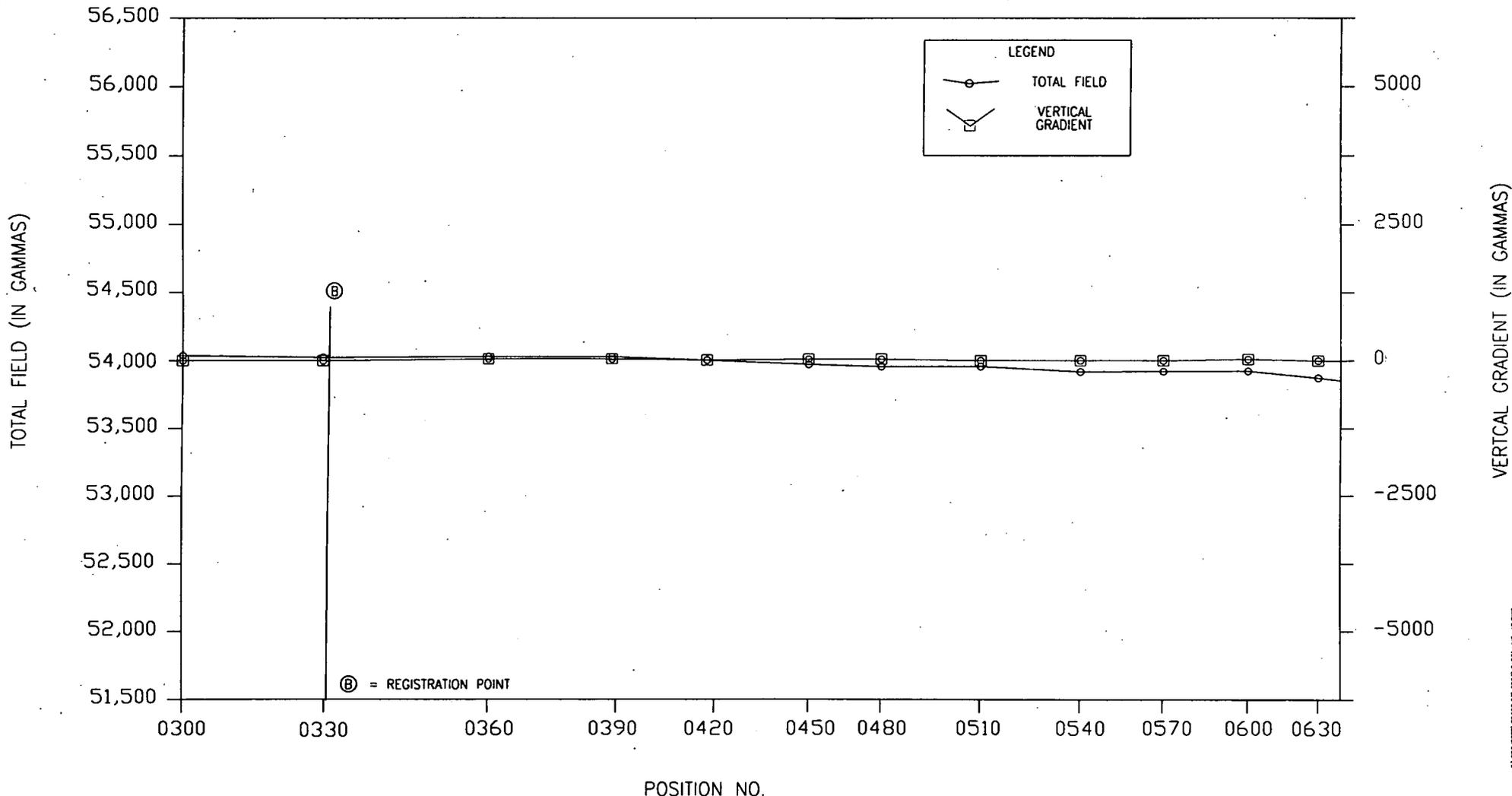
MAGNETOMETER SURVEY PLOT - LINE 3



MAGNETOMETER SURVEY PLOT - LINE 4



MAGNETOMETER SURVEY PLOT - LINE 4



F:\PROJECTS\29600\EA\29600\CD\LINE-4B.DWG

POSITION NO.

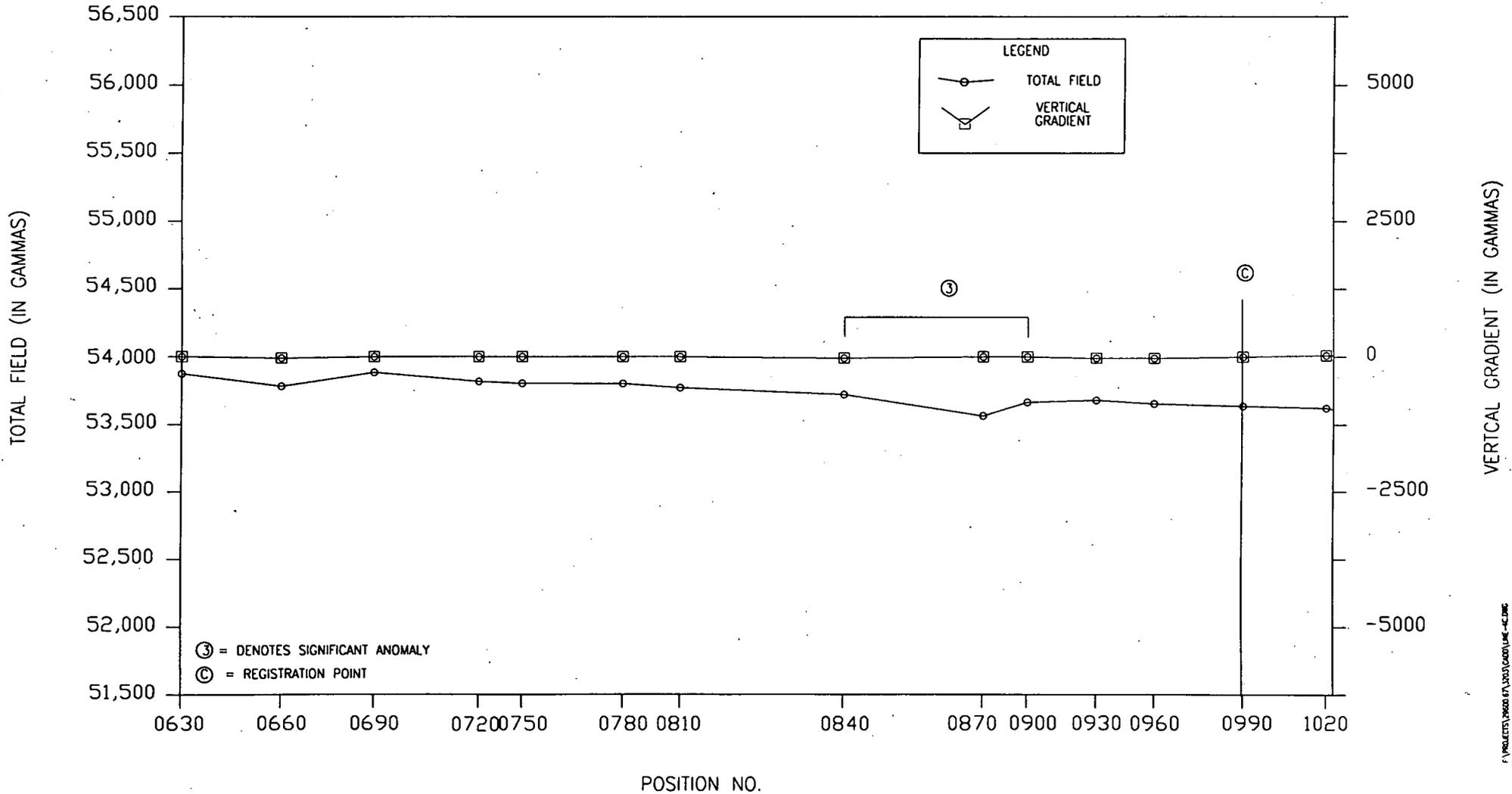


MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NCBC DAVISVILLE, RHODE ISLAND

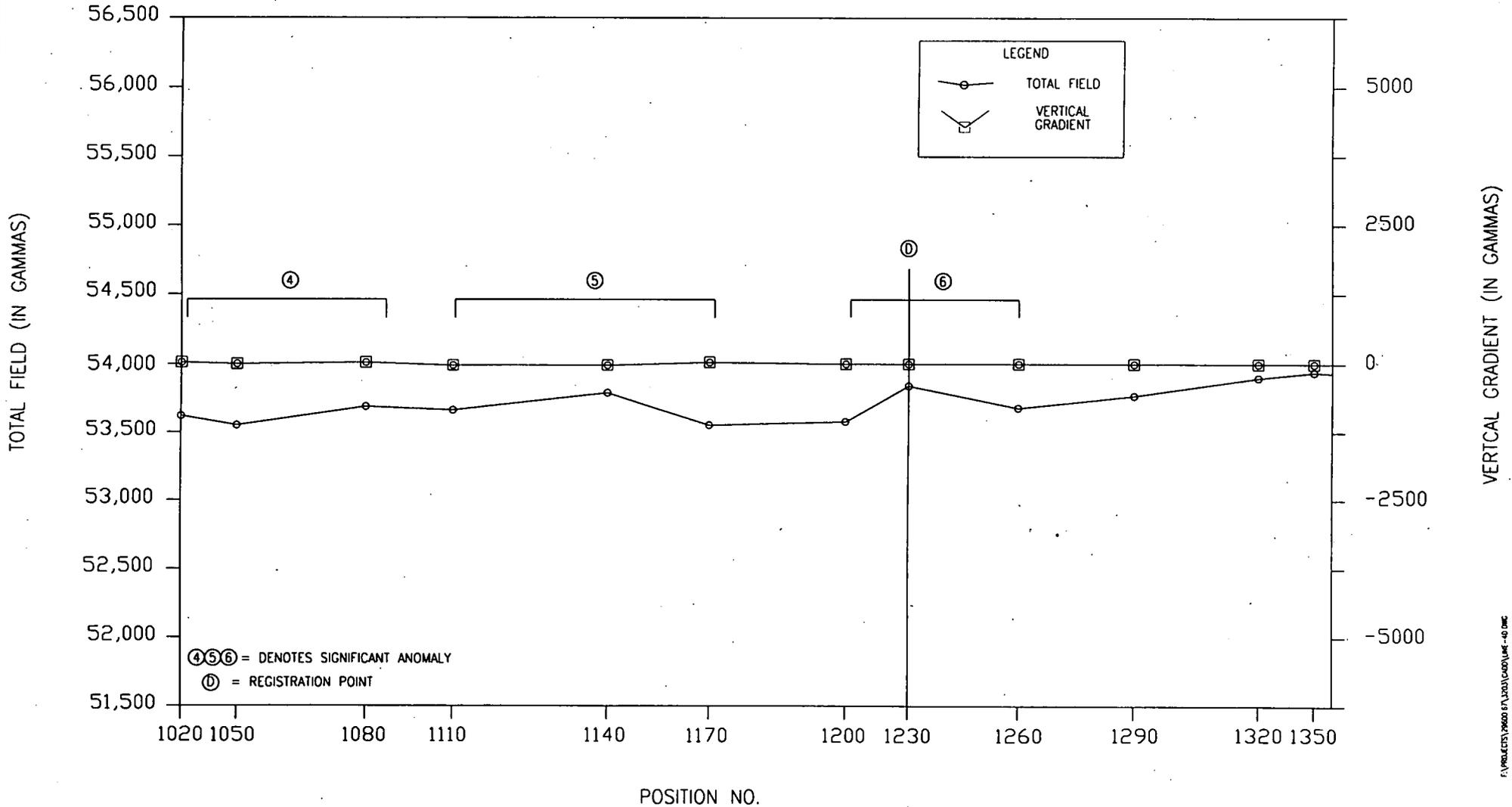
MAGNETOMETER SURVEY PLOT  
 LINE 4

DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-4B.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

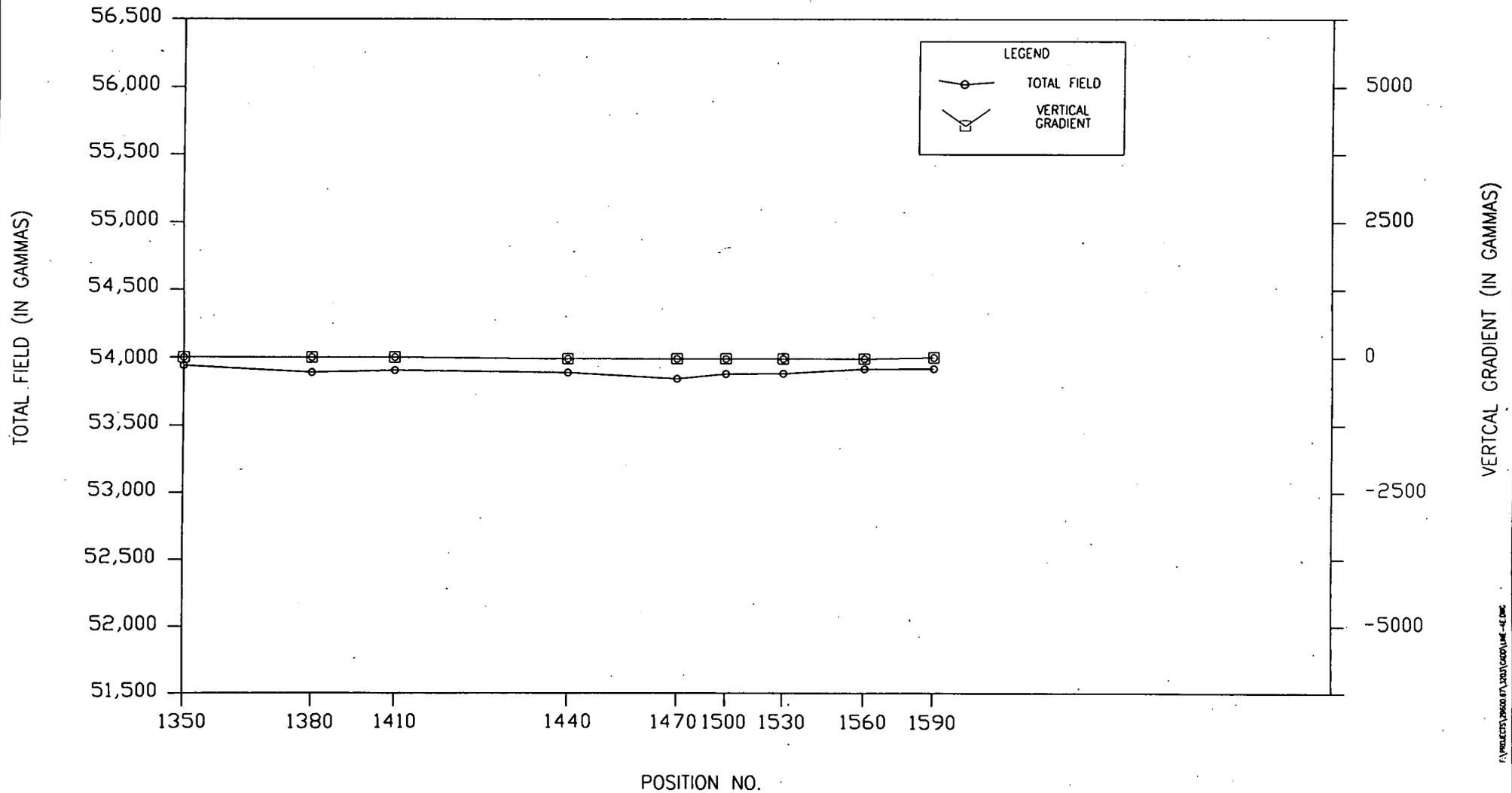
MAGNETOMETER SURVEY PLOT - LINE 4



MAGNETOMETER SURVEY PLOT - LINE 4



MAGNETOMETER SURVEY PLOT- LINE 4



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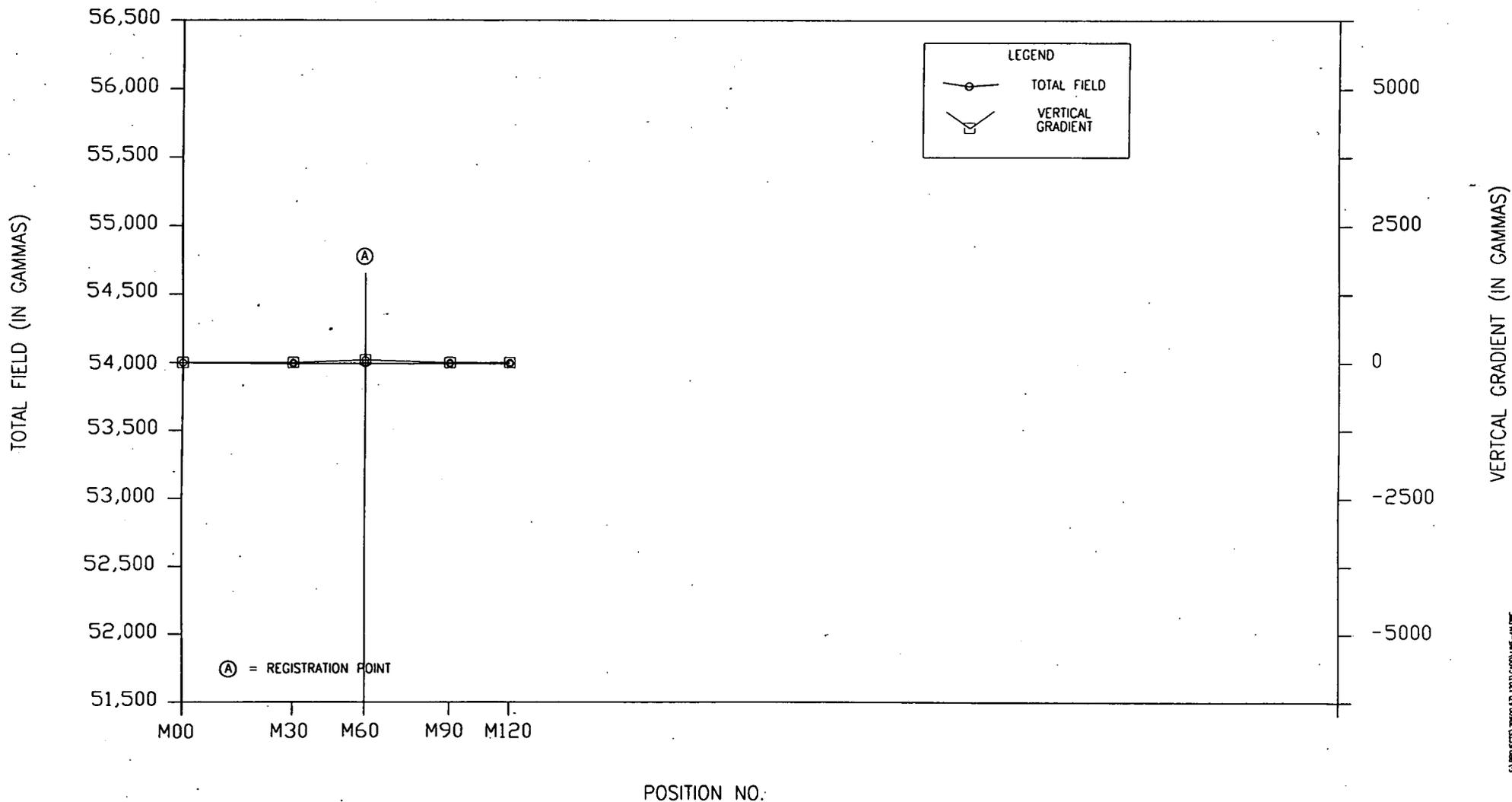


MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NBCB DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
 LINE 4

DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-4E.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

MAGNETOMETER SURVEY PLOT- LINE 4M



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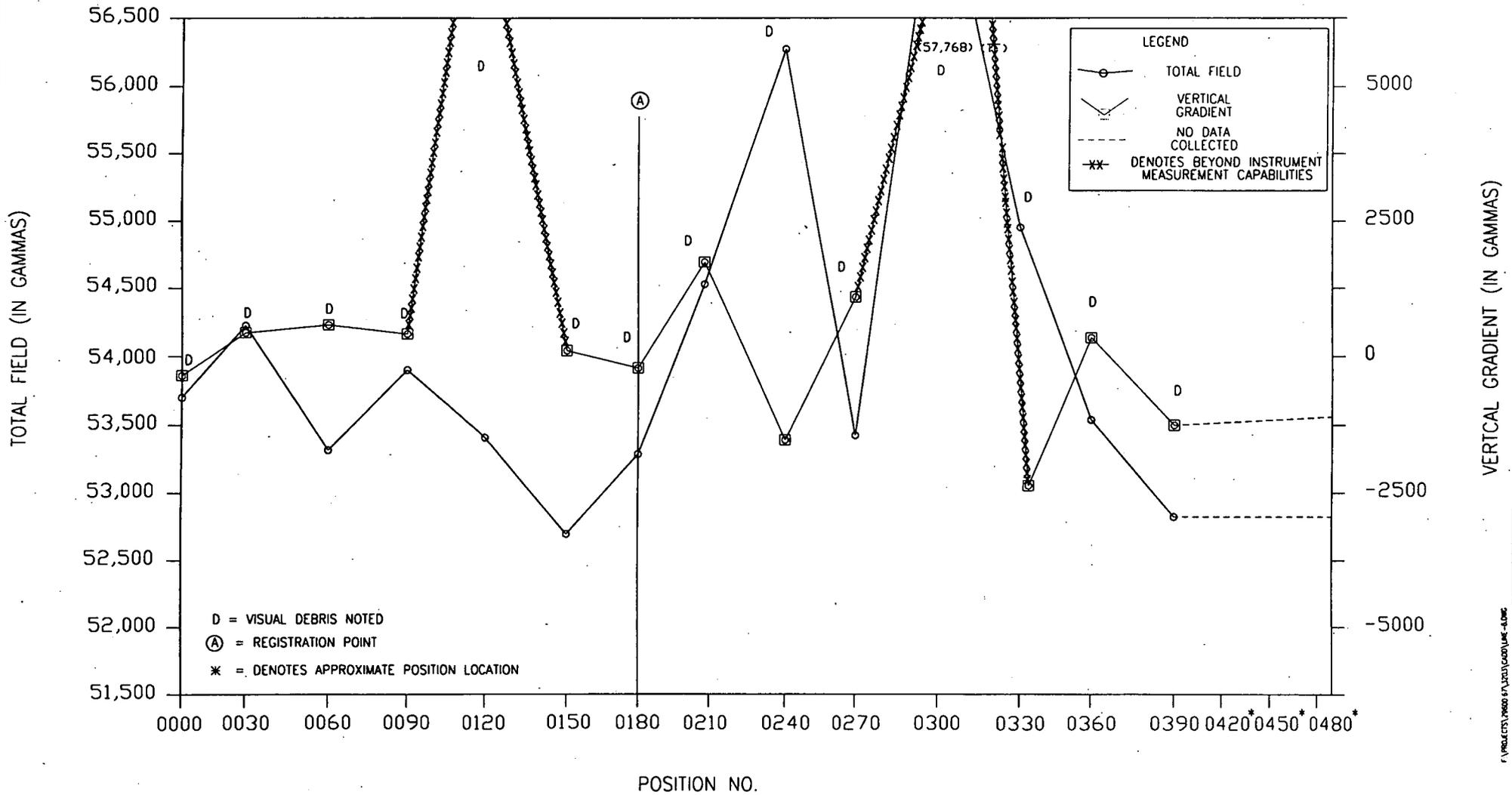


MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NBC DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
 LINE 4

DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-4M.DWG
CHECKED BY RIA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. ..	FIGURE 2-2

