

91 BEC 10 PH 2: 83

December 4, 1991

PROJECT REPORT UNDERGROUND STORAGE TANK REMOVAL

Garza and Associates 1240 Powell Street Emeryville, CA 94608

Prepared for:

Mr. Frank Garza 1240 Powell Street Emeryville, CA 94608

Submitted by: Aqua Science Engineers 1041 Shary Circle Concord, CA 94518 (510) 685-6700

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1.0 INTRODUCTION

This report documents the removal and related activities of the underground storage tank closure performed at Garza and Associates located at 1240 Powell St., Emeryville California. As of the date of tank removal, the property is reportedly owned by Mr. Frank Garza of Emeryville, California. The following tank was removed from the site; one (1) 4,000 gallon gasoline underground storage tank. The scope of services provided by Aqua Science Engineers, Inc. (ASE) is in accordance with ASE proposal No. 91-247 and includes the following tasks:

- o Obtain permits from the Alameda County Health Services Department and the Emeryville Fire Department.
- o Remove and dispose of residual liquid from the tank.
- o Remove and dispose of the underground storage tank.
- o Sample the soil beneath the tank.
- o Backfill, compact and resurface the excavation.
- o Prepare a report of methods and findings.

2.0 PERMITS

The application for permits to remove the underground storage tank were obtained from the Alameda County Health Services Department and the Emeryville Fire Department. Copies of the permits and notification documents are contained in Appendix A.

3.0 MOBILIZATION

ASE mobilized for on-site work on November 22, 1991. Project personnel included: Craig Hertz- Project Manager, Steve De Hope-Construction Manager, Field Personnel- Craig Barr and Michael Dirk-Health and Safety Manager and Project Administration.

3.1 EXCAVATION

Prior to excavation, ASE inspected the tank to confirm that only residual liquids remained, tested the Lower Explosive Limit of the vapor within the tank, then commenced to cut and remove the concrete cover over

the tank. The associated fill pipe and product supply pipe were disassembled and removed, and soil was excavated to expose the tank on top and along two sides.

Native material around the tank consisted of a layered medium brown clay with some medium and fine gravel to a depth of the 8 feet. Groundwater was not encountered during the tank removal.

Tank backfill material was classified as a light brown poorly graded sand. Excavated backfill material did not appear discolored nor was there any odor of petroleum products in the area below the tank.

Air quality sampling was conducted at the edge of the excavation using an organic vapor analyzer model 580A by TEI. Volatile organic vapors were not detected in the air near the edge of the excavation.

The tank piping was observed intact with no obvious holes or weakness. There is no evidence of corrosion. No overspill protection devices were in place.

During the excavation of the tank, a 6 foot observation well was identified on the northwest corner of the tank pit area. The well was removed during excavation.

3.2 REMOVAL

ASE and Waste Oil Recovery Systems triple rinsed, pumped all liquids from the tank and transported the liquids to the Demenno Kerdoon recycling facility in Compton, California. A hazardous waste manifest is located in appendix B in this report.

Prior to tank removal on the morning of November 22, 1991, ASE inerted the tanks by adding dry ice at the rate of at least 1.5 pounds per 100 gallons of tank volume. The tank removal operations were witnessed by the Alameda County Health Services Department Inspector-Susan Hugo and the Emeryville Fire Department Inspector-George Warren and Craig Hertz of ASE.

After verifying a safe LEL of the tank atmosphere, the vessel was removed from the excavation. The tank was constructed of 1/4" plate

steel with welded seams. The tank was tar coated. No significant corrosion of the tank exterior was noted.

The tank was transported by a licensed hazardous waste hauler, Mag Trucking, to the Erickson Tank Disposal Facility in Richmond, CA, on the date of removal. Copies of the Hazardous Waste Manifest and Tank Disposal Certificate are contained in Appendix B.

