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July 28, 1995

Mr. Dennis Buran
Glascock Street Property Owners
c/o Buran Equipment Co. Profit Sharing Plan
P.O. Box 1833
San Leandro, California 94577

Project No. 3406

SUBJECT: REPORT FOR ADDITIONAL SUBSURFACE SOIL AND GROUNDWATER INVESTIGATION AT:
Glascock Street Warehouse, 2901 Glascock Street, Oakland, California

Dear Mr. Buran:

W. A. Craig, Inc., is pleased to present the attached report for the additional investigative work performed for the soil and groundwater investigation at the above-referenced site. You have authorized W. A. Craig, Inc., to prepare this report for submittal to the Alameda County Health Services Agency - Local Oversight Program (ACHCSA). W. A. Craig, Inc., understands that you will forward copies of this report to the ACHCSA and the San Francisco Bay Regional Water Quality Control Board (RWQCB) for their review. Please note that this report supercedes any and all other drafts concerning groundwater assessment for this project as submitted in the last two months. W. A. Craig, Inc., will be pleased to prepare the Work Plan for the recommended feasibility assessment for submittal to the regulatory agencies, following your authorization. Please call W. A. Craig, Inc., at your convenience if you have any questions.

Sincerely,

W. A. CRAIG, INC.

William A. Craig, II
President, R.E.A. 01414

Attachments

W. A. CRAIG, INC.

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REPORT FOR ADDITIONAL SUBSURFACE SOIL AND GROUNDWATER INVESTIGATION

Located at:
GLASCOCK STREET WAREHOUSE
2901 GLASCOCK STREET
OAKLAND, CALIFORNIA

Prepared for:
GLASCOCK STREET PROPERTY OWNERS

REGISTERED ENVIRONMENTAL ASSESSOR
WILLIAM A. CRAIG, II
No. 01414
Expires 6-96
STATE OF CALIFORNIA

W. A. Craig, II, R.E.A. 01414

Frank Goldman, R.G. 5557

W. A. Craig, Inc., Project No. 3406
July 28, 1995

1.0 INTRODUCTION

This report presents the results of the additional investigative work W. A. Craig, Inc. performed as part of the soil and groundwater investigation for the subject site located at 2901 Glascock Street in Oakland, California. W. A. Craig, Inc. conducted this additional investigative work at the request of Mr. Dennis Buran and following the requirements of the Alameda County Health Care Services Agency (ACHCSA) and the Regional Water Quality Control Board (RWQCB) - San Francisco Bay Region.

W. A. Craig, Inc. previously performed a preliminary soil and groundwater investigation and installed four monitoring wells at the site, and presented the results in our report dated December 2, 1994. We subsequently performed quarterly groundwater monitoring of the four monitoring wells and presented the results in our report dated February 13, 1995; along with the results of our quarterly monitoring, we presented our Work Plan for the excavation of approximately nine soil borings and the installation of three monitoring wells. Eight soil borings were excavated and three additional monitoring wells were installed to assist in defining the lateral extent of ground water contamination beneath the site. The preliminary results obtained from excavation and sampling of the soil borings, along with the proposed locations of the three additional monitoring wells, were presented in our letter report to the ACHCSA dated April 17, 1995.

2.0 SITE SAFETY PLAN

Field work performed at the site by W. A. Craig, Inc. was conducted in accordance with the Site Safety Plan submitted with our Work Plan on February 13, 1995. The safety plan described the basic safety requirements for a subsurface environmental investigation and drilling of soil borings at the site. The Site Safety Plan was applicable to personnel and subcontractors performing work at the site. Personnel and subcontractors scheduled to perform work at the site were briefed on the contents of the Site Safety Plan and provided a copy before work began.

3.0 SOIL BORINGS

Borehole Drilling

We submitted our Work Plan on February 13, 1995, and received concurrence from the ACHCSA in their letter dated February 21, 1995. After approval of our Work Plan, we acquired a Monitoring Well Permit from the Zone 7 Water Agency prior to drilling.

A State of California registered professional geotechnical engineer was onsite March 29 and 30, 1995 to observe the drilling of eight boreholes, to log the materials encountered, and assist in collecting soil samples from the borings. The locations of the soil borings are shown on the Site

Plan with Location of Borings and Monitoring Wells, **Plate 1.** The soil borings were located to provide information on the lateral extent of soil and groundwater contamination beneath the site. Seven of the soil borings (SB-1 through SB-4 and SB-7 through SB-9) were drilled in the vicinity of the locations indicated on **Plate 2** of our Work Plan. An additional boring (SB-10) was drilled to assess the limits of contamination to the north. Soil borings SB-5 and SB-6 were not drilled when it was determined that they were within the known limits of the highest levels subsurface contamination.

The soil borings were drilled using a truck-mounted drill rig operated by Clear Heart Drilling, LLC of Guerneville, California. Eight-inch-diameter, continuous-flight, hollow-stem augers were used to drill the boreholes to the total depth. The augers were steam-cleaned prior to each use to reduce the possibility of downhole or crosshole contamination. Logs of the soil borings are illustrated on **Plates 2A through 2H.** A confined groundwater bearing zone was encountered at approximately 12 to 16½ feet below grade in the eight borings.

The drill cuttings from the soil borings were placed in DOT Type 17E, lined 55-gallon drums, and stored with the previously collected drill cuttings from monitoring wells MW-1 through MW-4 adjacent to the office, and remain the responsibility of the owner. The auger decontaminate rinsate was also placed in 55-gallon drums, and is stored adjacent to the other 55-gallon drums.

Soil Sampling

Soil samples were collected by advancing the boring to a point immediately above the sampling depth, and then driving an unlined California-type sampler into the soil through the hollow center of the auger. The sampler was driven 18 inches with a standard 140-pound hammer falling 30 inches. The number of blows necessary to drive the sampler each 6-inch increment was counted and recorded to evaluate the relative consistency of the soil materials. The number of blows required to drive the sampler were converted to "Standard Penetration Blow Counts", and are indicated on the boring logs.

The sampler was recovered, and the core of soil was removed and subjectively analyzed for the presence of hydrocarbons; any discoloration, odor, or obvious free product was noted on the boring log by the geotechnical engineer. After subjective analyses, the soil core was described on the boring log and representative soil samples were placed in laboratory-cleaned glass jars with Teflon-lined lids and labeled. Soil samples to be submitted to the analytical laboratory for testing, were immediately placed in a refrigerated ice chest for subsequent transport to the laboratory. Formal chain-of-custody records were maintained for all samples. A copy of the Chain-of-Custody form is included with the results of the analytical analyses which are attached as **Appendix A.**

After the augers were advanced past the soil/groundwater interface, the augers were raised and

a grab sample of groundwater was collected. The grab sample of ground water was collected using a clean, disposable bailer for each soil boring. The potential for the presence of free product (i.e. no free product was physically measured for for thickness, however, indications of the presence of free product was implied by a sheen on groundwater in borings and/or a hydrocarbon film/coating present on bailers and water level measuring devices lowered into wells) was noted on the boring log and the water sample was slowly decanted into 40 milliliter glass vials and 1 liter amber bottles, as appropriate for the the type of analysis. The water samples were quickly sealed in the sample containers with Teflon-lined caps, labeled, and placed in iced storage for transport to the analytical laboratory for testing. The Chain-of-Custody initiated by the geotechnical engineer is included in **Appendix A**, with the results of the analytical laboratory testing.

Subsurface Conditions

The site is typically underlain by a black silty clay to a depth of about 6 feet below ground surface, olive gray to greenish gray clayey silt or sandy clay from about 6 feet to about 10 feet, and then by heterogeneous layers of clayey and silty sands, gravelly clays and sands, and clayey and sandy gravels. The materials encountered in the borings are described on **Plates 2A through 2H**, Logs of Borings. A copy of the classification system used to describe the soils encountered is shown on **Plate 4**, Unified Soil Classification Chart.

Ground water was encountered in the soil borings at about 12 to 16½ feet below grade during drilling on March 29 and 30, 1995. Soil borings SB-1 through SB-4 and soil borings SB-8 and SB-9 may have contained free product in the soil and groundwater as indicated by an obvious sheen on groundwater, hydrocarbon film observed on water sampling and water level measuring devices, and obvious hydrocarbon odor. Soil boring SB-10 did not have any signs of free product present. There was a strong gasoline odor in the soil in SB-7 from a depth of about 6 to 12 feet below ground surface. (Analytical results are summarized on **Plate 5**, Site Plan).

Analytical Results of Soil and Ground Water Samples

Nineteen soil samples were collected from the soil borings and analyzed for petroleum hydrocarbon contamination. The samples submitted to the analytical laboratory for testing were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline and BTEX (benzene, toluene, ethylbenzene, and total xylenes) by EPA Methods 5030/8015M and 8020, and TPH as diesel and motor oil by EPA Methods 3550/8015M. The results of the laboratory analyses of the soil samples indicated that the soil at the sample locations contained up to 1700 parts per million (ppm) TPH as gasoline, 3.3 ppm benzene, 5700 ppm TPH as diesel, and 2300 ppm as motor oil. The results of the laboratory analyses of the soil samples submitted for testing are summarized on **Table 1** at the end of this report. Copies of the Report of Laboratory Analysis are included in **Appendix A** to this report.

The grab water samples collected from the borings were analyzed for TPH as gasoline and BTEX by EPA Methods 5030/8015M, and for TPH as diesel by EPA Methods 3510/8015M. The results of laboratory analyses of grab water samples from the borings provide qualitative information about petroleum hydrocarbon contamination in the ground water at the location of the borings, and are not considered quantitatively representative of the ground water beneath the site. The results of the laboratory analyses of the water samples are summarized on **Table 2** at the end of this report. Copies of the Report of Laboratory Analysis are included in **Appendix A** to this report.

4.0 MONITORING WELLS

Borehole Drilling

We submitted our letter report with the preliminary results from the soil borings and our proposed location of new groundwater monitoring wells to the ACHCSA on April 17, 1995, and received concurrence from ACHCSA in their letter dated April 25, 1995. After approval of our proposed monitoring well locations, we acquired an Excavation Permit from the City of Oakland to drill a boring and install a monitoring well in the city street.

Our geotechnical engineer was onsite April 27, 1995 to observe the drilling of three boreholes which were converted to monitoring wells (MW-5 through MW-7), to log the materials encountered, and to assist in collecting soil samples from the borings. Based on the results of the nine soil borings described above, the location of the borings for new monitoring wells were chosen and presented in our letter report to the ACHCSA for comment. Monitoring well MW-6 was installed near the down-gradient edge of the assumed limits of the contaminant plume. Monitoring well MW-7 was installed up-gradient, at the southeast corner of Glascock Street and Peterson Street, in order to provide background information on the groundwater gradient and quality. Monitoring well MW-5 was installed near the center of the assumed limits of the contaminant plume to assess the progress of future remediation at the site.

The borings for the monitoring wells were also drilled using a truck-mounted drill rig operated by Clear Heart Construction & Drilling of Guerneville, California. Eight-inch-diameter, continuous-flight, hollow-stem augers were used to drill the boreholes to the total depth. The augers were steam-cleaned prior to each use to reduce the possibility of downhole or crosshole contamination. Logs of the borings are illustrated on **Plates 3A through 3C**. An apparent confined ground water bearing zone was encountered at approximately 9 to 13½ feet below grade in the three borings.

The drill cuttings from the borings were placed onto and covered with visqueen, and remain the responsibility of the owner. The auger decontaminate rinsate was placed in 55-gallon drums and is stored adjacent to the other drums of drill cuttings and rinsate and development water from

previous work at the site.

Soil Sampling

Soil samples were collected ~~were collected~~ by driving a California-type drive sampler, fitted with clean 6-inch brass liner tubes. The samples were collected by advancing the boring to a point immediately above the sampling depth and then driving the sampler into the soil through the hollow center of the auger. The sampler was driven 18 inches with a standard 140-pound hammer falling 30 inches. The number of blows necessary to drive the sampler each 6-inch increment was counted and recorded to evaluate the relative consistency of the soil materials. The number of blows required to drive the sampler were converted to "Standard Penetration Blow Counts", and are indicated on the boring logs.

The sampler was recovered and the samples removed and subjectively assessed for the presence of hydrocarbons (i.e. any free product, discoloration or odor) and was noted on the boring log by the geotechnical engineer. After subjective assessment, the soil samples were described and the brass sample tube was quickly capped on both ends with Teflon to cover the ends of the sampling tube, sealed with an air-tight polyethylene cap on each end, and taped to seal the caps. The samples were labeled and placed in zip-lock bags, then immediately placed in a refrigerated ice chest for subsequent transport to the laboratory. Formal chain-of-custody records were maintained for all samples. A copy of the Chain-of-Custody Record is included with the results of the laboratory analyses which are attached as **Appendix B.**

Descriptions of the soils encountered in the borings are presented on the Boring Logs, **Plates 3A through 3C.** The Unified Soil Classification System was used to identify soil encountered in the borings. A copy of this classification system is shown on **Plate 4,** Unified Soil Classification Chart.

Monitoring Well Construction

Three new monitoring wells (MW-5, MW-6, and MW-7) were installed at the site using hollow-stem flight auger techniques. All monitoring wells were completed with 2-inch-inside-diameter, PVC casing set to approximately 18 to 20 feet below grade. The screened casing in the three new wells consists of factory-milled PVC with 0.020-inch-wide slots that were set from the total depth of the boring ~~to~~ from approximately 8 to 10 feet below grade to the depth of well (18-20') Unslotted PVC casing was set from the top of the screened casing to the ground surface. The casing joints in the wells were flush-threaded; no glues, chemical cements, or solvents were used to construct the wells. The top of each well casing is covered with a locking compression cap, and the bottom has a threaded end-plug.

