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WRITER'S DIRECT DIAL NUMBER
(415) 984-8798

May 18, 1995

OUR FILE NUMBER
650,627-011
203559.V1

BY HAND-DELIVERY

Ms. Susan L. Hugo
Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway
Alameda, California 94502

Mr. Brian P. Oliva
Alameda County Health Care Services Agency
Department of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway
Alameda, California 94502

Mr. Richard Hiett
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

Re: In re The Property Known as Chromex Inc.; 1400 Park Avenue, Emeryville, CA 94608 (Regional Water Quality Control Board File No. 2223.09 (SA))

Dear Ms. Hugo and Messrs. Oliva and Hiett:

I have enclosed for your review the Supplementary Site Assessment Report (the "Phase II Report") dated May 17, 1995 that was prepared by Alton Geoscience for O'Melveny & Myers on behalf of the owners of the property located at 1400 Park Avenue in Emeryville, California (the "Property").

The Phase II Report was prepared in accordance with the requirements of the Alameda County Health Care Services Agency, Department of Environmental Health, Hazardous Materials Division (the "County") and the workplan dated September 29, 1994 that was

prepared by Environmental Science and Engineering, Inc. to comply with the requirements of the Legal Request for Submittal of a Technical Report dated August 26, 1994 (the "Request for Technical Report") issued by the Regional Water Quality Control Board (the "Board").

Once you have reviewed the Phase II Report, we are confident you will agree that the owners of the Property have fully complied with the Request for Technical Report. By letter dated September 29, 1994, I formally requested that the County toll the requirements numbered "3," "4" and "5" in the Request for Technical Report until the Phase II Report had been completed. Since these requirements were predicated on assumptions that contaminant plumes exist under, are migrating from and/or originate at the Property -- none of which are supported by the Findings and Conclusions set forth in the Phase II Report -- the owners formally request that, based on the Phase II Report, the County deem the owners to have discharged fully all obligations arising from the Request for Technical Report.

If for any reason the County is inclined to deny this request, we ask that you contact the undersigned as soon as possible to discuss any further environmental investigation and/or remediation requirements arising from or in connection with the former Chromex facility.

If you have any questions or comments, or wish to discuss this matter further, please call.

Thank you.

Very truly yours,

Jeffrey M. Judd
for O'MELVENY & MYERS

Enclosure

SUPPLEMENTARY SITE ASSESSMENT REPORT
May 17, 1995

FORMER CHROMEX FACILITY
1400 Park Avenue
Emeryville, California

Alton Project No. 41-0042

Prepared For:

O'MELVENY & MYERS
Embarcadero Center West
275 Battery Street
San Francisco, California 94111-3305

Prepared By:

Kevin M. Keenan
Senior Geologist

Matthew W. Katen, RG
Senior Geologist

ALTON GEOSCIENCE
30A Lindbergh Avenue
Livermore, California 94550

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(Continued)

1.0 INTRODUCTION

This report presents the findings of a supplementary site assessment investigation conducted at the Former Chromex Facility, Charles Lowe Company, in Emeryville, California (Figure 1). This work was performed in accordance with the Alameda County Health Care Services Agency (ACHCSA), Department of Environmental Health requirements, and the Environmental Science and Engineering, Inc. (ESE) site assessment workplan dated September 29, 1994.

The objective of this investigation was to:

- Characterize the vertical and horizontal extent of selected metals and organic compounds, if any, in soil and groundwater in the vicinity of the former chrome plating facility.

2.0 SITE DESCRIPTION

Present Site Use: The site is currently occupied by the Charles Lowe Company, a manufacturing facility that produces and repairs marine and industrial equipment.

Past Site Use: A one room addition to the present building was constructed in 1973 by the Fred Myer company and was used to provide electroplating and metal spraying support for operations at the Charles Lowe facility. The addition was used by Modern Plating (a subsidiary of the Fred Myer company) until 1978, and by Chromex (a division of the Charles Lowe Company) until 1991. The addition was dismantled in July 1992 during closure of the Chromex facility (Environmental Science and Engineering, 1994).

Future Site Use: The site is expected to continue its present use as an industrial facility. The Charles Lowe Company is in the process of vacating the premises.

Surrounding Properties: Nearby properties include Electro-Coatings, Inc. (ECI) (formerly a metal plating business) which is located at 1401 Park Avenue directly south of the property, Sherwin-Williams manufacturing plant at 1450 Sherwin Drive to the west of the site, Plywood Lumber and Sales Company at 4050 Horton Street to the north of the site, and a Pacific Gas and Electric Company equipment yard located at 4227 Hollis Street to the east of the

site. Del Monte Plant #35 (a former food processing plant) is located approximately 400 feet east of the site at 4204 Hollis Street.

Geography: The site is located approximately 1/4 mile east of the San Francisco Bay at an elevation of approximately 15 feet above mean sea level. The topography of the site is relatively flat and slopes gently to the west.

Geology: The site is located on the tidal plane bounding the eastern edge of the San Francisco Bay. The sediments are Holocene interfluvial basin deposits consisting of poorly sorted organic-rich clays and silty clays overlying alluvial fan deposits of interfingered clayey gravel and sandy silty clay lenses (Helley et al, 1979).

Regional Hydrogeology: Depth to groundwater in the area is approximately 10 feet below grade (fbg) with a general gradient direction from the southeast to the northwest. The groundwater gradient varies locally in direction and magnitude possibly due to seasonal groundwater fluctuations.

Groundwater Quality and Usage: Information obtained from the Alameda County Public Works Agency in Hayward revealed no domestic water production wells in use within a 1-mile radius of the site.

3.0 BACKGROUND SITE CONDITIONS

The following conditions existed at the site prior to this investigation:

- Soil samples collected in 1992 indicated that background total chromium concentrations ranged from 27 to 88 parts per million (ppm) at the site.
- In 1992 background total lead concentrations ranged from less than 2.5 to 26 ppm at the site. One soil sample collected in 1992 from a depth of 1 foot below grade contained a lead concentration of 270 ppm.
- Ground water at the site is present at a depth of approximately 8 feet below grade.

- A below grade concrete vault, which acted as secondary containment for six former vats used during chrome plating activities, was removed in 1992. Dimensions of the vault are reported as 12 feet deep, 22 feet wide and 18.5 feet long (Excel Trans, 1992a). A Final Closure Report issued by Excel Trans on November 1, 1992 indicates that the vault was excavated and removed along with approximately 40 yards of soil generated during shoring activities prior to the vault removal (Excel Trans, 1992a). The report indicated that an excavation to a total depth of approximately 10 fbg was completed during vault removal activities. West of the vault an above ground bermed concrete pad that contained two tanks used during plating operations was also decommissioned. On September 9, 1992, two soil samples (SO-1 and SO-2) collected from beneath the floor of the vault at a depth of approximately 10 feet below grade indicated the presence of elevated chromium concentrations. Concentrations of 1,300 and 540 ppm total chromium were detected in the northwest and southeast corners of the vault, respectively (Excel Trans, 1992b). See Figure 3 for the approximate soil sample locations.

- On October 1, 1992, Excel Trans performed a subsurface investigation at the site after removal of the vault. Four soil borings were completed during the investigation. Boring B0 was completed as a control boring in the northeast corner of the site to establish a background level for total chromium at the site. Borings B2 and B3 were completed adjacent to the above ground concrete pad location and Boring B1 was completed adjacent to the northwest corner of the former vault. Soil samples were collected from the borings at depths of approximately 1-2, 5, and 10 fbg (Excel Trans, 1992b). See Figure 3 for the approximate boring locations and Table 1 for a summary of soil sample analysis.

- On October 1, 1992, Excel Trans collected grab water samples from borings B0, B1 and B3. Analysis of these samples indicated the presence of chlorinated solvents trichloroethene (TCE) and tetrachloroethene (PCE) in low concentrations. A grab surface water sample collected from the floor of the vault contained a concentration of 2.5 ppm chromium (Excel Trans, 1992b).

4.0 REGIONAL SOIL AND GROUNDWATER CONTAMINATION

The former Chromex facility is located in an area of Emeryville that has historically been occupied by industrial and manufacturing facilities. Several sites within a 5/8 mile radius of the former Chromex facility are listed as hazardous waste storage, generators, and/or release sites on existing federal and state databases. On February 6, 1995, Alton Geoscience conducted a detailed case review of nearby hazardous waste sites on file at ACHCSA. Files for two sites in

the immediate vicinity of the former Chromex facility with known chromium and/or solvent contamination were reviewed. A summary of conditions for the sites is provided in this section.

4.1 ELECTRO-COATINGS INC. FACILITY

The Electro-Coatings Inc. (ECI) facility is located at 1401 Park Avenue in Emeryville, approximately 100 feet south of the existing Charles Lowe facility at 1400 Park Avenue (Figure 2). ECI was formerly a chrome plating facility. Chrome plating activities ceased in 1989.

Historically, total chromium, hexavalent chromium, and chlorinated solvent concentrations have been detected in groundwater samples collected at the ECI facility since 1977. Recent data collected in July 1994 indicate the contaminants are migrating offsite to the north, northwest and west of the facility in the general direction of the former Chromex facility (Figures 4 and 5). ECI Monitoring Wells MW-4 and MW-16 are located on the northern most edge of the ECI facility directly across Park Avenue from the former Chromex facility. In July 1994, ECI Monitoring Well MW-4 contained concentrations of 6,300 parts per billion (ppb) hexavalent chromium and 6,500 ppb TCE, and Monitoring Well MW-16 contained 320,000 ppb hexavalent chromium and 22,000 ppb TCE. These wells are located approximately 200 feet crossgradient/upgradient from the former Chromex tank vault location. ECI Monitoring Well MW-19 located in Horton Street to the southwest of the former Chromex facility could not be located during site investigation work conducted by Alton Geoscience in December 1994. In 1985 this well contained 20 ppb hexavalent chromium, 20 ppb total chromium, and 91 ppb TCE (Entrix, 1994).

Soil samples collected from onsite soil borings drilled to the south of ECI's main building in 1983 and 1985, detected elevated total chromium concentrations at depths ranging from 4 to 8.5 fbg (maximum concentration of 5,200 ppm total chromium). A boring drilled in an abandoned railway track immediately to the east of ECI contained a maximum total chromium concentration of 6,700 ppm at a depth of 2.5 fbg (Entrix, 1994).

Complete historical results for the ECI facility are presented in a report prepared for ECI by Entrix, Inc., on October 28, 1994, on file at ACHCSA.

4.2 DEL MONTE PLANT 35

The Del Monte Plant 35 is located on two adjacent properties at 4202 Hollis Street (West Parcel) and 1250 Park Avenue (East Parcel) in Emeryville, directly east of the former Chromex site (Figure 2). This facility was a food processing plant from the late 1920's to 1989. Chlorinated solvents were first discovered in the soil and groundwater on the West Parcel in 1989 during

underground storage tank (UST) removal activities. Subsequent site assessment activities were carried out. Analytical results have shown dissolved-phase TCE and PCE concentrations as high as 1,600 ppb TCE and 110 ppb of PCE in 1992. The groundwater flow direction has been shown to be to the west and southwest in the general direction of the former Chomex facility. A groundwater treatment system was installed at the West Parcel of the property in 1993 and was expanded in 1994. Results of soil sample analyses during soil excavation activities on the East Parcel in 1994 indicated adsorbed-phase TCE and PCE concentrations as high as 6,800 ppb and 247,000 ppb, respectively. In addition, concentrations of 1,300 ppb cis-1,2-dichloroethene (cis-1,2-DCE), and 8,900 ppb vinyl chloride were detected in soil samples collected from the east parcel excavation (CH2M Hill, 1994 and 1995).

Del Monte Monitoring Well MW-12 is located offsite in a downgradient direction from the Del Monte West parcel, approximately 480 feet directly upgradient of the former Chromex facility (Figure 5). In March 1994, this well contained a dissolved-phase TCE concentration of 170 ppb and on December 29, 1994, a dissolved-phase TCE concentration of 28 ppb (CH2M Hill, 1995). Complete results for site assessment and remediation activities conducted at the Del Monte facility are on file at the ACHCSA.

5.0 FIELD ACTIVITIES

5.1 DRILLING AND SOIL SAMPLING

On December 19 and 20, 1994, Alton Geoscience conducted a supplementary site assessment at the Former Chromex Facility, Charles Lowe Company. The investigation included the drilling of six soil borings (B-1 through B-6) and the installation of three groundwater monitoring wells (MW-1 through MW-3) to an approximate depth of 24 fbg. Refer to Figure 6 for the soil boring and well locations. The groundwater monitoring wells were developed approximately 72 hours after installation using a surge block and bailer.

Soil samples were collected at depth intervals of 5 feet or less using a California-modified split spoon sampler. Refer to Appendix A for details regarding general field procedures, boring logs, and groundwater monitoring well construction details. See Figure 7 for a geologic cross section showing soil types beneath the site.

On March 17, 1995, Alton Geoscience collected additional soil samples from a depth of 5 fbg immediately adjacent to Soil Borings B-1, B-2, B-4, and B-5. These samples were collected using a hand-auger as per standard regulatory protocol. Onsite activities were observed by Mr. Brian Oliva of the ACHCSA.

All soil samples collected during drilling and hand-augering activities were submitted to a state-certified laboratory, and select soil samples were analyzed for halogenated volatile organic compounds (HVOC) using EPA Method 8010, total chromium and total lead using EPA Method 6010, and hexavalent chromium using EPA Method 7196. In addition, the soil sample collected from MW-3 at 6.5 fbg was analyzed for PCBs using EPA Method 8080 and total recoverable petroleum hydrocarbons (TRPH) using EPA Method 418.1. The results of the laboratory analysis of soil samples are listed in Table 2, and select results are shown on Figure 8. Refer to Appendix B for a description of the analytical methods used and copies of the official Laboratory Reports, Quality Assurance/Quality Control (QA/QC) Reports, and Chain of Custody Records.

5.2 WELL ELEVATION SURVEY

On December 23, 1994, the new wells were surveyed relative to a city of Emeryville benchmark by Ron Archer, Civil Engineer Inc. Refer to Appendix C for the survey data.

5.3 FLUID LEVEL MONITORING AND GROUNDWATER SAMPLING

On December 23, 1994, fluid levels were measured and groundwater samples collected from the monitoring wells as per standard regulatory protocol. The groundwater samples were submitted to a state-certified laboratory for analysis for HVOC's using EPA Method 601, total chromium and total lead using EPA Method 200.7, and hexavalent chromium using EPA method 7196. Fluid levels were measured again on January 5, 1995 due to anomalous data collected during the previous reading. A groundwater elevation contour map using the January 5, 1995 data is shown in Figure 9. The results of the laboratory analysis of water samples are listed in Tables 3 and 4, and select results are shown on Figure 10. Refer to Appendix B for a description of the analytical methods used and copies of the official Laboratory Reports, Quality Assurance/Quality Control (QA/QC) Reports, and Chain of Custody Records.

5.4 SOIL AND WATER DISPOSAL

Approximately 3.5 cubic yards of soil cuttings were generated during drilling activities. The soil was stockpiled on and covered with plastic sheeting pending disposal at a certified waste disposal facility. Approximately 500 gallons of rinsate water and groundwater generated during well development were stored onsite in DOT-approved drums pending transport and disposal at a certified waste disposal facility.

6.0 FINDINGS AND CONCLUSIONS

Hydrogeology

- Average depth to groundwater at the site is approximately 8 fbg. The local hydraulic gradient is calculated to be approximately 0.007 foot-per-foot towards the northwest.

Soil Samples

- Hexavalent chromium concentrations of 1.2 and 27 ppm were detected in soil samples B-4 at 11.5 fbg and B-5 at 5 fbg, respectively. No hexavalent chromium concentrations were detected in any other soil samples collected at the site. The California Code of Regulations [CCR] Title 22, Article 11, Section 66699 total threshold limit concentration (TTLC) for hexavalent chromium is 500 ppm. The TTLC is used by the State of California to determine if a waste is a hazard to human health and safety, livestock and wildlife. The two hexavalent chromium concentrations detected at the site are significantly below the state TTLC level of 500 ppm. Laboratory results for soil samples collected at 5 fbg (27 ppm) and 11.5 fbg (vault floor level) (1.2 ppm), indicate that no significant (ie. 500 ppm or greater) hexavalent chromium soil contamination exists at the site in the vicinity of the former tank vault.

- Total chromium concentrations ranging from 19 to 91 ppm were detected in all soil samples collected at the site during this investigation. A maximum total chromium concentration of 91 ppm was detected in Boring B-5 at a depth of 5 fbg. Total chromium concentrations detected in soil samples collected from borings at the site during this investigation and borings completed during previous investigations (27 to 88 ppm [Excel Trans, 1992b]), are within the normal background range for soils of this type. Typical total chromium concentrations for shaley and sandy sediments range from 35 to 90 ppm (Drever, 1988). In addition, the concentrations detected are well below the CCR Title 22 TTLC of 2,500 ppm for chromium. For comparison, total chromium concentrations detected in soil samples collected at ECI ranged up to 6,700 ppm with several samples exceeding the TTLC.

- Elevated total chromium concentrations of 1,300 and 540 ppm were reported by Excel Trans in 1992 for two grab soil samples collected during vault closure activities. Soil Borings B-4 and B-2, completed during this investigation adjacent to the previous sample locations in the vault, did not detect elevated total chromium concentrations. Soil containing elevated total chromium concentrations may have been removed from the tank vault area during excavation for the installation of shoring prior to removing the vault

and/or is very limited in extent. The elevated chromium concentrations detected in 1992 are well below the CCR Title 22 TTLC of 2,500 ppm for chromium.