4.0 SAMPLING AND ANALYSIS

Soil samples were collected from the excavation between 2:30 and 3:30 PM, by Project Engineer, Craig Hertz of ASE trained in sampling protocol by a registered civil engineer. Soil sampling was performed at the direction of the Alameda County Health Services Department Inspector.

Soil samples were collected from the tank excavation wall in the native material at approximately 9 feet below grade. The sampling locations are shown on the site map in figure 1. A soil sample of the stockpiled material was collected by driving a 6-inch by 2-inch brass tube into the soil using a wooden mallet when necessary. The sample of stockpiled soil was taken as a composite of four subsamples. The four samples were composited as one sample at the laboratory. All soil samples were secured using aluminum foil, teflon caps and sealed with duct tape. All samples were put on ice and transported directly to the analyzing laboratory under chain of custody procedures.

The samples were submitted for analysis to the state certified laboratory, Chromalab, Inc. in San Ramon, California (415) 831-1788. The soil samples taken were analyzed for Total Petroleum Hydrocarbons as Gasoline (EPA 5030/8015), BTEX (EPA 8020) and Total Lead (AA).

TABLE ONE:

SOIL SAMPLE RESULTS FOR TPH GASOLINE, BTEX & Total Lead

	TPH			Ethyl	Total	Total
Sample No.	Gasoline (ppm)	Benzene (ppb)	Toluene (ppb)	Benzene (ppb)	Xylenes (ppb)	Lead (ppm)
GRZ West	ND	ND	ND	ND	ND	ND
GRZ East	ND	ND	ND	ND	ND	5.50
GRZSTKP1-	4* ND	ND	ND	ND	ND	4,96

* - Composited sample

ND - Non Detectable at analytical method limits

ppm - parts per million

ppb - parts per billion

In total, approximately 30 cubic yards of material were removed from the excavation and stockpiled.

5.0 BACKFILLING AND RESURFACING

The tank pit was backfilled with the excavated material and clean imported backfill material was used to replace the volume of the tank. All material was compacted in one foot lifts. The excavation was resurfaced with concrete to match existing grade.

6.0 DISCUSSION AND CONCLUSIONS

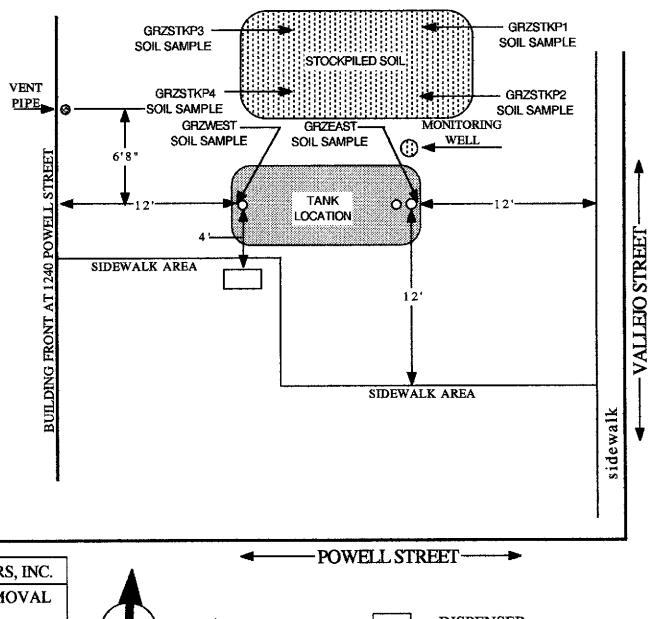
One 4000 gallon underground storage tank last containing gas was removed from the site and transported as hazardous waste to the Erickson Facility in Richmond California, to be cleaned and disposed of as scrap metal.

Soil samples from the excavation walls showed non-detectable concentrations of petroleum hydrocarbons. The native soil at this elevation appeared clean, dry, and free of petroleum odor.

