Chevron U.S.A. Products Company
2410 Camino Ramon, San Ramon, California • Phone (510) 842-9500
Mail Address: P.O. Box 5004, San Ramon, CA 94583-0804

April 19, 1993

STID 401

Ms. Susan Hugo
Alameda County Health Care Services
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

Re: Chevron Service Station #9-0338
5500 Telegraph Avenue, Oakland, CA

Dear Ms. Hugo:

Enclosed is the Annual Ground Water Monitoring Report dated March 31, 1993, prepared by our consultant Alton Geoscience for the above referenced site. As indicated in the report, ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline and BTEX. Laboratory analyses reported these constituents below the method detection limits for all monitor wells. Depth to ground water was measured at approximately 7.1 feet to 8.3 feet below grade and the direction of flow is to the southwest.

Levels of dissolved hydrocarbons observed in the ground water have decreased over the last two years. Concentrations observed in all wells for the past two annual sampling events have been below method detection limits. Chevron will instruct its consultant to increase the sampling frequency to quarterly to obtain two more sampling rounds of non-detectable concentrations and then evaluate the site for possible case closure.

If you have any questions or comments, please do not hesitate to call me at (510) 842-8134.

Very truly yours,
CHEVRON U.S.A. PRODUCTS COMPANY

Mark A. Miller
Site Assessment and Remediation Engineer

Enclosure

cc: Mr. Eddy So, RWQCB - Bay Area
Mr. M.R. Purcell
File (9-0338 QM1)

ALTON GEOSCIENCE
THE RESULTS TEAM

APR 7 '93 J.M.M.

March 31, 1993

Ms. Nancy Vukelich
Chevron U.S.A. Products Company
Post Office Box 5004
San Ramon, California 94583-0804

31-0261

Subject: Annual Ground Water Monitoring Report
Chevron Service Station No. 9-0338
5500 Telegraph Avenue
Oakland, California

Dear Mr. Miller:

In accordance with our agreement, Alton Geoscience transmits this Annual Ground Water Monitoring and Sampling Report for Chevron Service Station No. 9-0338, 5500 Telegraph Avenue, Oakland, California. Figure 1 shows the site location.

Monitoring and sampling of the ground water monitoring wells was performed on February 4, 1993, in accordance with the requirements and procedures of the California Regional Water Quality Control Board (RWQCB) and local regulatory agencies.

FIELD PROCEDURES

Prior to purging and sampling the wells, each well was checked for liquid-phase hydrocarbons or sheen. The depth to ground water and, if present, free product was measured in each well from the top of casing using an electronic interface probe with 0.01 foot tolerance. Ground water samples were collected after more than 3 casing volumes of ground water was purged from each well. Each sample was collected using a clean bailer. Ground water samples were then decanted into the appropriate clean sample containers for delivery to a California-certified laboratory following proper preservation and chain of custody procedures. Purged ground water was transferred to a 600-gallon, trailer-mounted, steel tank (California Department of Health Services-registered), and delivered as non-hazardous waste to Chevron Richmond Terminal for treatment.

5870 Stoneridge Drive, Suite 6
Pleasanton, California 94588
(510) 734-8134 • FAX (510) 734-8420

SAMPLING AND ANALYTICAL RESULTS

The results of the monitoring and laboratory analyses of ground water samples for this quarter, as well as the results of previous monitoring and sampling events, are summarized in Table 1 and Table 2. Based on the previous wellhead elevation survey data and depth to water measurements collected during this monitoring event, ground water elevations and the general ground water gradient direction at this site are presented in Figure 2.

No liquid-phase hydrocarbons or sheen were observed in any of the ground water samples. The official laboratory reports and chain of custody records are included in Appendix A.

Please call Todd B. Pearson at (510) 734-8134 if you have any questions regarding this report.

