Received 1/16/92
SOS

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

Marketing Department

92 JAN 14 PM 2:23

January 10, 1992

Mr. Scott Seery
Alameda County Health Care Services
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, CA 94621

Re: Chevron Service Station #9-6991
2920 Castro Valley Blvd., Castro Valley

Dear Mr. Seery:

Enclosed we are forwarding the Quarterly Monitoring and Sampling Report dated December 27, 1991, prepared by our consultant Groundwater Technology, Inc. (GTI) for the above referenced site. This report documents the monthly sampling and monitoring of the newly installed wells as agreed to for the first three months.

Ground water samples collected were analyzed for total petroleum hydrocarbons as gasoline (TPH-G), total petroleum hydrocarbons as diesel (TPH-D) and BTEX. Samples collected from Monitor well MW-1 located adjacent to the former waste oil tank were also analyzed for total oil & grease (TOG), purgeable halocarbons, extractable organics and metals. Benzene was detected in monitor wells MW-1 and MW-2 only at concentrations of 3.9 and 30 ppb, respectively. TPH-D was detected in monitor wells MW-1 and MW-2 only at concentrations of 170 and 130 ppb, respectively. MW-1 samples reported non-detectable concentrations of TOG, purgeable halocarbons, extractable organics and metals. Thus, subsequent sampling events of this well will not include the analysis of TOG, purgeable halocarbons, extractable organics and metals. Depth to ground water was measured at approximately 11-feet below grade, and the direction of flow fluctuates from the west to the southwest.

As reported in the GTI Well Installation Report dated November 11, 1991, MW-3 was questioned as an anomalous water level data point. The large discrepancy in water level measurements no longer exists in MW-3. As mentioned in my fax to you dated November 21, 1991, during installation of MW-3 water within the .5 to 1.5 gravel layer was infiltrating into the well. This could have been a result of a potential sprinkler line leak, etc. This may have resulted in the anomalous high. However, it appears to have equilibriated out with the formation since the initial monitoring event.

As ground water flow direction has been established, Chevron has instructed GTI to prepare a work plan proposing additional ground water monitor wells to delineate the extent of the

hydrocarbon contamination in the ground water beneath the site. This work plan will be forwarded to you for your review and approval prior to implementation. Chevron will implement a quarterly ground water monitoring program at the referenced site.

A technical assessment report of the 3/4-inch wells is currently being prepared and will be forwarded to you upon completion. This report will outline the advantages and disadvantages of the 3/4-inch wells and will provide options for improving the technology.

A letter is being prepared by GTI responding to your letter of December 5, 1991. This letter will be submitted to you the week of January 13, 1992 and will address your concerns.

If you have any questions or comments, please do not hesitate to contact me at (510) 842-9581.

Very truly yours,
CHEVRON U.S.A. INC.

Nancy Vukelich
Environmental Engineer

Enclosures

cc: Mr. Eddy So, RWQCB-Bay Area
Ms. Sandra Lindsey, GTI-Concord
Mr. W.T. Scudder
File (9-6991Q1)

reviewed 1/16/92
SPS

JAN 03 '92 T.L.H.

GROUNDWATER TECHNOLOGY, INC.

4057 Port Chicago Highway, Concord, CA 94520 (415) 671-2387
FAX: (415) 685-9148

December 27, 1991

Project No. 020301038

Ms. Nancy Vukelich
Chevron U.S.A. Inc.
2410 Camino Ramon
San Ramon, CA 94583-0804

92 JAN 14 PM 2:23

**SUBJECT: QUARTERLY MONITORING AND SAMPLING ACTIVITIES
CHEVRON SERVICE STATION NO. 9-6991
2920 CASTRO VALLEY BOULEVARD
CASTRO VALLEY, CALIFORNIA**

Dear Ms. Vukelich:

Groundwater Technology, Inc. presents the attached quarterly groundwater monitoring and sampling data collected on October 8, November 4, and December 4, 1991. The three groundwater monitoring wells at this site were monitored on each date to determine depth to groundwater (DTW) and to check for the presence of separate-phase hydrocarbons. Three potentiometric surface maps (Figures 1, 2 and 3) and a summary of groundwater monitoring data (Table 1) are presented in Attachments A and B, respectively.

After measuring the DTW, each monitoring well was purged and sampled. The groundwater samples were analyzed for the presence of benzene, toluene, ethylbenzene and xylenes (BTEX) and total petroleum hydrocarbons (TPH)-as-gasoline. Samples collected on December 4, 1991, were also analyzed for the presence of TPH-as-diesel fuel. Additional samples were collected from well MW-1 and analyzed for the presence of total oil and grease (TOG), base/neutral/acid extractable organics, halogenated volatile organics, and dissolved cadmium, chromium, lead, zinc and nickel. Analytical results indicate concentrations of dissolved base/neutral/acid extractable organics, halogenated volatile organics, cadmium, chromium, lead, zinc, and nickel were below method detection limits of the analyses. Results of the analyses for dissolved BTEX, TPH-as-gasoline, TPH-as-diesel fuel, and TOG are summarized in Table 2. Laboratory reports and chain-of-custody documents are presented in Attachment C. Monitoring well purge water was placed on site in a labeled 55-gallon drum. The purge water has been scheduled to be removed by a Chevron-approved contractor for transport and recycling.

Groundwater Technology, Inc. is pleased to assist Chevron on this project. If you have any questions or comments please call our Concord office.

