REDACTED VERSION

PHASE II
SITE INSPECTION PRIORITIZATION REPORT
AND PRESCORE PACKAGE
GARY JOB CORPS CENTER
REEDVILLE, CALDWELL COUNTY, TEXAS
EPA ID NO.: TX1161630644

Prepared for:

U.S. Environmental Protection Agency
Region VI
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INTRODUCTION

Roy F. Weston, Inc. (WESTON®) is pleased to present this report which summarizes the results of the file review completed for the Gary Job Corps Center (GJC) site (TX1161630644), located in Reedville, Caldwell County, Texas. WESTON was tasked by the U.S. Environmental Protection Agency (EPA) Region VI under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) to review existing file information and gather additional information as necessary (Phase II activities) to accurately evaluate the GJC site. This effort is part of the Site Inspection Prioritization (SIP) Work Assignment for various sites in EPA Region VI.

EPA established the SIP process to help assess known or potential hazardous waste sites. The SIP addresses first those sites that pose the greatest threat to human health and the environment and standardizes the criteria by which sites are evaluated within the Superfund program. Through the SIP, the EPA reviews sites that generally have had a complete Site Inspection (SI) performed on them but that have not received a final decision regarding the need for further investigation or remediation. The outcome of the SIP indicates whether the available information for the site meets a minimum standard of evaluation reflecting the requirements of the revised Hazard Ranking System (HRS). The SIP process better enables the EPA to determine if a site is likely to receive a score of 28.5 or above under the HRS, potentially making it a candidate for placement on the National Priorities List (NPL). If it is determined that the site will not score above the NPL threshold of 28.5, the EPA is in a position to declare No Further Remedial Action Planned (NFRAP) status for the site.

SITE BACKGROUND INFORMATION

The GJC site is located on Highway 21, 1 mile northeast of San Marcos, Caldwell County, Texas. A Site Location Map is provided as Attachment 1, Figure 1. The 817-acre site is a residential vocational training center for economically disadvantaged youth. The school occupies a portion of a former World War II air base. The Department of Defense closed the base in 1965 and deeded the airport and the land northeast of the facility to the City of San Marcos. The Department of Labor obtained the main base and surrounding buildings in 1965 for use by the Gary Job Corps as its educational campus. The City of San Marcos operated a municipal landfill in the eastern portion of the site between 1968 and 1984. The landfill is identified under a separate EPA I.D. number (TXD980625222); however, for the purposes of this assessment, it is considered a part of the GJC site. A Site Area Map is provided as Attachment 1, Figure 2.

During its operation, the Air Force Base allegedly buried tetraethyl lead on-site. However, due to insufficient information, the exact location of the buried contaminants is undetermined. The base stored approximately 375 electrical transformers on-site, which reportedly contained polychlorinated biphenol (PCB) oil. According to a 1988 sampling plan by Ecology and Environment, Inc. (E&E), a well-contained storage area was built onsite, and the transformers, some reportedly leaking, were transferred to the storage area for later repair or disposal. As of

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1992, all transformers had been removed from the site. The San Marcos Municipal landfill was closed in 1984 under the approval of the Texas Department of Health. A Site Plan Map is provided as Attachment 1, Figure 3.

Previous investigations at the GJC site are described below:

- A Potential Hazardous Waste Site SI of the GJC site was conducted by E&E on 18 February 1988. The report discussed the possibility of contamination at the sight from past activities including the burial of tetraethyl lead, the storage of transformers containing PCB oil, and the San Marcos municipal landfill operation.

- A Sampling Plan was completed for the site by E&E on 10 May 1988. The plan discussed the containment of the transformers containing PCB oil and proposed sampling locations to delineate areas of contamination.

- A Sampling Mission Report was completed by E&E on 12 January 1989. On 18 to 20 October 1988, a Field Inspection Team (FIT) sampled two monitoring wells and four residential drinking wells near the landfill. Sampling results documented a release of hazardous materials to the alluvial aquifer underlying the closed landfill and a lateral migration of cis-1,2-dichloroethene into nearby residential wells, also tapped in the alluvial aquifer.

- A Resampling Report was completed by E&E on 16 May 1989. The FIT resampled the four residential wells on 25 January 1989 to confirm contamination of groundwater attributable to the site. Analytical results of samples collected at the site documented the presence of 1,1-dichloroethane, cis-1,2-dichloroethene, trichloroethene, and 1,4-dichlorobenzene in the alluvial aquifer. Cis-1,2-dichloroethene was detected in all four residential wells with the [redacted] (b) (6) barn well have the highest concentration, 54.3 parts per billion (ppb).

HRS SCORING

Using the data provided from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, WESTON developed a Hazard Ranking System (HRS) score for the site using PREscore (Version 3.0). The PREscore is included as Attachment 2. The site received a score of 2.01 based on the waste characteristics and migration pathway scoring factors discussed in the following paragraphs.

Phase II Data

Additional site information resulting from Phase II SIP efforts (information/data gathering) is described below.

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Identification and Location of Private Wells

Water wells located within 1 mile of the site were identified based on the results of information from the E&E 1988 sampling mission and a 1995 Texas Water Development Board water well search. There are a total of eight groundwater wells within a 1-mile radius of the site. These wells include five domestic and three monitoring wells. The wells range from 20 feet to 40 feet deep. A Water Well Location Map showing the wells located within a 1-mile radius of the site is provided as Attachment 1, Figure 4.

Identification of the Surface Water Pathway

Drainage from the major portion of the site enters an intermittent drainage ditch on-site and flows south approximately 2.2 miles before reaching the perennial Blanco River. Drainage from the eastern end of the site enters an intermittent drainage ditch and flows southeast for approximately 1.9 miles before entering the intermittent Hemphill Creek. Hemphill Creek then flows south for approximately 2.8 miles before entering the Blanco River. Since the overland flow path does not empty into a perennial flowing water body within the 2-mile target distance limit (TDL) for intermittent flow, the surface water pathway was not evaluated.

Site Accessibility

According to the Texas Natural Resources Conservation Commission (TNRCC), the GJC site has a maintained fence around the entire facility.

Determination of Population by Distance Rings

During the Phase II effort, WESTON determined the population within target distances by using the EPA Geographical Exposure Modeling System (GEMS) Population Database.

DISTANCE (miles)	POPULATION
0 to ¼	2,500
¼ to ½	0
½ to 1	0
1 to 2	0
2 to 3	0
3 to 4	17,093

The total population within a 4-mile radius of the site is 19,593 people.

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SOURCE WASTE CHARACTERISTICS

According to the 1988 Sampling Plan by E&E, approximately 1,825,320 cubic yards of solid waste were deposited in the San Marcos landfill during the years of operation. No evidence exists to suggest soils at the landfill have been tested. However, the three monitoring wells surrounding the landfill have been documented to contain several contaminants with concentrations significantly greater than background levels. Target Compound List (TCL) organic analysis of samples taken from two of the monitoring wells during the 1988 FIT sampling mission indicate the presence of 1,1-dichloroethene, 1,2-dichloroethene (total), vinyl chloride, carbon disulfide, pyrene, and delta-BHC in groundwater underlying the landfill. Inorganic analysis of the monitoring wells indicated the presence of arsenic, barium, beryllium, chromium, cobalt, lead, vanadium, and zinc above background levels.

MIGRATION AND EXPOSURE PATHWAYS

Groundwater Pathway

The groundwater pathway received a score of 4.01. It is of primary concern due to the documented lateral migration of cis-1,2-dichloroethene in the shallow alluvial aquifer. The four residential wells resampled during the 1989 FIT resampling mission contained concentrations of cis-1,2-dichloroethene above background levels with the highest concentration of 54.3 ppb occurring in the (b) (6) [redacted] barn well. All four wells lie within a 0.5-to 0.8-mile range of the site and are completed in the shallow alluvial aquifer. The wells are used for domestic purposes. No contaminant concentrations exceeded maximum contaminant limits (MCLs) or health advisory standards.

Surface Water Pathway

The surface water pathway received a score of 0.00. The distance from the source to the probable point of entry (PPE) is greater than the 2-mile TDL for intermittent flow; therefore, the surface water pathway was not evaluated.

Soil Exposure Pathway

The soil exposure pathway received a score of 0.00. During its operation, the Air Force Base allegedly buried tetraethyl lead on-site; however, the exact location of the contaminants is unknown. As of 1992, all transformers containing PCB oil stored on-site have been removed. The landfill was reportedly covered with a 3-foot cap during its closure. The site is reportedly surrounded by a maintained fence and the land use around the site is mainly rural.

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Air Pathway

The air pathway received a score of 0.00. During the 1989 sampling mission, on-site air monitoring detected no significant levels of airborne contaminants.

CONCLUSIONS

The GJC site, located near Reedville, Caldwell County, Texas is an 817-acre residential vocational training center for economically disadvantaged youth. The site contains an inactive municipal landfill used by the City of San Marcos from 1968 to 1984. The overall PREscore is 2.01. The groundwater pathway is the pathway of greatest concern because two sampling missions have documented contaminants in monitoring and domestic wells located near the inactive landfill. The surface water, soil exposure, and air exposure pathways are of minimal concern because there has been no documentation of a release of hazardous constituents to these pathways.

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ATTACHMENT 1

FIGURE 1

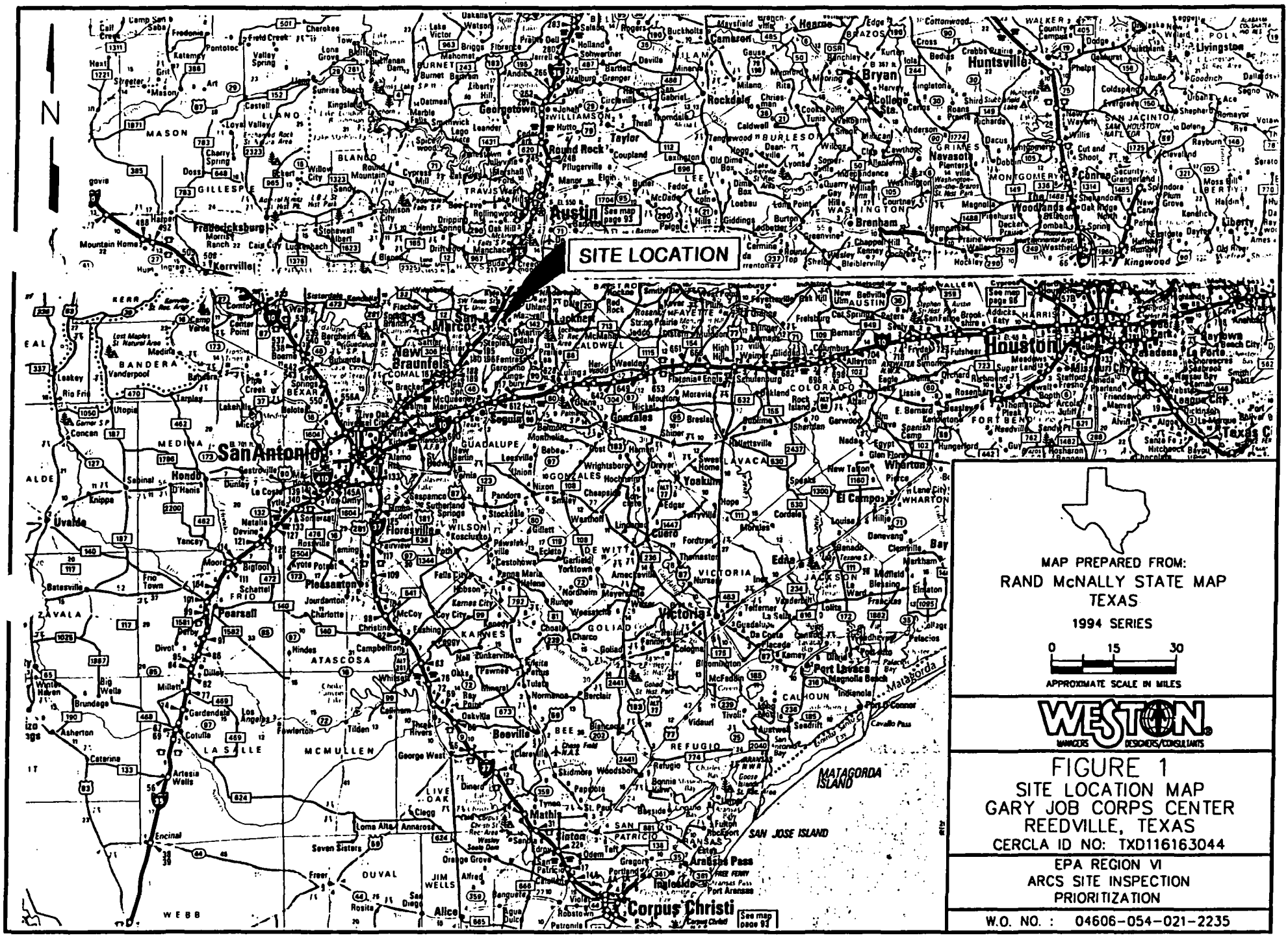

FIGURE 1
SITE LOCATION MAP
GARY JOB CORPS CENTER
REEDVILLE, TEXAS
CERCLA ID NO: TXD116163044

EPA REGION VI
ARCS SITE INSPECTION
PRIORITIZATION

W.O. NO. : 04606-054-021-2235

FIGURE 2

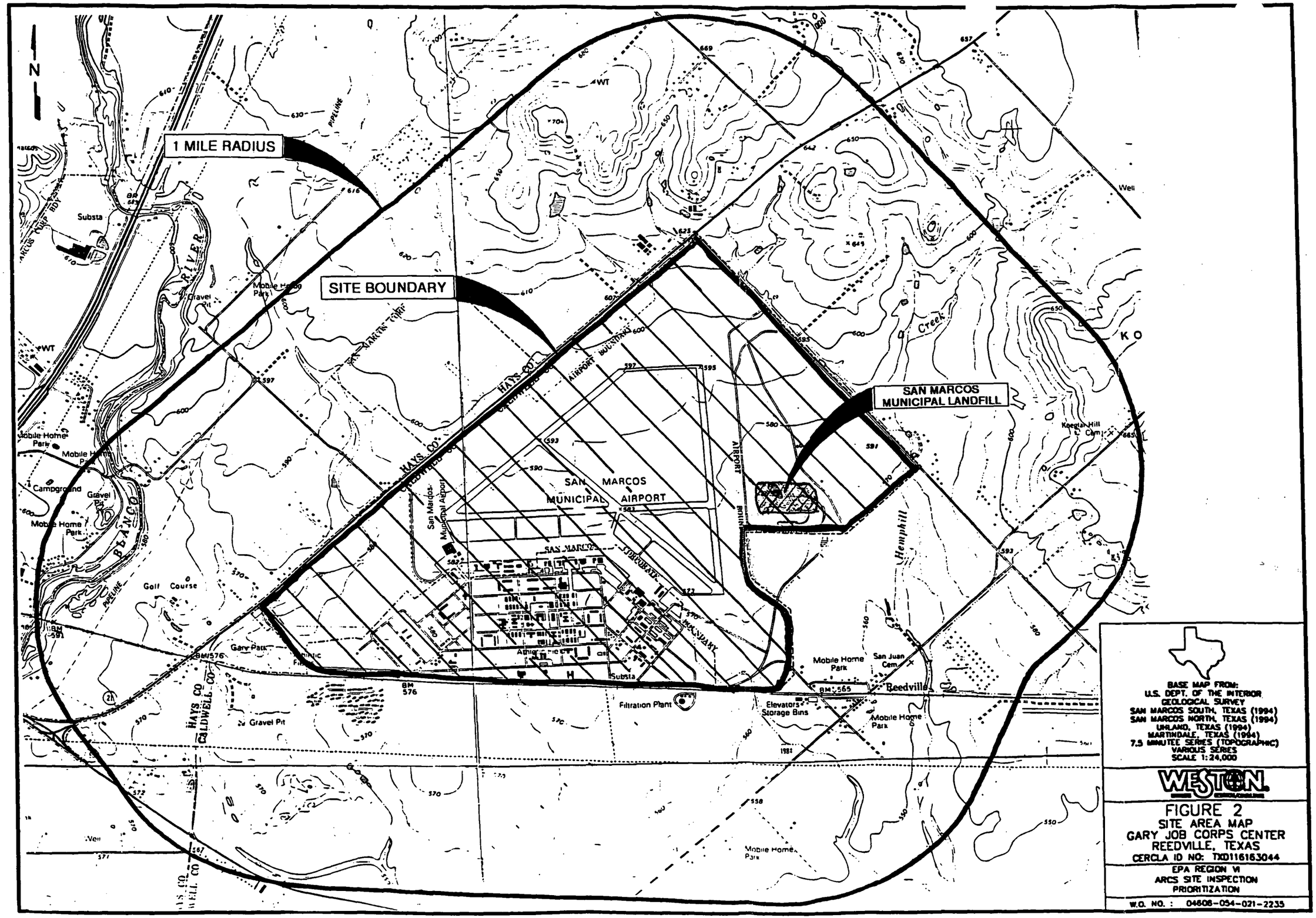

FIGURE 2
SITE AREA MAP
GARY JOB CORPS CENTER
REEDVILLE, TEXAS
CERCLA ID NO: TXD116163044

EPA REGION VI
ARCS SITE INSPECTION
PRIORITIZATION

W.O. NO. : 04608-054-021-2235

FIGURE 3

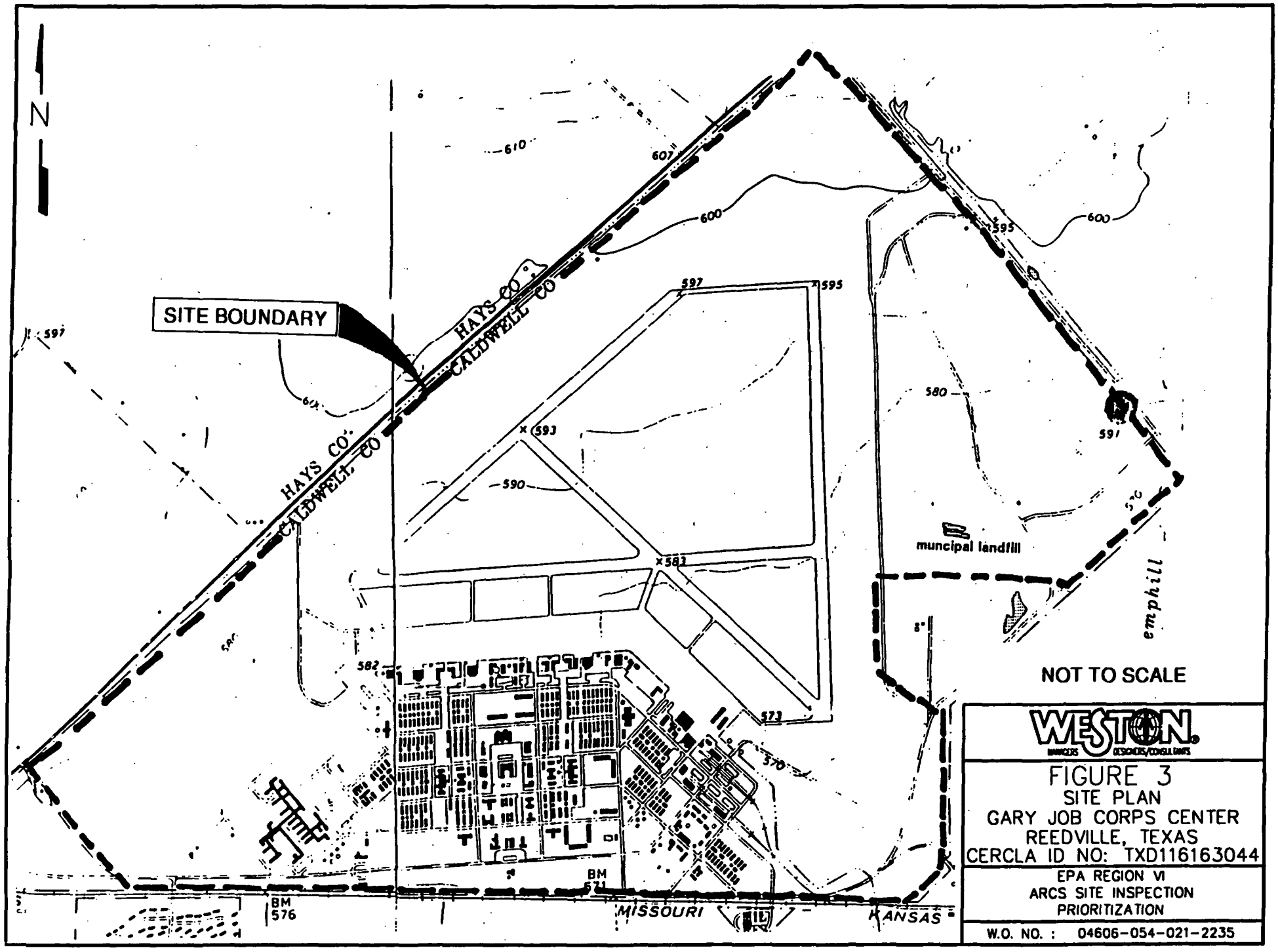

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FIGURE 3
SITE PLAN
GARY JOB CORPS CENTER
REEDVILLE, TEXAS
CERCLA ID NO: TXD116163044

EPA REGION VI
ARCS SITE INSPECTION
PRIORITIZATION

W.O. NO. : 04606-054-021-2235

FIGURE 4

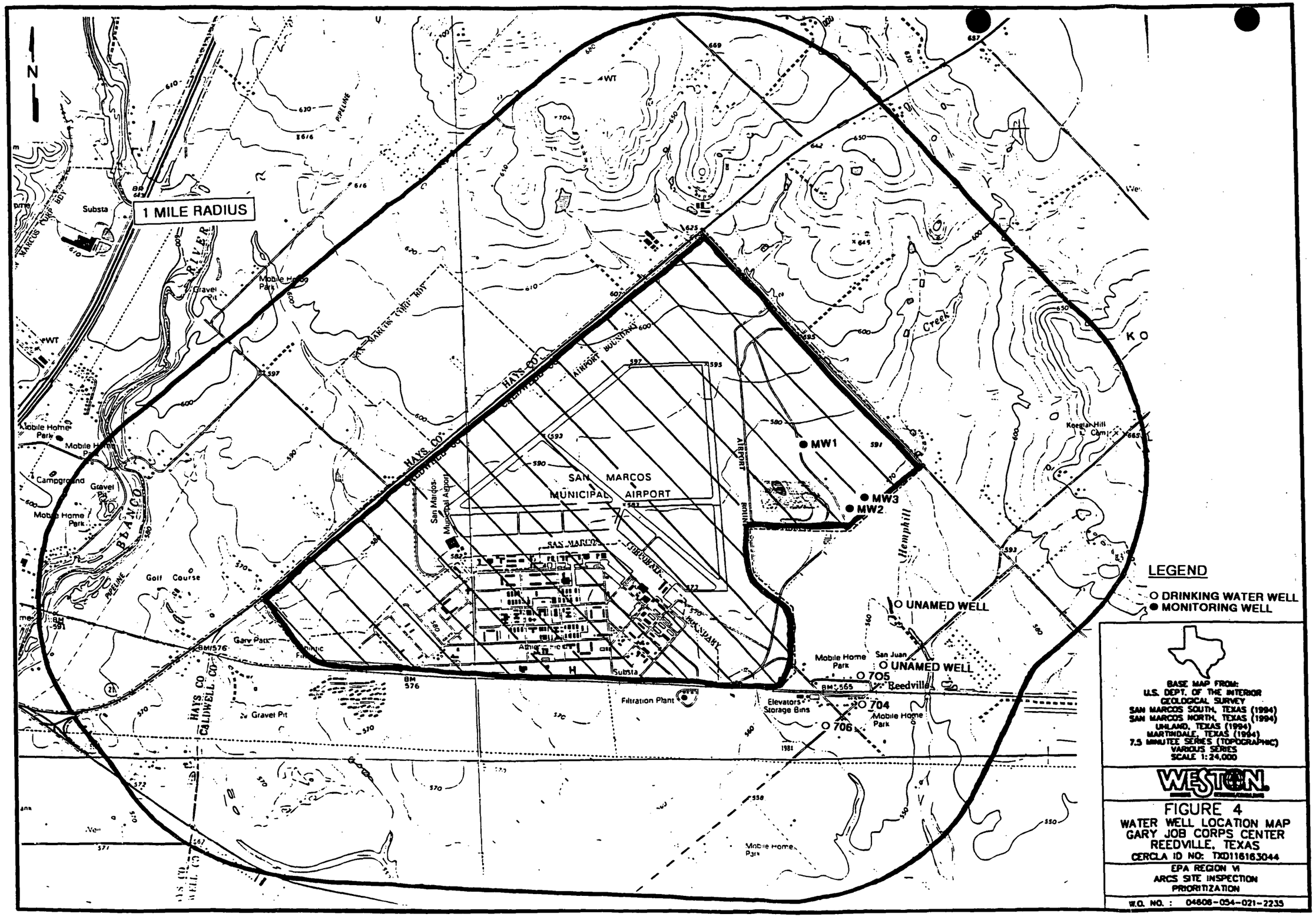

FIGURE 4
WATER WELL LOCATION MAP
GARY JOB CORPS CENTER
REEDVILLE, TEXAS
CERCLA ID NO: TXD116163044

EPA REGION VI
ARCS SITE INSPECTION
PRIORITIZATION

W.O. NO. : 04606-054-021-2235

NPL Characteristics Data Collection Form
Gary Job Corps Center - 09/11/95

Record Information

1. Site Name: Gary Job Corps Center
   (as entered in CERCLIS)

2. Site CERCLIS Number: TX1161630644

3. Site Reviewer: Peter M. Rung

4. Date: 8/23/95

5. Site Location: Reedville, Caldwell County, Texas
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Single

   Latitude: 29 51'50.0" Longitude: 097 52'02.

Site Description

1. Setting: Suburban

2. Current Owner: Federal

3. Current Site Status: Inactive

4. Years of Operation: Inactive Site,from and to dates:

5. How Initially Identified: Other Federal Program

6. Entity Responsible for Waste Generation:

   - Landfill
     - Municipal
   - Federal Facility
     - Other

7. Site Activities/Waste Deposition:

   - Municipal Landfill

Waste Description

8. Wastes Deposited or Detected Onsite:

- Organic Chemicals
- Inorganic Chemicals
- Metals

Response Actions

9. Response/Removal Actions:

RCRA Information

10. For All Active Facilities, RCRA Site Status:

- Not Applicable

Demographic Information

11. Workers Present Onsite: Yes

12. Distance to Nearest Non-Worker Individual: > 1/4 - 1/2 Mile

13. Residential Population Within 1 Mile: 2500.0

14. Residential Population Within 4 Miles: 7093.0

Water Use Information

15. Local Drinking Water Supply Source:

- Ground Water (within 4 mile distance limit)

16. Total Population Served by Local Drinking Water Supply Source: 0.0

17. Drinking Water Supply System Type for Local Drinking Water Supply Sources:

- Private

18. Surface Water Adjacent to/Draining Site:

- River

ATTACHMENT 2

HRS DOCUMENTATION RECORD
Gary Job Corps Center - 09/11/95

1. Site Name: Gary Job Corps Center
   (as entered in CERCLIS)

2. Site CERCLIS Number: TX1161630644

3. Site Reviewer: Peter M. Rung

4. Date: 8/23/95

5. Site Location: Reedville, Caldwell County, Texas
   (City/County,State)

6. Congressional District:

7. Site Coordinates: Single

   Latitude: 29 51'50.0" Longitude: 097 52'02.

	Score
Ground Water Migration Pathway Score (Sgw)	4.01
Surface Water Migration Pathway Score (Ssw)	0.00
Soil Exposure Pathway Score (Ss)	0.00
Air Migration Pathway Score (Sa)	0.00

Site Score	2.01

NOTE

EPA uses the terms "facility," "site," and "release" interchangeably. The term "facility" is broadly defined in CERCLA to include any area where hazardous substances have "come to be located" (CERCLA Section 109(9)), and the listing process is not intended to define or reflect boundaries of such facilities or releases. Site names, and references to specific parcels or properties, are provided for general identification purposes only. Knowledge regarding the extent of sites will be refined as more information is developed during the RI/FS and even during implementation of the remedy.