- Total lead concentrations were detected in all soil samples collected at the site during this investigation. A maximum total lead concentration of 12 ppm was detected in Boring B-5 at a depth of 5 fbg. Total lead concentrations detected during this investigation (3.4 to 12 ppm) and in borings (except B0 at 1 fbg) completed during previous investigations (less than 2.5 to 26 ppm [Excel Trans, 1992b]), are within the normal background range for soils of this type. Typical total lead concentrations for shaley and sandy sediments range from 7 to 20 ppm (Drever, 1988). Soil sample B0 collected by Excel Trans in 1992 from a depth of 1 foot below grade (Figure 3), contained a total lead concentration of 270 ppm. A total lead concentration of 3.5 ppm was detected at a depth of 5 fbg in boring B0. The shallow elevated lead concentration detected in 1992 likely reflects limited surface lead concentrations in soil resulting from past site activities. All lead concentrations detected at the site are well below the CCR Title 22 TTLC of 1,000 ppm for lead in soil.

- Adsorbed-phase HVOC concentrations (chlorinated solvents) were detected in two soil samples collected at the site. A TCE concentration of 8.0 ppb was detected in boring B-5 (adjacent to the former vault) at 11.5, fbg and a cis-1,2-DCE concentration of 30 ppb was detected in boring MW-3 (upgradient of the former vault) at 16.5 fbg. No other soil samples contained detectable concentrations of chlorinated solvents. The analytes detected are considered dense non-aqueous phase liquids (DNAPL), which have a higher density than water. In liquid form, these compounds will sink through permeable aquifer material and dissolve through the entire vertical section of the aquifer through which they have travelled. The concentrations of chlorinated solvents detected in the two soil samples are likely a result of dissolved-phase HVOC's present in groundwater (average depth to water of 7-8 fbg at the site) re-adsorbing to soil particles. No HVOC source was identified in the vicinity of the former tank vault location during this investigation.

- A TRPH concentration of 43 ppm was detected in soil boring MW-3 at a depth of 6.5 fbg. This concentration may have resulted from previous surface activities. Hydraulic lifting equipment was located at the site in the immediate vicinity of MW-3. The TRPH concentration detected is below the typical action level for adsorbed-phase hydrocarbons of this type and is likely limited in extent.

Groundwater Samples

- A dissolved-phase hexavalent chromium concentration of 0.025 ppm was detected in Monitoring Well MW-2. Hexavalent chromium was not detected in water samples

Chromex site). Concentrations of chromium, hexavalent chromium, and HVOC detected in the former Chromex monitoring wells may result from offsite sources.

7.0 REFERENCES

CH2M Hill, 1994, Report on Focused Soil Removal: East Parcel Del Monte Plant 35, Emeryville, California, December.

CH2M Hill, 1994, Quarterly Groundwater Monitoring and Groundwater Extraction and Treatment System Status Report: Del Monte Plant 35 - West Parcel, 4204 Hollis Street, Emeryville, California, January 31.

Drever, J.I., 1988, The Geochemistry of Natural Waters: Prentice Hall Publishing Company, Englewood Cliffs, NJ, p. 328-329.

Entrix, Inc., 1994, Summary of Site Conditions: Electro-Coatings, Inc. Facility, 1401 and 1421 Park Avenue, Emeryville, California, October 28.

Environmental Science and Engineering, Inc., 1994a, Phase I Environmental Site Assessment: Former Chromex Plating Facility, 1400 Park Avenue, Emeryville, California, August 23,

Environmental Science and Engineering, Inc., 1994b, Workplan for Phase II Environmental Site Assessment: Former Chromex Inc., 1400 Park Avenue, Emeryville, California, September 29.

Excel Trans, Inc., 1992a, Final Closure Report: Chromex Plating Facility, 1400 Park Avenue, Emeryville, California, November 1.

Excel Trans, Inc., 1992b, Summary of Subsurface Investigation and Immediate Mitigation Proposal: Chromex, 1400 Park Avenue, Emeryville, California, November 4.

Helley, E.S., Laijoie, K.R., Spangle, W.E., and Blair, M.L., 1979, Flatland Deposits of the San Francisco Bay Region, California: U.S. Geological Survey Professional Paper 943.

1 MILE 3/4 1/2 1/4 0 1 MILE

SCALE 1:24,000

Source: U.S.G.S. Map
Oakland West Quadrangle
California
7.5 Minute Series

VICINITY MAP

Former Chromex Facility
1400 Park Avenue
Emeryville, California

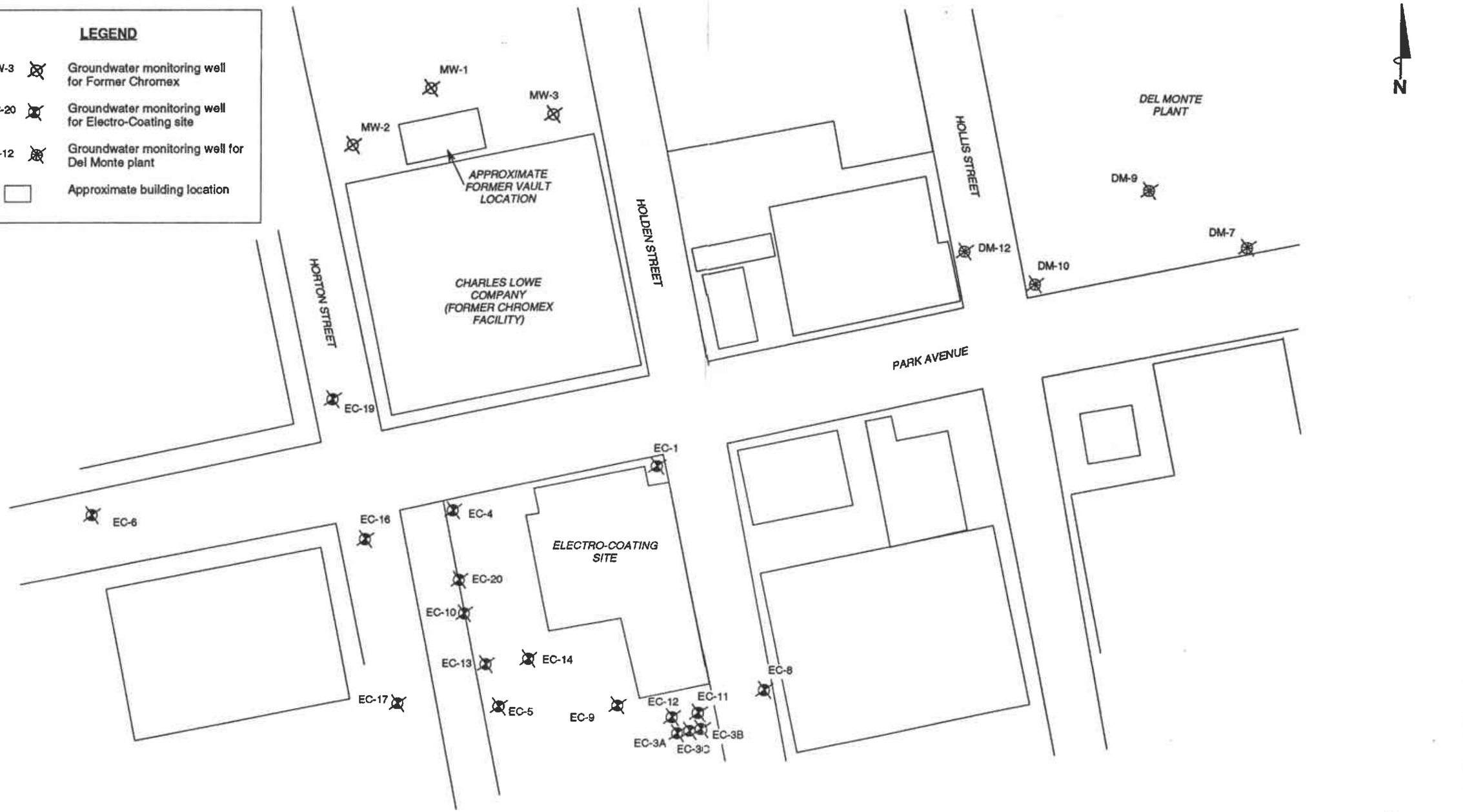
ALTON GEOSCIENCE
Livermore, California

Project No. 41-0042

FIGURE 1

LEGEND

- MW-3 — Groundwater monitoring well for Former Chromex
- EC-20 — Groundwater monitoring well for Electro-Coating site
- DM-12 — Groundwater monitoring well for Del Monte plant
- Approximate building location



ADJACENT PROPERTIES LOCATION MAP

Former Chromex Facility
1400 Park Avenue
Emeryville, California

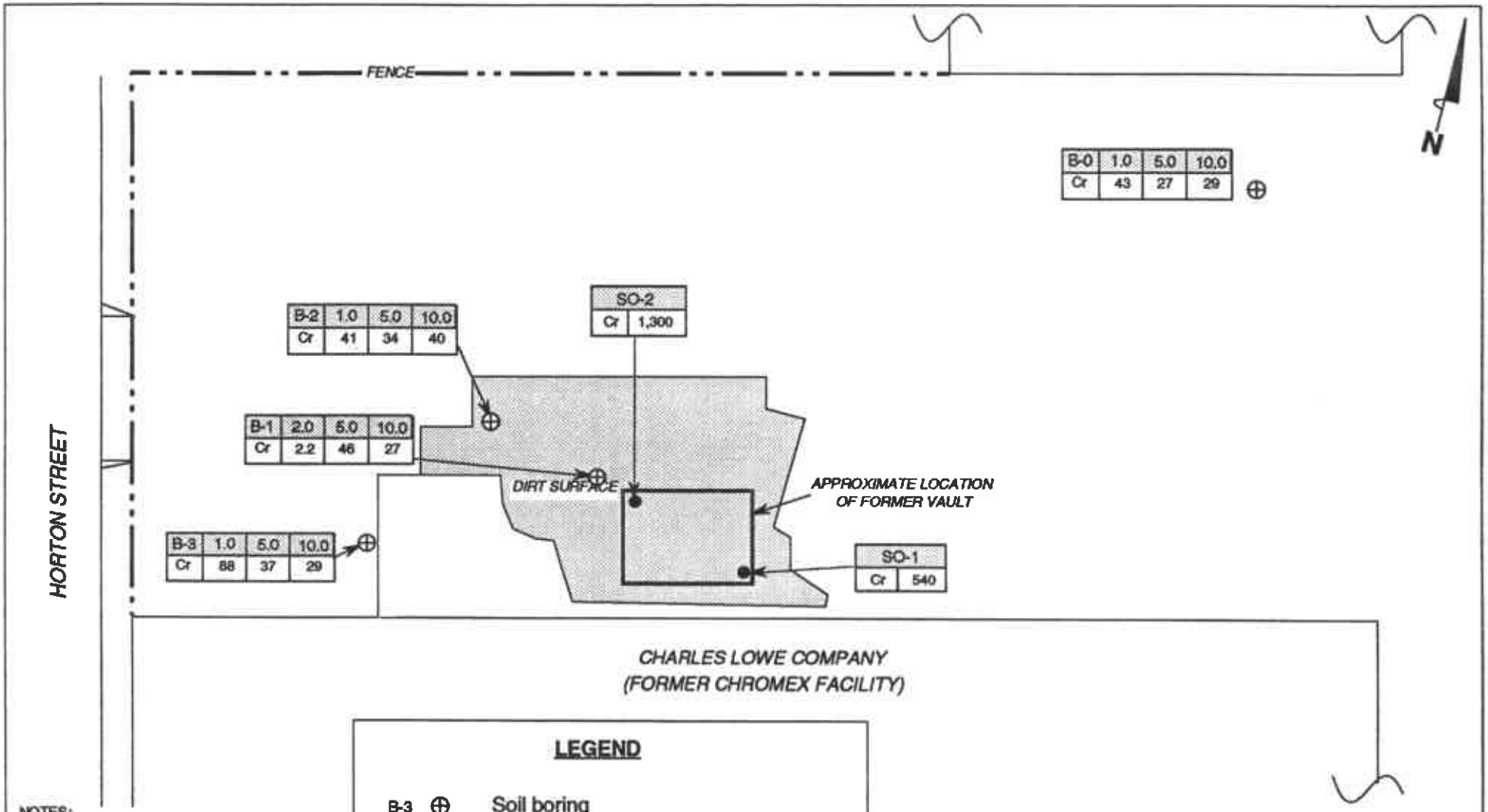
FIGURE 2

ALTON GEOSCIENCE
Livermore, California

SCALE (feet)
0 50 100

Source: Modified from a map created by CH2M Hill, 1995

41-0042/11X17 SITE PLAN 04/21/954



LEGEND

B-3 ⊕ Soil boring

SO-2 ● Soil sample location

MW-3	Depth
Cr	

Adsorbed-phase concentrations in ppm (depth in feet)

NOTES:
Sample locations and results taken from Excel Trans. Inc. report, November 4, 1992. ND = not detected at or above method detection limits. Cr = chromium. ppm = parts per million.

SCALE (FEET)

0 30 60

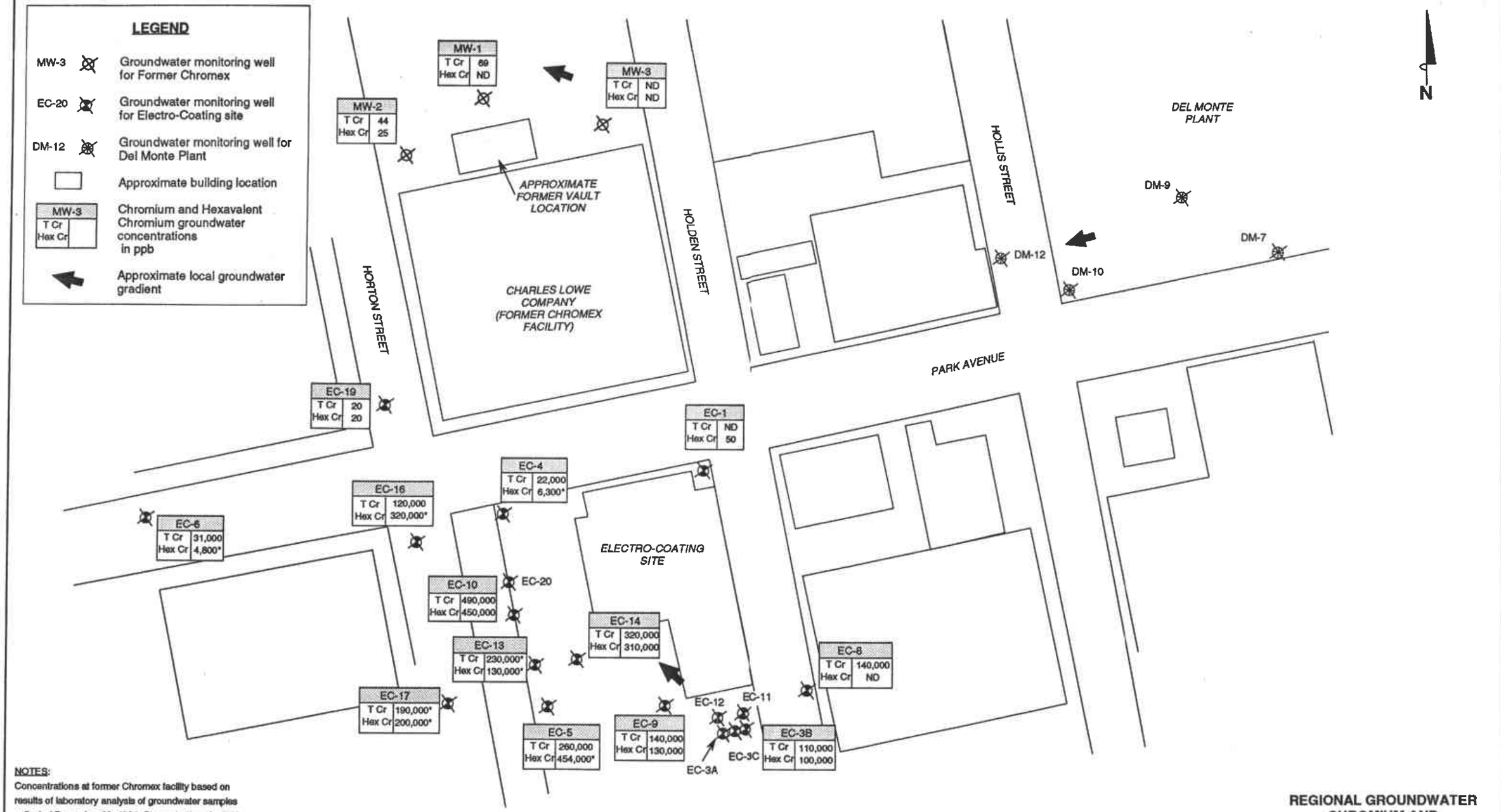
ALTON GEOSCIENCE
Livermore, California

Source: Modified from a map created by Ron Archer Civil Engineering Inc.

SUMMARY OF PREVIOUS INVESTIGATION RESULTS

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 3



NOTES:
Concentrations at former Chromex facility based on results of laboratory analysis of groundwater samples collected December 29, 1994. Concentrations for ECI facility based on results reported for October, November 1991 in Entrix, Inc. report, October 28, 1994 except where 1994 results are denoted by *. T Cr = total chromium; Hex Cr = hexavalent chromium; ppb = parts per billion.