MAGNETOMETER SURVEY PLOT - LINE 6



I:\PROJECTS\29600\29600\29600\LINE-6.DWG

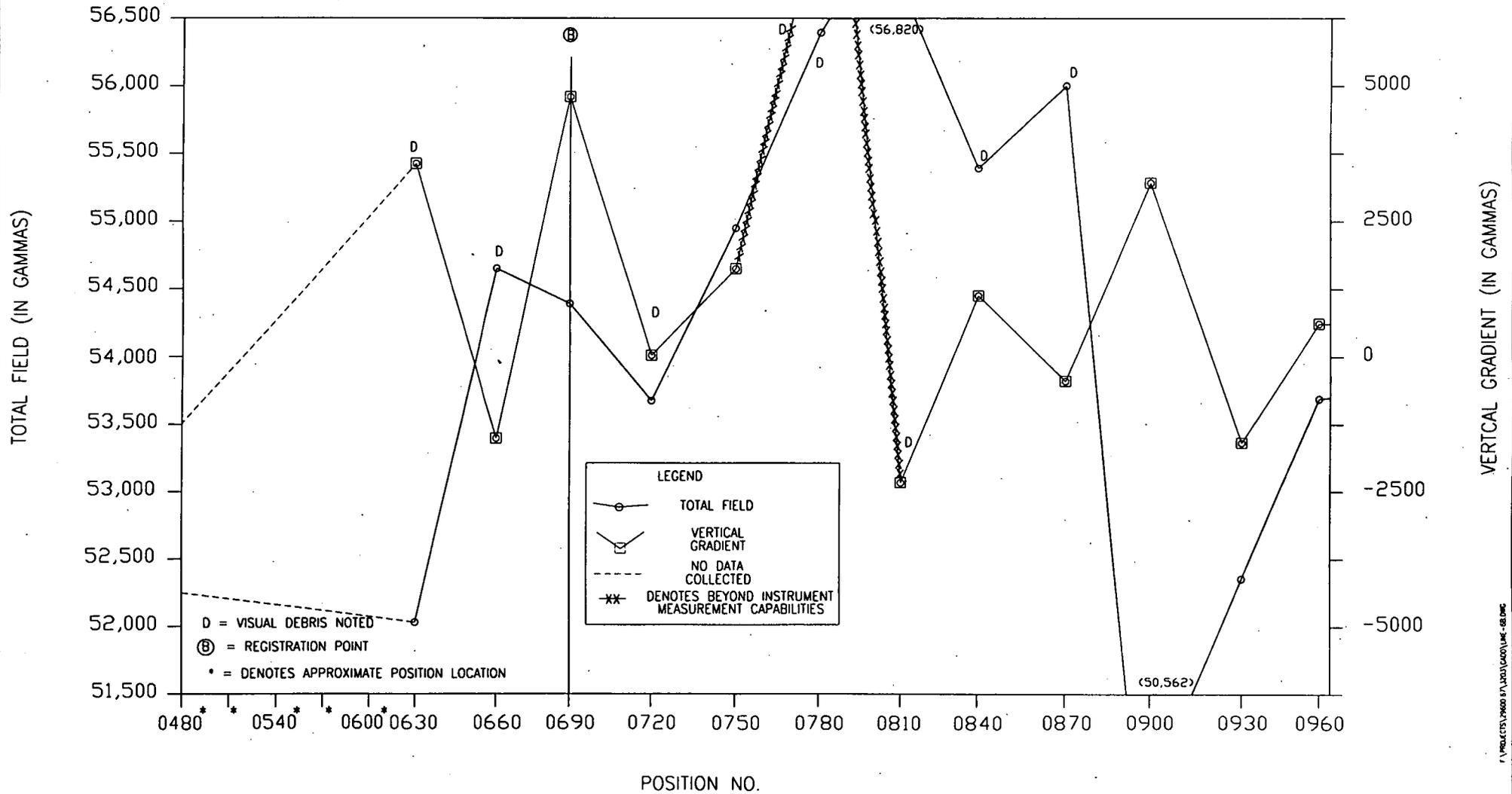


MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NBC DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
 LINE 6

DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-6.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

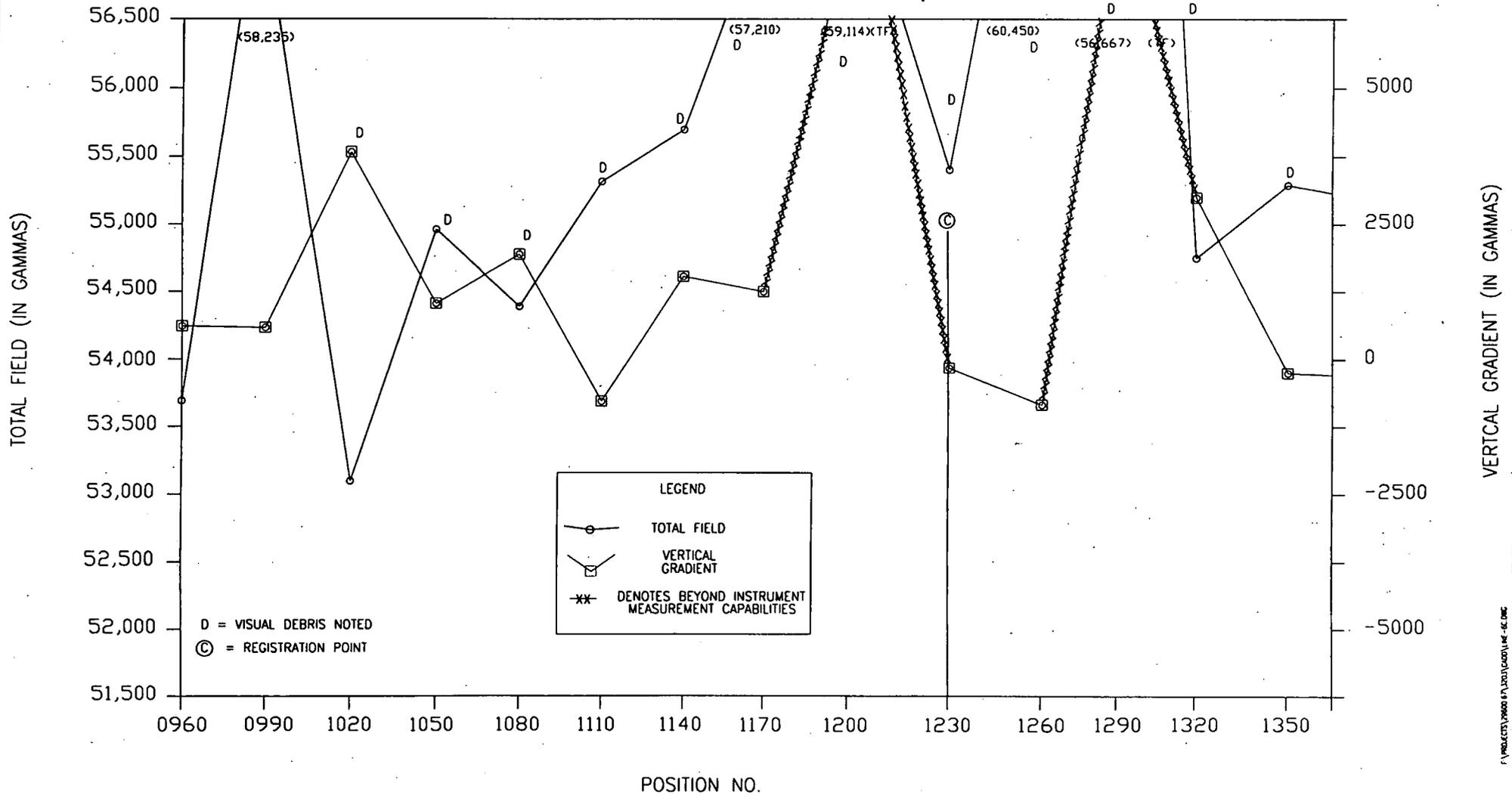
### MAGNETOMETER SURVEY PLOT - LINE 6



I:\PROJECTS\29600\21\_2001\2001\LINE-6B.DWG

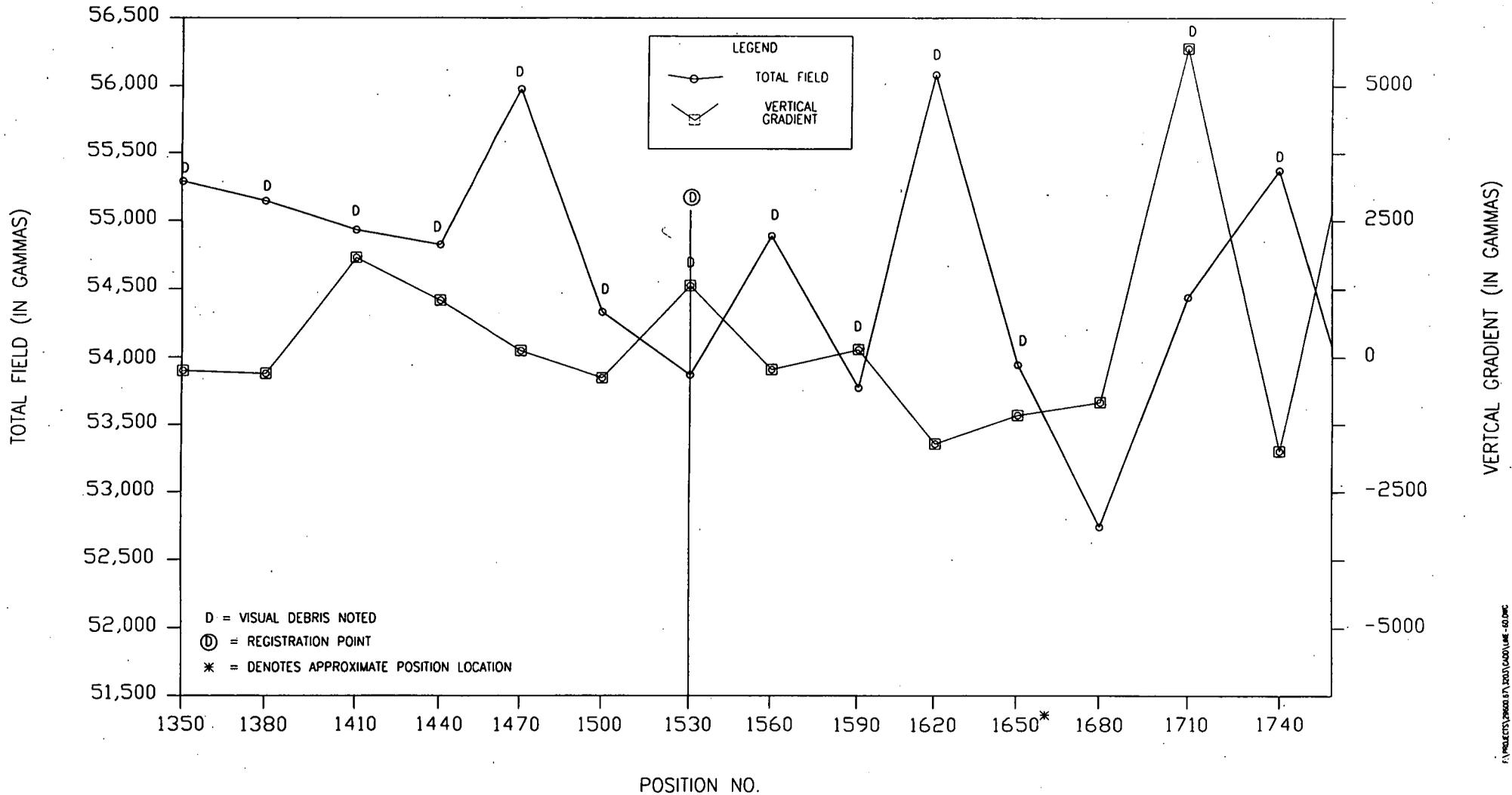
DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-6B.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

### MAGNETOMETER SURVEY PLOT - LINE 6



DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-6C.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

### MAGNETOMETER SURVEY PLOT - LINE 6



I:\PROJECTS\29600\29600\LINE-6.DWG

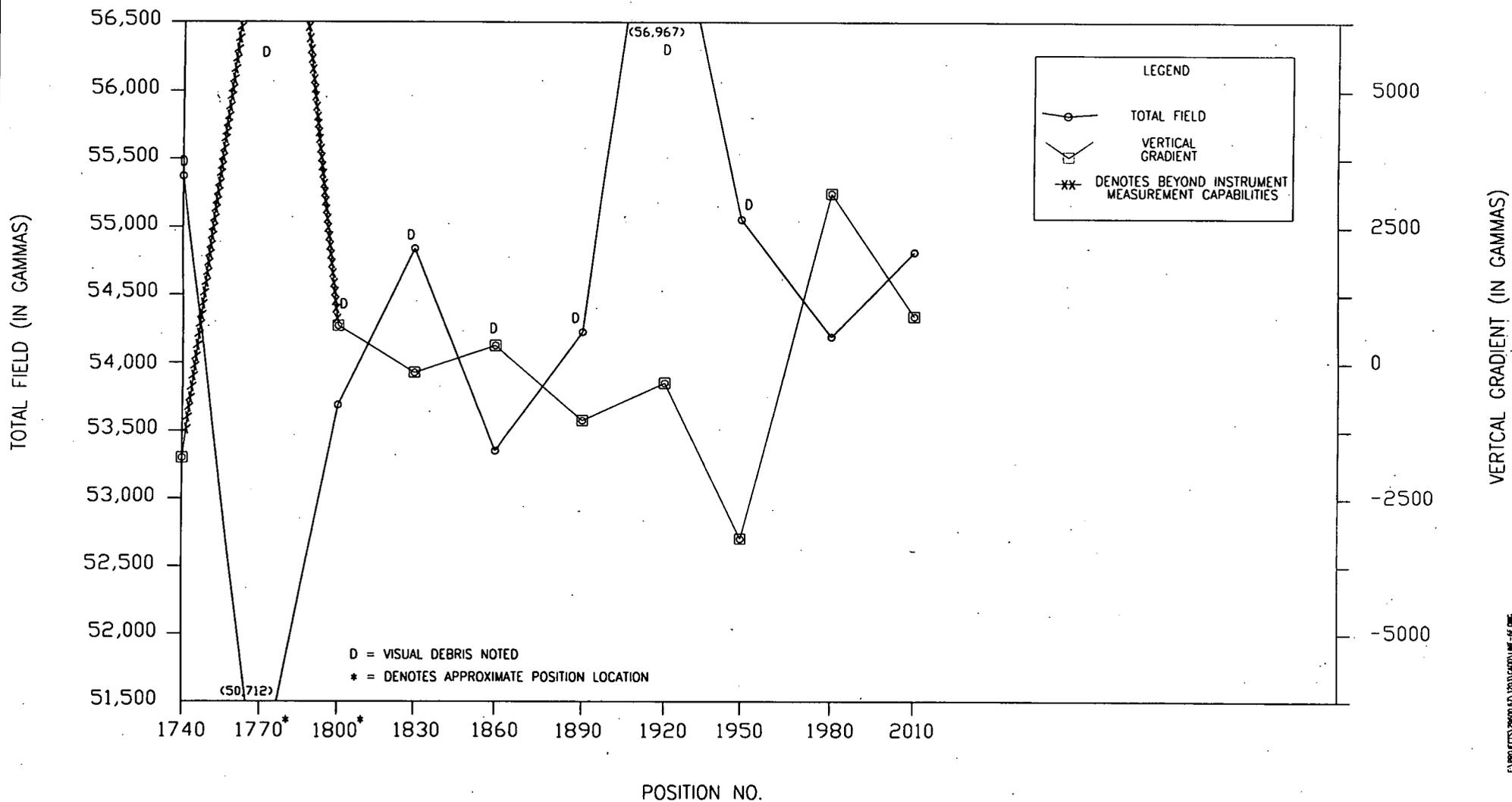


MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NOBC DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
 LINE 6

DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-6D.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

### MAGNETOMETER SURVEY PLOT - LINE 6



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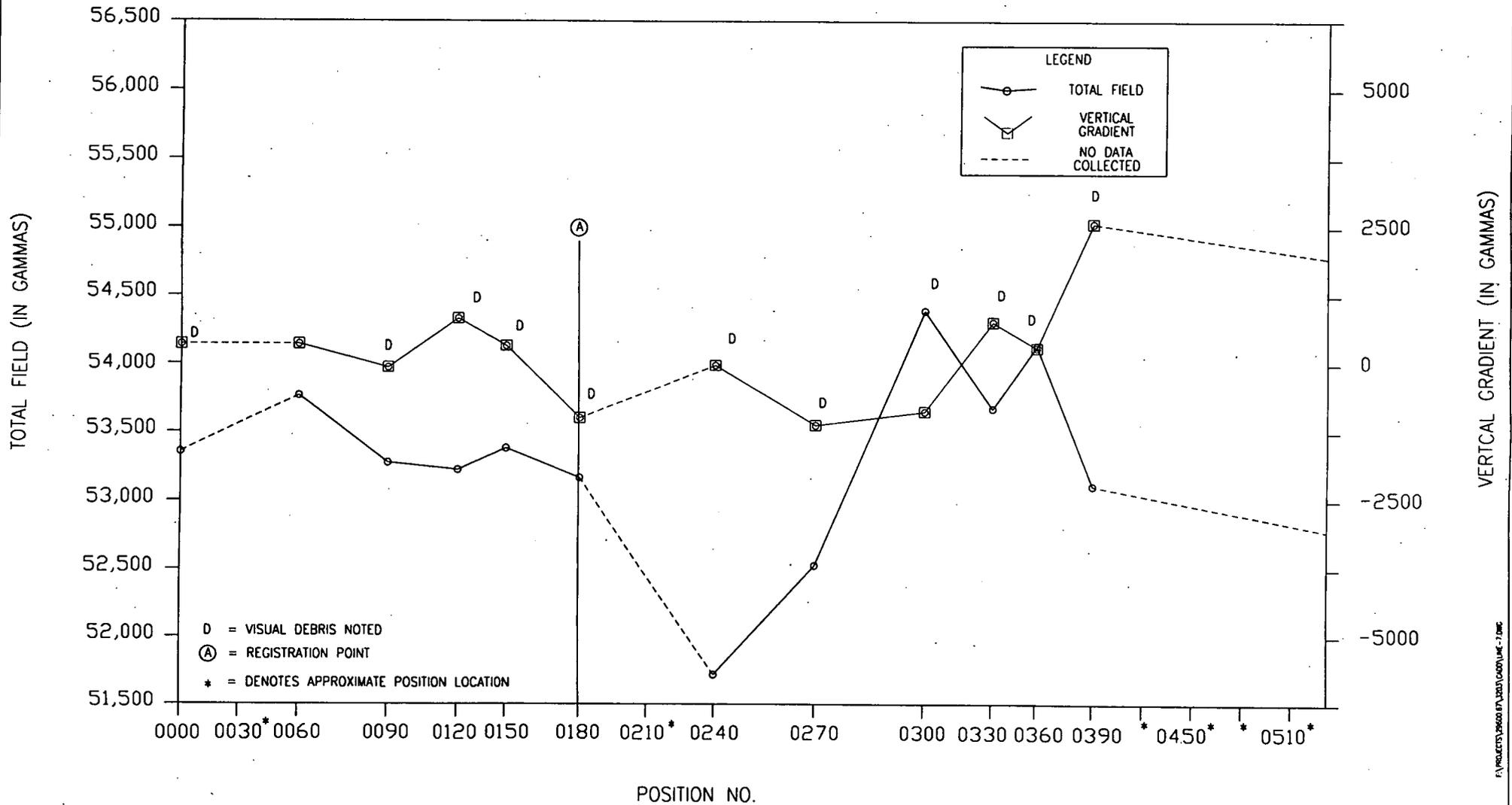


MAGNETOMETER SURVEY REPORT  
SITE 09 ALLEN HARBOR LANDFILL  
NCBC DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
LINE 6

DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-6E.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

### MAGNETOMETER SURVEY PLOT - LINE 7



F:\PROJECTS\29600\EA\29600\LINE-7.DWG



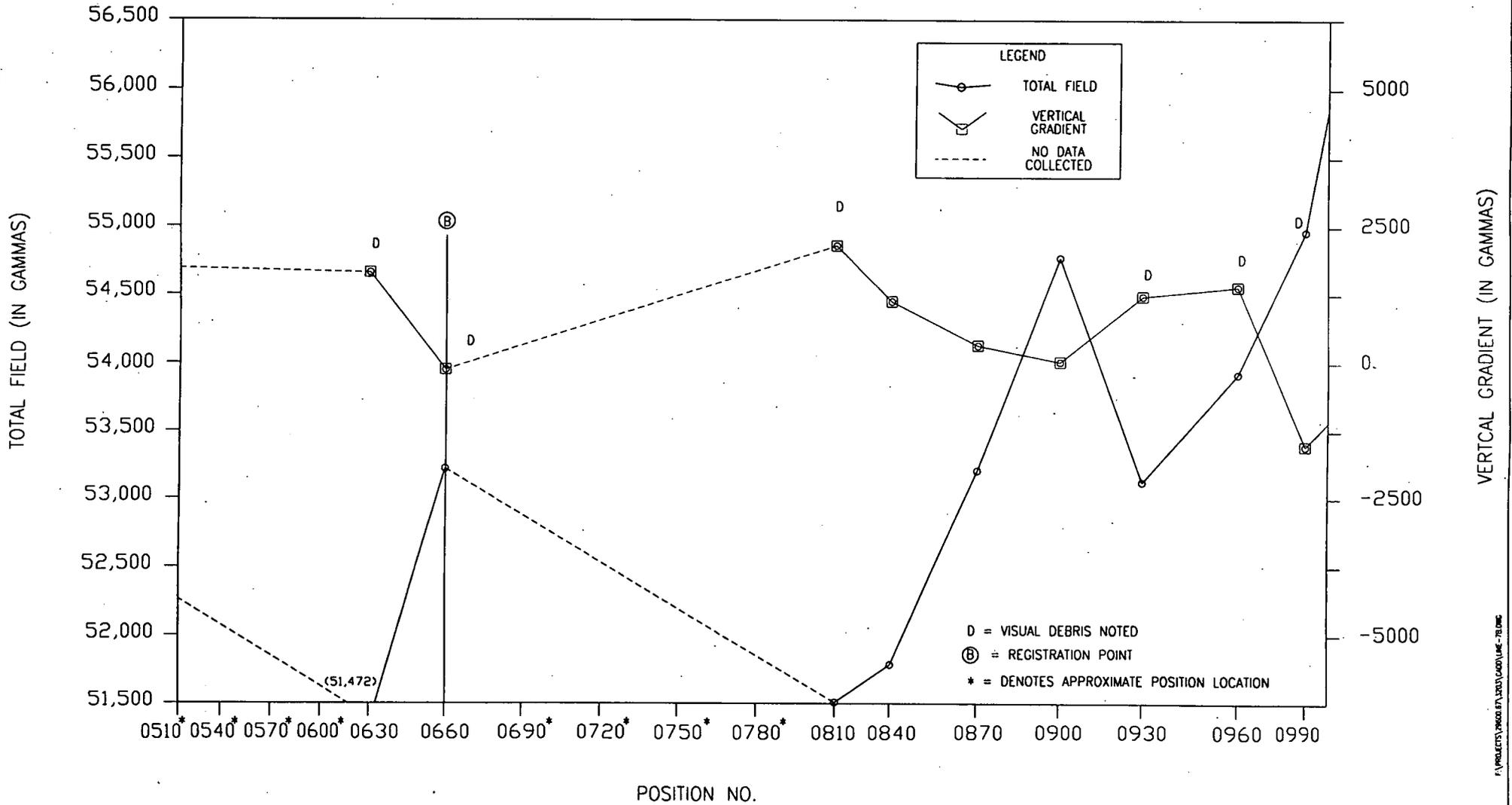
**EA ENGINEERING,  
SCIENCE, AND  
TECHNOLOGY**

MAGNETOMETER SURVEY REPORT  
SITE 09 ALLEN HARBOR LANDFILL  
NBCB DAVSVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
LINE 7

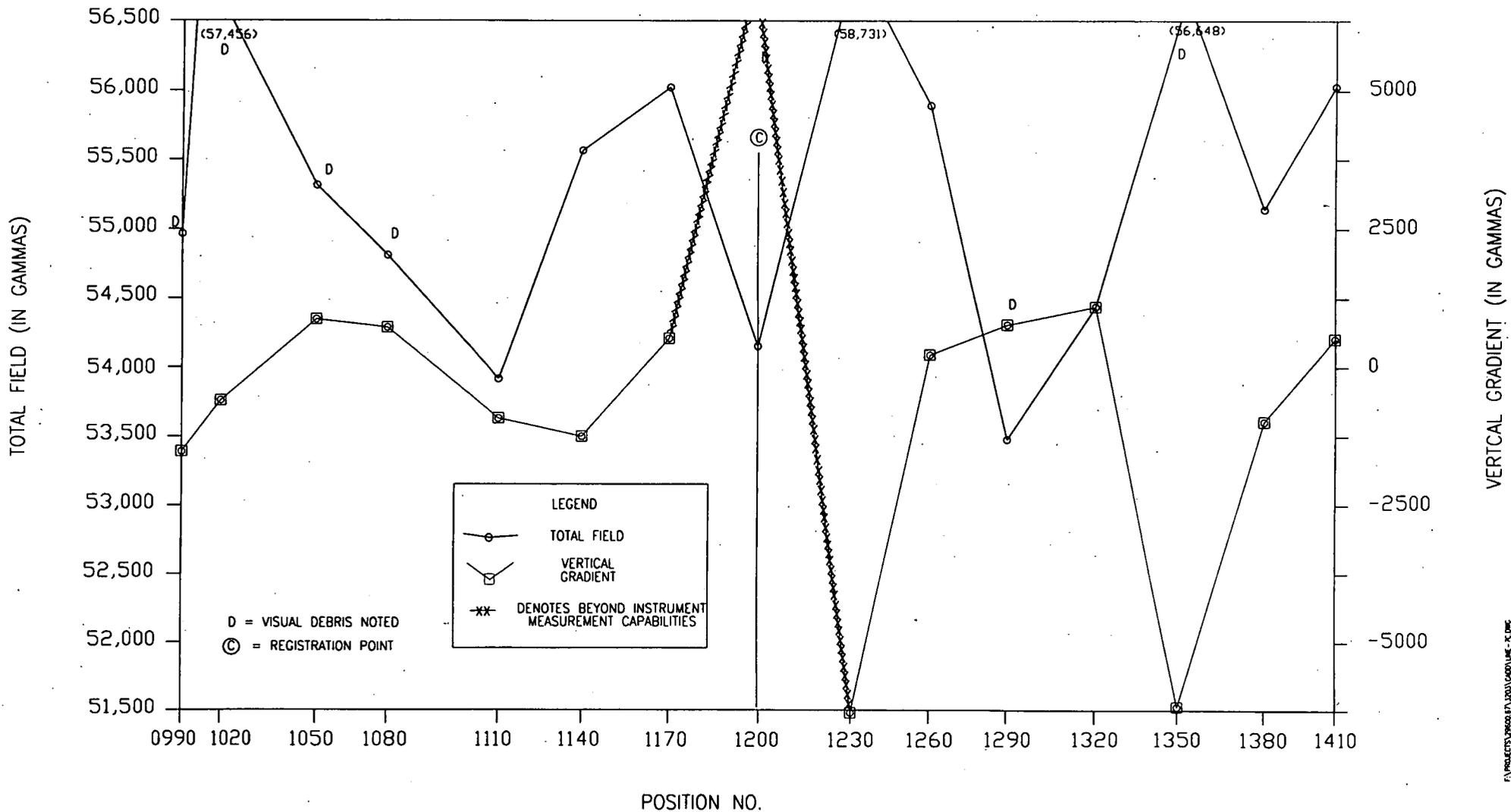
DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-7.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