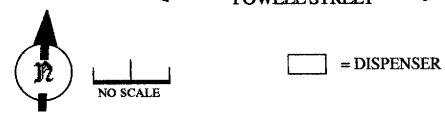
The results of laboratory analysis of samples indicate non detectable concentrations of gasoline and BTEX. Lead was present in soil removed from around the gasoline tank at background concentrations. A copy of the certified laboratory results appear in Appendix C.

The tank was removed form the site and transported as hazardous waste to the Erickson Facility in Richmond California, to be cleaned and disposed of as scrap metal.

The stockpile of soil removed from around the tank was used to backfill the excavation upon analytical results.



AQUA SCIENCE ENGINEERS, INC. PLOTPLAN FOR UST REMOVAL at **GARZA & ASSOCIATES** 1240 Powell St., Emeryville -figure one-



EMERYVILLE FIRE DEPARTMENT FIRE PREVENTION BUREAU 6303 HOLLIS STREET EMERYVILLE, CA 94608 655-7678

CITY OF EMERYVILLE

FIRE CODE PERMIT

Nº 1155.

PERM	USSION IS HE	REBY GRANTED Aqua Science Engineers
то	OPERATE MAINTAIN_ STORE	Remove UG tank
ON P	REMISES LOCA	ATED AT 1240 Powell Street
WITH	UNIFORM FIR	ons are a condition of this permit which is issued in accordance to code, as specified in section 4.108 of said code. The coordonation w/Alameda County: EFD
		4-hr notice prior to removal
ENG.	CO. DISTRICT	
	HIS PERMIT M STED WITH BI LICENSE	
		FIRE MARSHAL DATE

Project Specialist (print) SLESAN L. HWGM

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH HAZARDOUS MATERIALS DIVISION 80 SWAN WAY, ROOM 200 CA 94621 415/271-4320 OAKLAND, PHONE NO.

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Land of Tack and Marsh

With Post Street med Hoor, On the Street, ACCEPTED

Talestano (6-5) 274-7237.

Mose place have book notinand and found to be accept-Book health laws. Changes to your plans indicated, by this Perpetrations and to assure compliance with Sixte and local hwe. The project procedulthread is now relationed for issu-Our mine of those assession white mine has no the fall and able and essectivity, most its requirements of State arance of any required building commits for construction,

Response of a permit is apurete is dependent on going-But a contract of the regulations.

THERE IS, A PHANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS.

UNDERGROUND TANK CLOSURE PLAN Complete according to attached instructions

1.	Business Name Garza and Associates
	Business Owner Frank Garza
2.	Site Address 1240 Powell St.
	City <u>Emery ville</u> zip <u>94608</u> Phone <u>655-6155</u>
3.	Mailing Address 1240 Powell St.
	City <u>Emery Ville</u> Zip 94608 Phone 655-6155
4.	Land Owner Garza & Associates
	Address 1240 Powell St City, State Emeryville, 42ip 94608
5.	Generator name under which tank will be manifested
	Frank Garza
	EPA I.D. No. under which tank will be manifested CACOOO644474
	- 1 -

6.	Contractor <u>Aqua Science Engineers, Inc.</u>
	Address 1841 Shary Circle
	city <u>Concord</u> Phone (510) 685-6700
	License TypeA ID#487000
7.	Consultant Aqua Science Engineers, Inc.
	Address 1041 Shary Circle
	City <u>Concord</u> Phone <u>(5/0)</u> 685-6700
8.	Contact Person for Investigation
	Name Craig Hertz Title ProJect Engineer
	Phone (5/0) 685-6700
9.	Number of tanks being closed under this plan
	Length of piping being removed under this plan <20'
•	Total number of tanks at facility
10.	State Registered Hazardous Waste Transporters/Facilities (see instructions).
	** Underground tanks are hazardous waste and must be handled ** as hazardous waste
	a) Product/Residual Sludge/Rinsate Transporter
	Name Waste Oil Recovery EPA I.D. No. CADOO06265/
	Hauler License No. CAI PM 106399 License Exp. Date 4/92
	Address 6401 Leona Street
	City OAK Land. State Ca. Zip 94605
	b) Product/Residual Sludge/Rinsate Disposal Site
	Name Demenno Kerdoon EPA I.D. No. CATOBOO13352
	Address 2000 N. Alameda
	City COMPTON State CA. Zip 90221
	- 2 -