ALTON GEOSCIENCE
Livermore, California

SCALE (feet)
0 50 100

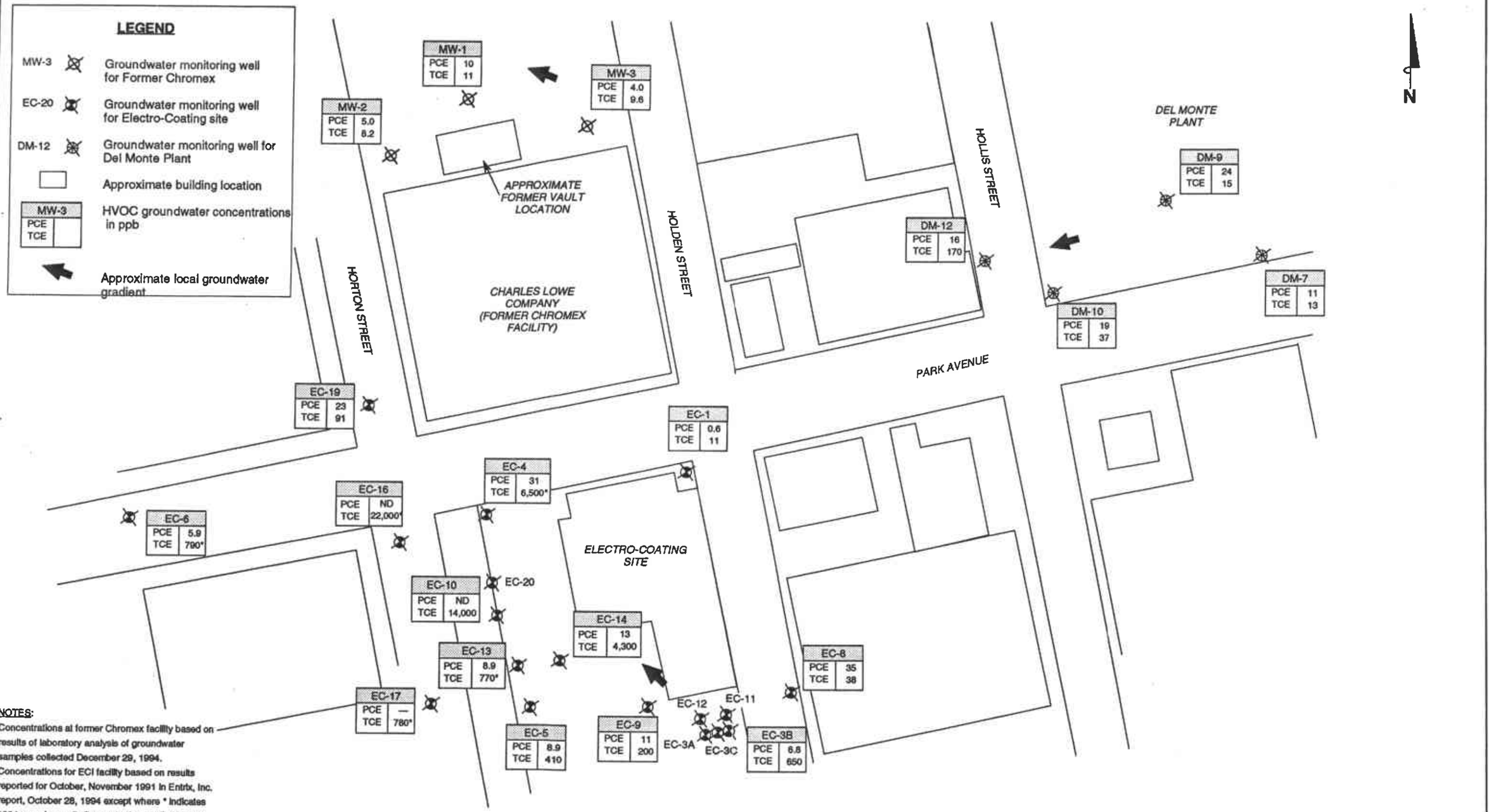
Source: Modified from a map created by CH2M Hill, 1995

REGIONAL GROUNDWATER CHROMIUM AND HEXAVALENT CHROMIUM CONCENTRATIONS

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 4

41-0042/11X17 SITE PLAN 04/21/954



NOTES:
Concentrations at former Chromex facility based on results of laboratory analysis of groundwater samples collected December 29, 1994. Concentrations for ECI facility based on results reported for October, November 1991 in Entrix, Inc. report, October 28, 1994 except where * indicates 1994 sample result. Concentrations at Del Monte Plant are maximum concentrations reported in CH2M Hill, January 31, 1995. HVOC = halogenated volatile oraganic compounds; PCE = tetrachloroethene; TCE = trichloroethene; ppb = parts per billion.

ALTON GEOSCIENCE
Livermore, California

SCALE (feet)
0 50 100

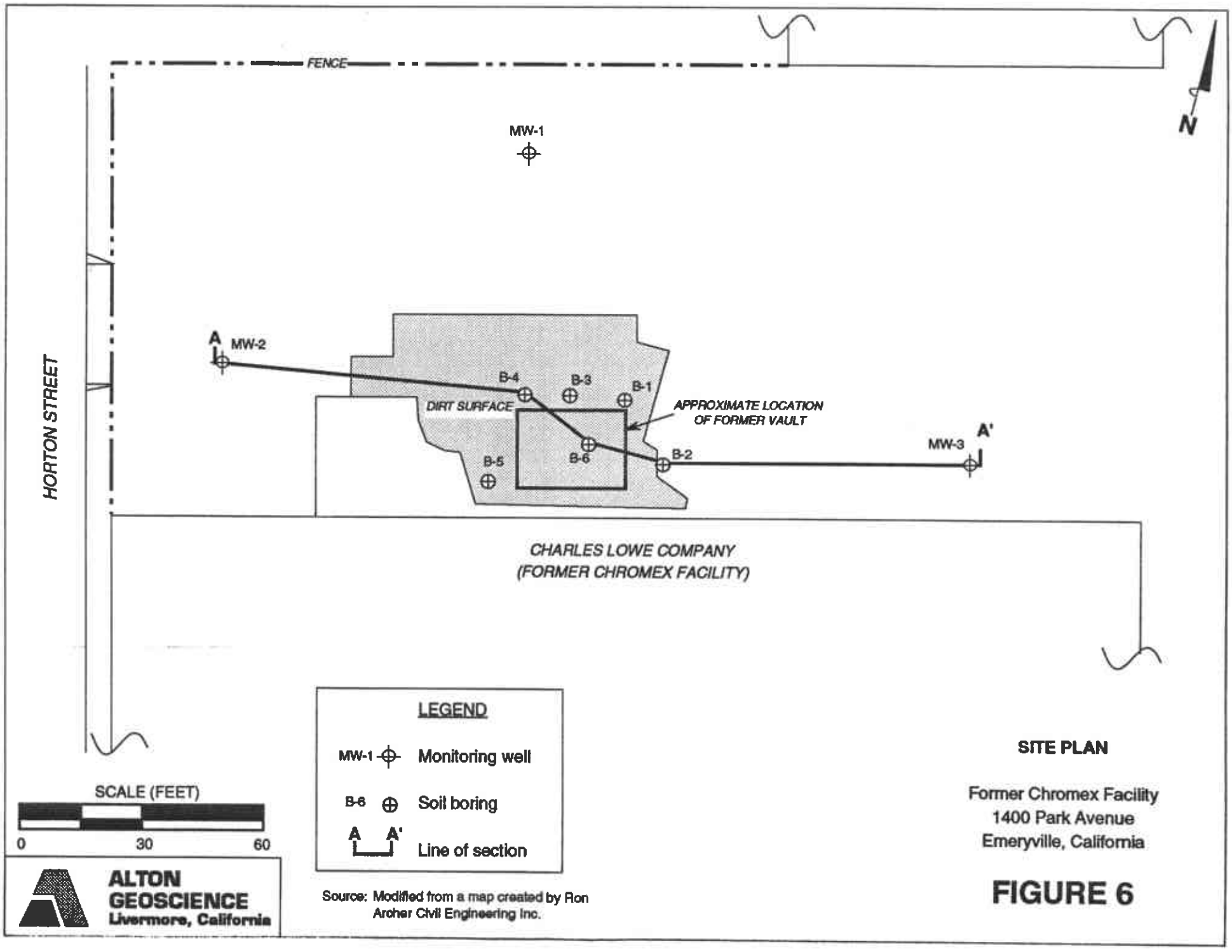
Source: Modified from a map created by CH2M Hill, 1995

REGIONAL GROUNDWATER HVOC CONCENTRATIONS

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 5

41-0042/11X17 SITE PLAN 04/21/954



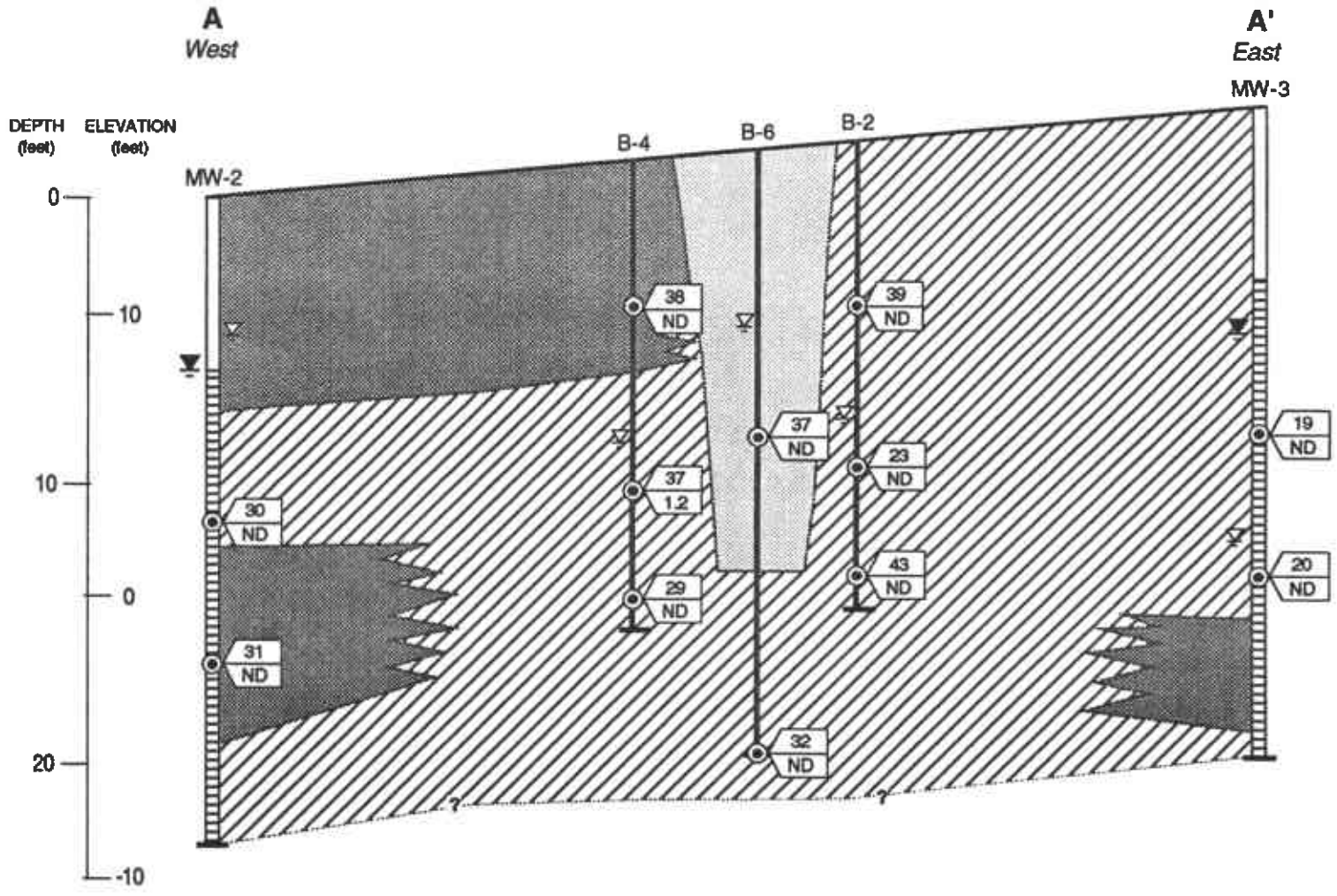
ALTON GEOSCIENCE
Livermore, California

Source: Modified from a map created by Ron Archer Civil Engineering Inc.

SITE PLAN

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 6



10

10

SCALE (feet)

Vertical exaggeration = 25:1

LEGEND

- Gravel fill
- Clayey gravel
- Clay
- Silty clay

ND / ND — Total chromium concentration (ppm) / Hexavalent chromium concentration (ppm)

- Blank
- Screened interval
- First encountered water level 12-20-94
- Stabilized water level as of 12-27-94

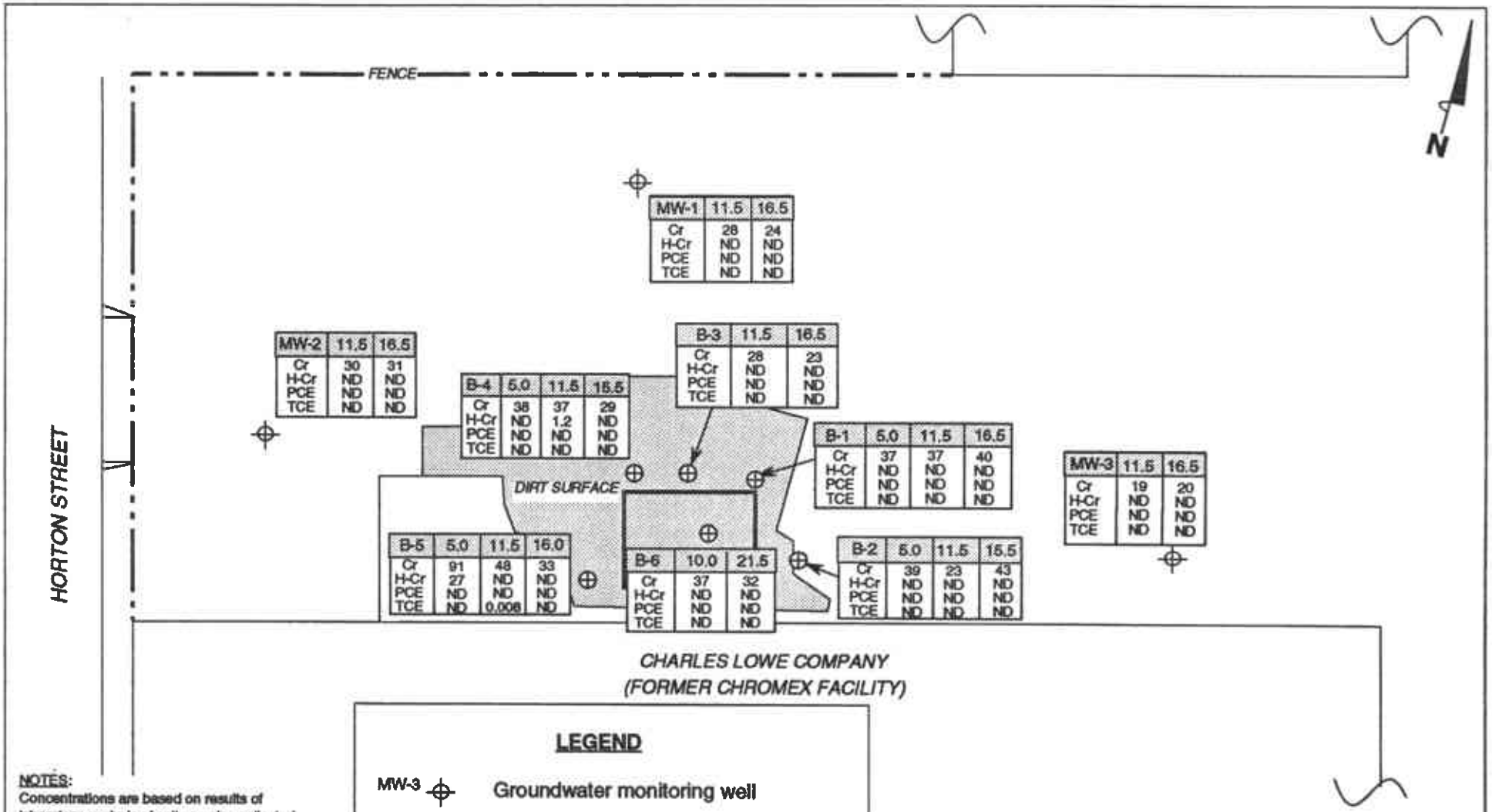
CROSS SECTION A-A'

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 7

ALTON GEOSCIENCE
Livermore, California

41-0042/A-A' 1-18-95



LEGEND

MW-3 ⊕ Groundwater monitoring well

B-6 ⊕ Soil boring

MW-3	Depth
Cr	
H-Cr	
PCE	
TCE	

Adsorbed-phase concentrations in ppm (depth in feet)

NOTES:
Concentrations are based on results of laboratory analysis of soil samples collected December 19 and 20, 1994 and March 17, 1995. ND = not detected at or above method detection limits. Cr = chromium; H-Cr = hexavalent chromium; PCE = tetrachloroethene; TCE = trichloroethene. ppm = parts per million.

