



STD 1630

Transmittal Letter

Date: January 8, 1999

To: Mr. Dale Klettke, CHMM

Company: Alameda County Health Care Services Agency

Address: 1131 Harbor Bay Parkway, Suite 250

City: Alameda State/Zip: CA 94502-6577

We are sending via:

Courier U.S. Mail UPS Overnight Mail Other _____

The following:

Report Shop Drawings Samples
 Proposal Specifications Other _____

Transmitted as checked:

Approved For Approval Approved as Noted
 For Correction For Your Use As Requested
 For Comments For Your Records For Distribution

Comments:

We are sending you herewith the On-Site Assessment Report dated January 7, 1999, for the Sears Store No. 1039 located at 1901 Telegraph Avenue, in Oakland, California. If you have comments or questions, please contact me at (925) 370-3990 extension 222.

Sincerely,
IT CORPORATION



Ned Borlgin, REA
Staff Scientist

c: Mr. Scott M. DeMuth, Sears, Roebuck and Co.
 Mr. Russ Zora, IT Corporation, Central Files
 Ms. Melissa Gossell, IT Corporation
 Project Files



FLUOR DANIEL GTI

ON-SITE ASSESSMENT REPORT
SEARS STORE NO. 1039
1901 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

37501634

Fluor Daniel GTI Project 106479

January 7, 1999

Prepared for:

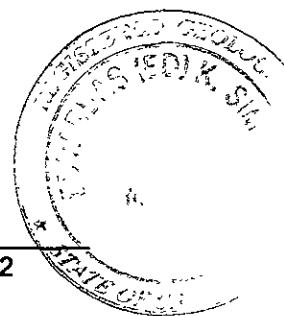
Mr. Scott DeMuth
Senior Environmental Engineer
Sears, Roebuck and Company
3333 Beverly Road
Dept. 824EV, A2-245A
Hoffman Estates, IL 60179

Fluor Daniel GTI, Inc.
Submitted by:


Ned Borglin, REA
Environmental Scientist

Fluor Daniel GTI, Inc.
Approved by:


Ed K. Simonis, R.G. No. 4422
Senior Geologist




Melissa Gossell, REA
West Zone Project Manager

SA981039.RPT



EXECUTIVE SUMMARY

The Sears Auto Center No. 1039 is located at 1901 Telegraph Avenue in Oakland, California, and is currently operational. Past reports indicated that the address for this site was 1911 Telegraph Avenue, because previously this site was under the adjacent store's oversight. On September 9, 1998, Fluor Daniel GTI, Inc. sampled four soil borings to a depth of approximately 22 feet below grade (bg). Soil and groundwater samples were obtained to delineate the horizontal as well as vertical extent of the petroleum hydrocarbon plume. Boring GP-1 had refusal at 20 ft bg, and a groundwater sample was not collected.

Soil samples were analyzed for benzene, toluene, ethyl benzene, and total xylenes (BTEX), methyl tert-butyl ether (MTBE), total petroleum hydrocarbons as gasoline (TPH-g), and oil and grease (O&G), using United States Environmental Protection Agency (EPA) Methods 8020, 8015 Modified (8015M) and 413.2, respectively. Laboratory analyses indicated that BTEX and TPH-g concentrations were below detection limits in all soil samples. MTBE concentrations were below detection limits in all soil samples except for GP-1 at 10 feet (0.042 mg/kg). Oil and grease (O&G) concentrations were below detection limits in four out of 13 soil samples; detectable concentrations ranged from 15-39 mg/kg.

Groundwater samples were analyzed for BTEX, MTBE, TPH-g, O&G, and halogenated volatile organics using EPA Methods 8020, 8015M, 413.2 and 8010, respectively. Laboratory analyses indicated that BTEX, TPH-g, MTBE, and O&G concentrations were below detection limits in all groundwater samples. Concentrations of volatile organic compounds were below detection limits except for a detectable concentration of tetrachloroethene ($1.8 \mu\text{g/l}$) in the groundwater sample from GP-4.

From the data collected at the site, it appears that the lateral and vertical extent of the plume in soil and groundwater has been defined. The migration of dissolved-phase hydrocarbons does not appear to have gone off-site.

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- B. Drilling Logs
- C. Laboratory Report - Physical Parameter Data
- D. Laboratory Report - Chemical Analyses (Soil and Water)
- E. Drum Inventory Forms
- F. Waste Disposal Documentation

GLOSSARY OF ABBREVIATIONS

bgs	below ground surface
BTEX	benzene, toluene, ethyl benzene, and total xylenes
DOT	Department of Transportation
DPT	direct push technology
EPA	United States Environmental Protection Agency
MTBE	methyl tert-butyl ether
O&G	oil and grease
PID	photoionization detector
PVC	polyvinyl chloride
TPH-g	total petroleum hydrocarbons as gasoline
TRPH	total recoverable petroleum hydrocarbons

1.0 INTRODUCTION

Fluor Daniel GTI, Inc. (Fluor Daniel GTI), performed a subsurface investigation to further characterize groundwater along the downgradient portion of Sears Store No. 1039, located at 1901 Telegraph Avenue in Oakland, California (Figure 1). Previous reports have indicated the site's address as 1911 Telegraph Avenue, because in the past the store was under the adjacent store's oversight. The purpose of this investigation was to collect additional data to delineate the lateral extent of the dissolved-phase plume and to define both the vertical and lateral extent of the soil containing hydrocarbons.

All sampling activities were performed under the review of Mr. Scott DeMuth, Sears, Roebuck and Company (Sears), 3333 Beverly Road, Dept. 824EV, A2-245A, Hoffman Estates, IL 60179, (847) 286-5530. The consultant work was conducted under the supervision of Ms. Melissa Gossell, Fluor Daniel GTI, Inc., 757 Arnold Drive, Suite D, Martinez, California, 94553, (925) 370-3990 extension 266. The lead agency for the site is the San Mateo County Health Services Agency, Site No. 880008.

2.0 SITE BACKGROUND

2.1 Site Description

The site is currently an operational Sears Auto Center, located at the intersection of 19th Street and Telegraph Avenue. The site is surrounded by a private parking garage to the northwest, the Sears retail store to the northeast, and other businesses to the south.

