SOIL SAMPLING REPORT
FOR:

6700 GOLDEN GATE DRIVE
DUBLIN, CA

MARCH 28, 1991

Uriah Inc.

An Environmental Services Company

March 28, 1991

Mr. Bill Craig, Owner
W.A. Craig Inc.
P.O. Box 448
Napa, CA 94559-0448

Re: Soil Sampling Performed At 6700 Golden Gate Drive, Dublin, CA

Dear Mr. Craig:

On February 28, 1991, staff of Uriah, Inc. performed soil sampling at the above referenced site attendant to the excavation and removal of one (1) 10,000 gallon underground diesel storage tank and one (1) 3,500 gallon underground unleaded gasoline storage tank in order to determine the presence, if any, of hydrocarbon contamination of the soil.

METHODOLOGY

Four subsurface soil samples (#A1, A2, A3, and A4) were collected from native soil (1.5 to 2 feet below the backfill-native soil interface) at a depth of 9.5' to 10.0' beneath the fill end and opposite the fill end of each tank. (See the Site Map, attached, for specific sampling locations). The soil to be sampled was obtained from a backhoe bucket by first removing the top two to three inches of material and then driving a clean brass sample tube 1.9 inches in diameter and 6.0 inches in length, using a drive sampler, into the soil. Upon completely filling each sample tube with a consolidated volume of soil, each tube was withdrawn from the soil and the ends of each sample tube then promptly covered with 4" teflon pads, fitted with plastic caps, sealed with duct tape, labeled, and placed on blue ice.

Due to inclement weather on February 28, 1991, two composite samples (#A5 Composite and #A6 Composite) from the 82 cubic yards of stockpiled soil previously excavated from the tank pit were not obtained until March 5, 1991. Each composite

464 Lindbergh Avenue • Livermore, California 94550 • (415) 455-4991

sample was obtained by driving a clean brass sample tube (1.9 inches in diameter and 6.0 inches in length) into the soil at four randomly selected points per composite sample. These soil samples were handled in the same manner as previously described. (See Site Map, attached, for specific sampling locations).

The above referenced soil samples were subsequently transported to a certified hazardous waste analytical laboratory under chain of custody for analysis as required by Dr. Ravi Arulanantham of the Alameda County Health Services Agency, Hazardous Materials Management Program for Total Petroleum Hydrocarbons as Gasoline (TPH-G), benzene, toluene, total xylenes and ethylbenzene (BTX&E) using EPA Methods 5030/8015 and 8020, Total Petroleum Hydrocarbons as Diesel (TPH-D) using EPA Method 3550/8015, Total Oil and Grease (TOG) using SM 5520F, and Total Lead using EPA Method 7420.

All sampling was witnessed by Dr. Ravi Arulanantham as well as Mr. Tom Hathcox, City of Dublin Fire Marshal. All sampling equipment was thoroughly cleansed prior to, and between, all samplings using a triple rinse with a Trisodium Phosphate solution (TSP) followed by a thorough rinse with distilled water.

OBSERVATIONS

Both tanks appeared to be in good condition with no rust, pitting, or holes noted. The native soils beneath the tanks was a gray-brown clay. The backfill material removed from the excavation was a silty, medium, gray-brown sand mixed with a very dark, organic, clay.

LABORATORY RESULTS

Copies of all laboratory results as received from the certified hazardous waste analytical laboratory are enclosed as Appendix "A".

CONCLUSIONS AND RECOMMENDATIONS

The results of analysis are outlined as follows:

Sample #	Matrix	TPH-D (ppm)	TOG (ppm)	TPH-G (ppm)	(B (ppb)	T (ppb)	X (ppb)	E) (ppb)
1	Soil	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
2	Soil	N.D.	270	N.D.	N.D.	7	4	N.D.

		D	TOG	G	B	T	X	E
3	Soil	N.D.	360	N.D.	N.D.	11	N.D.	5
4	Soil	N.D.	N.D.	N.D.	N.D.	8	N.D.	N.D.
5	Soil	30	170	1.1*	N.D.	5	N.D.	4
6	Soil	17	96	2.4*	N.D.	6	3	10

*Non typical Gasoline pattern

Sample #	Matrix	Total Lead (ppm)
1	Soil	N.D.
2	Soil	N.D.
3	Soil	N.D.
4	Soil	N.D.
5	Soil	N.D.
6	Soil	N.D.