SCALE (FEET)

0 30 60

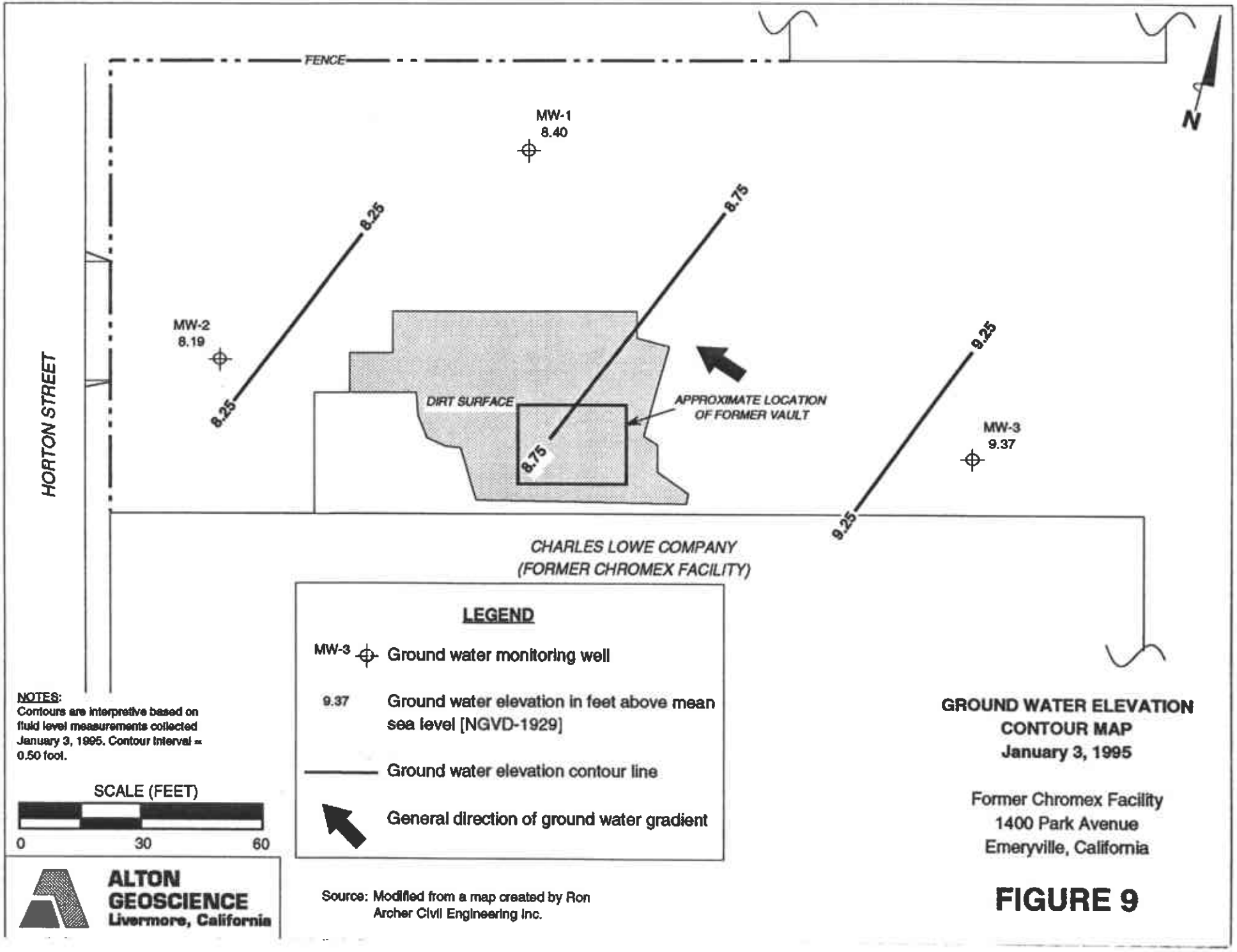
ALTON GEOSCIENCE
Livermore, California

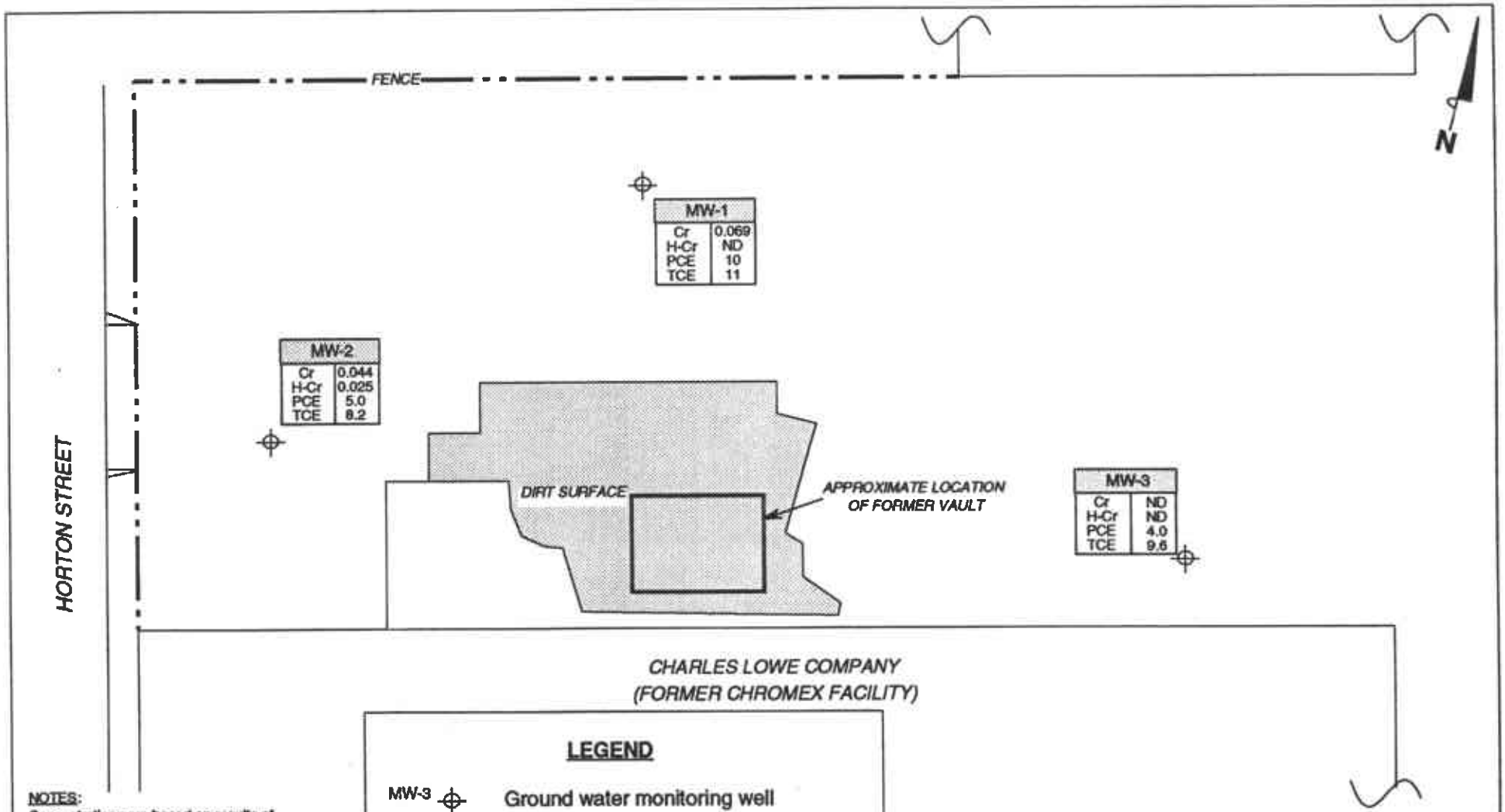
Source: Modified from a map created by Ron Archer Civil Engineering Inc.

ADSORBED-PHASE CONCENTRATIONS
December 19 and 20, 1994 and March 17, 1995

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 8


FENCE
N
MW-1
8.40
MW-2
8.19
8.25
8.25
8.75
8.75
DIRT SURFACE
APPROXIMATE LOCATION
OF FORMER VAULT
MW-3
9.37
9.25
9.25
HORTON STREET
CHARLES LOWE COMPANY
(FORMER CHROMEX FACILITY)
LEGEND
MW-3 Ground water monitoring well
9.37 Ground water elevation in feet above mean sea level [NGVD-1929]
Ground water elevation contour line
General direction of ground water gradient
NOTES:
Contours are interpretive based on fluid level measurements collected January 3, 1995. Contour interval = 0.50 foot.
SCALE (FEET)
0
30
60
ALTON GEOSCIENCE
Livermore, California
Source: Modified from a map created by Ron Archer Civil Engineering Inc.
GROUND WATER ELEVATION CONTOUR MAP
January 3, 1995
Former Chromex Facility
1400 Park Avenue
Emeryville, California
FIGURE 9



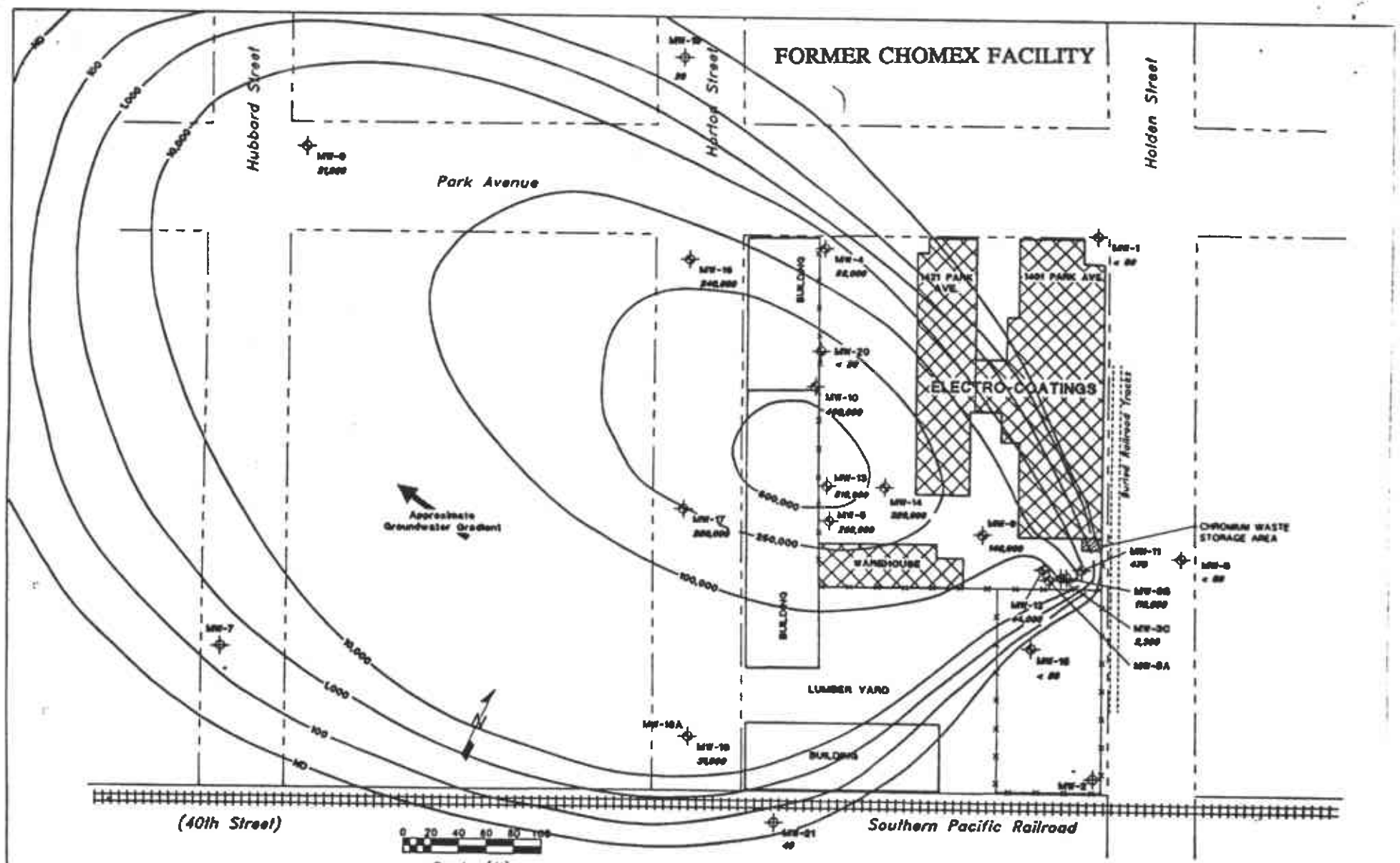
ALTON GEOSCIENCE
Livermore, California

Source: Modified from a map created by Ron Archer Civil Engineering Inc.

DISSOLVED-PHASE CONCENTRATIONS
December 27, 1994

Former Chromex Facility
1400 Park Avenue
Emeryville, California

FIGURE 10



LEGEND

- Fence or brick wall
- Buildings
- Property Line
- 100,000 Concentration Contour (ug/l)
- Monitoring Wells (found 1991)
- Monitoring Wells (not found 1991)

FIGURE 11

Taken from a report prepared for Electro-Coatings, Inc. by Entrix, Inc. (October 28, 1994)

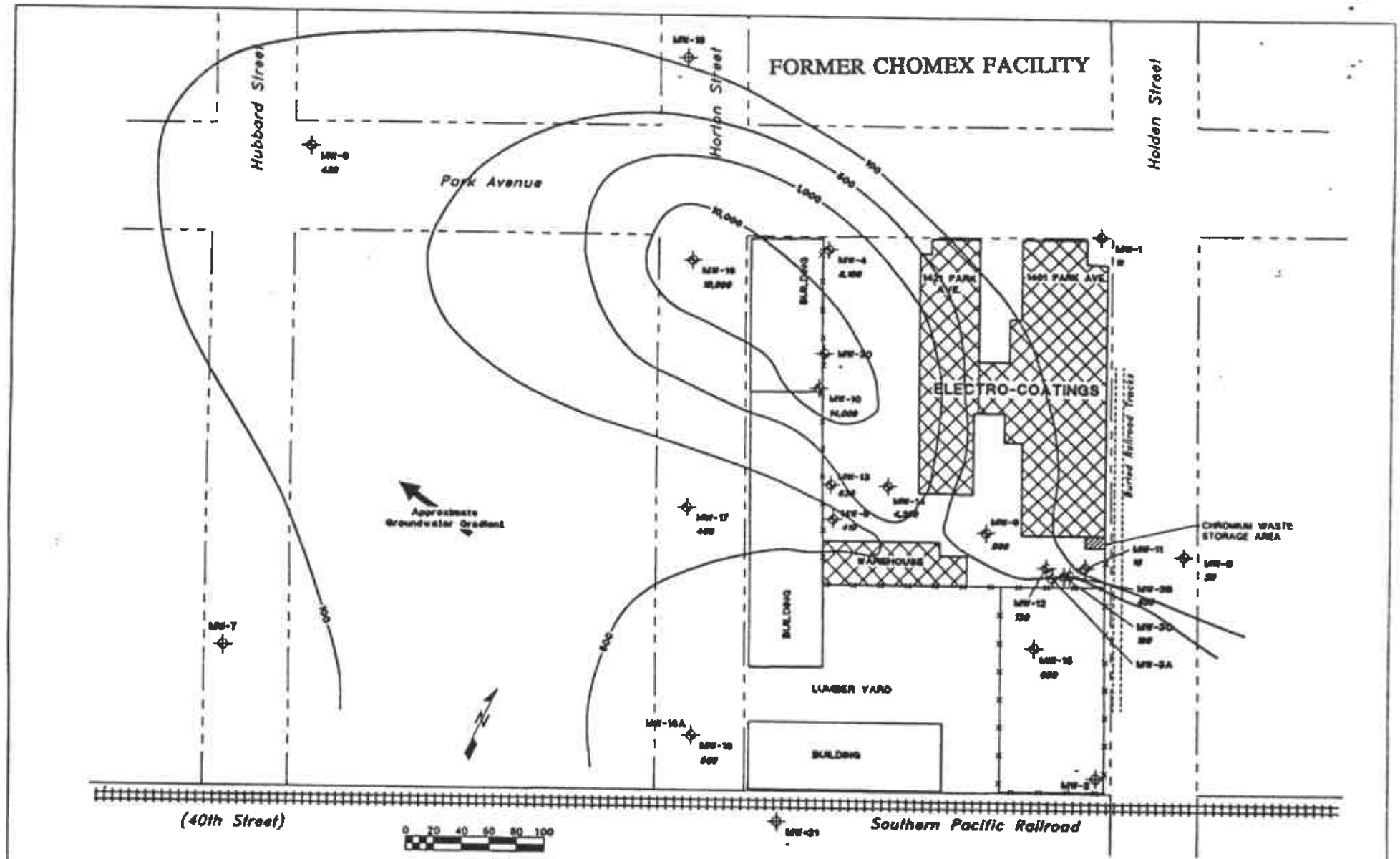
Total Chromium - October and November 1991
1401 and 1421 Park Avenue - Emeryville

Electro-Coatings, Inc.

Emeryville, California

Project: 378402	Drafted/Approved: RBL
File Name: ECBASE2.DWG	Approved: SM
Creation Date: 10/10/94	Sheet 1 of 1
Revision Date: 10/28/94	
Revision Level: 11	

[redacted]
LLLLL
LLLLL
LLLLL
LLLLL
WALNUT CREEK



LEGEND

- Fence or brick wall
- Buildings
- Property Line
- 1,000 — Concentration Contour (ug/l)
- Monitoring Wells (found 1991)
- Monitoring Wells (not found 1991)

FIGURE 12

Taken from a report prepared for Electro-Coatings, Inc. by Entrix, Inc. (October 28, 1994)

Trichloroethylene - October and November 1991
1401 and 1421 Park Avenue - Emeryville

Electro-Coatings, Inc.