GROUND WATER MIGRATION PATHWAY SCORESHEET
Gary Job Corps Center - 09/11/95

GROUND WATER MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release to an Aquifer Aquifer: Quaternary Alluvium		
1. Observed Release	550	550
2. Potential to Release		
2a. Containment	10	10
2b. Net Precipitation	10	10
2c. Depth to Aquifer	5	5
2d. Travel Time	35	35
2e. Potential to Release [lines 2a(2b+2c+2d)]	500	500
3. Likelihood of Release	550	550
Waste Characteristics		
4. Toxicity/Mobility	*	1.00E+02
5. Hazardous Waste Quantity	*	100
6. Waste Characteristics	100	10
Targets		
7. Nearest Well	50	4.50E+01
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	1.02E+01
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	1.02E+01
9. Resources	5	5.00E+00
10. Wellhead Protection Area	20	0.00E+00
11. Targets (lines 7+8d+9+10)	**	6.02E+01
12. Targets (including overlaying aquifers)	**	6.02E+01
13. Aquifer Score	100	4.01
GROUND WATER MIGRATION PATHWAY SCORE (Sgw)	100	4.01

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Gary Job Corps Center - 09/11/95

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors DRINKING WATER THREAT	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release by Overland Flow		
2a. Containment	10	0
2b. Runoff	25	0
2c. Distance to Surface Water	25	25
2d. Potential to Release by Overland Flow [lines 2a(2b+2c)]	500	0
3. Potential to Release by Flood		
3a. Containment (Flood)	10	0
3b. Flood Frequency	50	0
3c. Potential to Release by Flood (lines 3a x 3b)	500	0
4. Potential to Release (lines 2d+3c)	500	0
5. Likelihood of Release	550	0
Waste Characteristics		
6. Toxicity/Persistence	*	0.00E+00
7. Hazardous Waste Quantity	*	0
8. Waste Characteristics	100	0
Targets		
9. Nearest Intake	50	0.00E+00
10. Population		
10a. Level I Concentrations	**	0.00E+00
10b. Level II Concentrations	**	0.00E+00
10c. Potential Contamination	**	0.00E+00
10d. Population (lines 10a+10b+10c)	**	0.00E+00
11. Resources	5	0.00E+00
12. Targets (lines 9+10d+11)	**	0.00E+00
13. DRINKING WATER THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Gary Job Corps Center - 09/11/95

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors HUMAN FOOD CHAIN THREAT	Maximum Value	Value Assigned
Likelihood of Release		
14. Likelihood of Release (same as line 5)	550	0
Waste Characteristics		
15. Toxicity/Persistence/Bioaccumulation	*	0.00E+00
16. Hazardous Waste Quantity	*	0
17. Waste Characteristics	1000	0
Targets		
18. Food Chain Individual	50	0.00E+00
19. Population		
19a. Level I Concentrations	**	0.00E+00
19b. Level II Concentrations	**	0.00E+00
19c. Pot. Human Food Chain Contamination	**	0.00E+00
19d. Population (lines 19a+19b+19c)	**	0.00E+00
20. Targets (lines 18+19d)	**	0.00E+00
21. HUMAN FOOD CHAIN THREAT SCORE	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT SCORESHEET
Gary Job Corps Center - 09/11/95

SURFACE WATER OVERLAND/FLOOD MIGRATION COMPONENT Factor Categories & Factors ENVIRONMENTAL THREAT	Maximum Value	Value Assigned
Likelihood of Release		
22. Likelihood of Release (same as line 5)	550	0
Waste Characteristics		
23. Ecosystem Toxicity/Persistence/Bioacc.	*	0.00E+00
24. Hazardous Waste Quantity	*	0
25. Waste Characteristics	1000	0
Targets		
26. Sensitive Environments		
26a. Level I Concentrations	**	0.00E+00
26b. Level II Concentrations	**	0.00E+00
26c. Potential Contamination	**	0.00E+00
26d. Sensitive Environments (lines 26a+26b+26c)	**	0.00E+00
27. Targets (line 26d)	**	0.00E+00
28. ENVIRONMENTAL THREAT SCORE	60	0.00
29. WATERSHED SCORE	100	0.00
30. SW: OVERLAND/FLOOD COMPONENT SCORE (Sof)	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

SOIL EXPOSURE PATHWAY SCORESHEET
Gary Job Corps Center - 09/11/95

SOIL EXPOSURE PATHWAY Factor Categories & Factors RESIDENT POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
1. Likelihood of Exposure	550	0
Waste Characteristics		
2. Toxicity	*	0.00E+00
3. Hazardous Waste Quantity	*	0
4. Waste Characteristics	100	0
Targets		
5. Resident Individual	50	0.00E+00
6. Resident Population		
6a. Level I Concentrations	**	0.00E+00
6b. Level II Concentrations	**	0.00E+00
6c. Resident Population (lines 6a+6b)	**	0.00E+00
7. Workers	15	0.00E+00
8. Resources	5	0.00E+00
9. Terrestrial Sensitive Environments	***	0.00E+00
10. Targets (lines 5+6c+7+8+9)	**	0.00E+00
11. RESIDENT POPULATION THREAT SCORE	**	0.00E+00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

SOIL EXPOSURE PATHWAY SCORESHEET
Gary Job Corps Center - 09/11/95

SOIL EXPOSURE PATHWAY Factor Categories & Factors NEARBY POPULATION THREAT	Maximum Value	Value Assigned
Likelihood of Exposure		
12. Attractiveness/Accessibility	100	0.00E+00
13. Area of Contamination	100	0.00E+00
14. Likelihood of Exposure	500	0.00E+00
Waste Characteristics		
15. Toxicity	*	0.00E+00
16. Hazardous Waste Quantity	*	0
17. Waste Characteristics	100	0
Targets		
18. Nearby Individual	1	0.00E+00
19. Population Within 1 Mile	**	0.00E+00
20. Targets (lines 18+19)	**	0.00E+00
21. NEARBY POPULATION THREAT SCORE	**	0.00E+00
SOIL EXPOSURE PATHWAY SCORE (Ss)	100	0.00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.

AIR PATHWAY SCORESHEET
Gary Job Corps Center - 09/11/95

AIR MIGRATION PATHWAY Factor Categories & Factors	Maximum Value	Value Assigned
Likelihood of Release		
1. Observed Release	550	0
2. Potential to Release		
2a. Gas Potential to Release	500	0
2b. Particulate Potential to Release	500	0
2c. Potential to Release	500	0
3. Likelihood of Release	550	0
Waste Characteristics		
4. Toxicity/Mobility	*	0.00E+00
5. Hazardous Waste Quantity	*	0
6. Waste Characteristics	100	0
Targets		
7. Nearest Individual	50	0.00E+00
8. Population		
8a. Level I Concentrations	**	0.00E+00
8b. Level II Concentrations	**	0.00E+00
8c. Potential Contamination	**	0.00E+00
8d. Population (lines 8a+8b+8c)	**	0.00E+00
9. Resources	5	0.00E+00
10. Sensitive Environments		
10a. Actual Contamination	***	0.00E+00
10b. Potential Contamination	***	0.00E+00
10c. Sens. Environments(lines 10a+10b)	***	0.00E+00
11. Targets (lines 7+8d+9+10c)	**	0.00E+00
AIR MIGRATION PATHWAY SCORE (Sa)	100	0.00E+00

* Maximum value applies to waste characteristics category.
** Maximum value not applicable.
*** No specific maximum value applies, see HRS for details.

1. WASTESTREAM QUANTITY SUMMARY TABLE, SOURCE: San Marcos Landfill

a. Wastestream ID	
b. Hazardous Constituent Quantity (C) (lbs.)	0.00
c. Data Complete?	NO
d. Hazardous Wastestream Quantity (W) (lbs.)	0.00
e. Data Complete?	NO
f. Wastestream Quantity Value (W/5,000)	0.00E+00

2. SOURCE HAZARDOUS WASTE QUANTITY FACTOR TABLE

a. Source ID	San Marcos Landfill
b. Source Type	Landfill
c. Secondary Source Type	N.A.
d. Source Vol.(yd3/gal) | Source Area (ft2)	1825320.00 | 0.00
e. Source Volume/Area Value	7.30E+02
f. Source Hazardous Constituent Quantity (HCQ) Value (sum of 1b)	0.00E+00
g. Data Complete?	NO
h. Source Hazardous Wastestream Quantity (WSQ) Value (sum of 1f)	0.00E+00
i. Data Complete?	NO
k. Source Hazardous Waste Quantity (HWQ) Value (2e, 2f, or 2h)	7.30E+02

Documentation for Source Type:

The San Marcos landfill occupied an 84 acre tract of land northeast of the main base facility from 1969 to 1984. During this time approximately 1,825,320 cubic yards of solid waste were deposited.

Reference: 6

Documentation for Source Volume:

Reference: 6

3. SITE HAZARDOUS WASTE QUANTITY SUMMARY

No.	Source ID	Migration Pathways	Vol. or Area Value (2e)	Constituent or Wastestream Value (2f,2h)	Hazardous Waste Qty. Value (2k)
1	San Marcos Landfill	GW	7.30E+02	0.00E+00	7.30E+02

4. PATHWAY HAZARDOUS WASTE QUANTITY AND WASTE CHARACTERISTICS SUMMARY TABLE

Migration Pathway	Contaminant Values		HWQVs*	WCVs**
Ground Water	Toxicity/Mobility	1.00E+02	100	10
SW: Overland Flow, DW	Tox./Persistence	0.00E+00	0	0
SW: Overland Flow, HFC	Tox./Persis./Bioacc.	0.00E+00	0	0
SW: Overland Flow, Env	Etox./Persis./Bioacc.	0.00E+00	0	0
SW: GW to SW, DW	Tox./Persistence	4.00E+01	100	6
SW: GW to SW, HFC	Tox./Persis./Bioacc.	2.00E+02	100	10
SW: GW to SW, Env	Etox./Persis./Bioacc.	2.00E+02	100	10
Soil Exposure:Resident	Toxicity	0.00E+00	0	0
Soil Exposure: Nearby	Toxicity	0.00E+00	0	0
Air	Toxicity/Mobility	0.00E+00	0	0

* Hazardous Waste Quantity Factor Values
** Waste Characteristics Factor Category Values

Note: SW = Surface Water
GW = Ground Water
DW = Drinking Water Threat
HFC = Human Food Chain Threat
Env = Environmental Threat

GROUND WATER PATHWAY AQUIFER SUMMARY
Gary Job Corps Center - 09/11/95

No.	Aquifer ID	Type	Overlaying No.	Inter-Connected with	Likelihood of Release	Targets
1	Quaternary Alluvium	Non K	0	0	550	6.02E+01

Containment

No.	Source ID	HWQ Value	Containment Value
1	San Marcos Landfill	7.30E+02	10
		Containment Factor	10

Documentation for Ground Water Containment, Source San Marcos Landfill:

There is documented evidence of hazardous substance migration from the source.

Reference: 2, 3

Net Precipitation

Net Precipitation (inches) 34

GROUND WATER PATHWAY LIKELIHOOD OF RELEASE Quaternary Alluvium AQUIFER
Gary Job Corps Center - 09/11/95

Aquifer: Quaternary Alluvium

Type of Aquifer: Non Karst

Overlaying Aquifer: 0

Interconnected with: 0

Documentation for Quaternary Alluvium Aquifer:

The Quaternary Alluvium consists of sand, silt, and clay in varying proportions and extends to an approximate depth of 40 feet below the surface.

Reference: 1

OBSERVED RELEASE

No.	Well ID	Well Type	Distance (miles)	Level of Contamination
1	(b) (6) [redacted]	Drinking Water	0.500	Level II
2		Drinking Water	0.750	Level II
3		Drinking Water	0.800	Level II
4		Drinking Water	0.500	Level II

Well No.	Hazardous Substance	Concent.	MCL	Cancer	RFD	Units
1	Dichloroethylene, cis-1,2-	1.7E+01	7.0E+01	0.0E+00	3.5E+02	ppb
2	Dichloroethylene, cis-1,2-	5.0E+00	7.0E+01	0.0E+00	3.5E+02	ppb
3	Dichloroethylene, cis-1,2-	5.5E+00	7.0E+01	0.0E+00	3.5E+02	ppb
4	Dichloroethylene, cis-1,2-	5.4E+01	7.0E+01	0.0E+00	3.5E+02	ppb

Observed Release Factor 550

Documentation for Well [redacted] well:

This well is located approximately 0.5 mile southeast of the inactive San Marcos Municipal Landfill. A FIT team from Ecology and Environment, Inc. resampled this well on 25 January 1989 to confirm contamination. Cis-1,2-dichloroethene was detected at a concentration of 17.2 ppb. In accordance with the 1990 census, it is assumed that the well serves 3.37 people.

Reference: 2, 3

Documentation for Well [redacted]:

The [redacted] well is located approximately 0.7 mile southeast of the inactive San Marcos Landfill. A FIT team from Ecology and Environment resampled the well on 25 January 1989 to confirm contamination. Cis-1,2-Dichloroethene was found at concentrations of 5 ppb. According to the 1990 census, 3.37 people were apportioned to the well.

Reference: 2, 3

Documentation for Well [redacted]:

The [redacted] well is located approximately 0.8 mile southeast of the inactive San Marcos Landfill. A FIT team from Ecology and Environment resampled the well on 25 January 1989 to confirm contamination. Cis-1,2-dichloroethene was found at a concentration of 5.5 ppb. In accordance with the 1990 census, 3.37 people were apportioned to the well.

Reference: 2, 3

Documentation for Well [redacted] (b) (6) (barn):

The [redacted] (b) (6) barn well is located approximately 0.5 mile southeast of the inactive San Marcos Landfill. A FIT team from E&E resampled the well on 16 May 1989 to confirm contamination. Cis-1,2-dichloroethene was detected at concentrations of 54.3 ppb. The well is not currently used for drinking water, but could be and has been used as a source in the past.

Reference: 2, 3, 4

POTENTIAL TO RELEASE

Containment

Containment Factor	10	

Net Precipitation

Net Precipitation Factor	10	

Depth to Aquifer

A. Depth of Hazardous Substances	20.00	feet

Documentation for Depth of Hazardous Substances:

This assumption is made based on the fact that the four private wells sampled are all drilled to a depth of 30 feet or less.

Reference: 2

B. Depth to Aquifer from Surface	16.00	feet

Documentation for Depth to Aquifer from Surface :

The smallest approximate depth to static water listed in the well logs for the private wells sampled is 16 feet.

Reference: 2

C. Depth to Aquifer (B - A)	0.00	feet

GROUND WATER PATHWAY LIKELIHOOD OF RELEASE Quaternary Alluvium AQUIFER
Gary Job Corps Center - 09/11/95

Depth to Aquifer Factor	5	

Travel Time

Are All Layers Karst?	NO	
Thickness of Layer(s) with Lowest Conductivity	0.00	feet
Hydraulic Conductivity (cm/sec)	0.0E-00	
Travel Time Factor	35	

==========

Potential to Release Factor 500

Source: 1 San Marcos Landfill

Source Hazardous Waste Quantity Value: 730.13

Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value

Hazardous Substances Found in an Observed Release

Well No.	Observed Release Hazardous Substance	Toxicity Value	Mobility Value	Toxicity/ Mobility Value
1	Dichloroethylene, cis-1,2-	100	1.00E+00	1.00E+02
2	Dichloroethylene, cis-1,2-	100	1.00E+00	1.00E+02
3	Dichloroethylene, cis-1,2-	100	1.00E+00	1.00E+02
4	Dichloroethylene, cis-1,2-	100	1.00E+00	1.00E+02

Toxicity/Mobility Value from Source Hazardous Substances:	0.00E+00
Toxicity/Mobility Value from Observed Release Hazardous Substances:	1.00E+02
Toxicity/Mobility Factor:	1.00E+02
Sum of Source Hazardous Waste Quantity Values:	7.30E+02
Hazardous Waste Quantity Factor:	100
Waste Characteristics Factor Category:	10

Population by Well

No.	Well ID	Sample Type	Distance (miles)	Level of Contamination	Population
1	(b) (6) [redacted]	Drinking Water	0.500	Level II	3.40
2	[redacted]	Drinking Water	0.750	Level II	3.40
3	[redacted]	Drinking Water	0.800	Level II	3.40
4	[redacted]	Drinking Water	0.500	Level II	0.00

Well No.	Hazardous Substance	Concent.	MCL	Cancer	RFD	Units
1	Dichloroethylene, cis-1,2-	1.7E+01	7.0E+01	0.0E+00	3.5E+02	ppb
2	Dichloroethylene, cis-1,2-	5.0E+00	7.0E+01	0.0E+00	3.5E+02	ppb
3	Dichloroethylene, cis-1,2-	5.5E+00	7.0E+01	0.0E+00	3.5E+02	ppb
4	Dichloroethylene, cis-1,2-	5.4E+01	7.0E+01	0.0E+00	3.5E+02	ppb

Documentation for Well (b) (6) [redacted] well:

This well is located approximately 0.5 mile southeast of the inactive San Marcos Municipal Landfill. A FIT team from Ecology and Environment, Inc. resampled this well on 25 January 1989 to confirm contamination. Cis-1,2-dichloroethene was detected at a concentration of 17.2 ppb. In accordance with the 1990 census, it is assumed that the well serves 3.37 people.

Reference: 2, 3

Documentation for Well (b) (6) [redacted]:

The (b) (6) [redacted] well is located approximately 0.7 mile southeast of the inactive San Marcos Landfill. A FIT team from Ecology and Environment resampled the well on 25 January 1989 to confirm contamination. Cis-1,2-Dichloroethene was found at concentrations of 5 ppb. According to the 1990 census, 3.37 people were apportioned to the well.

Reference: 2, 3

Documentation for Well (b) (6) [redacted]

The (b) (6) [redacted] well is located approximately 0.8 mile southeast of the inactive San Marcos Landfill. A FIT team from Ecology and Environment resampled the well on 25 January 1989 to confirm contamination. Cis-1,2-dichloroethene was found at a concentration of 5.5 ppb. In accordance with the 1990 census, 3.37 people were apportioned to the well.

Reference: 2, 3

Documentation for Well (b) (6) [redacted] barn):

The (b) (6) [redacted] barn well is located approximately 0.5 mile southeast of the inactive San Marcos Landfill. A FIT team from E&E resampled the well on 25 January 1995 to confirm contamination. Cis-1,2-dichloroethene was detected at concentrations of 54.3 ppb.

and has been used as a source in the past.

Reference: 2, 3, 4

Level I Population Factor: 0.00

Level II Population Factor: 10.20

Potential Contamination by Distance Category

Distance Category (miles)	Population	Value
> 0 to 1/4	0.0	0.00E+00
> 1/4 to 1/2	0.0	0.00E+00
> 1/2 to 1	0.0	0.00E+00
> 1 to 2	0.0	0.00E+00
> 2 to 3	0.0	0.00E+00
> 3 to 4	0.0	0.00E+00

Potential Contamination Factor: 0.000

Nearest Well

Well: 1 (b) (6) [redacted] well
Level of Contamination: Level II
Distance in miles: 0.50

Nearest Well Factor: 4.50E+01

Documentation for Nearest Well:

The nearest private domestic supply well is the (b) (6) [redacted] well located 0.5 mile southeast of the landfill. The well is 25 feet deep and tapped in the alluvial aquifer.

Reference: 6

Resources

Resource Use: YES

Resource Factor: 5.00E+00

Documentation for Resources:

The (b) (6) [redacted] household has a well used to water livestock.

Reference: 2

Wellhead Protection Area

No wellhead protection area

Wellhead Protection Area Factor: 0.00E+00

SURFACE WATER PATHWAY SEGMENT SUMMARY
Gary Job Corps Center - 09/11/95

No.	Segment ID	Segment Type	Water Type	Start Point (mi)	End Point (mi)	Average Flow (cfs)
0		River	Fresh	0.00	0.00	0

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Gary Job Corps Center - 09/11/95

OBSERVED RELEASE

No.	Sample ID	Sample Type	Distance (miles)	Level of Contamination DW	HFC	Env

- N/A and/or data not specified

==========

Observed Release Factor 0

POTENTIAL TO RELEASE

Potential to Release by Overland Flow

Containment

No.	Source ID	HWQ Value	Containment Value

- N/A and/or data not specified

==========

Containment Factor: 0

Documentation for Overland Flow Containment, Source San Marcos Landfill:

The surface water pathway segment will not be evaluated because the receiving perennial surface water body is greater than 2 miles away from the site.

Reference: 5

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Gary Job Corps Center - 09/11/95

Distance to Surface Water

Distance to Surface Water:	0.0 feet
Distance to Surface Water Factor:	25

Runoff

A. Drainage Area:	0.0 acres
B. 2-year, 24-hour Rainfall:	0.0 inches
C. Soil Group: Coarse-textured soils with high infiltration rates	A
Runoff Factor:	0

==========

Potential to Release by Overland Flow Factor:	0

SURFACE WATER PATHWAY OVERLAND FLOW/FLOOD COMPONENT LIKELIHOOD OF RELEASE
Gary Job Corps Center - 09/11/95

Potential to Release by Flood

No.	Source ID	HWQ Value	Flood Containment Value	Flood Frequency Value	Potential to Release by Flood

- N/A and/or data not specified

==========

Potential to Release by Flood Factor: 0

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
Gary Job Corps Center - 09/11/95

Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Toxicity/ Persistence Value

- N/A and/or data not specified

SW PATHWAY: OVERLAND/FLOOD DRINKING WATER THREAT WASTE CHARACTERISTICS
Gary Job Corps Center - 09/11/95

- N/A and/or data not specified

Toxicity/Persistence Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence Factor:	0.00E+00
Sum of Source Hazardous Waste Quantity Values:	0.00E+00
Hazardous Waste Quantity Factor:	0
Waste Characteristics Factor Category:	0

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT DRINKING WATER THREAT TARGETS

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Gary Job Corps Center - 09/11/95

Level I Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level I Intakes: 0.0

Level I Population Factor: 0.00E+00

Gary Job Corps Center - 09/11/95

Level II Concentrations

Intake	Distance Along the In-water Segment from the Probable Point of Entry (miles)	Population
- N/A and/or data not specified		

Population Served by Level II Intakes: 0.0

Level II Population Factor: 0.00E+00

Gary Job Corps Center - 09/11/95

Potential Contamination

Intake ID	Average Annual Flow (cfs)	Population Served
- N/A and/or data not specified		

Type of Surface Water Body	Total Population	Dilution-Weighted Population
- N/A and/or data not specified		

Dilution-Weighted Population Served by Potentially Contaminated Intakes: 0.0

Potential Contamination Factor: 0.0

Nearest Intake

Location of Nearest Drinking Water Intake: N.A.

Nearest Intake Factor: 0.00

Resources

Resource Use: NO

Resource Value: 0.00E+00

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS
Gary Job Corps Center - 09/11/95

Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Toxicity Value	Persistence Value	Bio-accum. Value	Toxicity/ Persistence/ Bioaccum. Value

- N/A and/or data not specified

SW PATHWAY: OVERLAND/FLOOD HUMAN FOOD CHAIN THREAT WASTE CHARACTERISTICS

Gary Job Corps Center - 09/11/95

Toxicity/Persistence/Bioaccumulation Value from Source Hazardous Substances:	1.44E-89
Toxicity/Persistence/Bioaccumulation Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Persistence/Bioaccumulation Factor:	0.00E+00
Sum of Source Hazardous Waste Quantity Values:	0.00E+00
Hazardous Waste Quantity Factor:	0
Waste Characteristics Factor Category:	0

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT HUMAN FOOD CHAIN THREAT TARGETS

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Gary Job Corps Center - 09/11/95

Level I Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level I Concentrations Factor: 0.00E+00

Gary Job Corps Center - 09/11/95

Level II Concentrations

Fishery	Annual Production (pounds)	Human Food Chain Population Value
- N/A and/or data not specified		

Sum of Human Food Chain Population Values: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Gary Job Corps Center - 09/11/95

Potential Contamination

Fishery	Annnual Production (pounds)	Type of Surface Water Body	Average Annual Flow (cfs)	Pop. Value (Pi)	Dilution Weight (Di)	Pi*Di
- N/A and/or data not specified						

Sum of (Pi*Di): 0.00E+00

Potential Human Food Chain Contamination Factor: 0.00E+00

Food Chain Individual

Location of Nearest Fishery: N.A.

Food Chain Individual Factor: 0.00

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS

Gary Job Corps Center - 09/11/95

Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value

- N/A and/or data not specified

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS

Gary Job Corps Center - 09/11/95

Ecotoxicity/Persistence/Bioaccummulation Value from Source Hazardous Substances:	1.44E-89
Ecotoxicity/Persistence/Bioaccummulation Value from Observed Release Hazardous Substances:	0.00E+00
Ecotoxicity/Persistence/Bioaccummulation Factor:	0.00E+00
Sum of Source Hazardous Waste Quantity Values:	0.00E+00
Hazardous Waste Quantity Factor:	0
Waste Characteristics Factor Category:	0

SW PATHWAY: OVERLAND FLOW/FLOOD COMPONENT ENVIRONMENTAL THREAT TARGETS

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Level I Concentrations

- N/A and/or data not specified

Level II Concentrations

- N/A and/or data not specified

Most Distant Level I Sample

- N/A and/or data not specified

Most Distant Level II Sample

- N/A and/or data not specified

Gary Job Corps Center - 09/11/95

Level I Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

SW PATHWAY: OVERLAND FLOW/FLOOD ENVIRONMENTAL THREAT WASTE CHARACTERISTICS

Gary Job Corps Center - 09/11/95

Hazardous Substances Found in an Observed Release

Sample No.	Observed Release Hazardous Substance	Eco-toxicity Value	Persistence Value	Bio-accum. Value	Ecotoxicity/ Persistence/ Bioaccum. Value
- N/A and/or data not specified					

Gary Job Corps Center - 09/11/95

Level II Concentrations

Sensitive Environment	Distance from Probable Point of Entry to Sensitive Env. (miles)	Sensitive Environment Value
- N/A and/or data not specified		

Sum of Sensitive Environments Values: 0

Wetlands

Wetland	Distance from Probable Point of Entry to Wetland (miles)	Wetlands Frontage (miles)
- N/A and/or data not specified		

Total Wetlands Frontage: 0.00 Miles Total Wetlands Value: 0

Sum of Sensitive Environments Value + Wetlands Value: 0.00E+00

Level II Concentrations Factor: 0.00E+00

Gary Job Corps Center - 09/11/95

Potential Contamination

Sensitive Environments

Type of Surface Water Body	Sensitive Environment	Sensitive Environment Value

Wetlands

Type of Surface Water Body	Sensitive Environment	Wetlands Frontage	Wetlands Value

- N/A and/or data not specified

Gary Job Corps Center - 09/11/95

Type of Surface Water Body	Sum of Sens. Environment Values(Sj)	Sum of Wetland Frontage Values(Wj)	Dilution Weight (Dj)	Dj(Wj+Sj)

- N/A and/or data not specified

Sum of Dj(Wj+Sj): 0.00E+00
Sum of Dj(Wj+Sj)/10: 0.00E+00

Potential Contamination Sensitive Environment Factor: 0.00E+00

Toxicity Factor:	0.00E+00
Sum of Source Hazardous Waste Quantity Values:	0.00E+00
Hazardous Waste Quantity Factor:	0

AIR PATHWAY LIKELIHOOD OF RELEASE
Gary Job Corps Center - 09/11/95

OBSERVED RELEASE

No.	Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Observed Release Factor: 0

Gas Migration Potential

GAS POTENTIAL TO RELEASE

Source ID	Source Type	Gas Contain. Value (A)	Gas Source Type Value (B)	Gas Migrtn. Potent. Value (C)	Sum (B+C)	Gas Potential to Rel. Value A(B+C)
- N/A and/or data not specified						

Gas Potential to Release Factor: 0

Documentation for Gas Containment, Source San Marcos Landfill:

The air pathway segment will not be evaluated because air monitoring during sampling missions showed no release to this pathway.

Reference: 9

Documentation for Source Type, Source San Marcos Landfill:

The San Marcos landfill occupied an 84 acre tract of land northeast of the main base facility from 1969 to 1984. During this time approximately 1,825,320 cubic yards of solid waste were deposited.

Reference: 6

Source: San Marcos Landfill

Gaseous Hazardous Substance	Hazardous Substance Gas Migration Potential Value

Average of Gas Migration Potential Value for 3 Hazardous Substances: 0.000

Gas Migration Potential Value From Table 6-7: 0

Particulate Migration Potential

PARTICULATE POTENTIAL TO RELEASE

Source ID	Source Type	Partic. Contain. Value (A)	Partic. Source Type Value (B)	Partic. Migrtn. Potent. Value (C)	Sum (B+C)	Partic. Potential to Rel. Value A(B+C)
- N/A and/or data not specified						

Particulate Potential to Release Factor: 0

Documentation for Source Type, Source San Marcos Landfill:

The San Marcos landfill occupied an 84 acre tract of land northeast of the main base facility from 1969 to 1984. During this time approximately 1,825,320 cubic yards of solid waste were deposited.

Reference: 6

Source: San Marcos Landfill

Particulate Hazardous Substance

AIR PATHWAY WASTE CHARACTERISTICS

Gary Job Corps Center - 09/11/95

Hazardous Substance	Toxicity Value	Gas Mobility Value	Particulate Mobility Value	Toxicity/ Mobility Value

Hazardous Substances Found in an Observed Release

Sample ID	Observed Release Hazardous Substance	Particulate Toxicity/ Mobility Value	Gas Toxicity/ Mobility Value
- N/A and/or data not specified			

- N/A and/or data not specified

Toxicity/Mobility Value from Observed Release Hazardous Substances:	0.00E+00
Toxicity/Mobility Factor:	0.00E+00
Sum of Source Hazardous Waste Quantity Values:	0.00E+00
Hazardous Waste Quantity Factor:	0
Waste Characteristics Factor Category:	0

AIR PATHWAY TARGETS

Gary Job Corps Center - 09/11/95

Actual Contamination

No.	Sample ID	Distance (miles)	Level of Contamination

- N/A and/or data not specified

Potential Contamination

Distance Categories Subject to Potential Contamination	Population	Value
	Potential Contaminantion Factor:	0.0000
	Potential Contaminantion Factor:	0.0000
	Potential Contaminantion Factor:	0.0000
	Potential Contaminantion Factor:	0.0000
	Potential Contaminantion Factor:	0.0000
	Potential Contaminantion Factor:	0.0000
	Potential Contaminantion Factor:	0.0000

doc here

Nearest Individual Factor

Distance in miles: Potentia

- N/A and/or data not specified

doc here

Resources

Resource Value: 4.935386503022828170000000000000000000000e+257

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Actual Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value

- N/A and/or data not specified

Actual Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value

- N/A and/or data not specified

==========
(Sum of Sensitive Environments + Wetlands Values)

Potential Contamination, Sensitive Environments

Sensitive Environment	Distance (miles)	Sensitive Environment Value	Distance Weight	Weighted Value/10
(null)	4.935385843404746150000000000000000000000e+257			

Sum of Sensitive Environments Weighted Values/10: 0.000

Potential Contamination, Wetlands

Distance Category	Wetland Acreage	Wetland Acreage Value	Distance Weight	Weighted Value/10

- N/A and/or data not specified

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REFERENCES

Gary Job Corps Center - 09/11/95

1. Ecology and Environment, Inc 1988 "U.S. EPA Potenial Hazardous Waste Site Site Inspection Report" 18 February 1988.

2. Ecology and Environment, Inc 1989 "Resampling Mission Report for Gary Job Corps, San Marcos, Texas." 16 May 1989.

3. U.S. Department of Commerce. Bureau of Census, Texas General Population Characteristics, 1990 Census.

4. EPA (U.S. Environmental Protection Agency) Memorandum "Drinking Waters from the Gary Job Corps Site" 29 November 1988.