2.2 Background

The Sears site consists of a former Chevron Service Station (now the Sears Auto Center) and parking area, which previously had a site investigation performed and seven monitoring wells installed. The seven groundwater monitoring wells, MW-1 through MW-7, are sampled on a quarterly basis. Historical groundwater sampling data indicate that hydrocarbon concentrations in on-site wells are decreasing, except for increasing hydrocarbon concentrations in monitoring well MW-7 and stable concentrations in MW-5. Groundwater levels fluctuate about 1 to 2 feet on a seasonal basis. The groundwater flow direction at the site has been consistent to the east-southeast. With dissolved-phase

concentrations increasing in the downgradient well (MW-7) the boundary of the dissolved-phase plume had not been defined on-site.

2.3 Objective

The objective of the investigation was to collect additional subsurface data to delineate hydrocarbons in both soil and groundwater. Site characterization activities included sampling four Geoprobe™ borings; and collection and analysis of soil and groundwater samples from the borings. Data from this investigation was needed to determine if a downgradient monitoring well should be installed at the most southeastern extent of the property, or if an off-site investigation on Telegraph Avenue and/or 19th Street was necessary.

3.0 GEOLOGY/HYDROGEOLOGY

The site is located in the western portion of Oakland. The youngest geologic formation in the vicinity of the site has been mapped as the Merritt Sand (Radbruch, 1957). The Merritt Sand is slightly coherent fine-grained sand to firm clayey sand containing bands and stringers of sandy clay and clay. The Merritt Sand is dominantly an eolian deposit, and has a maximum known thickness in Oakland of 65 feet (Radbruch, 1957). It is underlain by Pleistocene silty, sandy clays. The subsurface sediments encountered during this phase of assessment consisted of clayey silty sand underlain by fine sand and fine silty sand to the total depth of exploration at 22 ft bgs (Appendix B).

4.0 DRILLING METHODS AND SAMPLING PROCEDURES

Prior to drilling the soil borings, Fluor Daniel GTI obtained the proper boring and excavation permits from the County of Alameda and the City of Oakland (Appendix A). On September 9, 1998, four soil borings (GP-1 through GP-4) were advanced and sampled to assess hydrocarbon impacted groundwater and to monitor the downgradient edge of the dissolved-phase hydrocarbon plume (Figure 1). The borings were advanced using Geoprobe Systems direct push technology (DPT) to a depth of approximately 22 feet below ground surface (bgs), except for boring GP-3 where the capillary fringe was encountered at 10.5 feet bgs. Soil samples were collected at 5 foot intervals using a 2-foot sampler containing 1 inch diameter acetate liner. Additional soil from each sampling event was placed in a plastic bag, field screened using a photoionization detector (PID), and described using the Unified Soil Classification System. Drilling logs are provided in Appendix B. Soil samples were also collected

for physical parameter testing to use for future remedial action or risk-based corrective action analysis, if warranted.

Groundwater samples were collected using Geoprobe™ Systems Hydropunch technology. A $\frac{3}{4}$ -inch polyvinyl chloride (PVC) temporary well casing was placed in the annulus of the DPT casing. Groundwater was then sampled using a disposable bailer. One water sample from three of the four locations was placed in six 40-milliliter (ml) vials and one 1-Liter glass bottle, preserved with hydrochloric acid, labeled, then analyzed at Sequoia Analytical in Redwood City, California, a state-certified laboratory, for BTEX, MTBE, TPH-g, O&G, and halogenated volatile hydrocarbons. Groundwater samples were collected from the borings except for GP-1, where three attempts were made to collect water. Groundwater samples could not be obtained because the density of the formation did not allow penetration into the saturated zone.

Two soil samples, one from the vadose zone and one from the saturated zone, were retained for physical testing and analyzed for physical parameters such as total organic carbon, porosity, air permeability, grain size analysis and bulk density (physical parameter package). The physical parameter laboratory report is provided in Appendix C and summarized in Table 1.

All sampling equipment was cleaned between sampling intervals with non-phosphate detergent, followed by successive rinses of tap and distilled water. This method decontaminates the sampling equipment and prevents cross contamination between sampling events.

All sample locations were abandoned by backfilling with bentonite grout. Because the Geoprobe® produces only a narrow diameter boring ($1\frac{1}{2}$ inches) by using DPT, there were no soil cuttings produced. Hand auger cuttings and PID screening soil samples were placed in a 55-gallon Department of Transportation (DOT)-rated drum and stored at the Sears Auto Center store.

5.0 LABORATORY ANALYSES AND RESULTS

5.1 Soil Analyses

Thirteen soil samples were sent to Sequoia Analytical. Soil samples were analyzed for BTEX/MTBE, TPH-g, and O&G using EPA Methods 8020, 8015M and 413.2, respectively. Laboratory analyses indicated that BTEX, MTBE, and TPH-g concentrations were below detection limits in all soil samples except for Sample GP-1-10 which contained 0.042 mg/kg of MTBE. Nine of the 12 soil samples

contained detectable concentrations of O&G, ranging from 15 mg/kg to 39 mg/kg. Analytical results are summarized in Table 2, and illustrated in Figure 2. Laboratory reports are provided in Appendix D.

5.2 Groundwater Analyses

Three groundwater samples, from GP-2 through GP-4, were sent to Sequoia Analytical and analyzed for BTEX/MTBE, TPH-g, O&G, and halogenated volatile hydrocarbons using EPA Methods 8020, 8015M, 413.2, and 8010, respectively. Laboratory results indicated that no concentrations of BTEX, MTBE, TPH-g, or O&G were detected. Sample GP-4-W contained 1.8 µg/L of tetrachloroethene (PCE); however, no other halogenated volatile hydrocarbons were detected above the reporting limit. The results of the laboratory analyses are summarized on Table 3 and illustrated on Figure 2. Laboratory reports are provided in Appendix D.

6.0 WASTE DISPOSAL

All soil excavated during drilling was stored on the site in a 55-gallon DOT-rated drum. The drum was labeled and its contents documented on a drum inventory form. The drum inventory form is provided in Appendix E.

On December 16, 1998, the drum was transported by Heiritage, off-site to the Heiritage facility in Kansas City, Missouri. All soil transported off-site was shipped with the proper transportation and disposal documentation. Copies of these documents are presented in Appendix F.