Emeryville, California

Project: 376402	Drafts person: RBL
File Name: ECBASE2.DWG	Approved: SM
Creation Date: 10/10/94	Sheet 1 of 1
Revision Date: 10/28/94	
Revision Level: 11	

WALNUT CREEK CALIFORNIA

Table 1

Summary of Excel Trans. Soil Sample Analysis
October 1992

Former Chromex Facility

Sample ID	Date	Depth (feet)	Total Chromium (ppm)	Total Lead (ppm)
SO-1	9/22/92	NA	540	7.0
SO-2	9/22/92	NA	1,300	26
B-0	10/1/92	1.0	43	270
	10/1/92	5.0	27	3.5
	10/1/92	10.0	29	3.0
B-1	10/1/92	2.0	2.2	ND
	10/1/92	5.0	46	4.5
	10/1/92	10.0	27	3.8
B-2	10/1/92	1.0	41	11
	10/1/92	5.0	34	4.0
	10/1/92	10.0	40	5.0
B-3	10/1/92	1.0	88	6.5
	10/1/92	5.0	37	3.0
	10/1/92	10.0	29	4.0

NOTES:

ppm = parts per million
NA = not applicable
ND = not detected at or above method detection limit

Table 2

Summary of Alton Geoscience Soil Sample Analysis
December 1994 and March 1995

Former Chromex Facility

Sample ID	Date	Depth (feet)	HVOC (ppb)	Total Chromium (ppm)	Total Lead (ppm)	Hexavalent Chromium (ppm)	PCB (ppm)	TRPH (ppm)
B-1	3/17/95	5.0	ND	37	6.4	ND	—	—
	12/19/94	11.5	ND	37	4.2	ND	—	—
	12/19/94	16.5	ND	40	5.5	ND	—	—
B-2	3/17/95	5.0	ND	39	10	ND	—	—
	12/19/94	11.5	ND	23	4.5	ND	—	—
	12/19/94	15.5	ND	43	5.2	ND	—	—
B-3	12/19/94	11.5	ND	28	5.5	ND	—	—
	12/19/94	16.5	ND	23	7.1	ND	—	—
B-4	3/17/95	5.0	ND	38	6.6	ND	—	—
	12/19/94	11.5	ND	37	5.8	1.2	—	—
	12/19/94	15.5	ND	29	5.1	ND	—	—
B-5	3/17/95	5.0	ND	91	12	27	—	—
	12/19/94	11.5	8.0*	48	4.7	ND	—	—
	12/19/94	16.0	ND	33	3.7	ND	—	—
B-6	12/20/94	10.0	ND	37	10	ND	—	—
	12/20/94	21.5	ND	32	7.2	ND	—	—
MW-1	12/19/94	11.5	ND	28	4.5	ND	—	—
	12/19/94	16.5	ND	24	4.3	ND	—	—
MW-2	12/19/94	11.5	ND	30	5.4	ND	—	—
	12/19/94	16.5	ND	31	3.4	ND	—	—

Table 2

Summary of Alton Geoscience Soil Sample Analysis
December 1994 and March 1995

Former Chromex Facility

Sample ID	Date	Depth (feet)	HVOC (ppb)	Total Chromium (ppm)	Total Lead (ppm)	Hexavalent Chromium (ppm)	PCB (ppm)	TRPH (ppm)
MW-3	12/20/94	6.5	—	—	—	—	ND	43
	12/20/94	11.5	ND	19	4.4	ND	—	—
	12/20/94	16.5	30**	20	9.5	ND	—	—

NOTES:

ppm = parts per million
HVOC = halogenated volatile organic compounds
PCB = polychlorinated biphenyl
TRPH = total recoverable petroleum hydrocarbons
* = trichloroethene
** = cis-1,2-dichloroethene
ppb = parts per billion

Table 3

Summary of Ground Water Monitoring and Analysis

Former Chromex Facility

Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Ground Water Elevation (feet)	Total Chromium (ppm)	Total Lead (ppm)	Hexavalent Chromium (ppm)
MW-1	12/27/94	16.71	8.52	8.19	0.069	ND	ND
	1/3/95		8.31	8.40	—	—	—
MW-2	12/27/94	13.99	8.02*	5.97	0.044	ND	0.025
	1/3/95		5.80	8.19	—	—	—
MW-3	12/27/94	17.69	8.62	9.07	ND	ND	ND
	1/3/95		8.32	9.37	—	—	—

NOTES: ppm = parts per million
* = anomalous result
— = not measured/not analyzed
ND = not detected at or above method detection limit

Table 4

Summary of Ground Water HVOC Analysis

Former Chromex Facility

Well ID	Date	Chlorobenzene (ppb)	cis-1,2-DCE (ppb)	trans- 1,2-DCE (ppb)	PCE (ppb)	Trichloroethene (ppb)
MW-1	12/27/94	1.5	2.5	ND	10	11
MW-2	12/27/94	ND	2.0	ND	5.0	8.2
MW-3	12/27/94	ND	23	0.69	4.0	9.6

NOTES:

HVOC = halogenated volatile organic compounds

ND = not detected at or above method detection limits

DCE = dichloroethene

PCE = tetrachloroethene

ppb = parts per billion

GENERAL FIELD PROCEDURES

A description of the general field procedures used during site investigation and monitoring activities is presented below. For an overview of protocol, refer to the appropriate section(s).

DRILLING AND SOIL SAMPLING

Soil borings are drilled using continuous-flight, hollow-stem augers. Borings that are not completed as monitoring wells are grouted to within 5 feet of the ground surface with a cement/bentonite slurry. The remaining 5 feet is filled with concrete.

Soil samples are obtained for soil description, field hydrocarbon vapor screening, and possible laboratory analysis. Soil samples are retrieved from the borings by one of two methods: 1) continuously, using a 5-foot-long, continuous-core barrel sampler advanced into the soil with the lead auger; sample tubes are driven into the core with a mallet, or 2) at 2.5- or 5-foot intervals, using a standard split-spoon sampler lined with four 1.5-inch-diameter stainless steel or brass sample inserts. The split-spoon sampler is driven approximately 18 inches beyond the lead auger with a 140-pound hammer dropped from a height of 30 inches.

For hand auger borings and hand-held, power-driven auger borings, soil samples are retrieved using a hand-driven slide hammer lined with a 1.5-inch-diameter stainless steel sample tube.

During drilling activities, soil adjacent to the laboratory sample is screened for combustible vapors using a combustible gas indicator (CGI) or equivalent field instrument. For each hydrocarbon vapor screening event, a 6-inch-long by 2.5-inch-diameter sample insert is filled approximately 1/3 full with the soil sample, capped at both ends, and shaken. The probe is then inserted through a small opening in the cap, and a reading is taken after approximately 15 seconds and recorded on the boring log. The remaining soil recovered is removed from the sample insert or sampler, and described in accordance with the Unified Soil Classification System. For each sampling interval, field estimates of soil type, density/consistency, moisture, color, and grading are recorded on the boring logs.

SOIL SAMPLE HANDLING

Soil sample handling follows the same basic protocol for both drilling and excavation activities. Upon retrieval, soil samples are immediately removed from the sampler, sealed with Teflon sheeting and polyurethane caps, and wrapped with tape. Each sample is labeled with the project number, boring/well number, sample depth, geologist's initials, and date of collection. After the samples have been labeled and documented in the chain of custody record, they are placed in a cooler with ice at approximately 4 degrees Celsius (°C) prior to and during transport to a state-certified laboratory for analysis. Samples not selected for immediate analysis may be transported in a cooler with ice and archived in a frostless refrigerator at approximately 4°C for possible future testing.

MONITORING WELL INSTALLATION

Monitoring wells are constructed of 4-inch-diameter, flush-threaded Schedule 40 PVC blank and screened (0.020-inch slot size) casing. Where possible, the screened interval will extend at least 10 feet above, and 10 to 20 feet below, the top of the groundwater table. The annular space surrounding the screened casing is backfilled with Sri Supreme # 8 sand (filter pack) to approximately 2 feet above the top of the screened section.

Recovery wells are constructed of 6-inch diameter flush-threaded Schedule 40 PVC blank and screened (0.030-inch slot size) casing. Where possible, the screened interval will extend at least 10 feet above, and 10 to 20 feet below, the top of the groundwater table. The annular space surrounding the screened casing is backfilled with medium aquarium sand (filter pack) to approximately 2 feet above the top of the screened section.

Vapor Extraction wells are constructed of 4-inch diameter flush-threaded Schedule 40 PVC blank and screened (0.030-inch slot size) casing. The annular space surrounding the screened casing is backfilled with medium aquarium sand (filter pack) to approximately 1 feet above the top of the screened section.

During monitoring and recovery well construction, the filter pack is completed by surging with a rig-mounted surge block. A 2 to 3 foot thick bentonite annular seal is placed above the filter pack. The remaining annular space is grouted with Portland cement and/or bentonite grout to the surface. Utility access boxes are installed slightly above grade. Locking, watertight caps are installed to prevent unauthorized access to the well, and limit infiltration of surface fluids.

FLUID LEVEL MONITORING

Fluid levels are monitored in the wells using an electronic interface probe with conductance sensors. The presence of liquid-phase hydrocarbons is verified using a hydrocarbon-reactive paste. The depth to liquid-phase hydrocarbons and water is measured relative to the well box top or top of casing. Well box or casing elevations are surveyed to within 0.02 foot relative to a county or city bench mark.

GROUNDWATER PURGING AND SAMPLING

Groundwater monitoring wells are purged and sampled in accordance with standard regulatory protocol. Typically, monitoring wells that contain no liquid-phase hydrocarbons are purged of groundwater prior to sampling so that fluids sampled are representative of fluids within the formation. Temperature, pH, and specific conductance are typically measured after each well casing volume has been removed. Purging is considered complete when these parameters vary less than 10% from the previous readings, or when four casing volumes of fluid have been removed. Samples are collected without further purging if the well does not recharge within 2 hours to 80% of its volume before purging. The purged water is either pumped directly into a licensed vacuum truck or temporarily stored in labeled drums prior to transport to an appropriate treatment or recycling facility. If an automatic recovery system (ARS) is operating at the site, purged water may be pumped into the ARS for treatment.

Groundwater samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.

CHAIN OF CUSTODY PROTOCOL

Chain of custody protocol is followed for all soil and groundwater samples selected for laboratory analysis. The chain of custody form(s) accompanies the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis.

DECONTAMINATION

Drilling and Soil Sampling

Drilling equipment is decontaminated by steam cleaning before being brought onsite. The augers are also steam cleaned before each new boring is commenced. Prior to use, the sampler and sampling tubes are brush-scrubbed in a Liqui-nox and potable water solution and rinsed twice in clean potable water. Sampling equipment and tubes are also decontaminated before each sample is collected to avoid cross-contamination between borings.

Groundwater Sampling

Purging and sampling equipment that could contact well fluids is either dedicated to a particular well or cleaned prior to each use in a Liqui-nox solution followed by two tap water rinses.

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS				TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS LARGER THAN No. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN No. 4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, SAND-SILT MIXTURES
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE-GRAINED SOILS MORE THAN HALF IS SMALLER THAN No. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW- TO MEDIUM-PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM- TO HIGH-PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

SYMBOLS AND NOTES

- SAMPLE INTERVAL
- SAMPLE NOT RECOVERED
- BENTONITE
- CONCRETE
- GROUT
- FILTER SAND PACK
- STATIC WATER LEVEL
- WATER LEVEL ENCOUNTERED WHEN DRILLING

ppm = parts per million (mg/kg)
ppb = parts per billion (µg/kg)
ND = not detected at detection limits stated in official laboratory reports
CGI = combustible gas indicator
OVA = organic vapor analyzer
PID = photoionization detector
LEL = lower explosive limit
TPH = total petroleum hydrocarbons
TRPH = total recoverable petroleum hydrocarbons
NA = not applicable

ALTON GEOSCIENCE
Livermore, California

KEY TO BORING LOG

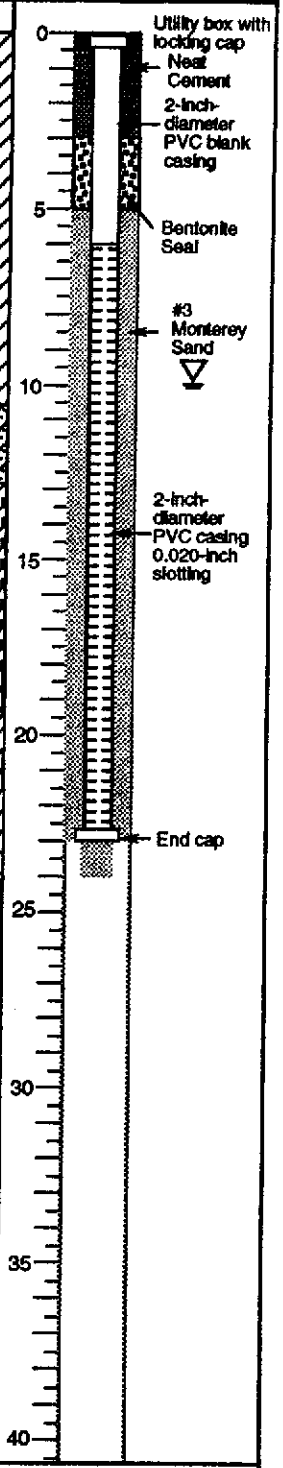
PROJECT NO.: 41-0042
LOCATION: Former Chromex Facility
1400 Park Avenue
Emeryville, California

DATE DRILLED: 12/19/94
LOGGED BY: A. Le May
APPROVED BY: M. Katen, RG
DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow-Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 24.0 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.	CL	
5,9,12	5			5	SANDY CLAY: olive brown, soft, damp, contains thin layers (1.0 inch thick) of clayey gravel.		
					As above to 10.5 feet.		
9,11,16	5	28/ND		10	CLAYEY SAND: very dark grayish brown, medium dense, saturated, clasts to 1.5 inches.	SC	
						GC	
12,15,16	5	24/ND		15	CLAYEY GRAVEL: dark olive brown, medium dense, saturated, rounded and angular clasts to 0.75 inch.		
10,11,15	5						
15,16,19	—				GRAVEL: olive brown, coarse, well graded, angular clasts to 0.5 inch-diameter	GW	
12,15,19	4			20	SANDY CLAY: black, medium stiff, damp, fine-grained sand for 10.0 inches	CL	
					GRAVEL: black, coarse, well graded, angular clasts to 0.5 inch.	GW	
—	3				SANDY CLAY: black, medium stiff, damp, with interbedded coarse gravel.	CL	
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

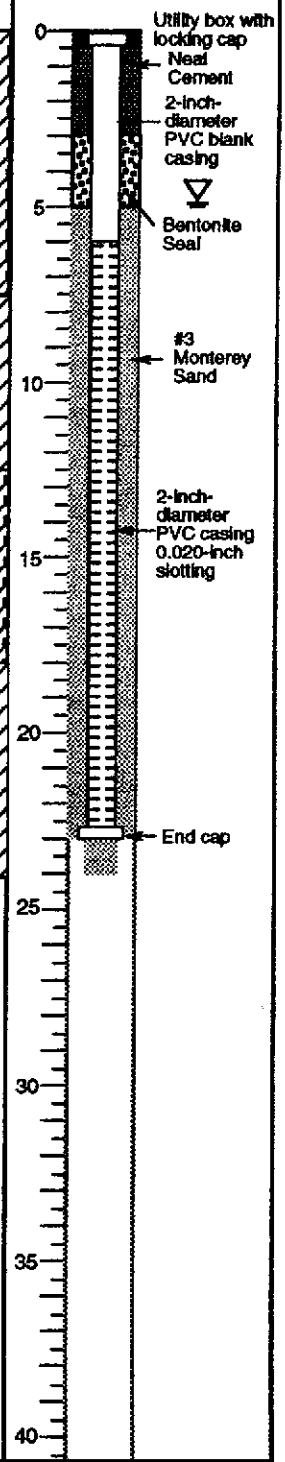
MW-1
PAGE 1 OF 1

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-Inch Hollow-Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 24.0 feet DEPTH TO WATER: 5.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 3.0 feet.	GC	
5,13,15	4			5	CLAYEY GRAVEL: olive brown, medium dense, saturated sample interval, includes 6.0 inch sandy layer, olive brown.		
10,11,15	4	30/ND		10	SANDY CLAY: olive brown, medium stiff, wet, fine-grained with occasional clasts of gravel.	CL	
18,18,21	4	31/ND		15	CLAYEY GRAVEL: olive brown, medium dense, wet, angular clasts to 1.0 inch-diameter.	GC	
10,15,16	4				SANDY CLAY: olive brown, medium stiff, saturated, fine-grained with silt.	CL	
—	4			20	Light olive brown, damp, contains small rounded clasts of gravel.		
10,16,19	4				SILTY CLAY: black, medium stiff, saturated, with 5.0 inch gravel layer in sample interval, bottom few inches is sandy clay, light olive brown.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

MW-2

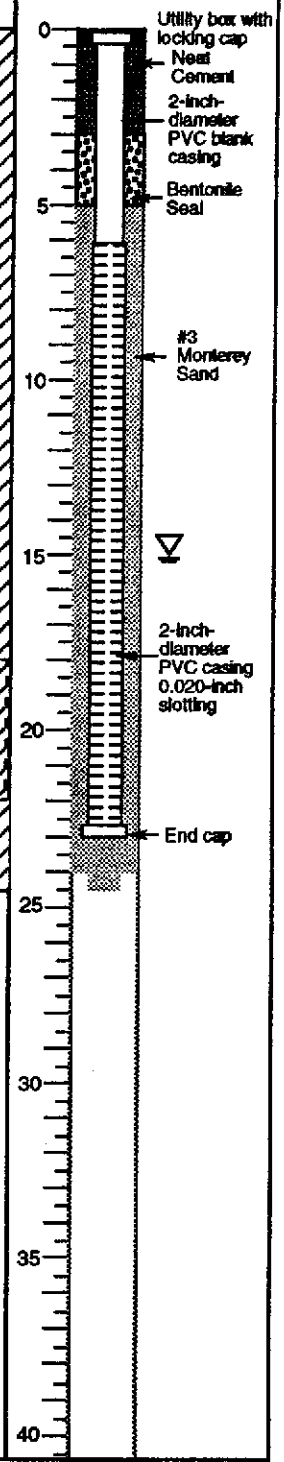
41/-0042/MW-2 01/18/95

PROJECT NO.: 41-0042	DATE DRILLED: 12/20/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-Inch Hollow-Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 24.5 feet DEPTH TO WATER: 15.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.		
4,11,12	64			5	SANDY CLAY: black, soft, damp, fine-grained sand with silt.		
6,9,15	48	19/ND		10	GRAVELLY CLAY: olive gray, soft, damp, small angular clasts of gravel, contains 1.0 inch thick layer of brownish yellow clayey sand.	CL	
11,15,18	28	20/ND		15	SANDY CLAY: light olive brown, medium stiff, saturated, very fine-grained sand, with silt, interbedded with gravel and black clay each up to 6.0 inches thick.		
12,17,18	20			20	CLAYEY GRAVEL: dark yellowish brown, medium dense, saturated, with clasts to 0.15 inch and sandy clay layers.	GC	
—	34			25	GRAVELLY CLAY: black, saturated, with clasts to 0.15 inch-diameter and fine sand.	CL	
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