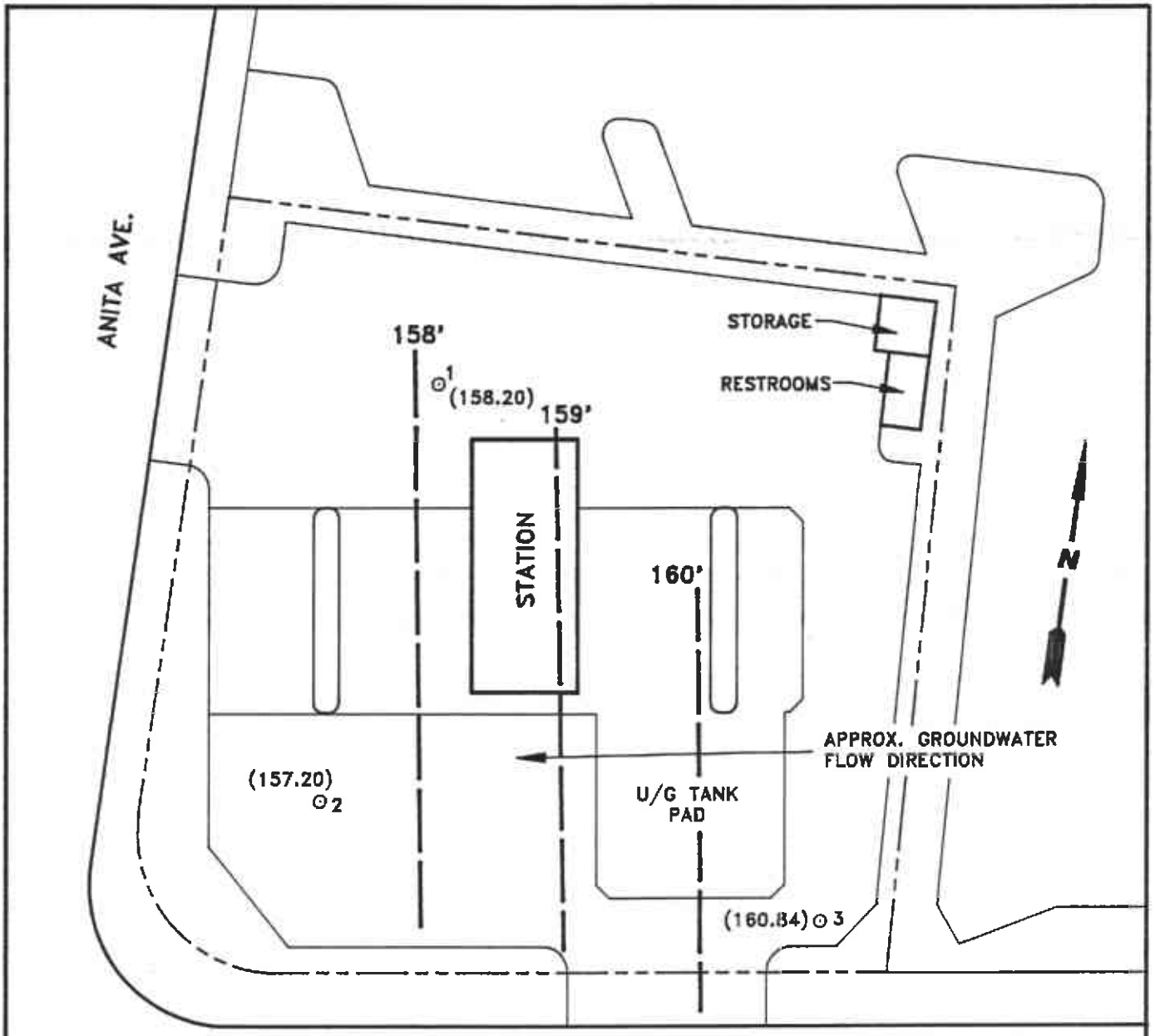
Sincerely,
GROUNDWATER TECHNOLOGY, INC.

Sandra L. Lindsey
Project Manager

David Kleesattel
Registered Geologist
No. 5136

Attachments: Attachment A - Figure 1
Attachment B - Table 1, Table 2
Attachment C - Laboratory Reports

R1038A2.GLM
(020522)



LEGEND

⊙ MONITORING WELL

( ) POTENTIOMETRIC SURFACE ELEVATION

—— POTENTIOMETRIC SURFACE CONTOUR

0 FEET 30

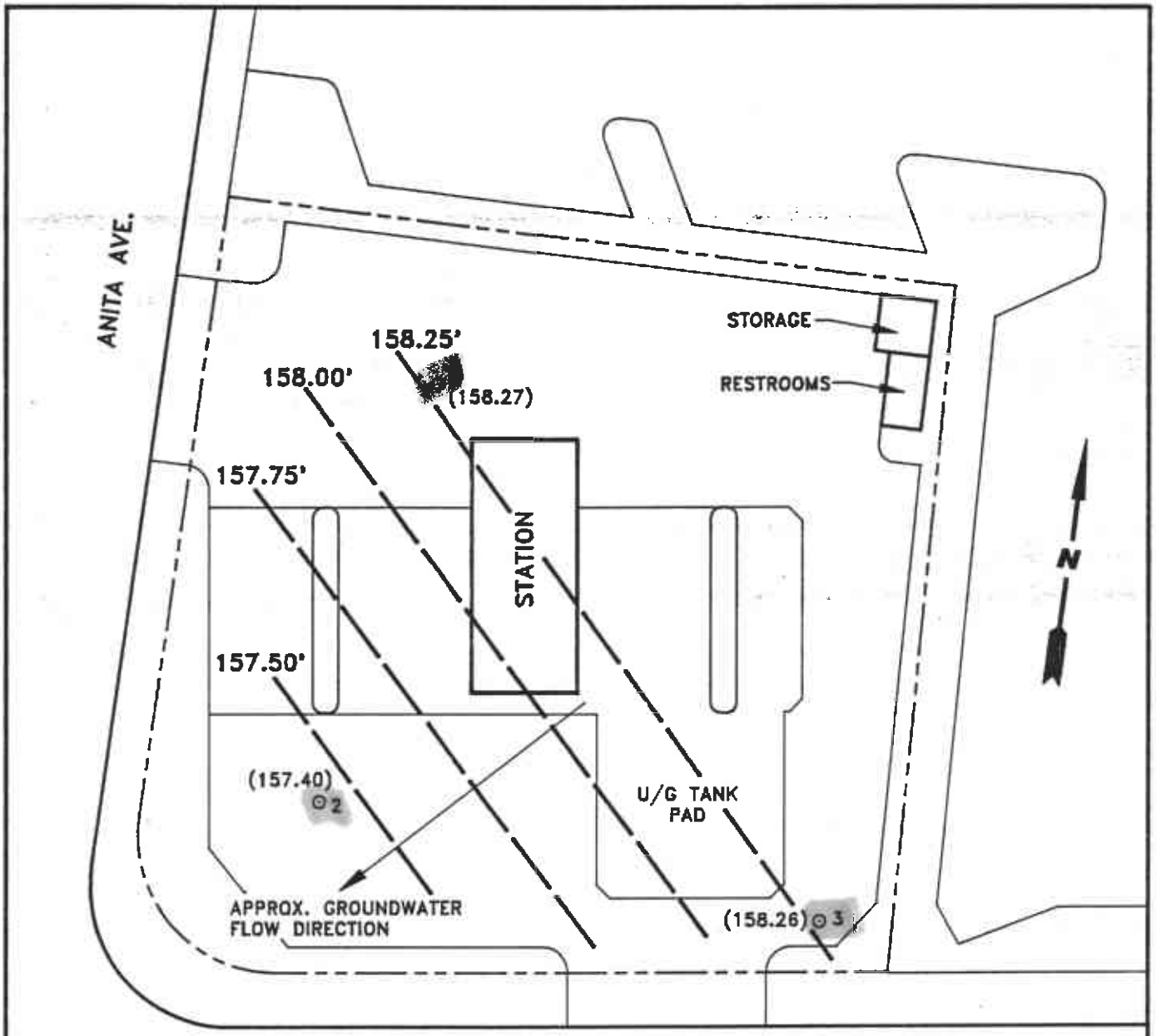
SCALE

GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387

POTENTIOMETRIC SURFACE MAP (10/8/91)

CLIENT:	LOCATION:	REV. NO.:	DATE:
CHEVRON U.S.A.Inc. SERVICE STATION #9-6991	2920 CASTRO VALLEY BLVD. CASTRO VALLEY, CALIFORNIA	0	12/27/91