c) Tank and Piping Transporter	
Name Frickson, Inc.	EPA I.D. No. CADO09466397
Hauler License No. 0019	License Exp. Date 5-97
Address _ 255 Par Bl	
city <u>Richmond</u>	State <u>CA</u> Zip <u>9480/</u>
d) Tank and Piping Disposal Site	
Name Erickson Inc	EPA I.D. No. 6App0946639Z
Address 255 Par Blvd.	
city Richmond	State <u>Ca.</u> Zip <u>94801</u>
. Experienced Sample Collector	
Name Craig Hertz	
Company <u>AQUA Science</u> Engi	neers, Inc.
Address 1041 Shary Circle	
city <u>Concord</u> state <u>Ca</u>	
. Laboratory	
Name Chromalab, Inc.	
Address 2239 OMega Rd #	<u> </u>
City San Ramon sta	
State Certification No. $E-69$) 4
. Have tanks or pipes leaked in the pa	st? Yes [] No [x]
If yes, describe.	

14. Describe methods to be used for rendering tank inert

Tank will be inerted by introducing Dry Tire into the tank at a rate of at least 1.5 lbs Dry Tire per 100 Gal.

OF Tank Volume. LEL OF Tank will be checked Anor to actual Poils

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be plugged.

The Bay Area Air Quality Management District (771-6000), along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of explosion proof combustible gas meters to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.

15. Tank History and Sampling Information

Tan	ik	Material to be sampled	Location and
Capacity	Use History (see instructions)	(tank contents, soil, ground-	Samples
4000 64.	Gasoline	Soil and or ground water if present.	2 feet below The bottom OF The Tank
		y present.	Ine sample mis be collected for
			each end of the f
			noting soil inter

One soil sample must be collected for every 20 feet of piping that is removed. A ground water sample must be collected should any ground water be present in the excavation.



Excavated/Stockpiled Soil Stockpiled Soil

Volume (Estimated)

Sampling Plan

Drive 6"x2" Bruss Tubes into soil at each end of Tunk, seal Ends with Aluminum Foil & Plastic CLPS. Chillin cooler with "Blue Ice". Transport To Laboratory under chain of custody procedures SLMPLE FOR TPH- G # BTEX

I muit be characterized deplacing on mel Stockpiled soil must be placed on bermed plastic and must be de completely covered by plastic sheeting.

16. Chemical methods and associated detection limits to be used for analyzing samples

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

	Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
TPH	-Gasoline	5030	GC-FID	1.0 PPM
	BTEX	8020 R8246	5PA 5030 8240	.005 PPM
•	-Gusoline BTEX Yotal Lead	AA		
			1	

Submit Site Health and Safety Plan (See Instructions)

18. Submit Worker's Compensation Certificate copy Ohio Casualty Group Name of Insurer _ 19. Submit Plot Plan (See Instructions) 20. Enclose Deposit (See Instructions) 21. Report any leaks or contamination to this office within 5 days of discovery. The report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (see Instructions) 22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions. I declare that to the best of my knowledge and belief the statements and information provided above are correct and true. I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved. I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained. I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda. Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections. Signature of Contractor Aqua Science Engineers, Inc. Name (please type) Date <u>October 8 1991</u> Signature of Site Owner or Operator FRANK GARZA. Name (please type) Signature

