INTERNATIONAL TECHNOLOGY CORPORATION

13 March 1990

Mr. Murray Stevens
Kamur Industries
2351 Shoreline Drive
Alameda, California 94501

REFERENCE: FEBRUARY MONTHLY SAMPLING OF MONITORING WELLS/SUMP
RAINFALL EVENT SAMPLING OF EL CERRITO CREEK
PLAZA CAR WASH
400 SAN PABLO AVENUE; SAN PABLO, CALIFORNIA

IT ENVIRONMENTAL SERVICES JOB #148031

Dear Mr. Stevens,

International Technology Environmental Services (ITES) was retained by Kamur Industries on 04 December 1989 to execute the monthly sampling activities on the monitoring wells, sump and El Cerrito Creek, and to obtain creek samples 48 hours following a significant rainfall greater than or equal to 0.25 inches.

The February monthly sampling event was completed on 02 February, with rain event samplings being conducted 08 February and 19 February 1990.

The groundwater gradient remained consistent, primarily flowing to the west-northwest then reversing directions (southeast) following a rainstorm.

Laboratory analysis revealed a decrease in contaminant concentrations in monitoring well MW-1 to below detectable levels, with levels encountered in monitoring well MW-2 increasing slightly. Inspection of monitoring wells MW-3 and MW-4 revealed an immeasurable layer (sheen only) of free product, as noticed during previous sampling events (Table 1).

Analysis of sump waters reflected a decrease in contaminant concentrations during the monthly sampling event however rain event results were consistent with past data (Table 2).

Contaminant levels from Point PT-1 (upstream) remained below detection limits. Results from point PT-2 revealed a slight increase following the rain event of 16 February 1990. Analytical results from points PT-3 and PT-4 remained constant (Table 3).

All laboratory reports are contained in Appendix A. A full report containing sampling programs and methodology is contained in Appendix B.

ITES appreciates Kamur Industries business and will continue striving to meet your environmental needs in the future. If you have any comments or concerns, please do not hesitate to call ITES at: (415) 372-9100.

Sincerely,

S. I. Mills

S. I. Mills
Project Geoscientist

TABLE 1
KAMUR INDUSTRIES
MONTHLY GROUNDWATER SAMPLING
MONITORING WELLS
RESULTS IN PARTS PER BILLION (PPB)

MONITORING WELL MW-1

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
08/03/89	16,000	1,800	1,800	1,200	210
12/08/89	BDL	21	12	17	7.7
01/03/90	BDL	6,300	530	410	900
02/02/90	BDL	BDL	BDL	BDL	BDL

MONITORING WELL MW-2

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
08/03/89	80,000	9,100	12,000	7,100	460
12/08/89	13,000	13,000	8,400	750	2,500
01/03/90	5,500	NA	NA	NA	NA
02/02/90	7,200	3,500	80	240	270

MONITORING WELL MW-3

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
08/03/89	71,000	20,000	21,000	7,900	580
12/08/89*	NA	NA	NA	NA	NA
01/03/90*	NA	NA	NA	NA	NA
02/02/90*	NA	NA	NA	NA	NA

* Not sampled due to the presence of free product.

MONITORING WELL MW-4

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
08/03/89	14,000	2,000	1,500	1,000	BDL
12/08/89*	NA	NA	NA	NA	NA
01/03/90*	NA	NA	NA	NA	NA
02/02/90*	NA	NA	NA	NA	NA

* Not sampled due to the presence of free product.

NOTE:

BDL = below detection limit
NA = not analyzed

TABLE 2
KAMUR INDUSTRIES
MONTHLY GROUNDWATER SAMPLING
SUMP
RESULTS IN PARTS PER BILLION (PPB)

SUMP SP-1

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
12/08/89	55,000	26,000	25,000	2,100	13,000
01/03/90	72,000	22,000	25,000	2,400	13,000
02/02/90	38,000	20,000	17,000	1,400	8,000
02/08/90	76,000	7,900	7,400	1,700	8,300
02/19/90	90,000	1,100	750	2,600	5,600

NOTE: Results in parts per billion (ppb)

TABLE 3
KAMUR INDUSTRIES
STORM EVENT SAMPLING (PPT > 0.25 IN) AND MONTHLY SAMPLING
EL CERRITO CREEK
RESULTS IN PARTS PER BILLION (PPB)

POINT 1

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
08/03/89	BDL	BDL	BDL	BDL	BDL
12/08/89	BDL	NA	NA	NA	NA
01/03/90+	BDL	NA	NA	NA	NA
01/15/90*	BDL	NA	NA	NA	NA
01/17/90*	BDL	NA	NA	NA	NA
02/02/90+	BDL	NA	NA	NA	NA
02/08/90*	BDL	NA	NA	NA	NA
02/19/90*	BDL	NA	NA	NA	NA

POINT 2

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
08/03/89	470,000	16,000	29,000	4,200	29,000
12/08/89	33,000	NA	NA	NA	NA
01/03/90+	99,000	NA	NA	NA	NA
01/15/90*	16,000	NA	NA	NA	NA
01/17/90*	15,000	NA	NA	NA	NA
02/02/90+	16,000	NA	NA	NA	NA
02/08/90*	7,000	NA	NA	NA	NA
02/19/90*	26,000	NA	NA	NA	NA

POINT 3

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
12/08/89	BDL	NA	NA	NA	NA
01/03/89+	900	NA	NA	NA	NA
01/15/90*	840	NA	NA	NA	NA
01/17/90*	BDL	NA	NA	NA	NA
02/02/90+	60	NA	NA	NA	NA
02/08/90*	100	NA	NA	NA	NA
02/19/90*	30	NA	NA	NA	NA