MAGNETOMETER SURVEY PLOT - LINE 7

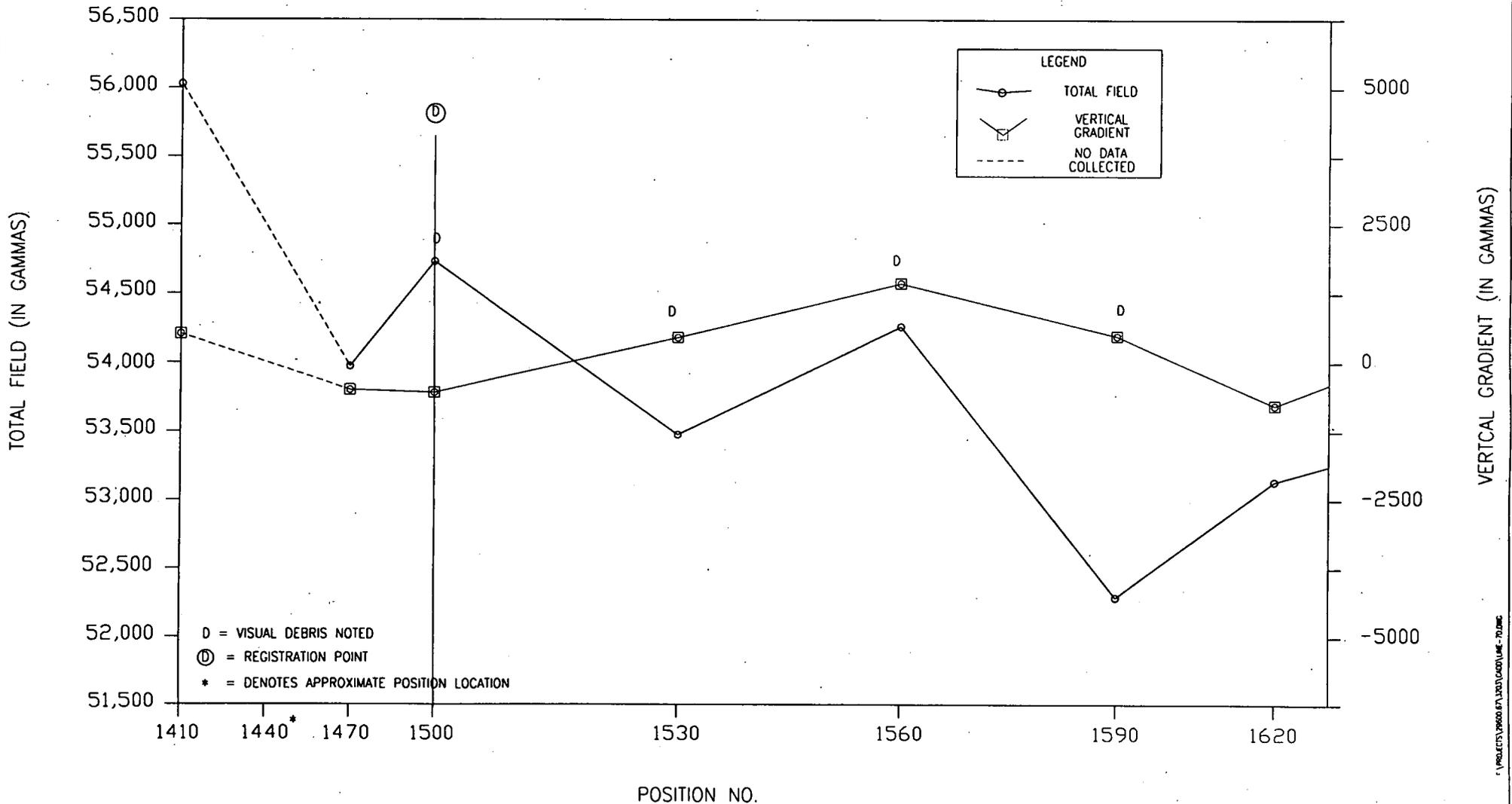


DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-7B.DWG
CHECKED BY RIA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO.	FIGURE 2-2

MAGNETOMETER SURVEY PLOT - LINE 7

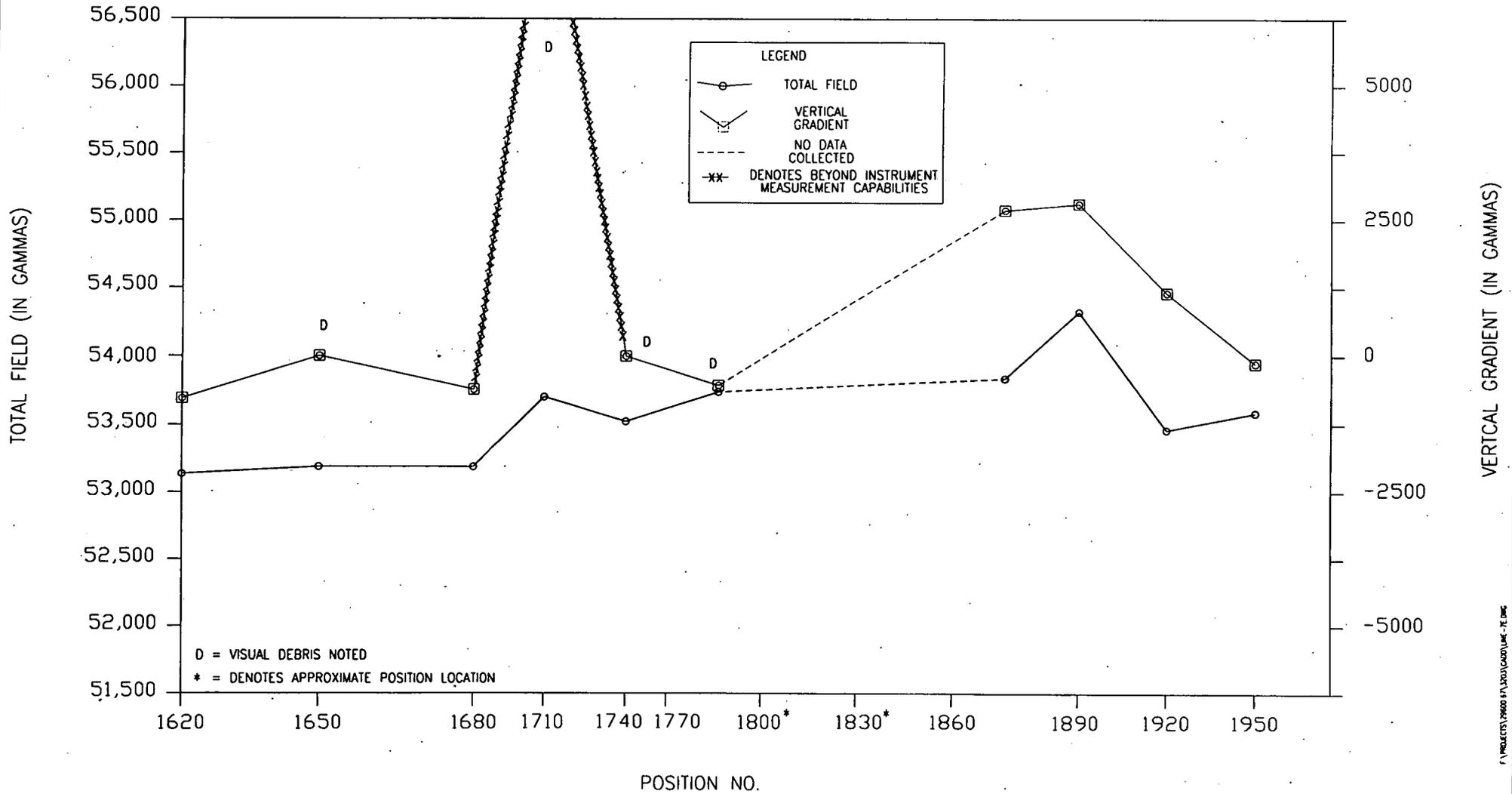


MAGNETOMETER SURVEY PLOT - LINE 7



DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO 29600.67.3203	FILE NAME LINE-7D.DWG
CHECKED BY RIA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

### MAGNETOMETER SURVEY PLOT - LINE 7



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MAGNETOMETER SURVEY REPORT  
 SITE 09 ALLEN HARBOR LANDFILL  
 NOBC DAVISVILLE, RHODE ISLAND

MAGNETOMETER SURVEY PLOT  
 LINE 7

DESIGNED BY RLA	DRAWN BY JFW	DATE 2-28-97	PROJECT NO. 29600.67.3203	FILE NAME LINE-7E.DWG
CHECKED BY RLA	PROJECT MGR. JAS	SCALE NONE	DRAWING NO. -	FIGURE 2-2

**TABLE 1: Record of Field Magnetometer Readings  
IR Site 09, Allen Harbor Landfill**

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L3	P090	11/21/96 1020	NC	1920	NC	NA	✓		✓		on concrete slab; rip rap
L3	P0120	11/21/96 NC	NC	1578	NC	NA	✓		✓		on concrete slab; rip rap
L3	P0150	11/21/96 1020	NC	-630	NC	NA	✓		✓		on concrete slab; rip rap; next to drum
L3	P0180	11/21/96 NC	NC	8	NC	NA	✓			✓	
L3	P0210	11/21/96 1022	NC	1	NC	NA	✓			✓	30 feet from pin flag
L3	P0240	11/21/96 1040	NC	35	NC	NA	✓			✓	
L3	P0270	11/21/96 1045	NC	169	NC	NA	✓		✓		drum viewed on the embankment
L3	P0300	11/21/96 1045	NC	126	NC	NA	✓		✓		drums & wire mesh viewed on the embankment
L3	P0330	11/21/96 NC	NC	-98	NC	NA	✓			✓	
L3	P0360	11/21/96 NC	NC	194	NC	NA	✓		✓		near drum on ground
L3	P0390	11/21/96 1050	NC	907	NC	NA	✓			✓	
L3	P0420	11/21/96 NC	NC	159	NC	NA	✓			✓	
L3	P0450	11/21/96 NC	NC	297	NC	NA	✓			✓	

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L3	P0480	11/21/96 NC	NC	105	NC	NA	✓		✓		
L3	P0510	11/21/96 NC	NC	no measurement @ 15' out	NC	NA	✓		✓	608 Gammas on toe pin flag	
L3	P0540	11/21/96 NC	NC	251	NC	NA	✓		✓		
L3	P0570	11/21/96 NC	NC	no measurement @ 15' out	NC	NA	✓		✓		
L3	P0600	11/21/96 NC	NC	no measurement @ 15' out	NC	NA	✓		✓		
L3	P0630	11/21/96 NC	NC	no measurement @ 15' out	NC	NA	✓		✓		
L3	P0660	11/21/96 NC	NC	no measurement @ 15' out	NC	NA	✓	✓		30' from 300 gal storage tank	
L1	swamp (bkgd)	11/11/96 NC	53,980	2.0	N196355.72 E522089.68	15.19	✓		✓		
L1	P0000	11/11/96 1300	53,340	40.50	N196483.38 E522095.27	18.31	✓		✓	concrete w/Rebar	
L1	P0030	11/11/96 1307	53,245	-340	N196468.92 E522112.99	15.33	✓ A10		✓	(10) metal mesh 20' toward next location; 8' (concrete) 8' away	
L1	P0060	11/11/96 1311	53,513	100	N196440.16 E522133.88	11.95		✓	✓	concrete near w/rebar. (Near concrete (2'))	
L1	P0090	11/11/96 1319	53,678	-142	N196417.50 E522156.51	20.39	✓ A11		✓	15' upslope large metal object 8' x 4'	
L1	P0120	11/11/96 1322	52,430	-92.5	N196401.58 E522180.23	17.77	✓ A12		✓	metal all along slope	
L1	P0150	11/11/96 1331	52,824	41.5	N196377.94 E522202.40	14.70	✓ A13		✓	concrete w/rebar; flat metal debris on slope	

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

**TABLE 1: Record of Field Magnetometer Readings (continued)**

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L1	P0180	11/11/96 1336	52,285	3,325	N196371.21 E522221.78	19.20		✓	✓		concrete 7' away, large metal 20' back
L1	P0210	11/11/96 1341	52,958	346	N196348.94 E522243.09	20.63		✓	✓		concrete 20' back
L1	P0240	11/11/96 1346	53,000	388	N196330.67 E522265.49	11.77		✓		✓	
L1	P0270	11/11/96 1351	53,027	595	N196328.77 E522295.71	19.01	✓	A14	✓		scattered metal debris
L1	P0300	11/11/96 1356	54,147	-63	N196317.70 E522323.96	13.96		✓	✓		lots of metal
L1	P0330 (10 minute reading)	11/11/96 1400	53,342	1322	N196314.92 E522356.13	21.39	✓	A15	✓		drum lids
L1	P0360	11/11/96 1404	55,569	940	N196312.25 E522384.80	11.62	✓	A15	✓		a few large pieces of scattered metal debris
L1	P0390	11/11/96 1408	53,850	1186	N196311.47 E522416.49	16.70	✓	A16	✓		see photo
L1	P0420	11/11/96 1410	54,597	6675	N196306.21 E522444.97	17.40		✓	✓		scattered metal debris
L1	P0450	11/11/96 1411	53,151	1770	N196297.99 E522473.19	18.61		✓	✓		upslope; 3' x 1' crushed metal
L1	P0480	11/11/96 1426	55,633	2297	N196291.10 E522501.78	19.12		✓	✓		scattered metal debris
L1	P0510	11/11/96 1429	53,801	907	N196289.40 E522529.93	14.78		✓	✓		scattered metal debris
L1	P0540	11/11/96 1433 (3 minute reading)	51,723	-15	N196277.68 E522560.38	3.80		✓	✓		concrete w/Rebar

**NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96. NC - Not Collected; NA - Not Applicable.**

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L1	P0570	11/11/96 1440	53,911	183	N196287.22 E522588.37	15.29		✓	✓		1 metal fencepost 4' from location
L1	P0600	11/11/96 1444	54,254	435	N196298.97 E522613.89	8.47		✓	✓		lots of concrete up-slope (possible rebar)
L1	P0630	11/11/96 1447	57,813	1586	N196321.41 E522635.04	11.60	✓ A17		✓		scattered metal debris
L1	P0660	11/11/96 1451	53,297	2260	N196337.98 E522659.49	7.06		✓	✓		wire mesh 10' from flag 6' steel beam and lots of small metal
L1	P0690	11/11/96 1454	52,314	5321	N196361.89 E522679.66	18.16	✓ A18 A19		✓		see picture
L1	P0720	11/11/96 1534	53,155	-349	N196383.03 E522697.40	13.95	✓ A19 A20				scattered metal detris
L1	P0750	11/11/96 1538	52,620	-183	N196406.15 E522715.21	9.33	✓ A21		✓		lots of metal
L1	P0780	11/11/96 1541	53,254	1404	N196425.24 E522739.66	13.58	✓ A22		✓		6' upshore; metal frame; appliances on slope
L1	P0810	11/11/96 1545	52,938	2273	N196446.66 E522753.46	12.72		✓	✓		Large metal chain < 1' away Metal debris scattered about
L1	P0840	11/11/96 1548	52,993	1341	N196473.11 E522769.36	14.46	✓ A23		✓		metal cable (1" x 20'); tanks
L1	P0870 (5' offset from flag inland)	11/11/96 1551	52,268	52,258 (toward landfill 5555 toward water - 2096)	N196497.53 E522781.88	13.66	✓ A24		✓		cable metal (10' away) 6" X 5"
L1	P0900	11/11/96 1554	52,738	1355	N196524.58 E522786.66	17.16		✓	✓		Metal scattered 1'X 1'
L1	P0930	11/11/96 1557	53,339	-1023	N196554.63 E522790.18	17.15		✓	✓		Wire meshed reinforced concrete - less metal then previous location more concrete

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS c nnecti n on 11/8/96; GPS reading collected on 11/11/96.  
 NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L1	P0960	11/11/96 1603	53,923	-2791	N196585.02 E522798.65	7.15		✓	✓		Tank
L1	P0990	11/11/96 1607	52,865	829	N196614.06 E522799.84	14.38		✓	✓		Lot of metal - near location (4' X 2' frame 6" wide) 3' to 4' away upshore - lots of small metal debris
L1	P1020	11/11/96 1612	54,765	-104	N196646.28 E522802.05	9.63		✓	✓		lots of concrete pieces up to 6" x 12"; possible rebar
L1	P1050	11/11/96 1617	52,439	-821	N196675.58 E522804.78	11.27	✓ B2		✓		cone and metal (4' away)
L1	P1080	11/11/96 1622	52,786	-755	N196706.07 E522807.89	6.54		✓	✓		Metal cable approx 100' long rolled up about 20' from location concrete 1' away
L1	1110	11/11/96 1625	52,403	1547	N196734.05 E533803.00	1209		✓	✓		land fill washed away - concrete and metal exposed
L1	1140	11/11/96 1628	52,327	1,067	N196764.41 E522803.72	14.98		✓	✓		metal pipe 2' from location - other metal scattered on slope.
L1	P1140	11/12/96 1245	53,371	52,408 (moved slightly = 379)	N196766.49 E522802.73	9.44		✓	✓		scattered metal debris
L1	P1170	11/12/96 1250	49,211	2,260	N196800.38E 522807.52	16.52		✓	✓		concrete 1' - 2' away; metal debris everywhere; iron frame (8'x 4')
L1	P1200	11/12/96 1252	51,754	2,230	N196823.91 E522803.13	20.26		✓	✓		concrete all around; small metal object 4' away
L1	P1230	11/12/96 1255	45,560	46,032	N196850.37 E522800.44	5.75		✓	✓		scattered metal debris
L1	P1260	11/12/96 1305	53,340	53,120-stays high when moved	N196875.39 E522808.76	12.29	✓ B4		✓		see picture
L1	P1290	11/12/96 1307	52,285	643	N196914.01 E522810.94	29.10		✓	✓		Concrete 4' X 4' X 1'; small metal scattered
L1	P1320	11/12/96 1310	53,064	-370	N196942.15E 522808.38	20.17		✓	✓		Construction debris; bricks, ceramic tiles; debris in water

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L1	P1350	11/12/96 1314	53,301	2,068	N196973.54 E522809.21	18.71		✓	✓		Lots of metal debris all around
L1	P1380	11/12/96 1316	52,159	1,510	N197002.59 E522805.35	21.37		✓	✓		Less scattered metal debris - still moderate amount
L1	P1410	11/12/96 1320	55,520	55,762-moves to left one foot; to right one foot; 55,440	N197031.72 E522800.71	11.87	✓	B5	✓		torpedo silo 6' away; cylinder 10' long x 2' round; scattered small metal debris
L1	P1440	11/12/96 1325	52,680	1755	N197062.50 E522800.05	26.86		✓	✓		concrete 3' away; metal debris scattered
L1	P1470	11/12/96 1328	52,516	-836	N197090.42 E522783.99	11.72		✓	✓		asphalt & concrete; 1 lg concrete 2' away; small amount metal scattered
L1	P1500	11/12/96 1330	52,911	-977	N197121.13 E522785.95	13.16		✓	✓		concrete & asphalt scattered ; metal scattered.
L1	P1530	11/12/96 1334	53,050	1176	N197149.01 E522792.67	12.08	✓	B6	✓		lg metal (4' X 1' X 1'); 15' away (scattered metal) see picture
L1	P1560	11/12/96 1341	52,980	3020	N197178.09 E522797.04	9.81	✓	B7	✓		lg crushed tank 10' from loc; 10' X 3' X 3" (concrete w/wire 3' away)
L1	P1590	11/12/96 1342	51,213	-1855	N197209.43 E522805.97	7.71		✓	✓		a lot of small metal debris < 4' long thin cables
L1	P1620	11/12/96 1345	52,405	2690	N197238.53 E522814.20	10.99	✓	B8 B9	✓		landfill washing away; lots of thick cable and metal support beams
L1	P1650	11/12/96 1346	52,480	790	N197265.36 E522823.54	25.54		✓	✓		A lot of asphalt; pieces of lg cable 1" X 2' near loc (1'-2' away)
L1	P1680	11/12/96 1350	52,499	-824	N197296.50 E522828.40	19.52		✓	✓		A lot of asphalt - some small metal debris
L1	P1710	11/12/96 1351	52,746	2915	N197317.24 E522828.75	24.93	✓	B10	✓		2' X 1' metal cylinder; lots of broken metal cable
L1	P1740	11/12/96 1355	52,931	-873	N197342.14 E522831.19	15.06	✓	B11 B12	✓		15' to 20' from location upslope flat metal w/pipe; asphalt

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
 NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L1	P1770	11/12/96 1400	53,671	549	N197363.10 E522834.70	11.44		✓	✓		metal cable 20' away
L1	P1800	11/12/96 1405	52,600	-3561	N197388.94 E522826.50	16.53	✓	B13	✓		thick metal cable 1/2' from location; approx. 25' long
L1	P1830	11/12/96 1410	53,361	573	N197423.77 E522825.13	13.37	✓	B14	✓		cable 20' away; concrete w/ 1" pipe 10' away in water 2" pipes
L1	P1860	11/12/96 1415	53,627	-360	N197452.73 E522821.71	7.20		✓	✓		lots of asphalt; small amount small metal pieces
L1	P1890	11/12/96 1417	53,783	-274	N197484.73 E522829.21	11.36		✓	✓		asphalt debris - flat metal (6' X 2 1/2') 8' away
L1	P1920	11/12/96 1420	53,762	121	N197513.47 E522836.36	18.16		✓	✓		asphalt. Small metal debris 10' away
L1	P1950	11/12/96 1422	53,455	684	N197540.44 E522843.19	10.28	✓	B15	✓		metal box (6' X 2' X 2') about 2' from location
L2	P0000	11/13/96 0900	53,670	5	N196321.71 E522218.03	12.78		✓		✓	(gps 10' from mag sensor); 4' above water for Line 2 Survey/3.2'
L2	P0030	11/13/96 0907	53,640	-70	NC	NA		✓		✓	3.2'
L2	P0060	11/13/96 0955	53,550	90	N196304.46 E522294.17	0.55		✓		✓	2.9'
L2	P0090	11/13/96 1000	53,612	-15	N196297.21 E522320.72	3.09		✓		✓	3.3'
L2	P0120	11/13/96 1005	53,550	50	NC	NA		✓		✓	3.3'
L2	P0150	11/13/96 1010	53,770	-10	NC	NA		✓		✓	3.96'
L2	P0180	11/13/96 1012	53,630	-20	NC	NA		✓		✓	3.55'

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L2	P0210	11/13/96 1015	53,560	-80	NC	NA	✓		✓		4.0'
L2	P0240	11/13/96 1017	53,715	-45	N196267.71 E522469.35	1.47	✓		✓		3.8
L2	P0270	11/13/96 1020	53,790	29	N196258.60 E522491.86	4.34	✓		✓		3.8
L2	P0300	11/13/96 1025	53,884	-40	N196245.43 E522520.37	-4.52	✓	✓			lg wood pier debris/3.7
L2	P0330	11/13/96 1030	53,960	2	N196246.35 E522566.63	-6.88	✓		✓		3.5
L2	P0360	11/13/96 1035	53,979	22	N196244.15 E522597.79	-4.26	✓		✓		3.7'
L2	P0390	11/13/96 1039	53,946	12	N196266.34 E522629.85	-8.77	✓		✓		3.8'
L2	P0420	11/13/96 1045	53,815	-42	N196305.41 E522671.89	-3.00	✓		✓		3.8'
L2	P0450	11/13/96 1047	53,760	-18	N196335.31 E522702.65	-0.65	✓		✓		3.9'
L2	P0480	11/13/96 1050	53,736	-3	N196348.73 E522718.44	-4.67	✓		✓		3.9'
L2	P0510	11/13/96 1052	53,762	41	N196372.88 E522743.65	1.10	✓		✓		4.1'
L2	P0540	11/13/96 1055	53,871	2.9	N196394.56 E522769.62	7.31	✓		✓		metal frame 30' toward shore/3.9'
L2	P0570	11/13/96 1057	53,847	7	N196442.89 E522815.52	9.28	✓		✓		4.1'
L2	P0600	11/13/96 1100	53,630	-40	N196471.38 E522808.88	9.49	✓		✓		4.4'

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L2	P0630	11/13/96 1105	53,560	-26	N196519.46 E522810.63	11.35		✓		✓	4.5'
L2	P0660	11/13/96 1110	53,536	36	N196542.58 E522823.91	9.15		✓		✓	4.5'
L2	P0690	11/13/96 1115	53,620	10	N196578.06 E522825.59	9.60		✓		can't see harbor bottom	6.2'
L2	P0720	11/13/96 1116	53,599	-20	N196609.01 E522827.74	12.86		✓		can't see harbor bottom	8.1'
L2	P0750	11/13/96 1117	53,713	-43	N196635.02 E522832.98	13.21		✓		can't see harbor bottom	9.1'
L2	P0780	11/13/96 1120	53,404	-25	N196670.09 E522830.80	13.63		✓		can't see harbor bottom	10.5'
L2	P0810	11/13/96 1125	53,160	38	N196701.06 E522836.53	14.52		✓		can't see harbor bottom	10.8'
L2	P0840	11/13/96 1126	53,230	40	N196732.93 E522839.83	14.25		✓		can't see harbor bottom	11.5'
L2	P0870	11/13/96 1130	53,110	-110	N196763.00 E522836.22	13.86		✓		can't see harbor bottom	11.8'
L2	P0900	11/13/96 1135	52,790	100	N196795.77 E522829.52	14.84		✓		can't see harbor bottom	11.8'
L2	P0930	11/13/96 1137	52,650	-200	N196822.27 E522831.34	15.26		✓		can't see harbor bottom	11.9'
L2	P0960	11/13/96 1140	52,631	-160	N196850.15 E522836.64	10.88		✓		can't see harbor bottom	11.8'
L2	P0990	11/13/96 1143	52,965	-144	N196876.55 E522844.70	14.47		✓		can't see harbor bottom	12.3'