PM	PE/RG	DESIGNED	DETAILED	ACAD FILE:	PROJECT NO.:	FIGURE:
SJ	DRK	SL	ML	PSM0891/SP1291	020301038	1



LEGEND

- ⊙ MONITORING WELL
- ( ) POTENTIOMETRIC SURFACE ELEVATION
- ——— POTENTIOMETRIC SURFACE CONTOUR

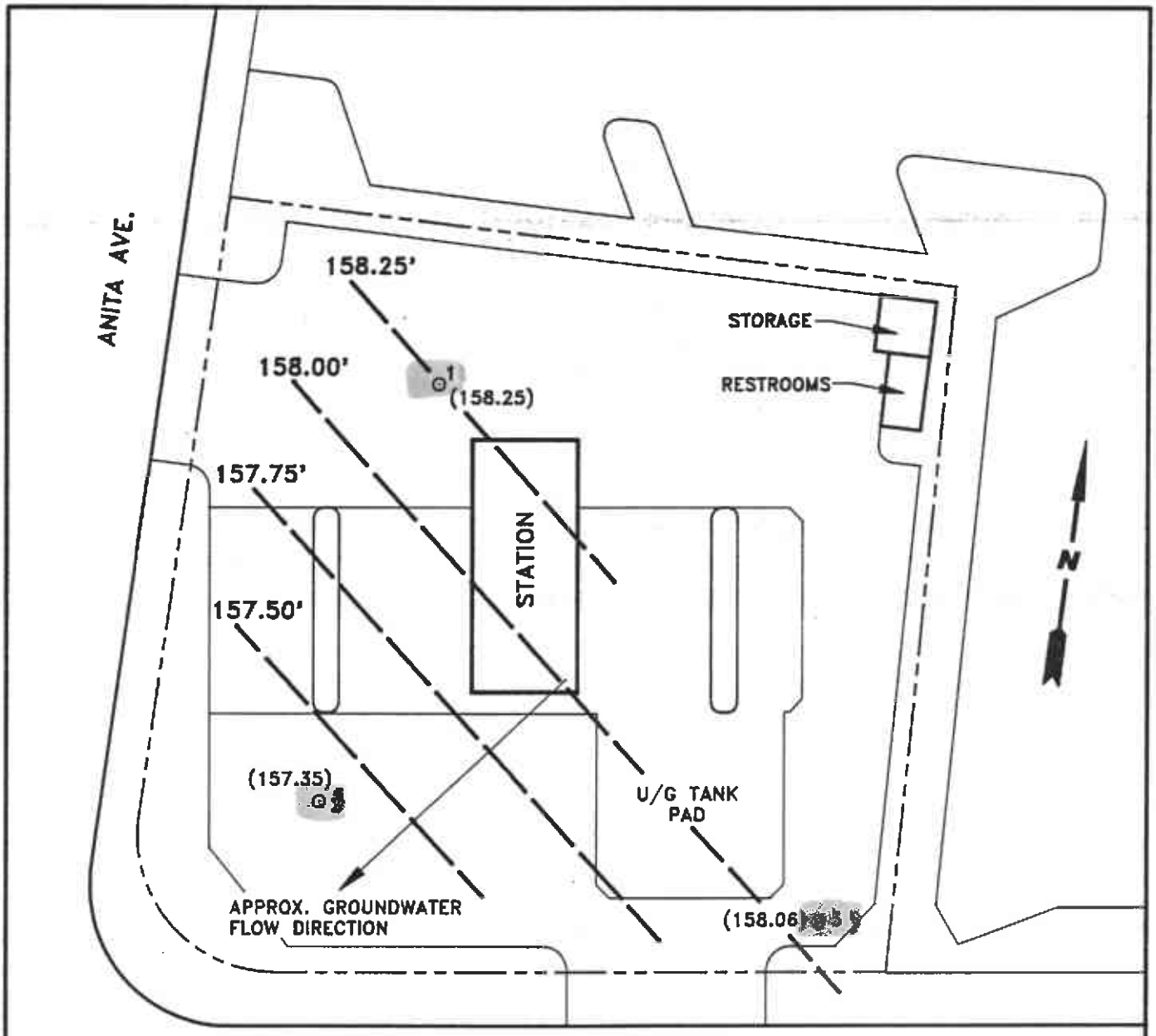
0 FEET 30
SCALE

GROUNDWATER TECHNOLOGY
4057 PORT CHICAGO HWY
CONCORD, CA 94520
(510) 671-2387

POTENTIOMETRIC SURFACE MAP (11/4/91)

CLIENT:	LOCATION:	REV. NO.:	DATE:
CHEVRON U.S.A.Inc. SERVICE STATION #9-6991	2920 CASTRO VALLEY BLVD. CASTRO VALLEY, CALIFORNIA	0	12/27/91

PM	PE/RG	DESIGNED	DETAILED	ACAD FILE:	PROJECT NO.:	FIGURE:
[illegible]	ORK	SL	ML	PSMN491/SP1291	020301038	2



LEGEND

⊙ MONITORING WELL

( ) POTENTIOMETRIC SURFACE ELEVATION

—— —— POTENTIOMETRIC SURFACE CONTOUR

0 FEET 30

SCALE

GROUNDWATER TECHNOLOGY 4057 PORT CHICAGO HWY CONCORD, CA 94520 (510) 671-2387

POTENTIOMETRIC SURFACE MAP (12/4/91)

CLIENT:	LOCATION:	REV. NO.:	DATE:
CHEVRON U.S.A.Inc. SERVICE STATION #9-6991	2920 CASTRO VALLEY BLVD. CASTRO VALLEY, CALIFORNIA	0	12/27/91

PM	PE/RG	DESIGNED	DETAILED	ACAD FILE:	PROJECT NO.:	FIGURE:
SL	DEK	SL	ML	PSMD491/SP1291	020301038	3

TABLE 1
GROUNDWATER MONITORING DATA
CHEVRON SERVICE STATION NO. 9-6991
2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY, CALIFORNIA
(Results in feet)

WELL I.D./ ELEVATION	DATE	DEPTH TO WATER	SEPARATE-PHASE HYDROCARBON THICKNESS	GROUNDWATER ELEVATION
MW-1 169.30	10/08/91	11.10	0.00	158.20
	11/04/91	11.03	0.00	158.27
	12/04/91	11.05	0.00	158.25
MW-2 169.15	10/08/91	11.95	0.00	157.20
	11/04/91	11.75	0.00	157.40
	12/04/91	11.80	0.00	157.35
MW-3 169.11	10/08/91	8.27	0.00	160.84
	11/04/91	10.85	0.00	158.26
	12/04/91	11.05	0.00	158.06

Elevations shown in feet above mean sea level.