7.0 SUMMARY AND CONCLUSIONS

The results of the site assessment conducted at the Sears Auto Center No. 1039 in Oakland, California, are presented below:

- On September 9, 1998, four soil borings (GP-1 through GP-4) were sampled using Geoprobe direct-push technology. Groundwater samples were collected from all borings except GP-1, due to the density of the formation which limited access to the saturated zone.
- Soil on-site consists of clayey silty sand underlain by fine sand and fine silty sand to the total depth of exploration at 22 feet bg. Groundwater was encountered at about 20 feet bg, except in GP-3 where it was at about 12 feet bg.

- Laboratory analyses indicated that BTEX, MTBE and TPH-g concentrations in soil were below detection limits, except for GP-1 at 10 feet which had a detectable concentration of MTBE (0.042 mg/kg). Oil and grease concentrations were below detection limits in four out of 13 soil samples; detectable concentrations ranged from 15 to 39 mg/kg.
- Laboratory analyses indicated that BTEX, MTBE, TPH-g and O&G concentrations were below detection limits in all groundwater samples. Concentrations of volatile organic compounds were below detection limits, except for a detectable concentration of tetrachloroethene ($1.8\mu\text{g/L}$) in GP-4-W.
- Data from the site assessment indicates that the petroleum hydrocarbon plume in soil, associated with the former gasoline and used-oil storage tanks, is defined vertically and laterally. The dissolved-phase plume is delineated on-site, and off-site migration has not occurred.

8.0 REFERENCE

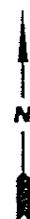
Radbruch, D.H. 1957. *Areal and Engineering Geology of the Oakland West Quadrangle, California*. U.S. Geological Survey, Miscellaneous Geologic Investigations Map 1-239.

FIGURES

1. Site Location Map
2. Boring Location and Hydrocarbon Concentrations in Soil and Groundwater



FLUOR DANIEL GTI



SCALE:

0 FEET 2000

SITE LOCATION MAP

DATE:

SOURCE: U.S.G.S. 7.5' QUAD SHEET
OAKLAND WEST, CALIFORNIA
PHOTOREVISED 1980

CLIENT: SEARS, ROEBUCK & COMPANY
SITE NO. 1039

LOCATION: 1901-1911 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

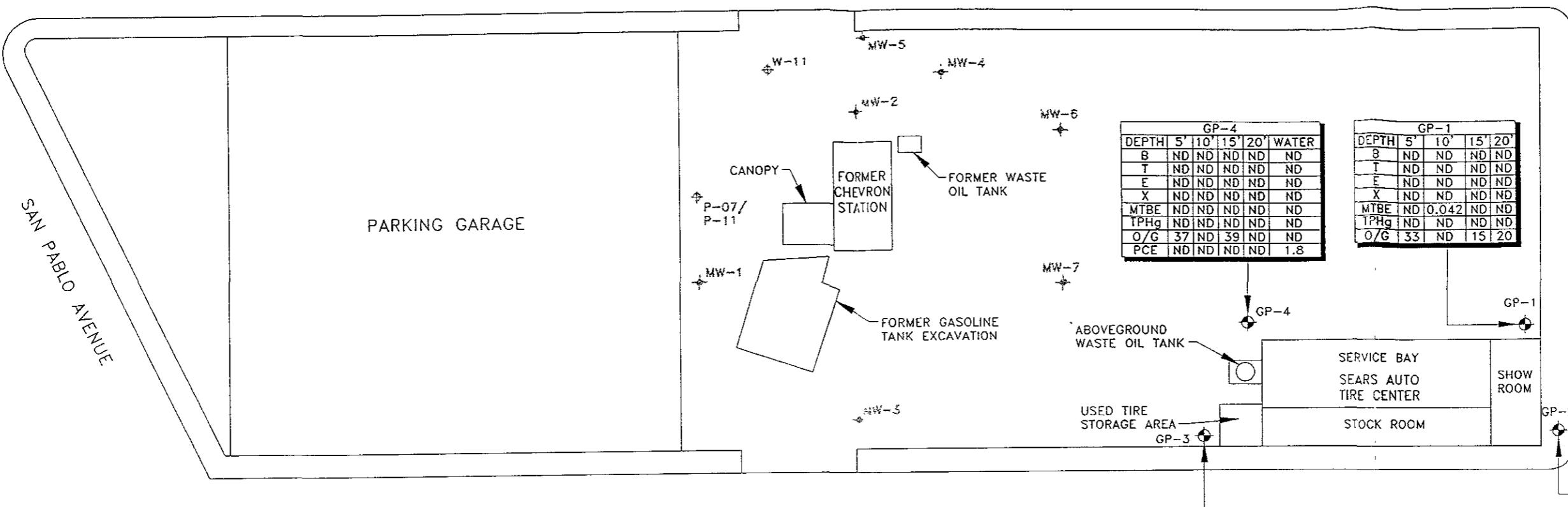
FIGURE 1

1

N

WILLIAMS STREET

TELEGRAPH AVENUE



LEGEND

- SOIL BORING LOCATION
 - MONITORING WELL
 - SOIL PROBE
- ND = BELOW DETECTION LIMITS

NOTES:

1. SOIL/GROUNDWATER SAMPLES COLLECTED SEPTEMBER 9, 1998.
2. BTEX = BENZENE, TOLUENE, ETHYLBENZENE, XYLEMES
DETECTION LIMIT = 0.005 mg/kg (SOIL); 0.5 ug/L (WATER)
- MTBE = METHYL TERT BUTYL ETHER
DETECTION LIMIT = 0.025 mg/kg (SOIL); 2.5 ug/L (WATER)
- TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
DETECTION LIMIT = 1.0 mg/kg (SOIL); 50 ug/L (WATER)
- O/G = OIL & GREASE
DETECTION LIMIT = 15 mg/kg (SOIL); 5.0 ug/L (WATER)
- PCE = TETRACHLOROETHENE (EPA 8240; ALL OTHER COMPOUNDS ND)
DETECTION LIMIT = 0.50 ug/L (WATER)
3. GP-1 HIT REFUSAL AT 20 FEET bg, AND A GROUNDWATER SAMPLE COULD NOT BE COLLECTED.