5. U.S. Geological Survey. 1985. Seguin, Texas (30-by-60-minute series topographic map).

6. Ecology and Environment, Inc. 1988. "Sampling Plan for Gary Job Corps Facility, San Marcos, Texas" 10 May 1988.

7. Rung, P. 1988. Personal Communication with Aida Laiche, Texas Natural Resources Conservation Commission, Municipal Waste Division. 31 August 1995.

8. Rung, P. 1995 Personal Communication with Ann Strahl, Texas Natural Resource Conservation Commission, Superfund Division. 31 August 1995.

9. Ecology and Environment, Inc. 1989. "Sampling Mission Report for the Gary Job Corps Center, San Marcos, Texas" 12 January 1989.

10. U.S. EPA Geographical Exposure Modeling System (GEMS). 28 August 1995.

REFERENCE 1

8708-08

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by HQ)
VI	TX 1161630644

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME	B. STREET (or other identifier)		
Gary Job Corps Center	State Hwy 21, 1 mi. NE of San Marcos, Texas		
C. CITY	**D. STATE**	**E. ZIP CODE**	**F. COUNTY NAME**
San Marcos TX1161630644	TX	78666	Caldwell

G. SITE OPERATOR INFORMATION

1. NAME	2. TELEPHONE NUMBER		
Dick Moncure-Environmental Coordinator	(512) 396-6544		
3. STREET	**4. CITY**	**5. STATE**	**6. ZIP CODE**
Gary Job. Corp.	San Marcos	TX	78666

H. REALTY OWNER INFORMATION (if different from operator of site)

1. NAME	2. TELEPHONE NUMBER	
Department of Labor	(512)396-6544	
3. CITY	**4. STATE**	**5. ZIP CODE**
FAC MGT 967 San Marcos	TX	786670967

I. SITE DESCRIPTION Vocational training center for economically depressed youth. The training center occupies a portion of a former WW II air base.

J. TYPE OF OWNERSHIP

[X] 1. FEDERAL [ ] 2. STATE [ ] 3. COUNTY [ ] 4. MUNICIPAL [ ] 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)	B. APPARENT SERIOUSNESS OF PROBLEM
	[ ] 1. HIGH [ ] 2. MEDIUM [X] 3. LOW [ ] 4. NONE

C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
Brenda Nixon Cook, FIT Chemist	(214)742-6601	Feb., 18, 1988

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME	2. TITLE	
James Stacks	FIT Chemist	
3. ORGANIZATION		**4. TELEPHONE NO. (area code & no.)**
Ecology and Environment, Inc., 1509 Main St., Dallas, TX 75201		(214)742-6601

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
Brenda Cook	Ecology and Environment, Inc SUPERFUND FILE	(214)742-6601
	DEC 14 1992	DEC 1992

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
Dick Moncure	Environmental Coordinator (512)346-6544	FAC M GT San Marcos, TX 78667
Terrace D. Airhart	Plant Supervisor (512)396-5432	

REORGANIZE

PRELIMINARY REPORT This does not constitute final opinion of EPA

Reviewed by 6H-ES Date

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS: [X] a. GROUND [ ] b. AERIAL
2. PHOTOS IN CUSTODY OF: EPA Region VI (Attached)

D. SITE MAPPED?

[X] YES. SPECIFY LOCATION OF MAPS: EPA Region VI (Attached)

E. COORDINATES

1. LATITUDE (deg.-min.-sec.): 29° 34' 00" N
2. LONGITUDE (deg.-min.-sec.): 97° 55' 00' W

V. SITE INFORMATION

A. SITE STATUS

[X] 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)
[ ] 2. INACTIVE (Those sites which no longer receive wastes.)
[ ] 3. OTHER (specify): _____ (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

[ ] 1. NO [X] 2. YES (specify generator's four-digit SIC Code): 0001

C. AREA OF SITE (in acres): 817

D. ARE THERE BUILDINGS ON THE SITE?

[ ] 1. NO [X] 2. YES (specify): Dormitories, service and educational buildings, dining halls.

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE	X	3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY		8. OTHER (specify):
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this form.

[X] 1. STORAGE [ ] 2. INCINERATION [ ] 3. LANDFILL [ ] 4. SURFACE IMPOUNDMENT [ ] 5. DEEP WELL
[ ] 6. CHEM/BIO/PHYS TREATMENT [ ] 7. LANDFARM [ ] 8. OPEN DUMP [ ] 9. TRANSPORTER [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

[X] 1. LIQUID [ ] 2. SOLID [ ] 3. SLUDGE [ ] 4. GAS

B. WASTE CHARACTERISTICS

[ ] 1. CORROSIVE [ ] 2. IGNITABLE [ ] 3. RADIOACTIVE [ ] 4. HIGHLY VOLATILE
[X] 5. TOXIC PCB [ ] 6. REACTIVE [ ] 7. INERT [ ] 8. FLAMMABLE
[ ] 9. OTHER (specify):

Gary Job Corps. produces minimal hazardous waste by reclamation of oil used by their automotive shop program.

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

Inventory of PCB transformers onsite. (Attached)

Continued From Page 4

VIII. HAZARD DESCRIPTION (continued)

☐ B. NON-WORKER INJURY/EXPOSURE

☐ C. WORKER INJURY/EXPOSURE

☒ D. CONTAMINATION OF WATER SUPPLY

During the 1950's tetraethyl lead was allegedly buried in a landfill on this site. The presence of the lead in the soil could potentially contaminate the water supply.

☐ E. CONTAMINATION OF FOOD CHAIN

☒ F. CONTAMINATION OF GROUND WATER

Potential for ground water contamination by lead exists if tetraethyl lead was buried on-site.

☐ G. CONTAMINATION OF SURFACE WATER

Continued From Page 6

VIII. HAZARD DESCRIPTION (continued)

☐ N. FIRE OR EXPLOSION

☒ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

A spill of PCB occurred 8-17-87 when a transformer pole broke and the transformer fell to the ground leaking PCB oil onto the soil. The topsoil surrounding the area has been removed and is currently stored in 55 gallon drums on site.

☐ P. SEWER, STORM DRAIN PROBLEMS

☐ Q. EROSION PROBLEMS

☐ R. INADEQUATE SECURITY

☐ S. INCOMPATIBLE WASTES

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA (continued)

H. LIST ALL DRINKING WATER WELLS WITHIN A 1.4 MILE RADIUS OF SITE

1. WELL	2. DEPTH (specify units)	3. LOCATION (proximity to population/buildings)	4. NON-COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
No wells within 1/4 mile.				

I. RECEIVING WATER

1. NAME: Blano River

☐ 2. SEWERS ☒ 3. STREAMS/RIVERS ☐ 4. LAKES/RESERVOIRS ☐ 5. OTHER (specify):

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

Recreational

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK (specify below)	'X'	C. OTHER (specify below)
X	1. SAND	X	Taylor Group		
X	2. CLAY				
X	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH (100,000 to 1000 cm/sec.) ☐ C. HIGH (1000 to 10 cm/sec.)

☐ D. MODERATE (10 to .1 cm/sec.) ☒ E. LOW (.1 to .001 cm/sec.) ☐ F. VERY LOW (.001 to .00001 cm/sec.)

G. RECHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS.

H. DISCHARGE AREA

☐ 1. YES ☒ 2. NO 3. COMMENTS.

I. SLOPE

1. ESTIMATE % OF SLOPE: Less than 1%

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.: southerly

J. OTHER GEOLOGICAL DATA

Overburden consists of Quarternary Alluvium made of gravel, silt, sand, and clay in varying proportions and extends to approximately 40 ft. The Taylor group lies beneath the alluvium and consists of a lower and upper section of calcerous, montmorillonitic clay separated by a unusally thick section of chalky, clayey limestone.

Continue On Reverse

STORAGE FAC 5 SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. STORAGE AREA HAS CONTINUOUS IMPERVIOUS BASE
[X] YES [ ] NO

2. STORAGE AREA HAS A CONFINEMENT STRUCTURE
[X] YES [ ] NO

3. EVIDENCE OF LEAKAGE/OVERFLOW (If "Yes", document where and how much spill is overflowing or leaking from containment)
[X] YES [ ] NO

A few of the transformers were leaking onto the concrete floor of the storage area. Vermiculite had been placed around the leaking transformers to absorb the leakage.

4. ESTIMATE TYPE AND NUMBER OF BARRELS/CONTAINERS

Approx. 100 in storage

5. GLASS OR PLASTIC STORAGE CONTAINERS USED
[ ] YES [X] NO

6. ESTIMATE NUMBER AND CAPACITY OF STORAGE TANKS

None

7. NOTE LABELING ON CONTAINERS

Caution PCB

8. EVIDENCE OF LEAKAGE CORROSION OR BULGING OF BARRELS/CONTAINERS/STORAGE TANKS (If "Yes", document evidence. Describe location and extent of damage. Take PHOTOGRAPHS)
[ ] YES [X] NO

9. DIRECT VENTING OF STORAGE TANKS
[X] YES [ ] NO

10. CONTAINERS HOLDING INCOMPATIBLE SUBSTANCES (If "Yes", document evidence. Describe location and identity of hazardous waste. Take PHOTOGRAPHS.)
[ ] YES [X] NO

11. INCOMPATIBLE SUBSTANCES STORED IN CLOSE PROXIMITY (If "Yes", document evidence. Describe location and identity of hazardous waste. Take PHOTOGRAPHS.)
[ ] YES [X] NO

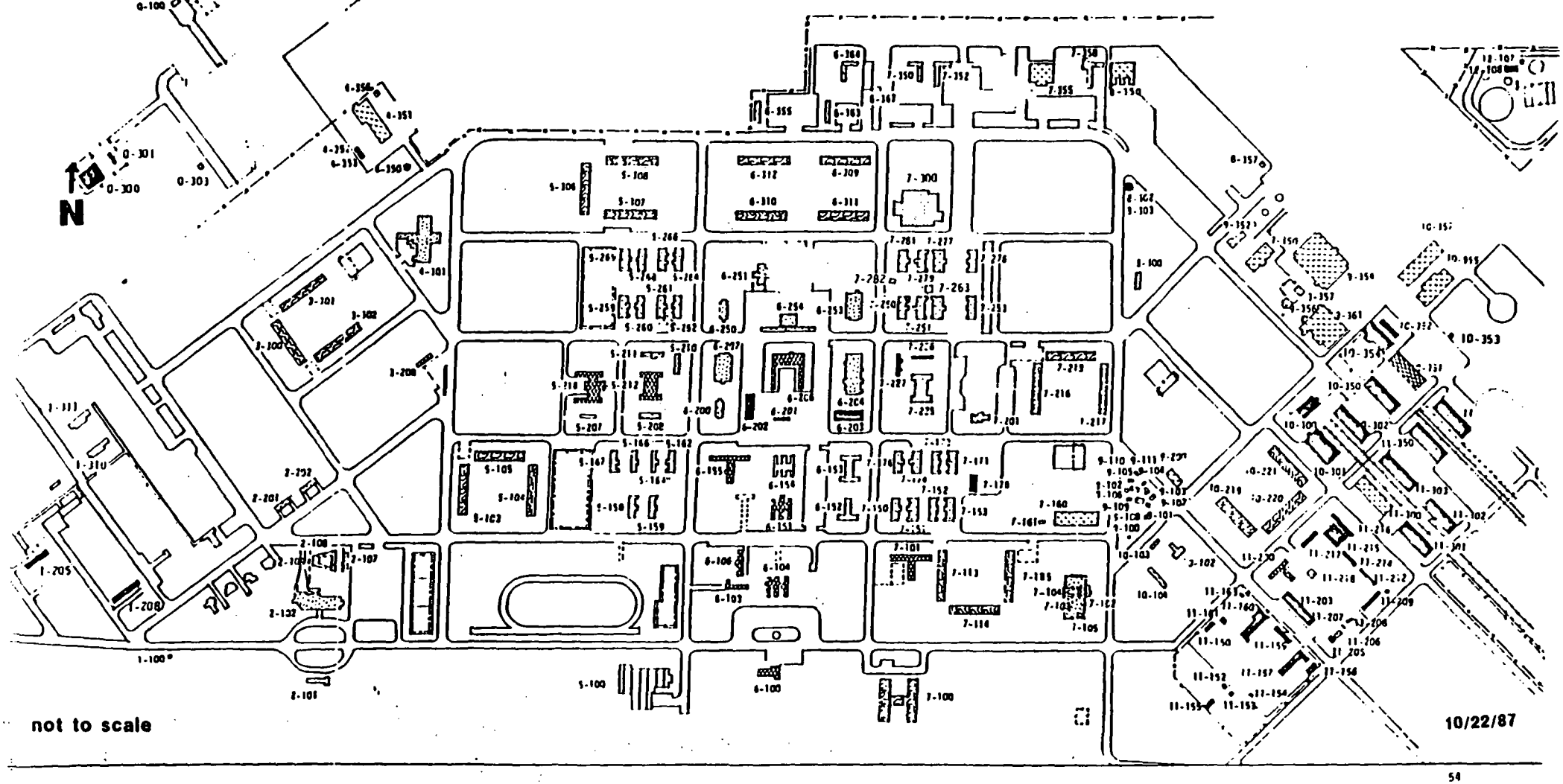
12. ADEQUATE CONTAINER WASHING AND REUSE PRACTICES
[X] YES [ ] NO

13. ADEQUATE PRACTICES FOR DISPOSAL OF EMPTY STORAGE CONTAINERS
[X] YES [ ] NO

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT SUPPLEMENT

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3

Corresponding number on form	Additional Remark and/or Explanation
VIII. U.	Due to the size of the facility FIT has requested historical photos of the facility (1945-1965) to determine precise locations of the military landfills and aid in the development of a sampling plan. At this time FIT believes that the Department of Labor is responding adequately to the problem of the PCB transformers and that no action is necessary by the EPA. FIT recommends no further action be taken until historical photos are received. FIT will then attempt to determine the location of the buried tetraethyl lead and past military landfill activities. Due to the large size of the facility, no further conclusions can be drawn until FIT can pinpoint the location of past landfills. A sampling plan will be forwarded upon receipt of the aforementioned historical aerial photos.



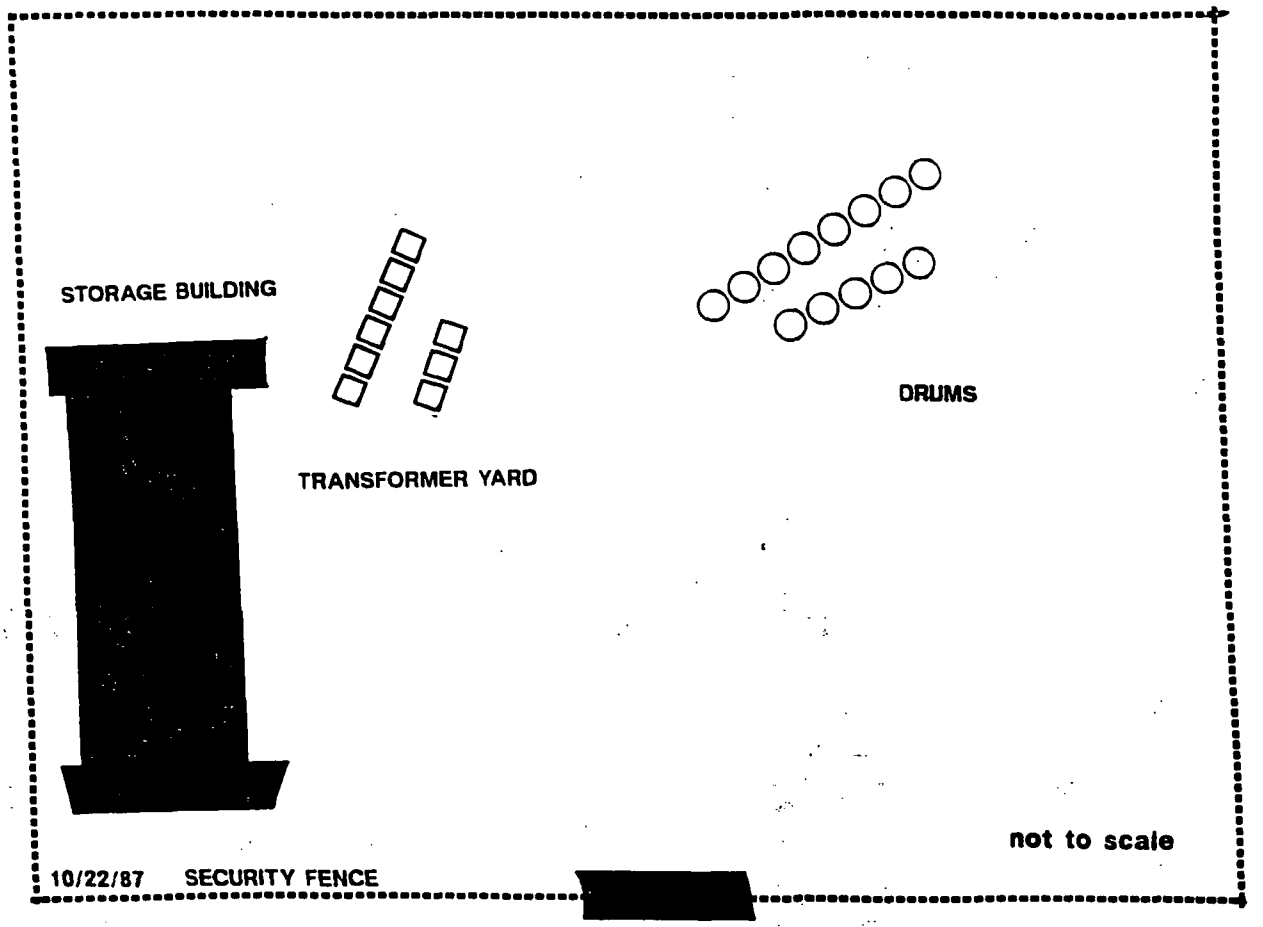
GARY JOB CORPS CENTER

SITE SKETCH

San Marcus, Tx. Caldwell County

TX1161630644

STORAGE FACILITY



GARY JOB CORPS CENTER

San Marcos, Tx. Caldwell County

TX1161630644

RECORD OF COMMUNICATION

[X] Phone Call [ ] Discussion [ ] Field Trip
[ ] Conference [ ] Other(Specify)

(Record of Item Checked Above)

TO:	FROM:	DATE
Dick Moncure Evironmental Coordinator Gary Job Corp. Center	Brenda Nixon Cook FIT Chemist	10-21-87 TIME 1500

SUBJECT
Status of PCB transformers&possible location of past landfills.

SUMMARY OF COMMUNICATION

Mr. Moncure confirmed the date that the transformer pole broke was 9-17-87 and that the building number for the transformer storage facility was 9-356. He stated that the city a one time had a municipal landfill east of the airstrip. When asked about previous military landfills, he stated that he thought there had been 2 fuel dumps, one at the east and one at the west end of the airport ramp, and 2 or 3 landfills northeast of the airstrip. When questioned about the probable location of the buried tetraethyl lead, he said he did not know for sure but his guess would be near the fuel dumps.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72)
Replaces EPA HQ Form 5300-3 Which May Be Used Until Supply is Exhausted.

RECORD OF COMMUNICATION

[X] Phone Call [ ] Discu[illegible] [ ] Field Trip

[ ] Conference [ ] Other(Specify)

(Record of Item Checked Above)

TO:
Mr. Gilbert Charles
Alamo Transformers
San Antonio

FROM:
Brenda Cook

DATE
10-23-87

TIME
1409 hrs.

SUBJECT
Disposal Method for Transformer Oil PCB Testing Positive.

SUMMARY OF COMMUNICATION

Mr. Gilbert Charles stated that when oil was taken from a transformer it was tested for PCB's. If PCB positive either the contaminated oil was contained in a 55 gallon drum an stored on the facility where the transformer originated from or with customer permission disposed of by Chemical Waste Co. (713)847-4320 Houston, TX when asked about PCB oil fro transformers originating from Gary Corp center he stated that all transformers they have repaired for Gary Job Corp center had not tested positive for PCB's

CONCLUSIONS, ACTION TAKEN OR REQUIRED

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72)
Replaces EPA HQ Form 5300-3 Which May Be Used Until Supply is Exhausted.

REFERENCE 2

ecology and environment, inc.
1509 MAIN STREET, SUITE 814, DALLAS, TEXAS 75201, TEL. 214-742-6601
International Specialists in the Environment

MEMORANDUM

TO: Ed Sierra, Region VI RPO

THRU: K. H. Malone, Jr., FITOM

FROM: Brenda Nixon Cook, FIT Chemist

DATE: May 16, 1989

TDD: F06-8812-26; F06-8905-9
PAN: FTX0529SCA

SUBJECT: Resampling Mission Report for Gary Job Corp
San Marcos, TX (TX1161630644)

Gary Job Corps, located approximately one mile northeast of San Marcos, Texas on Highway 21 (Figure 1), is a vocational school operated by the Department of Labor for disadvantaged youth. The school occupies a part of a former World War II air base. The remainder of the air base belongs to the City of San Marcos. Previous investigations indicated two possible sources of contamination originating from the facility: contamination by lead and PCB from prior military activity, and unknown contamination from the City of San Marcos municipal landfill, located in the area northeast of the main base facility. From October 18-20, 1988, FIT sampled 2 monitoring wells and 5 residential drinking water wells near the municipal landfill. Sampling results documented a release of hazardous material to the alluvial aquifer underlying the closed landfill, and a lateral migration of cis-1,2-dichloroethene into nearby residential wells. As a result, the FIT was tasked by this TDD to resample the residential wells to confirm contamination.

The FIT contacted well owners (b) (6) [redacted] (2 wells), (b) (6) [redacted] and (b) (6) [redacted] (b) (6) [redacted] to obtain permission to sample. The FIT was unsuccessful in contacting the owner of the fifth well, (b) (6) [redacted] by phone or registered mail. On January 25, 1989, FIT members Brenda Nixon Cook, Lloyd Collins, and Jim Trusley, accompanied by Lonnie Ross and Susan Gunnels of the EPA sampled the residential wells belonging to (b) (6) [redacted] (b) (6) [redacted] (Figure 2). The (b) (6) [redacted] well was not sampled since the FIT could not obtain permission. Upon arrival at (b) (6) [redacted] (b) (6) [redacted] home, the FIT was able to determine that the house was vacant. Temperature, conductivity and pH readings were recorded for each residential well sampled (Table 1.1). Proper drinking water sampling protocol was followed.

6 20 89

recycled paper

Four samples and a trip blank were shipped to the EPA Houston laboratory to be analyzed for TCL organics, metals, cyanide, alkalinity and hardness. Chain-of-Custody forms are attached to this report.

TCL organic analysis of the residential wells indicated the presence of 1-1 dichloroethane, cis-1,2-dichloroethene, trichloroethene and 1-4-dichlorobenzene in the alluvial aquifer. Cis-1,2 dichloroethene was detected in all four wells. The concentrations of cis-1,2 dichloroethene for both sampling dates are presented in Table 1.2. Inorganic analysis of the residential drinking water wells indicated the presence of barium and mercury in slightly elevated concentrations in the two (b) (6) [redacted] wells.

These results confirm the release of contaminants into the alluvial aquifer. The presence of cis-1,2-dichloroethene in both the closed San Marcos Municipal Landfill monitoring wells and the downgradient residential wells is evidence of a lateral migration of this contaminant. Even though cis-1,2-dichloroethene was found in samples from the landfill monitoring wells, contamination cannot be solely attributed to the landfill due to other possible sources such as previous military landfilling and/or unidentified sources upgradient from the landfill area. The presence of these contaminants in the alluvial aquifer may affect the drinking water supply of the surrounding population.

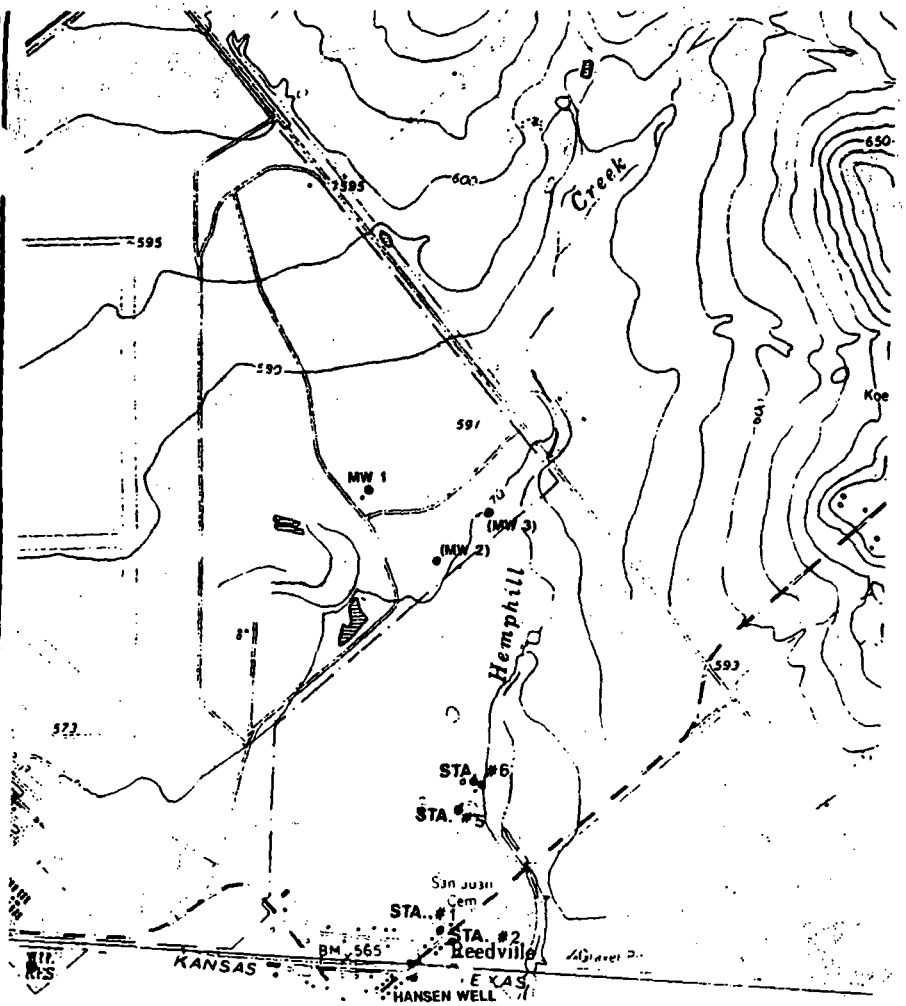


Table 1.1				
PH, Temperature and Conductivity Data				
Sta. #	Well Location	PH	Temperature	Conductivity
1	(b) (6) [redacted]	6.5	21	800
2		6.5	20	790
3-4		unable to sample		
5		6.0	23	1600
6		6.5	22	1750

Temperature in degrees Celcius
Conductivity in micro mhos per centimeter

Table 1.2		
Concentration of Cis-1,2- Dichloroethene		
	Sample Date	
Well Location	10/18/88	1/25/89
(b) (6) [redacted]	n.d.	5
	7.9	5.5
	6.2	17.2
	31.3	54.3
	n.d	n.s.

concentrations in ppb
n.d.- compound not detected
n.s.- well not sampled

N

FIGURE 2
SAMPLING LOCATIONS
GARY JOB CORP.
SAN MARCOS, TEXAS
TX116163044

DATA EVALUATION

SITE NAME: Gary Job Corp

CASE NUMBER: 9TFAFB21

SAMPLE NUMBERS: 9TFAFB21-01, 9TFAFB21-02, 9TFAFB21-03, 9TFAFB21-04, 9TFAFB21-05

This case consists of five drinking water well samples analyzed for full TCL organics, metals, alkalinity, and hardness by the EPA Houston Laboratory. Data package is complete.

ANIC [illegible] 'SIS SUMMA[illegible] 3R WATER

NBER: BARY JOB CORP
9TFAFB21 PAGE 1 OF 1
ATIONS IN PARTS PER BILLION (PPB)

TRAFFIC REPORT NUMBER AND STATION LOCATION.

		DRINKING WATER CRITERIA P - PRIMARY S - SECONDARY	9TFAFB211 STA. 01 RESIDENTIAL WELL BELONGING TO (b) (6) [redacted]	9TFAFB212 STA. 02 RESIDENTIAL WELL BELONGING TO (b) (6) [redacted]	9TFAFB214 STA. 05 RESIDENTIAL WELL BELONGING TO (b) (6) [redacted] WELL AT HOUSE	9TFAFB213 STA. 06 RESIDENTIAL WELL BELONGING TO (b) (6) [redacted] WELL BEHIND BARN	9TFAFB215 STA. 07 TRIP BLANK
	MATRIX		WATER	WATER	WATER	WATER	WATER
	% MOISTURE		0	0	0	0	0
	CAS NO.						
MINUM	7429-90-5		100U	100U	100U	1760	100U
IMONY	7440-36-0		60U	60U	60U	60U	60U
ENIC	7440-38-2	50P	4.600U	4.600U	4.600U	4.600U	4.600U
IUM	7440-39-3	1000P	67	72	128	151	10U
YLLIUM	7440-41-7		5U	5U	5U	5U	5U
MIUM	7440-43-9	10P	5U	5U	5U	5U	5U
CIUM	7440-70-2		134000	129000	204000	261000	337
OMIUM	7440-47-3	50P	10U	10U	10U	10U	10U
ALT	7440-48-4		20U	20U	20U	20U	20U
PER	7440-50-8	1000S	20U	20U	20U	20U	20U
N	7439-89-6	300S	25U	25U	25U	1410	25U
D	7439-92-1	50P	30U	30U	30U	30U	30U
NESIUM	7439-95-4		10400	10100	16800	21300	280
GANESE	7439-96-5	50S	5U	5U	9U	25	5
CURY	7439-97-6	2P	0.200U	1.550	0.240	1.180	0.200U
KEL	7440-02-0		20U	20	20U	20U	20U
ASSIUM	7440-09-7		5550	5350	7170	6920	4170
ENIUM	7782-49-2	10P	4.800U	4.800U	4.800U	4.800U	4.800U
VER	7440-22-4	50P	10U	10U	10U	10U	10U
IUM	7440-23-5		56900	63800	148000	160000	500U
LLIUM	7440-28-0		3.800U	3.800U	3.800U	3.800U	3.800U
	7440-31-5		0	0	0	0	0
ADIUM	7440-62-2		54	55	61	70	38
C	7440-66-6	5000S	38	92	22	45	43
NIDE			0.020U	0.020U	0.020U	0.020U	0.020
DNESS			377	364	579	739	0
ALINITY			344	338	374	444	0

DATA IS UNUSABLE DUE TO QA/QC OUT OF CONTROL LIMITS.
REPORTED CONCENTRATIONS OR DETECTION LIMITS ARE ESTIMATES DUE TO QA/QC OUT OF CONTROL LIMITS.
CONCENTRATION IN SAMPLE ATTRIBUTABLE TO BLANK CONTAMINATION.
NOT DETECTED: VALUE REPORTED IS THE DETECTION LIMIT.