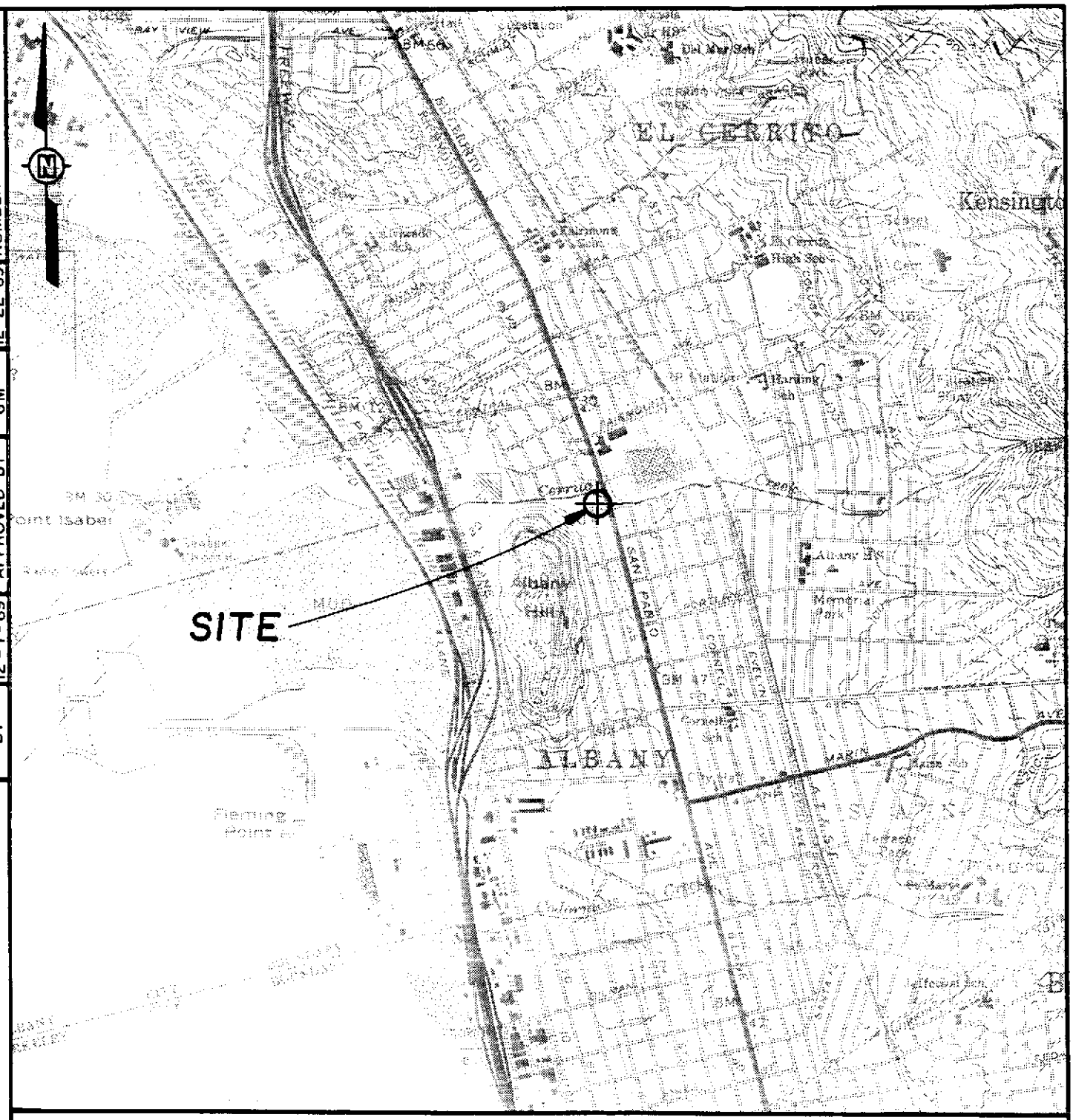
POINT 4

Date Sampled	TPH (Gas)	Benzene	Toluene	Ethyl Benzene	Xylene
08/03/89	2,700	88	8	BDL	210
12/08/89	BDL	NA	NA	NA	NA
12/22/89?	800	NA	NA	NA	NA
01/03/90+	800	NA	NA	NA	NA
01/15/90*	BDL	NA	NA	NA	NA
01/17/90*	160	NA	NA	NA	NA
02/02/90+	130	NA	NA	NA	NA
02/08/90*	140	NA	NA	NA	NA
02/19/90*	200	NA	NA	NA	NA

NOTE:

BDL = below detection limit
NA = not analyzed
* = storm event sampling
+ = monthly and storm event programs completed
? = one point sampling to test remediation method efficiency

DRAWN BY	T R S	CHECKED BY		DRAWING NUMBER
	12-7-89	APPROVED BY	12-22-89	148031-A1
		GM	12-22-89	
		GM		



SCALE

0 2000 4000 FEET

FIGURE 1

SITE VICINITY MAP
PLAZA CAR WASH
400 SAN PABLO AVENUE
ALBANY, CALIFORNIA
PREPARED FOR

KAMUR INDUSTRIES, INC.
ALAMEDA, CALIFORNIA

REFERENCE:
U.S.G.S. 7.5' MIN. TOPOGRAPHY, RICHMOND, CA. QUADRANGLE, DATED 1959 PHOTOREVISED 1968 AND 1973, SCALE = 1:24000