The annular space of each well was backfilled with a sand pack of clean, water-washed Monterey #2/12 sand from the total depth to approximately one foot above the top of the screened casing. The sand pack was placed by carefully pouring sand down the annulus between the hollow-stem auger and the well casing. The auger was raised periodically and an auger flight removed to allow the sand to fill the annulus between the casing and the borehole wall. A bentonite plug, approximately one foot thick, was placed above the sand as a seal against cement entering the sand pack. The remaining annulus was backfilled to within a few inches of the ground surface with a neat cement grout containing about 5 percent bentonite. Well completions consisted of water-tight "Christy" boxes with tamper deterrent bolts placed over each wellhead and set at grade in concrete. The "Christy" boxes have a watertight seal to protect the monitoring well against surface water intrusion. Well completion details are shown on the boring logs, **Plates 3A through 3C.**

The three monitoring wells were developed on May 10, 1995 under the supervision of our geotechnical engineer. The wells were developed by a combined bailing, pumping and water-surging technique. The wells were subsequently pumped until each well was thoroughly developed and essentially free of sand, silt and turbidity. The well development water was stored in 55-gallon drums that were labeled and are temporarily stored at the site.

Subjective indications of free product was observed in the water removed from monitoring wells MW-2 and MW-6; no subjective evidence of petroleum hydrocarbons was observed in the water pumped from the up-gradient monitoring well (MW-7).

On May 15, 1995, our field technician visited the site to collect water samples from monitoring wells MW-1 through MW-7. Before collecting the water samples, the depth to ground water was measured to the nearest 0.01-foot with a Soilinst Water Level Meter. Ground water samples were collected from each well by gently lowering approximately half the length of a disposable bailer past the air-water interface. Individual clean, disposable bailers were used in each well. The samples were retrieved and examined for any evidence of floating product, sheen, and emulsion. Subjective observations of floating product and a definite sheen was observed in the water samples from monitoring wells MW-2 and MW-6, and a sheen was observed on the surface of the water sample from monitoring well MW-1. Tthe only subjective evidence of hydrocarbon contamination in the other monitoring wells was a petroleum odor identified in the water sample from monitoring well MW-3. No subjective evidence of hydrocarbon contamination was observed in the water samples from monitoring wells MW-4 and MW-7.

Water samples for analytical testing were then collected by our field technician from the new monitoring wells (MW-5 through MW-7) and from the previously installed monitoring wells (MW-1 through MW-4) for submittal to the analytical laboratory.

Samples obtained from monitoring wells MW-2 and MW-6 on May 15, 1995 had been infiltrated with a very minor amount of free product as observed in the sample containers. The thickness of floating product, if present, could not be measured in the well because it dissipated with bailing before sampling. Indications of floating product were demonstrated by the obvious hydrocarbon film observed on the tape measure and the bailer before sampling.

The wells were purged of a minimum of 3 well volumes to allow representative sampling of the formation water. The purge water was stored in 55-gallon drums along with the previously collected development water. After purging, the water in the monitoring wells were allowed to recharge to at least 80 percent of their static water level before they were sampled for laboratory analysis.

Water samples were collected from the monitoring wells with clean, disposable bailers. To establish that the water samples were representative of the aquifer, periodic measurements for pH, temperature and specific conductance were made. The sample was collected only when the pH, temperature and specific conductance reached a more or less constant value; copies of the field log data sheets for each well are included in **Appendix C** to this report. Prior to sampling, approximately half the length of the bailer was lowered past the air-water interface, and the water was evaluated for floating product, sheen, or emulsion.

The collected water samples were slowly decanted into laboratory-cleaned, 40 milliliter glass vials for low boiling hydrocarbon water samples or 1 liter amber bottles for high boiling hydrocarbon samples, as appropriate for the type of analysis. The samples were quickly sealed in the sample containers with Teflon-lined caps, labeled, and placed in iced storage for transport to the analytical laboratory for testing. A Chain-of-Custody Record was initiated by our field technician; a completed copy of this record is included in **Appendix C** to this report, with the results of the analytical laboratory testing.

Subsurface Conditions

At the location of the new monitoring wells MW-5 through MW-7, the subsurface soil conditions are generally as described for the nine soil borings; however, about 3 feet of clayey sand fill material with metal shavings and a heavy petroleum odor was encountered beneath the concrete slab. The materials encountered in the borings are described on **Plates 3A through 3C**. The Unified Soil Classification System was used to describe soils encountered in the borings. A copy of the classification system is shown on **Plate 4**, Unified Soil Classification Chart.

Ground water was encountered in an apparent confined water bearing zone at about 9 to 13½ feet below grade in the borings for the monitoring wells. Hydrocarbon contamination was observed in the soil and/or water during the drilling of borings for monitoring wells MW-5 and MW-7. No subjective evidence of petroleum hydrocarbon contamination was observed in the up-gradient

monitoring well (MW-7).

Analytical Results of Soil and Ground Water Samples

Six soil samples were collected from the borings and were submitted to the laboratory for analyses of petroleum hydrocarbon contamination. The samples collected from the borings were analyzed for TPH as gasoline and BTEX by EPA Methods 5030/8015M, and for TPH as diesel and TPH as motor oil by EPA Methods 3550/8015M. The results of the laboratory analyses of the soil samples indicated that the soil at the sample locations in the boring locations contained up to 99 ppm TPH as gasoline, up to 1800 ppm TPH as diesel, and up 1900 ppm TPH as motor oil. The results of analytical laboratory analyses on soil samples from the borings for monitoring wells MW-5 through MW-7 are summarized on **Table 3**, at the end of this report; the results for the soil samples collected from the borings for the previously installed monitoring wells MW-1 through MW-4, are summarized on **Table 4**. Copies of the Report of Laboratory Analysis for the soil samples from borings MW-5 through MW-7 are included in **Appendix B** to this report.

Groundwater samples collected from wells at the site by our field technician were also analyzed for possible contaminants. Samples collected on May 15, 1995, from monitoring wells MW-1 through MW-7 were analyzed for TPH as gasoline and BTEX by EPA Methods 5030/8015M , and TPH as diesel by EPA Methods 3510/8015M. The results of the laboratory analyses of the water samples indicated that the ground water at the monitoring well locations contained up to 310 parts per billion (ppb) TPH as gasoline, 7.9 ppb benzene, and 5100 ppb TPH as diesel. The results of analytical analyses of the ground water samples are summarized on **Table 5**, at the end of this report. Copies of the Report of Laboratory Analysis are included in **Appendix C** to this report.

5.0 EVALUATION OF GROUND WATER GRADIENT

The locations and elevations of the casings of the new monitoring wells were surveyed by David L. Contreras, Land Surveyor, on June 2, 1995. A copy of the Monitoring Well Survey is included as **Appendix D** of this report. Depth to ground water was measured in the monitoring wells to the nearest 0.01-foot using a Soilinst Water Level Meter. Depth-to-water measurements and the surveyed wellhead elevations were used to evaluate the groundwater gradient on May 15, 1995. The groundwater flow direction is to the south toward the Oakland Estuary. The ground water elevation data are summarized in **Table 6**, along with the previous groundwater surface data, at the end of this report. The calculations for the groundwater gradient do not appear to be effected by the presence of floating product, if present, as the volume appears to be too small to depress the potentiometric surface.

6.0 CONCLUSIONS

Based on the results of our additional investigative work, the approximate limits of the ground water contamination beneath the site has been defined as shown on **Plate 5.** It appears that the sheet pile wall at the western edge of the building (adjacent to the Oakland Estuary) is acting as a barrier for migration of hydrocarbon contamination into the estuary. It appears that there are one or more ancient gravel stream channels, as indicated by the sandy gravel and gravelly sand layers encountered at depth in the boring for MW-1 and borings SB-4 and SB-9. It is reasonable to believe that these ancient gravel stream channels are preferential pathways for migration of the petroleum hydrocarbons. Subjective evidence of floating product was encountered on May 15, 1995 in monitoring wells MW-2 and MW-6 and dissipated immediately after initial bailing. This may be due to the fine grained soils which make up the formation which may be holding onto product, preventing it from flowing into the well casing. Also, the bottom horizon of the confining layer may be irregular, allowing trapped product to migrate laterally due to disturbances caused by drilling and bailing. Subjective evidence of free product was encountered during drilling of (e.g. predominantly trapped in soil samples with wormholes) of borings SB-1 through SB-4 and SB-7. Some contamination in soil may have traveled vertically upwards several feet from the bottom of the confining layer due to capillary action and diffusion within the capillary fringe. The capillary fringe in this type of fine grained soils can be up to several feet in thickness. In addition, petroleum contamination in soil was encountered starting at a depth of 4½ feet in the vicinity of monitoring well MW-2 (adjacent to the source) to about 8 feet in the vicinity of boring SB-9 and monitoring well MW-6 (adjacent to the sheetpile wall).

Gasoline contamination was identified from a depth of about 6 feet to a depth of about 12 feet below ground surface. A soil sample collected from 8 feet below ground surface contained 1700 ppm TPH as gasoline and 3.3 ppm benzene.

7.0 RECOMMENDATIONS

We recommend the following activities be performed to determine if free product exists in groundwater and to establish a baseline for cleanup levels for dissolved hydrocarbons in groundwater.

1) Monitor specifically for the presence of floating product in all wells be measured for the thickness of floating product on a quarterly basis and determine the volume and extent of the plume. Submit reports on a quarterly basis and make recommendations for floating product removal after sufficient data is collected.

2) Sample for Total Dissolved Solids in groundwater on a quarterly basis for one year to determine if the groundwater beneath the site is considered to have present or future beneficial uses. Report results along with quarterly reports on presence of floating product.

8.0 CLOSURE

These additional investigative activities have been performed by W. A. Craig, Inc. for the purpose of further assessing the limits of petroleum hydrocarbon contamination at the site. The results and opinions of this work are based on data collected at the locations of soil and water samples obtained from borings performed, and monitoring wells that were installed, as part of the investigation. It should be recognized that occurrences of contamination can migrate with time and could exist, or occur in the future, at other locations, or in amounts greater than those detected during this investigation.

We trust this provides the information required at this time. If you have any questions, please call. The following plates and appendices are attached and complete this report. A copy of this report should be forwarded to the ACHCSA and RWQCB - San Francisco Bay Region.

9.0 LIMITATIONS

The work performed was done solely for the purpose of investigating the status of potentially contaminted soil. No soil engineering or geotechnical references are implied or should be inferred. The subsurface investigation is meant only as a guide for your own decision making and was not designed to satisfy regulatory requirements. Not all areas of concern were investigated and the scope of work as carried out in this investigation did not provide for an adequate number of samples to conclusively rule out subsurface contamination. The recommendations herein are professional opinions that W.A. Craig, Inc. has endeavored to provide with competence and reasonabale care. We are not able to eliminate the risks associated with environmental work. No guarantees or warrants, express or implied, apply regarding our recommendations.

Plate 1	Site Plan with Boring and Monitoring Well Locations
Plates 2A through 2H	Logs of Borings SB-1 through SB-10
Plates 3A through 3C	Logs of Borings and Well Completion Details for Monitoring Wells MW-5 through MW-7
Plate 4	Unified Soil Classification Chart
Plate 5	Site Plan with Approximate Limits of Product Plume
Plate 6	Groundwater Gradient Map (5/15/95)
Table 1	Results of Analyses for TPHg, TPHd, TPHmo, and BTEX on Soil Samples from Soil Borings (3/29 - 3/30/95)
Table 2	Results of Analyses for TPHg, TPHd, and BTEX on Grab Samples of Water from Soil Borings (3/29 - 3/30/95)
Table 3	Results of Analyses for TPHg, TPHd, TPHmo, and BTEX on Soil Samples from Borings for Monitoring Wells MW-5, MW-6, and MW-7 (4/27/95)
Table 4	Results of Analyses for TPHg, TPHd, TPHmo, and BTEX on Soil Samples from Borings for Monitoring Wells MW-1, MW-2, MW-3, and MW-4 (9/23/94)
Table 5	Results of Analyses for TPHg, TPHd, and BTEX on Samples of Ground Water Collected from Monitoring Wells
Table 6	Ground Water Surface Elevation Data
Appendix A	McCampbell Analytical, Inc. Analytical Test Results for Soil and Grab Water Samples from Borings (3/29 - 3/30/95)
Appendix B	McCampbell Analytical, Inc. Analytical Test Results for Soil Samples from Borings for Monitoring Wells MW-5, MW-6, and MW-7 (4/27/95)
Appendix C	McCampbell Analytical, Inc. Analytical Test Results and Field Log Data Sheets (Ground Water Sampling 5/15/95)
Appendix D	Monitoring Well Survey

TABLE 1
RESULTS OF ANALYSES FOR TPHg, TPHd, TPHmo AND BTEX ON SOIL SAMPLES FROM SOIL BORINGS
(3/29 - 3/30/95)
2901 Glascock Street
Oakland, California

Sample Location	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl-benzenes	Total Xylenes
SB-1 @ 9'	100	500	230	ND<0.01	ND<0.01	ND<0.01	0.15
SB-1 @ 14'	24	220	99	ND	0.006	ND	0.043
SB-2 @ 8'	130	980	410	ND	0.020	ND	0.15
SB-2 @ 13'	56	300	120	ND	0.006	ND	0.098
SB-3 @ 7'	79	540	220	ND<0.05	ND<0.05	ND<0.05	ND<0.05
SB-3 @ 12'	42	210	81	ND	0.007	ND	0.076
SB-3 @ 15 1/2'	1.6	57	22	ND	ND	ND	0.008
SB-4 @ 8'	4.1	320	420	ND	ND	ND	0.008
SB-4 @ 13'	3.7	66	83	ND	ND	ND	ND
SB-4 @ 18'	1.4	1.5	ND	ND	ND	ND	ND
SB-7 @ 8'	1,700	1,100	280	3.3	9.9	19	81
SB-7 @ 11 1/2'	170	230	54	0.42	0.78	1.7	5.9
SB-7 @ 16 1/2'	5.4	21	ND	ND	0.021	0.030	0.077
SB-8 @ 8'	ND	10	34	ND	ND	ND	ND
SB-8 @ 13'	12	230	220	ND	0.008	0.005	0.022
SB-8 @ 17'	18	270	180	0.009	0.020	0.007	0.040
SB-9 @ 8'	56	960	570	ND	ND	0.010	0.035
SB-9 @ 12 1/2'	590	5,700	2,300	ND<0.1	0.15	0.33	2.4
SB-10 @ 16 1/2'	ND	ND	ND	ND	ND	ND	ND