MW-3

41/-0042/MW-1 01/18/95

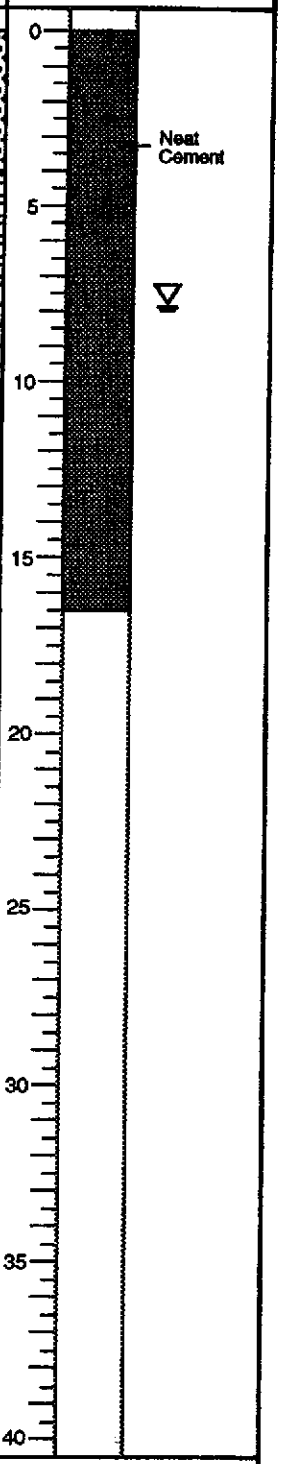
PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-Inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 8.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.		
16,11	5				SILTY GRAVEL: olive brown, wet from surface	GM	
7,9,12	6	37/ND		5	SILTY SAND: dark yellowish brown, very soft, damp, with angular gravel clasts to 1.0 inch.	SM	
4,6,15	7				SANDY CLAY: brown, wet, contains occasional small angular gravel clasts to 0.5 inch-diameter.	CL	
5,5,11	9	37/ND		10	Olive brown, saturated small layers of clayey sand up to 0.5 inch thick.		
6,9,12	10				With silt.		
7,12,15	12	40/ND		15	Damp, bottom 1.0 inch is gravelly clay with large pebbles and fine sand.		
				20			
				25			
				30			
				35			
				40			

* NOTE: Laboratory result reported for the 5 foot sample represents a soil sample collected by hand auger on March 17, 1995, immediately adjacent to the original boring drilled on December 19, 1995.

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

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PAGE 1 OF 1

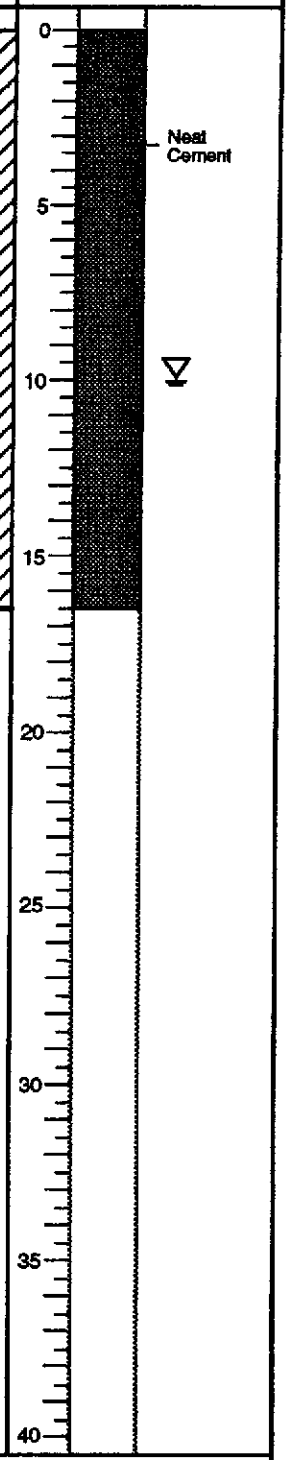
41-0042/B-1 01/11/95

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.		
3,6,9	8	39/ND		5	SILTY CLAY: very dark gray, moist, contains small gravel clasts to 0.15 inch, sample interval contains 0.25 inch thick layer of fine clayey sand.	CL	
7,11,12	12	23/ND		10	SANDY CLAY: dark olive brown, wet, contains thin layers of clayey sand and gravel to 1.0 inch thick.		
8,9,12	10	43/ND		15	CLAY: olive, damp, with angular gravel clasts, fines downward to homogeneous very fine clay in bottom 6.0 inches of sample interval.		
				20	* NOTE: Laboratory result reported for the 5 foot sample represents a soil sample collected by hand auger on March 17, 1995, immediately adjacent to the original boring drilled on December 19, 1995.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

B-2

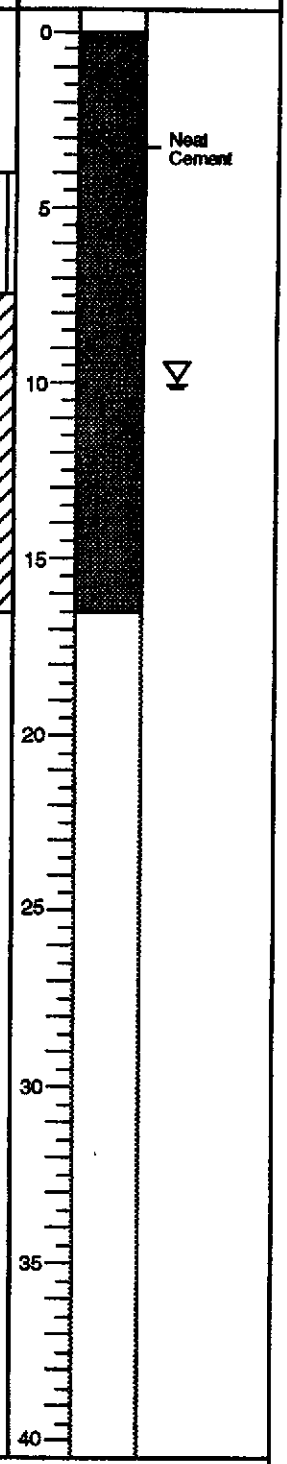
41-0042/B-2 01/11/95

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet. GRAVEL (Fill)	Fill	
9,11,15	5			5	CLAYEY SILT: mottled black and dark olive brown, moist, contains gravel clasts to 0.25 inch-diameter and clayey gravel layer for top 6.0 inches of sample interval.	ML	
7,7,8	4	28/ND		10	SANDY CLAY: olive brown, saturated, fine sand.	CL	
9,10,2	9	23/ND		15	Fine sand and occasional small gravel clasts to 0.15 inch-diameter.		
				20			
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

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PAGE 1 OF 1

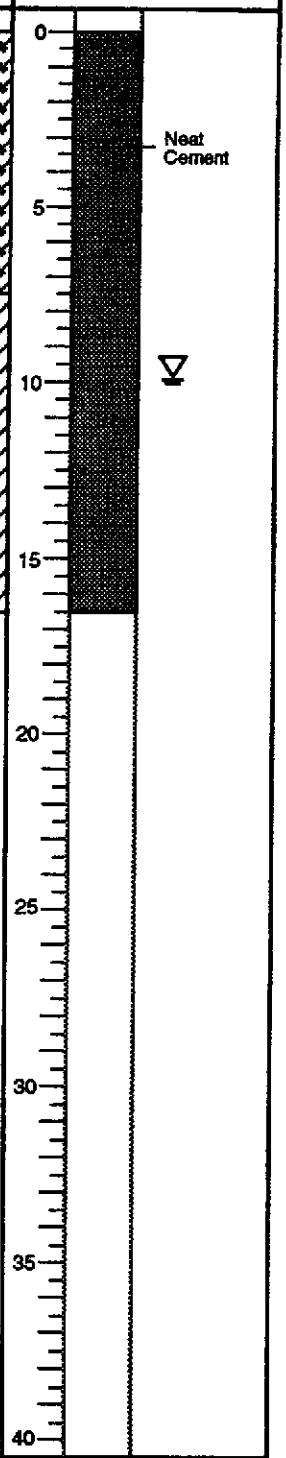
41-0042/B-3 01/11/95

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.	GC	
4,3,6	38	38/ND		5	CLAYEY GRAVEL: dark olive brown, damp, contains oxidized angular clasts to 1.0 inch-diameter, with silt.		
						CL	
5,5,12	20	37/1.2		10	SANDY CLAY: olive brown, wet, fine-grained sand, contains layer of clayey gravel (1.0 inch thick) which is mottled black.		
7,9,11	8	29/ND		15	Very dark grayish brown, saturated, fine sand with trace angular gravel clasts and thin layer of coarse clayey sand in sample interval.		
				20	* NOTE: Laboratory result reported for the 5 foot sample represents a soil sample collected by hand auger on March 17, 1995, immediately adjacent to the original boring drilled on December 19, 1995.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

B-4
PAGE 1 OF 1

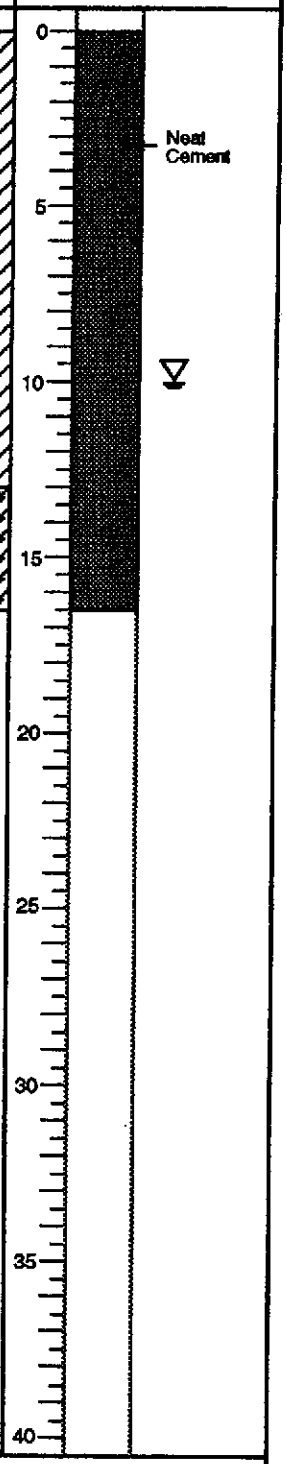
41-0042/B-4 01/11/95

PROJECT NO.: 41-0042	DATE DRILLED: 12/19/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 16.5 feet DEPTH TO WATER: 10.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 4.0 feet.		
4,6,11	7	91/27		5	SANDY CLAY: very dark grayish brown, stiff, damp, 1.0 inch-thick clayey gravel layer at 5.0 feet below grade.	CL	
7,7,9	8	48/ND		10	Dark grayish brown, saturated, fine sand.		
6,8,11	5	33/ND		15	CLAYEY GRAVEL: dark grayish brown, saturated, angular clasts to 1.0 inch-diameter, sample interval includes clay layer approximately 1.0 inch thick.	GC	
				20	* NOTE: Laboratory result reported for the 5 foot sample represents a soil sample collected by hand auger on March 17, 1995, immediately adjacent to the original boring drilled on December 19, 1995.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

B-5
PAGE 1 OF 1

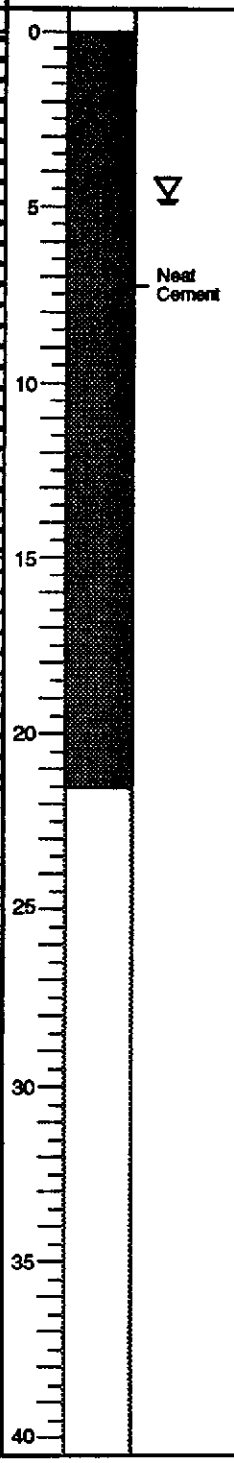
41-0042/B-5 01/11/95

PROJECT NO.: 41-0042	DATE DRILLED: 12/20/94
LOCATION: Former Chromex Facility	LOGGED BY: A. Le May
1400 Park Avenue	APPROVED BY: M. Katen, RG
Emeryville, California	DRILLING CO.: BC2

DRILLING METHOD: 8-inch Hollow Stem Auger
SAMPLER TYPE: California Modified Split Spoon
TOTAL DEPTH: 21.5 feet DEPTH TO WATER: 5.0 feet

BLOWS PER 6 INCHES	PID (ppm)	Total/Hexavalent Cr	SAMPLE	DEPTH (feet below grade)	DESCRIPTION	USCS	LITHOLOGY
				0	Hand-augered to 3.0 feet.	Fill	
5,8,12	—			5	GRAVEL: dark yellowish brown, saturated, coarse gravel fill, no PID reading, not enough material.		
9,11,15	—	37/ND		10			
15,18,20	10			15	GRAVELLY CLAY: gravel fill and clay.	CL	
7,12,9	10	32/ND		20	Dark yellowish brown, contains angular clasts to 0.25 inch-diameter.		
				25			
				30			
				35			
				40			

WELL CONSTRUCTION DETAIL



ALTON GEOSCIENCE
Livermore, California

LOG OF EXPLORATORY BORING

B-6

41-0042/B-6 01/11/95

Sequoia Analytical

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404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled: Mar 17, 1995
30-A Lindbergh Ave.	Sample Descript:	Soil, B-1 (5')	Received: Mar 17, 1995
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed: Mar 21, 1995
Attention: Kevin Keenan	Lab Number:	503-0794	Reported: Mar 28, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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APR 10 1995

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

5030794.ALT <1>

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled: Mar 17, 1995
30-A Lindbergh Ave.	Sample Descript:	Soil, B-2 (5')	Received: Mar 17, 1995
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed: Mar 21, 1995
Attention: Kevin Keenan	Lab Number:	503-0795	Reported: Mar 28, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled: Mar 17, 1995
30-A Lindbergh Ave.	Sample Descript:	Soil, B-4 (5')	Received: Mar 17, 1995
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed: Mar 21, 1995
Attention: Kevin Keenan	Lab Number:	503-0796	Reported: Mar 28, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled: Mar 17, 1995
30-A Lindbergh Ave.	Sample Descript:	Soil, B-5 (5')	Received: Mar 17, 1995
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed: Mar 21, 1995
Attention: Kevin Keenan	Lab Number:	503-0797	Reported: Mar 28, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-1 (5')
Lab Number: 503-0794

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Extracted: Mar 20-21, 1995
Analyzed: Mar 22, 1995
Reported: Mar 28, 1995

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	37
Lead	1.0	6.4
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-2 (5')

Lab Number: 503-0795

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Extracted: Mar 20-21, 1995
Analyzed: Mar 22, 1995
Reported: Mar 28, 1995

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	39
Lead	1.0	10
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-4 (5')

Lab Number: 503-0796

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Extracted: Mar 20-21, 1995
Analyzed: Mar 22, 1995
Reported: Mar 28, 1995

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	38
Lead	1.0	6.6
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-5 (5')

Lab Number: 503-0797

Sampled: Mar 17, 1995
Received: Mar 17, 1995
Extracted: Mar 20-21, 1995
Analyzed: Mar 22, 1995
Reported: Mar 28, 1995

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	91
Lead	1.0	12
Hexavalent Chromium	0.50	27

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

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Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 5030794-97

Reported: Mar 28, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Chromium	Lead	Hexavalent Chromium
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 6010	EPA 6010	EPA 7196
Analyst:	K. Nill	K. Nill	K. Nill	K. Anderson	K. Anderson	S. Phillips
MS/MSD Batch#:	5030579	5030579	5030579	5030792	5030792	5030797
Date Prepared:	3/21/95	3/21/95	3/21/95	3/20/95	3/20/95	3/21/95
Date Analyzed:	3/21/95	3/21/95	3/21/95	3/22/95	3/22/95	3/22/95
Instrument I.D.#:	HP5890/7	HP5890/7	HP5890/7	Liberty-100	Liberty-100	Spec-340
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	50 mg/kg	50 mg/kg	100 mg/kg
Matrix Spike % Recovery:	77	49	76	106	92	108
Matrix Spike Duplicate % Recovery:	72	38	75	100	94	124
Relative % Difference:	6.7	25	1.3	5.8	2.2	14
LCS Batch#:	LCS032195	LCS032195	LCS032195	BLK032095	BLK032095	BLK032195
Date Prepared:	3/21/95	3/21/95	3/21/95	3/20/95	3/20/95	3/21/95
Date Analyzed:	3/21/95	3/21/95	3/21/95	3/22/95	3/22/95	3/22/95
Instrument I.D.#:	HP5890/7	HP5890/7	HP5890/7	Liberty-100	Liberty-100	Spec-340
LCS % Recovery:	107	102	95	100	91	106
% Recovery Control Limits:	28-167	35-146	38-150	75-125	75-125	60-140

SEQUOIA ANALYTICAL, #1271

Kevin Van Slambrook
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

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☑ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Consulting Firm: ALTON GEOSCIENCE
Address: 30A Lindbergh Ave
City: Livermore State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 510 606 9260