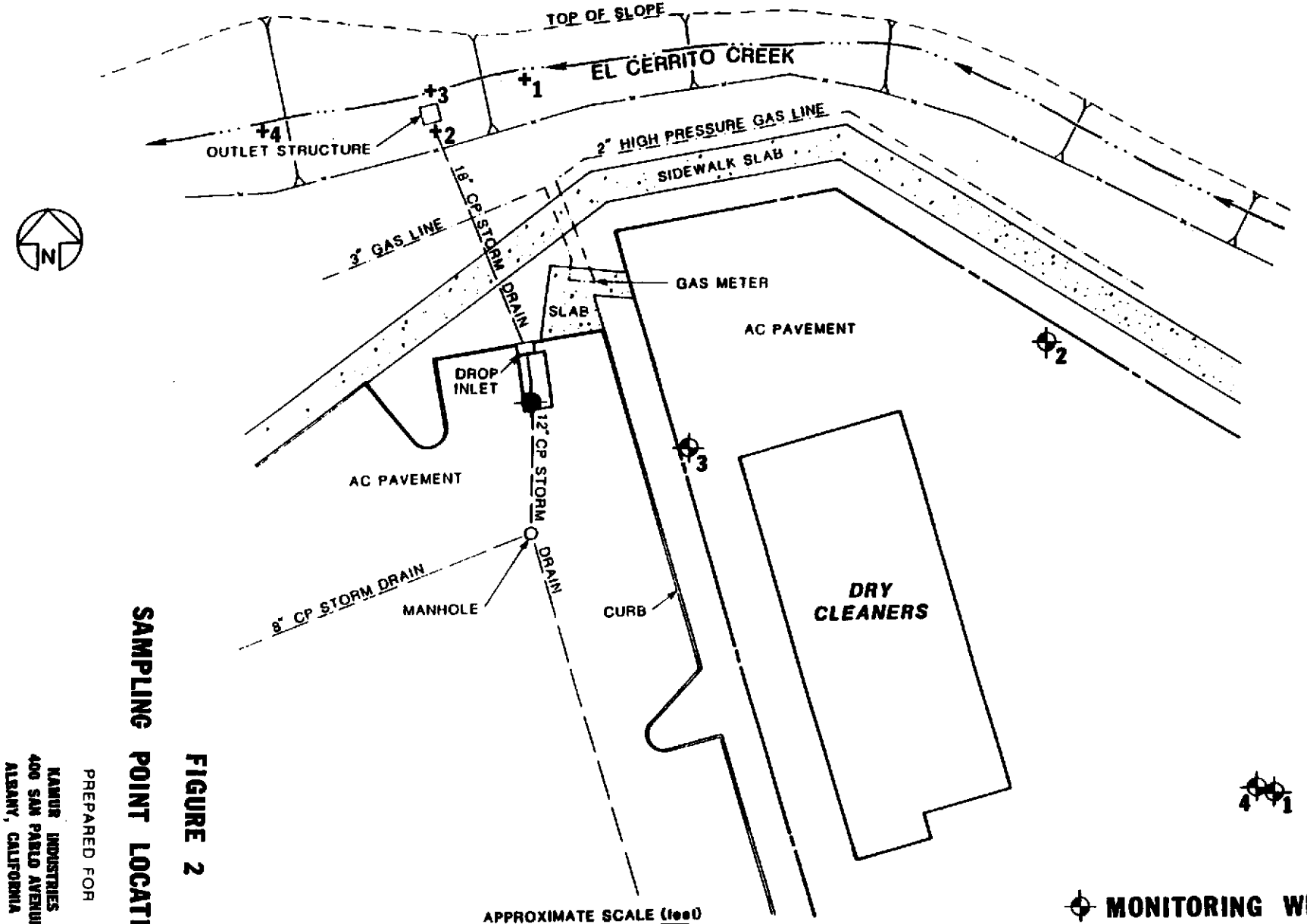
INTERNATIONAL TECHNOLOGY CORPORATION

146494

"Do Not Scale This Drawing

146494

DRAWN BY		CHECKED BY			DRAWING NUMBER
		APPROVED BY			



INTERNATIONAL TECHNOLOGY CORPORATION

PREPARED FOR

KAMUR INDUSTRIES
400 SAN PABLO AVENUE
ALBANY, CALIFORNIA

FIGURE 2

SAMPLING POINT LOCATION MAP

DRAWN BY		CHECKED BY			DRAWING NUMBER
		APPROVED BY			

146494

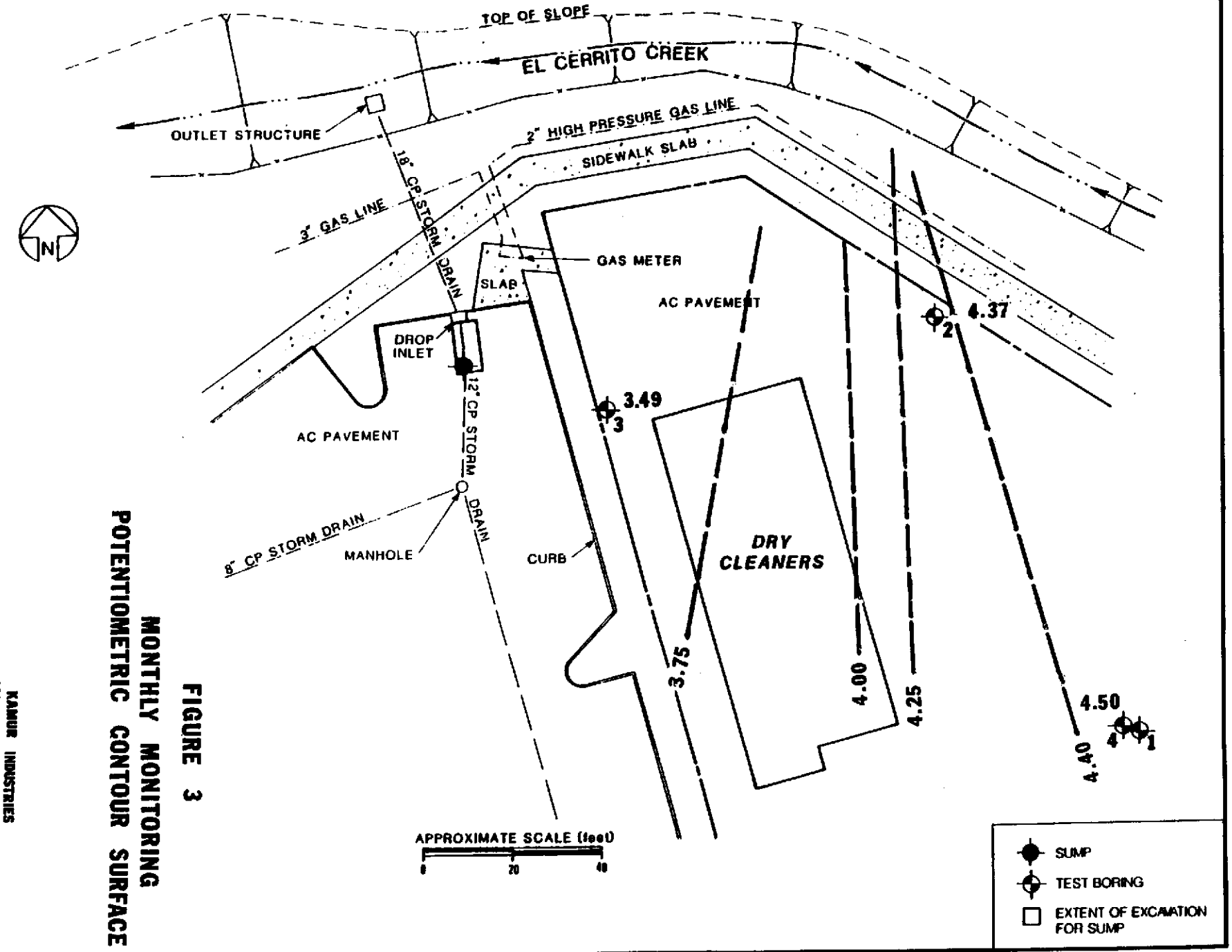


FIGURE 3

MONTHLY MONITORING
POTENTIOMETRIC CONTOUR SURFACE

KAMUR INDUSTRIES
400 SAN PABLO AVENUE
ALBANY, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWN BY		CHECKED BY			DRAWING NUMBER
		APPROVED BY			