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L2	P1020	11/13/96 1145	53,107	-40	N196920.70 E522842.46	-2.84	✓		can't see harbor bottom	12.0'	
L2	P1050	11/13/96 1148	53,299	-79	N196939.86 E522853.05	7.07	✓		can't see harbor bottom	11.7'	
L2	P1080	11/13/96 1150	53,160	-83	N196971.13 E522840.82	9.89	✓		can't see harbor bottom	11.6'	
L2	P1110	11/13/96 1155	53,166	-91	N196998.80 E522839.78	9.17	✓		can't see harbor bottom	11.7'	
L2	P1140	11/13/96 1200	53,410	25	N197032.93 E522852.40	7.91	✓		can't see harbor bottom	torpedo on shore/11.5'	
L2	P1170	11/13/96 1202	53,170	-26	N197068.11 E522822.50	9.16	✓		can't see harbor bottom	10.8'	
L2	P1200	11/13/96 1205	53,325	20	N197093.28 E522820.49	9.91	✓		can't see harbor bottom	10.8'	
L2	P1230	11/13/96 1206	53,434	-25	N197114.04 E522824.97	-3.07	✓		can't see harbor bottom	10.8'	
L2	P1260	11/13/96 1210	53,445	-15	N197148.34 E522829.89	5.30	✓		can't see harbor bottom	10.8'	
L2	P1290	11/13/96 1211	53,448	-53420 (-106)	N197165.46 E522837.77	6.62	✓		can't see harbor bottom	11.0'	
L2	P1320	11/13/96 1214	53,510	37	N197210.91 E522852.03	11.15	✓		can't see harbor bottom	11.2'	
L2	P1350	11/13/96 1215	53,410	41	N197244.58 E522847.33	7.83	✓		can't see harbor bottom	11.2'	
L2	P1380	11/13/96 1217	53,432	-80	N197254.33 E522849.87	6.15	✓		can't see harbor bottom	10.6'	
L2	P1410	11/13/96 1220	53,590	-80	N197297.02 E522855.83	11.22	✓		✓	2.0'	

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L2	P1440	11/13/96 1225	53,758	35	N197308.23 E522876.26	12.94		✓		✓	6"
L2	P1470	11/13/96 1227	53,847	73	N197328.32 E522872.07	10.33		✓		✓	6"
L2	P1500	11/13/96 1238	53,650	-53,270	N197365.15 E522869.63	6.35		✓		✓	8.7'
L2	P1530	11/13/96 1240	53,580	-80	N197389.95 E522855.06	14.90		✓		can't see harbor bottom	8.8'
L2	P1560	11/13/96 1244	54,023	-200	N197417.18 E522853.85	14.79		✓		can't see harbor bottom	8.2'
L2	P1590	11/13/96 1245	53,890	-10	N197445.89 E522853.11	11.04		✓	✓		metal rods/5.6'
L2	P1620	11/13/96 1248	53,945	-54,000 (-38)	N197474.19 E522860.58	10.48		✓	✓		metal rods/4.0'
L2	P1650	11/13/96 1250	53,961	-20	N197498.68 E522868.59	10.97		✓	✓		small pieces metal; rebar/2.5'
L2	P1680	11/13/96 1251	53,974	21	N197524.58 E522873.22	11.46		✓	✓		small pieces metal/2.5'
L4	P0000	11/14/96 0830	53,907	29	N196293.56 E522197.26	7.94		✓		✓	could not see harbor bottom/2.4'
L4	P0030	11/14/96 0831	53,896	30	N196271.28 E522246.86	10.65		✓		✓	could not see harbor bottom/3.1'
L4	P0060	11/14/96 0832	53,849	47	N196240.56 E522283.25	6.66		✓		✓	could not see harbor bottom/3.2'
L4	P0090	11/14/96 0835	53,931	56	N196231.95 E522317.73	13.68		✓		✓	old piers 60' opposite shore/NC
L4	P0120	11/14/96 0836	53,594	-320	N196225.84 E522349.90	15.32		✓		✓	2.9'

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L4	P0150	11/14/96 0840	53,957	53	NC	NA	✓		✓		2.61'
L4	P0180	11/14/96 0842	53,971	61	N196234.13 E522415.18	18.69	✓		✓		3.1'
L4	P0210	11/14/96 0843	53,950	6	N196232.12 E522444.86	13.07	✓		✓		3.5'
L4	P0240	11/14/96 0845	53,989	54	N196214.64 E522373.28	13.71	✓		✓		3.6'
L4	P0270	11/14/96 0846	54,032	50	N196194.95 E522502.93	10.09	✓		✓		4.56'
L4	P0300	11/14/96 0848	54,037	0 (5→ -5)	N196201.54 E522543.50	10.89	✓		✓		4.6'
L4	P0330	11/14/96 0850	54,034	29	N196210.62 E522594.59	14.31	✓		✓		4.8'
L4	P0360	11/14/96 0851	54,027	17	N196219.09 E522653.93	14.56	✓		✓		4.2'
L4	P0390	11/14/96 0855	54,025	20	N196237.82 E522694.77	16.49	✓		✓		pole 10' away/4.2'
L4	P0420	11/14/96 0856	54,000	10	N196265.63 E522717.06	15.27	✓		✓		10' from stump/4.5'
L4	P0450	11/14/96 0859	53,980	17	N196292.23 E522743.40	10.24	✓		✓		4.6'
L4	P0480	11/14/96 0900	53,963	23	N196318.26 E522749.50	13.49	✓		✓		4.9'
L4	P0510	11/14/96 0902	53,963	7	N196339.54 E522778.87	11.52	✓		✓		NC
L4	P0540	11/14/96 0904	53,925	10	N196374.42 E522789.68	8.23	✓		✓		4.6

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L4	P0570	11/14/96 0905	53,928	12	N196372.61 E522183.59	10.64	✓		✓		4.7'
L4	P0600	11/14/96 0907	53,930	20	N196416.78 E522832.55	10.99	✓			can't see harbor bottom	4.9'
L4	P0630	11/14/96 0909	53,881	-1	N196441.11 E522841.35	12.47	✓			can't see harbor bottom	5.1'
L4	P0660	11/14/96 0910	53,788	-15	N196476.49 E522833.05	13.34	✓			can't see harbor bottom	3'
L4	P0690	11/14/96 0911	53,791	-12	N196508.64 E522845.33	12.82	✓			can't see harbor bottom	6.3'
L4	P0720	11/14/96 0913	53,824	-1	N196544.95 E522858.35	11.51	✓			can't see harbor bottom	6.5'
L4	P0750	11/14/96 0915	53,810	7	N196560.50 E522864.24	11.29	✓			can't see harbor bottom	7.1'
L4	P0780	11/14/96 0916	53,809	-2	N196597.46 E522868.10	12.74	✓			can't see harbor bottom	10.3'
L4	P0810	11/14/96 0918	53,778	-12	N196618.52 E533866.79	15.17	✓			can't see harbor bottom	11.5'
L4	P0840	11/14/96 NC	53,727	-30	N196677.79 E522872.93	14.77	✓			can't see harbor bottom	12.8'
L4	P0870	11/14/96 930	53,565	-10	N196728.52 E522867.08	2.70	✓			can't see harbor bottom	13.5'
L4	P0900	11/14/96 0935	53,645	-10	N196737.81 E522880.81	13.35	✓		✓		13.8'
L4	P0930	11/14/96 0936	53,679	-15	N196761.37 E522891.28	12.97	✓		✓		14.1'
L4	P0960	11/14/96 0938	53,652	-15	N196779.42 E522879.64	1108	✓		✓		NC

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L4	P0990	11/14/96 0940	53,635	-12	N196811.56 E522880.72	11.43	✓		✓		≈ 15'
L4	P1020	11/14/96 0944	53,620	20	N196841.92 E522876.89	9.89	✓		✓		14.6'
L4	P1050	11/14/96 0946	53,549	4	N196858.99 E522866.47	12.23	✓		✓		NC
L4	P1080	11/14/96 0947	53,688	18	N196901.91 E522887.14	11.67	✓		✓		14.6'
L4	P1110	11/14/96 0950	53,661	-22	N196934.64 E522889.14	4.95	✓		✓		NC
L4	P1140	11/14/96 0951	53,784	-20	N196991.75 E522890.42	4.82	✓		✓		14.7'
L4	P1170	11/14/96 0953	53,550	29	N197024.78 E533872.65	5.53	✓		✓		NC
L4	P1200	11/14/96 0955	53,576	5	N197069.61 E522852.61	5.23	✓		✓		14.3'
L4	P1230	11/14/96 0956	53,840	5	N197089.94 E522865.23	9.05	✓		✓		NC
L4	P1260	11/14/96 0957	53,679	-10	N197129.22 E522858.43	13.15	✓		✓		14.4'
L4	P1290	11/14/96 0959	53,770	-1	N197162.55 E522885.23	5.87	✓		✓		NC
L4	P1320	11/14/96 1000	53,900	5	N197205.51 E522901.26	1.61	✓		✓		14.6'
L4	P1350	11/14/96 1005	53,940	7	N197220.75 E522913.55	0.30	✓		✓		NC
L4	P1380	11/14/96 1006	53,890	-9	N197266.72 E522920.55	-1.04	✓		✓		15'

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L4	P1410	11/14/96 1008 (Break-warmup)	53,905	-10	N197276.97 E522915.27	-1.19		✓		✓	NC
L4	P1440	11/14/96 1025	53,888	-22	N197360.62 E522901.07	-3.77		✓		✓	14.2'
L4	P1470	11/14/96 1028	53,844	-17	N197396.97 E522884.50	-5.42		✓		✓	NC
L4	P1500	11/14/96 1030	53,879	-18	N197415.18 E522882.42	-4.04		✓		✓	NC
L4	P1530	11/14/96 1031	53,882	-26	N197435.50 E522875.26	-8.82		✓		✓	NC
L4	P11560	11/14/96 1032	53,915	-24	N197458.17 E522895.80	-7.80		✓		✓	NC
L4	P1590	11/14/96 1033	53,917	-1	N197480.96 E522908.02	-0.85		✓		✓	NC
L2	M00	11/14/96 1406	53,754	5	N196422.98 E522108.11	16.5		✓		✓	concrete slabs w/rebar 15' to the left (N)
L2	M30	11/14/96 1409	53,867	80	NC	NC		✓		✓	concrete w/rebar 12' left (N)
L2	M60	11/14/96 1422	53,909	68	N196374.65 E522156.26	18.37		✓ B19		✓	concrete w/rebar 12' left (N)
L2	M90	11/14/96 1424	53,835	29	N196355.86 E522175.52	16.47		✓		✓	
L2	M120	11/14/96 1426	53,811	30	N196355.86 E522190.09	15.61		✓			
L4	M120	11/14/96 1427	53,934	17	N196321.60 E522172.42	17.02		✓		✓	
L4	M90	11/14/96 1428	53,944	10	N196334.37 E522154.37	14.91		✓		✓	

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L4	M60	11/14/96 1428	53,941	51	N196355.34 E522131.57	15.05	✓		✓		
L4	M30	11/14/96 1430	53,938	9	N196374.04 E522113.12	.71	✓		✓		
L4	M00	11/14/96 1431	53,944	9	N196403.69 E522086.75	4.26	✓		✓		
L7	P0000	11/15/96 0935	53,354	343	N196557.73 E522114.86	19.96	✓	✓		Wells 25' away Drum 7' inland; 25' away 1/2 drum	
L7	P0030	11/15/96 NC	NC	NC	NC	NC	NC	NC	NC	Inaccessible; too much brush	
L7	P0060	11/15/96 0945	53,762	348	N196521.74 E522138.38	27.40	✓		✓		
L7	P0090	11/15/96 0948	53,274	-72	N196501.18 E522164.66	31.74	✓	✓		concrete w/rebar 6' away other concrete (no rebar visible)	
L7	P0120	11/15/96 0952	53,223	825	N196484.97 E522186.12	26.64	✓	✓		concrete 2' away; metal 20' away	
L7	P0150	11/15/96 0955	53,380	327	N196481.36 E522204.09	14.85	✓	✓		metal (2' x 3') 6' away; concrete in vicinity	
L7	P0180	11/15/96 1002	53,168	-1000	N196473.25 E522229.91	24.47	✓ B22	✓		1" steel cable 10' long-1' from concrete, all around	
L7	P0210	11/15/96 NC	NC	NC	NC	NA	NC	NC	NC	Inaccessible; too much brush	
L7	P0240	11/15/96 1008	51,720	-25	N196468.98 E522279.89	22.39	✓	✓		Other metals scattered; crushed metal 12' away (6' x 3'); metal 8' away (1 1/2' x 1 1/2')	
L7	P0270	11/15/96 1050	52,530	-1120	N196480.61 E522312.94	22.87	✓	✓		foundation (concrete) w/rebar; concrete slab (4' x 5") 7' away; crushed drum 12' away	
L7	P0300	11/15/96 1055	54,392	-870	N196468.05 E522348.30	22.27	✓	✓		large pile concrete w/metal reinforcement 6' away	

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
 NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L7	P0330	11/15/96 1100	53,673	777	N197447.10 E522363.15	19.17		✓	✓		metal 17' away (1 1/2 x 2'); crushed drum 20' away, metal (1' x 2')
L7	P0360	11/15/96 1101	54,135	292	N196441.87 E522378.41	23.91		✓	✓		crushed drum 12' away; metal (1' x 2') 10' away.
L7	P0390	11/15/96 1105	53,110	2580	N196440.89 E522399.20	30.24		✓	✓		1'x1' flat metal 2' away; metal (3' x 3') 12' away, crushed drum 20' away.
L7	P0630	11/15/96 1110	51,472	1640	N196383.05 E522534.08	26.26		✓	✓		wells MW 09-08S/D 30' away crushed metal drum 20' away
L7	P0660	11/15/96 1112	53,220	-128	N196374.98 E522561.17	28.63		✓	✓		metal (1'x1') 3' away
L7	P0690	11/15/96 NC	NC	NC	NC	NA		✓	✓		inaccessible; drums large concrete depression
L7	P0720	11/15/96 NC	NC	NC	NC	NA		✓	✓		inaccessible; drums large concrete depression
L7	P0810	11/15/96 1130	51,509	2140	N196477.93 E522662.26	19.34		✓	✓		15' away metal drum
L7	P0840	11/15/96 1138	51,786	1116	N196495.15 E522672.92	32.61		✓		✓	
L7	P0870	11/15/96 1140	53,209	312	N196525.89 E522682.32	24.15		✓		✓	
L7	P0900	11/15/96 1142	54,772	21	N196555.61 E522686.00	23.23		✓		✓	
L7	P0930	11/15/96 1143	53,125	1232	N196585.73 E522692.46	20.70		✓	✓		metal (2'x1') 30' away
L7	P0960	11/15/96 1145	53,920	1411	N196618.18 E522705.39	19.62		✓	✓		same as above, still 30' away
L7	P0990	11/15/96 1146	54,965	-1520	N196639.71 E522717.66	24.37		✓	✓		metal pipe 6" away; metal (1 1/2' x 1' x 1') 3' away

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L7	P01020	11/15/96 1148	57,456	-588	N196657.38 E522721.89	28.42		✓	✓		concrete and metal 20' away
L7	P1050	11/15/96 1150	55,315	870	N196691.50 E522715.63	28.36		✓	✓		concrete 5' away (4' x 2') metal 4' long
L7	P1080	11/15/96 1155	54,813	730	N196717.76 E522710.41	31.49		✓	✓		metal 2' away (3' x 1 1/2') wells (MW-09-17) 25' away
L7	1110	11/15/96 1158	53,917	-920	N196759.69 E522709.59	17.13		✓		✓	
L7	P1140	11/15/96 1305	55,565	-1247	N196782.12 E522729.63	34.74		✓		✓	
L7	P1170	11/15/96 1306	56,023	520	N196813.95 E522722.34	30.93		✓		✓	
L7	P1200	11/15/96 1308	54,153	54170	N196847.41 E522723.85	29.48		✓	✓		crushed metal (2' x 1') 5' away; crushed drum 23' away
L7	P1230	11/15/96 1311	58,731	-6294	N196881.03 E522730.57	27.68		✓		✓	
L7	P1260	11/15/96 1315	55,893	226	N196909.63 E522730.30	29.55		✓		✓	
L7	P1290	11/15/96 1316	53,477	768	N196933.15 E522714.50	28.64		✓	✓		small metal 20' away
L7	P1320	11/15/96 1317	54,439	1153	N196964.59 E522707.34	34.60		✓			
L7	P1350	11/15/96 1335	56,648	-6185	N196990.24 E522693.27	36.46		✓	✓		small metal pieces 10' away
L7	P1380	11/15/96 1338	55,144	-987	N197021.21 E522697.80	36.79		✓		✓	
L7	P1410	11/15/96 1340	56,030	517	N197046.84 E522694.54	36.03		✓		✓	

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
 NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L7	P1440	11/15/96 NC	NC	NC	NC	NA	✓				inaccessible
L7	P1470	11/15/96 1343	53,972	-500	N197122.53 E522696.03	34.87	✓		✓		
L7	P1500	11/15/96 1346	54,732	-550	N197152.53 E522704.16	34.38	✓	✓			metal (1' x 1') 5' away
L7	P1530	11/15/96 1348	53,475	451	N197189.15 E522714.80	33.17	✓	✓			crushed drum and pipe 6' away. Some metal 10' away
L7	P1560	11/15/96 1350	54,261	1437	N197233.89 E522718.24	33.65	✓	✓			drum 15' away; 6" steel pipe 3' away; concrete with wire (2x3) 5' away
L7	P1590	11/15/96 1355	52,289	481	N197276.87 E522723.62	25.57	✓	✓			1/2" pipe 2' long (1' away); fence top 1' away
L7	P1620	11/15/96 1358	53,135	-775	N197290.35 E522729.63	24.05	✓		✓		
L7	P1650	11/15/96 1359	53,189	-3	N197317.33 E522734.91	26.82	✓	✓			2" pipe (2' long) 10' away
L7	P1680	11/15/96 1402	53,139	-613	N197348.25 E522727.48	23.30	✓		✓		
L7	P1710	11/15/96 1408	53,702	53,703 (-418)	N197373.03 E522719.40	24.41	✓	✓			12' away metal (6' x 4'); 6' away 4" steel 4" wide
L7	P1740	11/15/96 1411	53,525	-164	N197402.46 E522727.51	29.34	✓	✓			asphalt
L7	P1770	11/15/96 1414	53,739	-537	N197436.80 E522710.78	24.74	✓	✓			crushed can (1' x 1') 4' away; 7' away corrugated metal (4' x 6')
L7	P1800/ P1830	11/15/96 NC	NC	NC	NC	NA	✓				Inaccessible
L7	P1860	11/15/96 1420	53,837	2691	N197527.30 E522764.25	27.68	✓		✓		

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2) Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
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TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L7	P1890	11/15/96 1421	54,325	2811	N197552.00 E522775.32	26.52	✓		✓		
L7	P1920	11/15/96 1424	53,461	-1157	N197584.00 E522774.02	26.83	✓		✓		
L7	P1950	11/15/96 1426	53,588	-135	N197615.86 E522780.88	22.65	✓		✓		
L6	P2010	11/8/96 0842	54,816	854	N197601.78 <sup>(2)</sup> E522807.43	26.10 <sup>(2)</sup>	✓		✓		
L6	P1980	11/8/96 0850	54,192	3116	N197572.57 <sup>(2)</sup> E522800.14	29.11 <sup>(2)</sup>	✓		✓		
L6	P1950	11/8/96 0855	55,056	-3240	N197539.90 <sup>(2)</sup> E522794.97	25.47 <sup>(2)</sup>	✓	✓			
L6	P1920	11/8/96 0858	56,967	-371	N197513.01 <sup>(2)</sup> E522784.41	25.35 <sup>(2)</sup>	✓ A1, A2	✓			See picture
L6	P1890	11/8/96 0914	54,226	-1059	N197486.50 <sup>(2)</sup> E522769.56	24.14 <sup>(2)</sup>	✓ A2, A3	✓			See picture
L6	P1850	11/8/96 0920	53,353	315	N197457.71 <sup>(2)</sup> E522754.23	28.68 <sup>(2)</sup>	✓	✓			metal drum 30' away 2 flat drums 10' to 15' away
L6	P1830	11/8/96 0926	54,840	-179	N197432.73 <sup>(2)</sup> E522736.60	27.98 <sup>(2)</sup>	✓	✓			2 crushed drums 30' away
L6	P1800	11/8/96 0932	53,691	678	NC	NA	✓	✓			asphalt pile 8' away; concrete pile .5' away
L6	P1770	11/8/96 0939	50,712	6815	NC	NA	✓ A4	✓			concrete near edge; 3/4" steel cable (4' visible) 2' from P1770.
L6	P1740	11/8/96 0943	55,372	-1747	N197349.82 E522752.06	20.93 <sup>(2)</sup>	✓	✓			concrete near edge of landfill; near three peizometers
L6	P1710	11/8/96 0950	54,442	5690	N197317.47 <sup>(2)</sup> E522761.13	23.07 <sup>(2)</sup>	✓	✓			

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NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L6	P1680	11/8/96 0956	52,745	-838	N197285.56 <sup>(2)</sup> E522745.27	26.88 <sup>(2)</sup>		✓		✓	
L6	P1650	11/8/96 1003	53,944	-1077	NC	NA	✓	A5	✓		lots of 3/4" steel cable (about 20' visible)
L6	P1620	11/8/96 1007	56,082	-1612	N197229.95 <sup>(2)</sup> E522745.27	24.63 <sup>(2)</sup>		✓	✓		vehicle part 15' away; too few SVS.
L6	P1590	11/8/96 1009	53,773	141	N197201.43 <sup>(2)</sup> E522746.67	22.95 <sup>(2)</sup>		✓	✓		MW09-10S/D 20' away; 1/2" steel cable near wells; too few SVS
L6	P1560	11/8/96 1011	54,889	-229	N197171.81 <sup>(2)</sup> E522733.46	35.47 <sup>(2)</sup>		✓	✓		buried concrete 3' from P0450; too few SVS
L6	P1530	11/8/96 1012	53,869	1315	N197140.82 <sup>(2)</sup> E522723.27	35.20 <sup>(2)</sup>		✓	✓		10' away wire screen 2 1/2' x 1'; too few SVS
L6	P1500	11/8/96 1014	54,333	-385	N197110.61 <sup>(2)</sup> E522720.04	33.62 <sup>(2)</sup>		✓	✓		scattered small metal & pipe; 10-gal tank 20' away; too few SVS
L6	P1470	11/8/96 1016	55,975	116	N197080.21 E522725.76	32.87 <sup>(2)</sup>		✓	✓		4' away - bike frame; 10' away - metal beams (10' long)
L6	P1440	11/8/96 1019	54,824	1041	N197050.46 <sup>(2)</sup> E522723.45	31.27 <sup>(2)</sup>		✓	✓		8' away crushed drum, scattered metal; too few SVS
L6	P1410	11/8/96 1024	54,931	1820	N197018.94 <sup>(2)</sup> E522725.59	35.19 <sup>(2)</sup>		✓	✓		large drum (4' X 1 1/2') 25' away
L6	P1380	11/8/96 1027	55,143	-306	N196985.94 <sup>(2)</sup> E522722.19	35.52 <sup>(2)</sup>		✓	✓		small pieces of metal 3 ft and 6ft from P0660
L6	P1350	11/8/96 1030	55,289	-254	N196959.74 <sup>(2)</sup> E522738.17	34.20 <sup>(2)</sup>		✓	✓		small piece 1 ft square halfway between points PO630 and PO660
L6	P1320	11/8/96 1033	54,749	2995	N196927.95 <sup>(2)</sup> E522747.13	32.18 <sup>(2)</sup>		✓	✓		scattered metal debris
L6	P1290	11/8/96 NC	56,667	(56680); - 1206/2206 (shore) (inland)	N196900.54 <sup>(2)</sup> E522754.11	35.71 <sup>(2)</sup>		✓	✓		scattered small pieces of metal and cable

