PROJECT STATUS REPORT:
ENVIRONMENTAL ENGINEERING SERVICES
INDUSTRIAL ASPHALT FACILITY
PLEASANTON, CALIFORNIA

September 4, 1987

TABLE OF CONTENTS

1 CONCLUSIONS

The contaminants of concern at this site have migrated to the ground water table, and have contaminated ground water. The lateral and vertical extent of the contaminant plume, which are as yet unknown, should be delineated in order to assess the impact on soil and ground water resources. Remediation measures to clean-up the contaminated soil and ground water will be dependent on factors such as 1) concentration level of soil contamination, 2) concentration level of contamination of the ground water, 3) spatial extent of the contaminant plume, and 4) beneficial uses of the ground water.

2 RECOMMENDATIONS

Based on our analysis of the data and the work completed to date, we recommend that the following phases of work be undertaken to comply with the "Guidelines for Addressing Fuel Leaks" issued by the California Regional Water Quality Control Board, San Francisco Bay Region:

1) Tank Removal

   The existing asphalt tanks should be excavated and disposed of at an appropriate disposal facility. Following removal of the tanks, any free product observed in the excavation should be removed and disposed of at a Class I disposal facility. Additionally, any diesel saturated backfill or native soil materials should be excavated and stockpiled. Soil samples should be collected within the excavation and analyzed to determine the concentration of contamination in soil remaining after excavation.

2) Well Canvass

   A well canvass should be conducted to identify existing wells in the site area, use of the ground water, and information on well construction and development to aid in characterizing regional ground water conditions.

3) Soil Vapor Monitoring

   A soil vapor monitoring survey should be conducted to identify the lateral extent of the contaminant plume in the subsurface.

4) Additional Monitoring Wells and Observations

   The three onsite wells should be surveyed (level survey) on a regular basis (monthly) to continue monitoring depth to ground water and determination of any changes in floating product thickness and distribution. Additional monitoring wells should be installed to confirm the extent of the contamination plume and further characterize ground water contamination.

The results of these four recommended studies would aid in identifying beneficial ground water use, characterizing the contaminant plume and serve as a basis for identifying alternative remedial actions for both ground water and soil.

3 PROJECT DESCRIPTION

3.1 INTRODUCTION

This report presents the results of our second phase of the on-going environmental engineering services at the Industrial Asphalt facility in Pleasanton, California (Plate 1). This phase of work included the installation of three ground water monitoring wells and associated sample collection and laboratory analysis.

The results of the first phase of our investigation to characterize shallow soil conditions at the subject site were presented in our report entitled, "Final Environmental Investigation Report, Industrial Asphalt Facility, Eastern Alameda County, California", dated May 18, 1987.

3.2 PURPOSE AND SCOPE OF SERVICES

In accordance with our proposed workplan for the installation of three monitoring wells, dated May 22, 1987, this phase of the investigation was conducted to provide preliminary assessment of ground water conditions at the site.

The following scope of work was completed to meet this objective:

1. Permit and drill three borings to encounter ground water, MW-1 was drilled with 8-inch hollow stem auger and a CME-75 drill rig; MW-2 and MW-3 were drilled with Ingersoll Rand Cyclone rotary drill rig using air and mud.

2. Complete and develop each boring as a water monitoring well; Well MW-1 was completed as 2-inch well; Well MW-2 and MW-3 were completed as 4-inch wells.

3. Sample water and free product, if present, in each well, and collect sample of tank backfill material for laboratory analysis.

4. Analyze water and backfill samples for total petroleum hydrocarbons (TPH) as diesel and for polychlorinated biphenyls (PCB); analyze floating product sample for PCB.

5. Conduct level survey to evaluate depth to ground water and thickness of floating product, if present, in the three monitoring wells.

6 Prepare status report summarizing field investigations and analytical data, and provide recommendations for further site investigation.

4. FIELD ACTIVITIES AND OBSERVATIONS

4.1 INTRODUCTION

Three soil borings were drilled and completed as water monitoring wells. The locations of these wells are shown on Plate 2 relative to the shallow soil borings completed in the first phase of this investigation and the underground tanks and above ground facilities onsite. Logs of the monitoring wells are shown on Plates 3 through 5.

4.2 DRILLING AND SOIL SAMPLING

On June 10 and 11, 1987, the first boring, MW-1, was drilled using a CME 75 drill rig equipped with 8-inch hollow-stem augers. A Kleinfelder geologist supervised the drilling and logged the soils encountered. Soil samples were obtained by advancing the boring to a point immediately above the sampling depth and then driving a Modified California sampler into the soil through the center of the auger with a 140 pound hammer falling 30 inches. Penetration resistance to driving the sampler was recorded as blows per foot. The soils encountered were visually classified in accordance with the Unified Soil Classification System (USCS) which is summarized on Plate 6.

Due to limited sample recovery and drilling conditions, the second and third borings, MW-2 and MW-3, were drilled with an Ingersoll Rand Cyclone mud rotary drill rig during the period July 22 through July 28, 1987. A Kleinfelder field geologist supervised the drilling and logged the borings by visually classifying the soils encountered in accordance with the USCS.

These three borings were completed as ground water monitoring wells as described in the following section.

4.3 WELL INSTALLATION

Monitoring well MW-1 was completed as a two inch diameter well installed within the auger drill stem. Monitoring wells MW-2 and MW-3 was completed as four-inch diameter wells. Construction details for these wells are presented on the respective boring and monitoring well data sheets and boring logs (Plates 3 through 5).

4.4 MONITORING WELL SAMPLING

Prior to well development and purging for sample collection, water level measurements were recorded and observations made for floating fuel product; results are listed in Table 4-1.

TABLE 4-1
MONITORING WELL DATA

Well	Date	Total Well Depth*	Depth* to Water	Depth* to Product	Product Thickness(feet)
MW-1	6-11-87	88	75	NE	NE
	7-9-87	88	75.9	75.9	<0.1
	8-6-87	88	79.1	75.9	3.2
MW-2	8-6-87	89.3	NE	75.3	14.0
MW-3	8-6-87	90	75	NE	0

* Depth measured in feet from top of casing
NE = Not encountered in well
NM = Not measured

To date, approximately three feet of floating product has been observed in monitoring well MW-1. In monitoring well MW-2, floating product was first encountered at a depth of approximately 75 feet; the sampling bailer was lowered to the bottom of the well (total depth = 89.3 feet) and no water was encountered. No floating product has been observed in monitoring well MW-3.

After purging, monitoring wells MW-1 and MW-3 were each sampled with a teflon bailer. Prior to sampling, the bailer was thoroughly washed with a tri-sodium phosphate (TSP) solution and rinsed with distilled water to minimize potential for cross-contamination. To collect a sample, the bailer was lowered in the well casing below static water level. The bailer was then retrieved from the well and the water sample was decanted into one liter glass bottle and 40 milliliter glass volatile organics analysis (VOA) vials. The samples were labelled and immediately placed in refrigerated storage for transport to the analytical laboratory. In addition, a sample of the floating product in monitoring well MW-2 was collected with teflon bailer, placed in one liter glass containers and prepared for shipment to the analytical laboratory.

4.5 BACKFILL SAMPLING

One bulk sample of the tank backfill gravel was collected adjacent to Tank 5 at bottom of tank depth (Plate 2). The bulk sample was placed in a one liter glass bottle, labelled, refrigerated, and prepared for shipment to the analytical laboratory for determination of total petroleum hydrocarbons as diesel and for polychlorinated biphenyls.

4.6 CHAIN-OF-CUSTODY

All samples were labelled and transported under chain-of-custody control to Med-Tox Associates, Inc., in Pleasant Hill, California, for laboratory analysis. Copies of the chain-of-custody forms are included in the Appendix of this report.

5. LABORATORY ANALYSES

A summary of the analytical results is presented in Table 5-1. Water samples were analyzed using EPA Method 602 for purgeable organics, EPA Method 8015 for Total Petroleum Hydrocarbons, and EPA Method 608 for polychlorinated biphenyls (PCB). The backfill sample was analyzed using EPA Method 8015 for Total Petroleum Hydrocarbons and EPA Method 8080 for PCBs. The product sample was analyzed using EPA Method 8080 for PCBs. Copies of the laboratory reports are included in the Appendix of this report.