TABLE 2
HISTORICAL GROUNDWATER ANALYTICAL RESULTS
CHEVRON SERVICE STATION NO. 9-6991
2920 CASTRO VALLEY BOULEVARD, CASTRO VALLEY, CALIFORNIA
(Results in parts per billion)

WELL ID	DATE	TOG	TPH-AS-DIESEL	TPH-AS-GASOLINE	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-1	10/08/91	<5000	NA	230	45	<0.5	0.9	9.1
	11/04/91	NA	NA	340	120	<0.5	<0.5	6.1
	12/04/91	<5000	170	<50	3.9	<0.5	<0.5	<0.5
MW-2	10/08/91	NA	NA	110	5.1	1.1	0.8	26
	11/19/91	NA	NA	120	11	1.1	<0.5	17
	12/04/91	NA	130	440	30	2.5	<0.5	52
MW-3	10/08/91	NA	NA	81	1.9	0.7	0.8	2.4
	11/04/91	NA	NA	60	<0.5	<0.5	<0.5	<0.5
	12/04/91	NA	<50	<50	<0.5	<0.5	<0.5	<0.5
TRIP BLANK	10/08/91	NA	NA	<50	<0.5	<0.5	<0.5	<0.5
	11/04/91	NA	NA	<50	<0.5	<0.5	<0.5	<0.5
	12/04/91	NA	<50	<50	<0.5	<0.5	<0.5	<0.5

—

TOG = Total oil and grease
TPH = Total petroleum hydrocarbons
NS = Not sampled
NA = Not analyzed

ATTACHMENT C

LABORATORY REPORTS

LABORATORY REPORTS

OCTOBER 8, 1991

Superior Precision Analytical, Inc.
P.O. Box 1545 • Martinez, California 94553 • (510) 229-1590 / fax (510) 229-0916

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

LABORATORY NO.: 84100
CLIENT: GROUNDWATER TECHNOLOGIES INC.
CLIENT JOB NO.: 020301038 030504

DATE RECEIVED: 10/09/91
DATE REPORTED: 10/16/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
84100- 1	MW-1	10/08/91	10/16/91
84100- 2	MW-2	10/08/91	10/14/91
84100- 3	MW-3	10/08/91	10/14/91
84100- 4	RBMW-1	10/08/91	10/14/91
84100- 7	TRIP BLANK	10/08/91	10/15/91

Laboratory Number:	84100 1 mw-1	84100 2	84100 3	84100 4
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)			
OIL AND GREASE:	ND<5000	NA	NA	NA
TPH/GASOLINE RANGE:	230 *	110	81	ND <50
TPH/DIESEL RANGE:	NA	NA	NA	NA
BENZENE:	45	5.1	1.9	ND <0.5
TOLUENE:	ND <0.5	1.1	0.7	ND <0.5
ETHYL BENZENE:	0.9	0.8	0.8	ND <0.5
XYLENES:	9.1	26	2.4	ND <0.5

Laboratory Number:	84100 7
ANALYTE LIST	Amounts/Quantitation Limits (ug/l)
OIL AND GREASE:	NA
TPH/GASOLINE RANGE:	ND <50
TPH/DIESEL RANGE:	NA
BENZENE:	ND <0.5
TOLUENE:	ND <0.5
ETHYL BENZENE:	ND <0.5
XYLENES:	ND <0.5

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

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: 84100

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

OIL AND GREASE ANALYSIS By Standard Methods Method 503E:
Minimum Detection Limit in Water: 5000ug/L

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L
Standard Reference: 10/04/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L
Standard Reference: 10/11/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	09/10/91	20 ppm	69/68	1	56-106
Diesel	NA	NA	NA	NA	NA
Gasoline	10/04/91	200 ng	106/106	0	70-130
Benzene	10/11/91	200 ng	105/105	0	70-130
Toluene	10/11/91	200 ng	96/97	1	70-130
Ethyl Benzene	10/11/91	200 ng	92/93	1	70-130
Total Xylenes	10/11/91	200 ng	96/97	1	70-130

Richard Srna, Ph.D.
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☐ No 84100

Chain-of-Custody-Record

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

Chevron Facility Number 9-6791
Facility Address 2920 Castro Valley Blvd.
Consultant Project Number 020301038 030504
Consultant Name Groundwater Technology
Address 4057 Port Chicago Hwy, Concord, CA
Project Contact (Name) Greg Mischel
(Phone) 671-2387 (Fax Number) 685-7148

Chevron Contact (Name) Ms. Nancy Ukelich
(Phone) 842-9581
Laboratory Name Superior Analytical
Laboratory Release Number 4837960
Samples Collected by (Name) Randy Ruiz
Collection Date 10-8-91
Signature Randy Ruiz

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	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)		Hold				Remarks
MW-1	1	3V				HCL	Yes	✓													
MW-2	2	3V				HCL		✓													
MW-3	3	3V				None		✓													
MW-1	1	1L				None				✓											
RBMW-1	4	1V				HCL		✓													
RBMW-2	5	1V				HCL											X				
RBMW-3	6	1V				None															
TRIP Blank	7	2V				HCL	Yes	✓													

Please Initial:
Samples Stored in Ice: VV
Appropriate containers: PM
Samples preserved: VV
VOA's without headspace: VV
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Randy Ruiz	GTI	10/9/91 9:15			
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 915 10/9/91

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

COC-3.DWG/03 91/HCH

LABORATORY REPORTS

NOVEMBER 4 AND 19, 1991

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

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 84301
CLIENT: GROUNDWATER TECHNOLOGIES INC.
CLIENT JOB NO.: 020301038

DATE RECEIVED: [illegible]
DATE REPORTED: 11/12/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
84301- 1	TRIP BLANK	11/04/91	/ /
84301- 2	RBMW-1	11/04/91	11/12/91
84301- 3	MW-1	11/04/91	11/12/91
84301- 4	RBMW-2	11/04/91	/ /
84301- 5	MW-2	11/04/91	/ /
84301- 6	RBMW-3	11/04/91	/ /
84301- 7	MW-3	11/04/91	11/12/91

Laboratory Number:	84301 1	84301 2	84301 3 MW-1	84301 4	84301 5
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	NA	NA	NA	NA
TPH/GASOLINE RANGE:	NA	ND<50	#340	NA	*NA
TPH/DIESEL RANGE:	NA	NA	NA	NA	NA
BENZENE:	NA	ND<0.5	120	NA	NA
TOLUENE:	NA	ND<0.5	ND<0.5	NA	NA
ETHYL BENZENE:	NA	ND<0.5	ND<0.5	NA	NA
XYLENES:	NA	ND<0.5	6.1	NA	NA

Laboratory Number:	84301 6	84301 7
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)	
OIL AND GREASE:	NA	NA
TPH/GASOLINE RANGE:	NA	#60
TPH/DIESEL RANGE:	NA	NA
BENZENE:	NA	ND<0.5
TOLUENE:	NA	ND<0.5
ETHYL BENZENE:	NA	ND<0.5
XYLENES:	NA	ND<0.5

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

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: 84301

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

* All sample vials were broken in the laboratory.

Gasoline range concentration reported. A non-standard gasoline pattern was observed in the chromatogram.