GP-4				
DEPTH	5'	10'	15'	20'
B	ND	ND	ND	ND
T	ND	ND	ND	ND
E	ND	ND	ND	ND
X	ND	ND	ND	ND
MTBE	ND	ND	ND	ND
TPHg	ND	ND	ND	ND
O/G	37	ND	39	ND
PCE	ND	ND	ND	1.8

GP-1				
DEPTH	5'	10'	15'	20'
B	ND	ND	ND	ND
T	ND	ND	ND	ND
E	ND	ND	ND	ND
X	ND	ND	ND	ND
MTBE	ND	0.042	ND	ND
TPHg	ND	ND	ND	ND
O/G	33	ND	15	20

GP-3				
DEPTH	5'	10'	WATER	
B	ND	ND	ND	
T	ND	ND	ND	
E	ND	ND	ND	
X	ND	ND	ND	
MTBE	ND	ND	ND	
TPHg	ND	ND	ND	
O/G	31	16	ND	

GP-2				
DEPTH	5'	10'	16'	WATER
B	ND	ND	ND	ND
T	ND	ND	ND	ND
E	ND	ND	ND	ND
X	ND	ND	ND	ND
MTBE	ND	ND	ND	ND
TPHg	ND	ND	ND	ND
O/G	15	16	ND	ND

FLUOR DANIEL GTI



0 FEET
SCALE

BORING LOCATION AND HYDROCARBON CONCENTRATIONS IN SOIL AND GROUNDWATER

CLIENT: SEARS, ROEBUCK & CO.
SITE NO. 1039

LOCATION: 1901-1911 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

ACAD FILE: PBORLOC PROJECT NO.: 104391

REV.

1

DES.: MG DET.: SWL DATE: 10/5/98 FIGURE:
PM: PE/RG: 2

TABLES

1. Physical Parameter Summary, Sears Auto Center No. 1039
2. Laboratory Results in Soil Analyses, 9/9/98, Sears Auto Center No. 1039
3. Laboratory Results of Groundwater Analyses, 9/9/98, Sears Auto Center No. 1039

TABLE 1
Physical Parameter Summary

Sears Auto Center No. 1039
Oakland, California

Sample ID	Moisture Content (%)	Ne (%)	Pb (g/cc)	Pd (g/cc)	TOC (mg/kg)	Native k (millidarcy)	K (cm/s)
GP-4-10' (vadose)	10.7	43.8	1.52	2.71	<100	7,623	--
GP-4-20' (saturated)	22.2	41.8	1.54	2.65	<100	--	9.99E-04

Notes:

All data provided by PTS Laboratories, Inc.

Particle size analysis was conducted on both samples.

GP-4-10' and GP-4-20' are fine sands.

- Ne = effective porosity
Pb = bulk density
Pd = particle density (grain)
TOC = total organic carbon
Native k = native permeability to air
K = hydraulic conductivity
-- = not analyzed

TABLE 2
Laboratory Results of Soil Analyses

Sears Auto Center No. 1039
Oakland, California

Sample I.D.	Sample Date	Sample Depth (ft)	Benzene	Toluene	Ethyl-benzene	Xylenes	MTBE	TPH-g	O&G
GP-1-5	9/9/98	5	ND	ND	ND	ND	ND	ND	33
GP-1-10	9/9/98	10	ND	ND	ND	ND	0.042	ND	ND
GP-1-15	9/9/98	15	ND	ND	ND	ND	ND	ND	15
GP-1-20	9/9/98	20	ND	ND	ND	ND	ND	ND	20
GP-2-5	9/9/98	5	ND	ND	ND	ND	ND	ND	15
GP-2-10	9/9/98	10	ND	ND	ND	ND	ND	ND	16
GP-2-16	9/9/98	16	ND	ND	ND	ND	ND	ND	ND
GP-3-5	9/9/98	5	ND	ND	ND	ND	ND	ND	31
GP-3-10	9/9/98	10	ND	ND	ND	ND	ND	ND	16
GP-4-5	9/9/98	5	ND	ND	ND	ND	ND	ND	37
GP-4-10	9/9/98	10	ND	ND	ND	ND	ND	ND	ND
GP-4-15	9/9/98	15	ND	ND	ND	ND	ND	ND	39
GP-4-20	9/9/98	20	ND	ND	ND	ND	ND	ND	ND

Notes:

All concentrations in mg/kg.

ND = not detected

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tert butyl ether

Detection Limits:

BTEX = 0.005 mg/kg

MTBE = 0.025 mg/kg

TPH-g = 1.0 mg/kg

O&G = 15 mg/kg

TABLE 3
Laboratory Results of Groundwater Analyses

Sears Auto Center No. 1039
Oakland, California

Well No.	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH-g	O&G*	EPA 8010 Halogenated Volatile Organics
GP-2-W	9/9/98	ND	ND	ND	ND	ND	ND	ND	ND
GP-3-W	9/9/98	ND	ND	ND	ND	ND	ND	ND	ND
GP-4-W	9/9/98	ND	ND	ND	ND	ND	ND	ND	PCE=1.8**
TB-1	9/9/98	ND	ND	ND	ND	ND	ND	ND	NA

Notes:

All concentrations in $\mu\text{g}/\text{kg}$ except Oil & Grease, which is reported as mg/L.

ND = not detected

NA = not analyzed

TPH-g = total petroleum hydrocarbons as gasoline

MTBE = methyl tert butyl ether

Detection Limits:

BTEX = $0.5 \mu\text{g}/\text{L}$

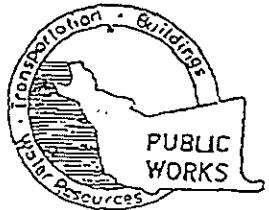
MTBE = $2.5 \mu\text{g}/\text{L}$

TPH-g = $50 \mu\text{g}/\text{L}$

*O&G = 5.0 mg/kg

**Tetrachloroethene reported at $1.8 \mu\text{g}/\text{L}$, all others ND.

APPENDIX A
BORING PERMITS



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651
PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Sears Store #1039
1911 Telegraph Avenue
Oakland, California

California Coordinates Source _____ ft. Accuracy ± _____ ft.
CCN _____ ft. CCE _____ ft.
APN 8-643-11

CLIENT
Name Sears Roebuck & Company
Address 3333 Beverly Rd Phone 847-286-5530
C Hoffman Estates, IL Zip 60179

APPLICANT
Name Fluor Daniel GTI
Address 257 Arnold DR, Ste D Fax 925-370-3991
C Martinez, CA Phone 925-370-3990
Zip 94553

TYPE OF PROJECT

Well Construction Geotechnical Investigation
Cathodic Protection General
Water Supply Contamination
Monitoring Well Destruction

PROPOSED WATER SUPPLY WELL USE

New Domestic Replacement Domestic
Municipal Irrigation
Industrial Other N/A

DRILLING METHOD:

Mud Rotary Air Rotary Auger
Cable Other Direct Push
Technology

DRILLER'S LICENSE NO. 705927

WELL PROJECTS

Hill Hole Diameter N/A in. Maximum
Casing Diameter N/A in. Depth N/A ft.
Surface Seal Depth N/A ft. Number N/A

TECHNICAL PROJECTS

Number of Bearings 4 Maximum
Hole Diameter 1-1/2" in. Depth 20' ft.