Date n 2 9

APPENDIX B

HAZARDOUS WASTE MANIFEST

		Manifest ocument No.		4 1110		the shaded are by Federal law
3. Generator's Name and Malling Address			A. Stat	te Manifest Docum	ent Nut	the same and the same
GRIZA MILLASSOCIATES					90	79655
4. Generator's Phone (1/1/50-1/5)	21 141 6		B. Stat	te Generator's ID		
				1111	LL.	1 1 1 1
5. Transporter 1 Company Name 6	8. US EPA ID Numbe	nr	C. Sta	te Transporter's II	00	247
MEKS - TransmillING.	LECTIVE DAYS	LITE	D. Trai	naporter's Phone	7	A
7. Transporter 2 Company Name	8. US EPA ID Numbe	NP .	E. Stat	te Transporter's ID)	
			F. Tran	naporter's Phone		
Designated Facility Name and Site Address	10. US EPA ID Number	DE .		te Facility's ID	11. 1	/
Erickson, Inc.	- Mil.		C	ADDODA	H 16	6576
255 Parr-Blvd.	F		H. Fac	lility's Phone		
(1) - [1] -	C IA ID IO IO IO IO IA I6 I	6 13 19 12		(510	23	5-1393
AND THE RESIDENCE OF THE PARTY	resource and William Property Co.	12. Conta	ainers	15. Total	14. Unit	Waste
11. US DOT Description (Including Proper Shipping Name, Hazan	Glass, and ID Number)	No.	Туре	Quantity	Wt/Vo	
Waste Empty Storage Tank						State 512
F.,	2	L 22 W				EPA/Other
NON-RCRA Hagardous Waste Solid.		0,01	TIP	afferac	P	NO.
b						State
1.5	140					EPA/Other
		1.1	1	1111		S. A. Salies
Q.(11 2	State
						EPA/Other
	-	1.1		1111		Sale Por Source
d.:	97					State
			1 1			EPA/Other
					11	
J. Additional Descriptions for Materials Listed Above Qty Empty Storage Tank (s)	1765		K Ha	ndling Codes for V	Vantes b.	
Qty Empty Storage Tank (s) Tank (s) have been	# 7625. inerted with 15	lbs.	K Ha	ndling Codes for V	Vantee b.	
	# 7625. Inerted with 15	lbs.	•	ndling Codes for V	b.	
Oty Empty Storage Tank (s) Tank (s) have been Dry Ice per 1000 Gal. Capacity.	# 765. Inerted with 15	5 1bs.	•	ndling Codes for V	b.	
Oty. / Empty Storage Tank (s) . Tank (s) have been Dry Ice per 1000 Gal. Capacity. 16. Special Handling Instructions and Additional Information			e.	Ol	d.	Listed Above
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State of California—Health and Welfare Agency Form Approved OMB No. 2050—0039 (Expires 9-30-91) See Instructions on Back of Page 6 Department of Health Services and Front of Page 7 **Toxic Substances Control Division** Please print or type. Form designed for use on elite (12-pitch typewriter). Secramento, Celifornia UNIFORM HAZARDOUS 1. Generator's US EPA ID No. Manifest 2. Page 1 Information in the shaded areas WASTE MANIFEST is not required by Federal law. Transporter 1 Company Name CALL 1-800-852-7550 State Transporter's ID Transporter's Phone, E. State Transporter's ID F. Trensporter's Phone Designated Facility Name and Site Address US EPA ID Number G. State Facility's ID Millinge Keideen ICI (Mareda Cist. 1-800-424-8902; WITHIN CALIFORNIA 13. Total Quantity 14. Unit US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) No Type Wt/Vo cleum (il, N. U.S. (Wast Cil) GENERATOR State EPA/Othe State EPA/Other RESPONSE CENTER State EPA/Other J. Additional Descriptions for Materials Listed Above H20+ Waste Oils (unsity moror rece) NATIONAL 15. Special Handling Instructions and Additional Information Wear Gloves 뿔 CALL GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste 8 AN EMERGENCY

Printed/Typed Name	Signature	Month Day Year
TEVE US FOR GATA. ALL COL	(1 day 11 (2)	1/1/11/19/1
17. Transporter 1 Acknowledgement of Receipt of Materials		LI IXL IV
Printed/Typed Name	Signature	Month Day Year
Jesse Garcia	1 May Mich	VVQVQV
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Nema	Signature	Month Day Year
19. Discrepancy Indication Space		

20. Facility Owner or Operator Certification of receipt of hazardous materials govered by this manifest except as noted in flem 19.