Results are in parts per million
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
ND = not detected at or above laboratory detection limits

TABLE 2
RESULTS OF ANALYSES FOR TPHg, TPHd AND BTEX
ON GRAB SAMPLES OF GROUND WATER
FROM SOIL BORINGS (3/29 - 3/30/95)
2901 Glascock Street
Oakland, California

Soil Boring	TPHg	TPHd	Benzene	Toluene	Ethyl-benzenes	Total Xylenes
SB-1	310	17,000	ND	0.78	ND	0.91
SB-2	5,200	190,000	3.9	4.9	2.6	14
SB-3	1,000	110,000	ND	2.6	0.77	4.8
SB-4	1,100	9,900	ND	0.6	0.69	0.71
SB-7	260	130	13	13	10	40
SB-8	130	6,200	ND	ND	ND	0.89
SB-9	820	210,000	16	1.8	ND	4.4
SB-10	ND	250	0.65	1.2	ND	1.3

Results are in parts per billion (ppb)
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
ND = not detected at or above laboratory detection limits
NT = not tested

TABLE 3
RESULTS OF ANALYSES FOR TPHg, TPHd, TPHmo AND BTEX ON SOIL SAMPLES FROM BORINGS FOR MONITORING WELLS MW-5, MW-6 AND MW-7
(4/27/95)
2901 Glascock Street
Oakland, California

Sample Location	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl-benzenes	Xylenes
MW-5 @ 3'	NT	1,200	1,900	NT	NT	NT	NT
MW-5 @ 8'	ND	ND	ND	ND	ND	ND	ND
MW-5 @ 12'	99	1,800	730	ND	0.017	0.023	0.20
MW-6 @ 8'	8.7	620	390	ND	ND	ND	ND
MW-6 @ 12'	4.7	46	21	ND	ND	ND	0.005
MW-7 @ 10'	ND	ND	ND	ND	ND	ND	ND

Results are in parts per million
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
ND = not detected at or above laboratory detection limits
NT = not tested

TABLE 4
RESULTS OF ANALYSES FOR TPHg, TPHd, TPHmo
AND BTEX ON SOIL SAMPLES FROM BORINGS
FOR MONITORING WELLS MW-1, MW-2, MW-3, AND MW-4
(9/23/94)
2901 Glascock Street
Oakland, California

Sample Location	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl-benzenes	Xylenes
MW-1 @ 5'	ND	ND	NT	ND	ND	ND	ND
MW-1 @ 10'	48	300	NT	ND	0.005	ND	0.086
MW-1 @ 15'	4.3	130	46	ND	ND	ND	ND
MW-2 @ 4.5'	26	250	NT	ND	ND	0.017	0.021
MW-2 @ 9'	52	830	NT	ND	0.018	ND	0.19
MW-2 @ 14.5'	50	7,900	3,900	0.039	0.022	0.61	0.84
MW-3 @ 5'	ND	ND	NT	ND	ND	ND	ND
MW-3 @ 9.5'	110	780	NT	ND<0.04	ND<0.04	ND<0.04	0.30
MW-3 @ 15'	ND	ND	ND	ND	ND	ND	ND
MW-4 @ 5'	ND	ND	NT	ND	ND	ND	ND
MW-4 @ 9'	ND	ND	NT	ND	ND	ND	ND
MW-4 @ 14'	1.9	ND	ND	ND	ND	ND	ND

Results are in parts per million
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
TPHmo = Total Petroleum Hydrocarbons as motor oil
ND = not detected at or above laboratory detection limits
NT = not tested

TABLE 5
RESULTS OF ANALYSES FOR TPHg, TPHd AND BTEX
ON SAMPLES OF GROUND WATER
COLLECTED FROM MONITORING WELLS
2901 Glascock Street
Oakland, California

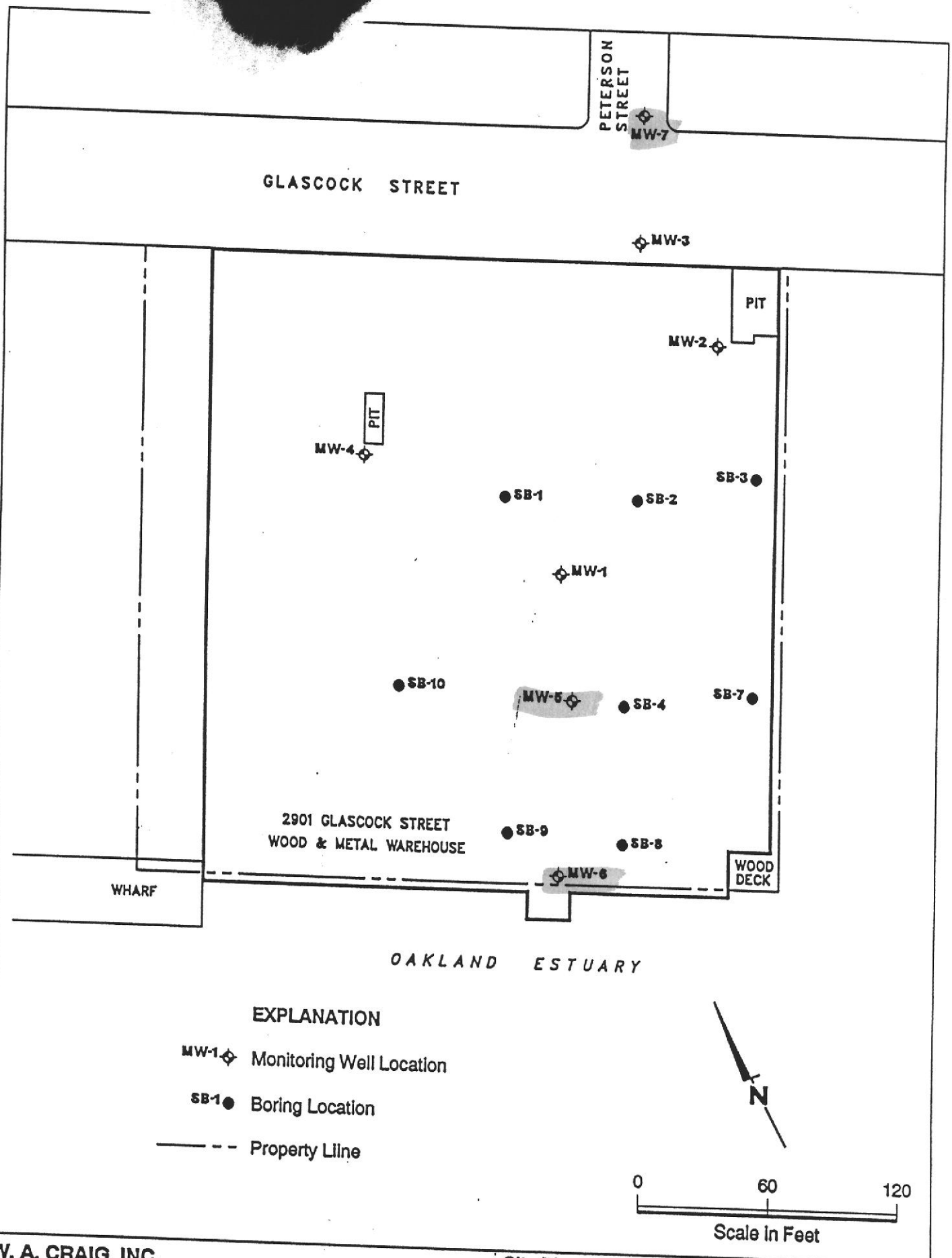
Monitoring Well	TPHg	TPHd	Benzene	Toluene	Ethyl-benzenes	Total Xylenes
October 6, 1994						
MW-1	NT	NT	NT	NT	NT	NT
MW-2	NT	NT	NT	NT	NT	NT
MW-3	NT	320	ND	ND	ND	ND
MW-4	NT	ND	ND	ND	ND	ND
January 20, 1995						
MW-1	670	1,900	5.3	ND	ND	1.1
MW-2	520	4,000	2.2	1.9	ND	1.3
MW-3	86	460	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND	ND
May 15, 1995						
MW-1	290	3,400	7.9	ND	ND	1.4
MW-2	310	5,100	2.3	1.9	ND	1.4
MW-3	60	310	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND	ND
MW-5	ND	490	ND	ND	ND	ND
MW-6	120	1,100	5.6	0.88	ND	2.1
MW-7	110	ND	ND	ND	ND	ND

Results are in parts per billion (ppb)
TPHg = Total Petroleum Hydrocarbons as gasoline
TPHd = Total Petroleum Hydrocarbons as diesel
ND = not detected at or above laboratory detection limits
NT = not tested

TABLE 6
GROUND WATER SURFACE ELEVATION DATA
at
2901 Glascock Street
Oakland, California

Well No.	Casing Elevation	Depth to Groundwater	Groundwater Elevation
October 6, 1994			
MW-1	10.76	8.36	2.40
MW-2	10.62	7.17	3.45
MW-3	9.87	6.59	3.28
MW-4	10.64	7.96	2.68
November 8, 1994			
MW-1	10.76	6.04	4.72
MW-2	10.62	4.20	6.42
MW-3	9.87	4.13	5.74
MW-4	10.64	5.33	5.31
January 29, 1995			
MW-1	10.76	6.67	4.09
MW-2	10.62	4.64	5.98
MW-3	9.87	4.47	5.40
MW-4	10.64	5.95	4.69
May 15, 1995			
MW-1	10.76	7.08	3.68
MW-2	10.62	5.66	4.96
MW-3	9.87	5.08	4.79
MW-4	10.64	6.28	4.36
MW-5	10.61	7.54	3.07
MW-6	10.27	7.46	2.81
MW-7	9.85	3.46	6.39

Elevation measurements are in feet and referenced to mean sea level



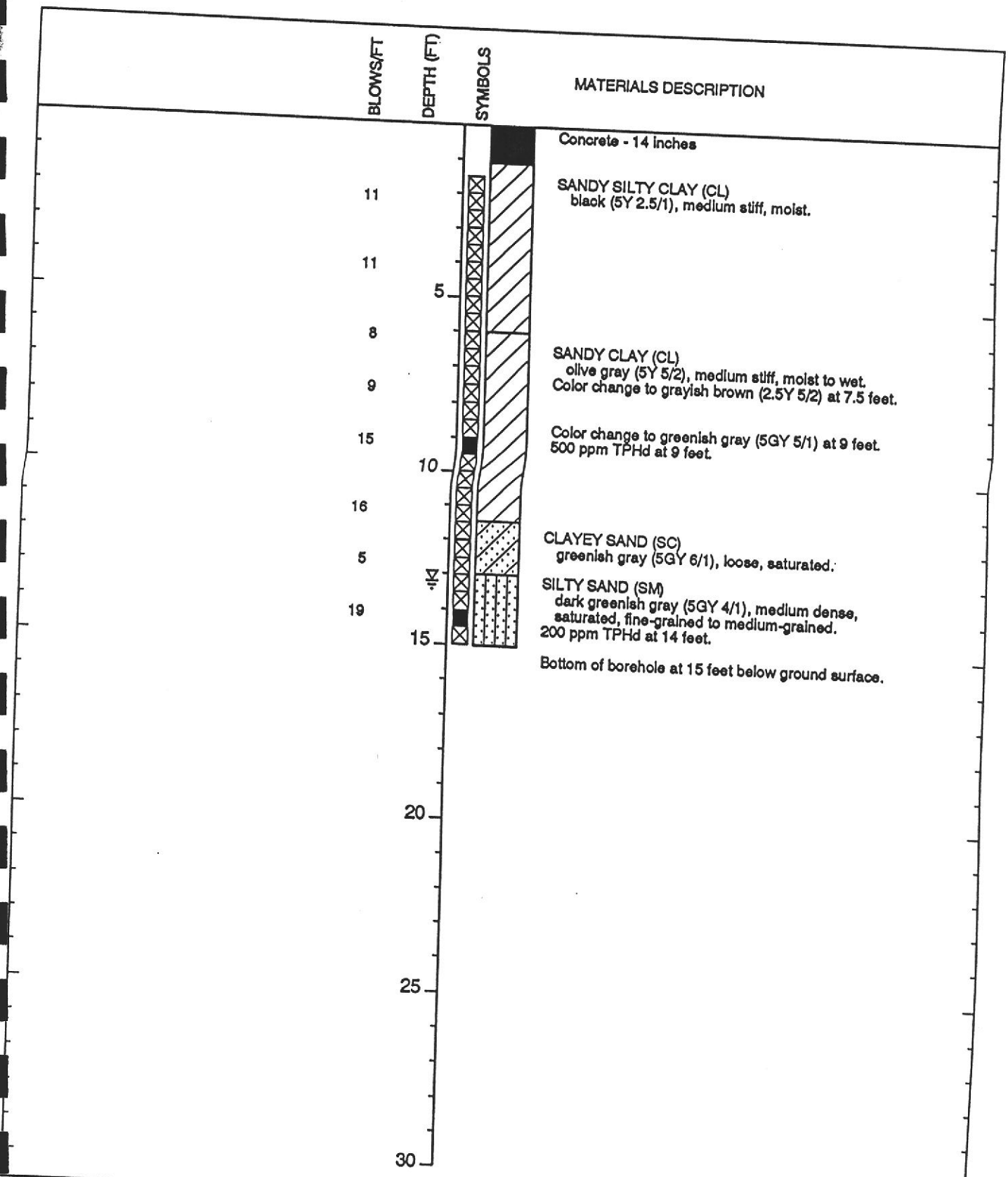
W. A. CRAIG, INC.

INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

Site Plan with Boring and Monitoring Well Locations
2901 Glascock Street
Oakland, California

PLATE **1**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
3406		6/95	



DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/29/95	TOTAL DEPTH OF HOLE	15 feet
DATE COMPLETED	3/29/95	TOP OF CASING ELEVATION	11 feet MSL

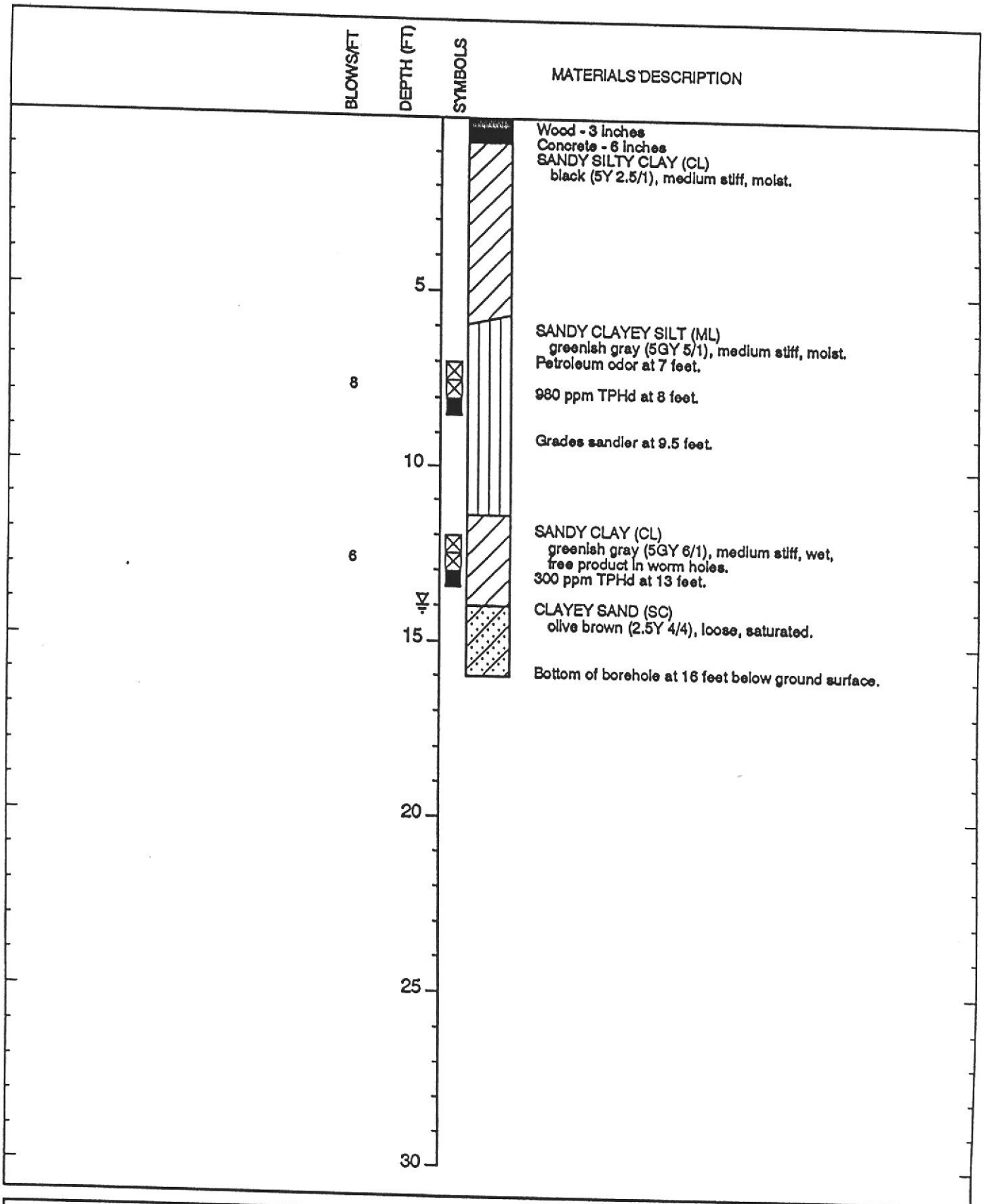
V.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring SB-1
2901 Glascock Street
Oakland, California

PLATE
2A

B NUMBER	REVIEWED BY	DATE	REVISED DATE
406		6/95	



DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/29/95	TOTAL DEPTH OF HOLE	16 feet
DATE COMPLETED	3/29/95	TOP OF CASING ELEVATION	11 feet MSL

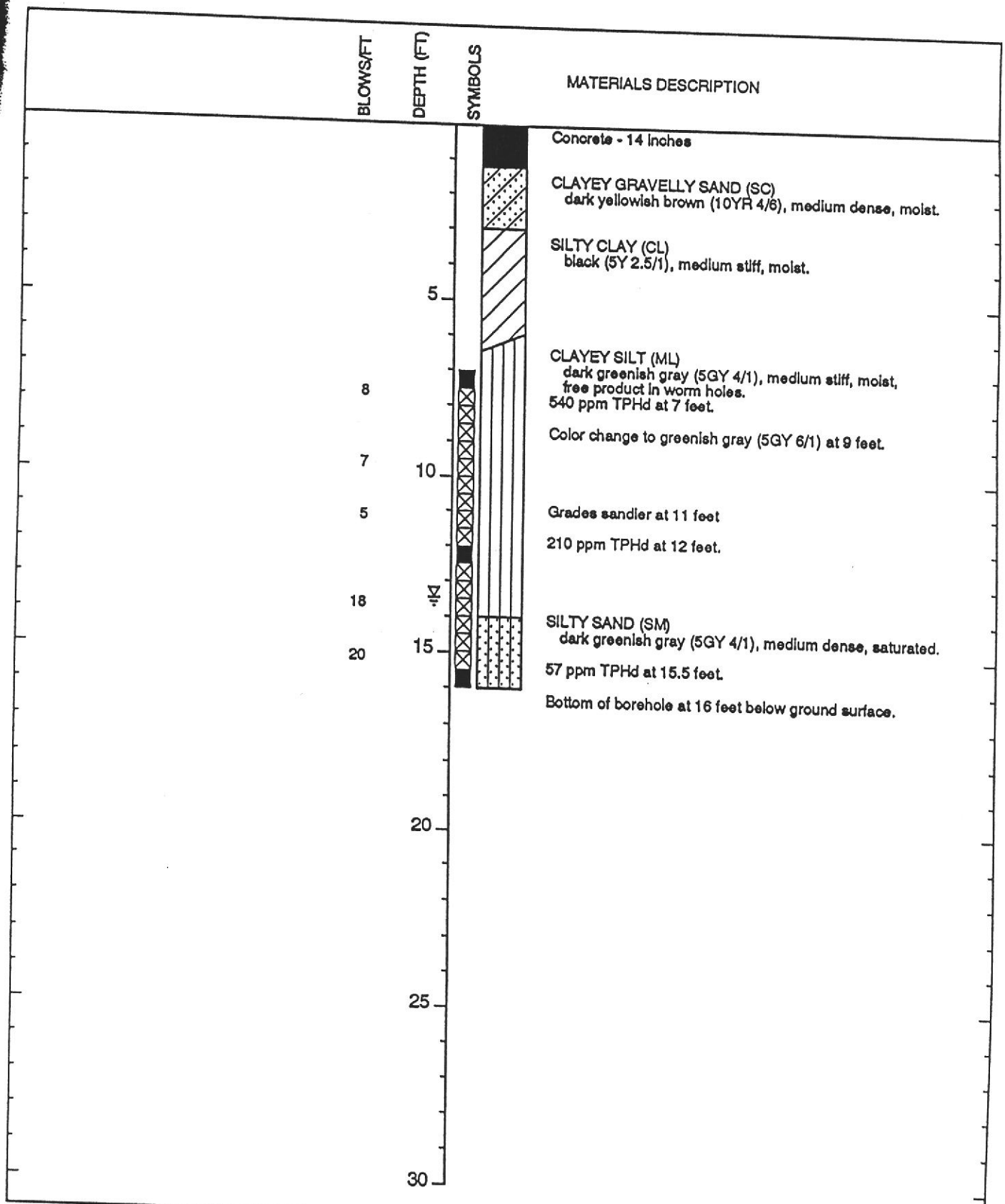
W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring SB-2
2901 Glascock Street
Oakland, California

PLATE
2B

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
3406		6/95	



DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/30/95	TOTAL DEPTH OF HOLE	16 feet
DATE COMPLETED	3/30/95	TOP OF CASING ELEVATION	11 feet MSL

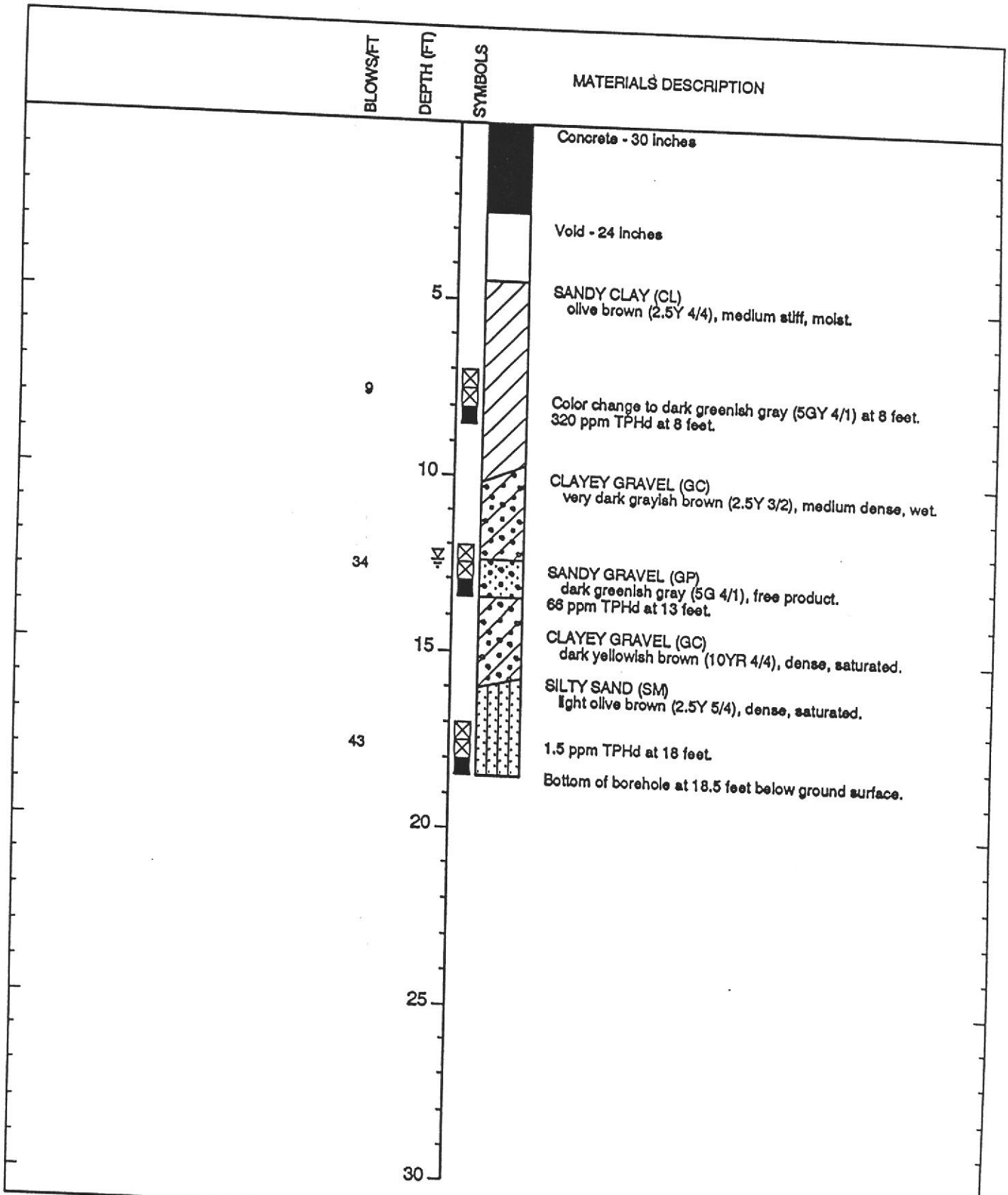
W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring SB-3
2901 Glascock Street
Oakland, California

PLATE
2C

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
3406		6/95	



DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/29/95	TOTAL DEPTH OF HOLE	18.5 feet
DATE COMPLETED	3/29/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring SB-4
2901 Glascock Street
Oakland, California