As indicated in Table 2, total petroleum hydrocarbons (TPH) as diesel in the backfill gravel was present at a concentration level of 300 ppm. In the water sample from monitoring well MW-1, the TPH concentration was 350 ppm. The water sample from monitoring well MW-3 had a TPH concentration of 0.6 ppm. The maximum concentration of polychlorinated biphenyls of 18 ppm was detected in the sample of floating product from monitoring well MW-2.

TABLE 5-1
ANALYTICAL DATA

Sample Identification	Total Petroleum Hydrocarbons Diesel (ppm)	Polychlorinated Biphenyls as Arochlor 1260 (ppb)	Benzene (ppb)	Toluene (ppb)	Total Xylenes (ppb)	Ethylbenzenes (ppb)
PT-1 Backfill gravel	300	140	NT	NT	NT	NT
MW-1 Water	350	5.7	ND(200)	ND(200)	ND(200)	ND(200)
MW-2 Product	--	18000	NT	NT	NT	NT
MW-3 Water	0.6	ND(0.5 ppb)	NT	NT	NT	NT

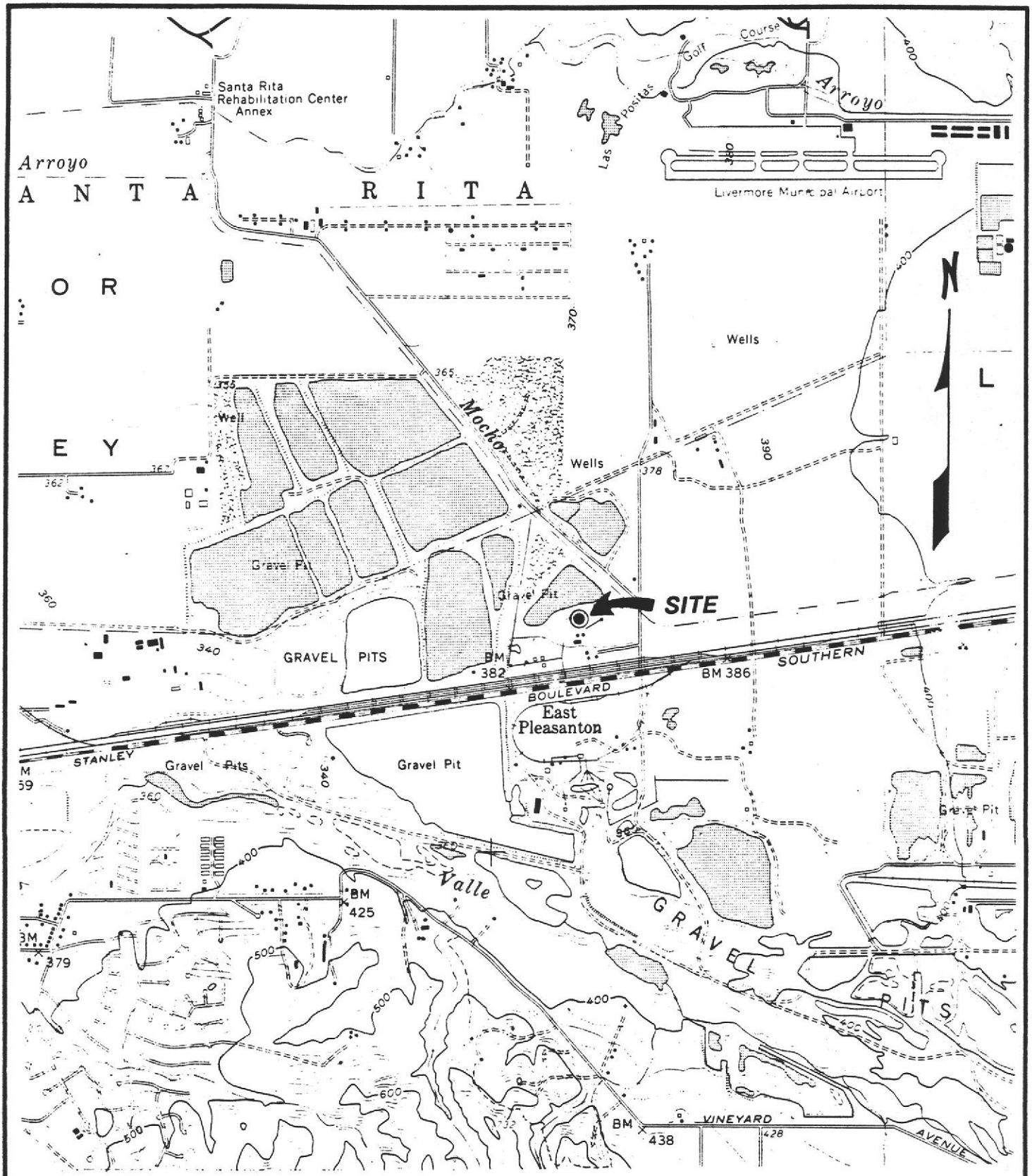
ND = Not detected at given detection limit shown in parenthesis

NT = Not tested.

6 LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice which exists in Northern California at the time the investigation was performed. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainty beyond the level associated with this study, Kleinfelder & Associates should be notified for additional consultation.

Our firm has prepared this report for the client's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other warranties, expressed or implied, as to the professional advice provided are made. The recommendations provided in this report are based on the assumption that an adequate program of tests and field observations will be conducted by our firm during subsequent phases in order to evaluate compliance with the recommendations.



SCALE 1:24000

Source: USGS 7.5 minute Livermore Quadrangle

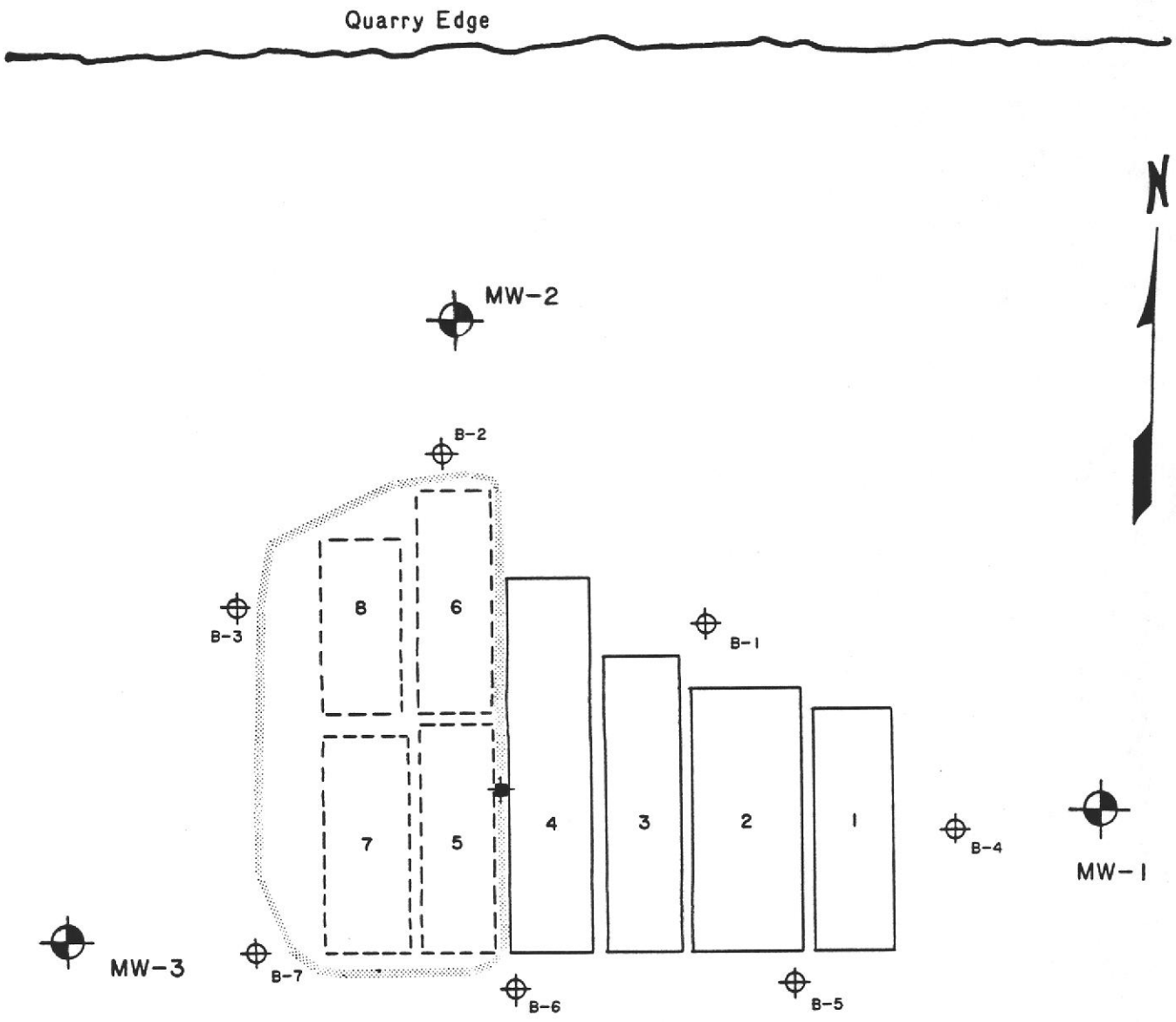
J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING
LAND AND WATER RESOURCES