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

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L
Standard Reference: 10/04/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L
Standard Reference: 10/11/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	10/04/91	200 ng	86/91	6	70-130
Benzene	10/11/91	200 ng	94/91	4	70-130
Toluene	10/11/91	200 ng	98/95	3	70-130
Ethyl Benzene	10/11/91	200 ng	99/93	6	70-130
Total Xylene	10/11/91	200 ng	104/102	2	70-130

Richard Srna, Ph.D.
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☑ No 84301

Chain-of-Custody-Record

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

Chevron Facility Number 9-6991
Facility Address 2920 Castro Valley Blvd.
Consultant Project Number 920301038
Consultant Name Groundwater Technology
Address 4057 Port Chicago Hwy, Concord
Project Contact (Name) Greg Mischel or Sandra Lindsey
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name) Nancy Vukelich
(Phone) 842-9581
Laboratory Name Superior
Laboratory Release Number 4837960
Samples Collected by (Name) Randy Ruiz
Collection Date 11-4-91
Signature Randy Ruiz

Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil W = Water A = Air C = Charcoal	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	Iced (Yes or No)	Analyses To Be Performed: 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)	HOLD					Remarks
TRIP Blank	1	1V	W	G		HCl	Yes	X								X					
RBMW-1	2	1V						X													
MW-1	3	3V						X													
RBMW-2	4	1V														X					Hold
MW-2	5	3V						X													
RBMW-3	6	1V														X					Hold
MW-3	7	3V	W	G		HCl	Yes	X													

Please initial
Samples Stored in Ice. RW
Appropriate containers RW
Samples preserved RW
VOA's w[illegible] RW
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Randy Ruiz	GTI	11-4-91/1440			
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 11/4/91 1440

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

COC-3.DWG/03 91/HCH

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

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

LABORATORY NO.: 84418
CLIENT: GROUNDWATER TECHNOLOGIES INC.
CLIENT JOB NO.: 020301038

DATE RECEIVED: 11/19/91
DATE REPORTED: 11/26/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
84418- 1	RBMW-2	11/19/91	/ /
84418- 2	MW-2	11/19/91	11/25/91

Laboratory Number:	84418 1	84418 2
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)	
OIL AND GREASE:	NA	NA
TPH/GASOLINE RANGE:	NA	120
TPH/DIESEL RANGE:	NA	NA
BENZENE:	NA	11
TOLUENE:	NA	1.1
ETHYL BENZENE:	NA	ND<0.5
XYLENES:	NA	17

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

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: 84418

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

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

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L
Standard Reference: NA

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L
Standard Reference: 10/04/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L
Standard Reference: 10/11/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	NA	NA	NA	NA	NA
Diesel	NA	NA	NA	NA	NA
Gasoline	10/04/91	200 ng	95/95	0	70-130
Benzene	10/11/91	200 ng	109/117	7	70-130
Toluene	10/11/91	200 ng	102/110	8	70-130
Ethyl Benzene	10/11/91	200 ng	107/114	6	70-130
Total Xylene	10/11/91	200 ng	114/122	7	70-130

Richard Srna, Ph.D.
Laboratory Director

Fax copy of Lab Report and COC to Chevron Contact: ☐ Yes ☒ No 8/9/18

Chain-of-Custody-Record

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

Chevron Facility Number 9-6991
Facility Address 2920 Castro Valley Blvd.
Consultant Project Number 020301038
Consultant Name Groundwater Technology
Address 4057 Port Chicago Hwy, Concord
Project Contact (Name) Greg Mischel & Sandra Lindsey
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name) Nancy Vukelich
(Phone) 842-9581
Laboratory Name Superior
Laboratory Release Number Free - duplicate sample
Samples Collected by (Name) Randy Ruiz
Collection Date 11-19-91
Signature Randy Ruiz

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	Iced (Yes or No)	Analyses To Be Performed: 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)		HOLD					Remarks
RBMW-2	1	1v	W	G		HCl	Y										X					
MW-2	2	3v	W	G		HCl	Y	X														"NO CHARGE"

Please Initial:	RW
Samples Stored in ice.	RW
Appropriate containers	RW
Samples preserved	RW
VOA's without headspace	RW
Comments:	

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
Randy Ruiz	GTI	11/19/91 1525			
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 1525 11/19/91

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

-3.DWG/03 91/HCH

LABORATORY REPORTS

DECEMBER 4, 1991

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

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

LABORATORY NO.: 84543
CLIENT: GROUNDWATER TECHNOLOGIES INC.
CLIENT JOB NO.: 020301038-030504

DATE RECEIVED: 12/04/91
DATE REPORTED: 12/11/91

Lab Number	Customer Sample Identification	Date Sampled	Date Analyzed
84543- 1	RBMW-1	12/04/91	/ /
84543- 2	MW-1	12/04/91	12/11/91
84543- 3	RBMW-2	12/04/91	/ /
84543- 4	MW-2	12/04/91	12/11/91
84543- 5	RBMW-3	12/04/91	/ /
84543- 6	MW-3	12/04/91	12/11/91
84543- 7	TRIP BLANK	12/04/91	12/11/91

Laboratory Number:	84543 1	84543 2 MW-1	84543 3	84543 4	84543 5
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)				
OIL AND GREASE:	NA	ND<5000	NA	NA	NA
TPH/GASOLINE RANGE:	NA	ND<50	NA	440	NA
TPH/DIESEL RANGE:	NA	* 170	NA	* 130	NA
BENZENE:	NA	3.9	NA	30	NA
TOLUENE:	NA	ND<0.5	NA	2.5	NA
ETHYL BENZENE:	NA	ND<0.5	NA	ND<0.5	NA
XYLENES:	NA	ND<0.5	NA	52	NA

Laboratory Number:	84543 6	84543 7
ANALYTE LIST	Amounts/Quantitation Limits (ug/L)	
OIL AND GREASE:	NA	NA
TPH/GASOLINE RANGE:	ND<50	ND<50
TPH/DIESEL RANGE:	ND<50	ND<50
BENZENE:	ND<0.5	ND<0.5
TOLUENE:	ND<0.5	ND<0.5
ETHYL BENZENE:	ND<0.5	ND<0.5
XYLENES:	ND<0.5	ND<0.05

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

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: 84543

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
ug/L = part per billion (ppb)
*** = Diesel Range Concentration Reported. A Non-standard Diesel Pattern was Observed in the Chromatogram.**

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

Modified EPA-SW846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Water: 50ug/L
Standard Reference: 07/20/91

EPA-SW846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Water: 50ug/L
Standard Reference: 10/04/91

SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Water: 0.5ug/L
Standard Reference: 10/11/91

ANALYTE	REFERENCE	SPIKE LEVEL	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Oil & Grease	11/20/91	30 ppm	89/92	3	56-106
Diesel	07/20/91	200 ppm	122/119	3	75-125
Gasoline	10/04/91	200 ng	73/73	0	70-130
Benzene	12/02/91	200 ng	85/83	2	70-130
Toluene	12/02/91	200 ng	87/88	1	70-130
Ethyl Benzene	12/02/91	200 ng	88/88	0	70-130
Total Xylene	12/02/91	200 ng	103/104	1	70-130