ESTIMATED STARTING DATE 8/9/98

ESTIMATED COMPLETION DATE 9/9/98

I, by signature, agree to comply with all requirements of this permit and
Alameda County Ordinance No. 73-68

Signature A. J. Howell for S. DeGruy DATE 8/25/98

FOR OFFICE USE

PERMIT NUMBER 98 WR 372
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Driller's Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremie cement grout shall be used in place of compacted cuttings.

E. CATHODIC

Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION

See attached.

G. SPECIAL CONDITIONS

APPROVED Andreas Godfrey DATE 9-1-98

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL
ENGINEERING

PAGE 2 of 2

PERMIT NUMBER	SITE ADDRESS/LOCATION	
X 9800652	X 1900 Telegraph AV,	
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS		CITY BUSINESS TAX #

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) # _____

2) 48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code). Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500.

I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code). The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision or more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project. (Sec. 7044, Business and Professions Code). The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law.

I am exempt under Sec. _____ B&PC for this reason.

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X Edgar K. Boaglin

8/31/98

Signature of Permittee

Agent for Contractor Owner

Date

DATE STREET LAST
RESURFACED

SPECIAL PAVING DETAIL
REQUIRED? YES NO

HOLIDAY RESTRICTION

(NOV 1 - JAN 1)

YES NO

LIMITED OPERATION AREA?

(7AM-9AM & 4PM-6PM) YES NO

ISSUED BY

DATE ISSUED

8/31/98

536170

EXCAVATION

Job Site 1900 TELEGRAPH AV

Parcel#

App# X9800652

Descr soil sample on sidewalk on telegraph; must leave at least
5' of walkway; per L. Barrozo

Permit Issued 08/31/98

Work Type EXCAVATION-PRIVATE P

USA #

Util Co. Job#
Util Fund #

Acctg#:

Owner

Applicant

Phone#

Lic#

License Classes--

Contractor GROUNDWATER TECHNOLOGY INC

X (916)372-4700-536170-A

Arch/Engr

Agent

Applic Addr 1401 HALYARD DR SUITE 140, WEST SACRAMENTO, CA, 95691

\$246.00 TOTAL FEES PAID AT ISSUANCE
 \$41.00 Applic \$205.00 Permit
 \$0.00 Process \$0.00 Rec Mgmt
 \$0.00 Gen Plan \$0.00 Invstg
 \$0.00 Other

CITY OF OAKLAND

CITY OF OAKLAND
 Community & Economic Development Agency
 250 Frank H. Ogawa Pl, Oakland CA, 94612
 Phone: (510)238-3587 FAX: (510)238-2863

PAYMENT RECEIPT

Application#:	X9800652	Payment#:	001
APPLICATION FEE			\$41.00
EXCAVATION PERMIT			\$205.00
Subtotal:			\$246.00