Station No./Site Address: FORMER CHROMEX
Project Contact: KEVIN KEENAN
Mobil Engineer: N/A prime MRC ✓
Sampler(s) (signature): [illegible]

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX-TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	7196 HexCr	6010 Total Pb
B1-(5')	Soil	3-17	1:54 pm	—	1	Steel tube		5030794				X									X	X
B-2 (5')	↓	↓	11:00	—	↓	↓		5030795				X									X	X
B-4 (5')			12:05	—				5030796				X									X	X
B-5 (5')			11:45	—				5030797				X									X	X
SP-1				—						please						Hold						
SP-2				—						please						Hold						
SP-3				—						please						Hold						
SP-4	↓	↓		—	↓	↓				please						Hold						

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: [illegible] Date/Time: 4:10 3-17-95
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in lab by: RD Kelley Date/Time: 3/17/95 4:10 pm

Turnaround Time: (check one):
Normal X Same day ____
1 day ____ 2 day ____
5 day ____

Sample Integrity: Intact ✓ On Ice ✓

Remarks:

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Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, B-1(11.5)	Received:	Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 28, 1994
Attention: Kevin Keenan	Lab Number:	412-1281	Reported:	Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2 Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

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Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, B-1(16.5)	Received:	Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 28, 1994
Attention: Kevin Keenan	Lab Number:	412-1282	Reported:	Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <2>

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-2(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1283

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <3>

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-2(15.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1284

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-3(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1285

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <5>

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-3(16.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1286

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

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Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, B-4(11.5)	Received:	Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 28, 1994
Attention: Kevin Keenan	Lab Number:	412-1287	Reported:	Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, B-4(15.5)	Received:	Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 28, 1994
Attention: Kevin Keenan	Lab Number:	412-1288	Reported:	Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-5(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1289

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	8.0
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-5(16.0)
Analysis Method: EPA 5030/8010
Lab Number: 412-1290

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 28, 1994
Reported: Dec 30, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <10>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Chromium
First Sample #: 412-1281

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 27, 1994
Analyzed: Dec 27, 1994
Reported: Dec 30, 1994

LABORATORY ANALYSIS FOR: Chromium

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1281	B-1(11.5)	0.50	37
412-1282	B-1(16.5)	0.50	40
412-1283	B-2(11.5)	0.50	23
412-1284	B-2(15.5)	0.50	43
412-1285	B-3(11.5)	0.50	28
412-1286	B-3(16.5)	0.50	23
412-1287	B-4(11.5)	0.50	37
412-1288	B-4(15.5)	0.50	29
412-1289	B-5(11.5)	0.50	48
412-1290	B-5(16.0)	0.50	33

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121281.ALT <11>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Lead
First Sample #: 412-1281

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 27, 1994
Analyzed: Dec 27, 1994
Reported: Dec 30, 1994

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1281	B-1(11.5)	1.0	4.2
412-1282	B-1(16.5)	1.0	5.5
412-1283	B-2(11.5)	1.0	4.5
412-1284	B-2(15.5)	1.0	5.2
412-1285	B-3(11.5)	1.0	5.5
412-1286	B-3(16.5)	1.0	7.1
412-1287	B-4(11.5)	1.0	5.8
412-1288	B-4(15.5)	1.0	5.1
412-1289	B-5(11.5)	1.0	4.7
412-1290	B-5(16.0)	1.0	3.7

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Hexavalent Chromium
First Sample #: 412-1281

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 20, 1994
Analyzed: Dec 20, 1994
Reported: Dec 30, 1994

LABORATORY ANALYSIS FOR: Hexavalent Chromium

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1281	B-1(11.5)	0.50	N.D.
412-1282	B-1(16.5)	0.50	N.D.
412-1283	B-2(11.5)	0.50	N.D.
412-1284	B-2(15.5)	0.50	N.D.
412-1285	B-3(11.5)	0.50	N.D.
412-1286	B-3(16.5)	0.50	N.D.
412-1287	B-4(11.5)	0.50	1.2
412-1288	B-4(15.5)	0.50	N.D.
412-1289	B-5(11.5)	0.50	N.D.
412-1290	B-5(16.0)	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121281-90

Reported: Jan 12, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8010	EPA 8010	EPA 8010
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	4121281	4121281	4121281	4121281	4121281	4121281
Date Prepared:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg
Matrix Spike % Recovery:	76	121	105	75	112	102
Matrix Spike Duplicate % Recovery:	64	108	98	78	115	103
Relative % Difference:	17	11	6.9	3.9	2.6	0.98
LCS Batch#:	LCS122894	LCS122894	LCS122894	LCS122994	LCS122994	LCS122994
Date Prepared:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6
LCS % Recovery:	99	105	96	84	101	94
% Recovery Control Limits:	28-167	35-146	38-150	28-167	35-146	38-150

SEQUOIA ANALYTICAL, #1271

for Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121281-90

Reported: Jan 12, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Chromium	Lead	Hexavalent Chromium	Hexavalent Chromium
Method:	EPA 6010	EPA 6010	EPA 7196	EPA 7196
Analyst:	J. Dinsay	J. Dinsay	M. Nguyen	M. Nguyen
MS/MSD Batch#:	4121280	4121280	4121286	4121290
Date Prepared:	12/27/94	12/27/94	12/20/94	12/20/94
Date Analyzed:	12/27/94	12/27/94	12/20/94	12/20/94
Instrument I.D.#:	Liberty-100	Liberty-100	Spec-340	Spec-340
Conc. Spiked:	50 mg/kg	50 mg/kg	5.0 mg/kg	5.0 mg/kg
Matrix Spike % Recovery:	98	89	95	108
Matrix Spike Duplicate % Recovery:	100	87	106	110
Relative % Difference:	2.0	2.3	11	1.8
LCS Batch#:	BLK122794	BLK122794	BLK122094	BLK122094
Date Prepared:	12/27/94	12/27/94	12/20/94	12/20/94
Date Analyzed:	12/27/94	12/27/94	12/20/94	12/20/94
Instrument I.D.#:	Liberty-100	Liberty-100	Spec-340	Spec-340
LCS % Recovery:	102	98	101	101
% Recovery Control Limits:	75-125	75-125	70-130	70-130

SEQUOIA ANALYTICAL, #1271

for Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Consulting Firm: ALTON GEOSCIENCE
Address: 30A LINDBERGH AVE
City: LIVERMORE State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 510 606 9260

Station No./Site Address: Former Chromex
Project Contact: Kevin Keenan
Mobil Oil Engineer:
PO# 426377
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX -TPH	TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	6010 Chromium Lead	7196 Hexavalent Chromium
B-3 (6.0)	Soil	12-19	9:20	—	1	Steel tube					HOLD												
B-3 (11.5)			9:30	—	1								X			4121285						X	X
B-3 (16.5)			9:35	—	1								X			4121286						X	X
B-4 (5.5)			11:10	—	1						HOLD												
B-4 (11.5)			11:15	—	1								X			4121287						X	X
B-4 (15.5)			11:20	—	1								X			4121288						X	X
B-5 (6.5)			12:45	—	1						HOLD												
B-5 (11.5)			12:50	—	1								X			4121289						X	X
B-5 (16.0)			12:53	—	1								X			4121290						X	X

CODING (check one)
Code 1 ☐ Emergency Response
Code 2 ☒ Site Assessment
Code 3 ☐ Remediation (Plan Devlpmt.)
Code 4 ☐ Active Remed. (Install./Start-up)
Code 5 ☐ Active Remed. (O & M)
Code 6 ☐ Passive Remed/ Monitoring
Code 7 ☐ Closure
Code 8 ☐ Construction
Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time: 12-19-94 4:55
Relinquished by: Date/Time:

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time:
Relinquished in Lab by: RECEIVED IN LAB Date/Time: 12/19/94 4:55

Turnaround Time: (check one):
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact X On Ice X

Remarks: Hexavalent chromium - Will phone in P.O. #

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
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☒ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Consulting Firm: ALTON GEOSCIENCE
Address: 30A Lindbergh Ave
City: Livermore State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 606 9260

Station No./Site Address: Former Chromex
Project Contact: Kevin Keenan
Mobil Oil Engineer:
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH	EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	6010 chromium Lab	7196 chromium
B-1 (4.0)	S	12-19	(9:00)	—	1	3 Teflon tube							X		H	O	L	D					
B-2 (6.5)			9:05												H	O	L	D					
B-1 (9.0)			9:15												H	O	L	D					
B-1 (11.5)			9:25										X			4121281						X	X
B-1 (14.0)			9:45												H	O	L	D					
B-1 (16.5)			9:50 am										X			4121282						X	X
B-2 (5.0)			9:00												H	O	L	D					
B-2 (11.5)			9:05										X			4121283						X	X
B-2 (15.5)			9:10										X			4121284						X	X

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time: 12-19-94 4:55
Relinquished by: Date/Time:
Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by: Date/Time:
Relinquished in Lab by: Received by: Date/Time: 12/19/94 4:55

Turnaround Time: (check one)
Normal ☒ Same day ☒
1 day ☐ 2 day ☐
5 day ☐

Sample Integrity
Intact ☒ On Ice ☒

Remarks: Hexavalent Chromium. - Will phone in P.O. #

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, MW-1 (11.5)	Received:	Dec 19, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 20, 1994
Attention: Kevin Keenan	Lab Number:	412-1279	Reported:	Dec 29, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-1 (16.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1280

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Analyzed: Dec 20, 1994
Reported: Dec 29, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-1 (11.5)

Lab Number: 412-1279

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 20-27, 1994
Analyzed: Dec 20-27, 1994
Reported: Dec 29, 1994

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	28
Lead	1.0	4.5
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-1 (16.5)

Lab Number: 412-1280

Sampled: Dec 19, 1994
Received: Dec 19, 1994
Extracted: Dec 20-27, 1994
Analyzed: Dec 20-27, 1994
Reported: Dec 29, 1994

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	24
Lead	1.0	4.3
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121279-80

Reported: Dec 29, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Chromium	Lead	Hexavalent Chromium	Hexavalent Chromium
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 6010	EPA 6010	EPA 7196	EPA 7196
Analyst:	K. Nill	K. Nill	K. Nill	J. Dinsay	J. Dinsay	M. Nguyen	M. Nguyen
MS/MSD Batch#:	4121345	4121345	4121345	4121280	4121280	4121286	4121290
Date Prepared:	12/20/94	12/20/94	12/20/94	12/27/94	12/27/94	12/20/94	12/20/94
Date Analyzed:	12/20/94	12/20/94	12/20/94	12/27/94	12/27/94	12/20/94	12/20/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340	Spec-340
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	50 µg/kg	50 µg/kg	5.0 mg/kg	5.0 mg/kg
Matrix Spike % Recovery:	97	96	85	98	89	95	108
Matrix Spike Duplicate % Recovery:	92	93	81	100	87	106	110
Relative % Difference:	5.3	3.2	4.8	2.0	2.3	11	1.8
LCS Batch#:	LCS122094	LCS122094	LCS122094	BLK122794	BLK122794	BLK122094	BLK122094
Date Prepared:	12/20/94	12/20/94	12/20/94	12/27/94	12/27/94	12/20/94	12/20/94
Date Analyzed:	12/20/94	12/20/94	12/20/94	12/27/94	12/27/94	12/20/94	12/20/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340	Spec-340
LCS % Recovery:	130	109	96	102	98	101	101
% Recovery Control Limits:	28-167	35-146	38-150	75-125	75-125	70-130	70-130

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Consulting Firm: ALTON GEOSCIENCE
Address: 30A Lindbergh Ave
City: Livermore State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 510 606 9260

Station No./Site Address: FORMER Chromex
Project Contact: Kevin Keenan
P.O. # 426377
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 ☐ Gas ☐ Diesel	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 ☐ TTLC ☐ STLC	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCP - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	6010 chromium + lead	7196 Hexavalent chromium
MW-1 (6.5)	Soil	12-19	2:10	—	1	Steel tube	—							HOLD								
MW-1 (11.5)			2:15	—								X				4121279					X	X
MW-1 (16.5)			2:20	—								X				4121280					X	X
MW-1 (17.0)			2:25	—			—	—	—	—	—	—	HOLD									
MW-1 (19.0)			2:29	—			—	—	—	—	—	—		#	O	L	D	—	—	—	—	—
MW-1 (20.5)			2:36	—			—	—	—	—	—	—		#	O	L	D	—	—	—	—	—
MW-1 (21.0)			2:41	—			—	—	—	—	—	—		#	O	L	D	—	—	—	—	—
MW-1 (22.5)			2:45	—			—	—	—	—	—	—		*	O	L	D	—	—	—	—	—

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time: 12-19-94 3:25	Relinquished by: Date/Time: 12-19-94 3:25
Relinquished by:	Date/Time: 12-19-94 4:55	Relinquished by: Date/Time:
Relinquished by:	Date/Time:	Relinquished in Lab by: Recieved I Y Date/Time: 12/19/94 4:55

Turnaround Time: (check one)
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity:
Intact X On Ice X

Remarks: Hexavalent Chromium - Will phone in P.O. #

Sequoia Analytical

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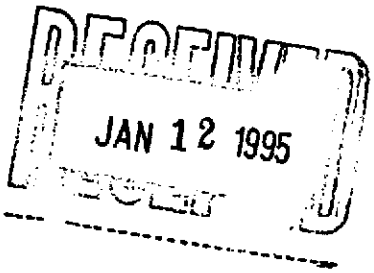
Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-2 (11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1491

Sampled: Dec 19, 1994
Received: Dec 20, 1994
Analyzed: Dec 29, 1994
Reported: Dec 29, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.



Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex	Sampled:	Dec 19, 1994
30-A Lindbergh Ave.	Sample Descript:	Soil, MW-2 (16.5)	Received:	Dec 20, 1994
Livermore, CA 94550	Analysis Method:	EPA 5030/8010	Analyzed:	Dec 29, 1994
Attention: Kevin Keenan	Lab Number:	412-1492	Reported:	Dec 29, 1994

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121491.ALT <2>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-2 (11.5)

Lab Number: 412-1491

Sampled: Dec 19, 1994
Received: Dec 20, 1994
Extracted: Dec 21-28, 1994
Analyzed: Dec 21-28, 1994
Reported: Dec 29, 1994

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	30
Lead	1.0	5.4
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-2 (16.5)

Lab Number: 412-1492

Sampled: Dec 19, 1994
Received: Dec 20, 1994
Extracted: Dec 21-28, 1994
Analyzed: Dec 21-28, 1994
Reported: Dec 29, 1994

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Chromium	0.50	31
Lead	1.0	3.4
Hexavalent Chromium	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121491.ALT <4>

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121491-92

Reported: Jan 9, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Chromium	Lead	Hexavalent Chromium
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 6010	EPA 6010	EPA 7196
Analyst:	K. Nill	K. Nill	K. Nill	J. Dinsay	J. Dinsay	M. Nguyen
MS/MSD Batch#:	4121281	4121281	4121281	4121696	4121696	4121492
Date Prepared:	12/29/94	12/29/94	12/29/94	12/28/94	12/28/94	12/21/94
Date Analyzed:	12/29/94	12/29/94	12/29/94	12/28/94	12/28/94	12/21/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	50 µg/kg	50 µg/kg	5.0 mg/kg
Matrix Spike % Recovery:	75	112	102	98	96	114
Matrix Spike Duplicate % Recovery:	78	115	103	90	98	128
Relative % Difference:	3.9	2.6	0.98	8.5	2.1	12
LCS Batch#:	LCS122994	LCS122994	LCS122994	BLK122894	BLK122894	BLK122194
Date Prepared:	12/29/94	12/29/94	12/29/94	12/28/94	12/28/94	12/21/94
Date Analyzed:	12/29/94	12/29/94	12/29/94	12/28/94	12/28/94	12/21/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340
LCS % Recovery:	84	101	94	102	102	119
% Recovery Control Limits:	28-167	35-146	38-150	75-125	75-125	70-130

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

☐ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233
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☒ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Mobil Consulting Firm: ACTON GEOSCIENCE
Address: 30A Lindbergh Ave
City: LIVERMORE State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 510 606 9260

Station No./Site Address: FORMER chromium
Project Contact: Kevin Keenan
Mobil Oil Engineer: PO # 426377
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 Hvoc	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	pH	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	Chromium 6010 Lead	Hexavalent Chromium 7196
MW-2 (16.5)	Soil	12-19	4:00	—	1	steel tube	—						H	O	C	D	—					
MW-2 (11.5)			4:05	—	1							X			4121491						X	X
MW-2 (16.5)			4:10	—	1							X			4121492						X	X
MW-2 (19.0)			4:20	—	1		—						H	O	L	D						
MW-2 (22.0)			4:25 PM	—	1		—						H	O	C	D	—					
MW-2 (24.0)			4:35 PM	—	1		—						H	O	C	D	—					

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims Fines

Relinquished by:	Date/Time:	Relinquished by:	Date/Time:
[signature]	12/20/94 16:57	Fed Express 7371	12/20/94 16:51
Fed Express 754	12/20/94 1819	Rec'd	
		Relinquished in Lab by: K. D. Kelley	12/20/94 1819

Turnaround Time: (check one): Normal X; Same day ___; 1 day ___; 2 day ___; 5 day ___

Sample Integrity: Intact X; On Ice X

Remarks: Hexavalent Chromium - Will phone in P.O.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix Descript: Soil
Analysis Method: EPA 418.1 (I.R. with clean-up)
First Sample #: 412-1475

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 28, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Petroleum Oil mg/kg (ppm)	Detection Limit Multiplication Factor
412-1475	MW-3(6.5)	43	1.0

RECEIVED
JAN 18 1995

Detection Limits:	1.0

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121475.ALT <*>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-3(6.5)
Analysis Method: EPA 8080
Lab Number: 412-1475