Chemical Data Summary

SITE NAME AND CODE: GARY JOB CORP
CASE NUMBER: 9TFAFB21
Page 1 of 1
CONCENTRATIONS IN PARTS PER BILLION (ug/L WATER, ug/kg SOIL)
Compiled by : Ecology & Environment, Inc.

TRAFFIC REPORT NUMBER AND STATION LOCATION

		Organic Traffic Number	9TFAFB211	9TFAFB212	9TFAFB214	9TFAFB213	9TFAFB215
		Matrix	WATER	WATER	WATER	WATER	WATER
		Percent Moisture					
		Location And/Or Sample Description	STA. 01 RESIDENTIAL WELL BELONGING (b) (6) [redacted]	STA. 02 RESIDENTIAL WELL BELONGING TO (b) (6) [redacted]	STA. 05 RESIDENTIAL WELL BELONGING TO (b) (6) [redacted] WELL AT [redacted]	STA. 06 RESEDENTIAL WELL BELONGING TO (b) (6) [redacted] WELL BEHIND BARN	STA. 07 TRIP BLANK
Compound Name	CAS/SCAN	CLASS					
...CHLOROETHANE	75-34-3	VOA/1			2.2	5.2	
...LOROETHENE	127-18-4	VOA/1				2.7	
...LOROETHENE	79-01-6	VOA/1				3.8	
...DICHLOROBENZENE	106-46-7	ABN/1			3	4	3
...s-1,2 dichloroethene	000	VOA/2	5	5.5	17.2	54.3	
...NOWN	173	ABN/2			130 J		
UNKNOWN	209	ABN/2			110 J		
UNKNOWN	212	ABN/2			29 J		
UNKNOWN	222	ABN/2			17 J		
UNKNOWN	423	ABN/2			180 J		
UNKNOWN	452	ABN/2			12 J		

...E ABN - ACID/BASE/NEUTRAL PES - PESTICIDE/PCB
...UND LIST COMPOUND (TCL) 2 - TENTATIVELY IDENTIFIED COMPOUND (TIC)
...NTRATION (TIC, TCL LESS THAN CRQL, OR TCL WITH QA/QC OUT OF CONTROL LIMITS) U - UNDETECTED, DETECTION LIMIT

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

2. Date well was dug Prior to 1913
3. Depth of well less than 20ft
4. Depth to static water approximately 16 feet
5. Is the well cased? Yes ___ No X Unknown ___

   If so, to what depth? ___

   What type of casing is used? N/A
6. Is well screened? Yes ___ No X Unknown ___
7. Is the well used for residential purposes, or for watering livestock?

   Well is used for all domestic needs of the (b) (6) [redacted] family.

8. Any other pertinent information?

   Well is located in Reedville area approximately 1/2 -3/4 mile from San Marcos Municipal Landfill .

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name. address and phone number of resident (include county and zip code)

(b) (6) [redacted]

2. Date well was dug 1936
3. Depth of well approximately 30ft.
4. Depth to static water unknown
5. Is the well cased? Yes ___ No X Unknown ___

   If so, to what depth? ___

   What type of casing is used? N/A
6. Is well screened? Yes ___ No X Unknown ___
7. Is the well used for residential purposes, or for watering livestock?

   Well is located in the Reedville community. Well supplies water for all domestic needs.

8. Any other pertinent information?

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

Mailing Address

(b) (6) [redacted]

2. Date well was dug Unknown
3. Depth of well 25 ft.
4. Depth to static water 20 ft.
5. Is the well cased? Yes X No ___ Unknown ___

   If so, to what depth? 20 ft.

   What type of casing is used? PVC
6. Is well screened? Yes ___ No ___ Unknown X
7. Is the well used for residential purposes, or for watering livestock?

   Well is used for domestic, commercial and livestock needs.

8. Any other pertinent information?

   One of two wells sampled at this location. This information corresponds to the well located behind the house. This well supplies water to the house and to the breeders association.

Well #

RESIDENTIAL WELL SAMPLING INFORMATION

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

Mailing Address

(b) (6) [redacted]

2. Date well was dug Unknown

3. Depth of well approximately 25 ft

4. Depth to static water 20ft

5. Is the well cased? Yes ___ No X Unknown ___

   If so, to what depth? ___

   What type of casing is used? N/A

6. Is well screened? Yes ___ No X Unknown ___

7. Is the well used for residential purposes, or for watering livestock?

   Well is used for watering livestock

8. Any other pertinent information?

   Well located in Reedville community. Closest well to the San Marcos municipal landfill.

CITY OF SAN MARCOS

May 8, 1989

Mr. Presley B. Hatcher
Superfund Site Assessment Section (6H-MA)
Environmental Protection Agency
Region VI
Suite 1200
1445 Ross Avenue
Dallas, TX 75202

[redacted]

Re: San Marcos, TX Landfill

Dear Mr. Hatcher:

Recently I received a report written by Brenda Nixon Cook of Ecology and Environment, Inc. dated January 12, 1989 directed to Mr. Ed Sierra. The subject of this report was the analyses of well samples taken from the landfill monitoring wells and other local water wells in October, 1988.

On behalf of the City of San Marcos, I am very concerned with her conclusion that the closed municipal landfill is the source of groundwater contaminants in the area. This conclusion at this time is purely speculative and is not based on any attempt to precisely locate the true source of any contamination of the alluvial aquifer.

Looking at the map of wells sampled in the area, Ms. Cook made no attempt to obtain samples from wells upgradient of the landfill site. Even if the one well upgradient had not been dry, she has failed to investigate the fact that this entire site was a long time military base where trash, materials and solvents were buried without any record of location. I am also concerned that the analytical report for the landfill monitoring wells differs considerably with the results obtained by analytical laboratories hired by the city in terms of compounds and concentrations.

I would ask that before any further conclusions are made about the source of any contamination in the area, more detailed analyses of the history and upgradient characteristics are included in the efforts supporting those conclusions. The City of San Marcos is actively pursuing this goal unilaterally by beginning a groundwater assessment for the landfill. Please contact me at your earliest opportunity if you would like more information concerning our efforts.

Sincerely,

Stephen M. Jenkins
Director, Environment & Engineering

SUPERFUND FILE

DEC 02 1992

REORGAN

city hall • 630 e. hopkins • san marcos, texas • 78666 • 512/353-4444

REFERENCE 3

U.S. Department of Com[illegible]e
Economics and Statistics A[illegible]ration
BUREAU OF THE CENSUS

1990 CP-1-45

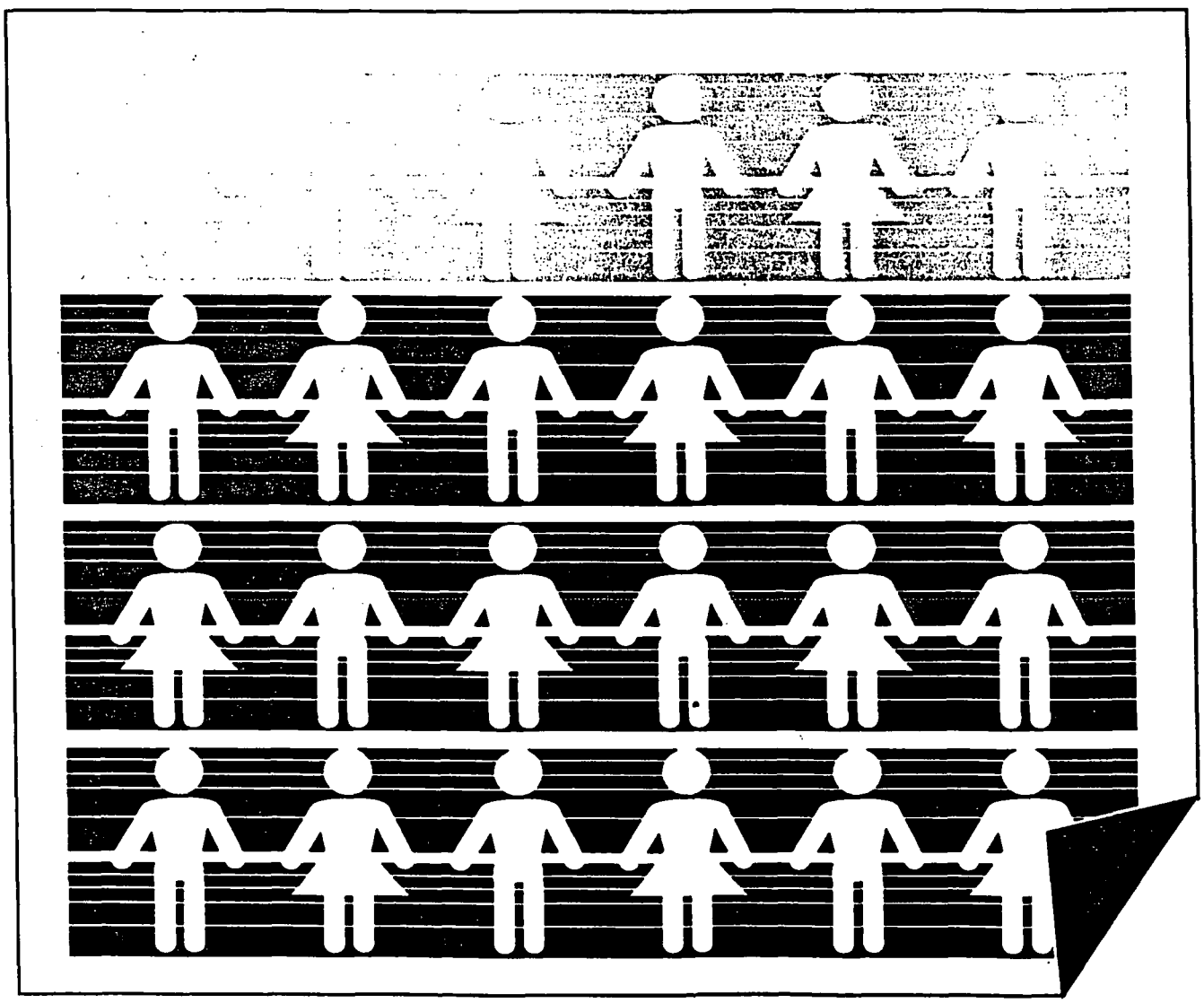
1990 Census of Population

General Population Characteristics

Texas

Section 1 of 2

CENSUS '90



REFERENCE 4

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

REPLY TO: 6E-SH

MEMORANDUM

DATE: November 29, 1988

SUBJECT: Drinking Water Samples from the Gary Job Corp. Site

FROM: Dave Wineman
FITRPO
Hazardous Waste Section (6E-SH)

TO: Tom Love
Chief
Public Water Supply Section (6W-SP)

Attached you will find copies of the drinking water analysis for residential wells adjacent to the Gary Job Corp. Site near San Marcos, Texas. The (b) (6) [redacted] wells are currently used for residential drinking water. The other two (2) wells, stations 5 and 6 (duplicate samples) behind the (b) (6) [redacted] barn, are not currently used for drinking water, but could be used at any time and have been used in the past. Mostly notably vinyl chloride occurs in both samples. All of the wells mentioned above are downgradient of a landfill.

Attachment

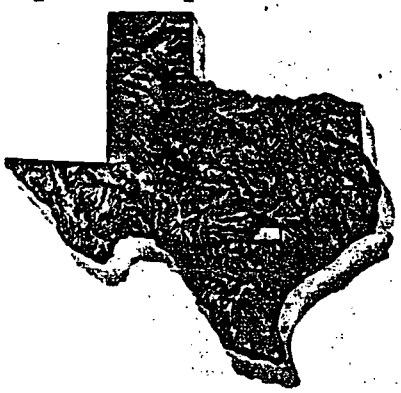
SUPERFUND FILE
DEC 02 1992
REORGANIZED

REFERENCE 5

29097-E1-TM-100

Seguin
TEXAS

1:100 000-scale *metric*
topographic map



GAYLORD STICKLE CO. & ASSOC., INC.
AGENTS FOR U.S.G.S. MAPS
Houston, TX (713) 523-0471

30 X 60 MINUTE QUADRANGLE SHOWING

- Contours and elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names

GEOLOGICAL SURVEY

1985

REFERENCE 6

ECOLOGY AND ENVIRONMENT, INC.

DALLAS, TEXAS

MEMORANDUM

TO: David Wineman, RPO Region VI

THRU: K. H. Malone, Jr., FITOM

FROM: Brenda Nixon Cook, FIT Chemist

DATE: May 10, 1988

SUBJ: Sampling Plan for Gary Job Corps facility, San Marcos, Texas
(TX1161630644)
TDD# F06-8802-20
PAN FTX0529SBA

The FIT previously submitted a Site Inspection Report (EPA T2070-3) to EPA on February 18, 1988 regarding the Gary Job Corps facility at San Marcos. As indicated, historical aerial photographs of the site had been requested in order to locate previous waste disposal areas to aid in the development of a sampling plan. Additional background information gathered by the FIT is also included in this memorandum.

In 1965, the Department of Defense closed Camp Gary as a military airbase, and deeded the airport and the land northeast of the facility to the City of San Marcos. The Department of Labor obtained the main base and surrounding buildings in 1965 for use by the Gary Job Corps as their educational campus. Previous investigations by the FIT at the Gary Job Corps facility indicated three areas of concern, i.e. 1) possible PCB contamination of the soil from the 341 electric transformers in storage at this facility; 2) alleged burial of tetraethyl lead by the military in the mid-1950s; and 3) the former City of San Marcos landfill.

The earlier site inspection report submitted to EPA indicated that the Department of Labor appears to be responding adequately to the problem of the electric transformers at the facility. However past practices concerning handling and storage of these transformers are unknown and for this reason soils which may in the past had continual contact with these transformers may have been contaminated by PCBs. With the construction and modification of building 9-356 at the facility, there now exists a well contained storage area for these transformers. Prior to moving the transformers to building 9-356, all transformers not in use were stored in the transformer utility yard near building 11-215. For this reason the soil near building 11-215 should be sampled. On September 17, 1987 a transformer pole broke near building 7-102 and a electric transformer fell to the ground leaching possible PCB contaminated oil onto the ground. Topsoil near the area where the pole broke was removed and drummed as PCB contaminated soil. Soils near where the transformer pole broke should be sampled to ensure that all PCB contaminated soil was adequately removed.

Due to the lack of information concerning past military landfills and the location of the alleged burial of tetraethyl lead at this facility, the FIT requested historical aerial photographs to help determine past waste disposal practices and locations. In a conversation with Mr. Monocure, Gary Job Corps Center Environmental Coordinator, on October 21, 1987, he stated that he believed that the military had once operated a landfill northeast of the main base area and two fuel dumps, one at the east and one at the west ends of the airport ramp. Aerial photographs from 1951 show no landfill activity in the area. Aerial photographs of the area northeast of the main base from 1958 indicate possible landfill activities, thus supporting the earlier allegation that tetraethyl lead may have been buried at this facility in the mid-1950s. In a conversation with Mr. Monocure on April 26, 1988 he stated that he could locate the previous military landfill at the facility. No records for wastes exist for the military landfill; however Mr. Monocure stated that the military first burned and then buried the remaining wastes. Soil samples taken around the perimeter of the military landfill and at each fuel dump would determine the presence of contamination, if any, from the previous military waste disposal practices.

In addition to the threat of PCB contamination from the electric transformers and the alleged burial of tetraethyl lead at the facility there also exists possible contamination of the alluvial aquifer from the City of San Marcos Municipal Landfill located in the area northeast of the main base facility. The municipal landfill appears to have been located east of and adjacent to the military landfill, based on interpretation of the historical aerial photos. Since submission of the site inspection report the EPA has received inquiries from several sources concerning possible contamination of the alluvial aquifer underlying the closed San Marcos Landfill. According to records from the Texas Department of Health the municipal landfill occupied an 84 acre tract of land northeast of the main base facility from 1969-1984. During this time approximately 1,825,320 cubic yards of solid waste were deposited. In a 1966 aerial photo, there appears to be considerable activity in the area northeast of the main base where the municipal landfill is located; however this area was not permitted for landfill activities until June of 1969. In a conversation with Mr. Monocure on April 26, 1988, he stated that he believed that dumping by the City of San Marcos began prior to 1969.

The Texas Department of Health records for the San Marcos Municipal Landfill provided the following geological information: the alluvial layer of the soil beneath the landfill consists of silty clay layers followed by a sand/gravel water bearing zone located at a depth of 15 - 20 feet. Records indicate that the trench type landfill operated by the city was not to go below 12 feet in depth leaving a 3 feet clay bottom to serve as a natural liner. Complaints from citizens suggesting that this 3-ft clay layer had not been maintained were included the Department of Health files.

Water usage in this area is provided by three separate sources. Water for the Job Corp residents is provided by the City of San Marcos. Other area residents are either using their own water wells or are members of the Maxwell Water Supply Corporation. The majority of residents use the Maxwell Water Supply Corp for drinking and their own well water for watering yards, gardens, and livestock. A small portion of the surrounding community does rely solely on the alluvial aquifer for their total water usage. A well

survey for the area would better determine water usage of the alluvial aquifer and provide data for a more strategic sampling of the wells surrounding the municipal landfill.

Due to the recent inquiries concerning the quality of the water in the alluvial aquifer surrounding the Camp Gary facility it is recommended that all three potential sources of contamination be examined. In addition to sampling ground water wells in close proximity to the municipal landfill and the earlier military landfill, areas on the main base facility that might have been contaminated by PCB electric transformers stored on this facility should also be sampled.

Attached is the proposed sampling plan.

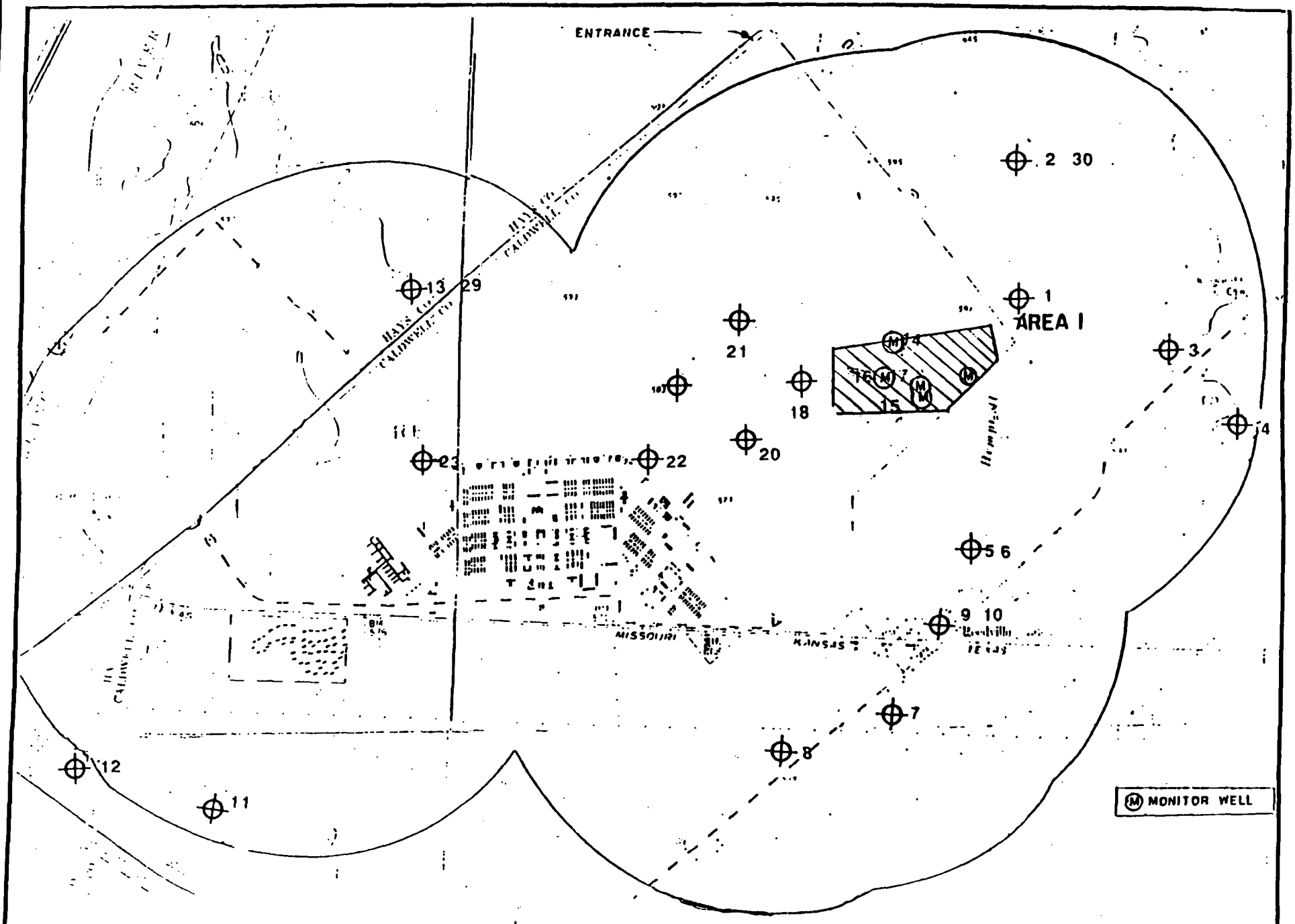
Sampling Plan for Gary Job Corp and San Marcos Municipal Landfill
TX1161630644

Groundwater wells

Sampling locations are based on an old well survey(1976) found in the Texas Department of Health File. During several phone calls trying to validate the survey, it was evident that a new well survey would be needed to obtain more accurate information to provide a representative sampling of the groundwater in the area surrounding the San Marcos Municipal Landfill. Locations may change based upon results of the proposed well survey.

Sample Number	Station Number	Sample Location Description
1	1	Residential Well belonging to (b) (6) (b) (6) approximately 300 ft east of San Marcos Municipal Landfill. (QA\QC)
2	2	Residential Well belonging to (b) (6) northeast of San Marcos Municipal Landfill. (Background)
3	3	Residential Well belonging to (b) (6) (b) (6) southeast of San Marcos Municipal Landfill.
4	4	Residential Well belonging to (b) (6) (b) (6) southeast of San Marcos Municipal Landfill.
5	5	Residential Well belonging to (b) (6) south of San Marcos Municipal Landfill
6	6	Residential Well belonging to (b) (6) south of San Marcos Municipal Landfill. Duplicate of 5.
7	7	Residential Well belonging to (b) (6) south of San Marcos Municipal Landfill.

19	19	West of previous military landfill site. Sample taken at depth of 4-6 ft.
20	20	South of previous military landfill site. Sample taken at depth of 4-6 ft.
21	21	North of previous military landfill site. Sample taken at depth of 4-6 ft.
22	22	East fuel dump. Sample taken at depth of 4-6 ft.
23	23	West fuel dump. Sample taken at depth of 4-6 ft.
24	24	Soil near building 7-102 where transformer fell . Surface Soil.
25	25	Soil near building 7-102 where transformer fell. Sample taken at depth of 4-6 ft.
26	26	Soil in former transformer Utility Yard building 11-215. Surface Soil (QA|QC).
27	27	Soil in former transformer Utility Yard building 11-215. Sample taken at depth of 4-6 ft.
28	28	Soil in former transformer utility yard building 11-215. Sample taken at depth of 4-6 ft. Duplicate of 27.
29	29	Background soil taken near well #13 (b) (6) [redacted] northwest of facility.
30	30	Background soil taken near well #2 (b) (6) [redacted] northeast of facility.

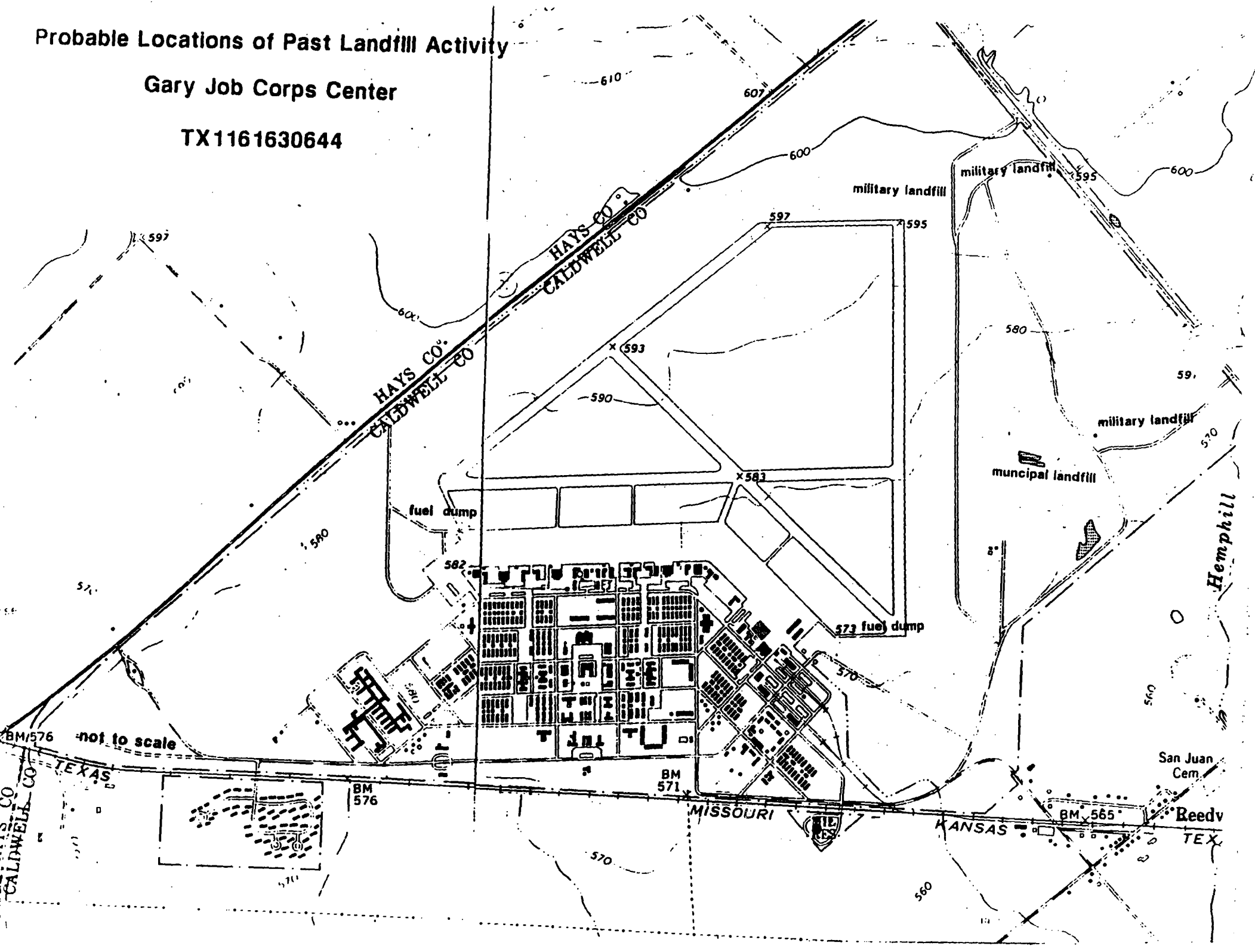


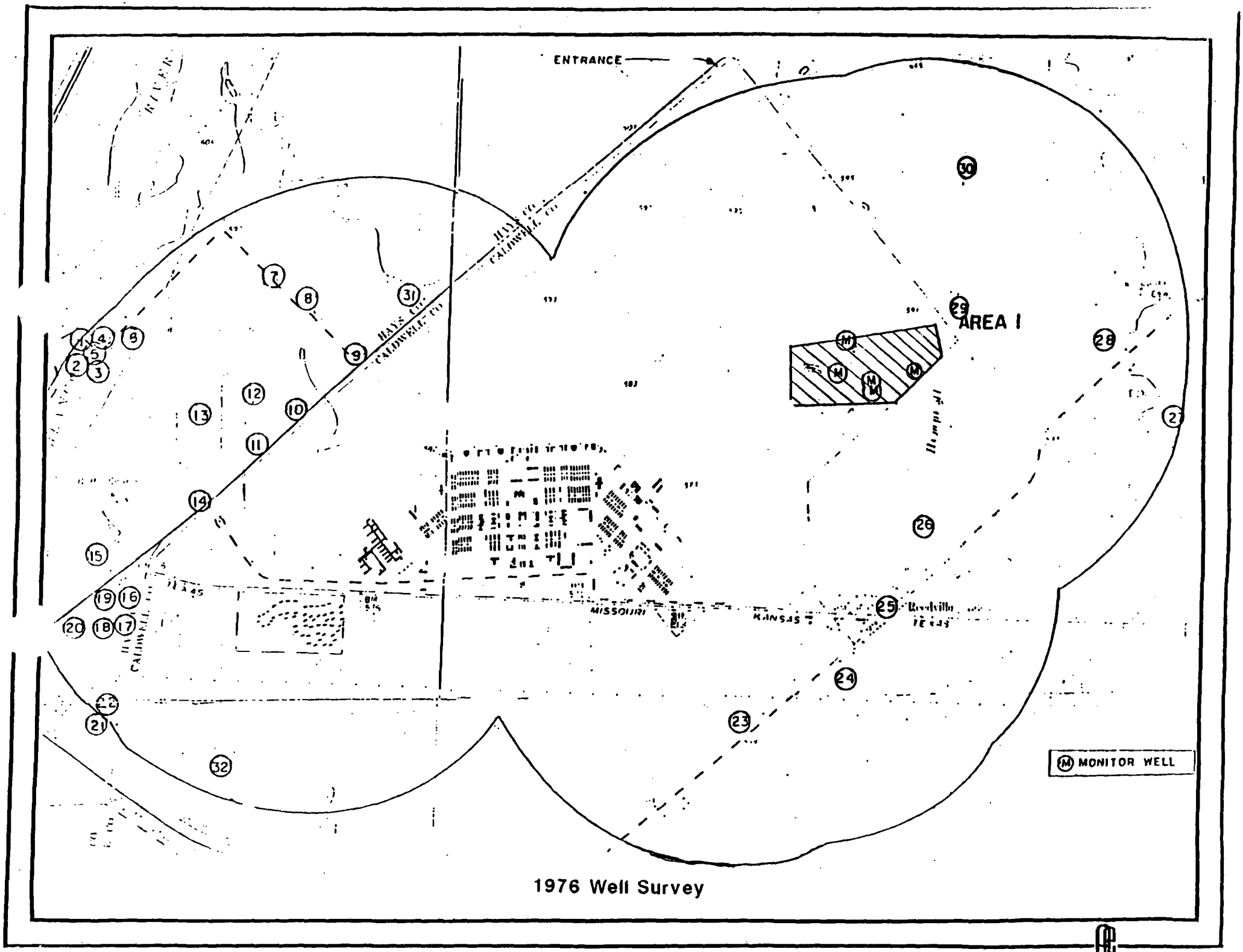
Sampling Locations

Probable Locations of Past Landfill Activity

Gary Job Corps Center

TX1161630644





1976 Well Survey

24. 35′ yard use-dug (b) (6) [redacted]

25. 30′ to 50′ 15 wells 10 house use Reedville Area

26. 35′ each (2 wells) 1 house use-dug (b) (6) [redacted]

27. 60′ each (3 wells) Stock use (b) (6) [redacted]

28. 30′ house use-dug (b) (6) [redacted]

29. 30′ (2 wells) 1 house and 1 abandon

30. 70′ stock use (b) (6) [redacted]

31. 50′ house use [redacted]

32. 35′ house use-dug well ((b) (6) [redacted]

REFERENCE 7

WESTON

Peter Rung
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name Aida Laiche
Company Municipal Solid Waste TNRCC
Address
Phone 512 ~~3~~ 239-6728
Subject San Marcos Landfill

Date 8/31/95
Time 8:45 AM/PM

☐ Originator Placed Call
☐ Originator Received Call
W.O. NO.