Sales Tax: \$0.00

***** TOTAL PAID: \$246.00

Check Payment: \$246.00

Payor: FLUOR DANIEL GTI 1566

Date: 08/31/98 Time: 14:42:11

By: DTF Register R02 Receipt# 024583

ORIGINAL RECEIPT REQUIRED FOR REFUND

Date: 08/31/98 Amt Paid: \$246.00
 By: DTF Register R02 Receipt# 024583

APPENDIX B
DRILLING LOGS

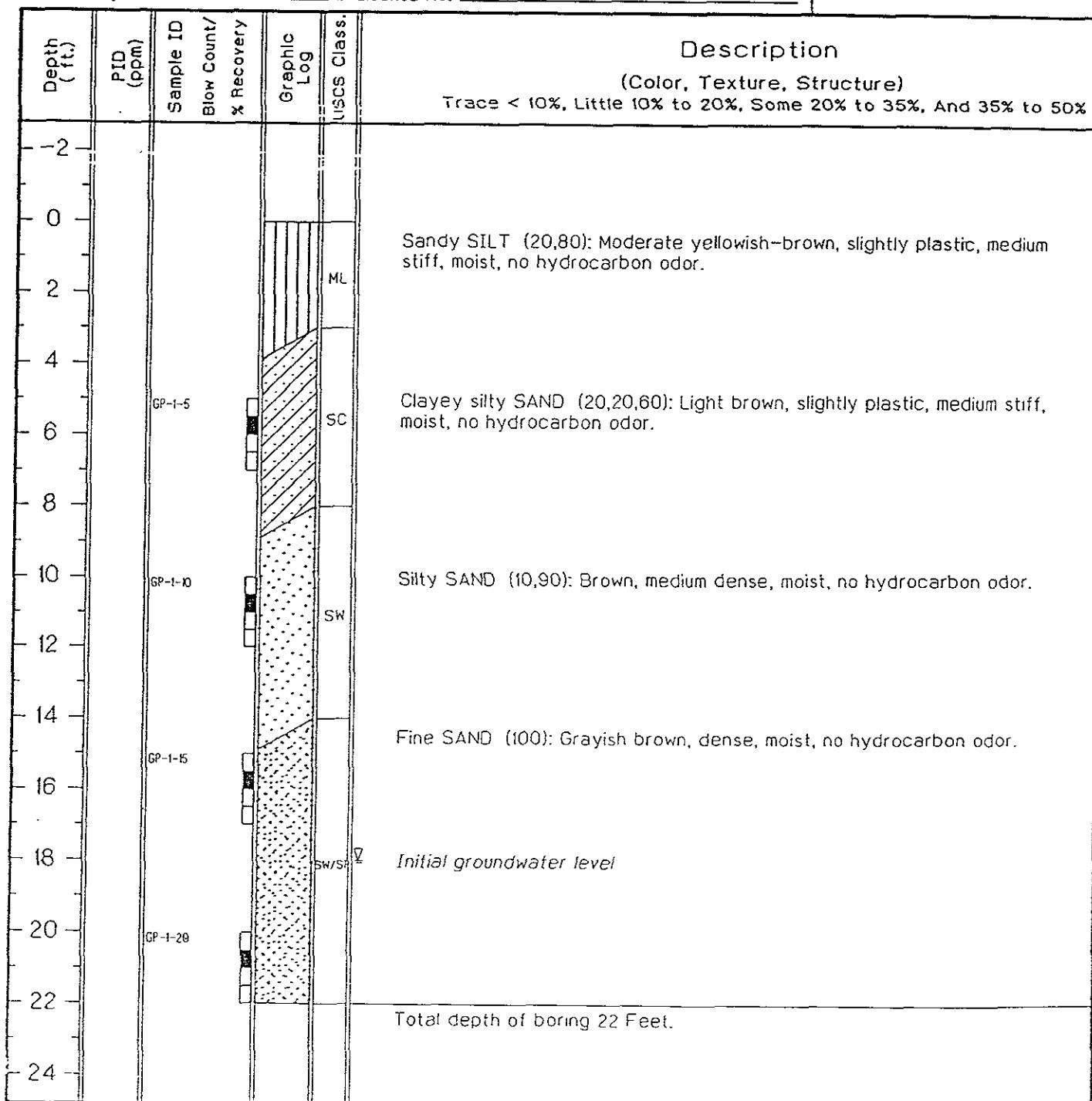
Drilling Log

FLUOR DANIEL GTI
Soil Boring GP-1

Project Sears Telegraph Owner Sears, Roebuck and Co.
 Location 1911 Telegraph Avenue Proj. No. 106479.030503
 Surface Elev. N/A ft. Total Hole Depth 22 ft. Diameter 1.5 in.
 Top of Casing N/A ft. Water Level Initial 18.00 ft. Static N/A ft.
 Screen: Dia N/A in. Length N/A ft. Type/Size N/A in.
 Casing: Dia N/A in. Length N/A ft. Type N/A
 Fill Material N/A Rig/Core GeoProbe
 Drill Co. Vironex Method Down Hole Push
 Driller M. Martin Log By Brian Pierskalla Date 09/09/98 Permit #
 Checked By Ed Simonis License No. #4422

 See Site Map
For Boring Location

COMMENTS:



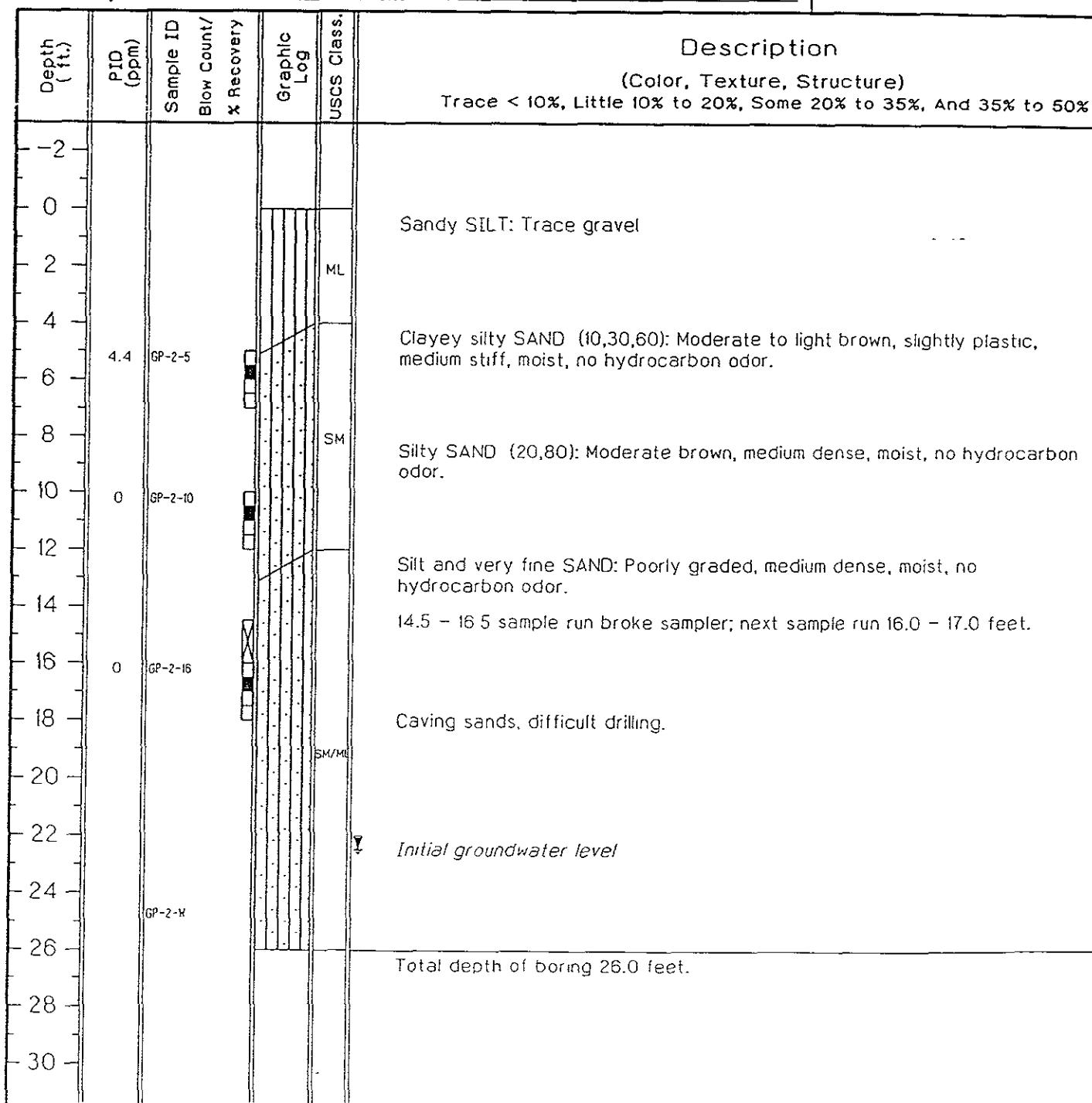
Drilling Log

FLUOR DANIEL GTI
Soil Boring GP-2

Project Sears Telegraph Owner Sears, Roebuck and Co.
 Location 1911 Telegraph Avenue Proj. No. 106479.03050
 Surface Elev. N/A ft. Total Hole Depth 26 ft. Diameter 1.5 in.
 Top of Casing N/A ft. Water Level Initial 22.45 ft. Static 22.50 ft.
 Screen: Dia N/A in. Length N/A ft. Type/Size N/A in.
 Casing: Dia N/A in. Length N/A ft. Type N/A
 Fill Material N/A Rig/Core GeoProbe
 Drill Co. Vironex Method Down Hole Push
 Driller M. Martin Log By Brian Pierskalla Date 09/09/98 Permit #
 Checked By Ed Simonis License No. #4422