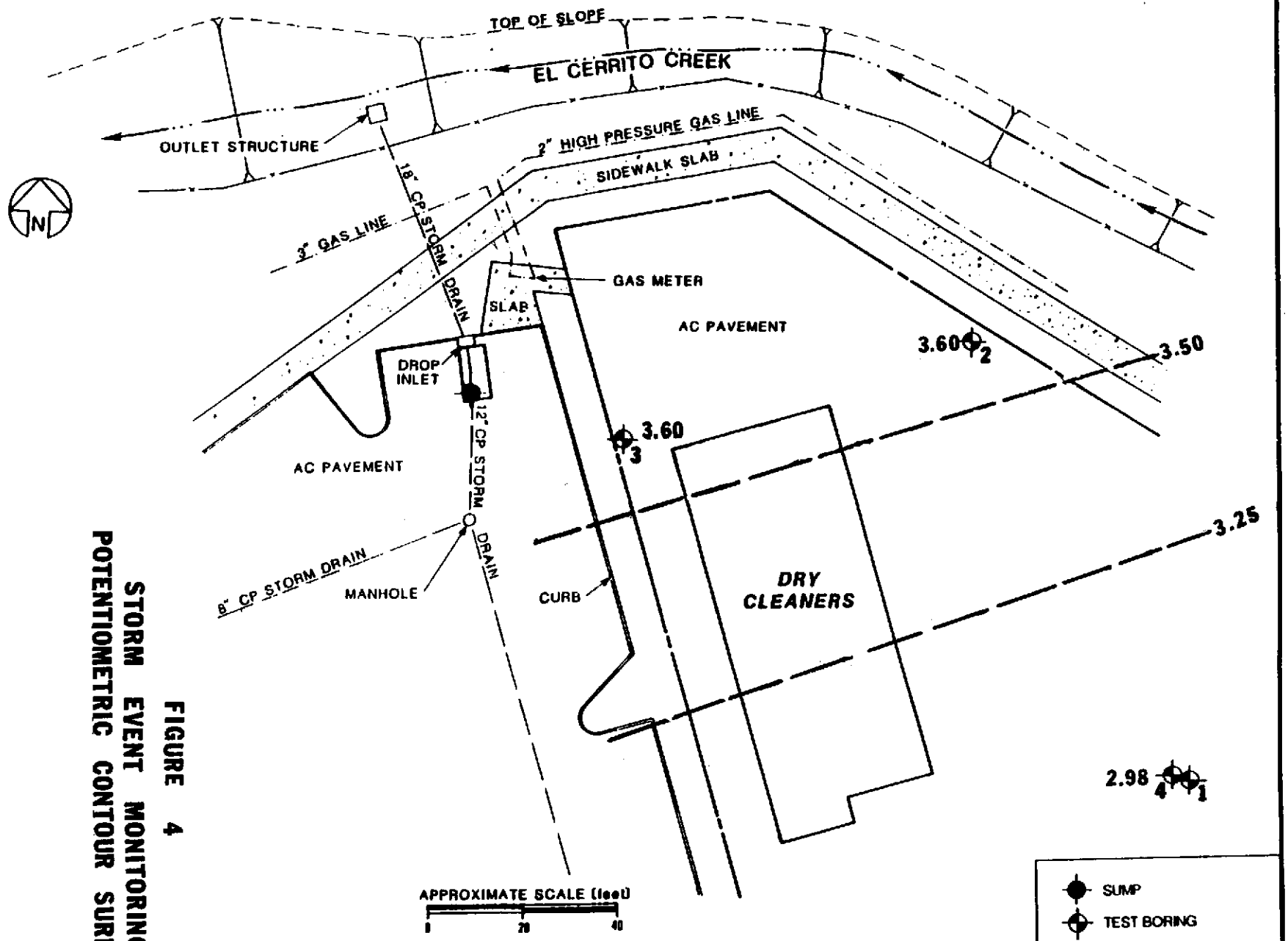
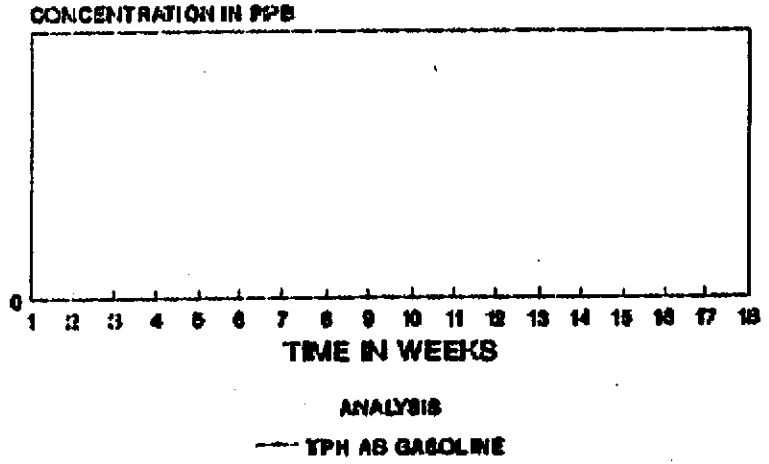