TPH-D...Total Petroleum Hydrocarbons as Diesel
TOG...Total Oil and Grease
TPH-G...Total Petroleum Hydrocarbons as Gasoline
B...benzene
T...toluene
X...Xylenes
E...ethylbenzene
ppm...Parts per million
ppb...Parts per billion

Copies of this report have been included for your convenience. A copy should be forwarded to each of the following regulatory agencies for their review:

San Francisco Bay Region Water Quality Control Board
1800 Harrison Street, Suite 700
Oakland, CA 94621
Attention: Mr. Stephen Berger

Alameda County Health Services Agency
Hazardous Materials Management Program
80 Swan Way, Room 200

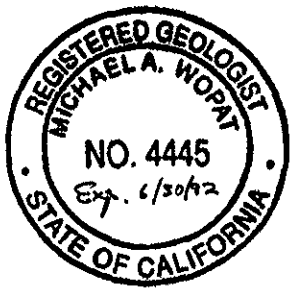
Oakland, CA 94621
Attention: Dr. Ravi Arulanantham

City of Dublin Fire Department
9399 Fircrest Lane
San Ramon, CA 94583
Attention: Mr. Tom Hathcox, Fire Marshal

If you have any questions, or if we may otherwise be of assistance, please contact the undersigned at (415) 455-4991.

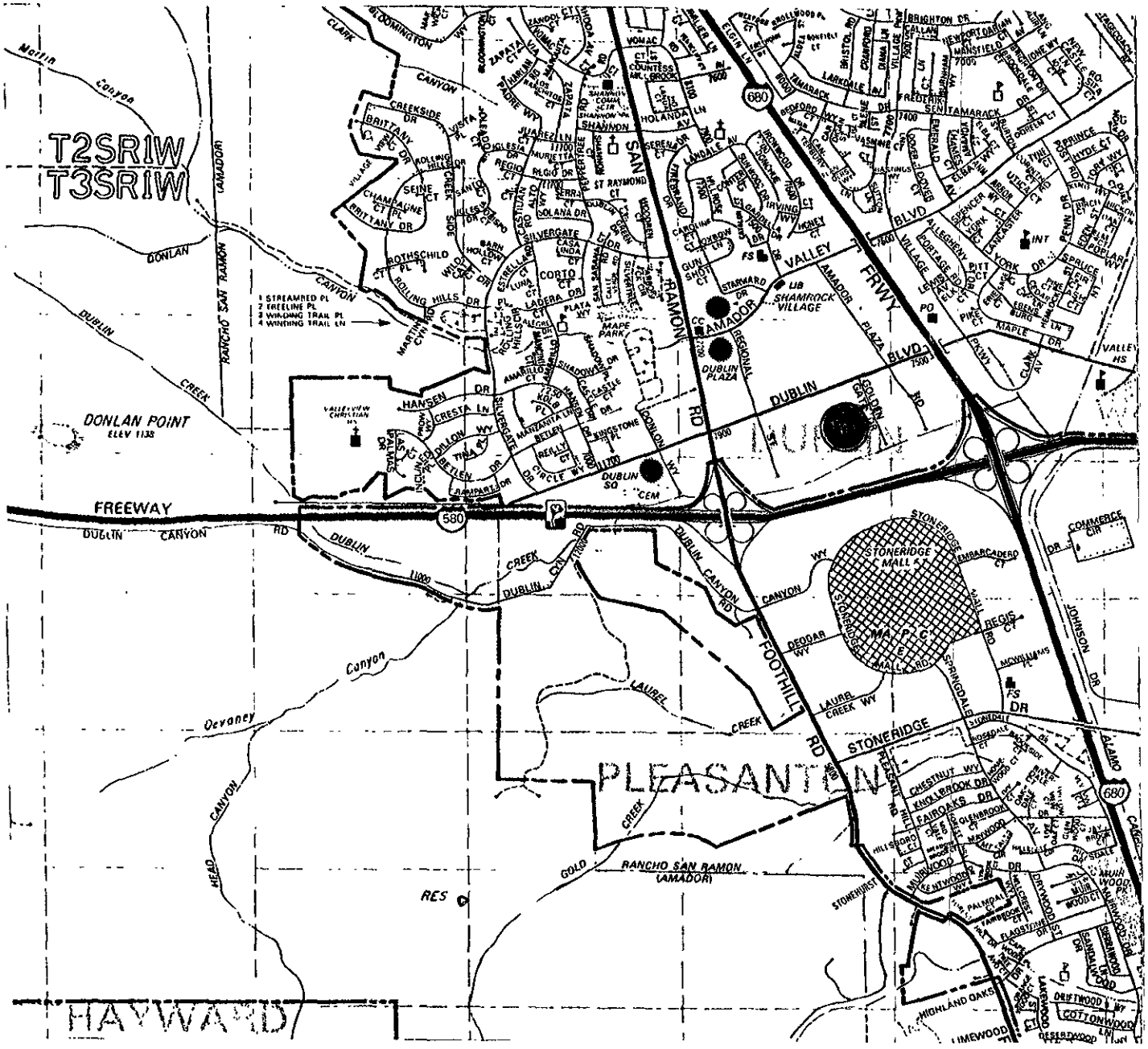
Sincerely,

Michael A. Wopat, Ph.D.
Registered Geologist
and



Denise A. Rapp
Vice-President, Uriah, Inc.