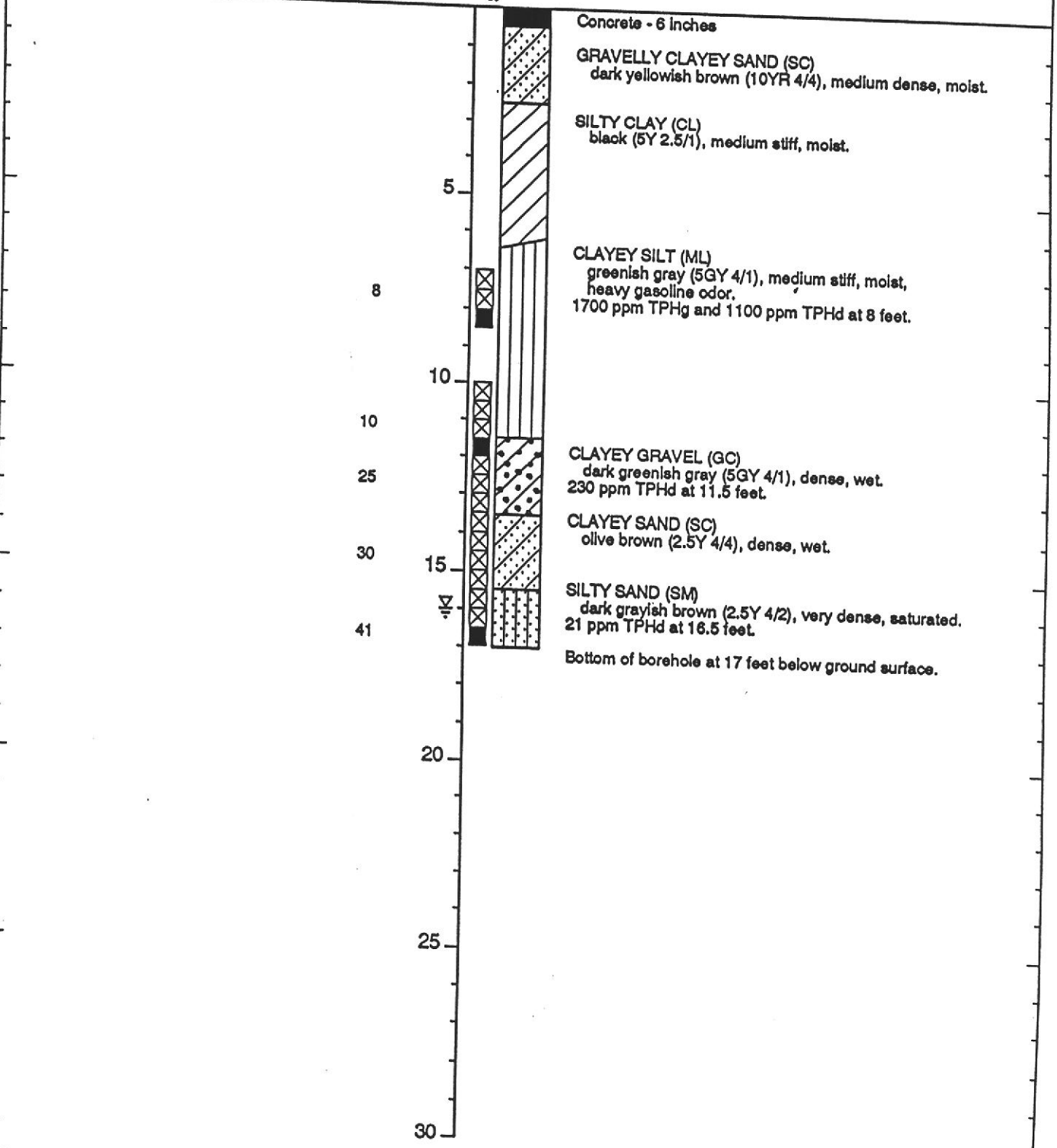
PLATE **2D**

JOB NUMBER 3406

REVIEWED BY

DATE 6/95

REVISED DATE



DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/30/95	TOTAL DEPTH OF HOLE	17 feet
DATE COMPLETED	3/30/95	TOP OF CASING ELEVATION	11 feet MSL

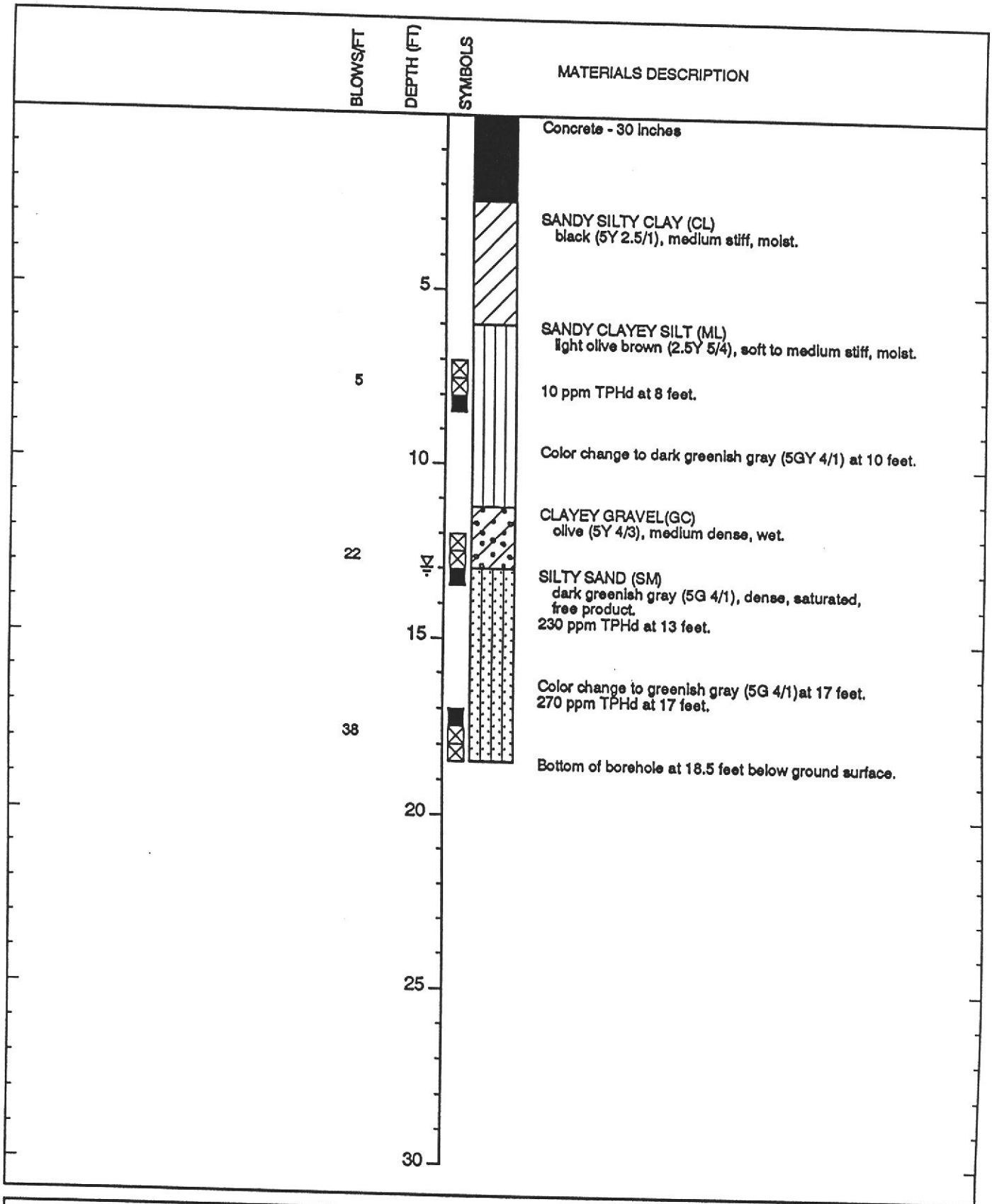
W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring SB-7
2901 Glascock Street
Oakland, California

PLATE
2E

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
3406		6/95	



DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/29/95	TOTAL DEPTH OF HOLE	18.5 feet
DATE COMPLETED	3/29/95	TOP OF CASING ELEVATION	11 feet MSL

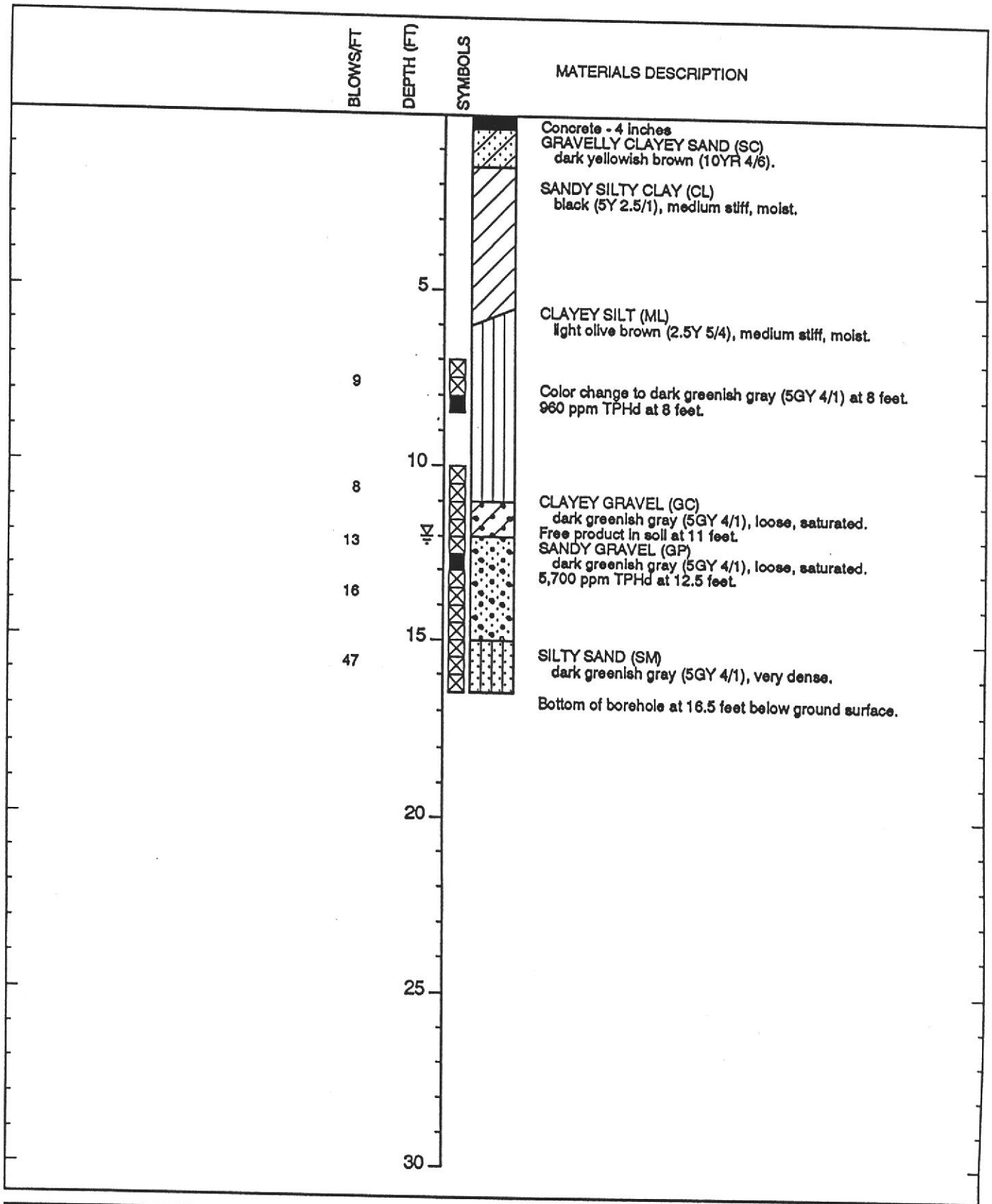
W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring SB-8
2901 Glascock Street
Oakland, California

PLATE
2F

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
3406		6/95	



DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/30/95	TOTAL DEPTH OF HOLE	16.5 feet
DATE COMPLETED	3/30/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring SB-9
2901 Glascock Street
Oakland, California

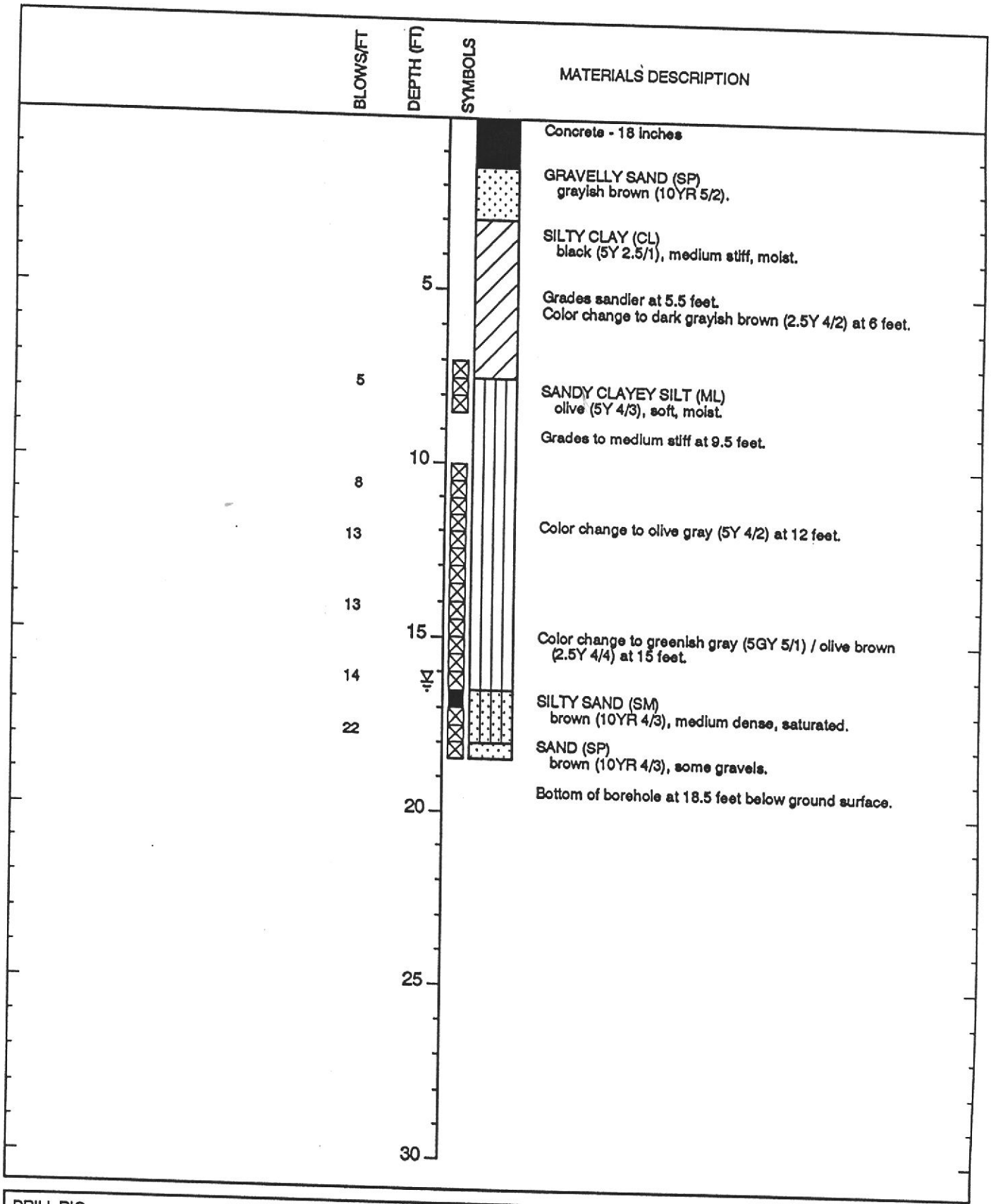
PLATE
2G

JOB NUMBER 3406

REVIEWED BY JWO

DATE 6/95

REVISED DATE



DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	3/30/95	TOTAL DEPTH OF HOLE	18.5 feet
DATE COMPLETED	3/30/95	TOP OF CASING ELEVATION	11 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring SB-10
2901 Glascock Street
Oakland, California