Notes: Aida Laiche stated that the landfill was closed with 3 feet of clean soil placed on top. She said she thinks the entire Gary Job Corps site is surrounded by a maintained fenced.

☐ File
☐ Tickle File ___/___/___
☐ Follow-Up By:
☐ Copy/Route To:

Follow-Up-Action:

Originator's Initials

RFW 110-4-83

REFERENCE 8

WESTON

Peter Rung
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name ANN Stahl
Company INRCC
Address
Phone 512 239 2500
Subject San Marcos Municipal Land Fill

Date 8/3/95
Time 2:34 AM/PM

☐ Originator Placed Call
☐ Originator Received Call
W.O. NO.

Notes: Ms. Stahl stated that the landfill was capped with 3-feet of clean soil and had healthy vegatation on top of it. At the time of her investigation there was a maintained fence around the entire facility. All transformers had been cleared from the site

☐ **File**
☐ **Tickle File** / /
☐ **Follow-Up By:**
☐ **Copy/Route To:**

Follow-Up-Action:

Originator's Initials

RFW 110-4-83

REFERENCE 9

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE : 1/17/89

SUBJECT : Potential Hazardous Waste Site

FROM : Ed Sierra, FIT RPO Ed Sierra
Hazardous Waste Section (6E-SH)

TO : Brian Burgess, Acting Chief
Site Assessment Section (6H-MA)

Site Name : Gary Job Corp

Location : San Marcos Tx X-Ray Sta 1 of 1

EPA ID No : TX 116 163 0 644

TDD No : F06-8809-11

A. Deliverables :

1. Preliminary Assessment attached( )
2. Site Inspection Report attached( )
3. Sampling Inspection Report attached(X)
4. HRS Package
   - Preliminary attached( )
   - Final attached( )
   - Support Documents attached( )
5. Other _____ attached( )

B. Were Drinking Water Wells sampled? Yes(X) No( )

C. Analytical Data :

1. None collected ( )
2. Field Data ( )
3. CLP Data (X)
4. Houston Lab Data ( )

COMMENTS: Attached are well survey sheet and lab analysis

SUPERFUND FILE

DEC 02 1992

ORGANIZED

cc: (circle) Cabra 6W-S 1/26/89 Tregoning 6H-CT
Gazda 6E-E Maiefski 6H-CS

ECOLOGY AND ENVIRONMENT, INC.

DALLAS, TEXAS

MEMORANDUM

To: Ed Sierra, Region VI RPO

Thru: K. H. Malone, Jr., FITOM

From: Brenda Nixon Cook, FIT Chemist

Date: January 12, 1989

Subj: Sampling Mission Report for Gary Job Corps Center, San Marcos, TX (TX1161630644)
TDD #F-06-8809-11
PAN #FTX0529HAB

Gary Job Corps, located approximately one mile northeast of San Marcos, Texas on Highway 21, is a vocational school operated by the Department of Labor for disadvantaged youth. The school occupies a portion of a former World War II air base with the remainder of the air base belonging to the City of San Marcos. Previous investigations of this facility indicated two possible sources of contamination originating from the facility: contamination by lead and PCB from prior military activity, and unknown contamination from the City of San Marcos Municipal Landfill, located in the area northeast of the main base facility. To address these allegations, the FIT was tasked to sample monitoring wells at the San Marcos Municipal Landfill and residential drinking water wells within half a mile of the Landfill and Job Corps Facility.

On October 18, 1988, FIT members Brenda Cook, David Anderson, Lloyd Collins and Lyle Winnette conducted a well survey to identify and obtain permission to sample the residential wells nearest to the facility. The following wells were identified: three wells belonging (b) (6) [redacted] (closest wells to landfill), one well belonging to (b) (6) [redacted] one well belonging to (b) (6) [redacted], one well belonging to (b) (6) [redacted] and two wells belonging to (b) (6) [redacted] (one upgradient) (Figure 2).

On October 19, the FIT members accompanied by Mr. Steve Jenkins, Environmental Coordinator for the City of San Marcos, arrived at the landfill. Mr. Jenkins stated that the upgradient monitoring well was dry and could not be sampled. After locating the three monitoring wells by vehicle, FIT members Cook and Anderson initiated site characterization procedures. No ambient air characteristics were recorded above background (background HNU reading 0.4 ppm benzene equivalents). The FIT purged Monitoring Well #2. Monitoring Well #2 was pumped dry and allowed to recharge overnight, prior to sampling. To

Reviewed by FILES
Date 4-14-89

PRELIMINARY REPORT
This does not constitute final opinion of EPA

avoid overpumping, the FIT hand bailed Monitoring Well #3 until pH, conductivity and temperature readings were constant. Monitoring Well #3 was sampled at this point. Temperature, pH, and conductivity readings were recorded for each monitoring well (Table 1.1). Water level indicator and depths of well readings were taken from each monitoring well (Table 1.2). Trip blanks were prepared in the field on October 19th by filling sample bottles with deionized water.

Residential wells of (b) (6) [redacted] were sampled on October 19th. The FIT learned that the wells belonging to (b) (6) [redacted] were dry and no longer used. Due to drought conditions and inactivity, many of the wells were dry. The FIT was unsuccessful in locating additional upgradient wells. Temperature, pH and conductivity readings were recorded for each residential well sampled (Table 1.1).

On October 20, Monitoring Well #2 was sampled. Only two 1-liter amber bottles were sent to a CLP laboratory from the well due to insufficient well recharge volume. Two residential wells belonging to (b) (6) [redacted] were sampled but the third (b) (6) [redacted] well to be sampled was dry. Temperature, pH and conductivity readings were recorded for each well sampled. Due to the limited sample volume from Monitoring Well #2, the PH, temperature and conductivity readings taken on October 19th were used for the record.

Residential well samples were sent to the EPA Houston Laboratory to be analyzed for TCL organics, metals, cyanide, alkalinity and hardness. Monitoring well samples were sent to CLP laboratories to be analyzed for TCL organics, metals and cyanide. Chain of Custody forms are attached to this report.

Due to the lack of an appropriate background sample, the least contaminated well was used as the standard to compare the extent of contamination in the other well samples. The residential well used as a background sample belongs to (b) (6) [redacted]

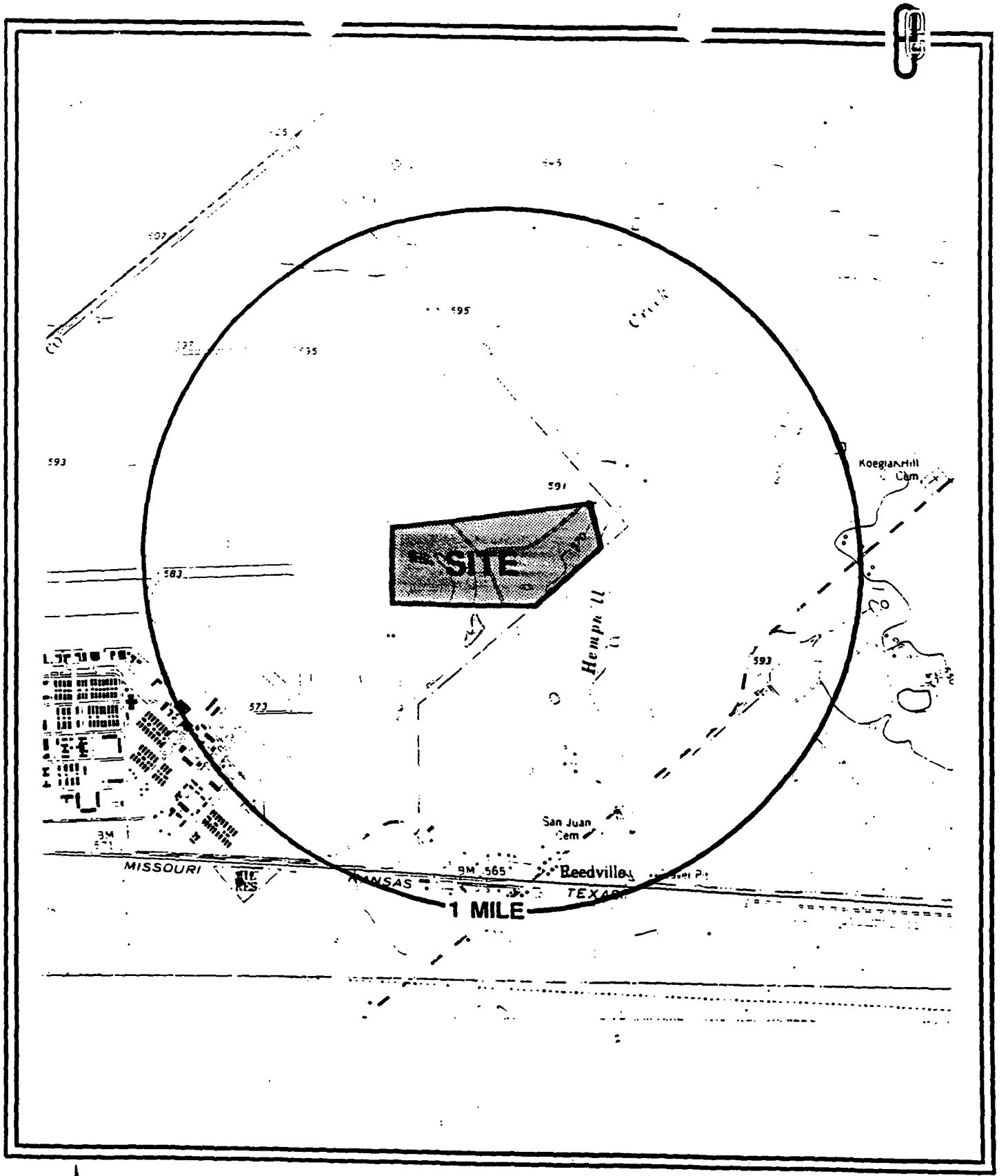
TCL organic analysis of the monitoring wells indicate the presence of 1,1-dichloroethene, 1,2-dichloroethene (total), vinyl chloride, carbon disulfide, pyrene, and delta-BHC in the groundwater underlying the facility. Inorganic analysis of the monitoring wells indicated the presence of arsenic, barium, beryllium, chromium, cobalt, lead, vanadium and zinc above background. Concentrations of contaminants in Monitoring Well #3 were significantly higher than those in Monitoring Well #2.

TCL organic analysis of the residential drinking water wells indicated the presence of bromoform, phenol and cis-1,2-dichloroethene in the alluvial aquifer. Cis-1,2-dichloroethene was detected in three of the five sampling locations. Inorganic analysis of the residential drinking water wells indicated the presence of barium, mercury and cyanide slightly above the background level in some of the residential well samples.

A documented release of hazardous material to the alluvial aquifer underlying the San Marcos Municipal Landfill appears to have occurred. A lateral migration of cis-1,2-dichloroethene in the alluvial aquifer is documented by the presence of this compound in both the monitoring wells and the downgradient residential drinking water wells. The source of the contaminants is believed to be the closed municipal landfill.

As a result of these findings, FIT has been tasked (TDD #F06-8812-25) to resample the residential wells to validate contamination. At this time FIT recommends no further action pending the results of the resampling.

BNC/amw



0 N 2000 ft.

FIGURE 1
SITE LOCATION MAP
GARY JOB CORP.
SAN MARCOS, TEXAS
TX1161630644

DATA EVALUATION

SITE NAME: Gary Job Corps

CASE NUMBER: 10654

SAMPLE NUMBERS: FJ076, FJ077, AND FJ078

This package consists of three low concentration water samples analyzed for full TCL organics. The following qualifications have been placed on the use of this data due to QA/QC criteria being out of control limits.

1. Analysis of the VOA fraction of all of the samples was conducted outside of holding times. Reported concentrations and detection limits for all aromatic target compounds are considered estimates.

2. Calibration criteria out of control limits was noted for acetone and 2-butanone. Reported concentrations and detection limits of these compounds are considered estimates (J flag). Other compounds with calibration criteria out of limits were noted in the VOA fraction, however these compounds were not detected in the samples and reported detection limits are considered estimates.

3. Acetone, methylene chloride, 2-butanone and a TIC were detected in the VOA method blank. Sample concentrations of acetone, methylene chloride and 2-butanone less than ten times the blank concentration or of the TIC less than five times the blank concentration are flagged "B" on the data summary sheets.

4. Several unknown TIC compounds were detected in the ABN fraction method blank. Sample concentrations of these compounds less than five times their blank concentrations are flagged "B" on the data summary sheets.

5. The surrogate recovery of DBC for the pesticide fraction of sample FJ076 was below the control limit. Reported detection limits of the pesticides/PCBs in this sample are considered estimates.

DATA QUALITY ASSURANCE REVIEW

SITE NAME [illegible]

SITE CODE TX 0644

PAN FTX [illegible]

CASE NUMBER 10654

LABORATORY Triangle Laboratories

SAMPLE NUMBERS [illegible]

[illegible]

[illegible]

REVIEWER [illegible]

DG 1-4-89

COVERAGE

STATE	COUNTY	STATE NAME	COUNTY NAME
48	55	Texas	Caldwell Co
48	187	Texas	Guadalupe Co
48	209	Texas	Hays Co

CENTER POINT AT STATE : 48 Texas
COUNTY : 209 Hays Co

REGION OF THE COUNTRY

Zipcode found: 78655 at a distance of 3.6 Km

STATE	CITY NAME	FIPSCODE	LATITUDE	LONGITUDE
TX	MARTINDALE	48055	29.8400	97.8417

CENSUS DATA

PETE
LATITUDE 29:51:50 LONGITUDE 97:52: 2 1990 POPULATION

KM	0.00-.400	.400-.810	.810-1.60	1.60-3.20	3.20-4.80	4.80-6.40	SECTOR TOTALS
S 1	0	0	0	0	0	17093	17093
RING TOTALS	0	0	0	0	0	17093	17093

STAR STATION

WBAN NUMBER	STATION NAME	LATITUDE	LONGITUDE	PERIOD OF RECORD	DISTANCE (km)
13958	AUSTIN/MUELLER TX	30.3000	97.7000	1980-1984	51.0
12921	SAN ANTONIO TX	29.5333	98.4667	1960-1964	68.5
12912	VICTORIA/FOSTER TX	28.8500	96.9167	1965-1974	145.5
12925	BEEVILLE/CHASE TX	28.3833	97.6667	1965-1969	165.6
13959	WACO TX	31.6167	97.2167	1969-1973	204.4
12947	COTULLA TX	28.4500	99.2167	1950-1954	204.5
12924	CORPUS CHRISTI/CLIFF MAUS TX	27.7667	97.5000	1965-1969	235.7

DATA EVALUATION

SITE NAME: Gary Job Corps

CASE NUMBER: 10654

SAMPLE NUMBERS: FJ076, FJ077, AND FJ078

This package consists of three low concentration water samples analyzed for full TCL organics. The following qualifications have been placed on the use of this data due to QA/QC criteria being out of control limits.

1. Analysis of the VOA fraction of all of the samples was conducted outside of holding times. Reported concentrations and detection limits for all aromatic target compounds are considered estimates.

2. Calibration criteria out of control limits was noted for acetone and 2-butanone. Reported concentrations and detection limits of these compounds are considered estimates (J flag). Other compounds with calibration criteria out of limits were noted in the VOA fraction, however these compounds were not detected in the samples and reported detection limits are considered estimates.

3. Acetone, methylene chloride, 2-butanone and a TIC were detected in the VOA method blank. Sample concentrations of acetone, methylene chloride and 2-butanone less than ten times the blank concentration or of the TIC less than five times the blank concentration are flagged "B" on the data summary sheets.

4. Several unknown TIC compounds were detected in the ABN fraction method blank. Sample concentrations of these compounds less than five times their blank concentrations are flagged "B" on the data summary sheets.

5. The surrogate recovery of DBC for the pesticide fraction of sample FJ076 was below the control limit. Reported detection limits of the pesticides/PCBs in this sample are considered estimates.

DATA EVALUATION

SITE NAME: Gary Job Corp

CASE NUMBER: 10654

SAMPLE NUMBERS: MFH380, MFH381, and MFH382

The data package consists of three waters analyzed for total metals and cyanide. The following qualifications have been placed on this data due to QA/QC criteria out of control limits.

1) The concentration of arsenic in sample MFH380 is considered an estimate (J flag) due to the method of standard addition results out of control limits.

2) A laboratory control sample was not analyzed for cyanide due to the lack of an appropriate LCS standard at the lab. This is a contractual violation. The data is not significantly affected since cyanide was not detected in any of the samples.

3) Concentrations of aluminum, iron, magnanese and magnesium are considered estimates (J flag) due to ICP serial dilution results out of control limits.

4) The concentration of zinc in sample MFH381 is flagged B due to the presence of zinc at a comparable concentration in the preparation blank.

5) Reported concentrations and detection limits for arsenic and antimony are considered estimates (J flag) due to low matrix spike recoveries. Actual concentrations may be as high as 1.7 and 2.5 times the reported values, respectively.

6) Reported concentrations and detection limits for mercury and selenium are unusable (R flag) due to unacceptable matrix spike recoveries.

7) Post digest spike results for mercury were also out of control limits, indicating possible matrix effects in the analysis.

8) Reported concentrations of aluminum, chromium and iron are estimates (J flag) due to duplicate results out of control limits.

9) All other QA/QC criteria were within control limits.

ITE NAME AND CODE: GARY JOB CORP
ASE NUMBER:

ONCENTRATIONS IN PARTS PER BILLION (ug/L WATER, ug/kg SOIL)
ompiled by : Ecology & Environment, Inc.

TRAFFIC REPORT NUMBER AND STATION LOCATION

Organic Traffic Number			9TFACB03-1		9TFACB03-2		9TFACB03-3		9TFACB03-5		9TFACB03-6		9TFACB03-7		9TFACB03-4														
Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER														
Percent Moisture																													
Location			STA. 07		STA. 08		STA. 09		STA. 04		STA. 05		STA. 06		STA. 10														
And/Or			RESIDENTIAL		RESIDENTIAL		RESIDENTIAL		RESIDENTIAL		RESIDENTIAL		RESIDENTIAL		TRIP BLANK														
Sample			WELL BELONGING		WELL BELONGING		WELL BELONGING		WELL BELONGING		WELL BELONGING		WELL BELONGING		DRINKING														
Description			TO [redacted]		TO [redacted]		TO [redacted]		TO [redacted]		TO [redacted]		TO [redacted]		WATER WELLS														
			[redacted]		[redacted]				AT HOUSE		BEHIND BARN		BEHIND BARN																
Compound Name	CAS/SCAN	CLASS											DUP OF STA. 05																
UNKNOWN	1517	ABN/2						13	J																				
UNKNOWN	1533	ABN/2			7	J																							
UNKNOWN	1541	ABN/2			8	J																							
UNKNOWN	1542	ABN/2						14	J																				
UNKNOWN	1593	ABN/2			9	J																							
UNKNOWN	1605	ABN/2			4	J																							
UNKNOWN	1667	ABN/2			10	J																							
UNKNOWN	1669	ABN/2						10	J																				
UNKNOWN	1684	ABN/2			8	J																							

) - VOLATILE ABN - ACID/BASE/NEUTRAL PES - PESTICIDE/PCB
- TARGET COMPOUND LIST COMPOUND (TCL) 2 - TENTATIVELY IDENTIFIED COMPOUND (TIC)
- ESTIMATED CONCENTRATION (TIC, TCL LESS THAN CRQL, OR TCL WITH QA/QC OUT OF CONTROL LIMITS) C - MS CONFIRMATION
- DATA FOR ANALYTE IS UNUSABLE B - ANALYTE DETECTED AT COMPARABLE CONCENTRATION IN ASSOCIATED BLANK

SITE NAME AND CODE: GARY JOB CORP
CASE NUMBER:

CONCENTRATIONS IN PARTS PER BILLION (ug/L WATER, ug/kg SOIL)
Compiled by : Ecology & Environment, Inc.

TRAFFIC REPORT NUMBER AND STATION LOCATION

Organic Traffic Number			9TFAC03-1			9TFAC03-2			9TFAC03-3			9TFAC03-5			9TFAC03-6			9TFAC03-7			9TFAC03-4								
Matrix			WATER			WATER			WATER			WATER			WATER			WATER			WATER								
Percent Moisture																													
Location			STA. 07			STA. 08			STA. 09			STA. 04			STA. 05			STA. 06			STA. 10								
And/Or			RESIDENTIAL			RESIDENTIAL			RESIDENTIAL			RESIDENTIAL			RESIDENTIAL			RESIDENTIAL			TRIP BLANK								
Sample			WELL BELONGING			WELL BELONGING			WELL BELONGING			WELL BELONGING			WELL BELONGING			WELL BELONGING			DRINKING								
Description			TO (b) (6) (b) (6)			TO (b) (6) (b) (6)			TO (b) (6)			TO (b) (6) ELL AT HOUSE			TO (b) (6) ELL BEHIND BARN			TO (b) (6) ELL BEHIND BARN DUP OF STA. 05			WATER WELLS								
Compound Name	CAS/SCAN	CLASS																											
DIBROMOCHLOROMETHANE	124-48-1	VOA/1							6.2																				
BROMOFORM	75-25-2	VOA/1							16.2																				
PHENOL	108-95-2	ABN/1	5																										
CIS-1, [redacted]LOROETHENE	234	VOA/2				7.9	J					6.2	J		31.3	J		36.8	J										
UNKNOW[redacted]	195	ABN/2										6	J																
UNKNOWN	215	ABN/2																4	J										
UNKNOWN	234	ABN/2										15	J																
UNKNOWN	235	ABN/2																5	J										
UNKNOWN	269	ABN/2										5	J																
UNKNOWN	328	ABN/2										6	J																
UNKNOWN BROMINATED COMPOUND	329	ABN/2							7	J																			
UNKNOWN BROMINATED COMPOUND	377	ABN/2							49	J																			
UNKNOWN BROMINATED COMPOUND	415	ABN/2							13	J																			
UNKNOWN BROMINATED COMPOUND	424	ABN/2							36	J																			
UNKNOWN	425	ABN/2													4	J													
UNKNOWN	426	ABN/2										8	J																
UNKNOWN	426	ABN/2																8	J										
UNKNOWN	457	ABN/2										4	J																
UNKNOWN	487	ABN/2																15	J										
UNKNOWN	520	ABN/2													7	J													
UNKNOWN	520	ABN/2																8	J										
UNKNOWN	521	ABN/2										26	J																
UNKNOWN	532	ABN/2													42	J													
UNKNOWN	532	ABN/2																58	J										
UNKNOWN	534	ABN/2										130	J																
UNKNOWN	610	ABN/2													8	J													
UNKNOWN	611	ABN/2										13	J																
UNKNOWN	611	ABN/2																6	J										
UNKNOWN BROMINATED COMPOUND	616	ABN/2							67	J																			
UNSPECIFIED PAH	643	ABN/2							22	J																			
UNKNOWN	704	ABN/2										11	J																
N,N DIETHYL-3-METHYLBENZAMIDE	792	ABN/2																5	J										
UNKNOWN	793	ABN/2													5	J													
UNKNOWN	819	ABN/2													6	J													
UNKNOWN	819	ABN/2																7	J										
UNKNOWN	1125	ABN/2										7	J																
UNKNOWN	1131	ABN/2										7	J																
UNKNOWN	1349	ABN/2							6	J																			
UNKNOWN	1387	ABN/2							5	J																			
UNKNOWN	1483	ABN/2				11	J																						

A - VOLATILE ABN - ACID/BASE/NEUTRAL PES - PESTICIDE/PCB
- TARGET COMPOUND LIST COMPOUND (TCL) 2 - TENTATIVELY IDENTIFIED COMPOUND (TIC)
- ESTIMATED CONCENTRATION (TIC, TCL LESS THAN CRQL, OR TCL WITH QA/QC OUT OF CONTROL LIMITS) C - MS CONFIRMATION
- DATA FOR ANALYTE IS UNUSABLE B - ANALYTE DETECTED AT COMPARABLE CONCENTRATION IN ASSOCIATED BLANK

INORGANIC ANALYSIS SUMMARY FOR WATER

ITE NAME AND NUMBER: BARY JOB CORP
ASE NUMBER: PAGE 1 OF 1
ONCENTRATIONS IN PARTS PER BILLION (PPB)

TRAFFIC REPORT NUMBER AND STATION LOCATION

		DRINKING WATER CRITERIA P - PRIMARY S - SECONDARY	9TFAC8031 STA. 07 RESIDENTIAL WELL BELONGING TO [redacted]	9TFAC8032 STA. 08 RESIDENTIAL WELL BELONGING TO [redacted]	9TFAC8033 STA. 09 RESIDENTIAL WELL BELONGING TO [redacted]	9TFAC8035 STA. 04 RESIDENTIAL WELL BELONGING TO [redacted] WELL AT HOUSE	9TFAC8036 STA. 05 RESIDENTIAL WELL BELONGING TO [redacted] WELL BEHIND BARN	9TFAC8037 STA. 06 RESIDENTIAL WELL BELONGING TO [redacted] DUP. OF STA. 05	9TFAC8034 STA. 10 TRIP BLANK DRINKING WATER WELLS					
	MATRIX		WATER	WATER	WATER	WATER	WATER	WATER	WATER					
	% MOISTURE		0	0		0	0	0	0	0	0	0	0	0
	CAS NO.													
ALUMINUM	7429-90-5		100U	100U	100U	100U	100U	100U	100U	0	0	0	0	0
ANTIMONY	7440-36-0		60U	60U	60U	60U	60U	60U	60U	0	0	0	0	0
ARSENIC	7440-38-2	50P	4.600U	4.600U	4.600U	4.600U	4.600U	4.600U	4.600U	0	0	0	0	0
BARIUM	7440-39-3	1000P	62	68	32	111	147	147	10U	0	0	0	0	0
BERYLLIUM	7440-41-7		5U	5U	5U	5U	5U	5U	5U	0	0	0	0	0
CADMIUM	7440-43-9	10P	5U	5U	5U	5U	5U	5U	5U	0	0	0	0	0
CALCIUM	7440-70-2		130000	122000	68000	169000	214000	222000	150U	0	0	0	0	0
CHROMIUM	7440-47-3	50P	10U	10	10U	10U	10U	10U	10U	0	0	0	0	0
COBALT	7440-48-4		20U	20U	20U	20U	20U	20U	20U	0	0	0	0	0
COPPER	7440-50-8	1000S	20U	20U	31	20U	20U	20U	20U	0	0	0	0	0
IRON	7439-89-6	300S	25U	25U	25U	25U	25U	25U	25U	0	0	0	0	0
LEAD	7439-92-1	50P	30U	30U	30U	30U	30U	30U	30U	0	0	0	0	0
MAGNESIUM	7439-95-4		10400	10100	18800	14400	20900	21100	150U	0	0	0	0	0
MANGANESE	7439-96-5	50S	9	13	5U	5	5	5U	5U	0	0	0	0	0
MERCURY	7439-97-6	2P	0.200U	0.200U	0.200U	0.200U	0.710	0.750	0.200U	0	0	0	0	0
NICKEL	7440-02-0		20U	20U	20U	20U	20U	20U	20U	0	0	0	0	0
POTASSIUM	7440-09-7		1000U	1000U	1000U	1000U	1360	2870	1000U	0	0	0	0	0
SELENIUM	7782-49-2	10P	4.800U	4.800U	4.800U	4.800U	4.800U	4.800U	4.800U	0	0	0	0	0
SILVER	7440-22-4	50P	10U	10U	10U	10U	10U	10U	10U	0	0	0	0	0
SODIUM	7440-23-5		68700	64600	14200	119000	158000	157000	500U	0	0	0	0	0
THALLIUM	7440-28-0		3.800U	3.800U	3.800U	3.800U	3.800U	3.800	3.800U	0	0	0	0	0
TIN	7440-31-5		0	0	0	0	0	0	0	0	0	0	0	0
VANADIUM	7440-62-2		30U	30U	30U	30U	30U	30U	30U	0	0	0	0	0
ZINC	7440-66-6	5000S	75	101	53	10U	5U	11	5U	0	0	0	0	0
CYANIDE			0.020U	0.328	0.027	0.020U	0.020U	0.020U	0.020U	0	0	0	0	0
HARDNESS			367000	346000	247000	481000	620000	641000	5000U	0	0	0	0	0
ALKALINITY			421000	414000	253000	409000	575000	570000	5000U	0	0	0	0	0

- DATA IS UNUSABLE DUE TO QA/QC OUT OF CONTROL LIMITS.
- REPORTED CONCENTRATIONS OR DETECTION LIMITS ARE ESTIMATES DUE TO QA/QC OUT OF CONTROL LIMITS.
- CONCENTRATION IN SAMPLE ATTRIBUTABLE TO BLANK CONTAMINATION.
- NOT DETECTED; VALUE REPORTED IS THE DETECTION LIMIT.