PROJECT NO. 10-1682-01

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

SITE LOCATION MAP

PLATE
1



LEGEND

Asphalt Hopper Area

B-1 SOIL BORING (drilled March 1987)

MW-3 MONITORING WELL LOCATION

STORAGE TANKS (removed tanks dashed) TANKS 1–6: ASPHALT TANKS 7–8: DIESEL

BACKFILL SAMPLE LOCATION

APPROXIMATE OUTLINE OF PRIOR EXCAVATION

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

PROJECT NO. 10-1682-01

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

MONITORING WELL LOCATION MAP

PLATE 2

J. H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Project	Industrial Asphalt	Boring No.
Number	10-1682-02	MW-1
Total Depth	88 feet	
Sheet	1 of 4	

BORING AND MONITORING-WELL DATA SHEET

Location

Owner & Mailing Information	Township / Range / Section
Industrial Asphalt 1645 Stanley Blvd. Pleasanton, CA	Other Identifiers
Site Location (if different)	

Sketch Map

Drilling Operations

Drilling Agency	Driller / Crew / Inspector
H.E.W.	Tomas/S. Fox

Rig Make / Model	Task	Start	Finish
CME 75	Drilling	6/15/87	6/16/87
Bit & Size: 8 inch	Completion	6/16/87	6/16/87
Hammer Data: Wt. 140 lbs; Drop 30"	Development	7/09/87	7/09/87

Well Development and Construction

Monumentation	Development Info.	Well Design	Size & Type	Top	Bottom
Ref. Pt. Description		Surface Casing			
		Casing	2" Schedule 40	1	50
Elevations Ref. Pt. Ground		Well Screen	2" 0.020 slot	58	88
Datum		Gravel Pack	#3 Sand	56	88
		Bentonite	Pellets	53	56
Markings	Yield Test? (Y/N)	Concrete	Grout	Surface	53

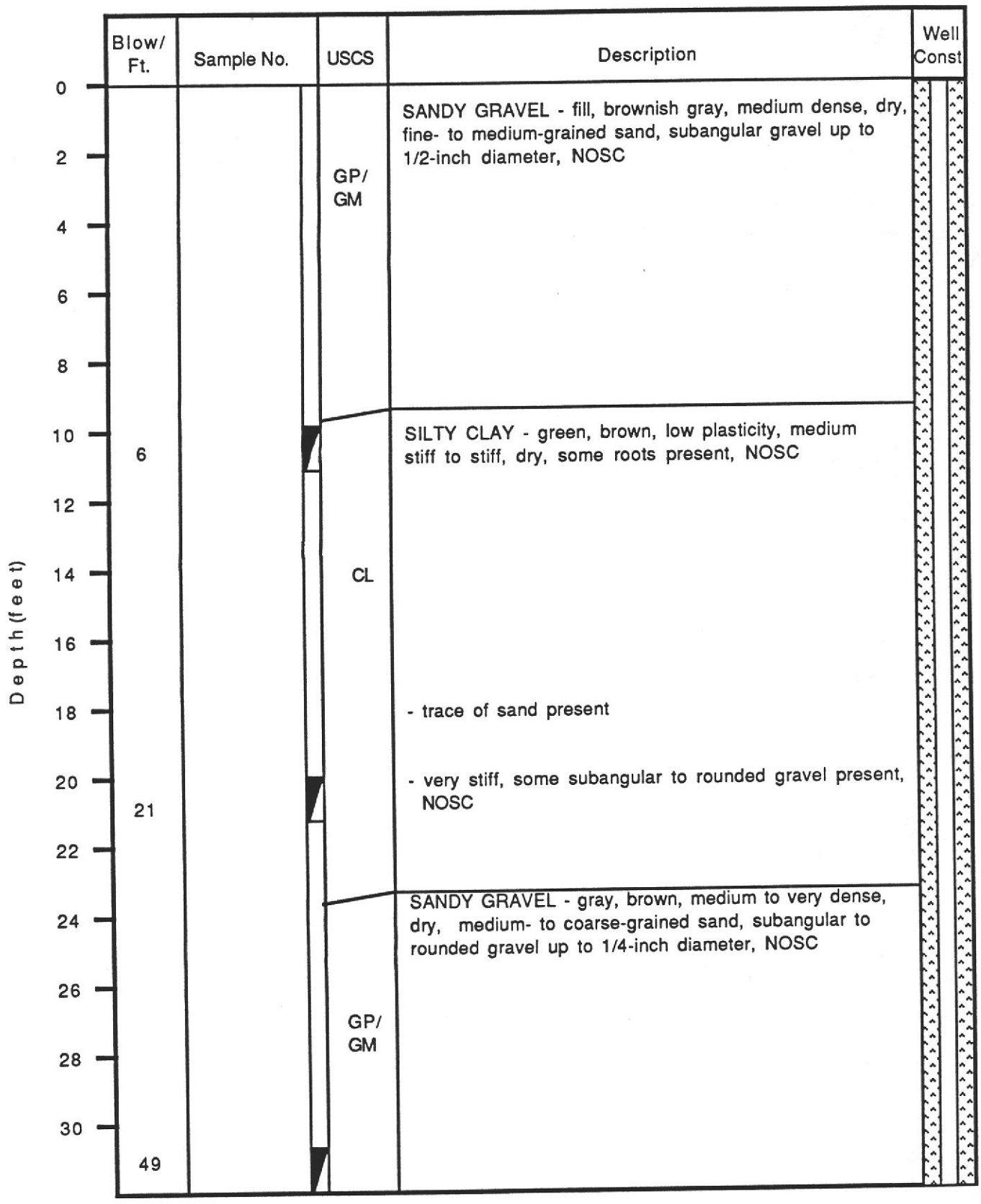
Field Hydrologic Observations

Weather	Date	Time	Water Level	Other Observations
Sunny, Clear				
Recent Rainfall? Irrigation? No				
Nearby Wells Pumping? Settling pond nearby.				
Ditches? Utility Courses?				

Remarks

There was some product present at the water interface. The casing and well screen for MW-1 are 2-inch in diameter.