FIGURE 4
STORM EVENT MONITORING
POTENTIOMETRIC CONTOUR SURFACE

INTERNATIONAL TECHNOLOGY CORPORATION

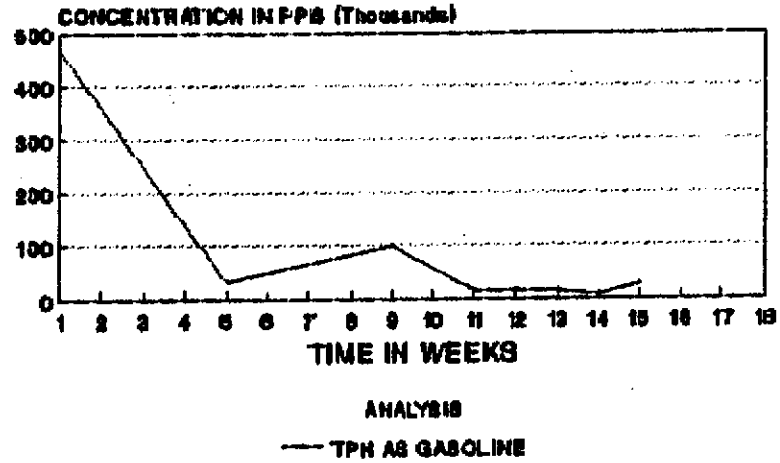
KAMUR INDUSTRIES
400 SAN PABLO AVENUE
ALBANY, CALIFORNIA

KAMUR INDUSTRIES
EL CERRITO CREEK SAMPLING - PT1



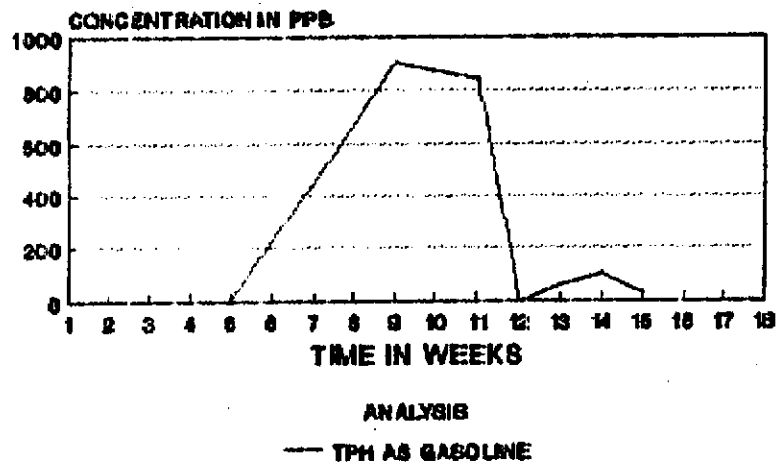
POINT 1 - 50' UPSTREAM

KAMUR INDUSTRIES
EL CERRITO CREEK SAMPLING - PT2



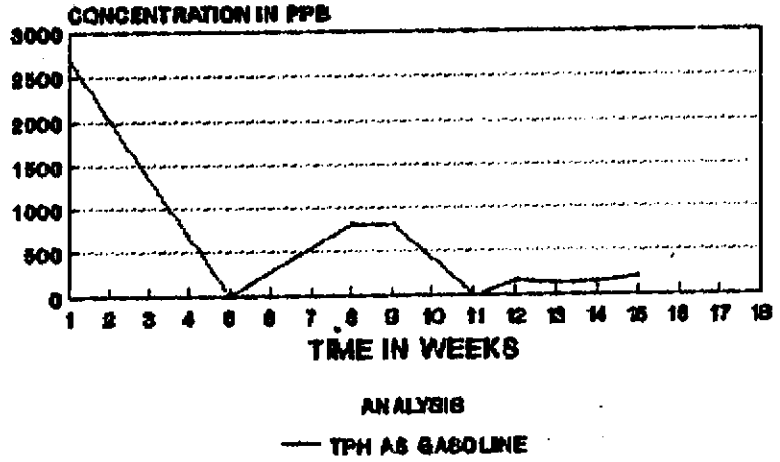
POINT 2 - MOUTH OF STORM DRAIN

KAMUR INDUSTRIES
EL CERRITO CREEK SAMPLING - PT3

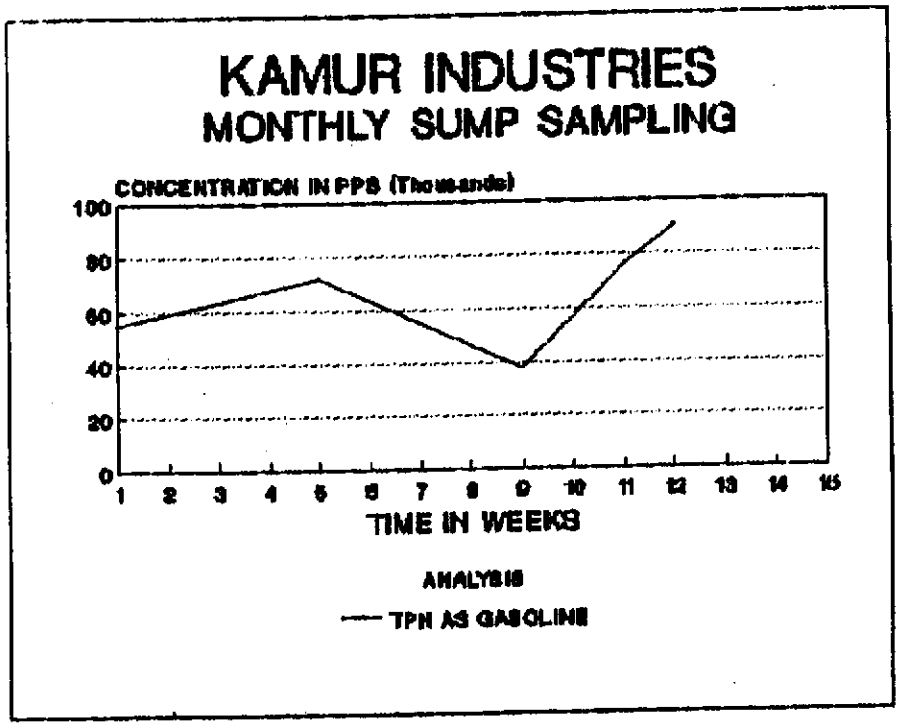


POINT 3 - DRAINAGE FLOW/CREEK INTERFACE

KAMUR INDUSTRIES
EL CERRITO CREEK SAMPLING - PT4



POINT 4 - 50' DOWNSTREAM


KAMUR INDUSTRIES
MONTHLY SUMP SAMPLING
CONCENTRATION IN PPB (Thousands)
100
80
60
40
20
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
TIME IN WEEKS
ANALYSIS
TPH AS GASOLINE

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 02/02/90
Reported: 02/16/90
Job No. #: 71326

Attn: Greg Millikan
International Technology
4585 Pacheco Blvd.
Martinez, CA. 94553

Project: Kamur Albany
Matrix: Water

Aromatic Volatile Hydrocarbon Analysis:
EPA Method 8020
ug/l

Lab ID	Client ID	Benzene	Ethyl-benzene	Toluene	Xylene	MDL
71326-1	020290 MW1	ND<0.3	ND<0.3	ND<0.3	ND<0.3	0.3
71326-2	020290 MW2	3500	80	240	270	0.3
71326-3	020290 MW3	ND<0.3	ND<0.3	ND<0.3	ND<0.3	0.3
71326-4	020290 MW4	20,000	17,000	1400	8000	0.3

QA/QC: Spike Recovery for Benzene: 82%
Spike Recovery for Toluene: 102%
Spike Recovery for O-Xylene: 72%

MDL: Method detection limit: Compound below this level would not be detected.

Jaime Chow
Laboratory Director

JC/dc

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

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Reported: 02/16/90
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Attn: Greg Millikan
International Technology
4585 Pacheco Blvd.
Martinez, CA. 94553

Project: Kamur Albany
Matrix: Water

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/l

Lab ID	Client ID	Diesel	MDL
71326-4	020290 SP1	ND<0.5	0.5

QA/QC: Spike Recovery for Diesel: 104%

MDL: Method detection limit: Compound below this level would not be detected.

Jaime Chow
Laboratory Director

JC/dc

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

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STATE LICENSE NO. 211

Received: 02/02/90
Reported: 02/16/90
Job No. #: 71326

Attn: Greg Millikan
International Technology
4585 Pacheco Blvd.
Martinez, CA. 94553

Project: Kamur Albany
Matrix: Water

Total Petroleum Hydrocarbon Analysis
EPA 5030
mg/l

Lab ID	Client ID	Gasoline	MDL
71326-1	020290 MW1	ND<0.01	0.01
71326-2	020290 MW2	7.2	0.5
71326-3	020290 MWFB	ND<0.01	0.01
71326-4	020290 SP1	38	10
71326-5	020290 PT1	ND<0.01	0.01
71326-6	020290 PT2	16	0.5
71326-7	020290 PT3	0.06	0.01
71326-8	020290 PT4	0.13	0.01

QA/QC: Spike Recovery for Gasoline: 100%

MDL: Method detection limit: Compound below this level would not be detected.