DATA EVALUATION

SITE NAME: Gary Job Corps

CASE NUMBER: 10654

SAMPLE NUMBERS: FJ076, FJ077, AND FJ078

This package consists of three low concentration water samples analyzed for full TCL organics. The following qualifications have been placed on the use of this data due to QA/QC criteria being out of control limits.

1. Analysis of the VOA fraction of all of the samples was conducted outside of holding times. Reported concentrations and detection limits for all aromatic target compounds are considered estimates.

2. Calibration criteria out of control limits was noted for acetone and 2-butanone. Reported concentrations and detection limits of these compounds are considered estimates (J flag). Other compounds with calibration criteria out of limits were noted in the VOA fraction, however these compounds were not detected in the samples and reported detection limits are considered estimates.

3. Acetone, methylene chloride, 2-butanone and a TIC were detected in the VOA method blank. Sample concentrations of acetone, methylene chloride and 2-butanone less than ten times the blank concentration or of the TIC less than five times the blank concentration are flagged "B" on the data summary sheets.

4. Several unknown TIC compounds were detected in the ABN fraction method blank. Sample concentrations of these compounds less than five times their blank concentrations are flagged "B" on the data summary sheets.

5. The surrogate recovery of DBC for the pesticide fraction of sample FJ076 was below the control limit. Reported detection limits of the pesticides/PCBs in this sample are considered estimates.

TE NO-E AND DATE: BARY DEC DEEPB
.D NUMBER: 1.154
Page 1 of 1
CENTRATIONS IN PARTS PER BILLION (ug/L WATER, ug/kg SOIL)
rolled by : Ecology & Environment, Inc.

TRAFFIC REPORT NUMBER AND STATION LOCATION

Organic Traffic Number			FJ075		FJ076		FJ077			
Matrix			WATER		WATER		WATER			
Percent Moisture										
Location			STA. 03		STA. 02		STA. 04			
And/Or			SOUTHEAST MW		SOUTHWEST		TRIP BLANK			
Sample			SAN MARCOS		SAN MARCOS		MONITORING			
Description			MUNICIPAL		MUNICIPAL		WELLS			
			LANDFILL		LANDFILL					
Compound Name	CAS/SCAN	CLASS								
1,1,1-TRICHLOROETHANE	71-55-6	VOA/1						4	J	
1,1-DICHLOROETHANE	75-34-3	VOA/1	4	J	2	J				
1,2-DICHLOROETHENE (TOTAL)	540-59-0	VOA/1	36							
METHYLENE CHLORIDE	75-09-2	VOA/1			6	B	3	BJ		
TOLUENE	108-88-3	VOA/1					2	J		
VINYL CHLORIDE	75-01-4	VOA/1	11							
ACETONE	67-64-1	VOA/1	14	BJ	13	BJ	20	BJ		
2-BUTANONE	78-93-3	VOA/1			18	BJ	17	BJ		
CARBON DISULFIDE	75-15-0	VOA/1	33		2	J				
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ABN/1	21		46		15			
PYRENE	129-00-0	ABN/1	5	J						
DELTA-BHC	319-86-8	PES/1	0.2							
CARBON DIOXIDE	1.78	VOA/2	500	J	600	J				
N-HEXANE	5.10	VOA/2					7	J		
UNKNOWN	6.77	ABN/2	20	J						
UNKNOWN	7.25	ABN/2	300	J						
UNKNOWN	7.80	ABN/2	100	J						
UNKNOWN	11.25	ABN/2			10	J				
UNKNOWN	22.27	ABN/2	20	J						
MOLECULAR SULFUR	24.90	ABN/2			10	J				
UNKNOWN	24.92	ABN/2	10	J						
UNKNOWN	25.23	ABN/2			10	J				
UNKNOWN	25.55	ABN/2	8	J						
UNKNOWN	27.75	ABN/2	10	J						
UNSPECIFIED ALKANE	28.08	ABN/2	10	J	10	BJ				
UNSPECIFIED ALKANE	29.18	ABN/2	20	BJ	20	BJ				
UNSPECIFIED ALKANE	30.27	ABN/2	10	J	20	BJ				
UNKNOWN	30.58	ABN/2	20	J	20	J				
UNSPECIFIED ALKANE	31.32	ABN/2	10	J	30	J				
UNSPECIFIED ALKANE	32.38	ABN/2	50	J						
UNKNOWN	33.15	ABN/2			40	J				
UNKNOWN	33.73	ABN/2	20	J						

VOA - VOLATILE ABN - ACID/BASE/NEUTRAL PES - PESTICIDE/PCB
1 - TARGET COMPOUND LIST COMPOUND (TCL) 2 - TENTATIVELY IDENTIFIED COMPOUND (TIC)
J - ESTIMATED CONCENTRATION (TIC, TCL LESS THAN CRQL, OR TCL WITH QA/QC OUT OF CONTROL LIMITS) C - MS CONFIRMATION
R - DATA FOR ANALYTE IS UNUSABLE B - ANALYTE DETECTED AT COMPARABLE CONCENTRATION IN ASSOCIATED BLANK

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

2. Date well was dug Prior to 1913
3. Depth of well less than 20ft
4. Depth to static water approximately 16 feet
5. Is the well cased? Yes ___ No X Unknown ___

   If so, to what depth? ___

   What type of casing is used? N/A
6. Is well screened? Yes ___ No X Unknown ___
7. Is the well used for residential purposes, or for watering livestock?

   Well is used for all domestic needs of the (b) (6) [redacted] family.

8. Any other pertinent information?

   Well is located in Reedville area approximately 1/2 -3/4 mile from San Marcos Municipal Landfill .

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

2. Date well was dug 1936
3. Depth of well approximately 30ft.
4. Depth to static water unknown
5. Is the well cased? Yes ___ No X Unknown ___

   If so, to what depth? ___

   What type of casing is used? N/A
6. Is well screened? Yes ___ No X Unknown ___
7. Is the well used for residential purposes, or for watering livestock?

   Well is located in the Reedville community. Well supplies water for all domestic needs.

8. Any other pertinent information?

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

2. Date well was dug Unknown
3. Depth of well Unknown
4. Depth to static water Unknown
5. Is the well cased? Yes ___ No ___ Unknown X

   If so, to what depth? ___

   What type of casing is used? N/A
6. Is well screened? Yes ___ No ___ Unknown X
7. Is the well used for residential purposes, or for watering livestock?

   Residential drinking water source.

8. Any other pertinent information?

   Well is located in the Reedville community. Approximately 1/2 -3/4 mile from San Marcos Municipal landfill.

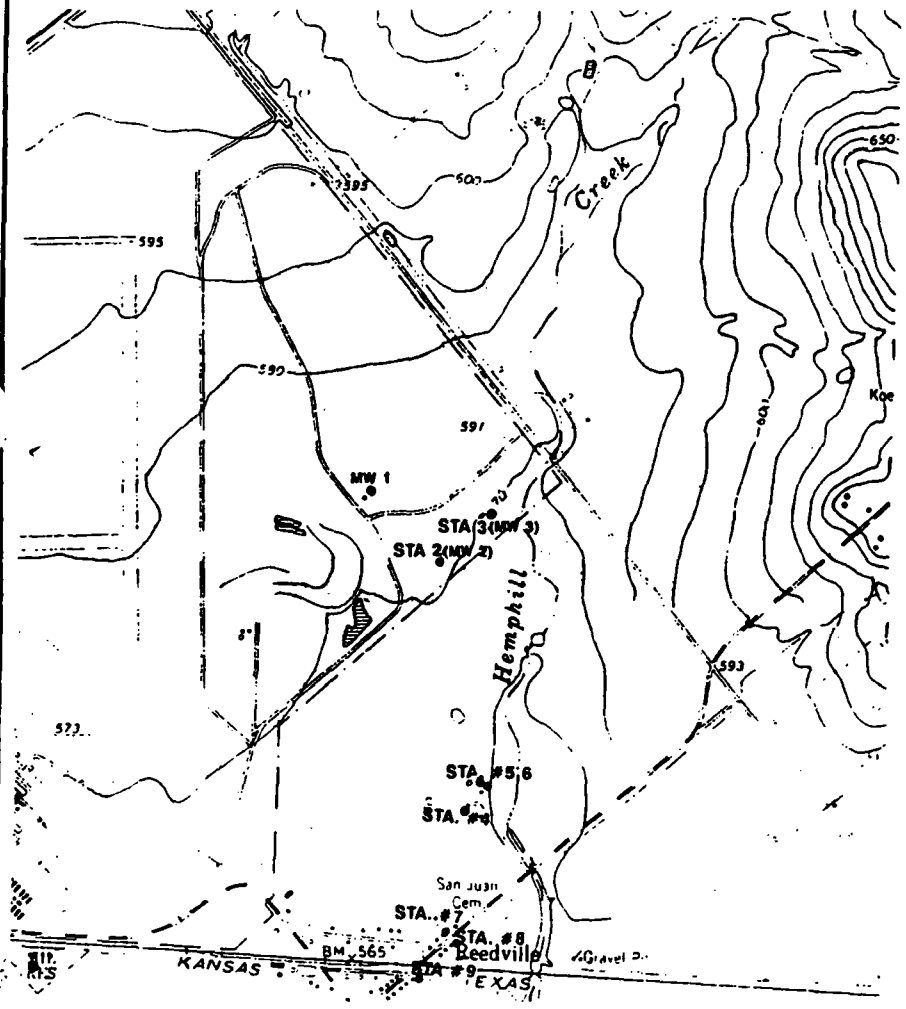


Table 1.1				
PH, Temperature and Conductivity Data				
Sta. #	Well Location	PH	Temperature	Conductivity
2	Southeast MW	6.7	26	380
3	Southwest MW	6.4	21.5	1750
7	(b) (6) [redacted]	6.4	27	840
8		6.4	26	875
9		6.6	25	490
4		6.4	22.5	1000
5-6		6.3	24	1350

Temperature in degrees Celcius
Conductivity in micro ohms

Table 1.2				
Well depth, Water levels and Casing Measurements				
Sta.#	Well description	Depth	Water level	Casing
2	Southwest MW	30'9"	22'	3'5"
3	Southeast MW	33'6"	19'8"	2'4"
NA	Upgradient MW	35'10"	Dry	2'6"

N

FIGURE 2
SAMPLING LOCATIONS
GARY JOB CORP.
SAN MARCOS, TEXAS
TX116163044

REFERENCE 10

COVERAGE

STATE	COUNTY	STATE NAME	COUNTY NAME
48	55	Texas	Caldwell Co
48	187	Texas	Guadalupe Co
48	209	Texas	Hays Co

CENTER POINT AT STATE : 48 Texas
COUNTY : 209 Hays Co

REGION OF THE COUNTRY

Zipcode found: 78655 at a distance of 3.6 Km

STATE	CITY NAME	FIPSCODE	LATITUDE	LONGITUDE
TX	MARTINDALE	48055	29.8400	97.8417

CENSUS DATA

PETE
LATITUDE 29:51:50 LONGITUDE 97:52: 2 1990 POPULATION

KM	0.00-.400	.400-.810	.810-1.60	1.60-3.20	3.20-4.80	4.80-6.40	SECTOR TOTALS
S 1	0	0	0	0	0	17093	17093
RING TOTALS	0	0	0	0	0	17093	17093

STAR STATION

WBAN NUMBER	STATION NAME	LATITUDE	LONGITUDE	PERIOD OF RECORD	DISTANCE (km)
13958	AUSTIN/MUELLER TX	30.3000	97.7000	1980-1984	51.0
12921	SAN ANTONIO TX	29.5333	98.4667	1960-1964	68.5
12912	VICTORIA/FOSTER TX	28.8500	96.9167	1965-1974	145.5
12925	BEEVILLE/CHASE TX	28.3833	97.6667	1965-1969	165.6
13959	WACO TX	31.6167	97.2167	1969-1973	204.4
12947	COTULLA TX	28.4500	99.2167	1950-1954	204.5
12924	CORPUS CHRISTI/CLIFF MAUS TX	27.7667	97.5000	1965-1969	235.7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE : 1/17/89

SUBJECT : Potential Hazardous Waste Site

FROM : Ed Sierra, FIT RPO Ed Sierra
Hazardous Waste Section (6E-SH)

TO : Brian Burgess, Acting Chief
Site Assessment Section (6H-MA)

Site Name : Gary Job Corp

Location : San Marcos, Tx X-Ref Sit Vol I

EPA ID No : TX 116 163 0 644

TDD No : F06-8809-11

A. Deliverables :

1. Preliminary Assessment attached( )
2. Site Inspection Report attached( )
3. Sampling Inspection Report attached(X)
4. HRS Package
   Preliminary attached( )
   Final attached( )
   Support Documents attached( )
5. Other_____ attached( )

B. Were Drinking Water Wells sampled? Yes(X) No( )

C. Analytical Data :

1. None collected ( )
2. Field Data ( )
3. CLP Data (X)
4. Houston Lab Data ( )

RECEIVED
1989 JAN 19 AM 9:54
SUPERFUND BRANCH

COMMENTS: Attached are well survey sheet and Lab analysis

SUPERFUND FILE
DEC 02 1992
REORGANIZED

cc: (circle) Cabra 6W-S 1/26/89 Tregoning 6H-CT
Gazda 6E-E Maiefski 6H-CS

ECOLOGY AND ENVIRONMENT, INC.

DALLAS, TEXAS

MEMORANDUM

To: Ed Sierra, Region VI RPO

Thru: K. H. Malone, Jr., FITOM

From: Brenda Nixon Cook, FIT Chemist

Date: January 12, 1989

Subj: Sampling Mission Report for Gary Job Corps Center, San Marcos, TX (TX1161630644)
TDD #F-06-8809-11
PAN #FTX0529HAB

X-Ref SA Vol 1

Gary Job Corps, located approximately one mile northeast of San Marcos, Texas on Highway 21, is a vocational school operated by the Department of Labor for disadvantaged youth. The school occupies a portion of a former World War II air base with the remainder of the air base belonging to the City of San Marcos. Previous investigations of this facility indicated two possible sources of contamination originating from the facility: contamination by lead and PCB from prior military activity, and unknown contamination from the City of San Marcos Municipal Landfill, located in the area northeast of the main base facility. To address these allegations, the FIT was tasked to sample monitoring wells at the San Marcos Municipal Landfill and residential drinking water wells within half a mile of the Landfill and Job Corps Facility.

On October 18, 1988, FIT members Brenda Cook, David Anderson, Lloyd Collins and Lyle Winnette conducted a well survey to identify and obtain permission to sample the residential wells nearest to the facility. The following wells were identified: three wells belonging to (b) (6) [redacted] (closest wells to landfill), one well belonging to (b) (6) [redacted] one well belonging to (b) (6) [redacted] one well belonging to (b) (6) [redacted] and two wells belonging to (b) (6) [redacted] (one upgradient) (Figure 2).

On October 19, the FIT members accompanied by Mr. Steve Jenkins, Environmental Coordinator for the City of San Marcos, arrived at the landfill. Mr. Jenkins stated that the upgradient monitoring well was dry and could not be sampled. After locating the three monitoring wells by vehicle, FIT members Cook and Anderson initiated site characterization procedures. No ambient air characteristics were recorded above background (background HNU reading 0.4 ppm benzene equivalents). The FIT purged Monitoring Well #2. Monitoring Well #2 was pumped dry and allowed to recharge overnight, prior to sampling. To

Reviewed by SHES
Date 4-14-89

PRELIMINARY REPORT
This does not constitute final opinion of EPA

avoid overpumping, the FIT hand bailed Monitoring Well #3 until pH, conductivity and temperature readings were constant. Monitoring Well #3 was sampled at this point. Temperature, pH, and conductivity readings were recorded for each monitoring well (Table 1.1). Water level indicator and depths of well readings were taken from each monitoring well (Table 1.2). Trip blanks were prepared in the field on October 19th by filling sample bottles with deionized water.

Residential wells of (b) (6) [redacted] were sampled on October 19th. The FIT learned that the wells belonging to (b) (6) [redacted] were dry and no longer used. Due to drought conditions and inactivity, many of the wells were dry. The FIT was unsuccessful in locating additional upgradient wells. Temperature, pH and conductivity readings were recorded for each residential well sampled (Table 1.1).

On October 20, Monitoring Well #2 was sampled. Only two 1-liter amber bottles were sent to a CLP laboratory from the well due to insufficient well recharge volume. Two residential wells belonging to (b) (6) [redacted] were sampled but the third (b) (6) [redacted] well to be sampled was dry. Temperature, pH and conductivity readings were recorded for each well sampled. Due to the limited sample volume from Monitoring Well #2, the PH, temperature and conductivity readings taken on October 19th were used for the record.

Residential well samples were sent to the EPA Houston Laboratory to be analyzed for TCL organics, metals, cyanide, alkalinity and hardness. Monitoring well samples were sent to CLP laboratories to be analyzed for TCL organics, metals and cyanide. Chain of Custody forms are attached to this report.

Due to the lack of an appropriate background sample, the least contaminated well was used as the standard to compare the extent of contamination in the other well samples. The residential well used as a background sample belongs to (b) (6) [redacted]

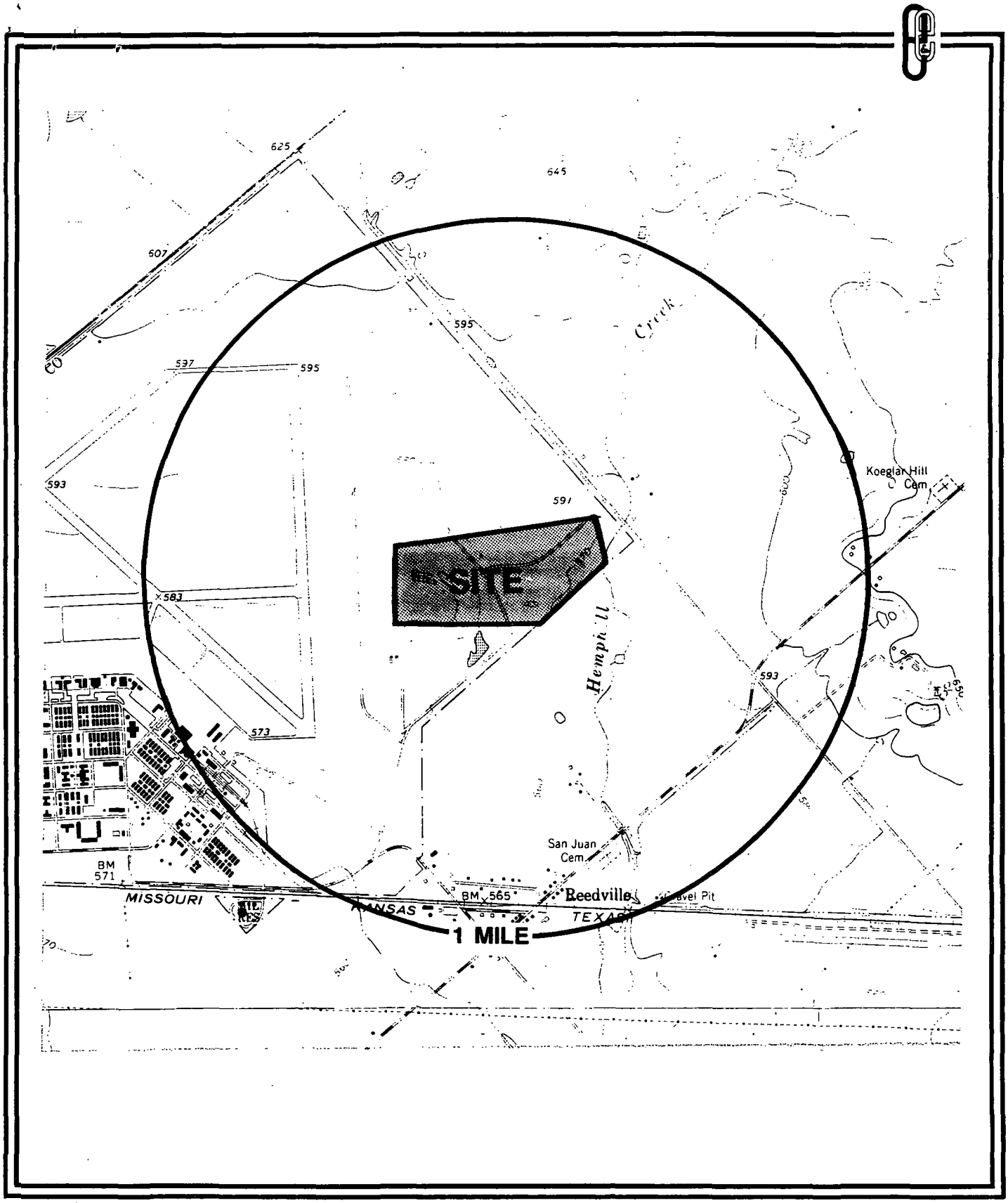
TCL organic analysis of the monitoring wells indicate the presence of 1,1-dichloroethene, 1,2-dichloroethene (total), vinyl chloride, carbon disulfide, pyrene, and delta-BHC in the groundwater underlying the facility. Inorganic analysis of the monitoring wells indicated the presence of arsenic, barium, beryllium, chromium, cobalt, lead, vanadium and zinc above background. Concentrations of contaminants in Monitoring Well #3 were significantly higher than those in Monitoring Well #2.

TCL organic analysis of the residential drinking water wells indicated the presence of bromoform, phenol and cis-1,2-dichloroethene in the alluvial aquifer. Cis-1,2-dichloroethene was detected in three of the five sampling locations. Inorganic analysis of the residential drinking water wells indicated the presence of barium, mercury and cyanide slightly above the background level in some of the residential well samples.

A documented release of hazardous material to the alluvial aquifer underlying the San Marcos Municipal Landfill appears to have occurred. A lateral migration of cis-1,2-dichloroethene in the alluvial aquifer is documented by the presence of this compound in both the monitoring wells and the downgradient residential drinking water wells. The source of the contaminants is believed to be the closed municipal landfill.

As a result of these findings, FIT has been tasked (TDD #F06-8812-25) to resample the residential wells to validate contamination. At this time FIT recommends no further action pending the results of the resampling.

BNC/amw



0 N 2000 ft.

FIGURE 1
SITE LOCATION MAP
GARY JOB CORP.
SAN MARCOS, TEXAS
TX1161630644

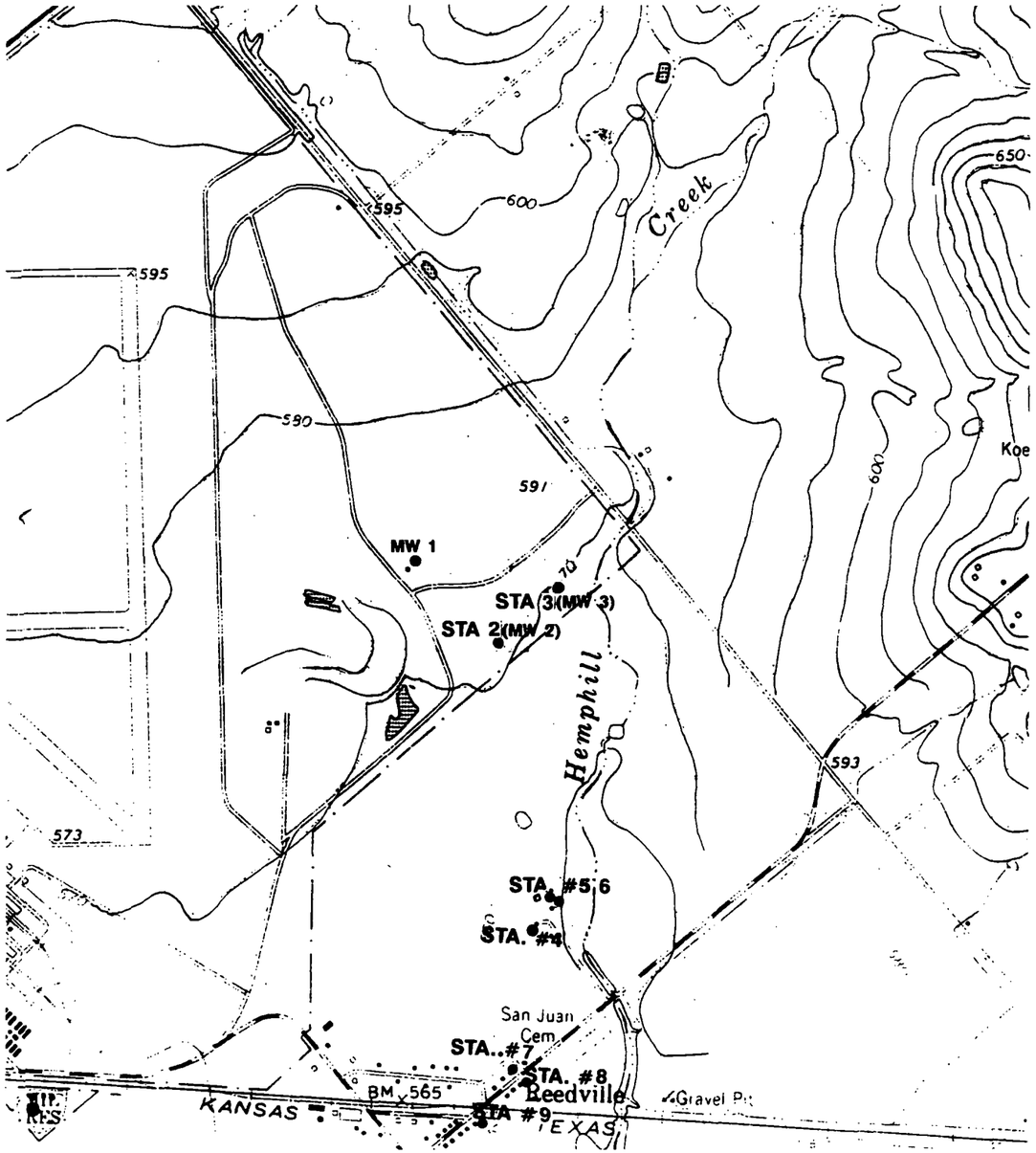


Table 1.1

PH, Temperature and Conductivity Data

Sta. #	Well Location	PH	Temperature	umhos Conductivity
2	Southeast MW	6.7	26	380
3	Southwest MW	6.4	21.5	1750
7	(b) (6) [redacted]	6.4	27	840
8		6.4	26	875
9		6.6	25	490
4		6.4	22.5	1000
5-6		6.3	24	1350

Temperature in degrees Celcius
Conductivity in micro ohms

Table 1.2

Well depth, Water levels and Casing Measurements

Sta.#	Well description	Depth	Water level	Casing
2	Southwest MW	30'9"	22'	3'5"
3	Southeast MW	33'6"	19'8"	2'4"
NA	Upgradient MW	35'10"	Dry	2'6"

N

FIGURE 2
SAMPLING LOCATIONS
GARY JOB CORP.
SAN MARCOS, TEXAS
TX116163044

Sta. 02

STA. 02

Monitor Well Data Sheet

Monitor Well I.D. No. 3

Permit No. 640

Latitude : N29° 53.50'

Longitude : W92° 50.90'

Well Boring Diameter : 2"

Ground Surface Elevation : 568

Report all Depths from Surface Elevation

Well Depth : 26'7"

Water Level Elevation : 555

Screen Bottom:

(1) Depth : _____

(2) Elevation : _____

Gravel Pack

(1) Depth : _____

(2) Elevation : _____

SKETCH:

Type of Locking Device: None

Type of Casing Protection : —

Type of Surface Pad: —

Top of Protective Collar Elevation: —

Top of Casing Elevation: —

Surface Elevation: 568

Type of Surface Grout: —

Depth: _____

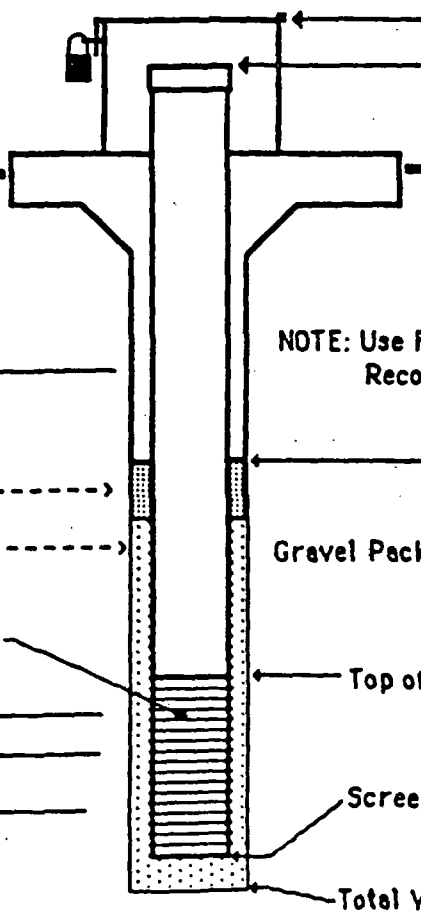
Casing Type Plastic

Size (dia) : 2"

Guage : 40

NOTE: Use Flush Screw Joint Casing Only 4Ø" or larger
Recommend Teflon Tape of joints

Backfill Material : _____



Bentonite Seal Top Depth: _____ Elev: _____

Bentonite Seal --------->

Gravel Pack ---------->

Gravel Pack Top Depth: _____ Elev: _____

Well Screen----

Top of Screen Depth: _____ Elev: _____

Type of Well Screen: _____

Screen Opening Size: _____

Screen Bottom Depth: _____ Elev: _____

Total Well Depth: _____ Elev: _____

Sta. 03

STA.03

Monitor Well Data Sheet

Monitor Well I.D. No. 4

Permit No. 640

Latitude : N29° 53.50'

Longitude : W97° 50.90'

Well Boring Diameter : 8"

Ground Surface Elevation : 568

Report all Depths from Surface Elevation

Well Depth : 35'

Water Level Elevation : 557

Screen Bottom:

(1) Depth : 31' 4"

(2) Elevation : 530

Gravel Pack

(1) Depth : 4' → 35'

(2) Elevation : 564

SKETCH:

Type of Locking Device: Padlock

Type of Casing Protection : Steel Pipe 6"

Type of Surface Pad: Concrete

Top of Protective Collar Elevation: _____

Top of Casing Elevation: _____

Surface Elevation: 568

Type of Surface Grout: Cement

Depth: 4"

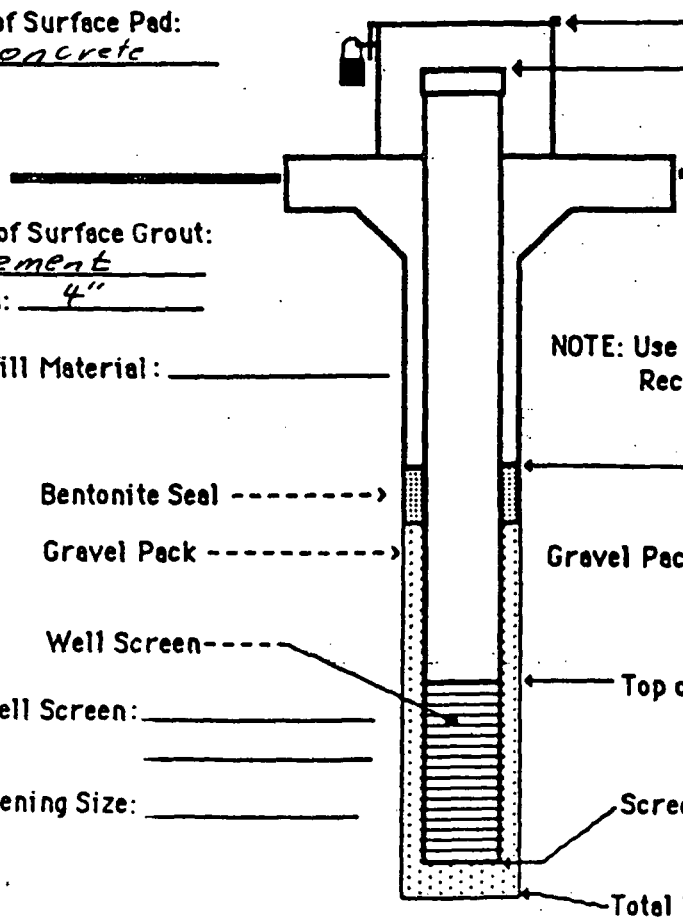
Casing Type Plastic

Size (dia) : 4"

Guage : 40

NOTE: Use Flush Screw Joint Casing Only 4Ø" or larger
Recommend Teflon Tape of joints

Backfill Material : _____



Bentonite Seal Top Depth: _____ Elev: _____

Bentonite Seal --------→

Gravel Pack ----------→

Gravel Pack Top Depth: 4' Elev: _____

Well Screen----

Top of Screen Depth: 26.8" Elev: _____

Type of Well Screen: _____

Screen Opening Size: _____

Screen Bottom Depth: 31' 8" Elev: _____

Total Well Depth: 35' Elev: _____

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

Mailing Address

(b) (6) [redacted]

2. Date well was dug Unknown
3. Depth of well 25 ft.
4. Depth to static water 20 ft.
5. Is the well cased? Yes X No ___ Unknown ___

   If so, to what depth? 20 ft.

   What type of casing is used? PVC
6. Is well screened? Yes ___ No ___ Unknown X
7. Is the well used for residential purposes, or for watering livestock?

   Well is used for domestic, commercial and livestock needs.

8. Any other pertinent information?

   One of two wells sampled at this location. This information corresponds to the well located behind the house. This well supplies water to the house and to the breeders association.

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

Mailing Address

(b) (6) [redacted]

2. Date well was dug Unknown
3. Depth of well approximately 25 ft
4. Depth to static water 20ft
5. Is the well cased? Yes ___ No X Unknown ___

   If so, to what depth? ___

   What type of casing is used? N/A
6. Is well screened? Yes ___ No X Unknown ___
7. Is the well used for residential purposes, or for watering livestock?

   Well is used for watering livestock and serves as backup water

8. Any other pertinent information?

   Well located in Reedville community. Closest well to the San Marcos municipal landfill.

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

2. Date well was dug Prior to 1913
3. Depth of well less than 20ft
4. Depth to static water approximately 16 feet
5. Is the well cased? Yes ___ No X Unknown ___

   If so, to what depth?

   What type of casing is used? N/A
6. Is well screened? Yes ___ No X Unknown ___
7. Is the well used for residential purposes, or for watering livestock?

   Well is used for all domestic needs of the (b) (6) [redacted] family.

8. Any other pertinent information?

   Well is located in Reedville area approximately 1/2 -3/4 mile from San Marcos Municipal Landfill .

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

2. Date well was dug 1936
3. Depth of well approximately 30ft.
4. Depth to static water unknown
5. Is the well cased? Yes ___ No X Unknown ___

   If so, to what depth? ___

   What type of casing is used? N/A
6. Is well screened? Yes ___ No X Unknown ___
7. Is the well used for residential purposes, or for watering livestock?

   Well is located in the Reedville community. Well supplies water for all domestic needs.

8. Any other pertinent information?

RESIDENTIAL WELL SAMPLING INFORMATION

Well #

1. Name, address and phone number of resident (include county and zip code)

(b) (6) [redacted]

2. Date well was dug Unknown
3. Depth of well Unknown
4. Depth to static water Unknown
5. Is the well cased? Yes ___ No ___ Unknown X

   If so, to what depth? ___

   What type of casing is used? N/A
6. Is well screened? Yes ___ No ___ Unknown X
7. Is the well used for residential purposes, or for watering livestock?

   Residential drinking water source.

8. Any other pertinent information?

   Well is located in the Reedville community. Approximately 1/2 -3/4 mile from San Marcos Municipal landfill.

DATA QUALITY ASSURANCE REVIEW

SITE NAME Gary J&B Corp

SITE CODE TX 0644

PAN FXX0529HAB

CASE NUMBER 9TFAC303

LABORATORY Houston EPA

SAMPLE NUMBERS 9TFAC303 01
02
03
04
05
06
07

REVIEWER Cook

DGC 1-3-89

DATA EVALUATION

SITE NAME: Gary Job Corp
CASE NUMBER: 9TFACB03

SAMPLE NUMBERS: 9TFACB03-1, 9TFACB03-2, 9TFACB03-3, 9TFACB03-4, 9TFACB03-5, 9TFACB03-6, and 9TFACB03-7.

This case consists of seven drinking water well samples analyzed for full TCL organics and metals by the EPA Houston Laboratory. Data package is complete.

INORGANIC ANALYSIS SUMMARY FOR WATER

SITE NAME AND NUMBER: GARY JOB CORP
CASE NUMBER:

CONCENTRATIONS IN PARTS PER BILLION (PPB)

TRAFFIC REPORT NUMBER AND STATION LOCATION.

		DRINKING WATER CRITERIA P - PRIMARY S - SECONDARY	9TFAC8031 STA. 07 RESIDENTIAL WELL BELONGING TO [redacted]	9TFAC8032 STA. 08 RESIDENTIAL WELL BELONGING TO [redacted]	9TFAC8033 STA. 09 RESIDENTIAL WELL BELONGING TO [redacted]	9TFAC8035 STA. 04 RESIDENTIAL WELL BELONGING TO [redacted] WELL AT HOUSE	9TFAC8036 STA. 05 RESIDENTIAL WELL BELONGING TO [redacted] WELL BEHIND BARN	9TFAC8037 STA. 06 RESIDENTIAL WELL BELONGING TO [redacted] UP. OF STA. 05	9TFAC8034 STA. 10 TRIP BLANK DRINKING WATER WELLS					
	MATRIX		WATER	WATER	WATER	WATER	WATER	WATER	WATER					
	% MOISTURE		0	0	0	0	0	0	0	0	0	0	0	0
	CAS NO.													
ALUMINUM	7429-90-5		100U	100U	100U	100U	100U	100U	100U	0	0	0	0	0
ANTIMONY	7440-36-0		60U	60U	60U	60U	60U	60U	60U	0	0	0	0	0
ARSENIC	7440-38-2	50P	4.600U	4.600U	4.600U	4.600U	4.600U	4.600U	4.600U	0	0	0	0	0
BARIUM	7440-39-3	1000P	62	68	32	111	147	147	10U	0	0	0	0	0
BERYLLIUM	7440-41-7		5U	5U	5U	5U	5U	5U	5U	0	0	0	0	0
CADMIUM	7440-43-9	10P	5U	5U	5U	5U	5U	5U	5U	0	0	0	0	0
CALCIUM	7440-70-2		130000	122000	68000	169000	214000	222000	150U	0	0	0	0	0
CHROMIUM	7440-47-3	50P	10U	10	10U	10U	10U	10U	10U	0	0	0	0	0
COBALT	7440-48-4		20U	20U	20U	20U	20U	20U	20U	0	0	0	0	0
COPPER	7440-50-8	1000S	20U	20U	31	20U	20U	20U	20U	0	0	0	0	0
IRON	7439-89-6	300S	25U	25U	25U	25U	25U	25U	25U	0	0	0	0	0
LEAD	7439-92-1	50P	30U	30U	30U	30U	30U	30U	30U	0	0	0	0	0
MAGNESIUM	7439-95-4		10400	10100	18800	14400	20900	21100	150U	0	0	0	0	0
MANGANESE	7439-96-5	50S	9	13	5U	5	5	5U	5U	0	0	0	0	0
MERCURY	7439-97-6	2P	0.200U	0.200U	0.200U	0.200U	0.710	0.750	0.200U	0	0	0	0	0
NICKEL	7440-02-0		20U	20U	20U	20U	20U	20U	20U	0	0	0	0	0
POTASSIUM	7440-09-7		1000U	1000U	1000U	1000U	1360	2870	1000U	0	0	0	0	0
SELENIUM	7782-49-2	10P	4.800U	4.800U	4.800U	4.800U	4.800U	4.800U	4.800U	0	0	0	0	0
SILVER	7440-22-4	50P	10U	10U	10U	10U	10U	10U	10U	0	0	0	0	0
SODIUM	7440-23-5		68700	64600	14200	119000	158000	157000	500U	0	0	0	0	0
THALLIUM	7440-28-0		3.800U	3.800U	3.800U	3.800U	3.800U	3.800	3.800U	0	0	0	0	0
TIN	7440-31-5		0	0	0	0	0	0	0	0	0	0	0	0
VANADIUM	7440-62-2		30U	30U	30U	30U	30U	30U	30U	0	0	0	0	0
ZINC	7440-66-6	5000S	75	101	53	10U	5U	11	5U	0	0	0	0	0
CYANIDE			0.020U	0.328	0.027	0.020U	0.020U	0.020U	0.020U	0	0	0	0	0
HARDNESS			367000	346000	247000	481000	620000	641000	5000U	0	0	0	0	0
ALKALINITY			421000	414000	253000	409000	575000	570000	5000U	0	0	0	0	0

R - DATA IS UNUSABLE DUE TO QA/QC OUT OF CONTROL LIMITS.
J - REPORTED CONCENTRATIONS OR DETECTION LIMITS ARE ESTIMATES DUE TO QA/QC OUT OF CONTROL LIMITS.
B - CONCENTRATION IN SAMPLE ATTRIBUTABLE TO BLANK CONTAMINATION.
U - NOT DETECTED; VALUE REPORTED IS THE DETECTION LIMIT.

Chemical Data Summary

SITE NAME AND CODE: GARY JOB CORP
CASE NUMBER:

CONCENTRATIONS IN PARTS PER BILLION (ug/L WATER, ug/kg SOIL)
Compiled by : Ecology & Environment, Inc.

TRAFFIC REPORT NUMBER AND STATION LOCATION

Organic Traffic Number			9TFACB03-1		9TFACB03-2		9TFACB03-3		9TFACB03-5		9TFACB03-6		9TFACB03-7		9TFACB03-4									
Matrix			WATER		WATER		WATER		WATER		WATER		WATER		WATER									
Percent Moisture																								
Location And/Or Sample Description			STA. 07 RESIDENTIAL WELL BELONGING TO [redacted]		STA. 08 RESIDENTIAL WELL BELONGING TO [redacted]		STA. 09 RESIDENTIAL WELL BELONGING TO [redacted]		STA. 04 RESIDENTIAL WELL BELONGING TO [redacted] WELL AT HOUSE		STA. 05 RESIDENTIAL WELL BELONGING TO [redacted] WELL BEHIND BARN		STA. 06 RESIDENTIAL WELL BELONGING TO [redacted] WELL BEHIND BARN DUP OF STA. 05		STA. 10 TRIP BLANK DRINKING WATER WELLS									
Compound Name	CAS/SCAN	CLASS																						
DIBROMOCHLOROMETHANE	124-48-1	VOA/1					6.2																	
BROMOFORM	75-25-2	VOA/1					16.2																	
PHENOL	108-95-2	ABN/1	5																					
CIS-1,2-DICHLOROETHENE	234	VOA/2			7.9	J			6.2	J	31.3	J	36.8	J										
UNKNOWN	195	ABN/2							6	J														
UNKNOWN	215	ABN/2											4	J										
UNKNOWN	234	ABN/2							15	J														
UNKNOWN	235	ABN/2											5	J										
UNKNOWN	269	ABN/2							5	J														
UNKNOWN	328	ABN/2							6	J														
UNKNOWN BROMINATED COMPOUND	329	ABN/2					7	J																
UNKNOWN BROMINATED COMPOUND	377	ABN/2					49	J																
UNKNOWN BROMINATED COMPOUND	415	ABN/2					13	J																
UNKNOWN BROMINATED COMPOUND	424	ABN/2					36	J																
UNKNOWN	425	ABN/2									4	J												
UNKNOWN	426	ABN/2							8	J														
UNKNOWN	426	ABN/2											8	J										
UNKNOWN	457	ABN/2							4	J														
UNKNOWN	487	ABN/2											15	J										
UNKNOWN	520	ABN/2									7	J												
UNKNOWN	520	ABN/2											8	J										
UNKNOWN	521	ABN/2							26	J														
UNKNOWN	532	ABN/2									42	J												
UNKNOWN	532	ABN/2											58	J										
UNKNOWN	534	ABN/2							130	J														
UNKNOWN	610	ABN/2									8	J												
UNKNOWN	611	ABN/2							13	J														
UNKNOWN	611	ABN/2											6	J										
UNKNOWN BROMINATED COMPOUND	616	ABN/2					67	J																
UNSPECIFIED PNA	643	ABN/2					22	J																
UNKNOWN	704	ABN/2							11	J														
N,N DIETHYL-3-METHYLBENZAMIDE	792	ABN/2											5	J										
UNKNOWN	793	ABN/2									5	J												
UNKNOWN	819	ABN/2									6	J												
UNKNOWN	819	ABN/2											7	J										
UNKNOWN	1125	ABN/2							7	J														
UNKNOWN	1131	ABN/2							7	J														
UNKNOWN	1349	ABN/2					6	J																
UNKNOWN	1387	ABN/2					5	J																
UNKNOWN	1483	ABN/2			11	J																		

VOA - VOLATILE ABN - ACID/BASE/NEUTRAL PES - PESTICIDE/PCB
1 - TARGET COMPOUND LIST COMPOUND (TCL) 2 - TENTATIVELY IDENTIFIED COMPOUND (TIC)
J - ESTIMATED CONCENTRATION (TIC, TCL LESS THAN CRQL, OR TCL WITH QA/QC OUT OF CONTROL LIMITS) C - MS CONFIRMATION
R - DATA FOR ANALYTE IS UNUSABLE B - ANALYTE DETECTED AT COMPARABLE CONCENTRATION IN ASSOCIATED BLANK

SITE NAME AND CODE: GARY JOB CORP
CASE NUMBER:

CONCENTRATIONS IN PARTS PER BILLION (ug/L WATER, ug/kg SOIL)
Compiled by : Ecology & Environment, Inc.

TRAFFIC REPORT NUMBER AND STATION LOCATION

		Organic Traffic Number	9TFACB03-1		9TFACB03-2		9TFACB03-3		9TFACB03-5		9TFACB03-6		9TFACB03-7		9TFACB03-4
		Matrix	WATER		WATER		WATER		WATER		WATER		WATER		WATER
		Percent Moisture													
		Location	STA. 07		STA. 08		STA. 09		STA. 04		STA. 05		STA. 06		STA. 10
		And/Or	RESIDENTIAL		RESIDENTIAL		RESIDENTIAL		RESIDENTIAL		RESIDENTIAL		RESIDENTIAL		TRIP BLANK
		Sample	WELL BELONGING		WELL BELONGING		WELL BELONGING		WELL BELONGING		WELL BELONGING		WELL BELONGING		DRINKING
		Description	TO (b) (6) (b) (6)		TO (b) (6) (b) (6)		TO (b) (6)		TO (b) (6) WELL AT HOUSE		TO (b) (6) WELL BEHIND BARN		TO (b) (6) WELL BEHIND BARN DUP OF STA. 05		WATER WELLS
Compound Name	CAS/SCAN	CLASS													
UNKNOWN	1517	ABN/2					13	J							
UNKNOWN	1533	ABN/2			7	J									
UNKNOWN	1541	ABN/2			8	J									
UNKNOWN	1542	ABN/2					14	J							
UNKNOWN	1593	ABN/2			9	J									
UNKNOWN	1605	ABN/2			4	J									
UNKNOWN	1667	ABN/2			10	J									
UNKNOWN	1669	ABN/2					10	J							
UNKNOWN	1684	ABN/2			8	J									

VOA - VOLATILE ABN - ACID/BASE/NEUTRAL PES - PESTICIDE/PCB
1 - TARGET COMPOUND LIST COMPOUND (TCL) 2 - TENTATIVELY IDENTIFIED COMPOUND (TIC)
J - ESTIMATED CONCENTRATION (TIC, TCL LESS THAN CRQL, OR TCL WITH QA/QC OUT OF CONTROL LIMITS) C - MS CONFIRMATION
R - DATA FOR ANALYTE IS UNUSABLE B - ANALYTE DETECTED AT COMPARABLE CONCENTRATION IN ASSOCIATED BLANK

DATA QUALITY ASSURANCE REVIEW

SITE NAME Cary Job Corp

SITE CODE TX 0644

PAN FTX0529HAB

CASE NUMBER 10654

LABORATORY Triangle Laboratories

SAMPLE NUMBERS FJ076
FJ077
FJ078

REVIEWER Brenda Nixon Cook

1-4-89

Chemical Data Summary

SITE NAME AND CODE: GARY JOB CORPS
CASE NUMBER: 10654

CONCENTRATIONS IN PARTS PER BILLION (ug/L WATER, ug/kg SOIL)
Compiled by : Ecology & Environment, Inc.

TRAFFIC REPORT NUMBER AND STATION LOCATION

		Organic Traffic Number	FJ078		FJ076		FJ077					
		Matrix	WATER		WATER		WATER					
		Percent Moisture										
		Location	STA. 03		STA. 02		STA. 04					
		And/Or	SOUTHEAST MW		SOUTHWEST		TRIP BLANK					
		Sample	SAN MARCOS		SAN MARCOS		MONITORING					
		Description	MUNICIPAL		MUNICIPAL		WELLS					
			LANDFILL		LANDFILL							
Compound Name	CAS/SCAN	CLASS										
1,1,1-TRICHLOROETHANE	71-55-6	VOA/1							4	J		
1,1-DICHLOROETHANE	75-34-3	VOA/1	4	J	2	J						
1,2-DICHLOROETHENE (TOTAL)	540-59-0	VOA/1	36									
METHYLENE CHLORIDE	75-09-2	VOA/1			6	B	3	BJ				
TOLUENE	108-88-3	VOA/1					2	J				
VINYL CHLORIDE	75-01-4	VOA/1	11									
ACETONE	67-64-1	VOA/1	14	BJ	13	BJ	20	BJ				
2-BUTANONE	78-93-3	VOA/1			18	BJ	17	BJ				
CARBON DISULFIDE	75-15-0	VOA/1	33		2	J						
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	ABN/1	21		46		15					
PYRENE	129-00-0	ABN/1	5	J								
DELTA-BHC	319-86-8	PES/1	0.2									
CARBON DIOXIDE	.78	VOA/2	500	J	600	J						
HEXANE	5.10	VOA/2					7	J				
UNKNOWN	6.37	ABN/2	20	J								
UNKNOWN	7.25	ABN/2	300	J								
UNKNOWN	7.80	ABN/2	100	J								
UNKNOWN	11.25	ABN/2			10	J						
UNKNOWN	22.27	ABN/2	20	J								
MOLECULAR SULFUR	24.90	ABN/2			10	J						
UNKNOWN	24.92	ABN/2	10	J								
UNKNOWN	25.23	ABN/2			10	J						
UNKNOWN	25.55	ABN/2	8	J								
UNKNOWN	27.75	ABN/2	10	J								
UNSPECIFIED ALKANE	28.08	ABN/2	10	J	10	BJ						
UNSPECIFIED ALKANE	29.18	ABN/2	20	BJ	20	BJ						
UNSPECIFIED ALKANE	30.27	ABN/2	10	J	20	BJ						
UNKNOWN	30.58	ABN/2	20	J	20	J						
UNSPECIFIED ALKANE	31.32	ABN/2	10	J	30	J						
UNSPECIFIED ALKANE	32.38	ABN/2	50	J								
UNKNOWN	33.15	ABN/2			40	J						
UNKNOWN	33.73	ABN/2	20	J								

VOA - VOLATILE ABN - ACID/BASE/NEUTRAL PES - PESTICIDE/PCB
1 - TARGET COMPOUND LIST COMPOUND (TCL) 2 - TENTATIVELY IDENTIFIED COMPOUND (TIC)
J - ESTIMATED CONCENTRATION (TIC, TCL LESS THAN CRQL, OR TCL WITH QA/QC OUT OF CONTROL LIMITS) C - MS CONFIRMATION
R - DATA FOR ANALYTE IS UNUSABLE B - ANALYTE DETECTED AT COMPARABLE CONCENTRATION IN ASSOCIATED BLANK

DATA EVALUATION

SITE NAME: Gary Job Corps

CASE NUMBER: 10654

SAMPLE NUMBERS: FJ076, FJ077, AND FJ078

This package consists of three low concentration water samples analyzed for full TCL organics. The following qualifications have been placed on the use of this data due to QA/QC criteria being out of control limits.

1. Analysis of the VOA fraction of all of the samples was conducted outside of holding times. Reported concentrations and detection limits for all aromatic target compounds are considered estimates.

2. Calibration criteria out of control limits was noted for acetone and 2-butanone. Reported concentrations and detection limits of these compounds are considered estimates (J flag). Other compounds with calibration criteria out of limits were noted in the VOA fraction, however these compounds were not detected in the samples and reported detection limits are considered estimates.

3. Acetone, methylene chloride, 2-butanone and a TIC were detected in the VOA method blank. Sample concentrations of acetone, methylene chloride and 2-butanone less than ten times the blank concentration or of the TIC less than five times the blank concentration are flagged "B" on the data summary sheets.

4. Several unknown TIC compounds were detected in the ABN fraction method blank. Sample concentrations of these compounds less than five times their blank concentrations are flagged "B" on the data summary sheets.

5. The surrogate recovery of DBC for the pesticide fraction of sample FJ076 was below the control limit. Reported detection limits of the pesticides/PCBs in this sample are considered estimates.

DATA QUALITY ASSURANCE REVIEW

SITE NAME Cary Job Corp

SITE CODE TX 0644

PAN FTX0529HAB

CASE NUMBER 10654

LABORATORY LAUCKS

SAMPLE NUMBERS MFH380
MFH381
MFH382

sd 1-3-88

REVIEWER Brenda Nixon Cook

INORGANIC ANALYSIS SUMMARY FOR WATER

SITE NAME AND NUMBER: GARY JOB CORP
CASE NUMBER: 10654 PAGE 1 OF 1
CONCENTRATIONS IN PARTS PER BILLION (PPB)

TRAFFIC REPORT NUMBER AND STATION LOCATION.

		DRINKING WATER CRITERIA P - PRIMARY S - SECONDARY	MFH380 STA. 03 SOUTHEAST MONITORING WELL/ SAN MARCOS MUNC. LANDFILL	MFH382 STA. 02 SOUTHWEST MONITORING WELL-SAN MARCOS MUNC. LANDFILL	MFH381 STA. 04 TRIP BLANK MONITORING WELLS		
	MATRIX		WATER	WATER	WATER		
	% MOISTURE		0	0	0	0	0
	CAS NO.						
ALUMINUM	7429-90-5		23600J	191000J	85.500UJ	0	0
ANTIMONY	7440-36-0		6.100UJ	30.500UJ	6.100UJ	0	0
ARSENIC	7440-38-2	50P	33.100J	1.800UJ	1.800UJ	0	0
BARIUM	7440-39-3	1000P	168	1250	10.800U	0	0
BERYLLIUM	7440-41-7		1.700	16	1.100U	0	0
CADMIUM	7440-43-9	10P	2.300U	7.700	2.300U	0	0
CALCIUM	7440-70-2		557000	500000	120U	0	0
CHROMIUM	7440-47-3	50P	31.700J	181J	4.600UJ	0	0
COBALT	7440-48-4		16.400U	39.400	16.400U	0	0
COPPER	7440-50-8	1000S	27.400	125	10.700U	0	0
IRON	7439-89-6	300S	26500J	187000J	22.400UJ	0	0
LEAD	7439-92-1	50P	28.900	0.900U	1.500	0	0
MAGNESIUM	7439-95-4		46600J	100000J	255UJ	0	0
MANGANESE	7439-96-5	50S	1590J	2210J	2.900UJ	0	0
MERCURY	7439-97-6	2P	0R	0R	0R	0	0
NICKEL	7440-02-0		42.500	168	16.500U	0	0
POTASSIUM	7440-09-7		10900	60500	1830U	0	0
SELENIUM	7782-49-2	10P	0R	0R	0R	0	0
SILVER	7440-22-4	50P	4.300U	4.300U	4.300U	0	0
SODIUM	7440-23-5		286000	423000	170U	0	0
THALLIUM	7440-28-0		1.100U	1.100U	1.100U	0	0
TIN	7440-31-5		0	0	0	0	0
VANADIUM	7440-62-2		45	185	21.200U	0	0
ZINC	7440-66-6	5000S	234	746	9.400B	0	0
CYANIDE			10U	10U	10U	0	0
HARDNESS			0	0	0	0	0
ALKALINITY			0	0	0	0	0

R - DATA IS UNUSABLE DUE TO QA/QC OUT OF CONTROL LIMITS.
J - REPORTED CONCENTRATIONS OR DETECTION LIMITS ARE ESTIMATES DUE TO QA/QC OUT OF CONTROL LIMITS.
B - CONCENTRATION IN SAMPLE ATTRIBUTABLE TO BLANK CONTAMINATION.
U - NOT DETECTED; VALUE REPORTED IS THE DETECTION LIMIT.

DATA EVALUATION

SITE NAME: Gary Job Corp

CASE NUMBER: 10654

SAMPLE NUMBERS: MFH380, MFH381, and MFH382

The data package consists of three waters analyzed for total metals and cyanide. The following qualifications have been placed on this data due to QA/QC criteria out of control limits.

1) The concentration of arsenic in sample MFH380 is considered an estimate (J flag) due to the method of standard addition results out of control limits.

2) A laboratory control sample was not analyzed for cyanide due to the lack of an appropriate LCS standard at the lab. This is a contractual violation. The data is not significantly affected since cyanide was not detected in any of the samples.

3) Concentrations of aluminum, iron, magnanese and magnesium are considered estimates (J flag) due to ICP serial dilution results out of control limits.

4) The concentration of zinc in sample MFH381 is flagged B due to the presence of zinc at a comparable concentration in the preparation blank.

5) Reported concentrations and detection limits for arsenic and antimony are considered estimates (J flag) due to low matrix spike recoveries. Actual concentrations may be as high as 1.7 and 2.5 times the reported values, respectively.

6) Reported concentrations and detection limits for mercury and selenium are unusable (R flag) due to unacceptable matrix spike recoveries.

7) Post digest spike results for mercury were also out of control limits, indicating possible matrix effects in the analysis.