Sincerely,

ALTON GEOSCIENCE,

Todd B. Pearson
Staff Scientist

Peter C. Lange
Registered Geologist, No. 5089

wp90261ds

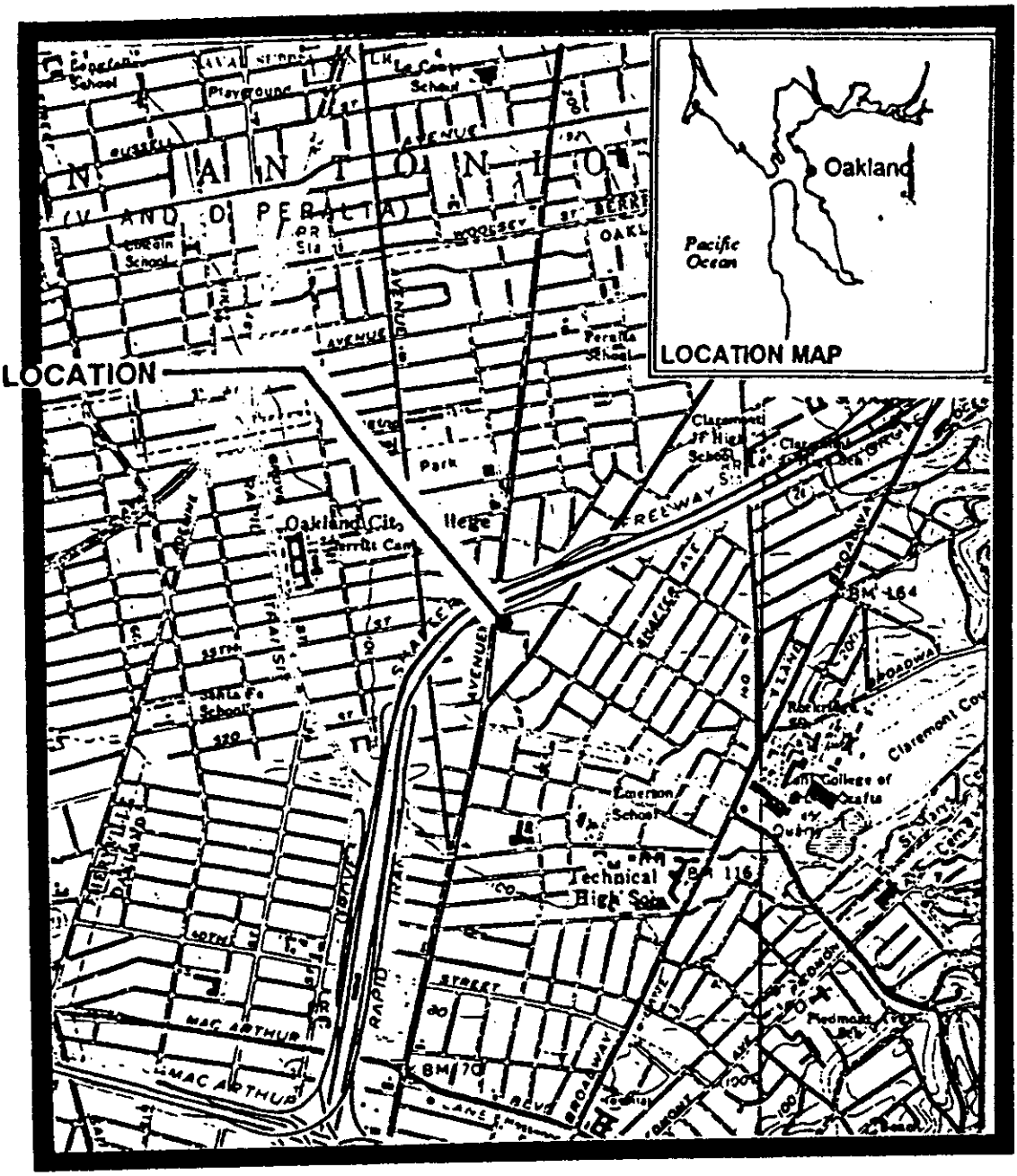


FIGURE 1. SITE VICINITY MAP

CHEVRON U.S.A.
CHEVRON SERVICE STATION NO. 9-0338
5500 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