Jaime Chow
Laboratory Director

JC/dc

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 02/09/90
Reported: 02/26/90
Job No. #: 71347

Attn: Greg Millikan
International Technology
4585 Pacheco Blvd.
Martinez, CA. 94553

Project: Kamur Albany
Matrix: Water

Aromatic Volatile Hydrocarbon Analysis:
EPA Method 8020
mg/l

Lab ID	Client ID	Benzene	Toluene	MDL
71347-5	020890 SP1	7.9	7.4	0.3

Lab ID	Client ID	Ethylbenzene	Xylene	MDL
71347-5	020890 SP1	1.7	8.3	0.3

QA/QC: Spike Recovery for Benzene: 101%
Spike Recovery for Toluene: 91%
Spike Recovery for O-Xylene: 82%

MDL: Method detection limit: Compound below this level would not be detected.

Jaime Chow
Laboratory Director

JC/dc

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 02/09/90
Reported: 02/26/90
Job No. #: 71347

Attn: Greg Millikan
International Technology
4585 Pacheco Blvd.
Martinez, CA. 94553

Project: Kamur Albany
Matrix: Water

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/l

Lab ID	Client ID	Diesel	MDL
71347-1	020890 SP1	ND<0.5	0.5

QA/QC: Spike Recovery for Diesel: 74%

MDL: Method detection limit: Compound below this level would not be detected.

Jaime Chow
Laboratory Director

JC/dc

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 02/09/90
Reported: 02/26/90
Job No. #: 71347

Attn: Greg Millikan
International Technology
4585 Pacheco Blvd.
Martinez, CA. 94553

Project: Kamur Albany
Matrix: Water

Total Petroleum Hydrocarbon Analysis
DHS Extraction Method (LUFT)
mg/l

Lab ID	Client ID	Gasoline	MDL
71347-1	020890 PT1	ND<0.01	0.01
71347-2	020890 PT2	7.7	0.01
71347-3	020890 PT3	0.1	0.01
71347-4	020890 PT4	0.14	0.01
71347-5	020890 SP1	76	0.01

MDL: Method detection limit: Compound below this level would not be detected.

Jaime Chow
Laboratory Director

JC/dc

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 02/20/90
Reported: 03/01/90
Job No. #: 71359

Attn: Greg Millikan
International Technology
4585 Pacheco Blvd.
Martinez, CA. 94553

Project: Kamur Albany
Matrix: Water

Total Petroleum Hydrocarbon Analysis
EPA 5030 & DHS Extraction Method (LUFT)
mg/l

Lab ID	Client ID	Gasoline	MDL	Diesel	MDL
71359-4	021990 SP1	90	0.01	ND<0.5	0.5

Less than 1% Floating Oil

QA/QC: Spike Recovery for Diesel: 120%
Spike Recovery for Gasoline: 97%

MDL: Method detection limit: Compound below this level would not be detected.

Jaime Chow
Laboratory Director

JC/dc

INTERNATIONAL TECHNOLOGY CORPORATION

CHAIN-OF-CUSTODY RECORD

R/A Control No. 178656

C/C Control No. 171159

PROJECT NAME/NUMBER KAMUR ALBANY 148031-01 LAB DESTINATION PRECISION

SAMPLE TEAM MEMBERS P. DeOCAMPO J. KNOTT CARRIER/WAYBILL NO.

Sample Number	Sample Location and Description	Date and Time Collected	Sample Type	Container Type	Condition on Receipt (Name and Date)	Disposal Record No.
020290MW1	MW 1	7-2-90 1415	Groundwater	40ml VOA		
020290MW2	MW 2	1400 ~~1345~~				
020290MWFB	MW FB	1345				
020290SD1	SD 1	1355		40ml VOA		
020290SP1	SP 1	1355	Groundwater	1L Amber		
020290PT1	PT 1	1315	Surface water	40ml VOA		
020290PT2	PT 2	1320				
020290PT3	PT 3	1325				
020290PT4	PT 4	7-2-90 1330	Surface water	40ml VOA		

Special Instructions:

Possible Sample Hazards:

SIGNATURES: (Name, Company, Date and Time)

1. Relinquished By: Paul DeOcampo ITES 7-2-90 1530

   Received By: Richard Eddy 7-2-90 3:30pm

2. Relinquished By:

   Received By:

3. Relinquished By:

   Received by:

4. Relinquished By:

   Received By:

Richard Eddy 7-2-90 3:30pm

WHITE - To accompany samples
YELLOW - Field copy

INTERNATIONAL TECHNOLOGY CORPORATION

REQUEST FOR ANALYSIS

R/A Control No. 178656
C/C Control No. 17159

PROJECT NAME: KAMUR ALBANY
PROJECT NUMBER: 148031-01
PROJECT MANAGER: Greg Millikan
BILL TO: 4585 Pacheco Blvd
MARTINEZ, CA 94553

PURCHASE ORDER NO.:

DATE SAMPLES SHIPPED: 2-2-90
LAB DESTINATION: Precision Lab
LABORATORY CONTACT: Jamie Chan
SEND LAB REPORT TO: Greg Millikan
4585 Pacheco Blvd
MARTINEZ, CA 94553
DATE REPORT REQUIRED: 2-16-90
PROJECT CONTACT: Greg Millikan
PROJECT CONTACT PHONE NO.: (415) 372-9100

Sample No.	Sample Type	Sample Volume	Preservative	Requested Testing Program	Special Instructions
020290MW1	Groundwater	3x40ml	HCL	TPH (G) BTEX	
020290MW2		3x40ml		TPH (G) BTEX	
020290MWFB		3x40ml		TPH (G) BTEX	
020290SP1		3x40ml		TPH (G) BTEX	
020290SP1 ~~020290TF1~~ TD	Groundwater	1L		TPH Diesel	
020290PT1	Surface water	3x40ml		TPH (G)	
020290PT2		3x40ml		TPH (G)	
020290PT3		3x40ml		TPH (G)	
020290PT4	Surface water	3x40ml		TPH (G)	
			HCL		

TURNAROUND TIME REQUIRED: (Rush must be approved by the Project Manager.)

Normal Y Rush _____ (Subject to rush surcharge)

POSSIBLE HAZARD IDENTIFICATION: (Please indicate if sample(s) are hazardous materials and/or suspected to contain high levels of hazardous substances)

Nonhazard Y Flammable _____ Skin Irritant _____ Highly Toxic _____ Other _____ (Please Specify)

SAMPLE DISPOSAL: (Please indicate disposition of sample following analysis. Lab will charge for packing, shipping, and disposal.)

Return to Client _____ Disposal by Lab Y

FOR LAB USE ONLY

Received By [signature] Date/Time 2-2-90 3:30 pm

WHITE - Original, to accompany samples
YELLOW - Field copy

INTERNATIONAL TECHNOLOGY CORPORATION

CHAIN-OF-CUSTODY RECORD

R/A Control No. 013976

C/C Control No. 171225

PROJECT NAME/NUMBER KAMOR ALBANY 148031-1 LAB DESTINATION Precision Lab

SAMPLE TEAM MEMBERS P. DeOCAMPO CARRIER/WAYBILL NO.