Printed/Typed Name Signature

Month Day Year

DHS 8022 A

AC-

(Rev. 6-89) Previous editions are obsolete

Do Not Write Below This Line

APPENDIX C

LABORATORY ANALYSIS and CHAIN OF CUSTODY SHEET

CHROMALAB, INC.

Analytical Laboratory (E694)

APPEAL TO THE PERIOD OF THE PE

5 DAYS TURNAROUND

November 25, 1991

ChromaLab File No.: 1191244

AQUA SCIENCE ENGINEERS, INC.

Attn: Steve DeHope

RE: Three rush soil samples for Gasoline/BTEX and Total Lead analysis

Project Name: GARZA - EMERYVILLE Project Location: 1240 Powell St.

Project Number: 2411

Date Sampled: Nov. 22, 1991
Date Extracted: Nov. 23, 1991

Date Submitted: Nov. 22, 1991 Date Analyzed: Nov. 25, 1991

RESULTS:

Sample I.D.	Gasoline (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl Benzene (µg/kg)	Total Xylenes (µg/kg)	Total Lead (mg/kg)
GRZ West	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
GRZ East	N.D.	N.D.	N.D.	N.D.	N.D.	5.50
GRZSTKP1-4	N.D.	N.D.	N.D.	N.D.	N.D.	4.96
BLANK	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
SPIKE RECOVERY	88.2%	103.1%	95.7%	94.3%	89.6%	
DUP SPIKE REC.	91.5%	98.2%	93.6%	90.2%	91.7%	
DETECTION LIMIT	1.0	5.0	5.0	5.0	5.0	0.5
METHOD OF	5030/					
ANALYSIS	8015	8020	8020	8020	8020	7421

*Composited soil sample

ChromaLab, Inc.

David Duong Chief Chemist

Eric Tam

Laboratory Director

aqua science Aqua S PO Box (415)

Aqua Science Engineers, Inc. PO Box 535, San Ramon CA 94583 (415) 820-9391

Chain of Custody

DATE 11/22/91 PAGE / OF/

SAMPLERS (S	GNATI	JRE)		(PI	HONE	NO.)	PPOI	ECT	JAME	6	c. V =	2.00	- En	200	11/1	12	50	NO.	24,	11	
Crau			A	685		- 6	ADD	RESS	12	40	Po	we	- E^ 11 S	+							
ANAI COMP	24	ISRI e G	EQUI RZS Tun	EST TKP1-4 100.0F	- GASOLINE A 5030/8015)	TPH-GASOLINE/BTEX (EPA 5030/8015-8020)	TPH-DIESEL (EPA 3510/8015)	PURCABLE AROMOTICS (EPA 602/8020)	PURGABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EDA 624/8240)	BASE/NUETRALS, ACIDS (EPA 625/8270)	OIL & GREASE (RDA 5520 B&F or B&F)	PCB (EPA 608/8080)	PHENOLS (EPA 604/8040)	LUFT METALS (5) (EPA 6010+7000)	PRIORITY POLLUT: (13) (EPA 6010 ICP + 7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	TCLP (EPA 1311/1310)	STLC- CAM WET (EPA 1311/1310)	REACTIVITY CORROSIVITY IGUTABILITY	
SAMPLE ID.	_	_		SAMPLES	E M	P. M	g (3)	P. W	DG (S)	8 ,	W	IO (H	M	HG (H	35	ā C	P C	¥5	8 0	ROH	H
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