MW:DAR:ms
enc. Appendix "A"- Certified Laboratory Data

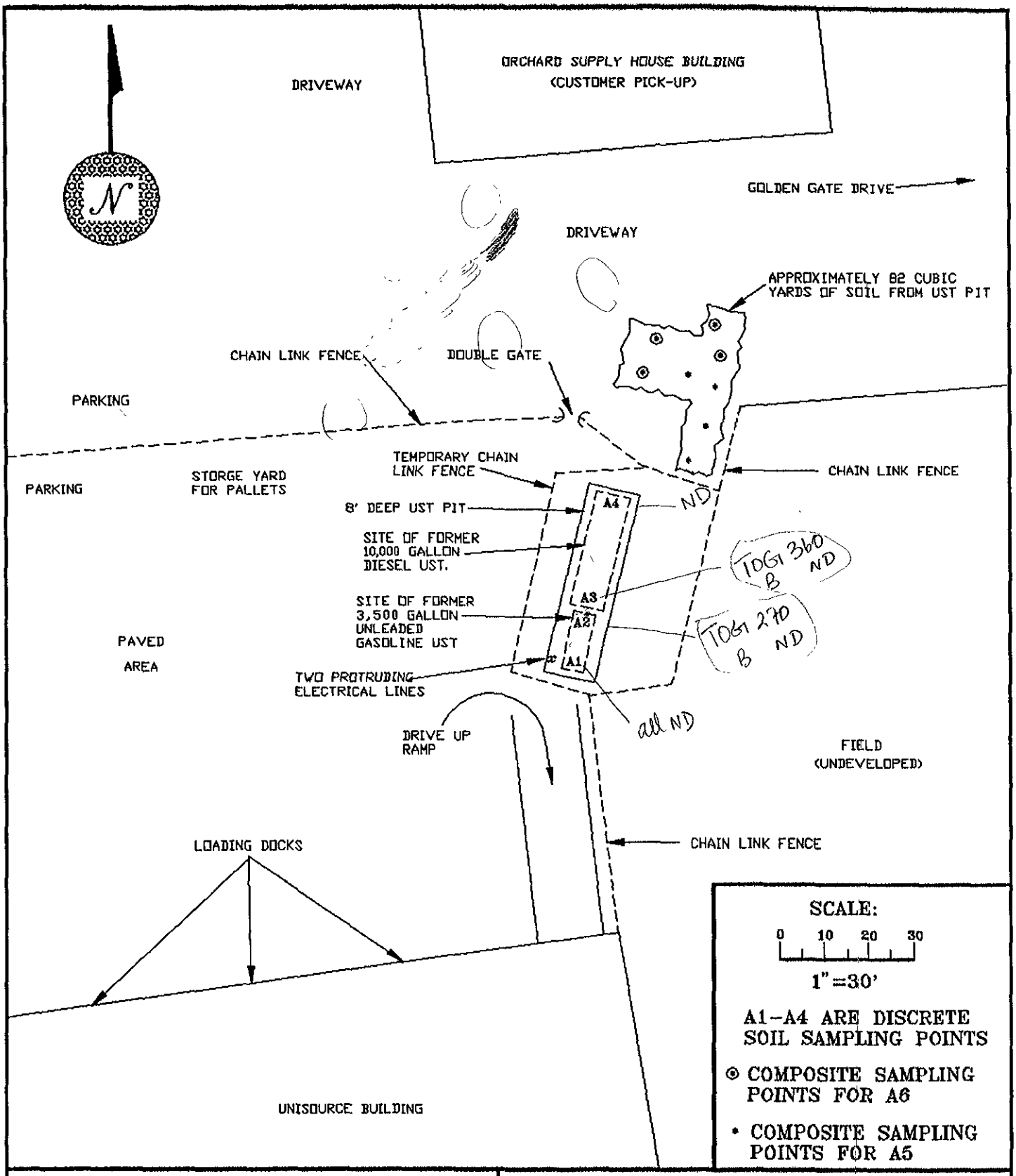


URIAH ENVIRONMENTAL SERVICES, INC.
464 LINDBERGH AVENUE, LIVERMORE, CA
AT:

6700 GOLDEN GATE DRIVE, DUBLIN, CA

Scale:
1"= ½ Mile

N

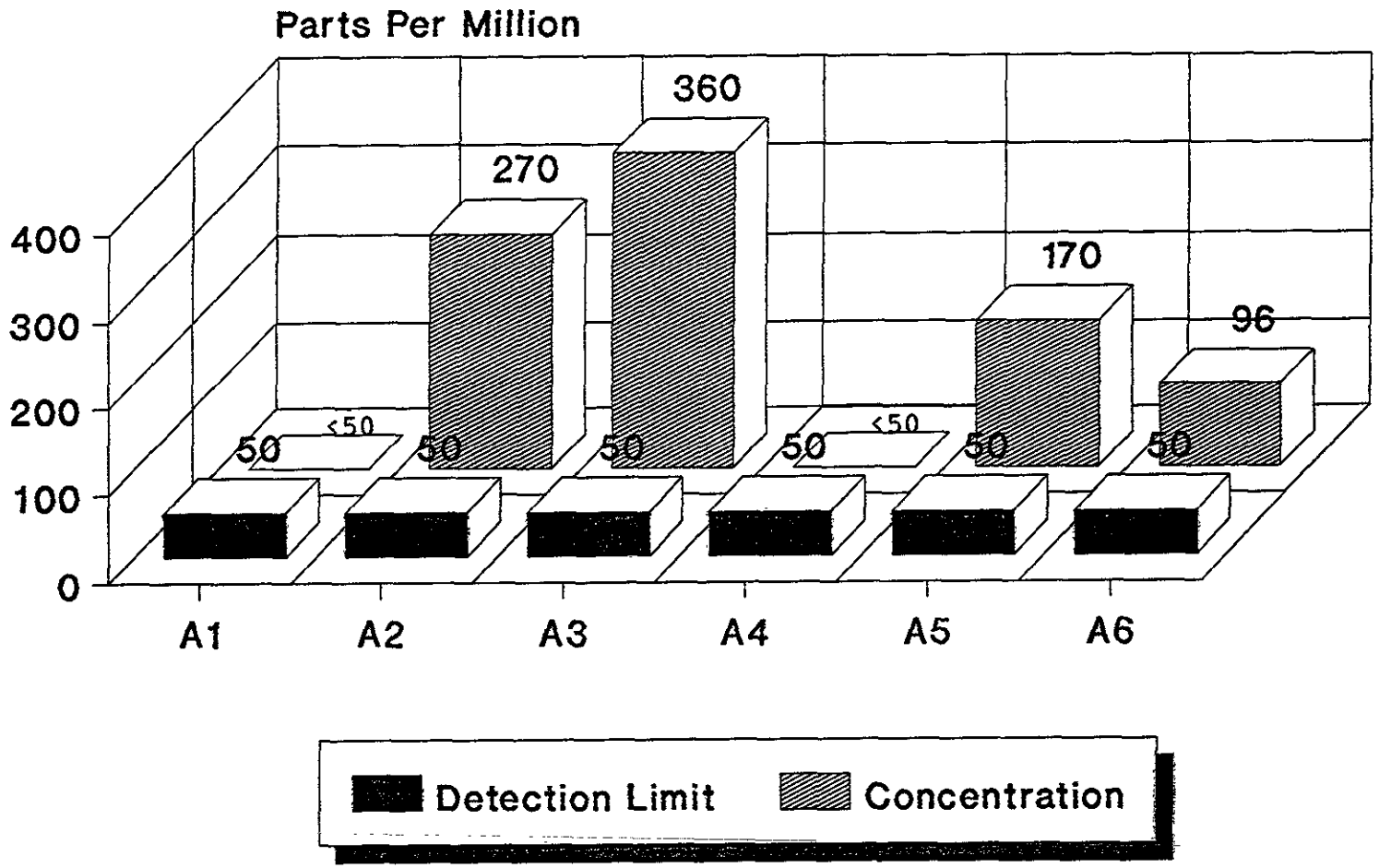


UNISOURCE
6700 GOLDEN GATE DR.
DUBLIN, CA 94568

Uriah, Inc
464 Lindbergh Ave.
Livermore, CA 94550
An Environmental Services Company