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
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TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L6	P1260	11/8/96 1042	60,450	-845	N196872.73 E522155.77	33.47 <sup>(2)</sup>	✓		✓		MW09-23 5' away; scattered concrete and metal
L6	P1230	11/8/96 NC	55,403	-160	N196839.07 <sup>(2)</sup> E522748.66	30.06 <sup>(2)</sup>	✓		✓		scattered metal and concrete
L6	P1200	11/8/96 1050	59,114	59072 (shore) (inland) 9,101 57,000	N196802.23 <sup>(2)</sup> E522743.46	35.26 <sup>(2)</sup>	✓		✓		
L6	P1170	11/8/96 1052	57,210	1250	N196771.59 <sup>(2)</sup> E522749.51	36.70 <sup>(2)</sup>	✓		✓		scattered metal detris, some concrete
L6	P1140	11/8/96 1054	55,696	1530	N196743.29 <sup>(2)</sup> E522742.32	34.69 <sup>(2)</sup>	✓		✓		
L6	P1110	11/8/96 1144	55,315	-780	N196713.45 <sup>(2)</sup> E522738.25	35.13 <sup>(2)</sup>	✓		✓		wells located 40' west
L6	P1080	11/8/96 1146	54,390	1940	N196683.68 <sup>(2)</sup> E522742.76	34.35 <sup>(2)</sup>	✓		✓		
L6	P1050	11/8/96 1147	54,961	1030	N196652.03 <sup>(2)</sup> E522757.10	31.76 <sup>(2)</sup>	✓		✓		20' away 1' X 2' metal
L6	P1020	11/8/96 1151	53,100	3830	N196620.30 N522748.91	31.90 <sup>(2)</sup>	✓		✓		10' away 1' X 2' metal
L6	P0990	11/8/96 1153	58,235	584	N196589.82 <sup>(2)</sup> E522731.74	30.72 <sup>(2)</sup>	✓			✓	
L6	P0960	11/8/96 1156	53,690	612	N196564.17 <sup>(2)</sup> E522726.16	32.35 <sup>(2)</sup>	✓			✓	25' from edge of landfill
L6	P0930	11/8/96 1158	52,355	-1595	N196537.22 <sup>(2)</sup> E522715.59	31.90 <sup>(2)</sup>	✓			✓	
L6	P0900	11/8/96 1159	50,562	3207	N196505.47 <sup>(2)</sup> E522705.56	NC	✓			✓	30' from edge of landfill; 10 minute GPS reading
L6	P0870	11/8/96 1402	56,000	-450	N196475.99 E522679.90	3.48 <sup>(2)</sup>	✓		✓		35' from edge of landfill; 1/2" steel cable 15' away

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L6	P0840	11/8/96 1406	55,390	1050	N196446.49 E522679.90	11.21 <sup>(2)</sup>	✓		✓		1' X 1' piece of steel
L6	P0810	11/8/96 1411	56,820	-2332	N196424.40 <sup>(2)</sup> E622662.68	29.55 <sup>(2)</sup>	✓		✓		10 minute GPS reading at nearby MW0920D; small piece of metal at location
L6	P0780	11/8/96 1414	56,395	56,235 (120 inland only)	N196399.25 E522647.30	30.59 <sup>(2)</sup>	✓		✓		piece of steel 25' away
L6	P0750	11/8/96 1417	54,950	1627	N196378.21 E522624.16	31.25 <sup>(2)</sup>	✓		✓		drum 20' away
L6	P0720	11/8/96 1419	53,675	31	N196359.73 E522598.15	29.11 <sup>(2)</sup>	✓	A6	✓		large piece of concrete, 3 drums and some steel 25' away
L6	P0690	11/8/96 1426	54,392	4795	N196348.60 E522570.00	30.88 <sup>(2)</sup>	✓			✓	
L6	P0660	11/8/96 1430	54,653	-1510	N196351.57 <sup>(2)</sup> E522543.09	21.72 <sup>(2)</sup>	✓			✓	10 minute GPS reading, MW098D and MW098S in vicinity
L6	P0630	11/8/96 1433	52,033	3560	N196363.29 <sup>(2)</sup> E522515.63	26.08 <sup>(2)</sup>	✓		✓		rusted corrugated steel and 15' X 7' mound in vicinity
L6	P0390	11/8/96 1440	52,824	-1253	N196412.43 <sup>(2)</sup> E522387.41	33.12 <sup>(2)</sup>	✓		✓		2' X 1' concrete 4' X 3' sheet metal; 1' X 1' pipe within 10'
L6	P0360	11/8/96 1447	53,539	340	N196413.69 <sup>(2)</sup> E522358.43	27.58 <sup>(2)</sup>	✓	A8	✓		2 drums; part of steel cart within 15'
L6	P0330	11/8/96 1451	54,952	-2361	N196421.45 <sup>(2)</sup> E522333.30	30.55 <sup>(2)</sup>	✓		✓		drum and part of steel cart within 15' MW09215/D
L6	P0300	11/8/96 1457	57,768	57,777 (-280 R)	N196448.94 <sup>(2)</sup> E522323.34	32.63 <sup>(2)</sup>	✓		✓		1' X 1' piece of steel; 6' X 3' concrete; 2 X 3" steel; 2' X 2' concrete
L6	P0270	11/8/96 1501	53,425	1090	N196554.60 <sup>(2)</sup> E522294.15	25.40 <sup>(2)</sup>	✓		✓		1' X 1' and 6' X 1' piece of steel within 20'
L6	P0240	11/8/96 1505	56,281	-1520	N196439.59 <sup>(2)</sup> E522271.74	26.86 <sup>(2)</sup>	✓		✓		

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
 NC - Not Collected; NA - Not Applicable.

TABLE 1: Record of Field Magnetometer Readings (continued)

Line No.	Position No.	Date and Time	Total Field (in Gammas)	Vertical Gradient (in Gammas)	GPS	Altitude (in ft)	Photo		Visual Debris <sup>(1)</sup>		Comments/Water Depth
							Y	N	Y	N	
L6	P0210	11/8/96 1509	54,530	1735	N196438.05 <sup>(2)</sup> E522242.83	28.41 <sup>(2)</sup>	✓		✓		1" cable, 6" steel pipe, and concrete debris within 15'
L6	P0180	11/8/96 1512	53,289	-210	N196453.29 <sup>(2)</sup> E522221.53	28.21 <sup>(2)</sup>	✓		✓		buried 1" cable within 5'
L6	P0150	11/8/96 1515	52,694	97	N196455.45 <sup>(2)</sup> E522194.95	29.40 <sup>(2)</sup>	✓		✓		large pile of rubble and concrete
L6	P0120	11/8/96 1518	53,409	53,380/-2120	N196469.56 <sup>(20)</sup> E522168.55	29.65 <sup>(2)</sup>	✓		✓		very small strip pieces of metal
L6	P0090	11/8/96 1521	53,901	-410	N196485.19 <sup>(2)</sup> E522145.03	29.06 <sup>(2)</sup>	✓		✓		20' from edge of landfill; concrete; pieces of concrete
L6	P0060	11/8/96 1524	53,319	576	N196501.38 <sup>(2)</sup> E522145.03	28.87 <sup>(2)</sup>	✓		✓		15' from edge of landfill; 2-3' concrete within 6'
L6	P0030	11/8/96 1527	54,226	433	N196529.42 <sup>(2)</sup> E522113.77	25.25 <sup>(2)</sup>	✓		✓		15' from edge of landfill; drum in vicinity
L6	P000	11/8/96 1529	53,701	-350	N196540.10 E522092.86	22.74 <sup>(2)</sup>	✓	A9	✓		5' from edge of landfill; MW0924S/D in vicinity

NOTE: (1) Staff height at 7.5 ft unless otherwise noted; (2)Unable to establish a GPS connection on 11/8/96; GPS reading collected on 11/11/96.  
 NC - Not Collected; NA - Not Applicable.

**APPENDIX A**

**Record of Visual Debris Form**

**APPENDIX A**

**Record of Visual Debris Form**

Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96  
Line No.: 1  
Position No.: 120

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (.e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

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\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

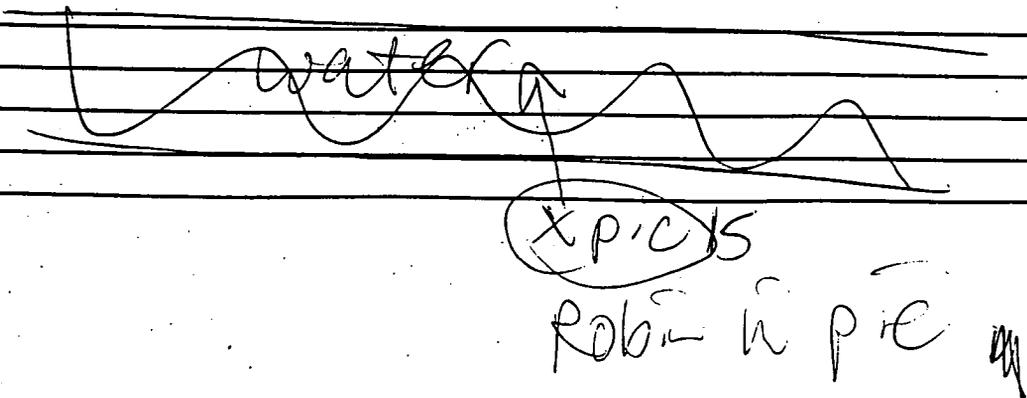
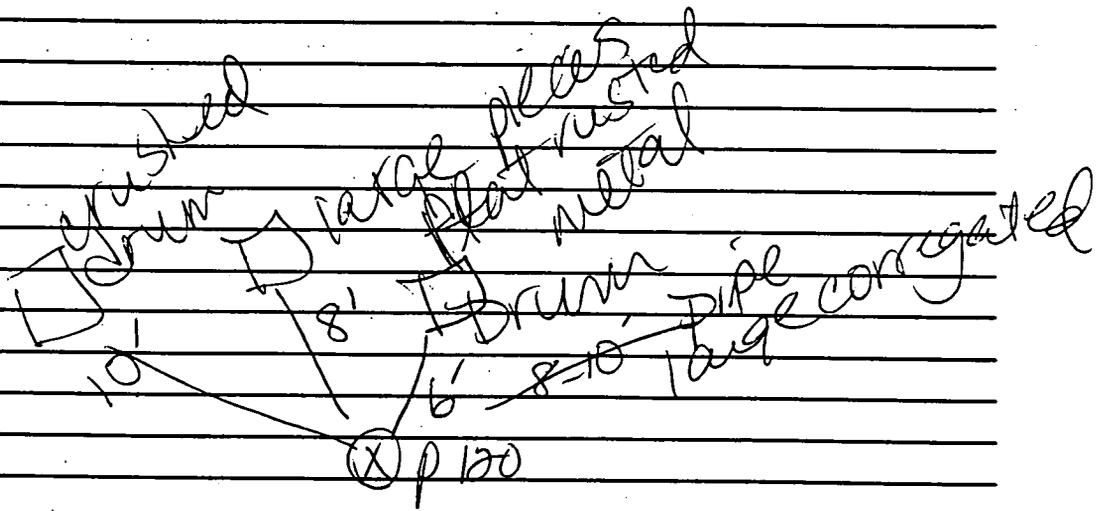
\_\_\_\_\_

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\_\_\_\_\_

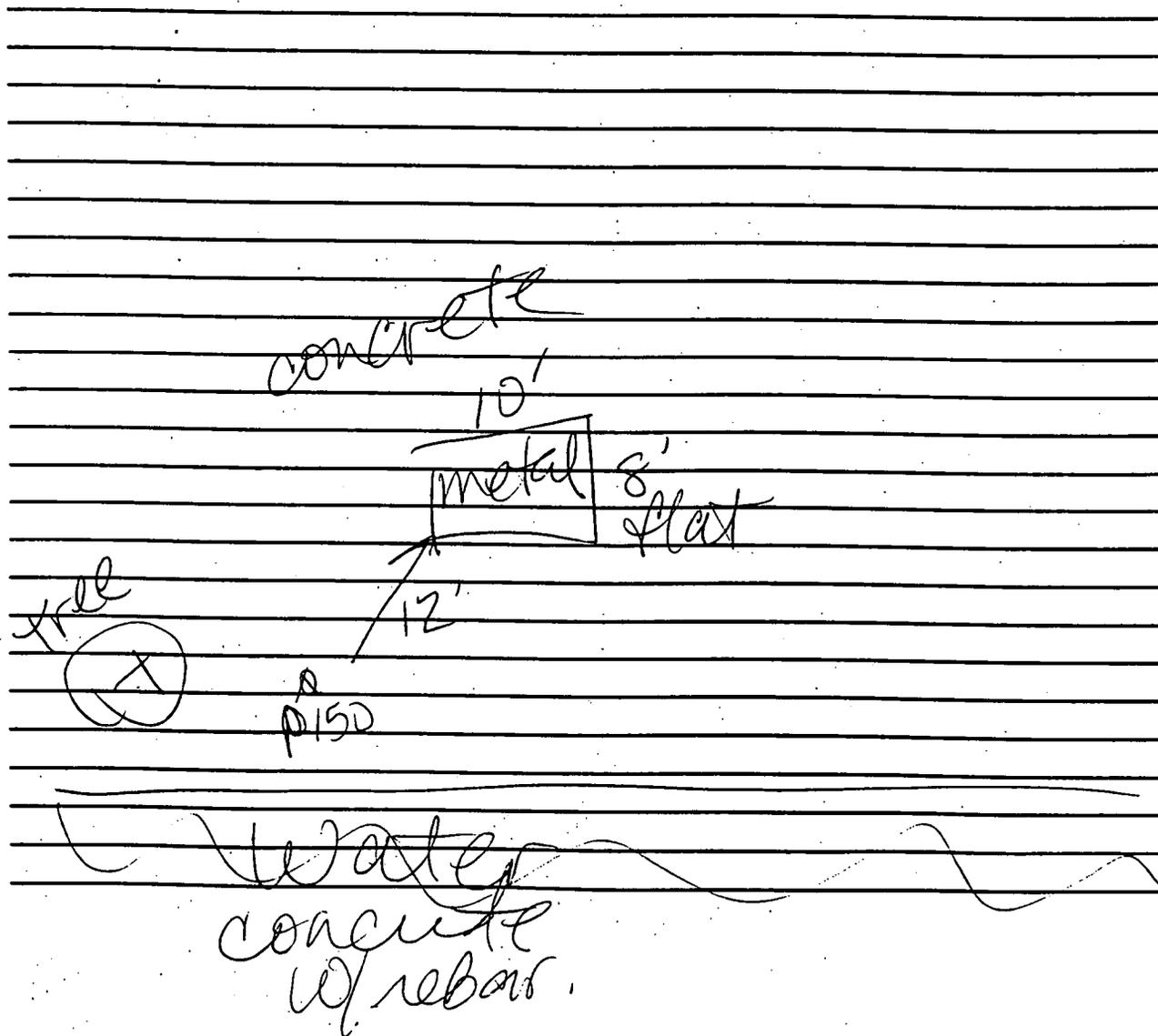
\_\_\_\_\_



Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96  
Line No.: \_\_\_\_\_  
Position No.: 150

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



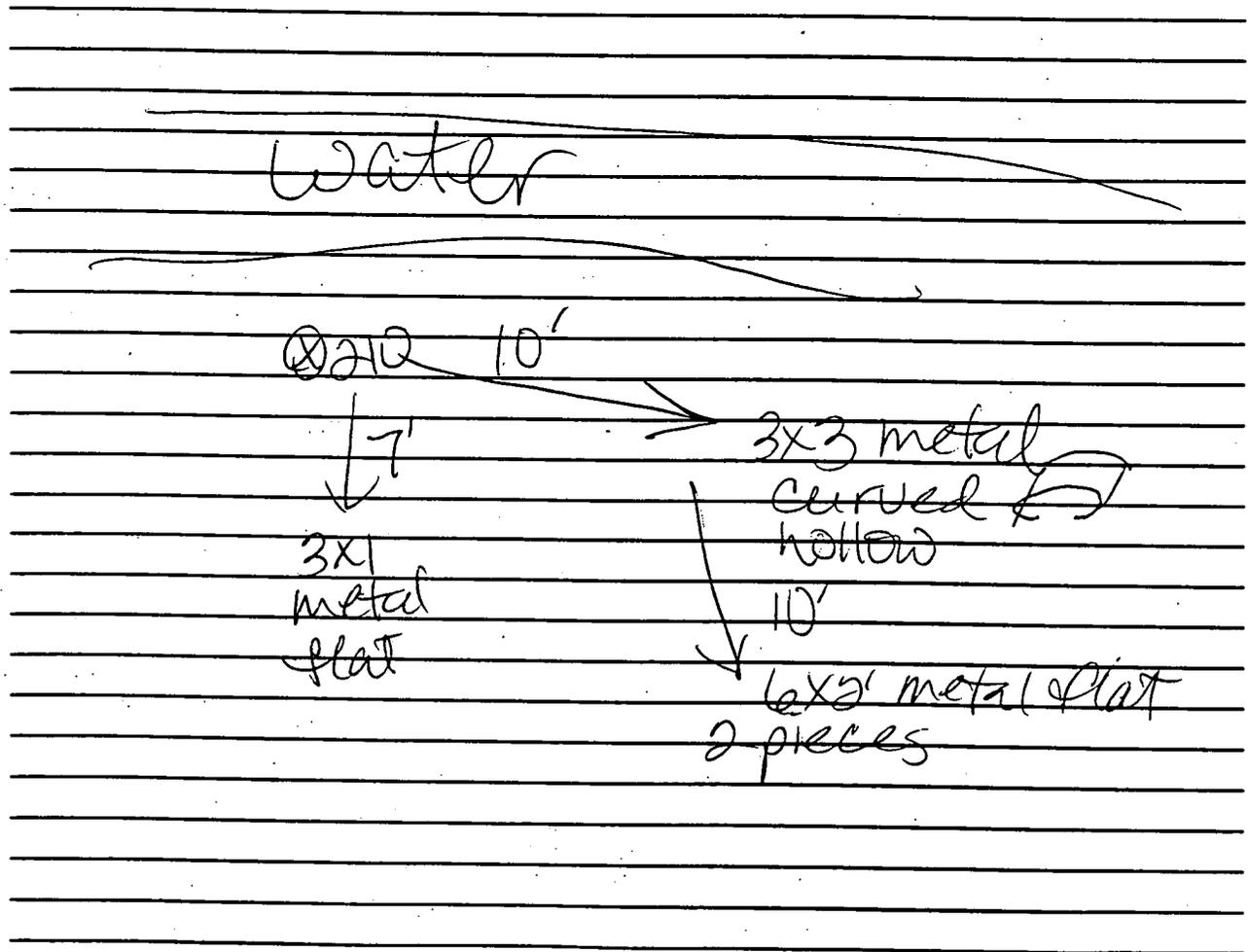
Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96

Line No.: 1

Postion No.: ~~120~~ 210

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debri. Use permanant reference points whenever possible (.e.g large rocks, boulders, monitroing wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



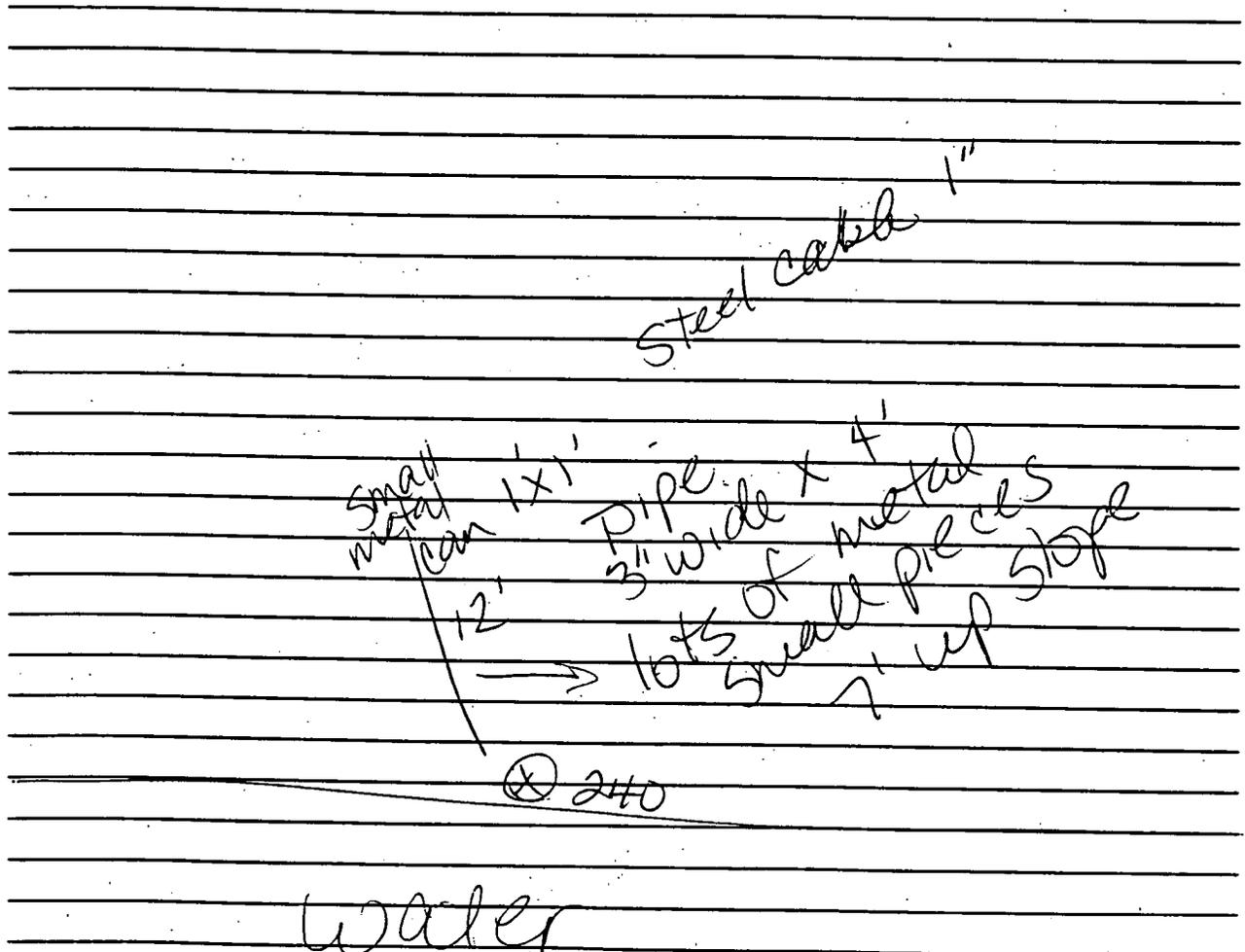
Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96

Line No.: 1

Position No.: 240

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



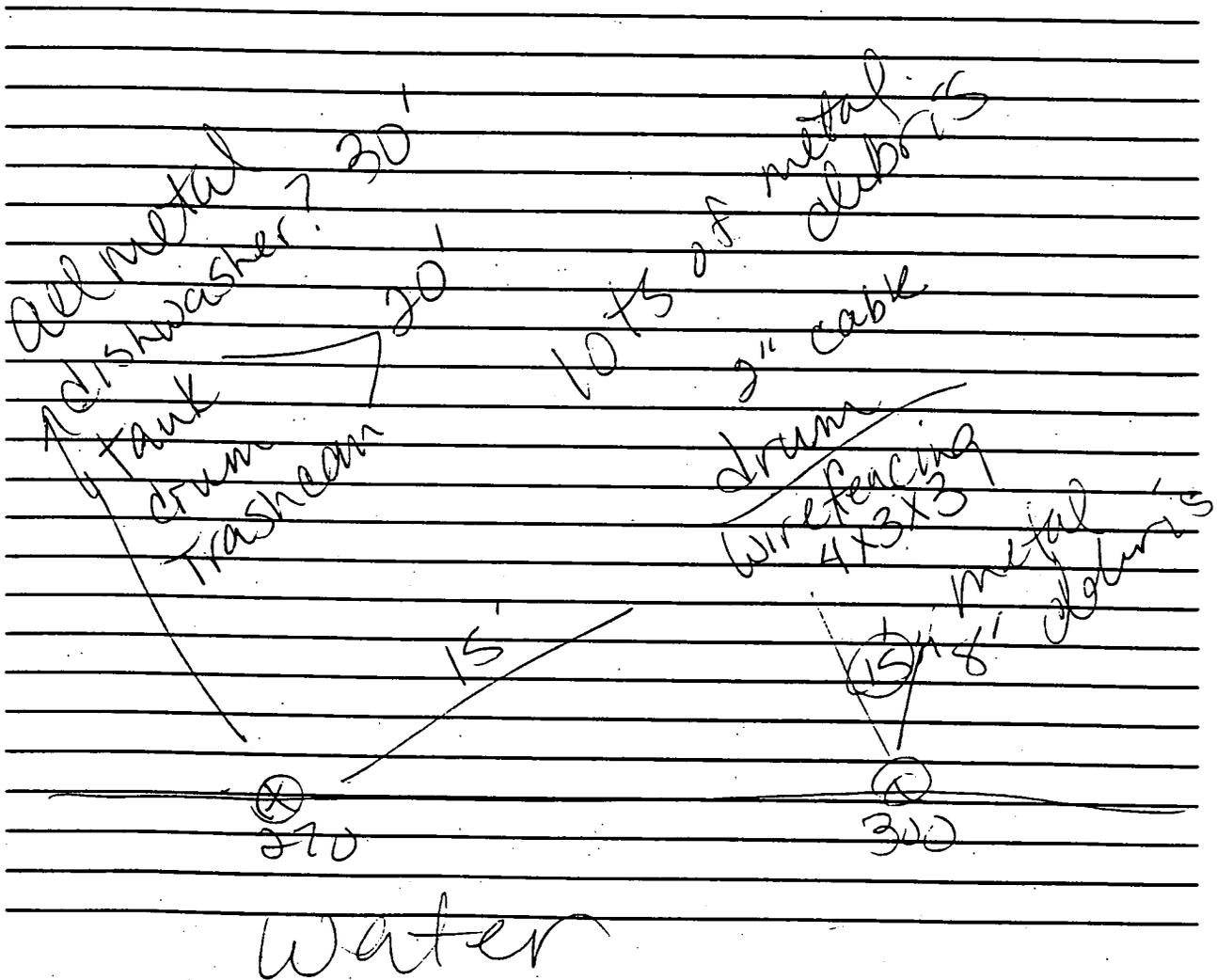
Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96