Plate 3a



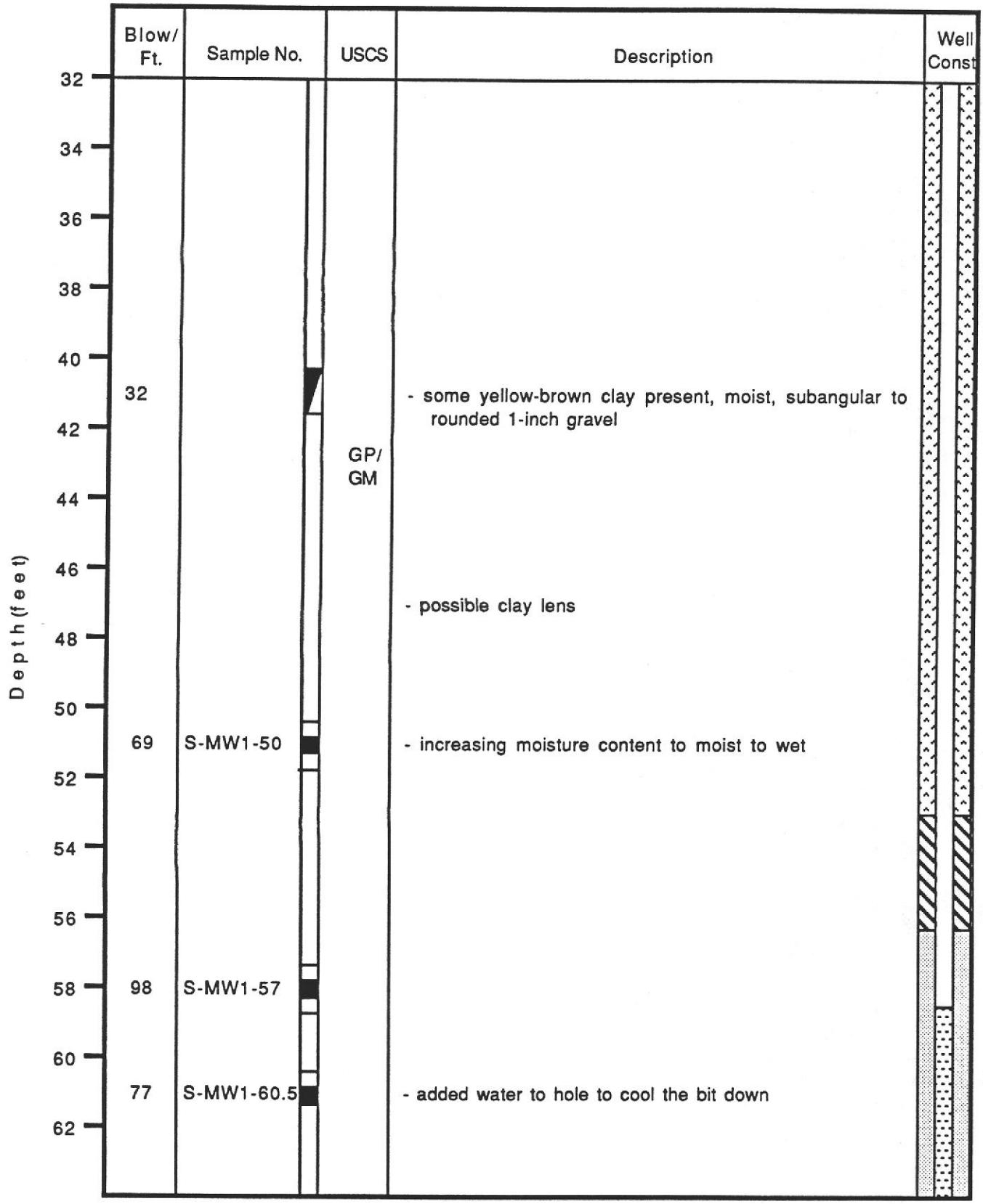
KLEINFELDER

PROJECT NO. 10-1682-02

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

BORING LOG NO. MW-1

PLATE
3b



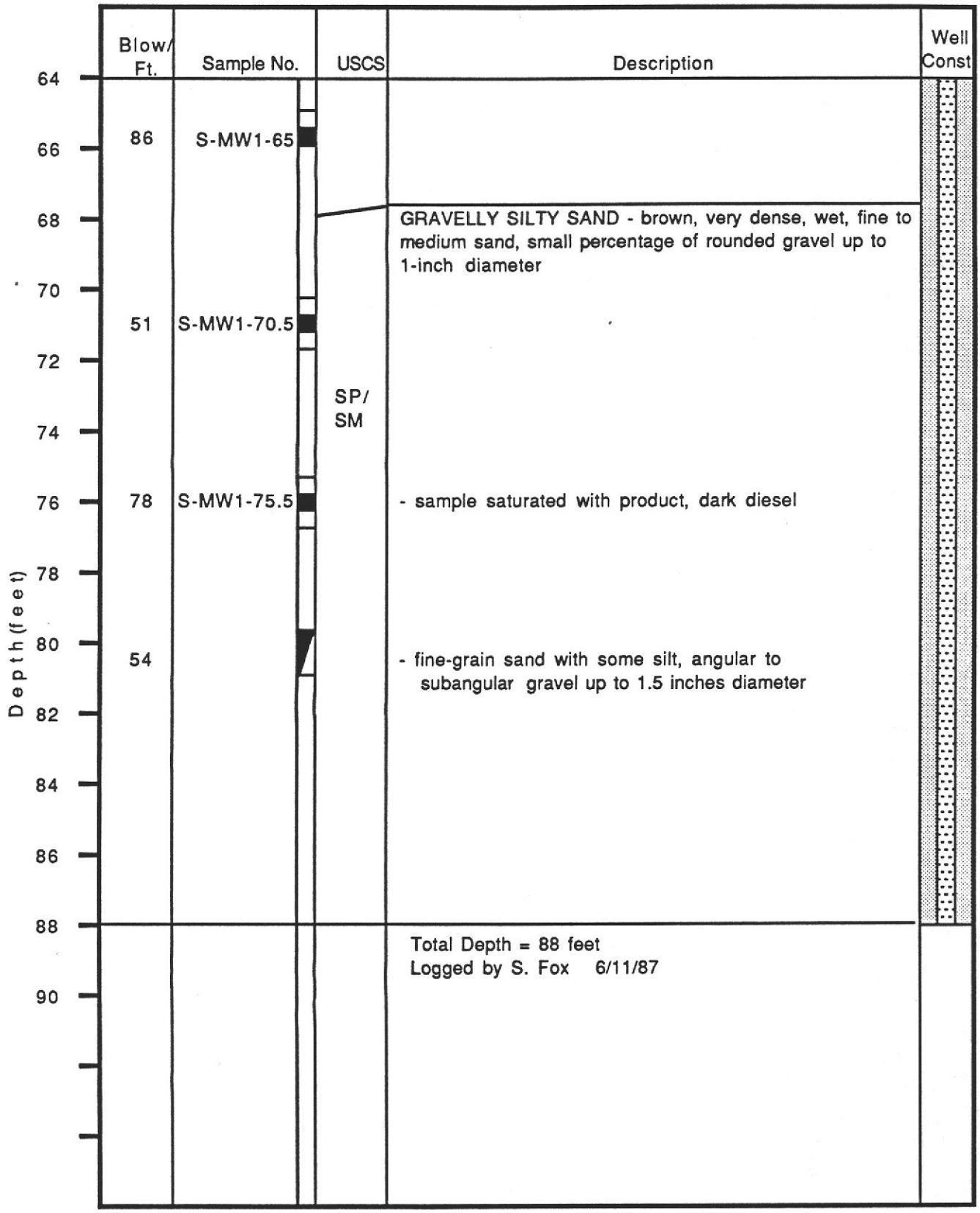
KLEINFELDER

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

PLATE
3c

PROJECT NO. 10-1682-02

BORING LOG NO. MW-1



KLEINFELDER

PROJECT NO. 10-1682-02

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

BORING LOG NO. MW-1

PLATE
3d

J. H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Project	Industrial Asphalt	Boring No.
Number	10-1682-02	MW-2
Total Depth	90 feet	
Sheet	1 of 4	

BORING AND MONITORING-WELL DATA SHEET

Location

Owner & Mailing Information	Township / Range / Section
Industrial Asphalt 1645 Stanley Blvd Pleasanton, CA	Other Identifiers
Site Location (if different)	

Sketch Map

Drilling Operations

Drilling Agency	Driller / Crew / Inspector
P.C. Exploration	Scott/Dave/S. Fox
Rig Make / Model: Ingersoll Rand/Cyclone Mud	
Bit & Size: Tri-Cone/8-7/8 inches	
Hammer Data Wt. Drop	

Task	Start	Finish
Drilling	7/22/87	7/24/87
Completion	7/24/87	7/27/87
Development	8/06/87	8/06/87