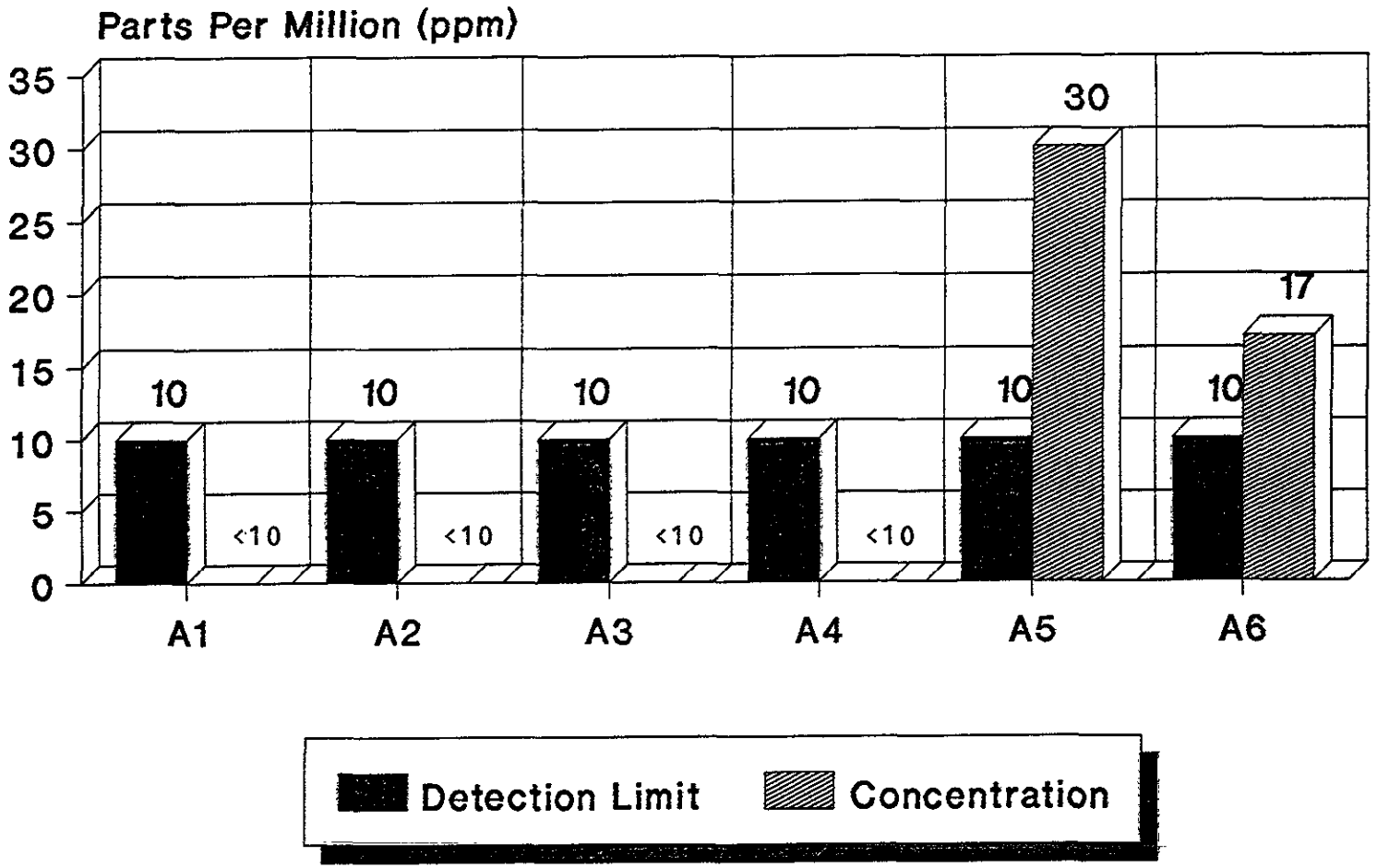
CONTAMINANT GRAPHS

TOG
6700 GOLDEN GATE DRIVE



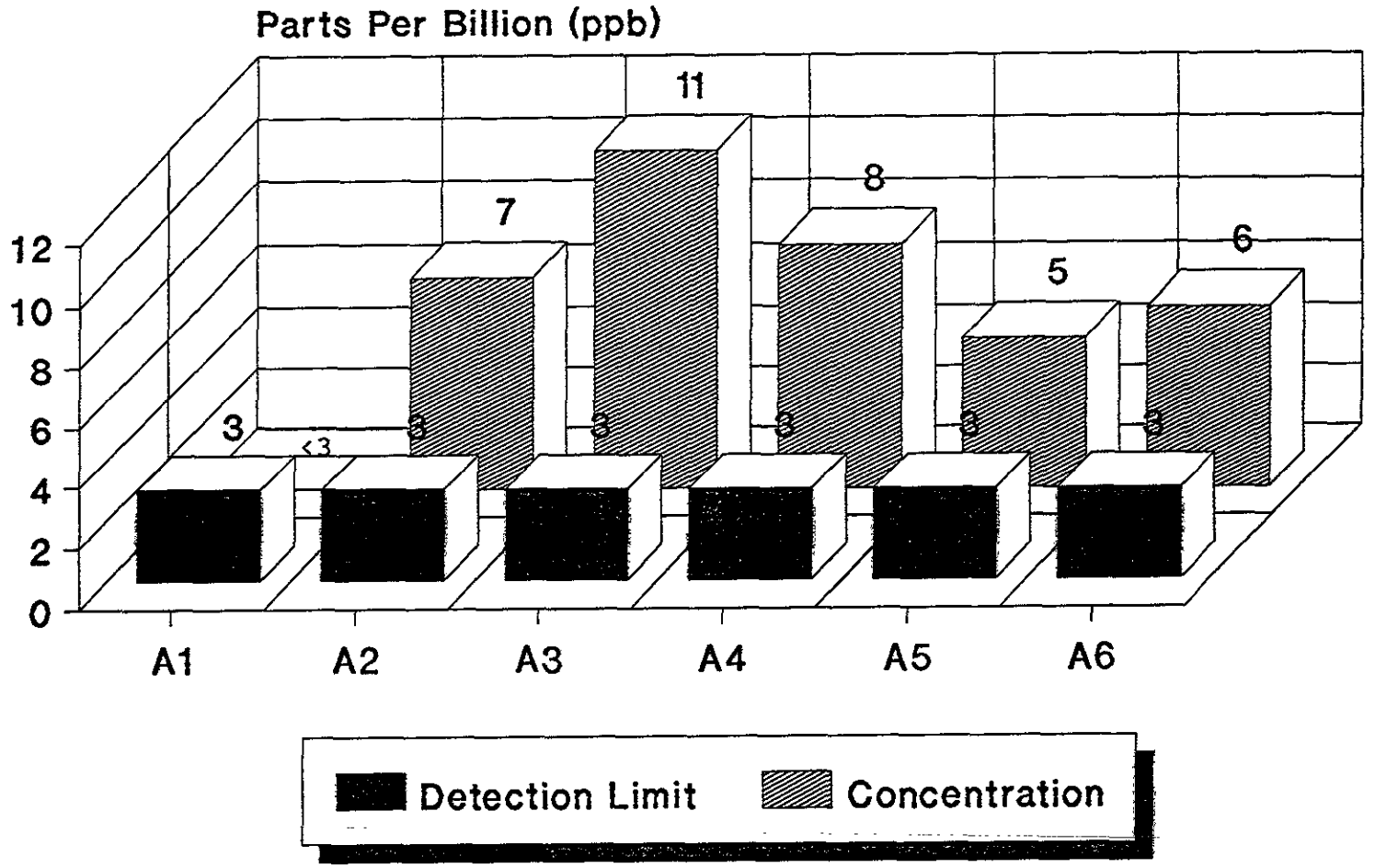
Soil Samples A1 to A6

TPH-D
6700 GOLDEN GATE DRIVE



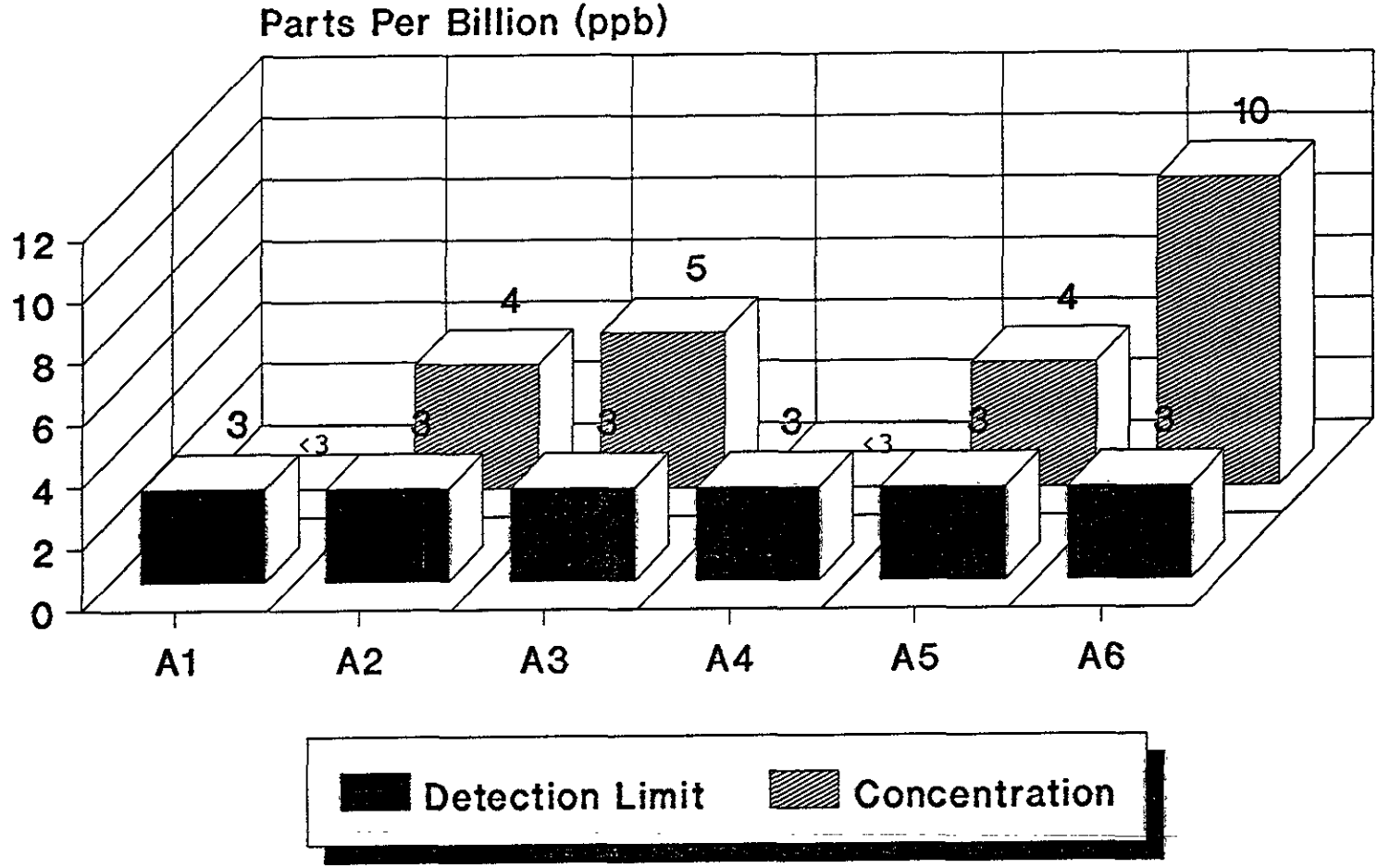
Soil Samples A1 to A6

TOLUENE
6700 GOLDEN GATE DRIVE



Soil Samples A1 to A6

XYLENES
6700 GOLDEN GATE DRIVE



Soil Samples A1 to A6

Appendix "A"

SUPERIOR ANALYTICAL LABORATORIES, INC.
825 ARNOLD, STE. 114 • MARTINEZ, CALIFORNIA 94553 • (415) 229-1512
DOHS #319
DOHS #220

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 82584
CLIENT: Uriah Environmental, Inc.
CLIENT JOB NO.: W.A.CRAIG

DATE RECEIVED: 03/06/91
DATE REPORTED: 03/13/91

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/kg) Diesel Range