Line No.: \_\_\_\_\_

Postion No.: 270/300

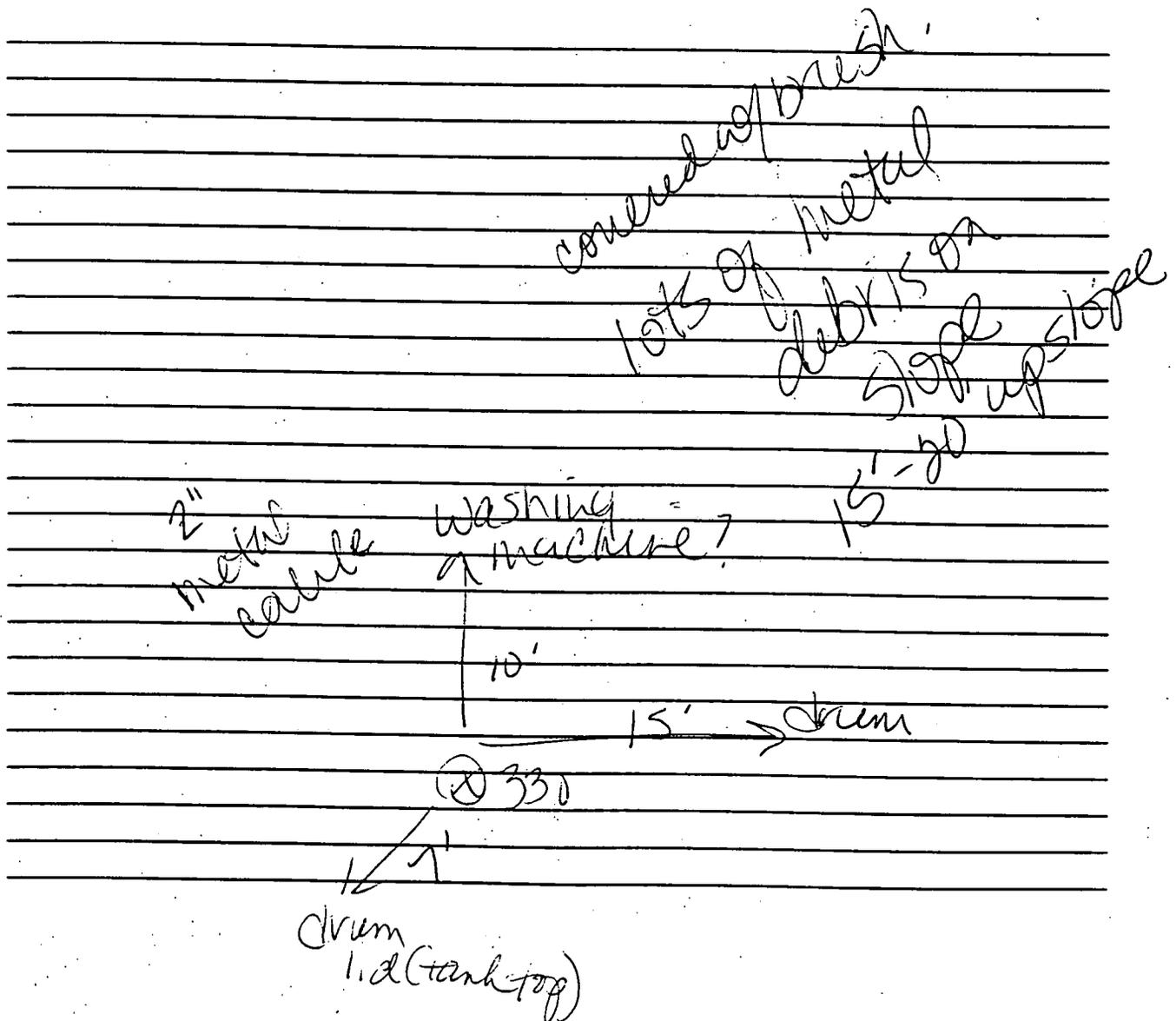
1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debri. Use permanant reference points whenever possible (.e.g large rocks, boulders, monitroing wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/12/96  
Line No.: 1  
Position No.: 330

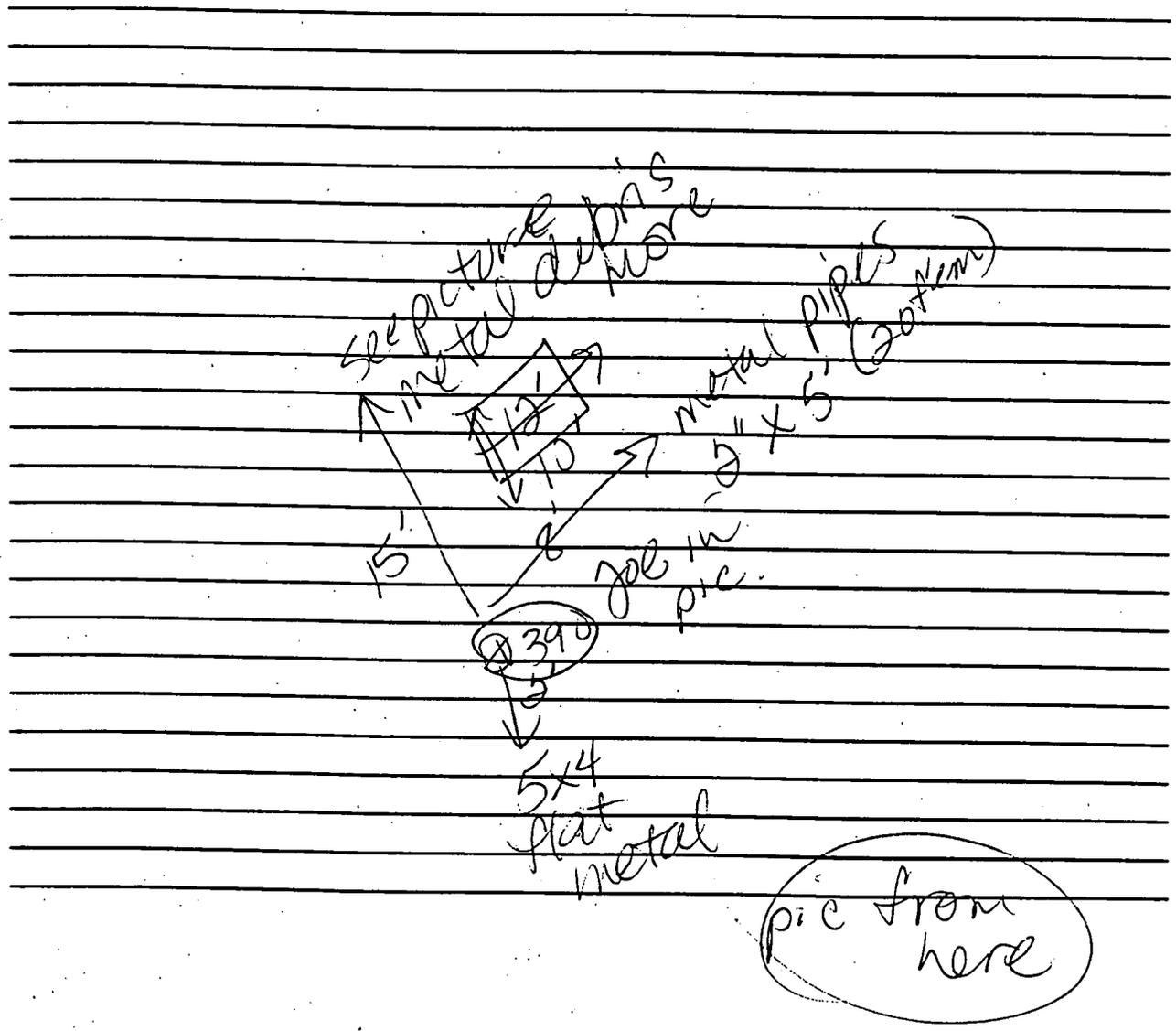
1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96  
Line No.: 1  
Position No.: 390

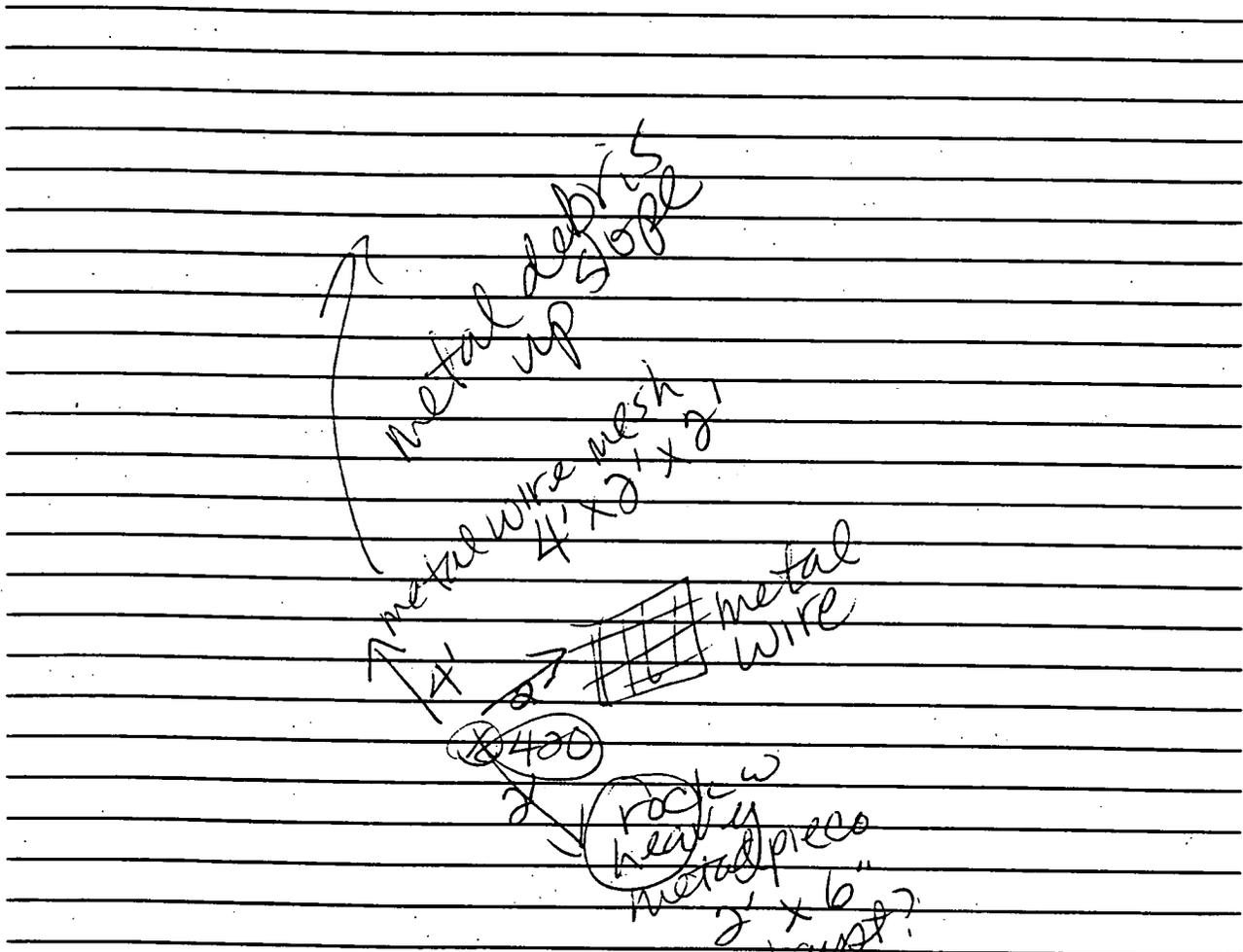
1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debri. Use permanent reference points whenever possible (.e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96  
Line No.: 1  
Position No.: 400

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



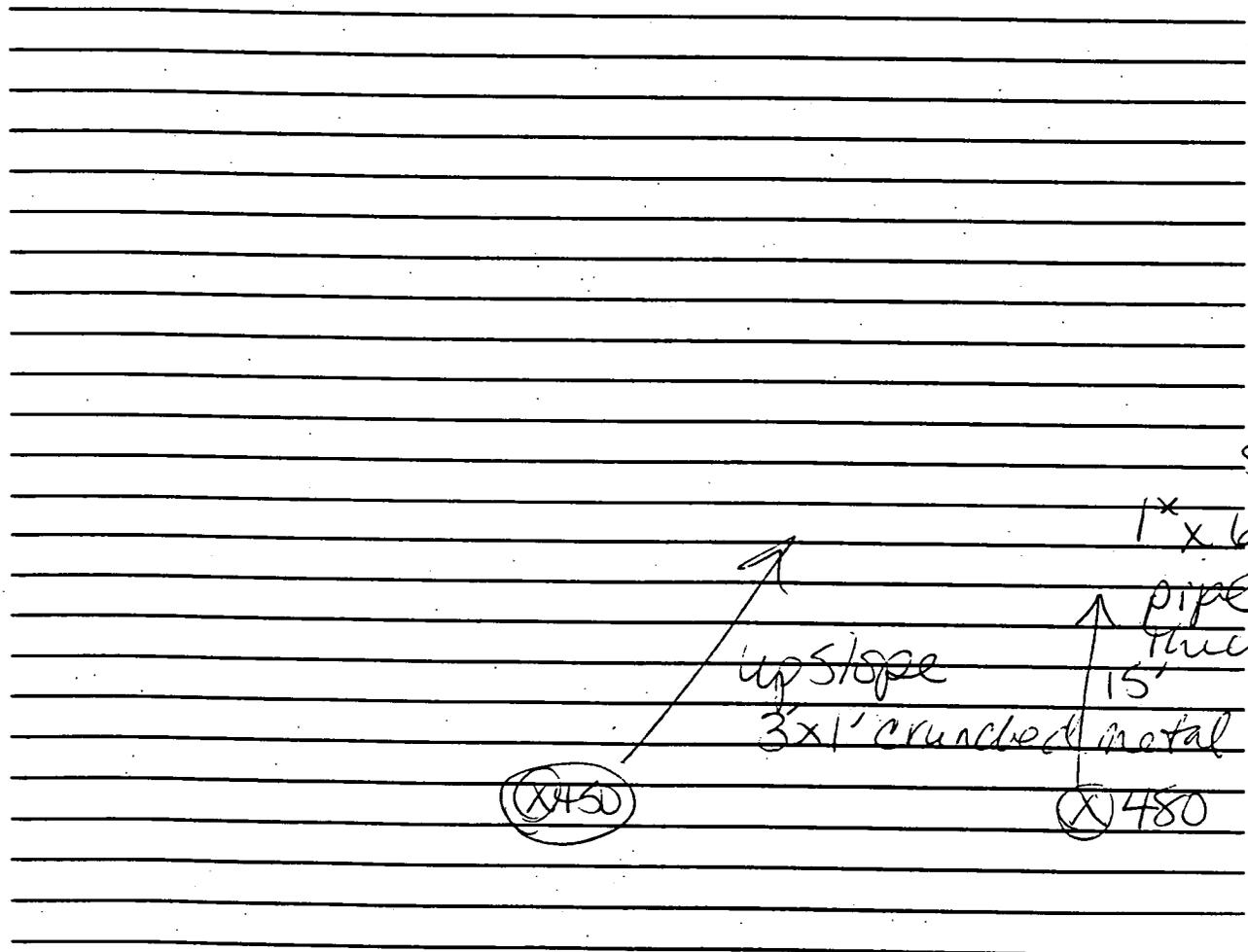
**Record of Visual Debris Form**  
Davisville, RI Site 09

Date: 11/11/96

Line No.: \_\_\_\_\_

Position No.: 450/450

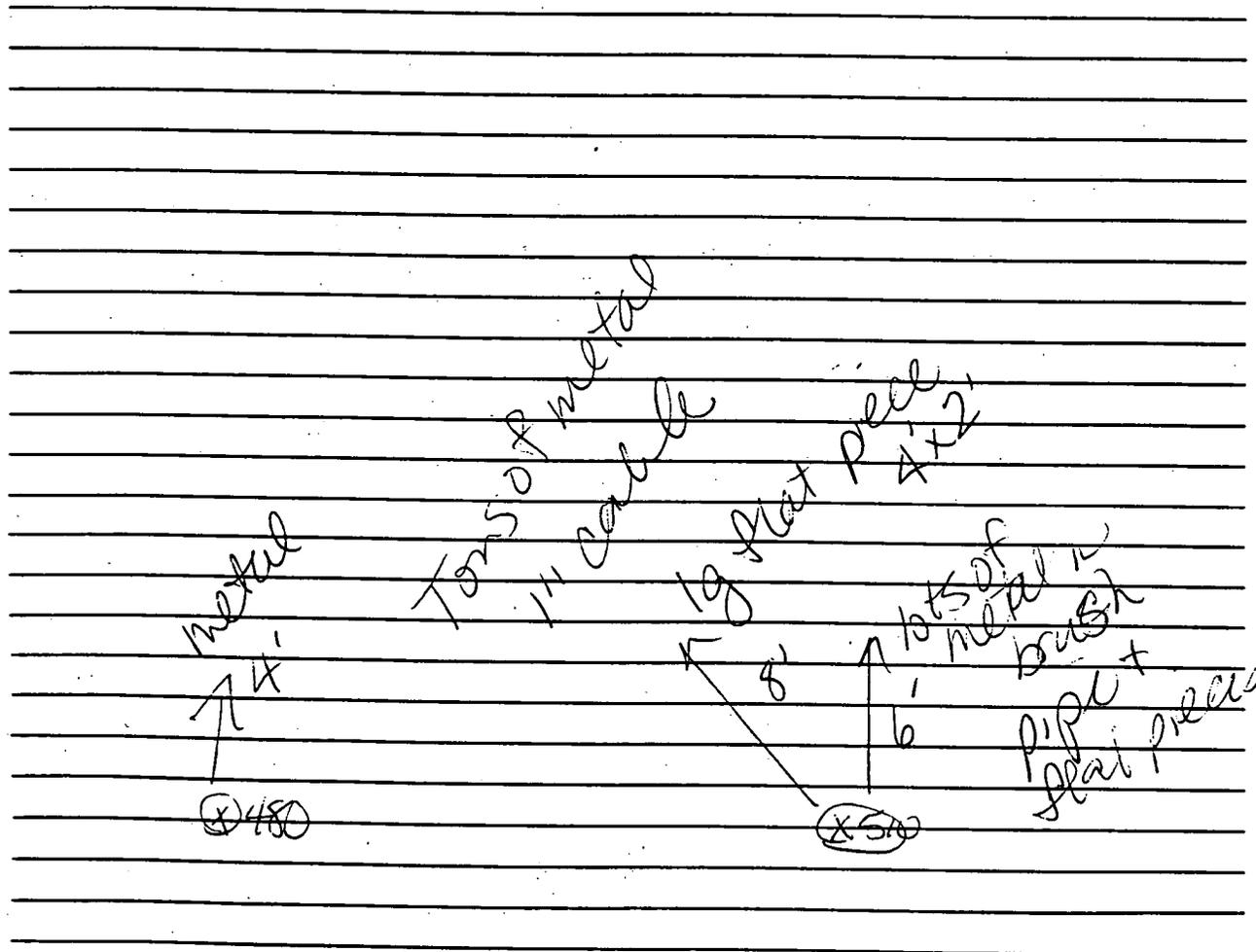
1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96  
Line No.: 1  
Position No.: 480/510

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11/11/96

Line No.: 1

Position No.: 690 → 720

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

lots of metal washing  
from land fill to Harbor  
Slope eroded away

picture →  
x 690 720

Record of Visual Debris Form  
Davisville, RI Site 09

Date: \_\_\_\_\_  
Line No.: 1  
Position No.: 1200/1230

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (.e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

1200

Concrete all around  
land fill continues into harbor  
10-15' visual debris  
Observed partially covered  
w/ sediment

1230

lots of concrete  
tons of metal  
large metal  
square of  
5' of water  
in 10' away  
metal  
hardware

Record of Visual Debris Form  
Davisville, RI Site 09

Date: \_\_\_\_\_  
Line No.: 1  
Position No.: 1800

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

pic 15  
metal cable near flag  
1/4 inch  
3-4 inch  
from 25' long  
per 3-5' long  
metal  
pipes  
insulated

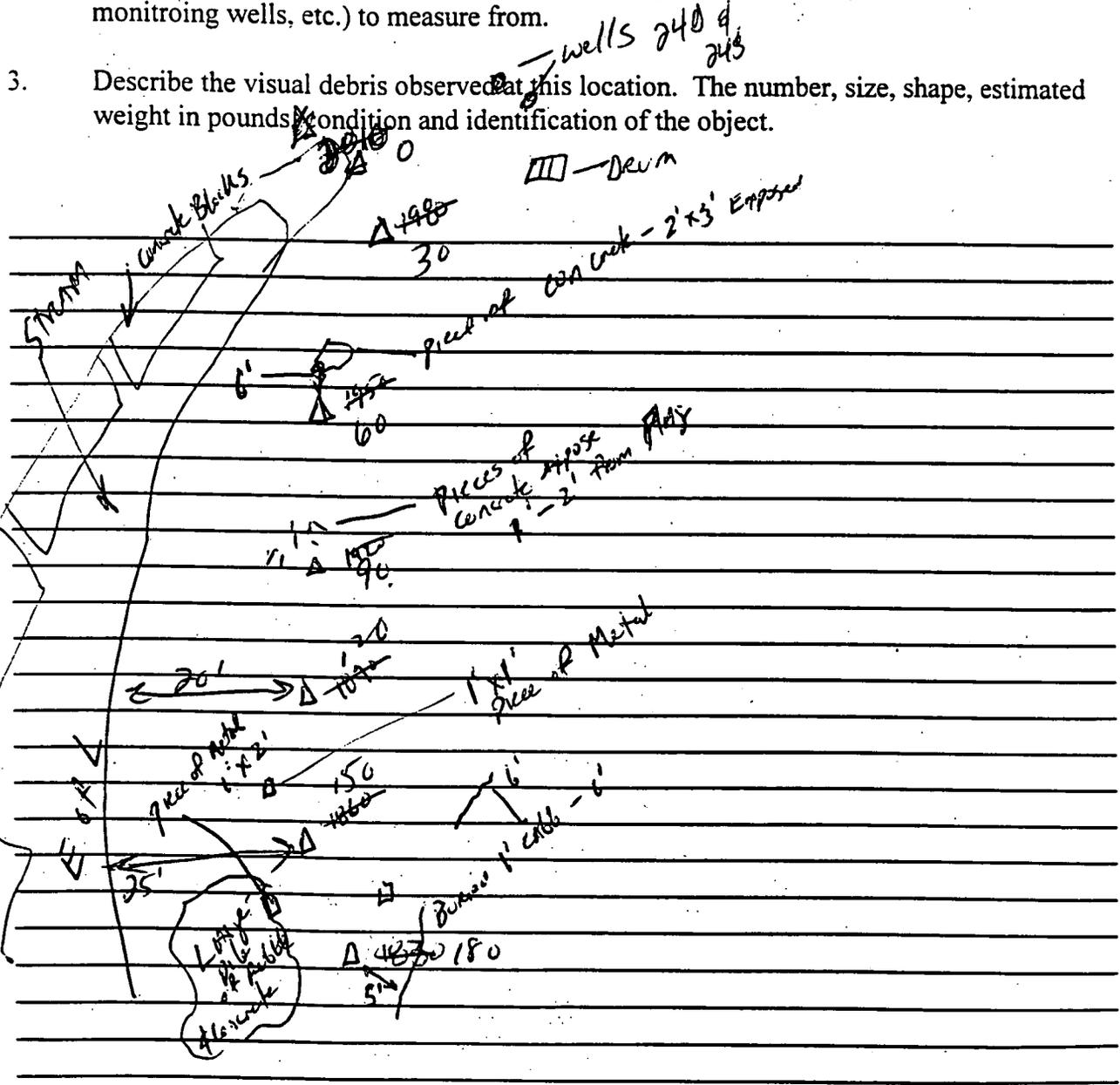
**Record of Visual Debris Form**  
Davisville, RI Site 09

Date: 11/8/96

Line No.: 6

Position No.: 1430 → 1480  
0 → 180 *R/LA*

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (.e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



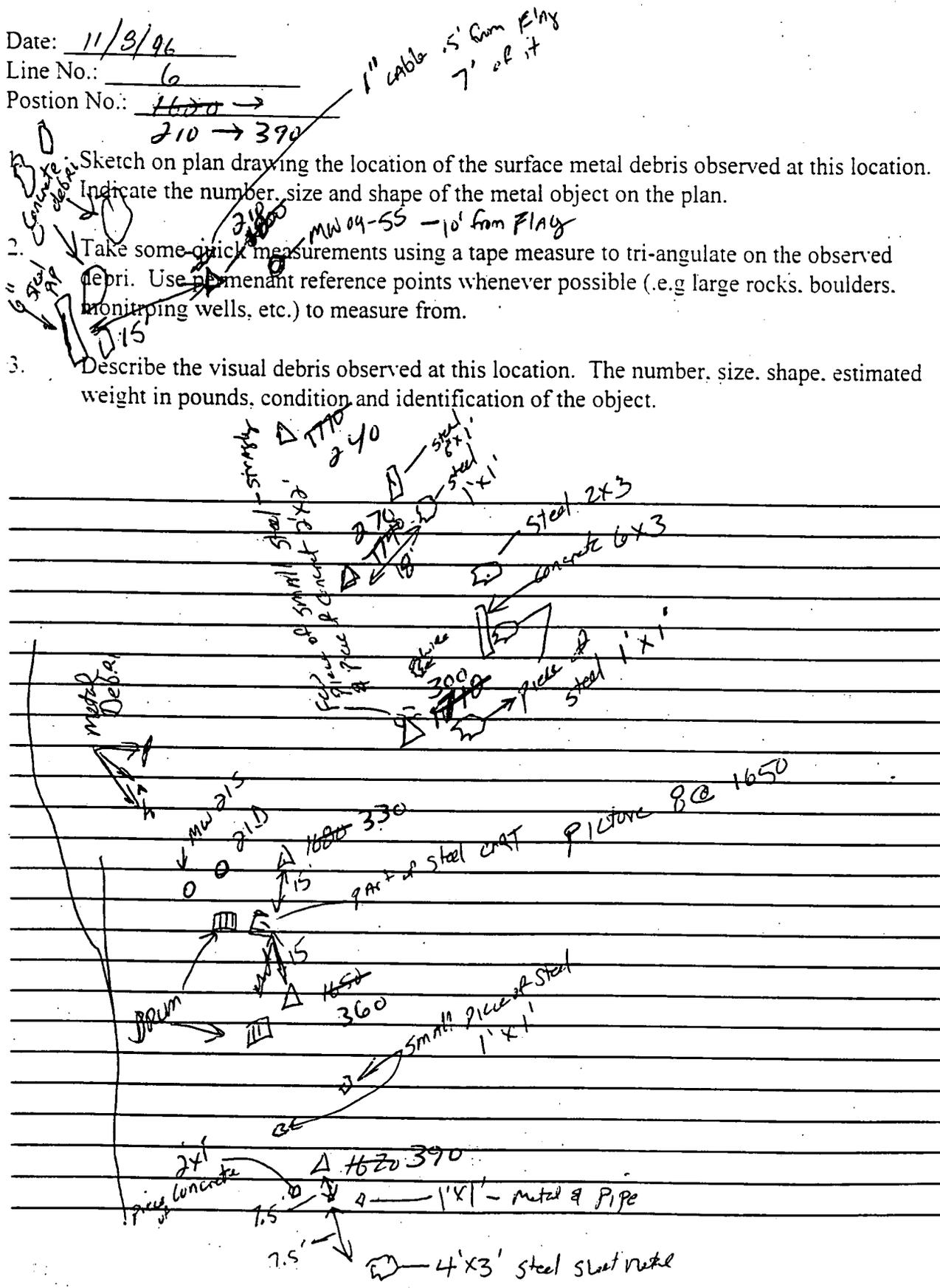
**Record of Visual Debris Form**  
 Davisville, RI Site 09