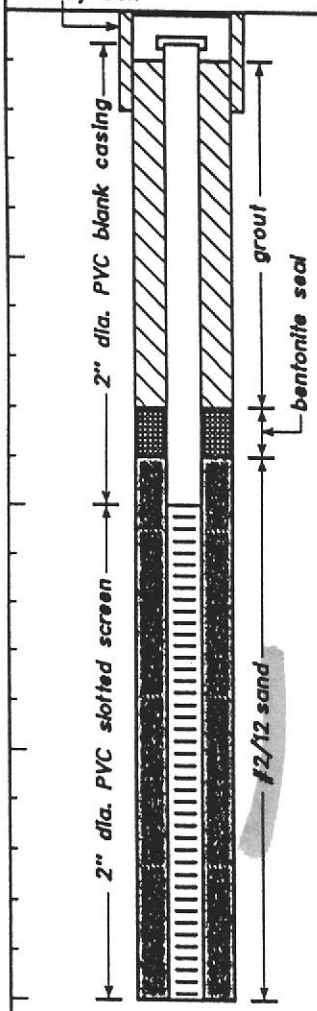
PLATE
2H

JOB NUMBER 3406

REVIEWED BY

DATE 6/95

REVISED DATE



DEPTH (FT)	BLOWS/FT	SYMBOLS	MATERIALS DESCRIPTION
			Concrete - 14 inches
			CLAYEY SAND (SC) very dark grayish brown (2.5Y 3/2), medium dense, moist, metal shavings.
			1200 ppm TPHd at 3 feet.
5	11		SILTY CLAY (CL) black (5Y 2.5/1), medium stiff, moist.
	9		SANDY CLAYEY SILT (ML) olive (5Y 5/3), medium stiff, moist.
			Color change to greenish gray (5G 5/1) at 8.5 feet.
10			SANDY CLAY (CL) olive gray (5Y 4/2), medium stiff, wet. Petroleum odor at 11 feet.
	11		Free product at 12 feet.
15	29		SILTY SAND (SM) dark brown (10YR 4/3), dense, saturated.
			SAND (SP) olive (5Y 5/3) / olive brown (2.5Y 4/4), dense, saturated, medium-grained.
20			Bottom of borehole at 20 feet below ground surface.
25			
30			

DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	4/27/95	TOTAL DEPTH OF HOLE	20 feet
DATE COMPLETED	4/27/95	TOP OF CASING ELEVATION	10.61 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

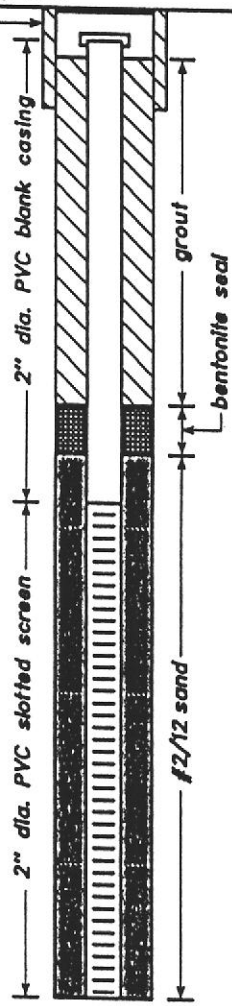
Log of Boring MW-5 and Well Completion Detail
2901 Glascock Street
Oakland, California

PLATE **3A**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
3406		6/95	

WELL CONSTRUCTION DETAIL

Christy Box



BLOWS/FT	DEPTH (FT)	SYMBOLS	MATERIALS DESCRIPTION
			Concrete - 12 inches
			GRAVELLY CLAYEY SAND (SC) dark yellowish brown (10YR 4/6).
			SANDY SILTY CLAY (CL) black (5Y 2.5Y/1), medium stiff, moist.
	5		
7			CLAYEY SILT (ML) olive (5Y 4/4), medium stiff, moist.
			Color change to dark gray (5Y 4/1) at 8 feet. 620 ppm TPHd at 8 feet.
	10		Grades sandier at 10 feet.
17			GRAVELLY CLAYEY SAND (SC) olive gray (5Y 4/2), medium dense, wet, free product.
			46 ppm TPHd at 12 feet.
			SILTY SAND (SM) dark gray (5Y 4/1), medium dense, saturated.
	15		Color change to olive gray (5Y 4/2) at 15 feet.
30			SAND (SP) dark brown (10YR 3/3), dense, saturated.
	20		Bottom of borehole at 20 feet below ground surface.
	25		
	30		

DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	4/27/95	TOTAL DEPTH OF HOLE	20 feet
DATE COMPLETED	4/27/95	TOP OF CASING ELEVATION	10.27 feet MSL

W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring MW-6 and Well Completion Detail
2901 Glascock Street
Oakland, California

PLATE **3B**

JOB NUMBER 3406

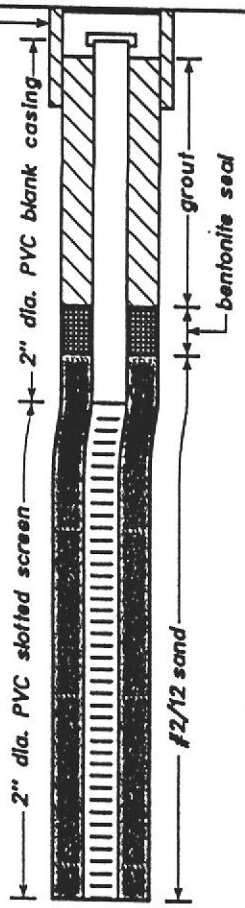
REVIEWED BY

DATE 6/95

REVISED DATE

WELL CONSTRUCTION DETAIL

Christy Box



BLOWS/FT	DEPTH (FT)	MATERIALS DESCRIPTION
		Asphalt - 8 inches. Class II AB - 6 inches.
		SANDY SILTY CLAY (CL) very dark grayish brown (2.5Y 3/2), medium stiff, moist.
8	5	SANDY CLAY (CL) light olive brown (2.5Y 5/4), medium stiff, moist.
3	10	CLAYEY SILT (ML) *grayish brown (2.5Y 5/2), soft, saturated.*
		SILTY CLAY (CL) dark grayish brown (2.5Y 4/2), stiff, wet.
33	15	Color change to olive brown (2.5Y 4/4) at 15 feet.
		SAND (SP) dark brown (10YR 3/3), dense, saturated.
	20	Bottom of borehole at 18 feet below ground surface.
	25	
	30	

DRILL RIG	8" Hollow Stem Auger/2"Mod. CA Sampler	DIAMETER OF HOLE	8 inches
DATE STARTED	4/27/95	TOTAL DEPTH OF HOLE	18 feet
DATE COMPLETED	4/27/95	TOP OF CASING ELEVATION	9.85 feet MSL

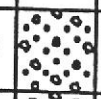
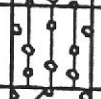
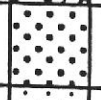
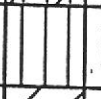
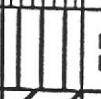
W.A. CRAIG, INC

INDUSTRIAL AND ENVIRONMENTAL CONTRACTO

Log of Boring MW-7 and Well Completion Detail
2901 Glascock Street
Oakland, California

PLATE **3C**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
3406		6/95	

MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER 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 WITH OR WITHOUT SAND, LITTLE OR NO FINES
			GP		POORLY GRADED GRAVELS WITH OR *WITHOUT SAND, LITTLE OR NO FINES*
		GRAVELS WITH OVER 15% FINES	GM		SILTY GRAVELS, SILTY GRAVELS WITH SAND
			GC		CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW		WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
			SP		POORLY GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
		SANDS WITH OVER 15% FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SANDS AND GRAVELS
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
			OL		ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH		ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS			PT		PEAT AND OTHER HIGHLY ORGANIC SOILS

Perm	- Permeability
Consol	- Consolidation
LL	- Liquid Limit (%)
PI	- Plastic Index (%)
G_s	- Specific Gravity
MA	- Particle Size Analysis
2.5 YR 6/2	- Soil Color according to Munsell Soil Color Charts (1975 Edition)
5 GY 5/2	- GSA Rock Color Chart

□	- No Soil Sample Recovered
⊘	- Disturbed Soil Sample Recovered
■	- Sample Submitted for Laboratory Analysis
⊠	- Undisturbed Soil Sample Recovered
▽	- First Encountered Ground Water Level
▼	- Piezometric Ground Water Level
Penetration	- Sample drive hammer weight - 140 pounds falling 30 inches. Blows required to drive sampler 1 foot are indicated on the logs

W. A. CRAIG, INC.

INDUSTRIAL AND ENVIRONMENTAL CONTRACTOR

Unified Soil Classification Chart
2901 Glascock Street
Oakland, California

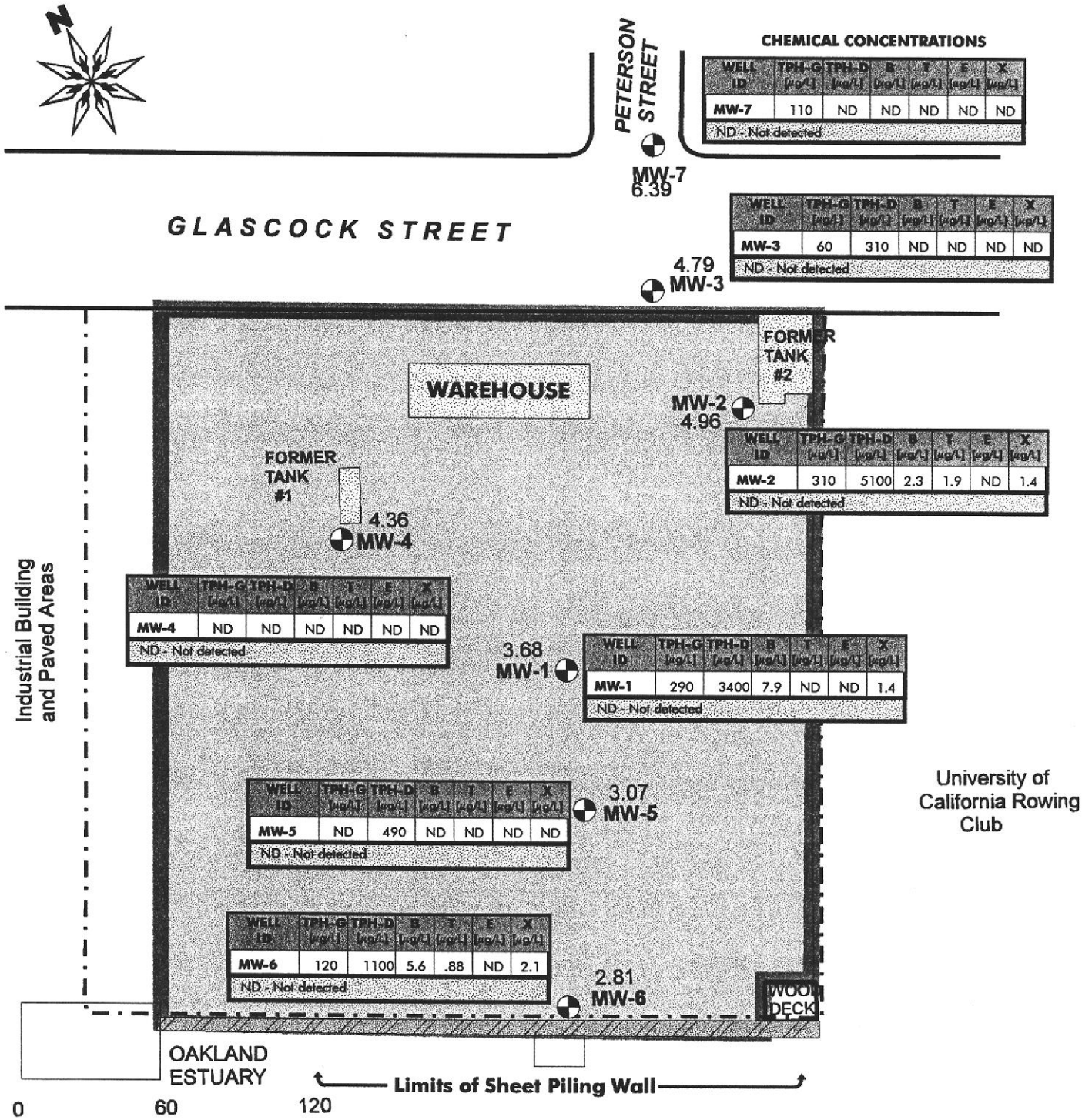
PLATE **4**

JOB NUMBER 3406

REVIEWED BY

DATE 6/95

REVISED DATE



CHEMICAL CONCENTRATIONS

WELL ID	TPH-G (µg/L)	TPH-D (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-7	110	ND	ND	ND	ND	ND
ND - Not detected						

WELL ID	TPH-G (µg/L)	TPH-D (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-3	60	310	ND	ND	ND	ND
ND - Not detected						

WELL ID	TPH-G (µg/L)	TPH-D (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-2	310	5100	2.3	1.9	ND	1.4
ND - Not detected						

WELL ID	TPH-G (µg/L)	TPH-D (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-4	ND	ND	ND	ND	ND	ND
ND - Not detected						

WELL ID	TPH-G (µg/L)	TPH-D (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-1	290	3400	7.9	ND	ND	1.4
ND - Not detected						