1	A1	ND<10
2	A2	ND<10
3	A3	ND<10
4	A4	ND<10
5	A5 COMPOSITE	30
6	A6 COMPOSITE	17

Method Detection Limit for Gasoline and Diesel in Soil: 10 mg/Kg

QAQC Summary:

Daily Standard run at 200mg: RPD Diesel = 1
MS/MSD Average Recovery = 104%: Duplicate RPD = 18

Richard Srna, Ph.D.
Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

SUPERIOR ANALYTICAL LABORATORIES, INC.
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DATE RECEIVED: 03/06/91
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ANALYSIS FOR TOTAL OIL AND GREASE
by Standard Method 5520F

LAB #	Sample Identification	Concentration (mg/Kg) Oil & Grease
1	A1	ND<50
2	A2	270
3	A3	360
4	A4	ND<50
5	A5 COMPOSITE	170
6	A6 COMPOSITE	96

Method Detection Limit for Oil and Grease in Soil: 50mg/Kg

QAQC Summary: MS/MSD : 111 Duplicate RPD : 10

Richard Srna, Ph.D.
Laboratory DIrector

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CERTIFICATE OF ANALYSIS

LABORATORY NO.: 82584
CLIENT: Uriah Environmental, Inc.
CLIENT JOB NO.: W.A.CRAIG

DATE RECEIVED: 03/06/91
DATE REPORTED: 03/13/91

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration (mg/kg) Gasoline Range
1	A1	ND<1
2	A2	ND<1
3	A3	ND<1
4	A4	ND<1
5	A5 COMPOSITE	1.1 *
6	A6 COMPOSITE	2.4 *

* Non typical Gasoline pattern.

mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/Kg

QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = <15
MS/MSD Average Recovery = 87%: Duplicate RPD = 3

Richard Srna, Ph.D.