Date: 11/9/96

Line No.: 6

Position No.: H620 →  
210 → 390

- Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
- Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
- Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



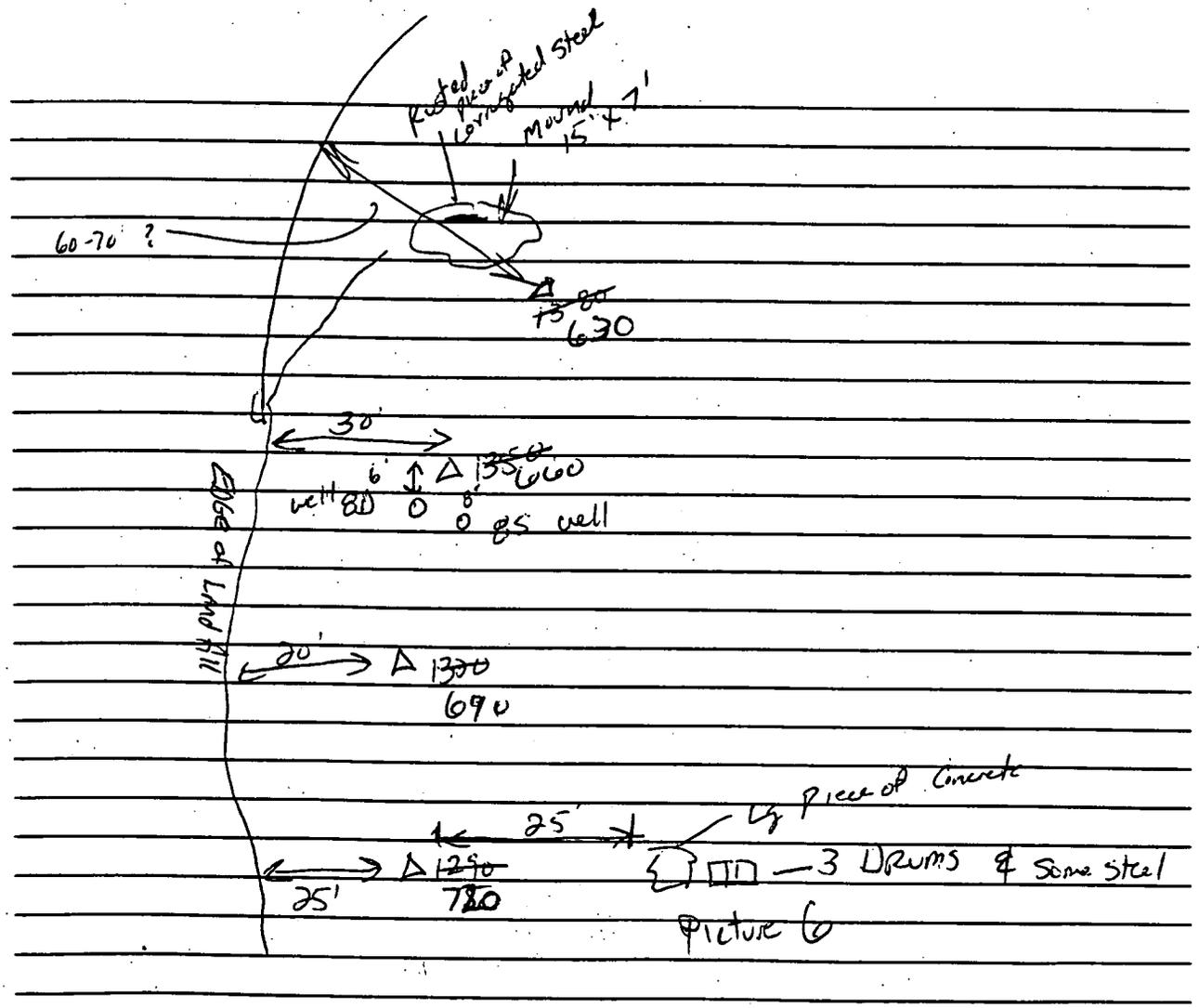
**Record of Visual Debris Form**  
 Davisville, RI Site 09

Date: 11/8/96

Line No.: 6

Position No.: 1290 → 630 → 720 R/LA

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



*used/Res*

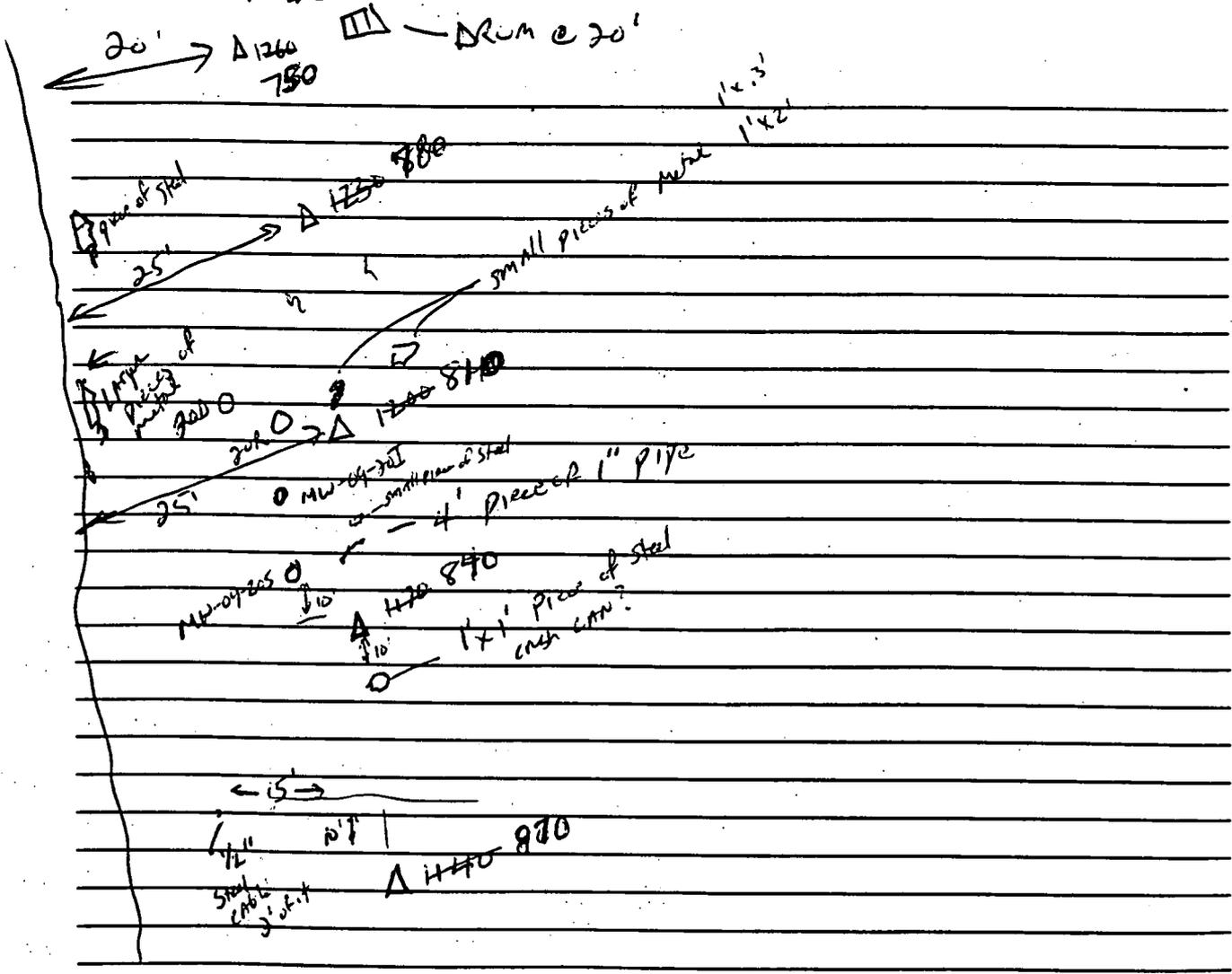
**Record of Visual Debris Form**  
 Davisville, RI Site 09

Date: 11/8/96

Line No.: 6

Position No.: H40 → H60 RCH  
750 → 870

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (.e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



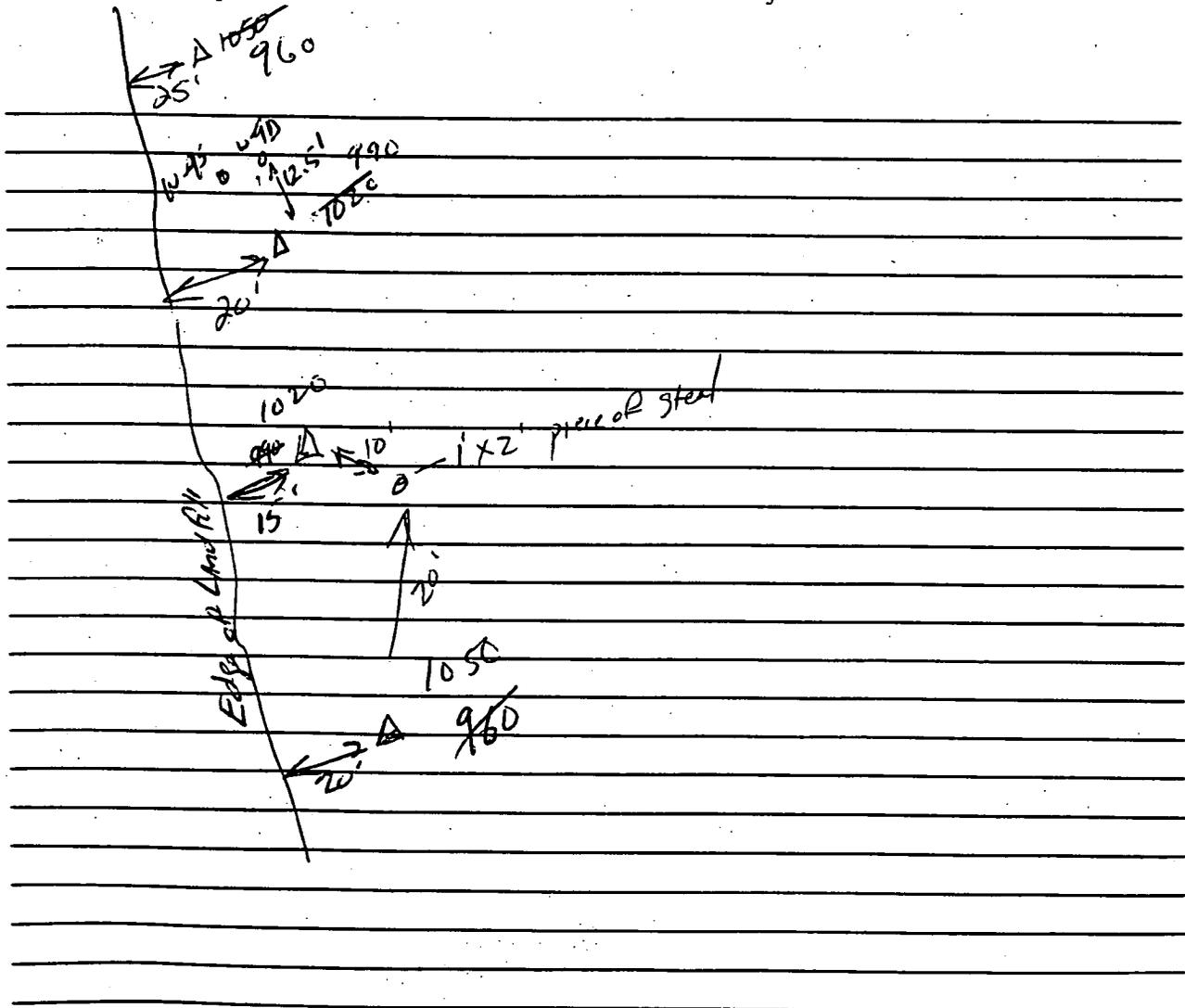
**Record of Visual Debris Form**  
 Davisville, RI Site 09

Date: 11/2/96

Line No.: 6

Position No.: 966 - 996 →  
                   1050    1070    960

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debri. Use permanent reference points whenever possible (.e.g large rocks. boulders. monitroing wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



**Record of Visual Debris Form**  
 Davisville, RI Site 09

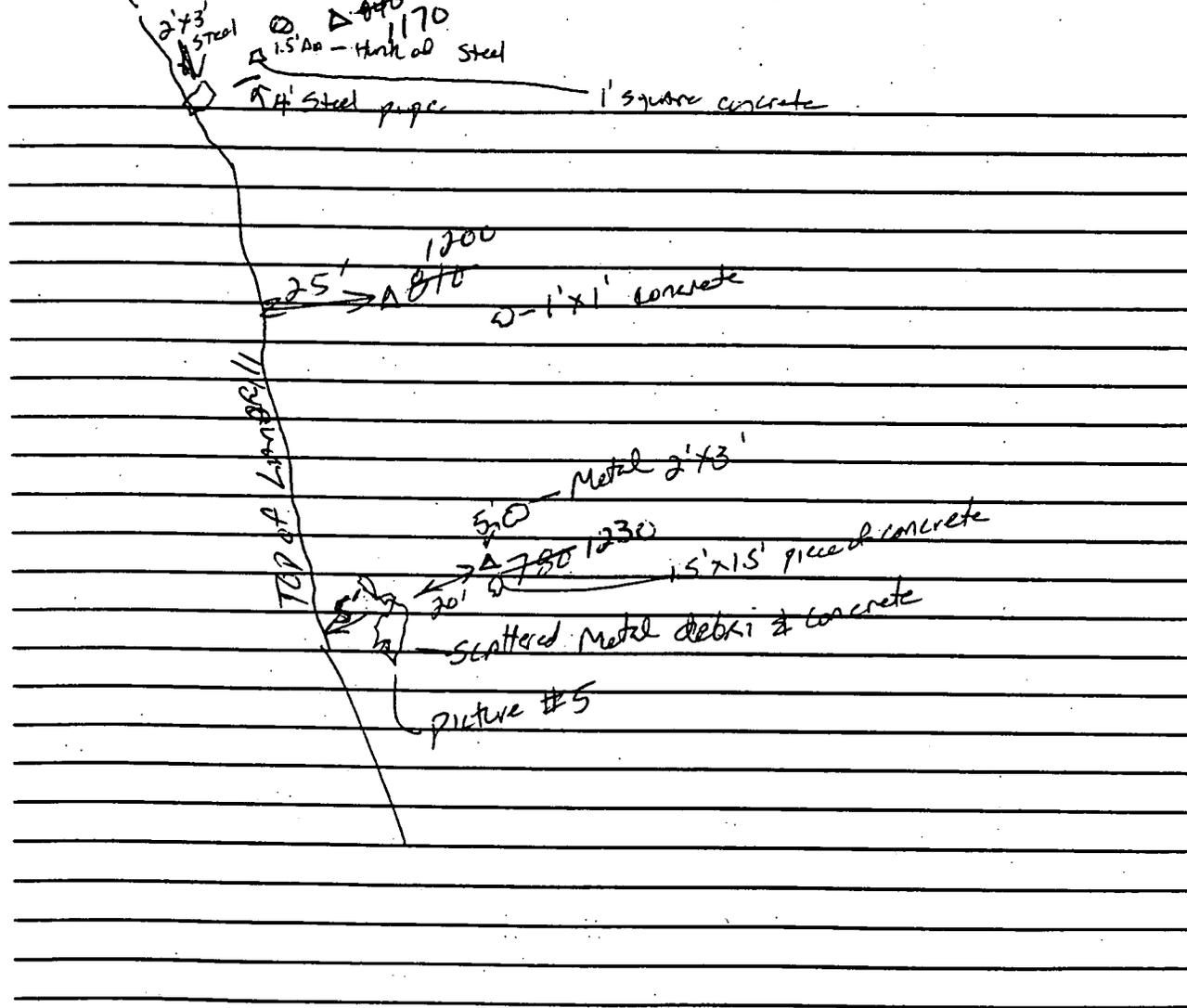
Date: 11/8/96

Line No.: 6

Position No.: 750

1140 → 1230 RUN

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

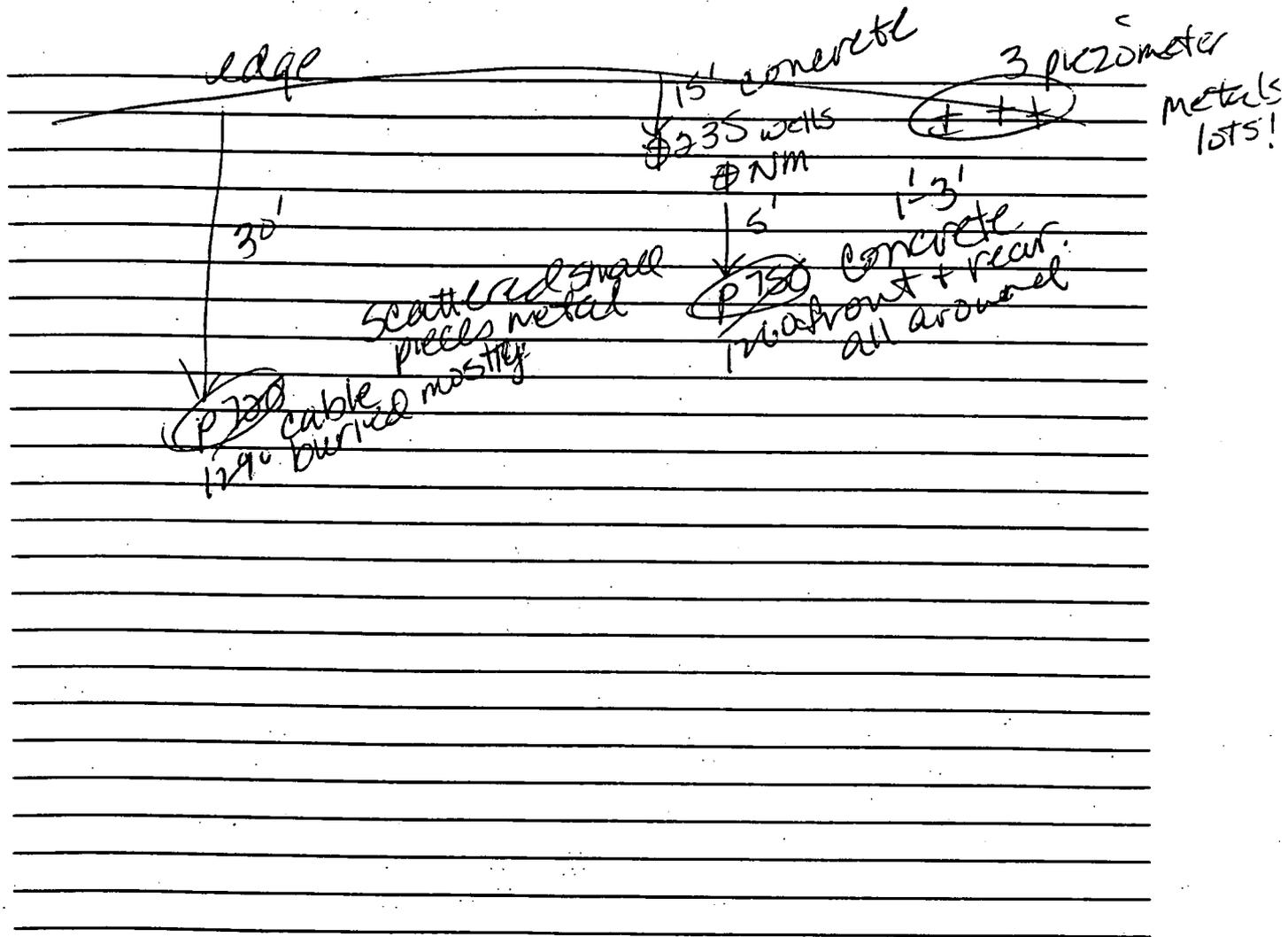
Date: 11-8-96

Line No.: 6

Position No.: 720/750

1290/1260

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



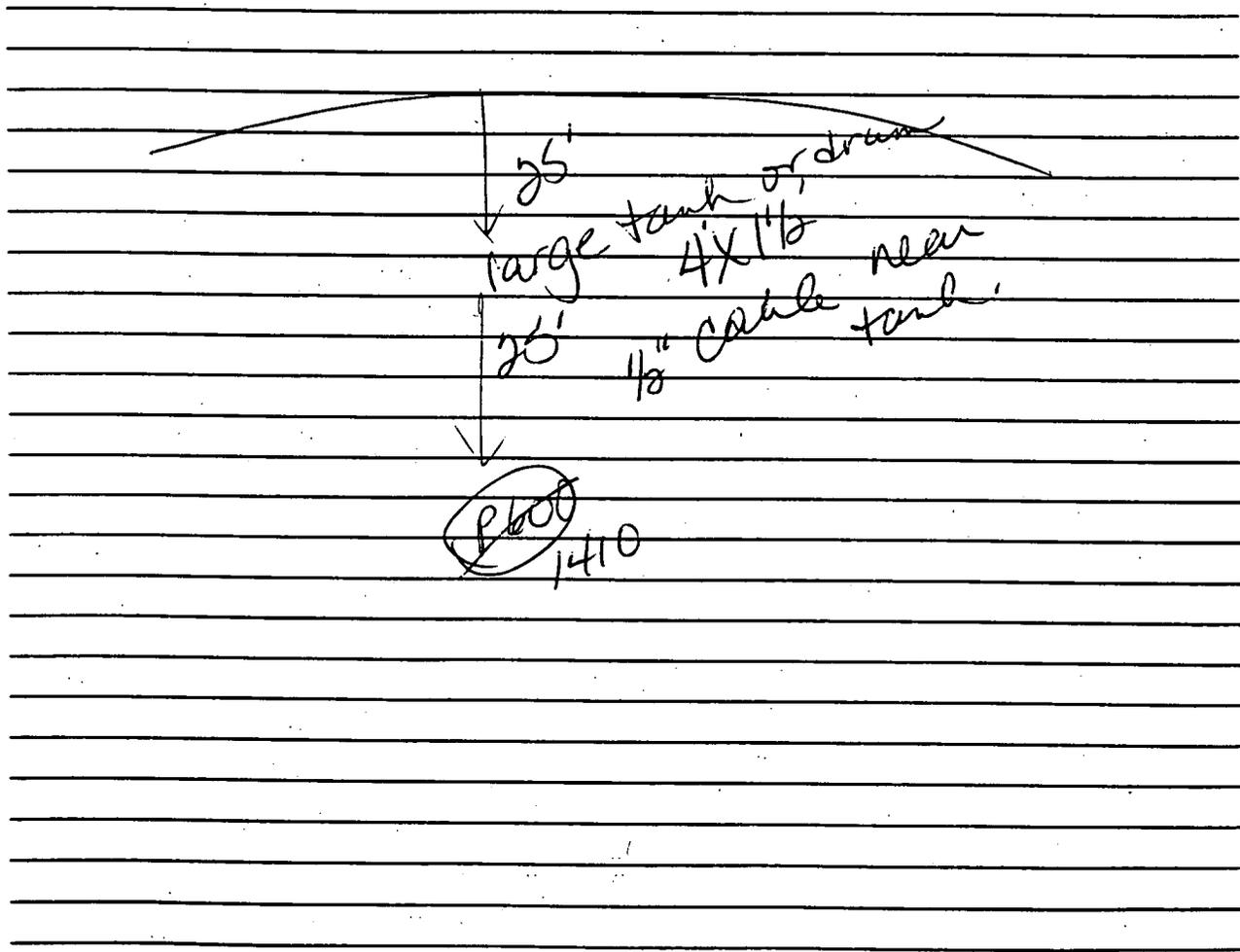
Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Position No.: ~~600~~ 1410

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Position No.: 1090/320 *2A*

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

*med.*  
metal right on location 1' x 4"  
10' toward shore - more metal 1 1/2' x 1 1/2'  
~~metal~~ small pieces 6" - 10" between locations