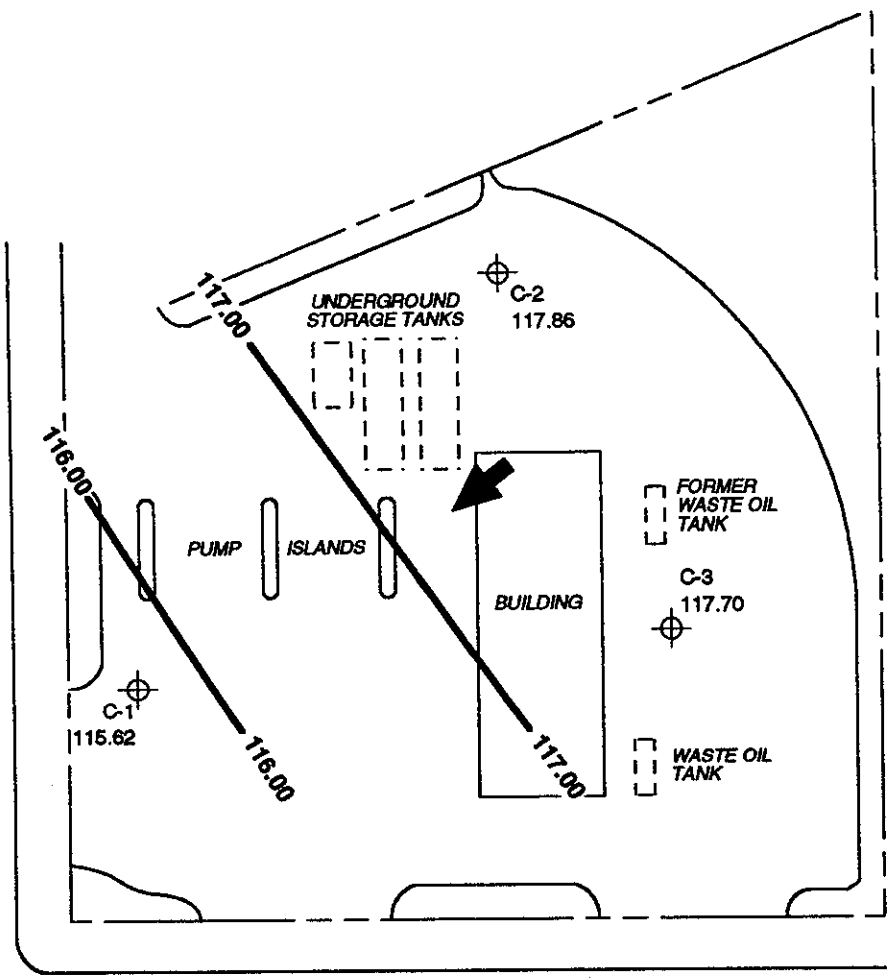
PROJECT NO. 31-0261

SOURCE: GEOSTRATEGIES INC.

ALTON GEOSCIENCE
Pleasanton, California

LEGEND

- C-3 — Ground water monitoring well
- 117.70 — Ground water elevation, in feet below mean sea level [NGVD-1929]
- Ground water elevation contour
- General direction of ground water gradient



NOTES:
Contour lines are interpretive based on fluid levels collected February 4, 1993.
Contour interval - 1.0 foot.

SCALE (feet)
0 20 40

Source: Geostrategies, Inc.