Sample Number	Sample Location and Description	Date and Time Collected	Sample Type	Container Type	Condition on Receipt (Name and Date)	Disposal Record No.
020890PT1	PT 1	2-9-90 1300	Groundwater	40ml VOA		
020890PT2	PT 2	1305		40ml VOA		
020890PT3	PT 3	1310		40ml VOA		
020890PT4	PT 4	1315		40ml VOA		
020890SP	SP1	1320		40ml VOA		
020890SP1	SP1	2-9-90 1330	Groundwater	1L Amber		

Special Instructions:

Possible Sample Hazards:

SIGNATURES: (Name, Company, Date and Time)

1. Relinquished By: Paul DeOca po ITES 2-9-90 1245

   Received By: Kulwinder Sidhu

2. Relinquished By:

   Received By: Kulwinder Sidhu

3. Relinquished By:

   Received by:

4. Relinquished By:

   Received By:

WHITE - To accompany samples
YELLOW - Field copy

INTERNATIONAL TECHNOLOGY CORPORATION

REQUEST FOR ANALYSIS

C/C Control No. 17[illegible]

PROJECT NAME: KAMUR ALBANY

PROJECT NUMBER: 148031-1

PROJECT MANAGER: Greg Millikan

BILL TO: 4585 Pacheco Blvd Martinez, CA 94553

PURCHASE ORDER NO.

DATE SAMPLES SHIPPED: 2-9-90

LAB DESTINATION: Precision Lab

LABORATORY CONTACT: Jamie Chow

SEND LAB REPORT TO: Greg Millikan 4585 Pacheco Blvd Martinez, CA [illegible]

DATE REPORT REQUIRED: 2-23-90

PROJECT CONTACT: Greg Millikan

PROJECT CONTACT PHONE NO. (415) 372-9100

Sample No.	Sample Type	Sample Volume	Preservative	Requested Testing Program	Special Instructions
020890PT1	Surface Water	3x40ml	HCL	TPH (G)	
020890PT2	"	"	"	TPH (G)	
020890PT3	"	"	"	TPH (G)	
020890PT4	Surface Water	3x40ml	"	TPH (G)	
020890GP1	Groundwater	3x40ml	"	TPH BTEX (G)	
020890SP1	Groundwater	1L	HCL	TPH Diesel	

COPY

TURNAROUND TIME REQUIRED: (Rush must be approved by the Project Manager.)

Normal X Rush _____ (Subject to rush surcharge)

POSSIBLE HAZARD IDENTIFICATION: (Please indicate if sample(s) are hazardous materials and/or suspected to contain high levels of hazardous substances)

Nonhazard X Flammable _____ Skin Irritant _____ Highly Toxic _____ Other _____ (Please Specify)

SAMPLE DISPOSAL: (Please indicate disposition of sample following analysis. Lab will charge for packing, shipping, and disposal.)

Return to Client _____ Disposal by Lab X

FOR LAB USE ONLY

Received By Balwinder Sidhu Date/Time 02-19-90 2:[illegible]pm

WHITE - Original, to accompany samples
YELLOW - Field copy

INTERNATIONAL TECHNOLOGY CORPORATION

CHAIN-OF-CUSTODY RECORD

R/A Control No. 178423

C/C Control No. 171137

PROJECT NAME/NUMBER KAMUR ALBANY

LAB DESTINATION Precision

SAMPLE TEAM MEMBERS P. DeCRAMPO

CARRIER/WAYBILL NO.

Sample Number	Sample Location and Description	Date and Time Collected	Sample Type	Container Type	Condition on Receipt (Name and Date)	Disposal Record No.
021990PT2	PT 2	2-19-90 1405	Surface water	40ML VOA		
021990PT3	PT 3	1410	" "	40ML VOA		
021990PT4	PT 4	1415	Surface water	40ML VOA		
021990SP1	SUMP 1	1430	Groundwater	40ML VOA		
021990SP1	SUMP 1	2-19-90 1430	Groundwater	1L AMBER		

Special Instructions:

Possible Sample Hazards:

SIGNATURES: (Name, Company, Date and Time)

1. Relinquished By: Paul DeCrampo 2/20/90 1400

   Received By: Kulwinder Sidhu 2-20-90 4:00 pm

2. Relinquished By:

   Received By:

3. Relinquished By:

   Received by:

4. Relinquished By:

   Received By:

WHITE - To accompany samples
YELLOW - Field copy

INTERNATIONAL TECHNOLOGY CORPORATION

REQUEST FOR ANALYSIS

R/A Control No. 118423
C/C Control No. 171137

PROJECT NAME: KAMUR ALBANY
PROJECT NUMBER: 148031
PROJECT MANAGER: Greg Millikan
BILL TO: 4585 Pacheco Blvd
MARTINEZ, CH 94553

PURCHASE ORDER NO.:

DATE SAMPLES SHIPPED: 2-20-90
LAB DESTINATION: Precision
LABORATORY CONTACT: Jamie Chow
SEND LAB REPORT TO: Greg Millikan
4585 Pacheco Blvd
MARTINEZ CH 94553
DATE REPORT REQUIRED: 3-4-90
PROJECT CONTACT: Greg Millikan
PROJECT CONTACT PHONE NO.: (415) 372-9100

Sample No.	Sample Type	Sample Volume	Preservative	Requested Testing Program	Special Instructions
021990PT2	Surface Water	3x40ml	HCL	TPH (G)	
021990PT3	"	3x40ml		TPH (G)	
021990PT4	Surface Water	3x40ml		TPH (G)	
021990SP1	Groundwater	3x40ml		TPH BTEX (G)	
021990SP1	Groundwater	1 VIL	HCL	TPH Diesel	

TURNAROUND TIME REQUIRED: (Rush must be approved by the Project Manager.)

Normal X Rush _____ (Subject to rush surcharge)

POSSIBLE HAZARD IDENTIFICATION: (Please indicate if sample(s) are hazardous materials and/or suspected to contain high levels of hazardous substances)

Nonhazard X Flammable _____ Skin Irritant _____ Highly Toxic _____ Other _____ (Please Specify)

SAMPLE DISPOSAL: (Please indicate disposition of sample following analysis. Lab will charge for packing, shipping, and disposal.)

Return to Client _____ Disposal by Lab X

FOR LAB USE ONLY

Received By Balwinder Sidhu Date/Time 2-20-90 4:10 pm

WHITE - Original, to accompany samples
YELLOW - Field copy

1.0 INTRODUCTION

International Technology Environmental Services (ITES) was retained by Kamur Industries on 04 December 1990, to execute monthly and rainstorm event sampling programs. The following is a report of February sampling activities with all previous ITES sampling results included for reference.