*loc.* 30' from edge

Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Position No.: 660 1350 *RLR*

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

piece of metal - mostly buried 4' inland  
8' toward edge large piece metal  
& concrete w/ rebar.  
mostly buried

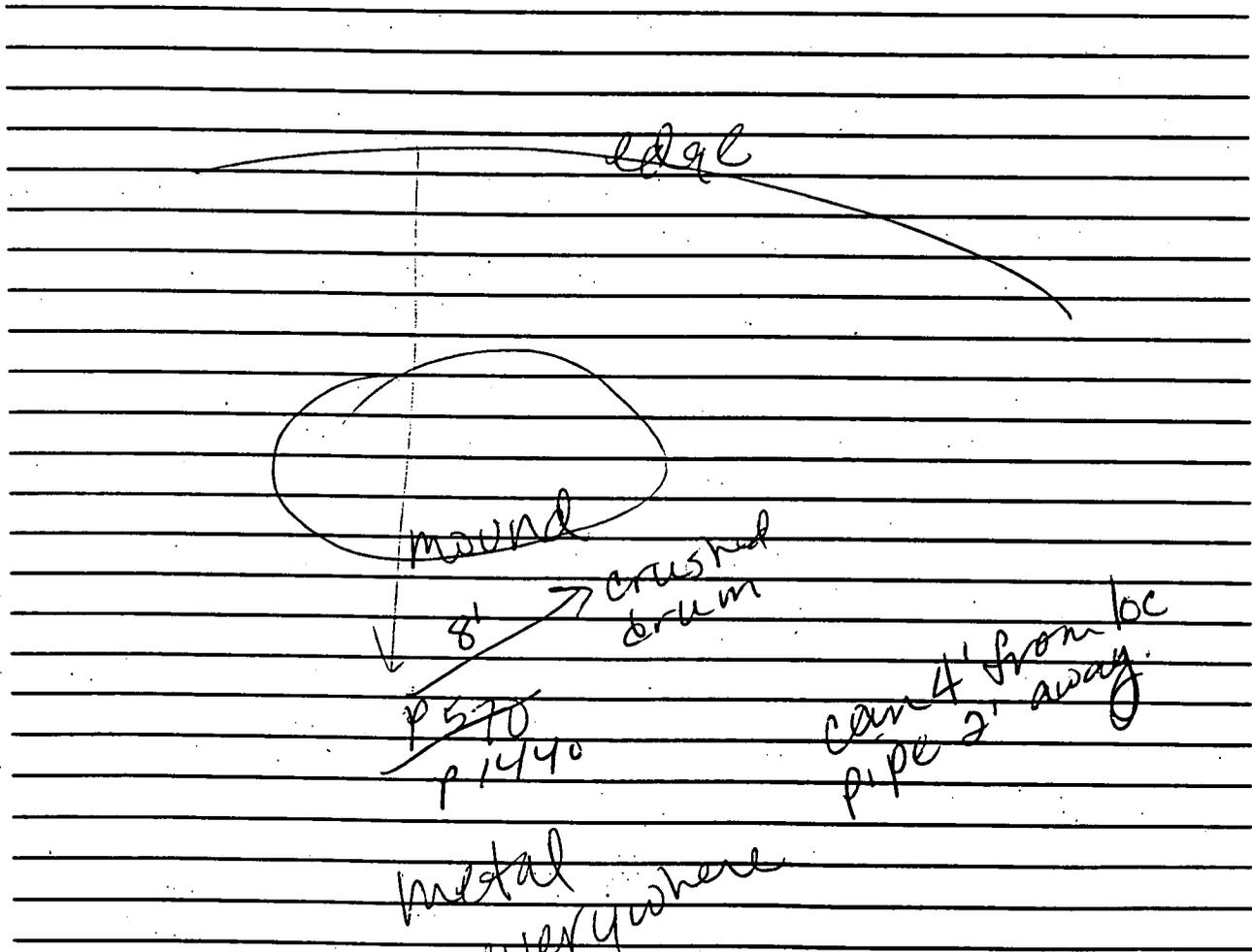
Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Postion No.: ~~570~~ 1440<sup>Rut</sup>

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debri. Use permanant reference points whenever possible (.e.g large rocks, boulders, monitroing wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



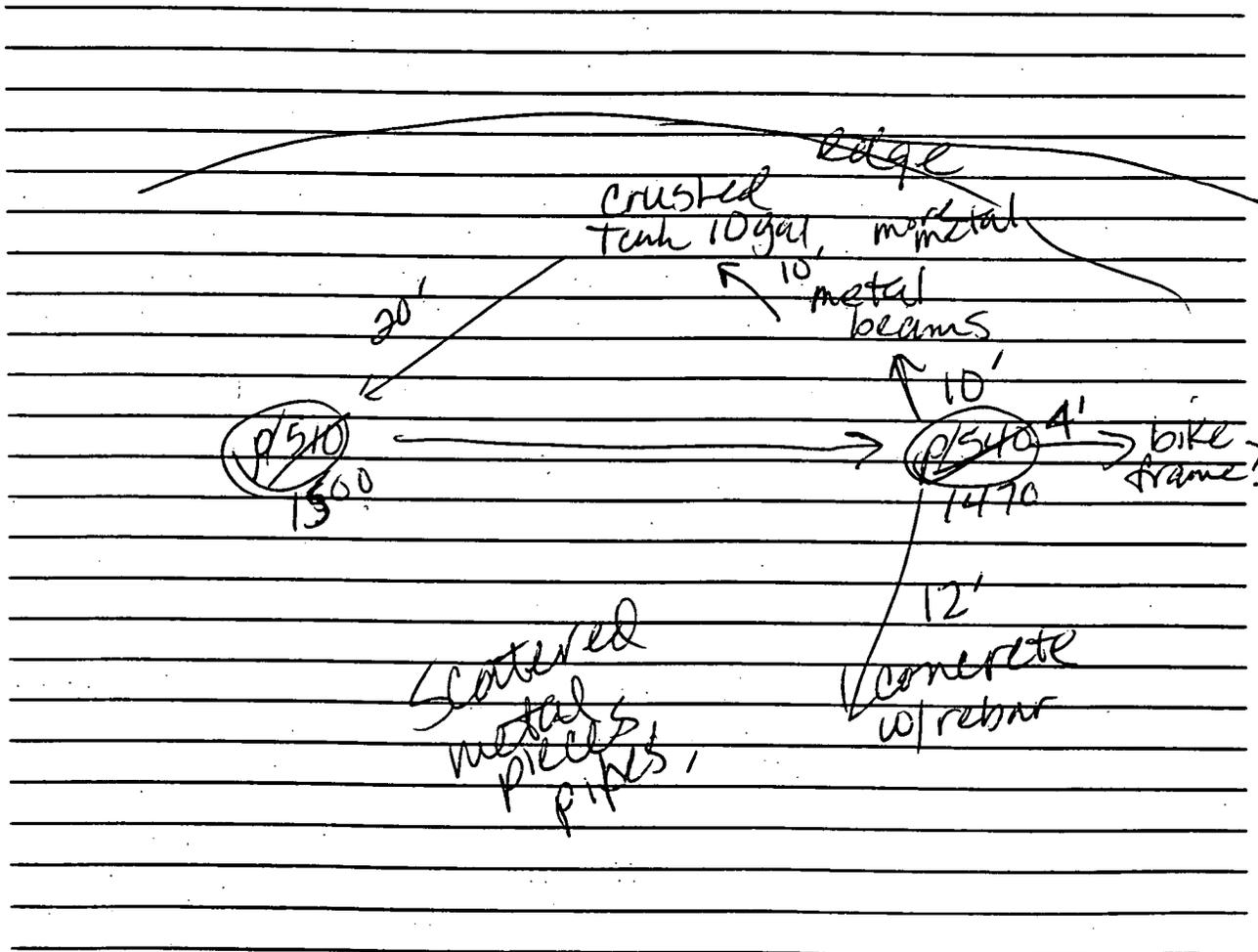
Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Position No.: 510/540  
1500/1470

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (.e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

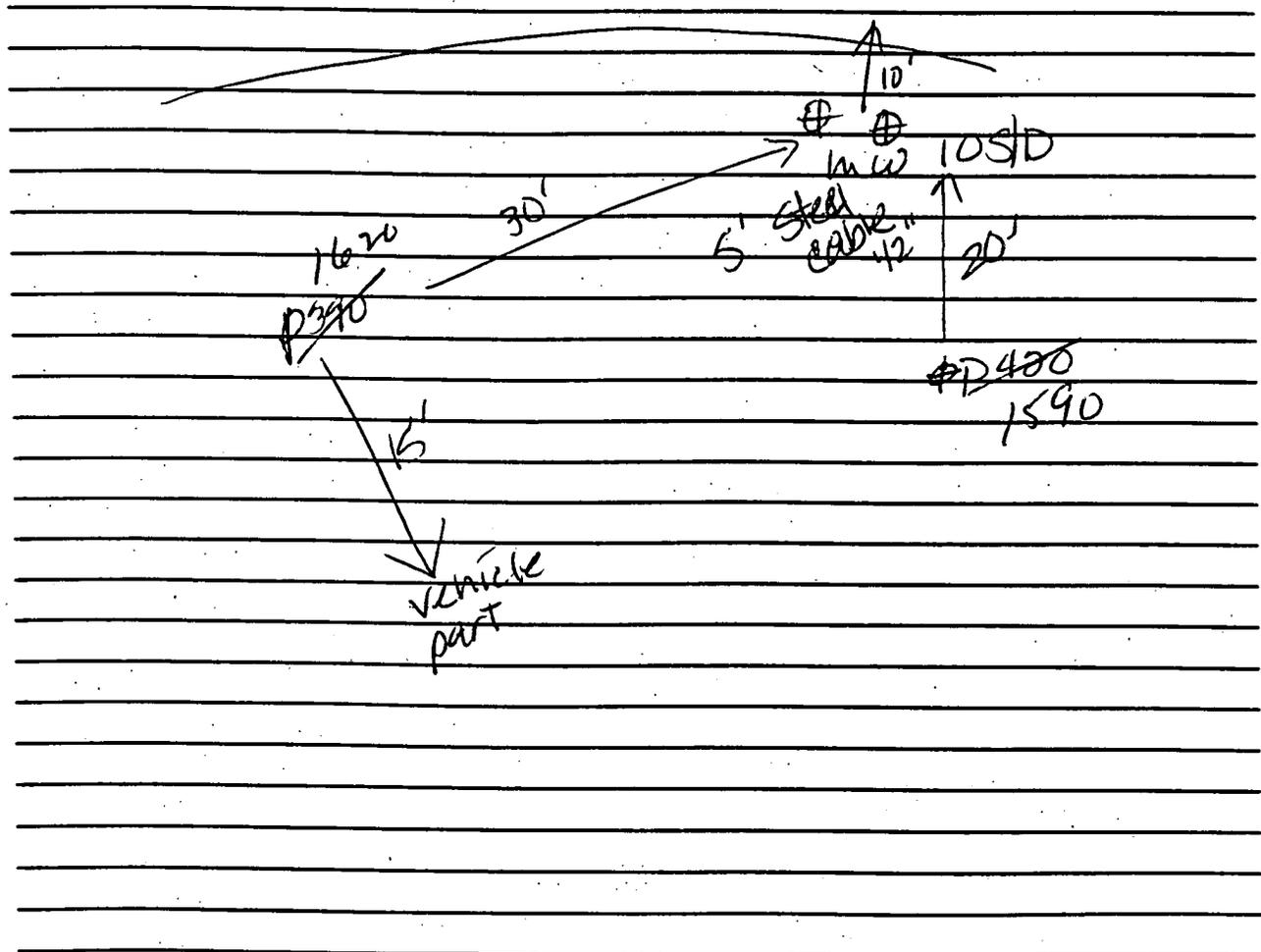
Date: 11-8-96

Line No.: 6

Position No.: 390/420

1620 / 1590

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Position No.: ~~360~~ 1650

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (.e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

35' from edge

3/4" metal cable - about

pic (S)

about 20' visible

5' from loc'

Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Position No.: ~~240~~ 1770

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

<sup>4'</sup>  
3/4" steel cable (2' from flag. (inland))  
↳ goes into ground, 4' visible

45' from edge

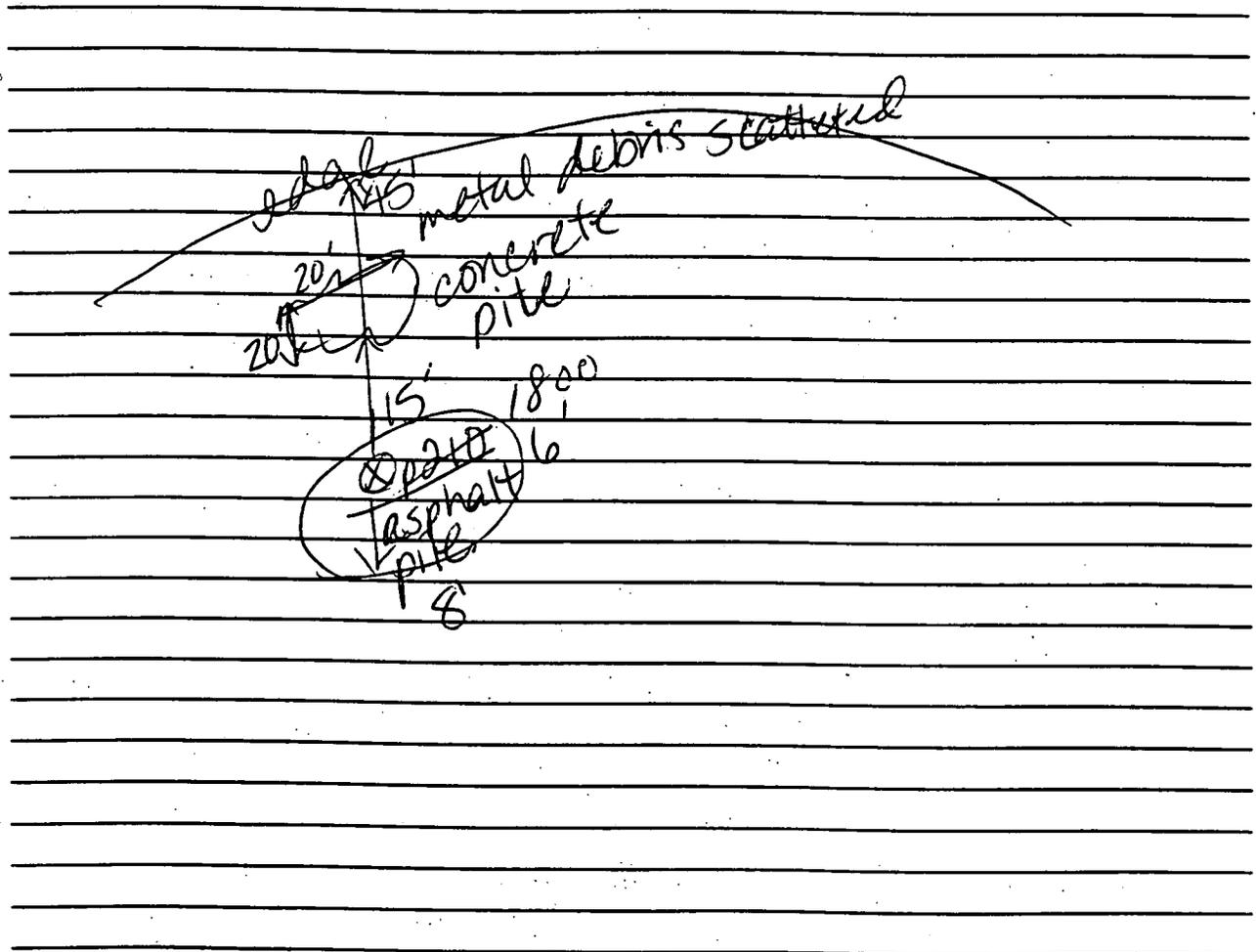
asphalt + concrete

picture (4)

Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96  
Line No.: 6  
Position No.: 210 1800

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



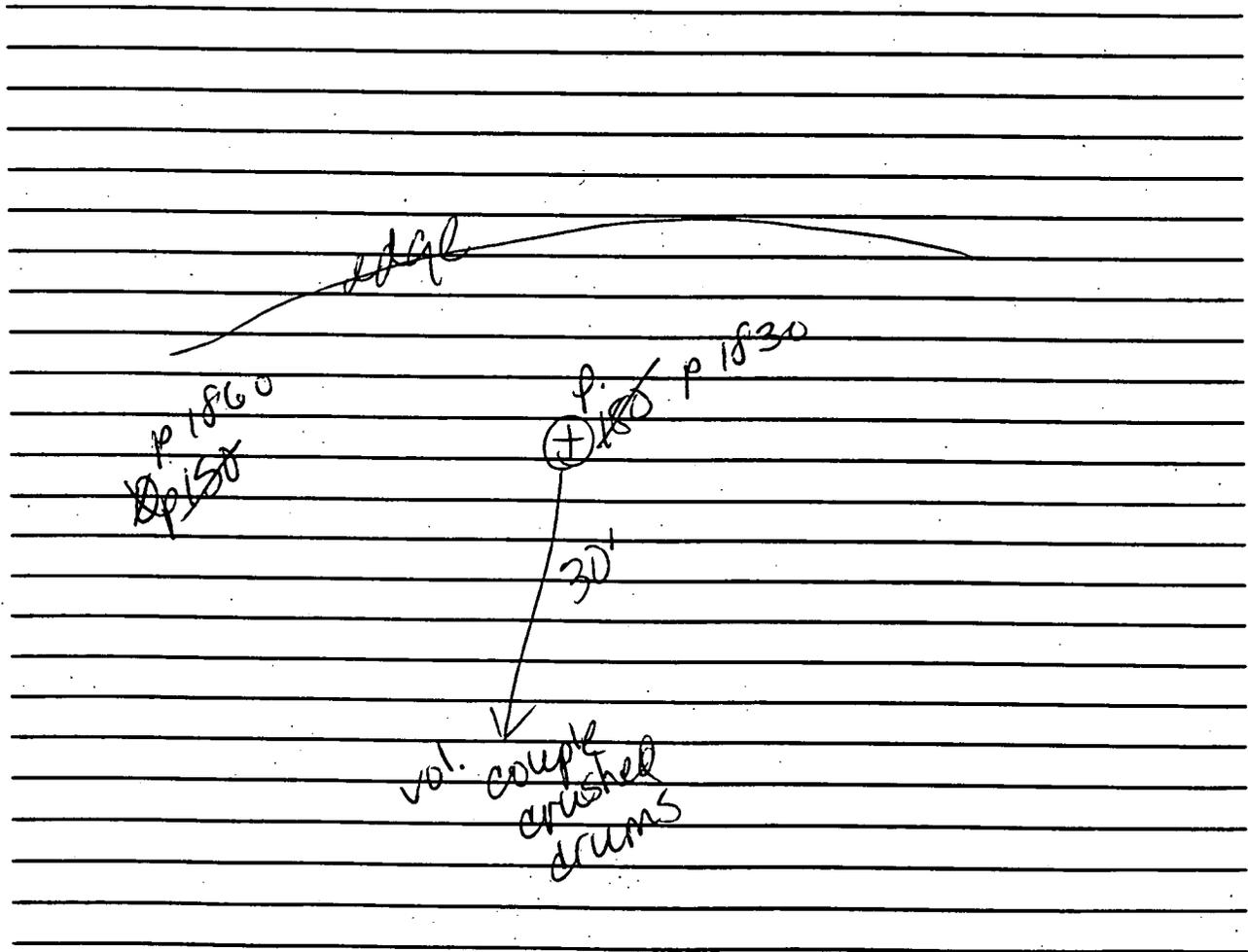
Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Position No.: ~~185~~ 1830

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (.e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



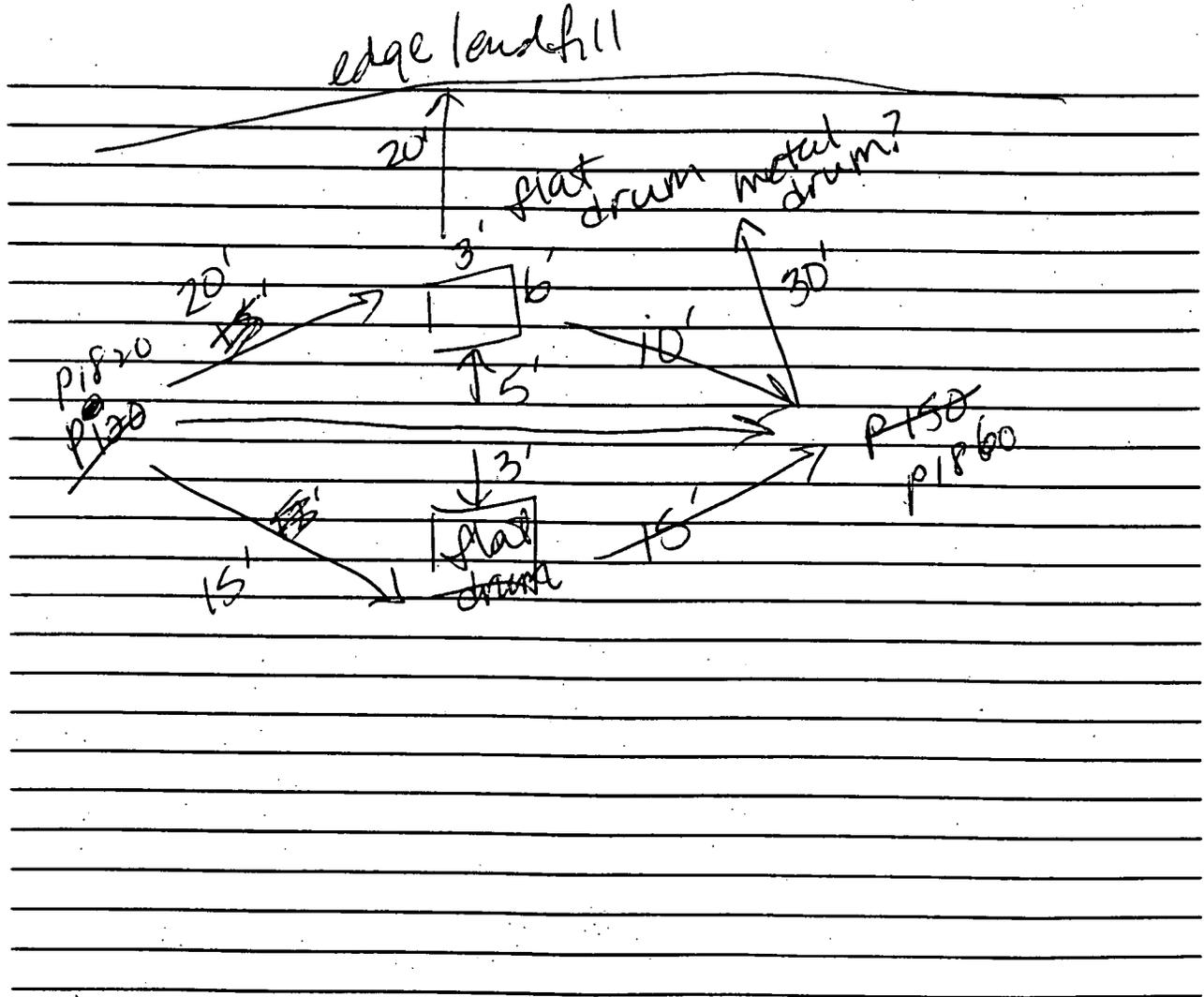
Record of Visual Debris Form  
Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

Position No.: 120/150  
1890     1860

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.



**Record of Visual Debris Form**  
 Davisville, RI Site 09

Date: 11-8-96

Line No.: 6

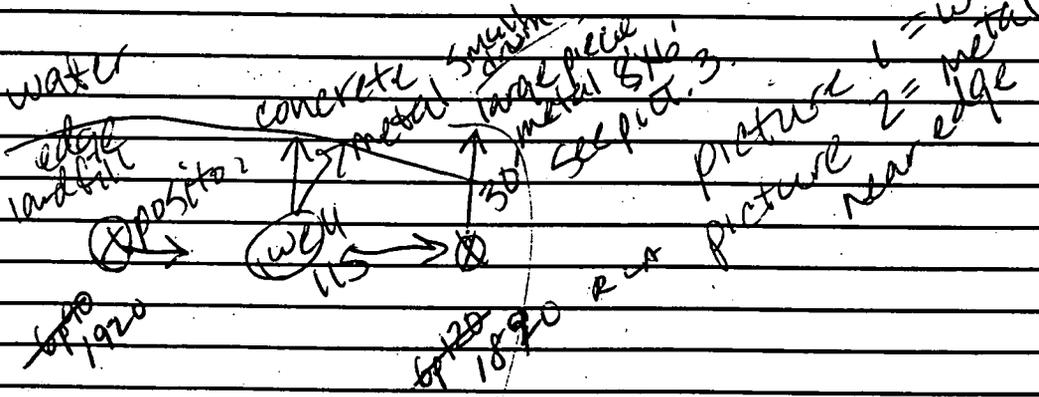
Position No.: 90/120 RIA  
1920 / 1890

1. Sketch on plan drawing the location of the surface metal debris observed at this location. Indicate the number, size and shape of the metal object on the plan.
2. Take some quick measurements using a tape measure to tri-angulate on the observed debris. Use permanent reference points whenever possible (e.g. large rocks, boulders, monitoring wells, etc.) to measure from.
3. Describe the visual debris observed at this location. The number, size, shape, estimated weight in pounds, condition and identification of the object.

Well 115 approx 10' in front of position

Concrete + steel over edge of land fill

approx 15-20' from location



looks like small tank 25-30 gal.

- pic 1 well 115
- pic 2 Small Drum + concrete
- pic 3 drum + large metal piece