WELL ID	TPH-G (µg/L)	TPH-D (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-5	ND	490	ND	ND	ND	ND
ND - Not detected						

WELL ID	TPH-G (µg/L)	TPH-D (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW-6	120	1100	5.6	.88	ND	2.1
ND - Not detected						

PLATE 5

LEGEND

GROUNDWATER MONITORING WELL

W.A. CRAIG, INC.
P.O. BOX 448, NAPA, CALIFORNIA 94559-0448

2901 GLASCOCK STREET
OAKLAND, CALIFORNIA
JOB # 3518

MAP OF DISSOLVED HYDROCARBONS IN GROUNDWATER

MAY 15, 1995

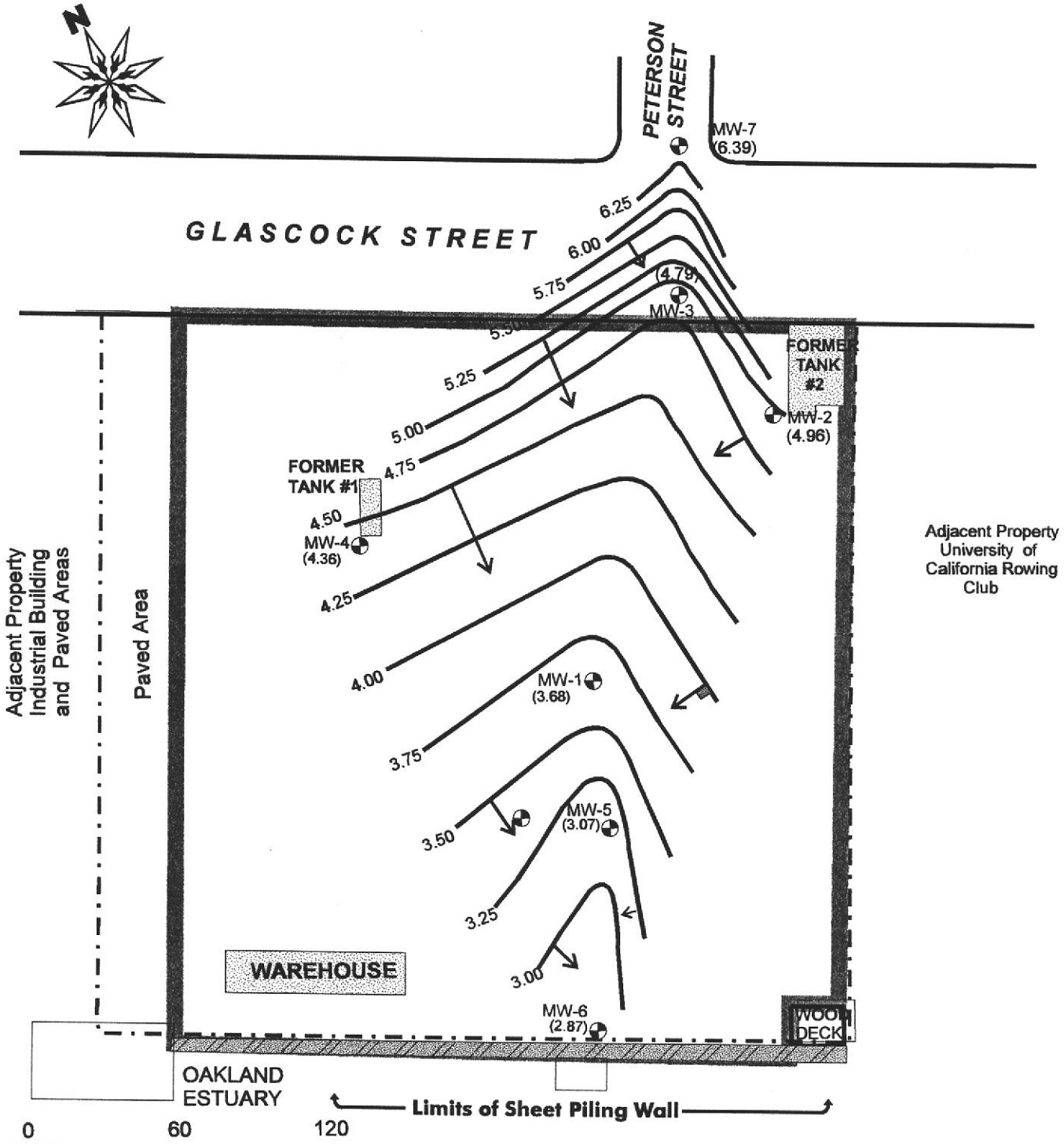


PLATE 6

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER ELEVATION CONTOUR

W.A. CRAIG, INC.

P.O. BOX 448, NAPA, CALIFORNIA 94559-0448

2901 GLASCOCK STREET
OAKLAND, CALIFORNIA
JOB # 3518

GROUNDWATER GRADIENT MAP

MAY 15, 1995

APPENDIX A

MCCAMPBELL ANALYTICAL, INC. ANALYTICAL TEST RESULTS FOR SOIL AND GRAB WATER SAMPLES FROM BORINGS (3/29 - 3/30/95)

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

W.A. Craig, Inc. P.O. Box 448 Napa, CA 94559-0448	Client Project ID: 3406; Glascock	Date Sampled: 03/29-03/30/95
		Date Received: 03/30/95
	Client Contact: Bill Craig	Date Extracted: 03/30/95
	Client P.O:	Date Analyzed: 03/30-04/01/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
51233	3406 SB8.8	S	ND	ND	ND	ND	ND	101
51234	3406 SB8.13	S	12,g	ND	0.008	0.005	0.022	87
51235	3406 SB8.17	S	18,g	0.009	0.020	0.007	0.040	101
51236	3406 SB8-W	W	120,g	ND	ND	ND	0.89	97
51237	3406 SB9.8	S	56,g	ND	ND	0.010	0.035	98
51238	3406 SB9.12.5	S	590,g	ND< 0.1	0.15	0.33	2.4	91
51239	3406 SB9-W	W	820,g,c,h	16	1.8	ND	4.4	90
51240	3406 SB10.16.5	S	ND	ND	ND	ND	ND	97
51241	3406 SB10-W	W	ND,a,g	0.65	1.2	ND	1.3	101
51242	3406 SB7.16.5	S	5.4,d,g	ND	0.021	0.030	0.077	97
51243	3406 SB7-W	W	260,a	13	13	10	40	96
51244	3406 SB7.8	S	1700,b	3.3	9.9	19	81	107
51245	3406 SB3.12	S	42,g	ND	0.007	ND	0.076	102
51246	3406 SB7.11.5	S	170,d,g	0.42	0.78	1.7	5.9	---#
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/phase is present; j) no recognizable pattern.

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

W.A. Craig, Inc. P.O. Box 448 Napa, CA 94559-0448	Client Project ID: 3406; Glascock	Date Sampled: 03/29-03/30/95
		Date Received: 03/30/95
	Client Contact: Bill Craig	Date Extracted: 03/30/95
	Client P.O:	Date Analyzed: 03/30-04/01/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
51247	3406 SB3.15.5	S	1.6,g	ND	ND	ND	0.008	98
51248	3406 SB3-W	W	1000,g,c,h	ND	2.6	0.77	4.8	106
51249	3406 SB3.7	S	79,g	ND< 0.05	ND< 0.05	ND< 0.05	ND< 0.05	91
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/phase is present; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

W.A. Craig, Inc. P.O. Box 448 Napa, CA 94559-0448	Client Project ID: 3406; Glascock	Date Sampled: 03/29-03/30/95
		Date Received: 03/30/95
	Client Contact: Bill Craig	Date Extracted: 03/30/95
	Client P.O:	Date Analyzed: 03/31-04/03/95

Diesel Range (C10-C23), Motor Oil Range (> C18) Extractable Hydrocarbons as Diesel & Motor Oil *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	TPH(mo)-	% Recovery Surrogate
51233	3406 SB8.8	S	10,g	34	91
51234	3406 SB8.13	S	230,a	220	97
51235	3406 SB8.17	S	270,a	180	95
51236	3406 SB8-W	W	6200,a	---	101
51237	3406 SB9.8	S	960,a	570	109
51238	3406 SB9.12.5	S	5700,a	2300	97
51239	3406 SB9-W	W	210,000,a,h,i	---	108
51240	3406 SB10.16.5	S	ND	ND	98
51241	3406 SB10-W	W	250,a	---	100
51242	3406 SB7.16.5	S	21,a	ND	96
51243	3406 SB7-W	W	130,d	---	101
51244	3406 SB7.8	S	1100,a,d	280	105
51245	3406 SB3.12	S	210,a	81	103
51246	3406 SB7.11.5	S	230,a,d	54	106
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	250 ug/L	
		S	1.0 mg/kg	10 mg/kg	

* water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; c) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible phase is present; i) result may be artificially high due unavoidable extraction of suspended product

DHS Certification No. 1644

Edward Hamilton, Lab Director

W. A. CRAIG, INC.

CHAIN-OF-CUSTODY RECORD

ANALYSIS

	SAMPLE IDENTIFICATION	MATRIX S/Sed	TPH	BTX	TPH	TPH	
1535	3406SB8. 8	S	✓	✓	✓	✓	✓
1540	3406SB8. 13	S	✓	✓	✓		
1545	3406SB8. 17	S	✓	✓	✓		
1550	3406SB8 - W	W	✓	✓			
0820	3406SB9. 3	S	✓	✓	✓		
0830	3406SB9. 12½	S	✓	✓	✓		
0900	3406SB9 - W	W	✓	✓			
1030	3406SB10. 16½	S	✓	✓	✓		
1100	3406SB10 - W	W	✓	✓			
1220	3406SB7. 16½	S	✓	✓	✓		
1410	3406SB3. 14						
1420	3406SB7. 11½						

51242
51243
51244
51245
51246
51247

51233
51234
51235
51236
51237
51238
51239
51240
5124[illegible]

PRESERVATIVE ✓
APPROPRIATE ✓
CONTAINERS ✓

GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

Signature: Scott	DATE/TIME: 7/14/95 1733	Signature: Mahoney	LABORATORY: McCampbell Analytical
SHED BY (Signature):	DATE/TIME	RECEIVED BY (Signature):	TURNAROUND TIME: Standard 48hr

SEND RESULTS TO:

W. A. CRAIG, INC.
P.O. BOX 448
NAPA, CA 94559-0448
(707) 252-3353

ATTN:

TECHNICA TECHFILM 003 (5/93)

CHAIN OF CUSTODY RECORD

pg 2 of 2

PROJECT NO.: 3406

PROJECT NAME: Glascock

PURCHASE ORDER NO.:

SIGNATURE OF SAMPLER: Russell Scott

DATE 1995	TIME	W. A. CRAIG, INC.'S SAMPLE IDENTIFICATION	MATRIX: Soil, Water, Air, Sludge, Other	ANALYSIS: TPHgasoline (8015)	BTEX (602/8020)	TPHdiesel (8015)	TPHg & BTEX	TPH-m/o				Preserved? HCl ICE	REMARKS	LABORATORY I. D. NUMBER
3/30	1350	3406 SB3 -W	W			✓	✓					✓		51248
"	1300	3406 SB3.7	S			✓	✓	✓				✓		51249
-4-	1030	3406 SB10 .16½ -14	S			✓	✓	✓				—		

ISEE: ✓ VOC: [illegible] CHECKED

GOOD CONDITION: ✓ PRESERVATIVE APPROPRIATE: ✓

HEAD SPACE ABSENT: — CONTAINERS: ✓

RELINQUISHED BY (Signature):	DATE/TIME	RECEIVED BY (Signature):
Russell Scott	3/30/95 1738	[signature]
RELINQUISHED BY (Signature):	DATE/TIME	RECEIVED BY (Signature):
RELINQUISHED BY (Signature):	DATE/TIME	RECEIVED BY (Signature):

LABORATORY: Pacific Analytical Inc

TURNAROUND TIME:

PLEASE SEND RESULTS TO:
W. A. CRAIG, INC.
P.O. BOX 448
NAPA, CA 94559-0448
(707) 252-3353

ATTN:

TECHNICAL TECHNICIAN (540)

W A CRAIG P.03

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

QC REPORT FOR HYDROCARBON ANALYSES

Date: 04/01-04/03/95

Matrix: Water

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		
	Sample	MS	MSD		MS	MSD	RPD
TPH (gas)	0.0	94.9	98.6	100	94.9	98.6	3.8
Benzene	0	9.3	8.3	10	93.0	83.0	11.4
Toluene	0	9.4	8.6	10	94.0	86.0	8.9
Ethyl Benzene	0	9.3	8.8	10	93.0	88.0	5.5
Xylenes	0	28.9	27.1	30	96.3	90.3	6.4
TPH (diesel)	0	172	175	150	115	117	1.9
TRPH (oil & grease)	0	18950	19000	23700	80	80	0.3

% Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100

APPENDIX B

MCCAMPBELL ANALYTICAL, INC. ANALYTICAL TEST RESULTS FOR SOIL SAMPLES FROM BORINGS FOR MONITORING WELLS MW-5, MW-6, AND MW-7 (4/27/95)

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

W.A. Craig, Inc. P.O. Box 448 Napa, CA 94559-0448	Client Project ID: # 3406; Glascock	Date Sampled: 04/27/95
		Date Received: 05/01/95
	Client Contact: Bill Craig	Date Extracted: 05/01/95
	Client P.O:	Date Analyzed: 05/01-05/04/95

Diesel Range (C10-C23) Motor Oil Range (> C18) Extractable Hydrocarbons as Diesel * & Motor Oil *
EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	TPH(mo)+	% Recovery Surrogate
52153	3406 MW6.8'	S	620,a	390	98
52154	3406 MW6.12'	S	46,a	21	100
52155	3406 MW5.12'	S	1800,a	730	100
52156	3406 MW5.3'	S	1200,a	1900	102
52157	3406 MW5.8'	S	ND	ND	100
52158	3406 MW7.10'	S	ND	ND	101
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	50 ug/L	
		S	1.0 mg/kg	1.0 mg/kg	

* water samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

uttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated aseline, or; surrogate has been diminished by dilution of original extract.

e following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not nsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range ounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds e significant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks esent; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample a contains greater than ~ 5 vol.% sediment.

Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

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

Client Project ID: # 3406; Glascock
Client Contact: Bill Craig
Client P.O:

Date Sampled: 04/27/95
Date Received: 05/01/95
Date Extracted: 05/01/95
Date Analyzed: 05/01/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
52153	3406 MW6.8'	S	8.7,g	ND	ND	ND	ND	105
52154	3406 MW6.12'	S	4.7,b	ND	ND	ND	0.005	105
52155	3406 MW5.12'	S	99,g	ND	0.017	0.023	0.20	102
52157	3406 MW5.8'	S	ND	ND	ND	ND	ND	100
52158	3406 MW7.10'	S	ND	ND	ND	ND	ND	100
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

clustered chromatogram; sample peak coelutes with surrogate peak

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

ELAP Certification No. 1644

Edward Hamilton, Lab Director

APPENDIX C

MCCAMPBELL ANALYTICAL, INC. ANALYTICAL TEST RESULTS AND FIELD LOG DATA SHEETS (GROUND WATER SAMPLING 5/15/95)

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Telc: 510-798-1620 Fax: 510-798-1622

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

Client Project ID: # 3406; Glascock
Client Contact: Bill Craig
Client P.O:

Date Sampled: 05/15/95
Date Received: 05/15/95
Date Extracted: 05/15-05/16/95
Date Analyzed: 05/15-05/16/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method OGFID(5030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylbenzene	Xylenes	% Rec. Surrogate
52468	MW-7	W	110,d/e	ND	ND	ND	ND	100
52469	MW-3	W	60,f	ND	ND	ND	ND	100
52470	MW-2	W	310,b,h	2.3	1.9	ND	1.4	95
52471	MW-1	W	290,c,b	7.9	ND	ND	1.4	109
52472	MW-5	W	ND,f	ND	ND	ND	ND	102
52473	MW-6	W	120,d	5.6	0.88	ND	2.1	102
52474	MW-4	W	ND	ND	ND	ND	ND	103
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W	50 ug/L	0.5	0.5	0.5	0.5	
	S	1.0 mg/kg	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; sample peak coelutes with surrogate peak

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (Stoddards solvent?); f) one o a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter han water immiscible sheen is present; i) liquid sample that contains greater than ~ 5 vol. % sediment; j) no recognizable pattern.

DHS Certification No. 1644

Edward Hamilton, Lab Director

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

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

Client Project ID: # 3406; Glascock
Client Contact: Bill Craig
Client P.O:

Date Sampled: 05/15/95
Date Received: 05/15/95
Date Extracted: 05/16/95
Date Analyzed: 05/16/95

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d)+	% Recovery Surrogate
52468	MW-7	W	ND	96
52469	MW-3	W	310,a	98
52470	MW-2	W	5100,a	100
52471	MW-1	W	3400,a	100
52472	MW-5	W	490,a	100
52473	MW-6	W	1100,a	96
52474	MW-4	W	ND	100
porting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

ter samples are reported in ug/L, soil samples in mg/kg, and all TCLP and STLC extracts in mg/L

ttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated a ne, or; surrogate has been diminished by dilution of original extract.

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not nsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range ounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds nificant; e) medium boiling point pattern that does not match diesel (?); f) one to a few isolated peaks esent; g) oil range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample at contains greater than ~ 5 vol. % sediment.

S Certification No. 1644

Edward Hamilton, Lab Director

106 | Oakcock #3406

PHASE # NO. | SIGNATURE OF SAMPLER: Russell Beatty

ANALYSIS

TIME	W. A. CRAIG, INC.'S SAMPLE IDENTIFICATION	MATRIX: Soil, Water, Air, Sludge, Other	TPHgasoline (8015)	BTEX (602/8020)	TPHdiesel (8015)	TPHg & BTEX	Preserved? HCl ICE	REMARKS	LABORATORY I. D. NUMBER
10:50	MW-7	W			✓	✓	✓		52468
11:05	MW-3	W			✓	✓	✓		52469
12:55	MW-2	W			✓	✓	✓		52470
13:50	MW-1	W			✓	✓	✓		52471
14:25	MW-5	W			✓	✓	✓		52472
15:15	MW-6	W			✓	✓	✓		52473
16:00	MW-4	W			✓	✓	✓		52474

ICE ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓

PRESERVATIVE ✓
APPROPRIATE ✓
CONTAINERS ✓

VOAs O&G Metals

BY (Signature):	DATE/TIME	RECEIVED BY (Signature):
R Beatty	5/15/95 5:05	
BY (Signature):	DATE/TIME	RECEIVED BY (Signature):
BY (Signature):	DATE/TIME	RECEIVED BY (Signature):

LABORATORY: McCampbell Analytical

TURNAROUND TIME:

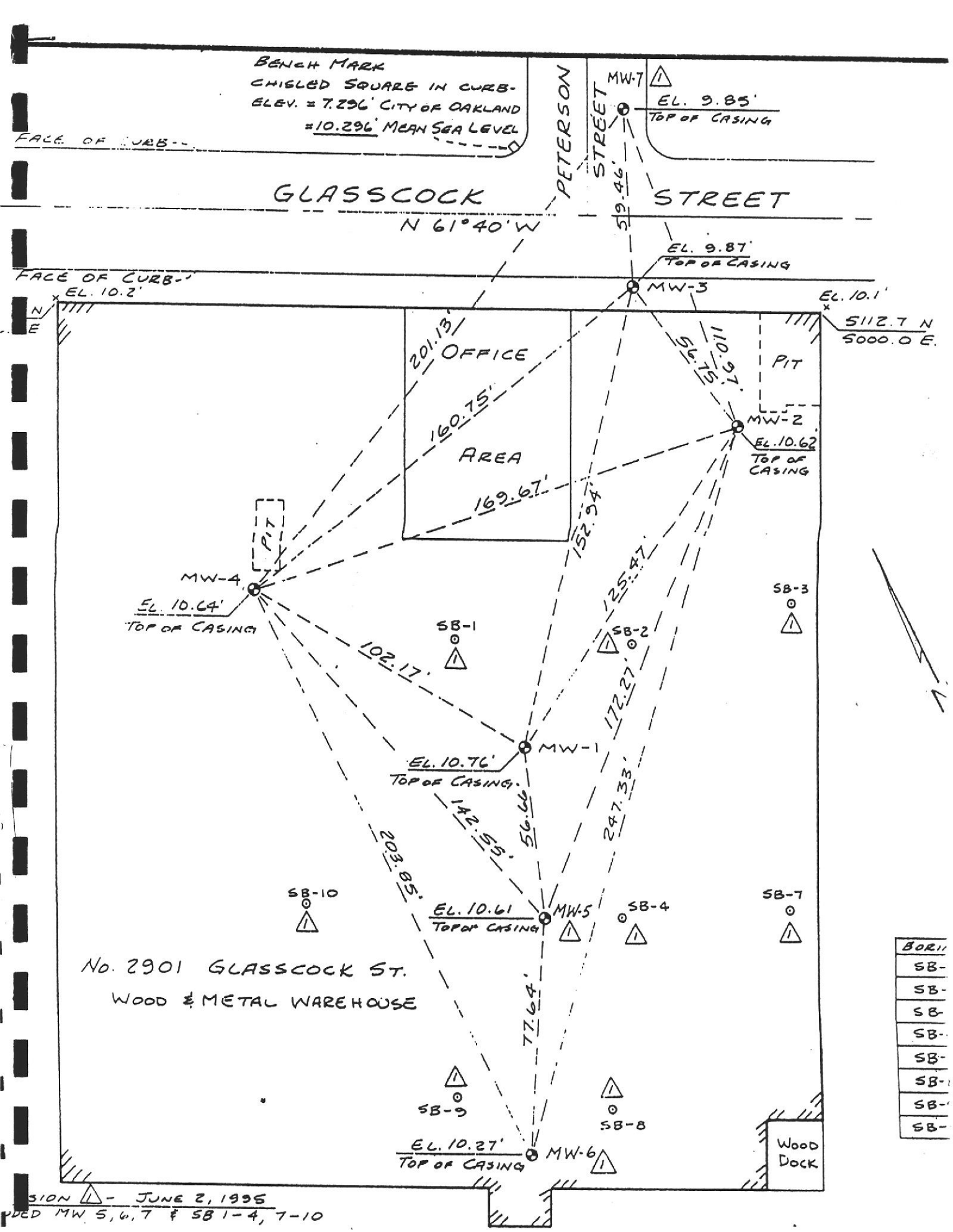
PLEASE SEND RESULTS TO:
W. A. CRAIG, INC.
P.O. BOX 448
NAPA, CA 94559-0448
(707) 252-3353

ATTN:

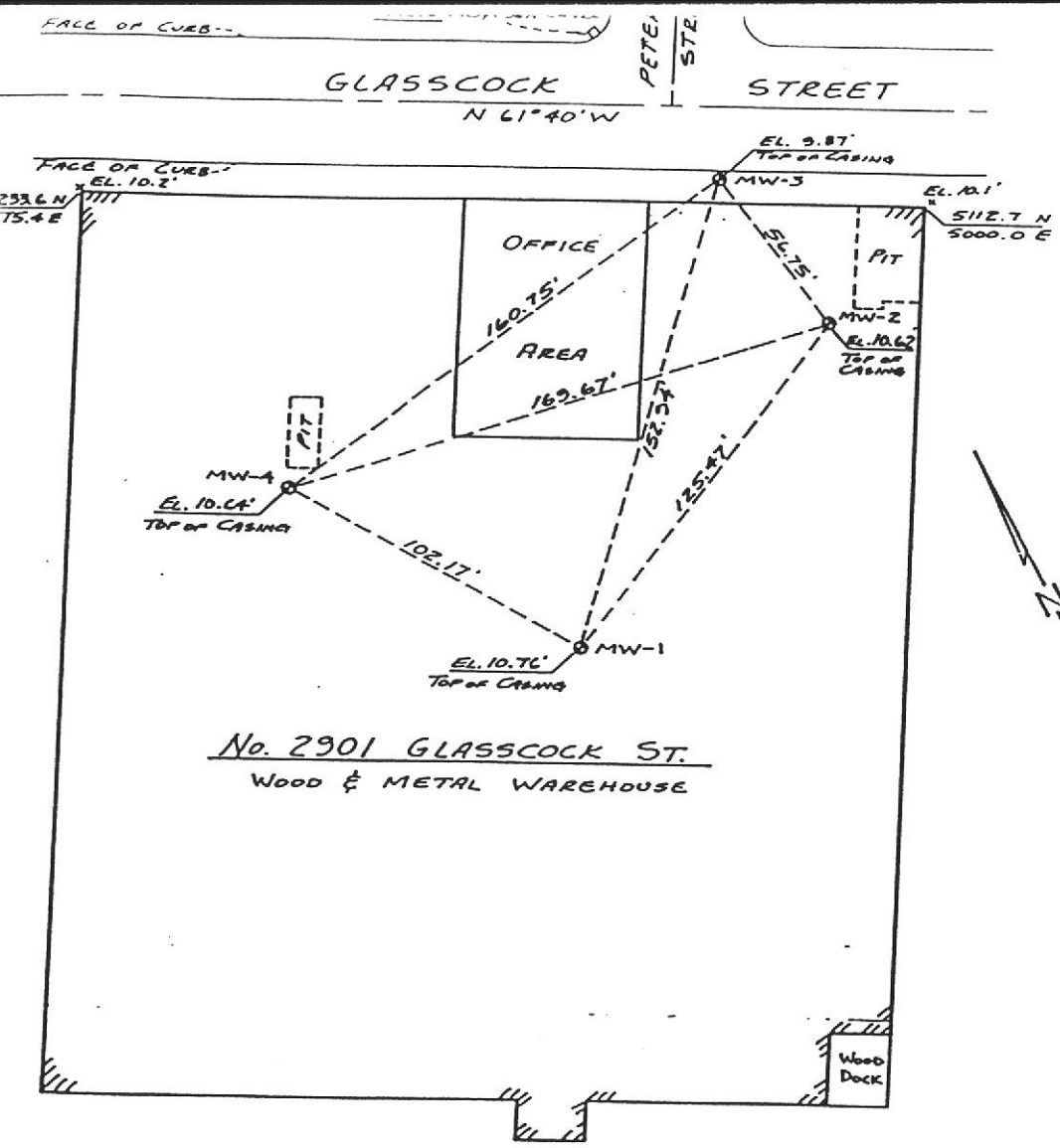
CA TECHFORM 003 (1/90)

APPENDIX D

MONITORING WELL SURVEY



RVEY 6031, 0064



1) PUNCH MARK SET AT NORTHERLY SIDE, TOP OF CASING AT MONITORING WELLS MW-1 THROUGH MW-4, IS BASIS OF MEASUREMENT OF DISTANCES, COORDINATES & ELEVATIONS.

2) ELEVATION EQUATION BETWEEN CITY OF OAKLAND DATUM AND MEAN SEA LEVEL (-3.00') SUPPLIED BY CITY OF OAKLAND, DEPARTMENT OF PUBLIC WORKS, SURVEY DIVISION.

WELL NO	NORTHING	EASTING	ELEV.
MW-1	5034.77	4846.67	10.76'
MW-2	5092.37	4958.13	10.62'
MW-3	5148.33	4949.05	9.87'
MW-4	5120.23	4790.78	10.64'

LICENSED LAND SURVEYOR
DAVID L. CONTRERAS
5065
STATE OF CALIFORNIA

David Contreras

MONITORING WELL SURVEY
OF
No. 2901 GLASSCOCK STREET
OAKLAND, CALIFORNIA
FOR
W.A. CRAIG, INC.

BY
DAVID L. CONTRERAS, LAND SURVEYOR
(415) 892-5905
20 VIVIAN CT. NOVATO, CA

SCALE: 1"= 40' SEPTEMBER 27, 1994

:Y 0031