Well Development and Construction

Monumentation	Development Info.	Well Design	Size & Type	Top	Bottom
Ref. Pt. Description		Surface Casing			
		Casing	4" Schedule 40	1	65
Elevations Ref. Pt. Ground		Well Screen	4" 0.020 slot	65	90
Datum		Gravel Pack	#3 Sand	62	90
		Bentonite	Pellets	59	62
Markings	Yield Test? (Y/N)	Concrete	Grout	0	62

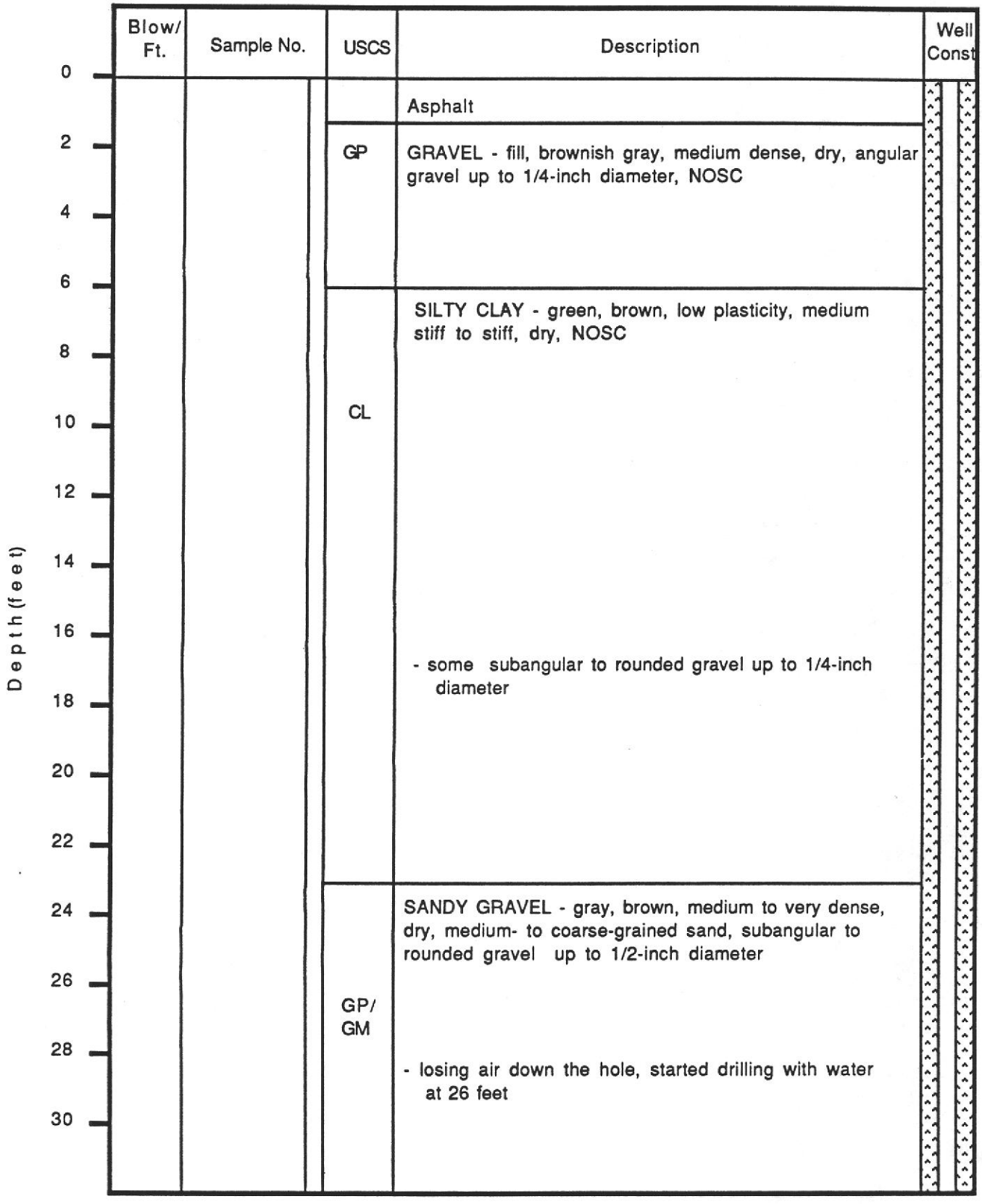
Field Hydrologic Observations

Weather: Sunny-Clear	Date	Time	Water Level	Other Observations
Recent Rainfall? Irrigation? No				
Nearby Wells Pumping? Settling pond nearby.				
Ditches? Utility Courses?				

Remarks

Had trouble because of the caving encountered in the sandy gravels at depth. Drilled with air until 26 feet, then the rest of the hole was drilled with mud.