2.0 SAMPLING PROGRAMS

2.1 MONTHLY SAMPLING

Monthly events include monitoring and sampling the four (4) existing monitoring wells, the sump and four (4) predetermined points along El Cerrito Creek.

The monitoring wells were installed by Subsurface Consultants Inc. on 01 August 1989. The initial soil and groundwater samples were collected by SCI on 01 and 03 August 1989. A monthly groundwater sampling program was installed by ITES on 04 December 1989, with the monthly sampling events conducted on 08 December 1989, 03 January and 02 February 1990.

The sump was installed on 10 and 11 October 1989 by Riedel Environmental Services, to abate the flow of contaminants into the creek. The sump was sampled in conjunction with the ITES monthly sampling programs in December 1989, January 1990 and February 1990.

In August 1989, SCI identified three (3) sampling locations along El Cerrito creek, which borders the site on the north. The three (3) original creek sampling points are as follows:

PT-1 = 20' upstream
PT-2 = storm drain outlet
PT-3 = 20' downstream

These points were sampled on 03 August 1989, and were modified by ITES in December 1989:

PT-1 = 20' upstream
PT-2 = mouth of the drainage pipe
PT-3 = drainage flow/creek interface
PT-4 = 35' downstream

Sampling point PT-1 was established 20 feet upstream of the drain outfall, in order to identify any background contamination. Point PT-2 was selected to define the contaminant concentrations prior to the initial remedial step (absorbent pads) positioned immediately beneath the storm drain. Point PT-3 is situated to reveal the effectiveness of the pads and determine the amount of dilution of outfall by creek mixing. Absorbent boom has been installed between points PT-3 and PT-4, to collect any remaining contaminants not removed by the absorbent pads. Point PT-4 is located approximately 15' beyond the boom to determine the

adequacy of the remedial measures. In March 1990, point PT-4 will be relocated 25 feet downstream from its original position, in order to determine the influence of alternate stream inlets.

2.2 STORM EVENT SAMPLING

The creek is sampled 48 hours following the cessation of any significant rain storm event. A significant rain event was initially defined as rainfall greater than or equal to 0.5 inches, however on 16 January 1990 Hosain Kazemi (San Francisco Bay Regional Water Quality Control Board) requested that the significant rainfall accumulation figure be decreased to 0.25 inches. Mr. Kazemi's contention is that rain events frequently occur which measure below 0.5 inches in accumulation, and in view of the topography surrounding the site, a rainfall of 0.25 inches is sufficient to produce runoff. Rainfall samplings were executed on 02 February (in conjunction with the February monthly sampling run) and on 08 February and 19 February 1990, following the rain events of 31 January, 06 February and 17 February 1990.

3.0 METHODOLOGY

3.1 MONTHLY SAMPLING

Water levels and samples were obtained from each of the four (4) existing monitoring wells, the sump and four predetermined locations along El Cerrito Creek. Monthly sampling activities were executed on 08 December 1989, 03 January and 02 February 1990, with an initial sampling run conducted on 01 and 03 August 1989. Monitoring was executed to aid in determining groundwater flow characteristics with sampling to facilitate contaminant plume delineation.

Sampling procedures conformed to the California Regional Water Quality Control Board - San Francisco Bay Region Guidelines for Addressing Fuel Leaks, September 1985; Tri-Regional Recommendations for Initial Evaluation and Investigation of Underground Tanks, 18 May 1989; and the LUFT Manual, March 1989.

One to three well volumes were evacuated from each well, to ensure the samples are representative of the surrounding aquifer. The wells were allowed to recharge and groundwater samples were collected from the wells with a Voss Industries decontaminated disposable teflon bailer. Sump and creek samples were obtained with the use of a decontaminated glass jar. Water samples were placed directly from the bailer or jar into the appropriate sample

containers. No headspace was left in the samples to be analyzed for volatile organic constituents. Each container was placed in a "zip-lock" bag, security taped, and placed in a refrigerated ice chest. until delivery to the licensed, contracted laboratory. Chain of custody forms accompanied the samples at all times.

3.2 STORM EVENT SAMPLING

Storm event sampling is conducted 48 hours following the cessation of any significant rain event, to determine storm runoff influence in El Cerrito Creek.

Sampling procedures were those delineated above in 3.1 Monthly Sampling.

4.0 LABORATORY ANALYSES

The water samples were analyzed by International Technology Analytical Services (ITAS) California License #137 for Total Petroleum Hydrocarbons (TPH) as gas, and Benzene, Toluene, Ethyl Benzene and Xylene (BTEX). Analyses were executed by EPA methods 5030 and 8020 respectively. The results of the analyses are summarized in Tables 1, 2 and 3, with copies of the laboratory reports and chain of custody forms following this report.

5.0 RESULTS

An initial baseline sampling run was conducted during well installation procedures in August 1989, with monthly sampling events being conducted in December 1989, January and February 1990. Contaminant concentrations encountered in monitoring well MW-1 was found to decrease to below detectable levels, with contaminant levels encountered in monitoring well MW-2 increasing slightly. Free product (sheen) was encountered in wells MW-3 and MW-4 during the monthly sampling events of December 1989, January and February 1990, which was not present during the initial sampling run in August 1989.

Point PT-1 in El Cerrito Creek (upstream) has continued to reveal contaminant levels below detection limits, with contaminant levels detected at points PT-3 and PT-4 remaining fairly constant. Point PT-2 exhibited a slight increase in contaminant levels following the last rain event.

Contaminant levels discovered in the sump have remained fairly consistent during the monthly samplings.

5.0 CONCLUSIONS

1. Groundwater flow, as calculated with monthly well monitoring data, is to the west-northwest. Following a rain event, groundwater flow is modified, flowing to the southeast.

2. No detectable, background upstream contamination has been discovered.

3. Contaminant levels at point PT-4 (downstream) have decreased, confirming the effectiveness of the remedial methods employed thus far.

4. Contaminant levels detected at point PT-3 are significantly lower than the levels detected at PT-2 (contaminant source), confirming the effectiveness of the initial remedial measure. Contaminant levels encountered at PT-2 have decreased approximately 18 fold since the initial sampling in August of 1989.

5. Contaminant levels in monitoring well MW-1 have decreased to below detectable levels, however this wells screened casing is installed ten feet lower than the screen in the other three wells. The groundwater samples obtained from monitoring well MW-1 are assumed to be from a different aquifer than the those from the remaining wells.

6. Contaminant levels in monitoring well MW-2 have decreased over time, although a slight increase in contaminant levels appeared following the most recent rain event.

7. Free product has been discovered in monitoring wells MW-3 and MW-4, which was not present during the initial sampling run in August 1989. This fact supports the hypothesis that contaminants are traveling from the leak site to the north northwest, encountering the storm drain fill zone, and entering El Cerrito Creek.

8. Contaminant levels in the sump have remained relatively consistent as revealed by the sampling events of December 1989, January and February 1990.