Richard Srna, Ph.D.
Laboratory Director

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

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

LABORATORY NO.: 84543
CLIENT: GROUNDWATER TECHNOLOGIES INC.
CLIENT JOB NO.: 020301038-030504

DATE RECEIVED: 12/04/91
DATE REPORTED: 12/11/91

ANALYSIS FOR CADMIUM, CHROMIUM, LEAD & ZINC
by EPA SW-846 Method 6010

LAB #	Sample Identification	Concentration (mg/L) Cadmium	Chromium	Lead	Zinc
2	MW-1	ND<0.05	ND<0.05	ND<0.2	ND<0.05

mg/L - parts per million (ppm)

Method Detection Limit for Cadmium in Water: 0.05 mg/L
Method Detection Limit for Chromium in Water: 0.05 mg/L
Method Detection Limit for Lead in Water: 0.2 mg/L
Method Detection Limit for Zinc in Water: 0.05 mg/L

QAQC Summary: MS/MSD Average Recovery : 95/104%
Duplicate RPD : 9

Richard Srna, Ph.D.

Ganesh Balimpour for
Laboratory Manager

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

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

LABORATORY NO.: 84543
CLIENT: GROUNDWATER TECHNOLOGIES INC.
CLIENT JOB NO.: 020301038-030504

DATE RECEIVED: 12/04/91
DATE REPORTED: 12/11/91
DATE SAMPLED : 12/04/91

ANALYSIS FOR TOTAL NICKEL
by SW-846 METHOD 6010

LAB #	Sample Identification	Concentration(mg/L) Total Nickel
2	MW-1	ND<0.1

mg/L - parts per million (ppm)

Method Detection Limit for Nickel in Water: 0.1 mg/L

QAQC Summary: MS/MSD Average Recovery : 94/97%
Duplicate RPD : 3

Richard Srna, Ph.D.

Laboratory Manager

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

CERTIFICATE OF ANALYSIS

LABORATORY NO: 84543
CLIENT: GROUNDWATER TECHNOLOGIES
PROJECT NO: 020301038-030504

DATE SAMPLED :12/04/91
DATE RECEIVED:12/04/91
DATE REPORTED:12/18/91

EPA SW-846 METHOD 8010
HALOGENATED VOLATILE ORGANICS

LAB#: 84543-2 (Analyzed:12/17/91)
SAMPLE: MW-1 (Water)

ANALYTE	MDL(ug/L)	RESULT(ug/L)
Chloromethane/Vinyl Chloride	1.0	ND
Bromomethane/Chloroethane	1.0	ND
Trichlorofluoromethane	0.5	ND
1,1-Dichloroethene/Freon 113	0.5	ND
Dichloromethane	0.5	ND
trans-1,2-Dichloroethene	0.5	ND
1,1-Dichloroethane	0.5	ND
cis-1,2-Dichloroethene	0.5	ND
Chloroform	0.5	ND
1,1,1-Trichloroethane	0.5	ND
Carbon Tetrachloride	0.5	ND
1,2-Dichloroethane	0.5	ND
Trichloroethene (TCE)	0.5	ND
1,2-Dichloropropane	0.5	ND
Bromodichloromethane	0.5	ND
cis-1,3-Dichloropropene	0.5	ND
trans-1,3-Dichloropropene	0.5	ND
1,1,2-Trichloroethane	0.5	ND
Tetrachloroethene (PCE)	0.5	ND
Dibromochloromethane	0.5	ND
Chlorobenzene	0.5	ND
Bromoform	0.5	ND
1,1,2,2-Tetrachloroethane	0.5	ND
1,3-Dichlorobenzene	0.5	ND
1,4-Dichlorobenzene	0.5	ND
1,2-Dichlorobenzene	0.5	ND

Surrogate (BFB) Recovery: 76%

MDL: Method Detection Limit
*Second Column confirmation available upon request.

QA/QC Summary: For Water Matrix (12/18/91)
MS/MSD Average Recovery: 110%
MS/MSD %RPD: 4%

Afsaneh Salimpour
Senior Analyst

Western Operations

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

December 11, 1991

Ms. Sandra Lindsey
GROUNDWATER TECHNOLOGY, INC.
4057 Port Chicago Hwy
Concord, CA 94520

Client Ref. 9-6991/020301038-030504
Clayton Project No. 91120.47

Dear Ms. Lindsey:

Attached is our analytical laboratory report for the samples received on December 5, 1991 from Superior Analytical Laboratory. A copy of the Chain-of-Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be disposed of 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Ronald H. Peters, CIH
Director, Laboratory Services
Western Operations

RHP/caa
Attachments

Results of Analysis
for
Chevron USA, Inc./Groundwater Technology, Inc.

Client Reference: 9-6991/020301038-030504
Clayton Project No. 91120.47

Sample Identification: MW-1
Lab Number: 9112047-01A
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Analytical Method: EPA 8270

Date Sampled: [illegible]
Date Received: 12/05/91
Date Analyzed: 12/10/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Acid Extractables			
Phenol	108-95-2	ND	5
2-chlorophenol	95-57-8	ND	5
2-methyl phenol	95-48-7	ND	5
4-methyl phenol	106-44-5	ND	5
2-nitrophenol	88-75-5	ND	5
2,4-dimethylphenol	105-67-9	ND	5
2,4-dichlorophenol	120-83-2	ND	5
4-chloro-3-methylphenol	59-50-7	ND	5
2,4,5-trichlorophenol	95-95-4	ND	5
2,4,6-trichlorophenol	88-06-2	ND	5
2,4-dinitrophenol	51-28-5	ND	20
4-nitrophenol	100-02-7	ND	20
2-methyl-4,6-dinitrophenol	534-52-1	ND	20
Pentachlorophenol	87-86-5	ND	20
Base/Neutral Extractables			
Bis(2-chloroethyl)ether	111-44-4	ND	5
1,3-dichlorobenzene	541-73-7	ND	5
1,4-dichlorobenzene	106-46-7	ND	5
1,2-dichlorobenzene	95-50-1	ND	5
Bis-(2-chloroisopropyl)ether	108-60-1	ND	5
N-nitrosodi-n-propylamine	621-64-7	ND	5

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Chevron USA, Inc./Groundwater Technology, Inc.