Plate 4a



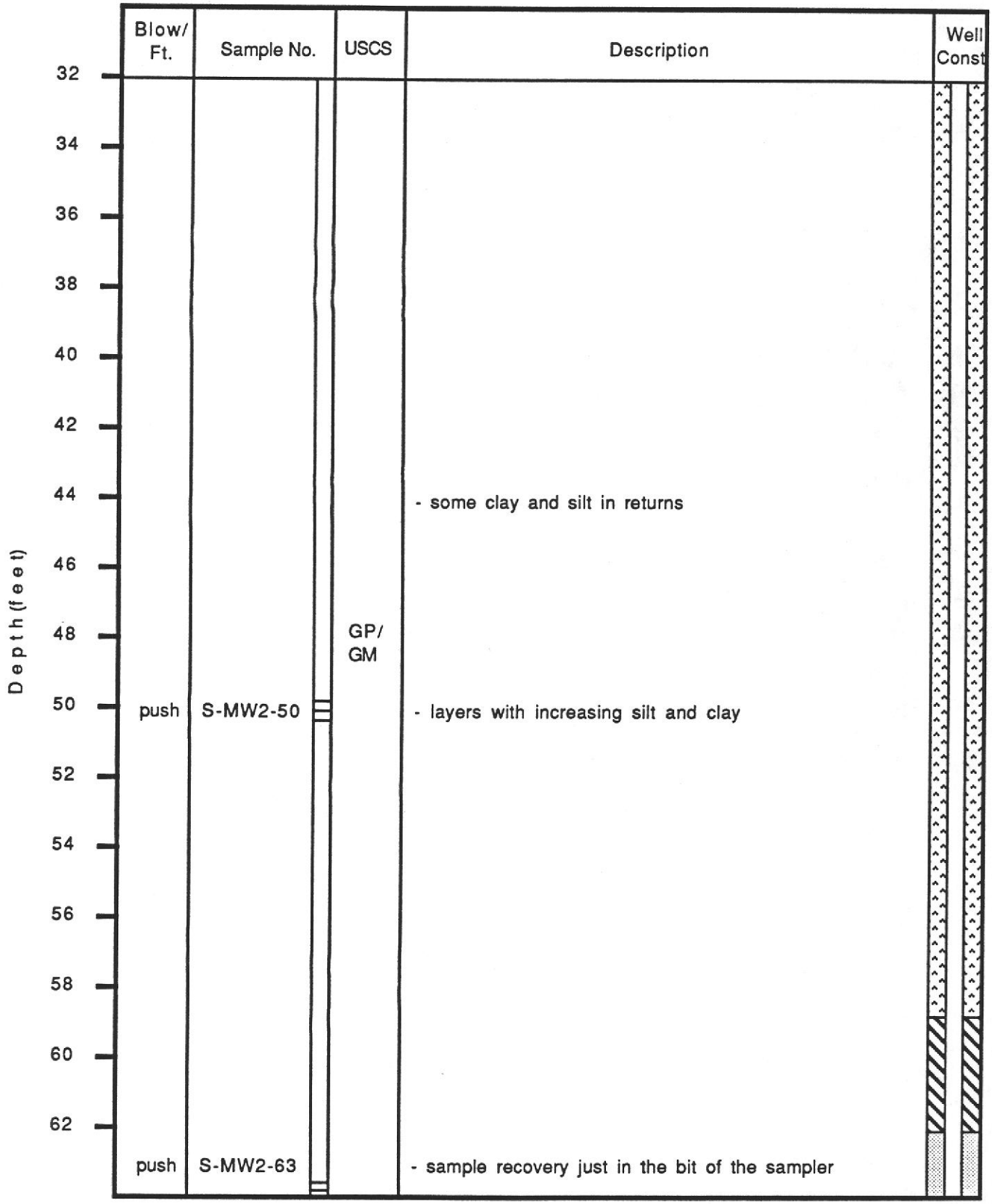
KLEINFELDER

PROJECT NO. 10-1682-02

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

BORING LOG NO. MW-2

PLATE
4b



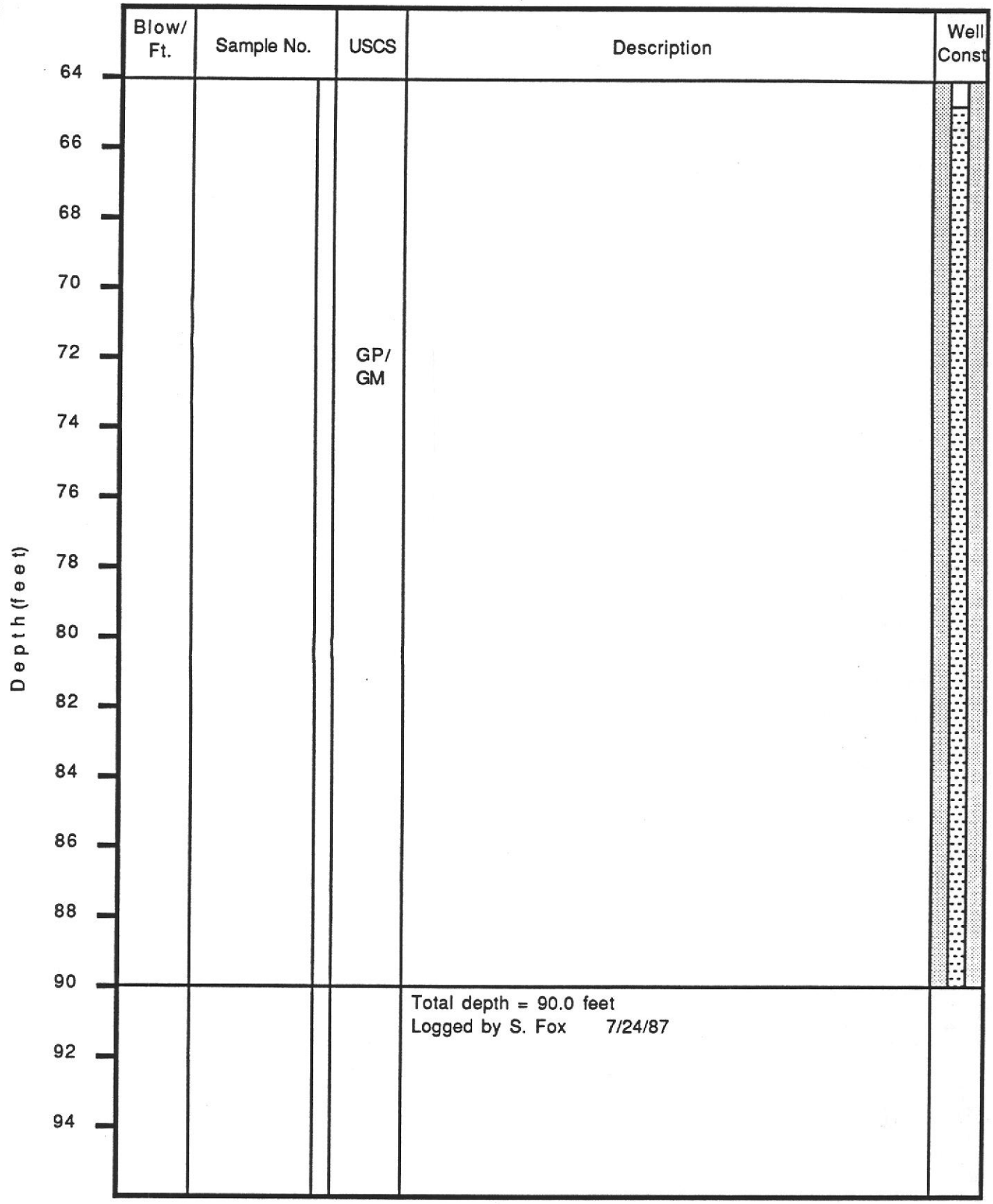
KLEINFELDER

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

PLATE
4C

PROJECT NO. 10-1682-02

BORING LOG NO. MW-2



KLEINFELDER

PROJECT NO. 10-1682-02

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

BORING LOG NO. MW-2

PLATE
4d

J. H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Project	Industrial Asphalt	Boring No.
Number	10-1682-02	
Total Depth	90 feet	MW-3
Sheet	1 of 4	

BORING AND MONITORING-WELL DATA SHEET

Location

Owner & Mailing Information	Township / Range / Section
Industrial Asphalt 1645 Stanley Blvd. Pleasanton, CA	Other Identifiers
Site Location (if different)	

Sketch Map

Drilling Operations

Drilling Agency	Driller / Crew / Inspector		
P.C. Exploration	Scott/Dave/S. Fox		
Rig Make / Model	Task	Start	Finish
Ingersoll Rand/Cyclone Mud	Drilling	7/26/87	7/28/87
Bit & Size Fish Tail/7-1/2 inch	Completion	7/28/87	7/28/87
Hammer Data Wt. Drop	Development	8/06/87	8/06/87

Well Development and Construction

Monumentation	Development Info.	Well Design	Size & Type	Top	Bottom
Ref. Pt. Description		Surface Casing			
		Casing	4" Schedule 40	1	65
Elevations Ref. Pt. Ground		Well Screen	4" 0.020 Slot	65	90
Datum		Gravel Pack	#3 Sand	62	90
		Bentonite	Pellets	59	62
Markings	Yield Test? (Y/N)	Concrete	Grout	Surface	62