Laboratory Manager

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DOHS #319
DOHS #220

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 82584
CLIENT: Uriah Environmental, Inc.
CLIENT JOB NO.: W.A.CRAIG

DATE RECEIVED: 03/06/91
DATE REPORTED: 03/13/91

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/kg) Benzene	Toluene	Ethyl Benzene	Xylenes
1	A1	ND<3	ND<3	ND<3	ND<3
2	A2	ND<3	7	ND<3	4
3	A3	ND<3	11	ND<3	5
4	A4	ND<3	8	ND<3	ND<3
5	A5 COMPOSITE	ND<3	5	ND<3	4
6	A6 COMPOSITE	ND<3	6	3	10

ug/Kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/Kg

QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%
MS/MSD Average Recovery =88%: Duplicate RPD = <2

Richard Srna, Ph.D.

Laboratory Manager

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DOHS #319
DOHS #220

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 82584
CLIENT: Uriah Environmental, Inc.
CLIENT JOB NO.: W.A.CRAIG

DATE RECEIVED:03/06/91
DATE REPORTED:03/13/91

ANALYSIS FOR TOTAL LEAD
by SW-846 Method 7420

LAB #	Sample Identification	Concentration(mg/kg) Total Lead
1	A1	ND<10
2	A2	ND<10
3	A3	ND<10
4	A4	ND<10
5	A5 COMPOSITE	ND<10
6	A6 COMPOSITE	ND<10

mg/kg - parts per million (ppm)

Method Detection Limit for Lead in Soil: 10 mg/Kg

QAQC Summary: MS/MSD Average Recovery : 109%
Duplicate RPD : 11

Richard Srna, Ph.D.

Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

Uriah, Inc.

An Environmental Services Company

(415) 455-4991 Office
(415) 455-4995 FAX

Chain of Custody

DATE 3/5/91 PAGE 1 OF 1

PROJ. MGR. TONY FAVERO
COMPANY Uriah, Inc.
ADDRESS 464 Lindbergh Avenue
Livermore, CA 94550
SAMPLERS (SIGNATURE) Tony Favero (PHONE NO.) 455-4991

ANALYSIS REQUEST

SAMPLE ID.	DATE	TIME	MATRIX	LAB ID.	TPH - Gasoline (EPA 5030)	TPH - Gasoline (5030) WATER (EPA 602, 8020)	TPH - Diesel (EPA 3510, 3550)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240)	BASE/NEUTRALS, ACIDS (EPA 625/625, 8270)	TOTAL OIL & GREASE (EPA 5520E&F)	PESTICIDES/PCB (EPA 608, 8080)	PHENOLS (EPA 604, 8040)	LEAD 7420/7421		METALS: Cd, Cr, Pb, Zn	CAM METALS (17) W/O V+	PRIORITY POLLUTANT METALS (13)						NUMBER OF CONTAINERS
A1 DISCRETE	3/5/91	1140	SOIL			X	X					X			X										1
A2 "	3/5/91	1148	SOIL			X	X					X			X										1
A3 "	3/5/91	1158	SOIL			X	X					X			X										1
A4 "	3/5/91	1220	SOIL			X	X					X			X										1
A5 COMPOSITE	3/5/91	1250	SOIL			X	X					X			X										1
A6 COMPOSITE	3/5/91	1259	SOIL			X	X					X			X										1

PROJECT INFORMATION

W.H. CRAIG
UNISOURCE SITE
IN DUBLIN, CA.

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
RECT'D GOOD CONDITION/COLD	
CONFORMS TO RECORD	
LAB NO.	

SPECIAL INSTRUCTIONS/COMMENTS: NORMAL TURN AROUND TIME. A1 & A4 ARE DISCRETE SAMPLES; A5, A6 ARE 4 PT. COMPOSITE SAMPLES.

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
Tony Favero	Ken Brown 3/6	
(Signature) (Time) Tony Favero 901	(Signature) (Time) 1030	(Signature) (Time)
(Printed Name) (Date) 3/6/91	(Printed Name) (Date) EXPRESS IT	(Printed Name) (Date)
(Company) URIAH, INC.	(Company)	(Company)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3.**
Ken Brown 3/6/91		Nadermann
(Signature) (Time) 0980	(Signature) (Time)	(Signature) (Time) Nadermann 10:30
(Printed Name) (Date) EXPRESS IT	(Printed Name) (Date)	(Printed Name) (Date)
(Company)	(Company)	(Lab)