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 27, 1994
Analyzed: Dec 27, 1994
Reported: Jan 3, 1995

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin	1.0	N.D.
alpha-BHC	1.0	N.D.
beta-BHC	1.0	N.D.
delta-BHC	1.0	N.D.
gamma-BHC (Lindane)	1.0	N.D.
Chlordane	20	N.D.
4,4'-DDD	6.0	N.D.
4,4'-DDE	2.0	N.D.
4,4'-DDT	6.0	N.D.
Dieldrin	2.0	N.D.
Endosulfan I	2.0	N.D.
Endosulfan II	2.0	N.D.
Endosulfan sulfate	6.0	N.D.
Endrin	2.0	N.D.
Endrin aldehyde	6.0	N.D.
Heptachlor	1.0	N.D.
Heptachlor expoxide	1.0	N.D.
Methoxychlor	20	N.D.
Toxaphene	80	N.D.
PCB-1016	20	N.D.
PCB-1221	80	N.D.
PCB-1232	20	N.D.
PCB-1242	20	N.D.
PCB-1248	20	N.D.
PCB-1254	20	N.D.
PCB-1260	20	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1624

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-3(11.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1476

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, MW-3(16.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1477

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Analyzed: Dec 28-29, 1994
Reported: Jan 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	30
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-6(10.0)
Analysis Method: EPA 5030/8010
Lab Number: 412-1478

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil, B-6(21.5)
Analysis Method: EPA 5030/8010
Lab Number: 412-1479

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane	5.0	N.D.
Bromoform	5.0	N.D.
Bromomethane	10	N.D.
Carbon tetrachloride	5.0	N.D.
Chlorobenzene	5.0	N.D.
Chloroethane	10	N.D.
2-Chloroethylvinyl ether	10	N.D.
Chloroform	5.0	N.D.
Chloromethane	10	N.D.
Dibromochloromethane	5.0	N.D.
1,2-Dichlorobenzene	5.0	N.D.
1,3-Dichlorobenzene	5.0	N.D.
1,4-Dichlorobenzene	5.0	N.D.
1,1-Dichloroethane	5.0	N.D.
1,2-Dichloroethane	5.0	N.D.
1,1-Dichloroethene	5.0	N.D.
cis-1,2-Dichloroethene	5.0	N.D.
trans-1,2-Dichloroethene	5.0	N.D.
1,2-Dichloropropane	5.0	N.D.
cis-1,3-Dichloropropene	5.0	N.D.
trans-1,3-Dichloropropene	5.0	N.D.
Methylene chloride	50	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.
Tetrachloroethene	5.0	N.D.
1,1,1-Trichloroethane	5.0	N.D.
1,1,2-Trichloroethane	5.0	N.D.
Trichloroethene	5.0	N.D.
Trichlorofluoromethane	5.0	N.D.
Vinyl chloride	10	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Chromium
First Sample #: 412-1476

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 28, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

LABORATORY ANALYSIS FOR: Chromium

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1476	MW-3(11.5)	0.50	19
412-1477	MW-3(16.5)	0.50	20
412-1478	B-6(10.0)	0.50	37
412-1479	B-6(21.5)	0.50	32

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Lead
First Sample #: 412-1476

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 28, 1994
Analyzed: Dec 28, 1994
Reported: Jan 3, 1995

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1476	MW-3(11.5)	1.0	4.4
412-1477	MW-3(16.5)	1.0	9.5
412-1478	B-6(10.0)	1.0	10
412-1479	B-6(21.5)	1.0	7.2

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Sample Descript: Soil
Analysis for: Hexavalent Chromium
First Sample #: 412-1476

Sampled: Dec 20, 1994
Received: Dec 20, 1994
Extracted: Dec 21, 1994
Analyzed: Dec 21, 1994
Reported: Jan 3, 1995

LABORATORY ANALYSIS FOR: Hexavalent Chromium

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
412-1476	MW-3(11.5)	0.50	N.D.
412-1477	MW-3(16.5)	0.50	N.D.
412-1478	B-6(10.0)	0.50	N.D.
412-1479	B-6(21.5)	0.50	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121475.ALT <9>

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121475-79

Reported: Jan 3, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease	Chromium	Lead	Hexavalent Chromium
Method:	EPA 418.1	EPA 6010	EPA 6010	EPA 7196
Analyst:	S. Le	J. Dinsay	J. Dinsay	M. Nguyen
MS/MSD Batch#:	4120916	4121696	4121695	4121492
Date Prepared:	12/28/94	12/28/94	12/28/94	12/21/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/21/94
Instrument I.D.#:	Miran-IFF	Liberty-100	Liberty-100	Spec-340
Conc. Spiked:	50 mg/kg	50 mg/kg	50 mg/kg	5.0 mg/kg
Matrix Spike % Recovery:	109	98	96	114
Matrix Spike Duplicate % Recovery:	103	90	98	128
Relative % Difference:	5.7	8.5	2.1	12
LCS Batch#:	BLK122894	BLK122894	BLK122894	BLK122194
Date Prepared:	12/28/94	12/28/94	12/28/94	12/21/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/21/94
Instrument I.D.#:	Miran-IFF	Liberty-100	Liberty-100	Spec-340
LCS % Recovery:	124	102	102	119
% Recovery Control Limits:	70-130	75-125	75-125	70-130

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 4121476-79

Reported: Jan 3, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8010	EPA 8010	EPA 8010
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD Batch#:	4121281	4121281	4121281	4121281	4121281	4121281
Date Prepared:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6
Conc. Spiked:	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg	10 µg/kg
Matrix Spike % Recovery:	76	121	105	75	112	102
Matrix Spike Duplicate % Recovery:	64	108	98	78	115	103
Relative % Difference:	17	11	6.9	3.9	2.6	0.98
LCS Batch#:	LCS122894	LCS122894	LCS122894	LCS122994	LCS122994	LCS122994
Date Prepared:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Date Analyzed:	12/28/94	12/28/94	12/28/94	12/29/94	12/29/94	12/29/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6	HP5890/6
LCS % Recovery:	99	105	96	84	101	94
% Recovery Control Limits:	28-167	35-146	38-150	28-167	35-146	38-150

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex
Matrix: Solid

QC Sample Group: 412-1475

Reported: Jan 3, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	Lindane	Heptachlor	Aldrin	Dieldrin	Endrin	DDT
Method:	EPA 8080	EPA 8080	EPA 8080	EPA 8080	EPA 8080	EPA 8080
Analyst:	C. Chapman	C. Chapman	C. Chapman	C. Chapman	C. Chapman	C. Chapman
MS/MSD Batch#:	BLK122794	BLK122794	BLK122794	BLK122794	BLK122794	BLK122794
Date Prepared:	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94
Date Analyzed:	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94
Instrument I.D.#:	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A
Conc. Spiked:	2.5 µg/kg	2.5 µg/kg	2.5 µg/kg	5.0 µg/kg	5.0 µg/kg	5.0 µg/kg
Matrix Spike % Recovery:	92	84	76	70	82	80
Matrix Spike Duplicate % Recovery:	116	100	92	88	100	96
Relative % Difference:	27	17	19	23	20	18
LCS Batch#:	BLK122794	BLK122794	BLK122794	BLK122794	BLK122794	BLK122794
Date Prepared:	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94
Date Analyzed:	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94	12/27/94
Instrument I.D.#:	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A	GCHP-4A
LCS % Recovery:	92	84	76	71	82	80
% Recovery Control Limits:	60-130	60-130	60-130	60-130	60-130	60-130

SEQUOIA ANALYTICAL, #1624

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

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Consulting Firm: ALTON GEOSCIENCE
Address: 30 A LINDBERGH AVE
City: LIVERMORE State: CA Zip: 94550
Tel: 510 606 9150 Fax.: 510 606 9260

Station No./Site Address: FORMER CHROMEX
Project Contact: Kevin Keenan
~~Mobil Oil Engineer~~:
Sampler(s) (signature):

Sample I.D.	Matrix	Date Sampled	Time	Preservation	Number of Containers	Type of Containers	BTEX - EPA 602/8020	BTEX - TPH EPA M602/8015/8020 (GAS)	TPH EPA Modified 8015 Gas ☐ Diesel ☐	Oil & Grease - EPA 413.2	TPH - EPA 418.1	EPA 601/8010 HVOC	EPA 624/8240	EPA 625/8270	Title 22 Metals EPA 6010/7000 TTLC ☐ STLC ☐	Lead Org./DHS ☐ Lead Total ☐	EDB/DBCD - EPA 504	8080 PCB	Bioassay - Title 22 Haz. Waste	Bioassay - Effluent	6010 chromium + lead	7196 Hexavalent Chromium
MW-3 (6.5)	So.	12-20	9:15 am	—	1	Steel tube		4121475			X							X				
MW-3 (11.5)			9:25 am	—	1			4121476				X									X	X
MW-3 (16.5)			9:30 am	—	1			4121477				X									X	X
MW-3 (21.5)			9:40 am	—	1																X	X
MW-3 (24.5)			9:45 am	—	1																	
B-6 (5.0)			11:50 am	—	1																	
B-6 (10.0)			12:00	—	1			4121478				X									X	X
B6 (15.0)			12:00	—	1																	
B-6 (21.5)			12:15	—	1			4121479				X									X	X

CODING (check one)

- Code 1 ☐ Emergency Response
- Code 2 ☒ Site Assessment
- Code 3 ☐ Remediation (Plan Devlpmt.)
- Code 4 ☐ Active Remed. (Install./Start-up)
- Code 5 ☐ Active Remed. (O & M)
- Code 6 ☐ Passive Remed/ Monitoring
- Code 7 ☐ Closure
- Code 8 ☐ Construction
- Code 9 ☐ Litigation/Claims/ Fines

Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:

Received Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished in Lab by: R H Kelley 12/20/94 Date/Time: 5:15 pm

Turnaround Time: (check one)
Normal X Same day ___
1 day ___ 2 day ___
5 day ___

Sample Integrity
Intact X On Ice X

Remarks: Hexavalent Chromium + Will phone in P.O. #

Sequoia Analytical

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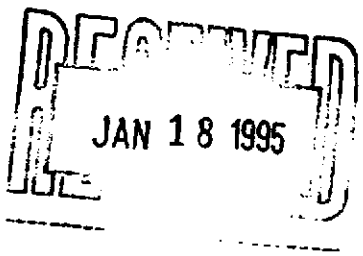
Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water, MW1
Analysis Method: EPA 601
Lab Number: 412-1742

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Analyzed: Dec 30, 1994
Reported: Jan 5, 1995

PURGEABLE HALOCARBONS (EPA 601)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	1.5
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	2.5
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	10
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	11
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.



Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121742.ALT <1>

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience	Client Project ID:	Former Chromex Plating Facility	Sampled: Dec 27, 1994
30-A Lindbergh Ave.	Sample Descript:	Water, MW2	Received: Dec 27, 1994
Livermore, CA 94550	Analysis Method:	EPA 601	Analyzed: Dec 30, 1994
Attention: Kevin Keenan	Lab Number:	412-1743	Reported: Jan 5, 1995

PURGEABLE HALOCARBONS (EPA 601)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	2.0
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	5.0
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	8.2
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121742.ALT <2>

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water, MW3
Analysis Method: EPA 601
Lab Number: 412-1744

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Analyzed: Dec 30, 1994
Reported: Jan 5, 1995

PURGEABLE HALOCARBONS (EPA 601)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	23
trans-1,2-Dichloroethene	0.50	0.69
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	4.0
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	9.6
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121742.ALT <3>

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water
Analysis for: Lead
First Sample #: 412-1742

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Extracted: Dec 28, 1994
Analyzed: Jan 4, 1995
Reported: Jan 5, 1995

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
412-1742	MW1	0.020	N.D.
412-1743	MW2	0.020	N.D.
412-1744	MW3	0.020	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water
Analysis for: Chromium
First Sample #: 412-1742

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Extracted: Dec 28, 1994
Analyzed: Jan 4, 1995
Reported: Jan 5, 1995

LABORATORY ANALYSIS FOR: Chromium

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
412-1742	MW1	0.010	0.069
412-1743	MW2	0.010	0.044
412-1744	MW3	0.010	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Sample Descript: Water
Analysis for: Hexavalent Chromium
First Sample #: 412-1742

Sampled: Dec 27, 1994
Received: Dec 27, 1994
Extracted: Dec 28, 1994
Analyzed: Dec 28, 1994
Reported: Jan 5, 1995

LABORATORY ANALYSIS FOR: Hexavalent Chromium

Sample Number	Sample Description	Detection Limit mg/L	Sample Result mg/L
412-1742	MW1	0.0050	N.D.
412-1743	MW2	0.0050	0.025
412-1744	MW3	0.0050	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

4121742.ALT <6>

Sequoia Analytical

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Alton Geoscience
30-A Lindbergh Ave.
Livermore, CA 94550
Attention: Kevin Keenan

Client Project ID: Former Chromex Plating Facility
Matrix: Liquid

QC Sample Group: 4121742-44

Reported: Jan 5, 1995

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Chromium	Lead	Hexavalent Chromium
Method:	EPA 601	EPA 601	EPA 601	EPA 200.7	EPA 200.7	EPA 7196
Analyst:	K. Nill	K. Nill	K. Nill	J. Dinsay	J. Dinsay	M. Nguyen
MS/MSD Batch#:	4121483	4121483	4121483	4121653	4121653	4121744
Date Prepared:	12/30/94	12/30/94	12/30/94	12/28/94	12/28/94	12/28/94
Date Analyzed:	12/30/94	12/30/94	12/30/94	1/4/95	1/4/95	12/28/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	1.0 mg/L	1.0 mg/L	0.050 mg/L
Matrix Spike % Recovery:	100	108	97	93	95	131
Matrix Spike Duplicate % Recovery:	112	103	96	98	97	124
Relative % Difference:	11	4.7	1.0	5.2	2.1	5.5

LCS Batch#:	LCS123094	LCS123094	LCS123094	BLK122894	BLK122894	7196 MN12H-1
Date Prepared:	12/30/94	12/30/94	12/30/94	12/28/94	12/28/94	12/28/94
Date Analyzed:	12/30/94	12/30/94	12/30/94	1/4/95	1/4/95	12/28/94
Instrument I.D.#:	HP5890/6	HP5890/6	HP5890/6	Liberty-100	Liberty-100	Spec-340
LCS % Recovery:	96	101	96	101	103	104
% Recovery Control Limits:	28-167	35-146	38-150	75-125	75-125	75-125

SEQUOIA ANALYTICAL, #1271

Karen L. Enstrom
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL CHAIN OF CUSTODY

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☒ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Company Name: Alton Geoscience	Project Name: FORMER CHROMEX PLATING FACILITY
Address: 30A Lindbergh Ave	Billing Address (if different):
City: Livermore State: Ca Zip Code: 94550	
Telephone: 510 606 9150 FAX #: 606 9260	P.O. #: 426 383
Report To: KEVIN KEENAN Sampler: PAUL RASMUSSEN	QC Data: ☒ Level A (Standard) ☐ Level B ☐ Level C ☐ Level D

Turnaround Time: ☒ 10 Working Days ☐ 7 Working Days ☐ 5 Working Days ☐ 3 Working Days ☐ 2 Working Days ☐ 24 Hours ☐ 2 - 8 Hours

☐ Drinking Water ☐ Waste Water ☑ Other

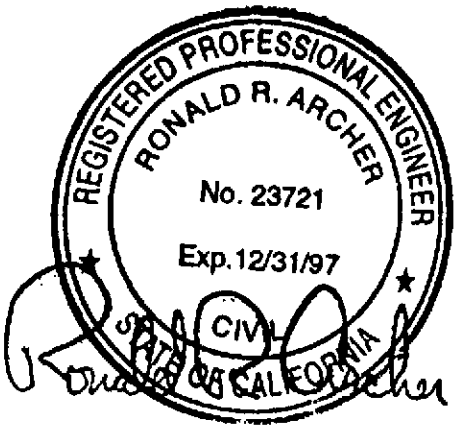
Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	HVOC's/EPA 601	Total lead/200.7	Total Chromium 200.7	Chromium VI/218						Comments
1. MW 1	12-27/1130	H2O	5	3 L-plas. 2 VOA		X	X	X	X		4121742		A-L		
2. MW 2	12-27/1100	↓	↓	↓		↓	↓	↓	↓		4121743		↓		
3. MW 3	12-27/1200										4121744		↓		
4.															
5.															*
6.															Note:
7.															Chromium VI
8.															Analysis to
9.															be completed
10.															immediately.

Relinquished By: [signature]	Date: 12-27	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: R.D. Kelley	Date: 12/27/94	Time: 1:00 PM

Pink - Client
Yellow - Sequoia
White - Sequoia

RON ARCHER
CIVIL ENGINEER, INC.
CONSULTING • PLANNING • DESIGN • SURVEYING
4133 Mohr Ave., Suite E • Pleasanton, CA 94566
(510) 462-9372



DECEMBER 13, 1994

JOB NO. 2223

ELEVATIONS OF EXISTING MONITORING WELLS AT THE FORMER CHROMEX FACILITY LOCATED AT 1400 PARK AVENUE BETWEEN HORTON STREET AND HOLDEN STREET, CITY OF EMERYVILLE, ALAMEDA COUNTY, CALIFORNIA.

FOR: *ALTON GEOSCIENCE INC.*

BENCHMARK: # H-130 - U.S.G.S.

A FOUND U.S.G.S BRASS DISK SET IN THE NORTHEAST CORNER OF THE TOWN HALL BUILDING LOCATED AT 1333 PARK AVENUE AT HOLLIS STREET. ELEVATION TAKEN AS 24.514 U.S.G.S. DATUM.

MONITORING WELL DATA TABLE

WELL DESIGNATION	TOP OF CASING ELEVATION	TOP OF BOX ELEVATION
MW-1	16.71	16.96
MW-2	13.99	14.22
MW-3	17.69	18.03