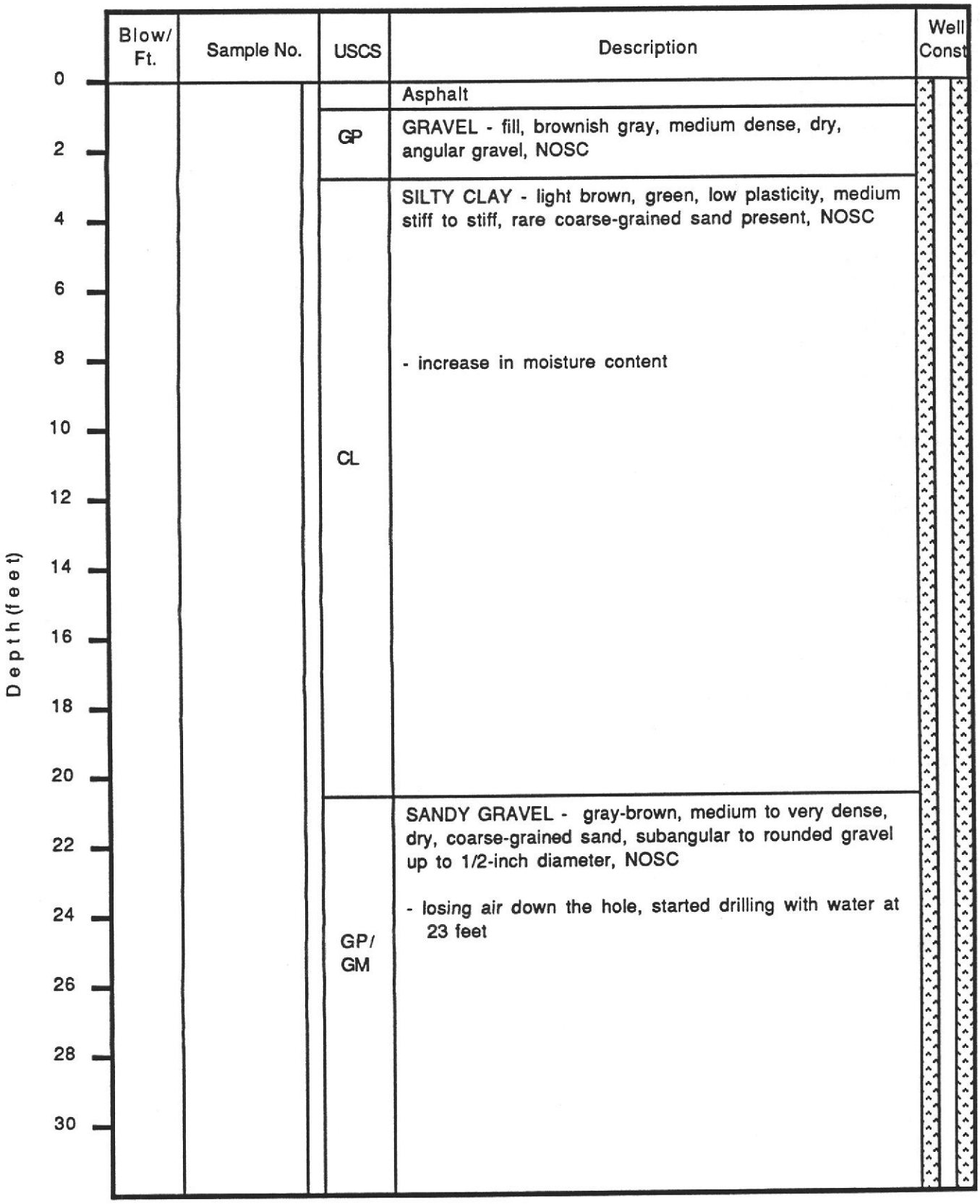
Field Hydrologic Observations

Weather Sunny-Clear	Date	Time	Water Level	Other Observations
Recent Rainfall? Irrigation? No				
Nearby Wells Pumping? Settling pond nearby.				
Ditches? Utility Courses?				

Remarks

The first 23 feet were drilled with air and with the tri-cone bit. When the drilling switched from air to mud, then the bit was changed to the smaller fish-tail bit.

Plate
5a



KLEINFELDER

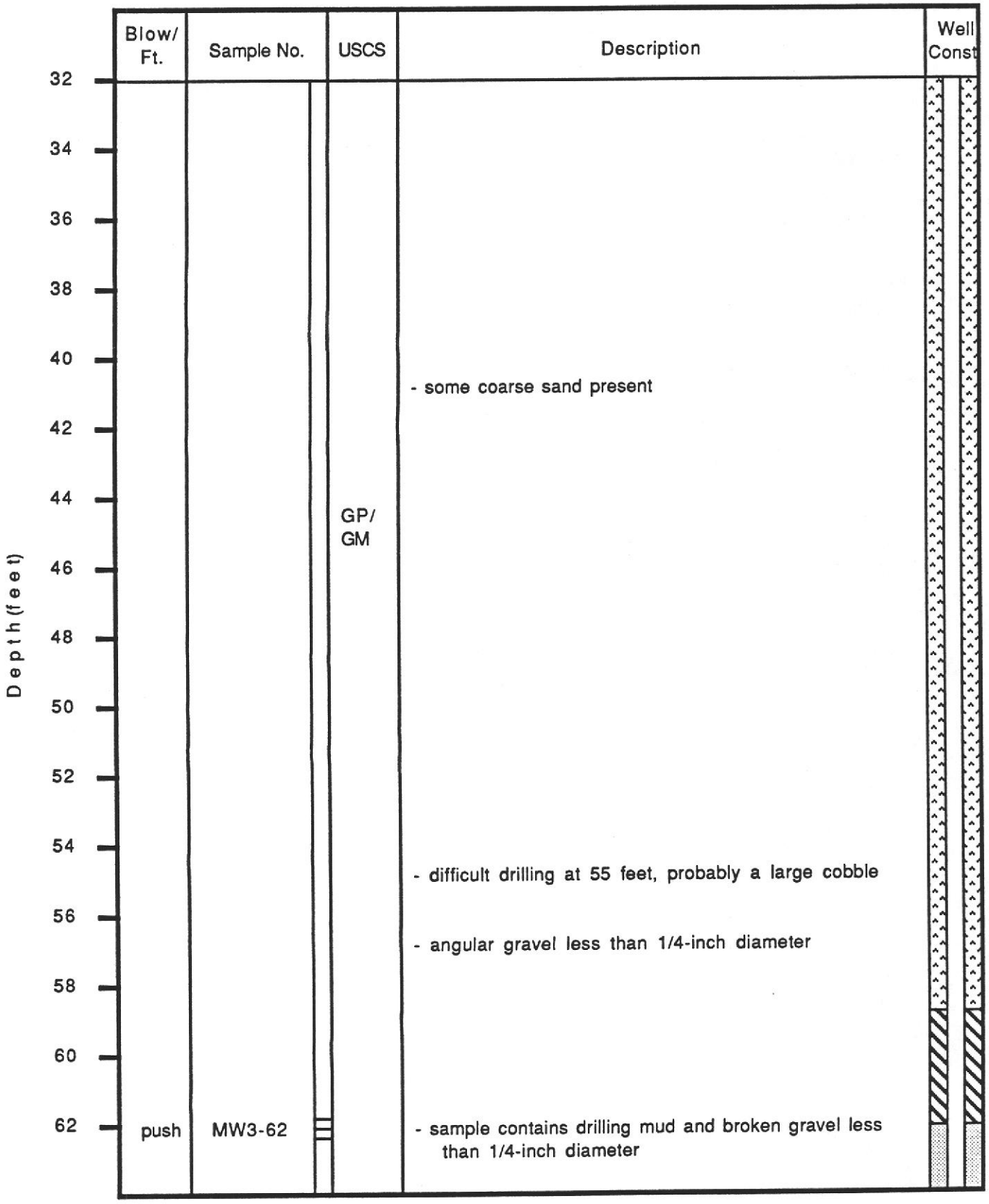
PROJECT NO. 10-1682-02

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

BORING LOG NO. MW-3

PLATE

5b



KLEINFELDER

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

BORING LOG NO. MW-3

PLATE 5c

PROJECT NO. 10-1682-02

Depth (feet)	Blow/ Ft.	Sample No.	USCS	Description	Well Const
64					
66			GP/ GM		
68					
70					
72				CLAYEY GRAVEL - brown, medium dense, medium plastic clays, no free product visible in the drilling mud	
74	push	S-MW3-75	GC	- Sample MW3-75 composed of drilling mud and angular gravel up to 1-inch diameter, no free product	
76					
78					
80					
82					
84					
86					
88					
90	push	S-MW3-90		- Sample MW3-90 composed of drilling mud and small angular gravel	
92				Total Depth = 90.0 feet Logged by S. Fox 7/28/87	
94					

KLEINFELDER

PROJECT NO. 10-1682-02

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

BORING LOG NO. MW-3

PLATE
5d

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		LTR	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel sand mixtures, little or no fines.
		GP	Poorly-graded gravels or gravel sand mixture, little or no fines.
		GM	Silty gravels, gravel-sand-clay mixtures.
		GC	Clayey gravels, gravel-sand-clay mixtures.
	SAND AND SANDY SOILS	SW	Well-graded sands or gravelly sands, little or no fines.
		SP	Poorly-graded sands or gravelly sands, little or no fines.
		SM	Silty sands, sand-silt mixtures.
		SC	Clayey sands, and-clay mixtures.

MAJOR DIVISIONS		LTR	DESCRIPTION
FINE GRAINED SOILS	SILTS AND CLAYS LL < 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 silt-clays of low plasticity.
	SILTS AND CLAYS LL > 50	MH	Inorganic silts, micaceous or diatomaceous fine or silty soils, elastic silts.
		CH	Inorganic clays of high plasticity, fat clays.
		OH	Organic clays of medium to high plasticity.
HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils.

Standard penetration split spoon sample

Modified California (Porter) sample

Shelby tube sample

Water level observed in boring

* No recovery

NFWE No free water encountered

NOSC No odor, scent, or fluid cut

Blank casing

Screened Casing

Cement grout

Bentonite

Sand pack or gravel pack

NOTES: Blow count represents the number of blows of a 140-pound hammer falling 30 inches per blow required to drive a sampler through the last 12 inches of an 18-inch penetration.