Client Reference: 9-6991/020301038-030504
Clayton Project No. 91120.47

Sample Identification: MW-1
Lab Number: 9112047-01A
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Analytical Method: EPA 8270

Date Sampled: 12/04/91
Date Received: 12/05/91
Date Analyzed: 12/10/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (continued)			
Hexachloroethane	67-72-1	ND	5
Nitrobenzene	98-95-3	ND	5
Isophorone	78-59-1	ND	5
Bis-(2-chloroethoxy)methane	111-91-1	ND	5
1,2,4-trichlorobenzene	120-82-1	ND	5
Naphthalene	91-20-3	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-chloronaphthalene	91-58-7	ND	5
2-methyl naphthalene	91-57-6	ND	5
4-chloroaniline	106-47-8	ND	20
2-nitroaniline	88-74-4	ND	20
3-nitroaniline	99-09-2	ND	20
4-nitroaniline	100-01-6	ND	20
Hexachlorocyclopentadiene	77-47-4	ND	5
Dimethyl phthalate	131-11-3	ND	10
Acenaphthylene	208-96-8	ND	5
Acenaphthene	83-32-9	ND	5
2,4-dinitrotoluene	121-14-2	ND	5
2,6-dinitrotoluene	606-20-2	ND	5
Diethyl phthalate	84-66-2	ND	5

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Chevron USA, Inc./Groundwater Technology, Inc.

Client Reference: 9-6991/020301038-030504
Clayton Project No. 91120.47

Sample Identification: MW-1
Lab Number: 9112047-01A
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Analytical Method: EPA 8270

Date Sampled: 12/04/91
Date Received: 12/05/91
Date Analyzed: 12/10/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (continued)			
4-chlorophenylphenylether	7005-72-3	ND	5
Fluorene	86-73-7	ND	5
N-nitrosodiphenylamine	86-30-6	ND	5
4-bromophenylphenylether	101-55-3	ND	5
Hexachlorobenzene	118-74-1	ND	5
Phenanthrene	85-01-8	ND	5
Anthracene	120-12-7	ND	5
Di-n-butylphthalate	84-74-2	ND	5
Fluoranthene	206-44-2	ND	5
Benzidine	92-87-5	ND	30
Pyrene	129-00-0	ND	5
Benzylbutylphthalate	85-68-7	ND	5
3,3'-dichlorobenzidine	91-94-1	ND	40
Benzo(a)anthracene	56-55-3	ND	5
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	10
Chrysene	218-01-9	ND	5
Di-n-octylphthalate	117-84-0	ND	5
Benzo(b)fluoranthene	205-99-2	ND	5
Benzo(k)fluoranthene	207-08-9	ND	5
Benzo(a)pyrene	50-32-8	ND	5

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Chevron USA, Inc./Groundwater Technology, Inc.

Client Reference: 9-6991/020301038-030504
Clayton Project No. 91120.47

Sample Identification: MW-1
Lab Number: 9112047-01A
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Analytical Method: EPA 8270

Date Sampled: 12/04/91
Date Received: 12/05/91
Date Analyzed: 12/10/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (continued)			
Indeno(1,2,3-cd)pyrene	193-39-5	ND	5
Dibenzo(a,h)anthracene	53-70-3	ND	5
Benzo(ghi)perylene	191-24-2	ND	5
Surrogates		Recovery (%)	QC Limits (%) LCL UCL
2-Fluorophenol	367-12-4	73	21 - 100
Phenol-d6	13127-88-3	56	10 - 94
Nitrobenzene-d5	4165-60-0	71	35 - 114
2-Fluorobiphenyl	321-60-8	97	43 - 116
2,4,6-Tribromophenol	118-79-6	78	10 - 123
Terphenyl-d14	---	66	33 - 141

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Chevron USA, Inc./Groundwater Technology, Inc.

Client Reference: 9-6991/020301038-030504
Clayton Project No. 91120.47

Sample Identification: METHOD BLANK
Lab Number: 9112047-02A
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Analytical Method: EPA 8270

Date Sampled: --
Date Received: --
Date Analyzed: 12/10/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Acid Extractables			
Phenol	108-95-2	ND	5
2-chlorophenol	95-57-8	ND	5
2-methyl phenol	95-48-7	ND	5
4-methyl phenol	106-44-5	ND	5
2-nitrophenol	88-75-5	ND	5
2,4-dimethylphenol	105-67-9	ND	5
2,4-dichlorophenol	120-83-2	ND	5
4-chloro-3-methylphenol	59-50-7	ND	5
2,4,5-trichlorophenol	95-95-4	ND	5
2,4,6-trichlorophenol	88-06-2	ND	5
2,4-dinitrophenol	51-28-5	ND	20
4-nitrophenol	100-02-7	ND	20
2-methyl-4,6-dinitrophenol	534-52-1	ND	20
Pentachlorophenol	87-86-5	ND	20
Base/Neutral Extractables			
Bis(2-chloroethyl)ether	111-44-4	ND	5
1,3-dichlorobenzene	541-73-7	ND	5
1,4-dichlorobenzene	106-46-7	ND	5
1,2-dichlorobenzene	95-50-1	ND	5
Bis-(2-chloroisopropyl)ether	108-60-1	ND	5
N-nitrosodi-n-propylamine	621-64-7	ND	5

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Chevron USA, Inc./Groundwater Technology, Inc.

Client Reference: 9-6991/020301038-030504
Clayton Project No. 91120.47

Sample Identification: METHOD BLANK
Lab Number: 9112047-02A
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Analytical Method: EPA 8270

Date Sampled: --
Date Received: --
Date Analyzed: 12/10/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (continued)			
Hexachloroethane	67-72-1	ND	5
Nitrobenzene	98-95-3	ND	5
Isophorone	78-59-1	ND	5
Bis-(2-chloroethoxy)methane	111-91-1	ND	5
1,2,4-trichlorobenzene	120-82-1	ND	5
Naphthalene	91-20-3	ND	5
Hexachlorobutadiene	87-68-3	ND	5
2-chloronaphthalene	91-58-7	ND	5
2-methyl naphthalene	91-57-6	ND	5
4-chloroaniline	106-47-8	ND	20
2-nitroaniline	88-74-4	ND	20
3-nitroaniline	99-09-2	ND	20
4-nitroaniline	100-01-6	ND	20
Hexachlorocyclopentadiene	77-47-4	ND	5
Dimethyl phthalate	131-11-3	ND	10
Acenaphthylene	208-96-8	ND	5
Acenaphthene	83-32-9	ND	5
2,4-dinitrotoluene	121-14-2	ND	5
2,6-dinitrotoluene	606-20-2	ND	5
Diethyl phthalate	84-66-2	ND	5

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Chevron USA, Inc./Groundwater Technology, Inc.