8) Reported concentrations of aluminum, chromium and iron are estimates (J flag) due to duplicate results out of control limits.

9) All other QA/QC criteria were within control limits.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

10/19/88
(DATE)

RECEIPT FOR SAMPLES

NAME AND TITLE OF E.P.A. REPRESENTATIVE: LYLE WINNETTE
FIT-Chemist
Lyle C Winnett
(Signature)

SAMPLES COLLECTED:

SAMPLE NUMBER	TIME	PLACE COLLECTED	TYPE	VOLUME	SPLIT SAMPLE REQUESTED	SPLIT SAMPLE PROVIDED
BC 0309	1745	(b) (6) [redacted] Well	Water	1.75 gallons	No	

ACKNOWLEDGMENT OF FACILITY REPRESENTATIVE

The undersigned acknowledges that the samples described above have been collected.

NAME, TITLE AND ADDRESS OF FACILITY REPRESENTATIVE:
(b) (6) [redacted]

10/19/88
(Date)

DISTRIBUTION: One copy facility representative
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

10/20/88
(DATE)

RECEIPT FOR SAMPLES

NAME AND TITLE OF E.P.A. REPRESENTATIVE: Brenda Nixon Cook
FIT Chemist
[signature]
(Signature)

SAMPLES COLLECTED:

DOX TWC #	SAMPLE NUMBER	TIME	PLACE COLLECTED	TYPE	VOLUME	SPLIT SAMPLE REQUESTED	SPLIT SAMPLE PROVIDED
(4)	MW#3	10/19/88 11:42-1215	MW#3	W	18L	No	
(3)	MW#2	10/20/88 1104-1126	MW#2	W	4L	No	

ACKNOWLEDGMENT OF FACILITY REPRESENTATIVE

The undersigned acknowledges that the samples described above have been collected.

NAME, TITLE AND ADDRESS OF FACILITY REPRESENTATIVE:

[signature]
(Signature)

10/20/88
(Date)

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REGION VI
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

10/20/88
(DATE)

RECEIPT FOR SAMPLES

NAME AND TITLE OF E.P.A. REPRESENTATIVE: Brenda Nixon Cook
Ecology & Environment
FIT · CHEMIST
(Signature)

SAMPLES COLLECTED:

SAMPLE NUMBER	TIME	PLACE COLLECTED	TYPE	VOLUME	SPLIT SAMPLE REQUESTED	SPLIT SAMPLE PROVIDED
04	0830	at house	W	5.25 gallons	No	
05-06	0900	behind barn	W	3.50 gall	No	
~~06~~	~~0930~~	~~south corner~~	~~W~~	~~1.75 gal~~	~~No~~	~~well was dry~~

ACKNOWLEDGMENT OF FACILITY REPRESENTATIVE

The undersigned acknowledges that the samples described above have been collected.

NAME, TITLE AND ADDRESS OF FACILITY REPRESENTATIVE:

(b) (6) [redacted]

10-20-88
(Date)

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

10/19/88
(DATE)

RECEIPT FOR SAMPLES

NAME AND TITLE OF E.P.A. REPRESENTATIVE: LYLE WINNETTE
FIT- CHEMIST
Lyle C. Winnette
(Signature)

SAMPLES COLLECTED:

SAMPLE NUMBER	TIME	PLACE COLLECTED	TYPE	VOLUME	SPLIT SAMPLE REQUESTED	SPLIT SAMPLE PROVIDED
QX07	1545	(b) (6) [redacted] well	WATER	1.75 gallons	NO	
QZ08	1550	[redacted] well	WATER	1.75 gallons	NO	

ACKNOWLEDGMENT OF FACILITY REPRESENTATIVE

The undersigned acknowledges that the samples described above have been collected.

NAME, TITLE AND ADDRESS OF FACILITY REPRESENTATIVE:
(b) (6) [redacted]

10/19/88
(Date)

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Brenda Lynn Cook	[illegible]	[illegible]	[illegible]
Company: ECOLOGY & ENVIRONMENT INC	Department/Floor No.	Company: United States [illegible]	Department/Floor No.
Street Address: 1500 MAIN ST STE 1400		Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. ® Zip Codes.): 6608 [illegible]	
City: DALLAS State: TX	ZIP Required: [illegible]	City: [illegible] State: [illegible]	ZIP Required: [illegible]

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12 ☐ HOLIDAY DELIVERY (If offered) (Extra charge)

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	LBS		
	LBS		
	LBS		
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8914933436

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Company: ECOLOGY & ENVIRONMENT INC
Department/Floor No.:
Street Address: 1309 MAIN ST STE 1400
City: DALLAS State: [illegible] ZIP Required: 75201

2 To (Recipient's Name) Please Print: Connie Gaschie
Recipient's Phone Number (Very Important): 713 [illegible] 315
Company: United States EPA
Department/Floor No.:
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. ® Zip Codes.): 6608 Harwood Avenue
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7 ☐
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2 ☒ DELIVER WEEKDAY
3 DELIVER SATURDAY (Extra charge) ☐
4 ☐ DANGEROUS GOODS (Extra charge)
5 ☐ CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable)
6 ☐ DRY ICE Lbs.
7 ☐ OTHER SPECIAL SERVICE
8 ☐
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10 ☐
11 ☐
12 ☐ HOLIDAY DELIVERY (If offered) (Extra charge)

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Department/Floor No.:
Street Address: 1509 MAIN ST STE 1400
City: DALLAS State: TX ZIP Required: 75201

2 To (Recipient's Name) Please Print: Kathy [illegible]
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10 ☐

*Declared Value Limit $100

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	LBS		
	LBS		
	LBS		
	LBS		
Total	Total	Total	

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J 6934933140

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Your Phone Number (Very Important): [illegible]
Company: ECOLOGY & ENVIRONMENT INC
Department/Floor No.:
Street Address: 1509 MAIN ST STE 1400
City: DALLAS State: TX ZIP Required: 7 5 2 0 1

2 To (Recipient's Name), Please Print: Charlotte Nix
Recipient's Phone Number (Very Important): [illegible]
Company: Bellevue Test Lab Inc
Department/Floor No.:
Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 921 [illegible]
City: Seattle State: [illegible] ZIP Required: 98108

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3 OVERNIGHT BOX
4 OVERNIGHT TUBE
5 STANDARD AIR Delivery not later than second business day
6 OVERNIGHT LETTER*
7
8
9
10
*Declared Value Limit $100

DELIVERY AND SPECIAL HANDLING

1 HOLD FOR PICK-UP (Fill in Box H)
2 DELIVER WEEKDAY
3 DELIVER SATURDAY (Extra charge)
4 DANGEROUS GOODS (Extra charge)
5 CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable)
6 DRY ICE ____ Lbs.
7 OTHER SPECIAL SERVICE
8
9 SATURDAY PICK-UP (Extra charge)
10
11
12 HOLIDAY DELIVERY (If offered) (Extra charge)

PACKAGES	WEIGHT	YOUR DECLARED VALUE (See right)	OVER SIZE
	LBS		
	LBS		
	LBS		
	LBS		
Total	Total	Total	

Received At: 1 ☐ Regular Stop; 2 ☐ On-Call Stop; 3 ☐ Drop Box; 4 ☐ B.S.C.; 5 ☐ Station

FEDEX Corp. Employee No.

Date/Time for FEDEX Use

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Use of this airbill constitutes your agreement to the service conditions in our current Service Guide which is available upon request. See back of sender's copy of this airbill for further information.

We will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay or non-delivery, unless you specify a higher amount in the space to the left; pay 40¢ per additional $100 specified and document your actual loss in the event of a claim. Maximum amount limitations found in the current Federal Express Service Guide apply. Your rights to recover from Federal Express for loss of the intrinsic value of the package, as well as for loss of sales, income, interest, profit, attorneys fees, costs and any other form of damage whether direct, incidental, consequential or special is limited to the greater of $100 or the declared value specified to the left. In no event shall your recovery exceed your actual loss. In the event of untimely delivery, Federal Express will at your request and with some limitations, refund all transportation charges paid. See Service Guide for further information.

5 Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

Release Signature:

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

PART #111800 REVISION DATE 1/88
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FEDERAL EXPRESS

AIRBILL

USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO.
QUESTIONS? CALL 800-238-5355-TOLL FREE.

PACKAGE TRACKING NUMBER 8914933195

8914933195

SENDER'S COPY

Sender's Federal Express Account Number: 0700-3[illegible]-2 | Date: 10/20/88

1 From (Your Name) Please Print: LORENDA NIXON COOK | Your Phone Number (Very Important): 214 [illegible]

Company: ECOLOGY & ENVIRONMENT INC | Department/Floor No.:

Street Address: 1509 MAIN ST STE 1400

City: DALLAS | State: TX | ZIP Required: 7[illegible]

2 To (Recipient's Name) Please Print: K. [illegible] AVENUE | Recipient's Phone Number (Very Important): 914 [illegible]

Company: Tronto Laboratories | Department/Floor No.:

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): HISTON TECHNICAL PARK 80-10 CENTRAL DRIVE

City: Rensselaer Park | State: NY | ZIP Required: 7113

3 YOUR BILLING REFERENCE INFORMATION (FIRST 24 CHARACTERS WILL APPEAR ON INVOICE.): T-7X05-THAB-24

PAYMENT ☐ Bill Sender ☐ Bill Recipient's FedEx Acct. No. ☒ Bill 3rd-Party FedEx Acct. No. ☐ Bill Credit Card ☐ Cash 0200-7751-4

4a IF HOLD FOR PICK-UP, Print FEDEX Address Here: Street Address | City | State | ZIP Required

4 SERVICES

1 ☒ PRIORITY 1 Overnight Delivery
2 ☐ COURIER-PAK OVERNIGHT ENVELOPE*
3 ☐ OVERNIGHT BOX
4 ☐ OVERNIGHT TUBE
5 ☐ STANDARD AIR Delivery not later than second business day
6 ☐ OVERNIGHT LETTER*
7 ☐
8 ☐
9 ☐
10 ☐
*Declared Value Limit $100

DELIVERY AND SPECIAL HANDLING

1 ☐ HOLD FOR PICK-UP (Fill in Box 4a)
2 ☒ DELIVER WEEKDAY
3 DELIVER SATURDAY (Extra charge) ☐
4 ☐ DANGEROUS GOODS (Extra charge)
5 ☐ CONSTANT SURVEILLANCE SERVICE (CSS) (Extra charge) (Release Signature Not Applicable)
6 ☐ DRY ICE ____ Lbs.
7 ☐ OTHER SPECIAL SERVICE
8 ☐
9 ☐ SATURDAY PICK-UP (Extra charge)
10 ☐
11 ☐
12 ☐ HOLIDAY DELIVERY (If offered) (Extra charge)

PACKAGES	WEIGHT	YOUR DECLARED VALUE (See right)	OVER SIZE
	LBS		
	LBS		
	LBS		
	LBS		
Total	Total	Total	

Received At: 1 ☐ Regular Stop 2 ☐ On-Call Stop 3 ☐ Drop Box 4 ☐ B.S.C. 5 ☐ Station

FEDEX Corp. Employee No.

Date/Time for FEDEX Use

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Use of this airbill constitutes your agreement to the service conditions in our current Service Guide which is available upon request. See back of sender's copy of this airbill for further information.

We will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay or non-delivery, unless you specify a higher amount in the space to the left, pay 40¢ per additional $100 specified and document your actual loss in the event of a claim. Maximum amount limitations found in the current Federal Express Service Guide apply. Your rights to recover from Federal Express for loss of the intrinsic value of the package, as well as for loss of sales, income, interest, profit, attorneys fees, costs and any other form of damage whether direct, incidental, consequential or special is limited to the greater of $100 or the declared value specified to the left. In no event shall your recovery exceed your actual loss.

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund all transportation charges paid. See Service Guide for further information.

5 Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

Release Signature

Federal Express Use
Base Charges
Declared Value Charge
Other 1
Other 2
Total Charges

PART #111800 REVISION DATE 1/88
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IRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Gary Job Corp

SAMPLERS: (Signature) Kyle Wennett L. Collins

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Extractable, pst	VOA	Metals	Cyanide	Hardness	Alkalinity	REMARKS
10	10-10-88	1304 1314		✓	Trip blank	4	X						6-013782, 6-013783
						2		X					6-013784, 6-013785
						1			X				6-013786, 6-013787
						1				X			6-013788, 6-013789
						1					X		6-013790, 6-013791
						1						X	
07	10/10/88	1500 1550		✓	(b) (6) [redacted] Well	4	X						6-013772, 6-013773, 6-013774, 6-013775
						2		X					6-013776, 6-013777
						1			X				6-013778
						1				X			6-013779
						1					X		6-013780
						1						X	6-013781

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Kyle Wennett L. Collins	10/10/88 1930	Federal Express			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks AB# 8914933436	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6-05867

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

CHAIN OF CUSTODY RECORD

PROJ. NO.:

PROJECT NAME: Gary Job Corp

SAMPLERS: (Signature) L. Collins

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Extractable Pest	VOA	Metals	Cyanide	Hardness	Alkalinity	REMARKS
08	10/19/88	1550 ~~1500~~ 1600		✓	(b) (6) [redacted] well	4	X						6-013824, 6-013825, 6-013827, 6-013826
						2		X					6-013822, 6-013823
						1			X				6-013828
						1				X			6-013830
						1					X		6-013831
						1						X	6-013832
09	10/19/88	1740 1750		✓	(b) (6) [redacted]	4	X						6-013794, 6-013795, 6-013796, 6-013797
						2		X					6-013792, 6-013793
						1			X				6-013799
						1				X			6-013798
						1					X		6-013800
						1						X	6-013801

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
L. Collins	10/19/88 1430	Federal Express			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Air Bill # 891 4933436	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6-05868

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

Houston 3

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

CHAIN OF CUSTODY RECORD

PROJ. NO.

PROJECT NAME: Gary Job Corp

SAMPLERS: (Signature) [illegible] Rob Wimmett

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Extractable/Post	VOA					REMARKS
03	10/20/87	0845 0858		✓	(b) (6) [redacted], Behind	12	X						6-013802, 6-013803, 6-013804, 6-013805
04					Residence, QA/QC	4		X					6-013806, 6-013807, 6-013808, 6-013809
													6-013810, 6-013811, 6-013812, 6-013813
													6-013814, 6-013815, 6-013816, 6-013817
													6-013818, 6-013819

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Rob Wimmett	10/20/87 1470	Federal Express AA# 8914933484			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6-05871

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

Houston D

CHAIN OF CUSTODY RECORD

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

PROJ. NO.:

PROJECT NAME: Gary Job Corp

SAMPLERS: (Signature) [signature] L. Collins

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Extractable/Pest	VOA	Metals	Cyanide	Hardness	Alkalinity	REMARKS
03	10/20/88			✓	(b) (6) [redacted] Well, South Corner	4	X						6-013762, 6-013763, 6-013764, 6-013765 Da
					of Property	2		X					6-013766, 6-013767 Da
						1			X				6-013768, ~~6-013769~~ Da
						1				X			6-013769 Da
						1					X		6-013770 Da
						1						X	6-013771 Da
04	10/20/88	0840 0850		✓	(b) (6) [redacted] Well Behind Residence	2			X				6-013820, 6-013821
					QA/QC	2				X			~~6-013822~~ Da 6-013834, 6-013835
						2					X		6-013836, 6-013837
						2						X	6-013838, 6-013839

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature] L. Collins	10/20/88 1430	LC Fed Express			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
				Airbill # 8914933484	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6-05870

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

Hdu 1

CHAIN OF CUSTODY RECORD

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

PROJ. NO.

PROJECT NAME: Gary Job Corp

SAMPLERS: (Signature)

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Extractable/pest	VOA	Metals	Cyanide	Hardness	Alkalinity	REMARKS
05	10/20/88	0925 0945		✓	(b) (6) [redacted] Well Behind Barn	4	X						6-013742, 6-013743, 6-013744, 6-013745
					A	2		X					6-013746, 6-013747
						1			X				6-013748
						1				X			6-013749
						1					X		6-013750
						1						X	6-013751
06	10/20/88	0925 0945		✓	(b) (6) [redacted] ell Behind Barn B	4	X						6-013752, 6-013753, 6-013754, 6-013755
						2		X					6-013756, 6-013757
						1			X				6-013758
						1				X			6-013759
						1					X		6-013760
						1						X	6-013761

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
	10/20/88 1630	Federal Express 8914933418-1			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6-05869

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

CHAIN OF CUSTODY RECORD

PROJ. NO.: 10654

PROJECT NAME:

SAMPLERS: (Signature) L. Collins, David Anderson, [illegible]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Extractable	VOA					REMARKS
04	10-14-88	1258 305		✓	Trip Blank	4	X						6-013708, 6-13709, 6-013710, 6-13711 FJ077
						2		X					6-013712, 6-13713
02	10/20/88	1104 1126		✓	SW Monitoring Well	2 ~~4~~	X						6-013702, 6-013703 ~~6-013704, 6-013705~~ FJ076
						2		X					6-013704, 6-013707
													insufficient Volume for additional Sample

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
David Anderson, L. Collins, [illegible]	10/20/88 1470	Federal Expr #3 AB# 891493395			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6-05875

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

015

CHAIN OF CUSTODY RECORD

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

PROJ. NO.: 10654
PROJECT NAME:
SAMPLERS: (Signature) David Cadoa & Collins

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Extractable	VOA					REMARKS
03	10/19/88	1142, 1217		✓	Southeast MW	12	X						6-013714, 6-013715, 6-013716, 6-013717, 6-013718, 6-013719 FS078
						6		X					6-013730, 6-013731, 6-013732, 6-013733, 6-013734, 6-013735, 6-013736, 6-013737, 6-013738, 6-013739, 6-013740, 6-013741

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
David Cadoa & Collins	10/19/88 1930	Federal Express			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Airbill # 8914933403

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6-05865

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

INORGANIC

CHAIN OF CUSTODY RECORD

REGION 6
First International Bldg., 1201 Elm St.
Dallas, Texas 75270

PROJ. NO. 10654

PROJECT NAME

SAMPLERS: (Signature) David Anderson, [illegible]

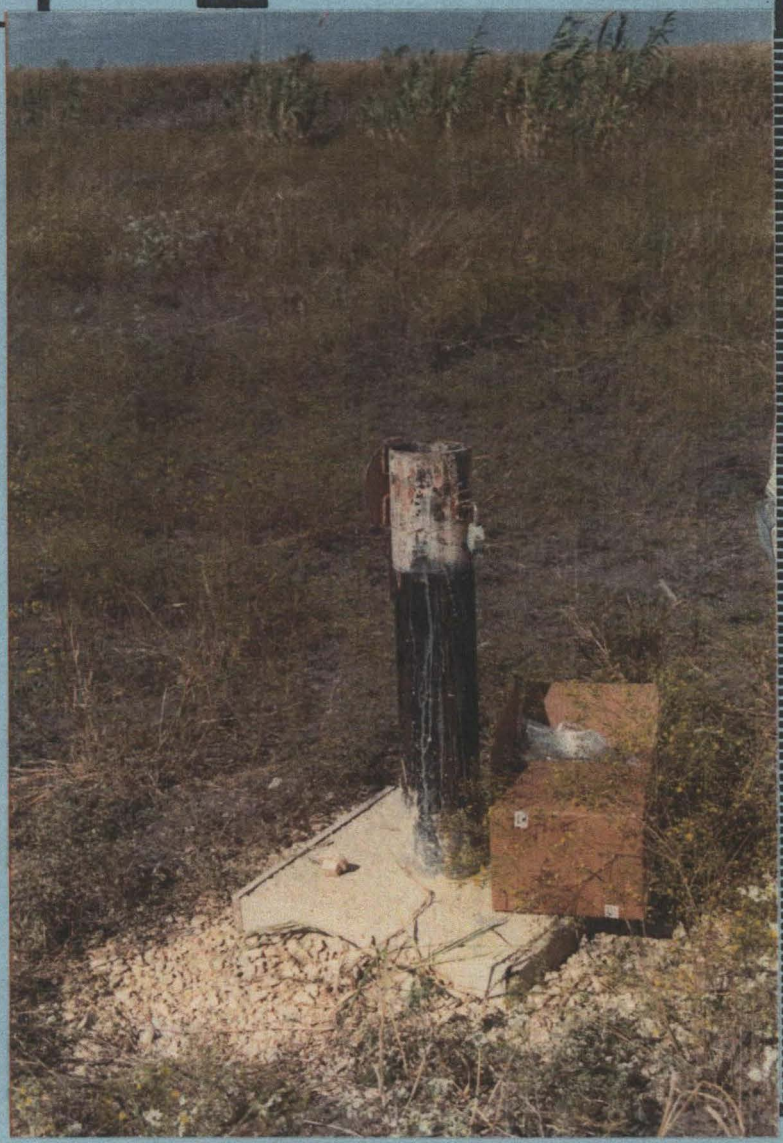
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	METALS	CYANIDE					REMARKS Traffic #	REMARKS Tag #
03	10/19/88	1142-1215		X	Southeast Monitoring Well (QA/QC)	4	2	2					MFH380	6-013726 6-013728 6-013727 6-013729
04	10/19/88	1258 1305		X	Sta 4 Trip Blank	2	1	1					MFH381	6-013725 6-013724
02	10/20/88			X	Sta 02 Southwest Monitoring Well	2	1	1					MFH382	6-013723 6-013722

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
David Anderson [illegible]	10/20/88 1470	Federal Express			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Airbill # 8914933440	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

6-05866

NO. 1



PHOTOGRAPHER/WITNESS
Bob Bennett / L. Collins

DATE / TIME / DIRECTION
10/20/88 1100 SW

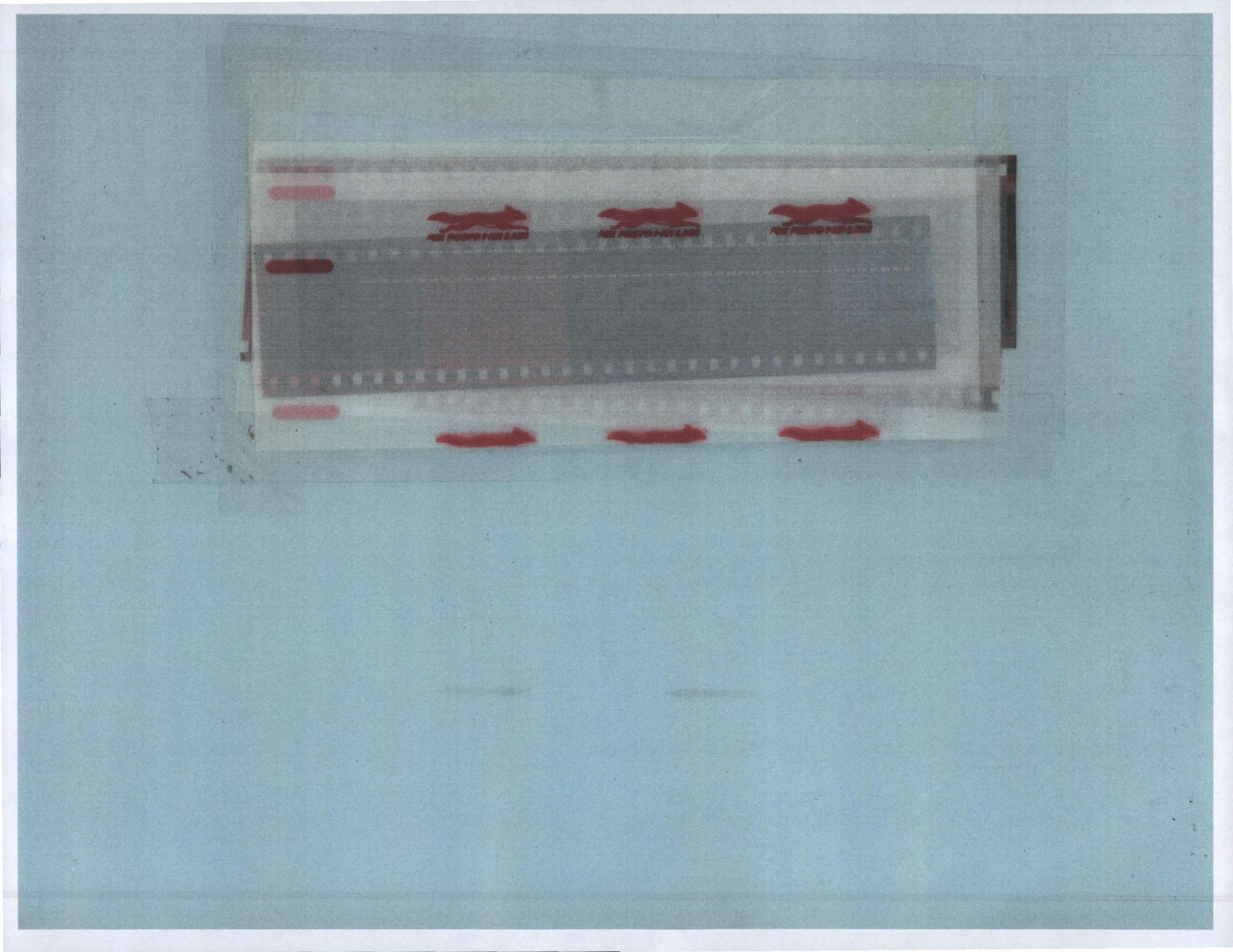
COMMENTS
SAN MARCOS MUNICIPAL LANDFIL
MONITORING WELL #2

PHOTOGRAPHER/WITNESS
Bob Bennett / L. Collins

DATE / TIME / DIRECTION
10/20/88 1115 NE

COMMENTS
SAN MARCOS MUNICIPAL LANDFIL
MONITORING WELL #3

NO. 2



NO. 3

PHOTOGRAPHER/WITNESS

Lyle Wennett / L. Collins

DATE / TIME / DIRECTION

10/19/88 1547 NE

COMMENTS

RESIDENTIAL WELL BELONGING

TO (b) (6) [redacted]

PHOTOGRAPHER/WITNESS

Lyle Wennett / L Collins

DATE / TIME / DIRECTION

10/19/88 1559 ? NE

COMMENTS

RESIDENTIAL WELL BELONGING

TO (b) (6) [redacted]

NO. 4

NO.

5

PHOTOGRAPHER/WITNESS

Lyle Wennett / L. Collins

DATE / TIME / DIRECTION

10/20/88 1040 SW

COMMENTS

RESIDENTIAL WELL BELONGING TO (b) (6) [redacted]

PHOTOGRAPHER/WITNESS

Lyle Wennett / L. Collins

DATE / TIME / DIRECTION

10/20/88 0947 N

COMMENTS

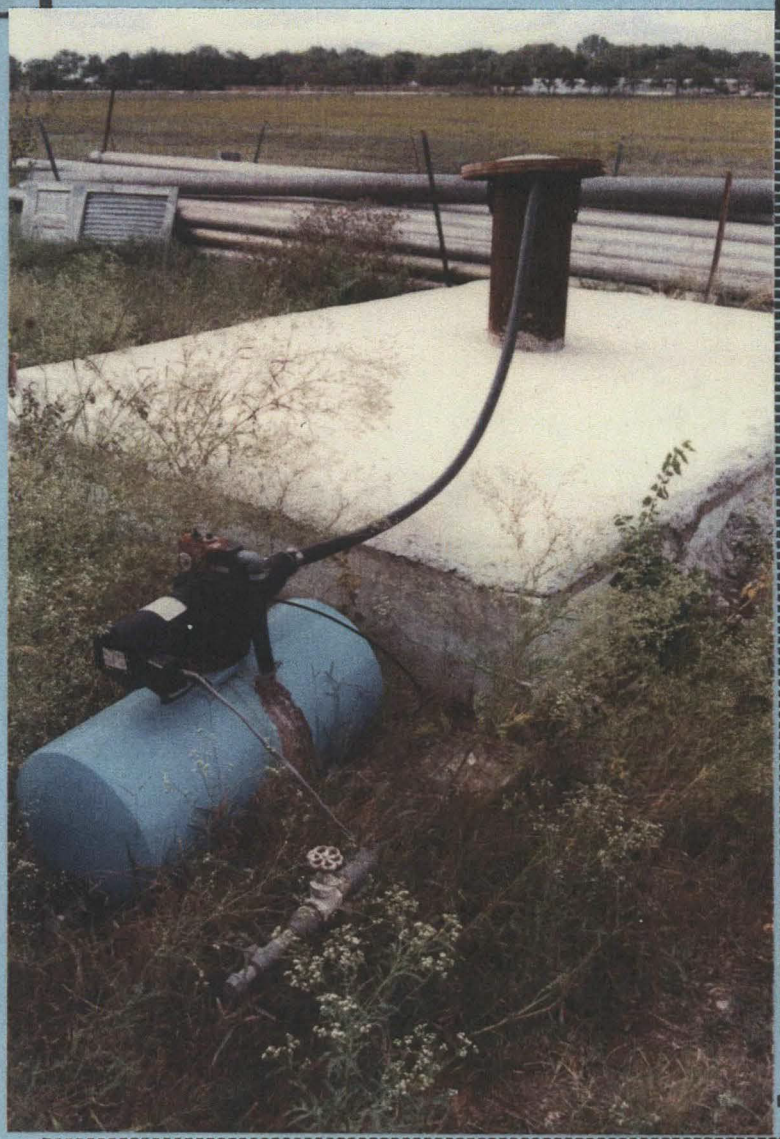
RESIDENTIAL WELL BELONGING TO (b) (6) [redacted]

WELL LOCATED BEHIND BARN

NO.

6

NO. 7



PHOTOGRAPHER/WITNESS

10/20/88 1003 SE

DATE / TIME / DIRECTION

Rob Bennett / L. Collins

COMMENTS

RESIDENTIAL WELL BELONGING TO (b) (6) [redacted]

WELL LOCATED BEHIND DWELLING

PHOTOGRAPHER/WITNESS

Rob Bennett / L. Collins

DATE / TIME / DIRECTION

10/20/88 1029 S

COMMENTS

DRY WELL BELONGING TO (b) (6) [redacted]

NO. 8