The lines separating strata on the logs represent approximate boundaries only. The actual transition may be gradual. No warranty is provided as to the continuity of soil strata between borings. Logs represent the soil section observed at the boring location on the date of drilling only

KLEINFELDER

PROJECT NO. 10-1682-02

INDUSTRIAL ASPHALT
PLEASANTON, CALIFORNIA

BORING LOG LEGEND

PLATE 6

MED-TOX ASSOCIATES, INC.

OCCUPATIONAL & ENVIRONMENTAL HEALTH SERVICES

3440 Vincent Road • Pleasant Hill, CA 94523 • (415) 930-9090

LABORATORY ANALYSIS REPORT

J.H. KLEINFELDER & ASSOCIATES
1901 OLYMPIC BLVD
WALNUT CREEK, CA 94596

ATTN: STEVE FOX

DATE: 07/30/87

SAMPLES RECEIVED: 07/09/87

MED-TOX JOB NO.: 8707025

PURCHASE ORDER NO: 10.1682.1

ANALYSIS OF: ONE WATER SAMPLE FOR TOTAL PETROLEUM HYDROCARBONS, POLYCHLORINATED BIPHENYLS, BENZENE, TOLUENE, XYLENES, AND ETHYLBENZENE

METHOD: EPA 8015 (PURGE & TRAP), 608, 602

Sample Identification Client	Lab. No.	Total Petroleum Hydrocarbons As Diesel (mg/L)	Polychlorinated Biphenyls as Aroclor 1260 (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Total Xylenes (ug/L)	Ethylbenzene (ug/L)
MW-1	01A	350	5.7	ND	ND	ND	ND
Trip blank	02A	ND	NA	ND	ND	ND	ND
Detection Limit		10	1	200	200	200	200

ND = Not Detected
NA = Not Applicable: analysis not requested

NOTE: Elevated detection limits for aromatic compounds resulted from sample's relatively high hydrocarbon content

Michael J. Jaeger
Organic Group Leader

LR20-52

CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature) Brian Ramm

Phone: 415-938-5610

SHIP TO: Med-Tox
P.H

ATTENTION: M.Y.

Phone No.

SHIPPING INFORMATION

Shipper J. H. Kleinfelder

Address Walnut Creek

Date Shipped 7/9/87

Shipment Service

Airbill No.

Cooler No.

Att. Steve Fox

		Date/Time
Relinquished by: (Signature) Brian Ramm	Received by: (Signature)	
Relinquished by: (Signature)	Received by: (Signature)	
Relinquished by: (Signature)	Received by: (Signature)	
Relinquished by: (Signature)	Receive for laboratory by*: (Signature) X Yvonne & John	7/9/87 1515

* Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return top copy to J. H. KLEINFELDER & ASSOCIATES, 1901 Olympic Blvd., Suite 300, Walnut Creek, California 94596

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
MW-1	10-1682-1	7/9/87	3x40 ml BTX	OK
			1x1 l P.C.B	↓
			1x1 l THC-Diesel	↓
			2x40ml Trip Blanks	↓

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated
(4)
(5)

White - Sampler

Canary - J. H. Kleinfelder & Associates

Pink - Lab Courtesy Copy

JHK&A Form M-60

MED-TOX ASSOCIATES, INC.

OCCUPATIONAL & ENVIRONMENTAL HEALTH SERVICES

3440 Vincent Road • Pleasant Hill, CA 94523 • (415) 930-9090

LABORATORY ANALYSIS REPORT

J. H. KLEINFELDER & ASSOC.
1901 OLYMPIC BLVD.
WALNUT CREEK, CA 94596

ATTN: STEVE FOX

DATE: 08/05/87

SAMPLES RECEIVED: 07/30/87

MED-TOX JOB NO: 8707092

PURCHASE ORDER NO: 10-1682-02

ANALYSIS OF: ONE GRAVEL SAMPLE FOR POLYCHLORINATED BIPHENYLS AND TOTAL PETROLEUM HYDROCARBONS.

METHOD: EPA 8080, 8015 (EXTRACTION)

Sample Identification Client	Lab No.	Polychlorinated Biphenyls as Aroclor 1260 (mg/kg)	Total Petroleum Hydrocarbons As Diesel (mg/kg)
PT-1	01A	0.14	300*
Detection Limit		0.01	50

* GC analysis also indicated the presence of hydrocarbons of higher molecular weight than those typically found in diesel fuel.

Michael J. Jaeger
Organic Group Leader

LR6-P10

Note: Results reported verbally 08/03/87.

CHAIN OF CUSTODY RECORD

SAMPLERS: (Signature) Stu E. Fox

Phone: 415-938-5610

SHIP TO:
Med Tox
Pleasant Hill

ATTENTION: Kent Reynolds

Phone No. 415-938-5610

SHIPPING INFORMATION

Shipper J. H. Kleinfelder

Address Walnut Creek

Date Shipped 7/30/87

Shipment Service

Airbill No.

Cooler No.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Stu E. Fox		
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Receive for laboratory by*: (Signature) M. St John	Date/Time 7/30/87 0935

* Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return top copy to J. H. KLEINFELDER & ASSOCIATES, 1901 Olympic Blvd., Suite 300, Walnut Creek, California 94596

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
PT-1	10-1682-02	7-28-87	8080 8015	
			Same analysis for PCB's as done before.	
			24 hr or 48 hr turnaround	

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated
(4)

White - Sampler Canary - J. H. Kleinfelder & Associates Pink - Lab Courtesy Copy

JHK&A Form M-60

MED-TOX ASSOCIATES, INC.

OCCUPATIONAL & ENVIRONMENTAL HEALTH SERVICES

3440 Vincent Road • Pleasant Hill, CA 94523 • (415) 930-9090

LABORATORY ANALYSIS REPORT

J.H. KLEINFELDER & ASSOC.
1901 OLYMPIC BLVD., STE. 300
WALNUT CREEK, CA 94596

ATTN: STEVE FOX

DATE: 09/02/87

SAMPLES RECEIVED: 08/07/87

MED-TOX JOB NO: 8708018

PURCHASE ORDER NO: 10.1682.01

ANALYSIS OF: ONE WATER SAMPLE FOR POLYCHLORINATED BIPHENYLS AND TOTAL PETROLEUM HYDROCARBONS; ONE FUEL SAMPLE FOR POLYCHLORINATED BIPHENYLS

METHOD: EPA 608, 8015 (PURGE & TRAP), 8080

Sample Identification Client	Lab No.	Polychlorinated Biphenyls as Aroclor 1260 (mg/kg)
MW-2	01A	18
Detection Limit		1

See attached for remaining results.

MED-TOX ASSOCIATES, INC

Sample Identification Client	Lab No.	Polychlorinated Biphenyls as Aroclor 1260 (ug/L)	Total Petroleum Hydrocarbons As Diesel (mg/L)
MW-3	02A	ND	0.6
Detection Limit		0.5	0.1

ND = Not Detected.

Michael J. Jaeger
Organic Group Leader

LR34-P10

'AIN OF CUSTODY RECOR)

SAMPLERS: (Signature) Ben Ramos

Phone: 415 930 5610

SHIP TO: Med Tox P.H.

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper J.H. Kleinfelder

Address Walnut Creek

Date Shipped 8/6/87

Shipment Service

Airbill No.

Cooler No.

Att. Kent Reynolds

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Ben Ramos		
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Receive for laboratory by*: (Signature) Maria de Jesus	Date/Time 8/6/87 5:11

* Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return top copy to J. H. KLEINFELDER & ASSOCIATES, 1901 Olympic Blvd., Suite 300, Walnut Creek, California 94596

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
MW-2	10-1682-1	8/6/87	TPH- Diesel	
	↓	↓	608 PCB	
MW-3	↓	↓		
	Pure Product			
		10-1734-01		
		SF		

LAB INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

(1) summary of analytical methodology and QA work (blanks, spikes, duplicates)
(2) dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
(3) detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated
(4)
(5)

White - Sampler Canary - J. H. Kleinfelder & Associates Pink - Lab Courtesy Copy

JHK&A Form M-60