Client Reference: 9-6991/020301038-030504
Clayton Project No. 91120.47

Sample Identification: METHOD BLANK
Lab Number: 9112047-02A
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Analytical Method: EPA 8270

Date Sampled: --
Date Received: --
Date Analyzed: 12/10/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (continued)			
4-chlorophenylphenylether	7005-72-3	ND	5
Fluorene	86-73-7	ND	5
N-nitrosodiphenylamine	86-30-6	ND	5
4-bromophenylphenylether	101-55-3	ND	5
Hexachlorobenzene	118-74-1	ND	5
Phenanthrene	85-01-8	ND	5
Anthracene	120-12-7	ND	5
Di-n-butylphthalate	84-74-2	ND	5
Fluoranthene	206-44-2	ND	5
Benzidine	92-87-5	ND	30
Pyrene	129-00-0	ND	5
Benzylbutylphthalate	85-68-7	ND	5
3,3'-dichlorobenzidine	91-94-1	ND	40
Benzo(a)anthracene	56-55-3	ND	5
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	10
Chrysene	218-01-9	ND	5
Di-n-octylphthalate	117-84-0	ND	5
Benzo(b)fluoranthene	205-99-2	ND	5
Benzo(k)fluoranthene	207-08-9	ND	5
Benzo(a)pyrene	50-32-8	ND	5

ND Not detected at or above limit of detection
-- Information not available or not applicable

Results of Analysis
for
Chevron USA, Inc./Groundwater Technology, Inc.

Client Reference: 9-6991/020301038-030504
Clayton Project No. 91120.47

Sample Identification: METHOD BLANK
Lab Number: 9112047-02A
Sample Matrix/Media: WATER
Extraction Method: EPA 3510
Analytical Method: EPA 8270

Date Sampled: --
Date Received: --
Date Analyzed: 12/10/91

Analyte	CAS #	Concentration (ug/L)	Limit of Detection (ug/L)
Base/Neutral Extractables (continued)			
Indeno(1,2,3-cd)pyrene	193-39-5	ND	5
Dibenzo(a,h)anthracene	53-70-3	ND	5
Benzo(ghi)perylene	191-24-2	ND	5
Surrogates		Recovery (%)	QC Limits (%) LCL - UCL
2-Fluorophenol	367-12-4	76	21 - 100
Phenol-d6	13127-88-3	55	10 - 94
Nitrobenzene-d5	4165-60-0	70	35 - 114
2-Fluorobiphenyl	321-60-8	93	43 - 116
2,4,6-Tribromophenol	118-79-6	108	10 - 123
Terphenyl-d14	---	59	33 - 141

ND Not detected at or above limit of detection
-- Information not available or not applicable

Quality Assurance Results Summary
for
Clayton Project No. 91120.47

Clayton Lab Number: 9112049-MB
Ext./Prep. Method: EPA3510
Date: 12/09/91
Analyst: HYT
Std. Source: M910819-01W
Sample Matrix/Media: WATER

Analytical Method: EPA625_8270
Instrument ID: 05138
Date: 12/10/91
Time: :
Analyst: AC
Units: UG/L

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
1,2,4-Trichlorobenzene	ND	100	86.0	86	84.0	84	85	39	98	2.4	28
1,4-Dichlorobenzene	ND	100	92.0	92	92.0	92	92	36	97	0.0	28
2,4-Dinitrotoluene	ND	100	86.0	86	80.0	80	83	24	96	7.2	38
2-Chlorophenol	ND	200	210	105	194	97	101	27	123	7.9	40
4-Chloro-m-cresol	ND	200	184	92	162	81	87	23	97	13	42
4-Nitrophenol	ND	200	93.0	47	83.0	42	44	10	80	11	50
Acenaphthene	ND	100	97.0	97	91.0	91	94	46	118	6.4	31
N-Nitrosodipropylamine	ND	100	109	109	109	109	109	41	116	0.0	38
Pentachlorophenol	ND	200	215	108	195	98	103	9	103	9.8	50
Phenol	ND	200	143	72	122	61	66	12	89	16	42
Pyrene	ND	100	72.0	72	68.0	68	70	26	127	5.7	31

LCS = Laboratory Control Sample
ND = Not detected at or above limit of detection
LCL = Lower Control Limit
UCL = Upper Control Limit
SOR = Spike out of range due to high sample concentration.

9112047

Section I

Chain of Custody and Analysis Request

page 1 of 1

From: Superior Precision Analytical, Inc.
825 Arnold Drive Suite 114
Martinez, CA 94553
Phone No. (415) 229-1512 Fax No. (415) 229-1526
Contact: B Oliver
P.O. No. 84543

Turn Around Time (circle one)
Same Day 72 Hrs
24 Hrs (5 Day)
48 Hrs 10 Day

Superior Precision Analytical, Inc.
P.O. Box 1545
Martinez, California 94553

Work Subcontracted to: Clayton

Section II: Analysis Request

Laboratory Sample Identification	S = Soil A = Air W = Water Matrix	8240	8270	8010	8080						Client Sample Identification	Number of Containers	Preservative (yes or no)			Sampling Remarks
1 MW-1	W		X								84543-2	1	y			Chevron [X] Non-Chevron [ ] ** Please Fax Results ** fax directly to (1gl11) Sandra Lindsay 1-510-605-9148
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Relinquished by	Date/Time	Received by	Date/Time
Organization Superior	12/05/11 11:00	Organization Clayton	12/5/11 5:05
Relinquished by	Date/Time	Received by	Date/Time
Organization		Organization	
Relinquished by	Date/Time	Received by	Date/Time
Organization		Organization	

Lab please initial the following:
Samples Stored in Ice yes
Appropriate Containers yes
Samples Preserved N/A
VOAs without Headspace N/A
Comments

Fax copy of Lab Report and COC to Chevron Contact: ☒ Yes ☐ No 9112067 84543 **Chain-of-Custody-Record**

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

Chevron Facility Number: 9-6991
Facility Address: 2920 Castro Valley Blvd, Castro Valley
Consultant Project Number: 070301038-030504
Consultant Name: Groundwater Technology
Address: 4057 Port Chicago Hwy, Concord, CA 94520
Project Contact (Name): Sandra Lindsey
(Phone) 671-2387 (Fax Number) 685-9148

Chevron Contact (Name): Nancy Vukelich
(Phone) 842-9581
Laboratory Name: Superior
Laboratory Release Number: 483-7960
Samples Collected by (Name): Greg MASON
Collection Date: 12-4-91
Signature:

Pg. 1 of 1

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	Iced (Yes or No)	Analyses To Be Performed: 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)		HOLD	Remarks
RBMW-1	1	1v	W	G		HCl	yes										X	
MW-1	2	3v				HCl		X										
MW-1		3v				—					X							
MW-1		1l				—			X									
MW-1		1l				H_2SO_4				X								
MW-1		1l				—								X				
MW-1	↓	500ml				HNO_3									X			
RBMW-2	3	1v				HCl											X	
MW-2	4	3v				HCl		X										
MW-2	↓	1l				—			X									
RBMW-3	5	1v				HCl											X	
MW-3	6	3v				HCl		X										
MW-3	↓	1l				—			X									
TRIP Blank	7	2v/1l	W	G		HCl/—	yes	X	X									

Please Initial:
Samples Stored in ice — BLD
Appropriate containers — BLD
Samples preserved — BLD
VOA's without headspace — BLD
Comments:

Relinquished By (Signature)	Organization	Date/Time	Received By (Signature)	Organization	Date/Time
	GTI	12/4/91			
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
			F Tamayo		12-4-91

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
5 Days
10 Days
13-00

COC-3.DWG/03 91/HCH