GROUND WATER ELEVATION CONTOUR MAP
February 4, 1993

Chevron Station No. 9-0338
5500 Telegraph Avenue
Oakland, California

FIGURE 2

ALTON GEOSCIENCE
Pleasanton, California

31-0261 4/2/93

Table 1
Summary of Results of Ground Water Sampling
Chevron Service Station # 9-0338
5500 Telegraph Avenue, Oakland, California

Concentrations in parts per billion (ppb)

WELL ID		DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	TPH-D	TOG	B	T	E	X	TTL	LAB
C-1		11/21/89	123.88	10.75	113.13	ND<500	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	NA
C-1		03/20/90	123.88	9.93	113.95	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	NA
C-1		06/27/90	123.88	9.64	114.24	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-1D		06/27/90	123.88	9.64	114.24	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-1*		10/12/90	123.88	10.91	112.97	---	---	---	---	---	---	---	---	SAL
C-1D		10/12/90	123.88	10.91	112.97	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-1		12/20/90	123.88	9.76	114.12	75	---	---	ND<0.5	0.9	0.8	3	---	SAL
C-1D		12/20/90	123.88	9.76	114.12	73	---	---	ND<0.5	0.6	0.7	2	---	SAL
C-1		04/10/91	123.88	8.76	115.12	ND<50	---	---	0.7	1.2	ND<0.5	1.0	---	SAL
C-1D		04/10/91	123.88	8.76	115.12	ND<50	---	---	0.9	1.5	ND<0.5	1.5	---	SAL
C-1	**	02/26/92	123.88	8.08	115.8	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-1		02/04/93	123.88	8.26	115.62	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-2		11/21/89	124.92	10.75	114.17	ND<500	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	NA
C-2		03/20/90	124.92	9.44	115.48	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	NA
C-2		06/27/90	124.92	9.55	115.37	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-2		10/12/90	124.92	10.89	114.03	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-2		12/20/90	124.92	9.65	115.27	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-2		04/10/91	124.92	8.04	116.88	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-2	**	02/26/92	124.92	7.03	117.89	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-2		02/04/93	124.92	7.06	117.86	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-3		11/21/89	125.64	11.28	114.36	ND<500	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	NA
C-3		01/12/90	125.64	---	---	---	ND<1000	ND<5000	---	---	---	---	---	NA
C-3		03/20/90	125.64	10.39	115.25	ND<50	ND<50	ND<5000	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	NA
C-3		06/27/90	125.64	10.32	115.32	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	SAL
C-3		10/12/90	125.64	11.28	114.36	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-3		12/20/90	125.64	10.25	115.39	54	---	---	ND<0.5	ND<0.5	ND<0.5	0.7	---	SAL
C-3		04/10/91	125.64	8.79	116.85	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-3	**	02/26/92	125.64	7.83	117.81	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
C-3		02/04/93	125.64	7.94	117.7	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL

Table 1
Summary of Results of Ground Water Sampling
Chevron Service Station # 9-0338
5500 Telegraph Avenue, Oakland, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	TPH-D	TOG	B	T	E	X	TTL	LAB
TB	03/20/90	NA	NA	NA	ND<50	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	NA
TB	06/27/90	NA	NA	NA	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
TB*	10/12/90	NA	NA	NA	---	---	---	---	---	---	---	---	SAL
TB	12/20/90	NA	NA	NA	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
TB	04/10/91	NA	NA	NA	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
TB	02/26/92	NA	NA	NA	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
RINSATE	06/27/90	NA	NA	NA	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
RINSATE*	10/12/90	NA	NA	NA	---	---	---	---	---	---	---	---	SAL
RINSATE	12/20/90	NA	NA	NA	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	SAL
RINSATE	04/10/91	NA	NA	NA	ND<50	---	---	ND<0.5	0.6	ND<0.5	ND<0.5	---	SAL
RINSATE	02/26/92	NA	NA	NA	ND<50	---	---	ND<0.5	ND<0.5	ND<0.5	3.3	---	SAL

EXPLANATION OF ABBREVIATIONS:

TPH-G	:Total Petroleum Hydrocarbons as Gasoline (EPA method 8015 modified)	---	:Not Analyzed/Not Measured
B	:Benzene (EPA method 8020 or 8240)	NA	:Not Applicable/Not Available
T	:Toluene (EPA method 8020 or 8240)	ND	:Not Detected
E	:Ethylbenzene (EPA method 8020 or 8240)	TB	:Trip Blank
X	:Xylenes (EPA method 8020 or 8240)	D	:Duplicate
		SAL	:Superior Analytical Laboratory
		*	:Samples broken by lab. Unable to analyze.
		**	:Listed on COC and lab report as MW.

Note: Top of casing and Ground Water Elevations are expressed as feet above mean sea level (NGVD-1929).

APPENDIX A

OFFICIAL LABORATORY RESULTS
AND
CHAIN OF CUSTODY FORMS

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 FAX (510) 229-1526

FEB 22 1993

Alton Geoscience
Attn: DALE SWAIN

Project 31-0261
Reported 02/18/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
87785- 1	TB-LB	02/04/93	02/16/93	Water
87785- 2	C-3	02/04/93	02/16/93	Water
87785- 3	C-1	02/04/93	02/16/93	Water
87785- 4	C-2	02/04/93	02/16/93	Water

RESULTS OF ANALYSIS

Laboratory Number:	87785- 1	87785- 2	87785- 3	87785- 4
Gasoline:	ND<50	ND<50	ND<50	ND<50
Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Toluene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Ethyl Benzene:	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Xylenes:	ND<0.5	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L	ug/L

Superior Precision Analytical, Inc.
[illegible] Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-[illegible] / fax (510) 229-1926

FEB 22 1993

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

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 87785

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = parts per billion (ppb)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	88/89	1%	70-130
Benzene:	99/96	3%	70-130
Toluene:	102/103	1%	70-130
Ethyl Benzene:	110/111	1%	70-130
Xylenes:	105/106	1%	70-130

Richard Srna, Ph.D.
Jelemia V Sanguilig (for)
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☒ No

Chain-of-Custody-Record

Chevron U.S.A. Inc.
P.O. BOX 5004
San Ramon, CA 94583
FAX (415)842-9591

Chevron Facility Number: 9-0338
Facility Address: 5500 Telegraph Ave, Oakland
Consultant Project Number: 31-0261
Consultant Name: ALTON Geoscience
Address: 5870 Stoneridge Dr., Ste. 6 Pleasanton
Project Contact (Name): Dale Swain
(Phone) 510-734-8134 (Fax Number) 734-8420

Chevron Contact (Name): Nancy Vukelich
(Phone): 510-842-9500
Laboratory Name: GAL
Laboratory Release Number: 2646690
Samples Collected by (Name): Andrew Block
Collection Date: 2-4-93
Signature:

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation (FEB 22 1993)	Iced (Yes or No)	BTEX + TPH GAS (8020 + 8015)	TPH Diesel (8015)	Oil and Grease (5520)	Purgeable Halocarbons (8010)	Purgeable Aromatics (8020)	Purgeable Organics (8240)	Extractable Organics (8270)	Metals Cd,Cr,Pb,Zn,Ni (ICAP or AA)	Remarks
TB-LB		1	W	G	1420	HCL	Yes	X								DO NOT BILL for TB-LB Sample
C-3		2	W	G	1424	HCL	Y	X								
C-1		2	W	G	1440	HCL	Y	X								
C-2		2	W	G	1454	HCL	Y	X								

Please initial:
Samples stored in ice.
Appropriate containers.
Samples preserved.
Sufficient headspace.
Seals.

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	ALTON	2/8/93 10:04		Express I-T	2-8-93 1000
Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Relinquished By (Signature)	Organization	Date/Time	Received For Laboratory By (Signature)		Date/Time 2/8/93 10:45

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
(10 Days)
As Contracted

COC-3.DWG/03 91/HCH