 See Site Map
For Boring Location

COMMENTS:



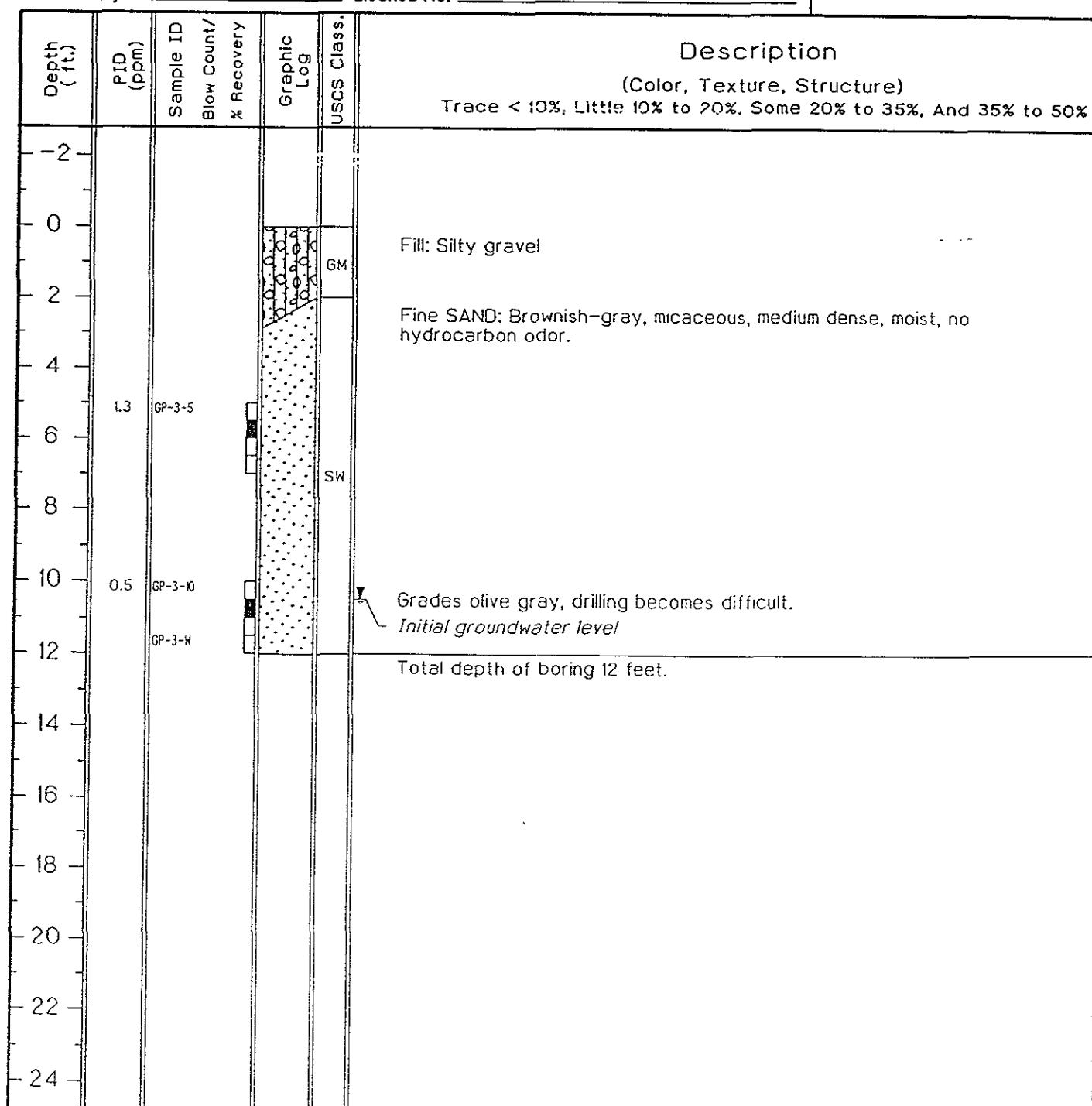
Drilling Log

FLUOR DANIEL GTI
Soil Boring GP-3

Project Sears Telegraph Owner Sears, Roebuck and Co.
 Location 1911 Telegraph Avenue Proj. No. 106479.030503
 Surface Elev. N/A ft. Total Hole Depth 12 ft. Diameter 1.5 in.
 Top of Casing N/A ft. Water Level Initial 10.50 ft. Static 10.50 ft.
 Screen: Dia N/A in. Length N/A ft. Type/Size N/A in.
 Casing: Dia N/A in. Length N/A ft. Type N/A
 Fill Material N/A Rig/Core GeoProbe
 Drill Co. Vironex Method Down Hole Push
 Driller M. Martin Log By Brian Pierskalla Date 09/09/98 Permit #
 Checked By Ed Simonis License No. #4422

 See Site Map
For Boring Location

COMMENTS:



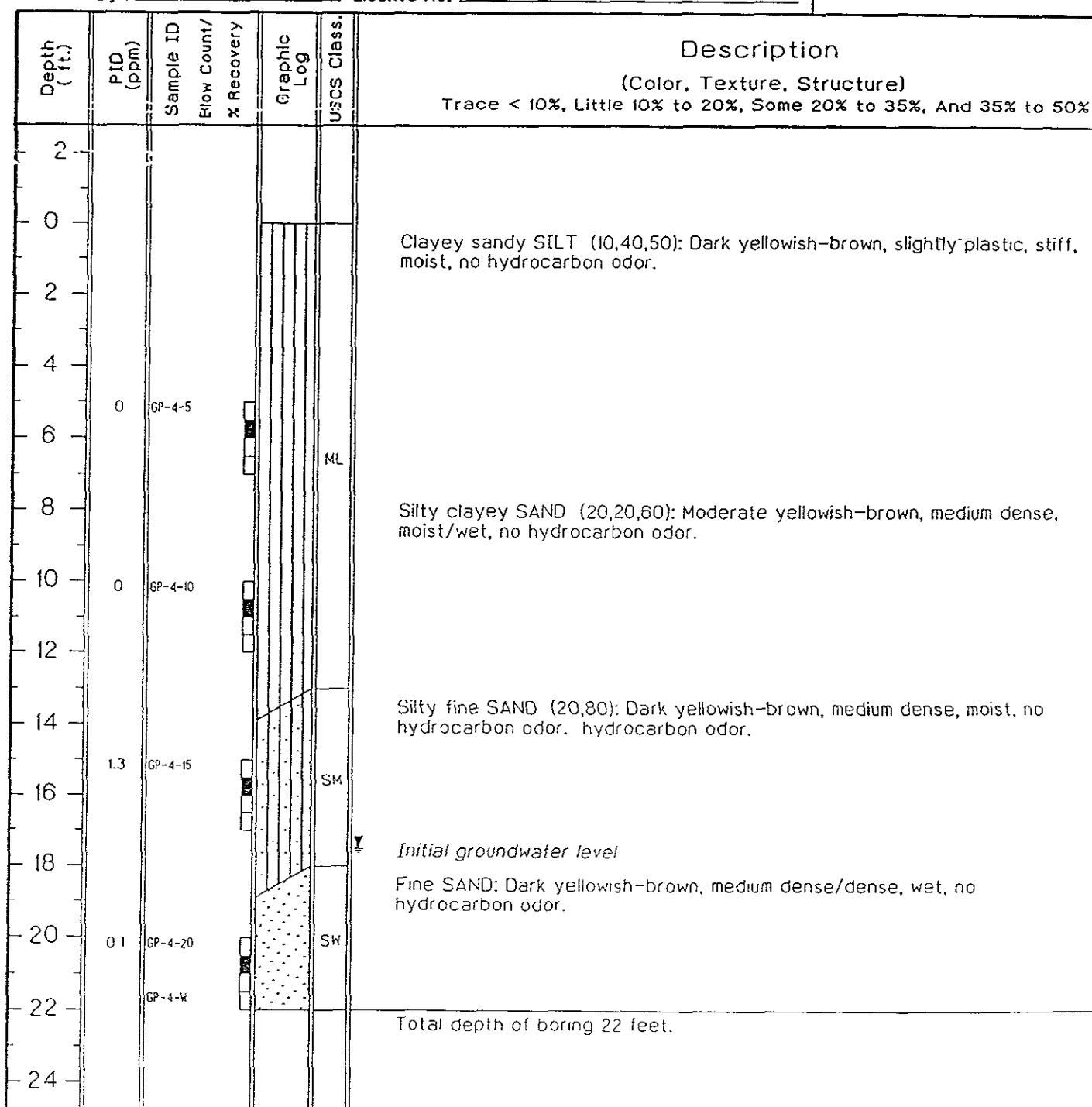
Drilling Log

FLUOR DANIEL GTI
Soil Boring GP-4

Project Sears Telegraph Owner Sears, Roebuck and Co.
 Location 1911 Telegraph Avenue Proj. No. 106479.030503
 Surface Elev. N/A ft. Total Hole Depth 22 ft. Diameter 1.5 in.
 Top of Casing N/A ft. Water Level Initial 17.50 ft. Static 17.50 ft.
 Screen: Dia N/A in. Length N/A ft. Type/Size N/A in.
 Casing: Dia N/A in. Length N/A ft. Type N/A
 Fill Material N/A Rig/Core GeoProbe
 Drill Co. Vironex Method Down Hole Push
 Driller M. Martin Log By Brian Pierskalla Date 09/09/98 Permit #
 Checked By Ed Simonis License No. #4422

 See Site Map
For Boring Location

COMMENTS:



APPENDIX C
LABORATORY REPORT - PHYSICAL PARAMETER DATA

PTS Laboratories, Inc.

Geotechnical Services

8100 Secura Way • Santa Fe Springs • CA 90670
Phone (562) 907-3607 • Fax (562) 907-3610

September 28, 1998

Ms. Melissa Gossell
Fluor Daniel GTI
757 Arnold Dr. Suite D
Martinez, CA 94553

Re: 106479.0305
PTS File: 28355

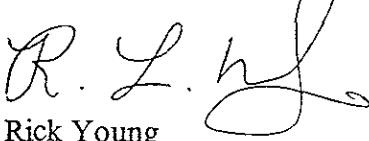
Dear Ms. Gossell:

Enclosed are final data for samples submitted from your Project # 106479.0305. All analyses were performed by applicable ASTM, EPA or API methodology. Samples will be retained for 30 days before disposal unless other arrangements are made.

We appreciate the opportunity to be of service and trust these data will prove beneficial in the development of this project. Please feel free to call myself or Larry Kunkel, District Manager, should you have any questions or require additional information.

Sincerely,

PTS Laboratories, Inc.


Rick Young
Project Manager

RK/vk

encl.

PHYSICAL PROPERTIES DATA

(METHODOLOGY: ASTM D2216, API RP40, EPA 9100, WALKLEY-BLACK)

PROJECT NAME: Sears 1039 Oakland
PROJECT NO: 106479.030503

SAMPLE ID	SAMPLE ORIENT. (1)	MOISTURE CONTENT (% wt)	DENSITY BULK GRAIN (g/cc)	EFFECTIVE POROSITY, % Vb	PORE FLUID SATURATION, % Pv		TOTAL ORGANIC CARBON mg/kg	CATION EXCHANGE CAPACITY meq/100g	NATIVE PERMEABILITY TO AIR (millidarcy)	SPECIFIC PERMEABILITY TO WATER (millidarcy)	SPECIFIC HYDRAULIC CONDUCTIVITY (cm/s)
					WATER (2)	HYDROCARBON (3)					
GP-4-10-GT	V	10.7	1.52	2.71	43.8	38.1	ND	6.58	<100	7.8	7623
GP-4-20-GT	V	22.2	1.54	2.65	41.8	83.4	ND	6.85	<100	5.2	984

(1) Sample Orientation: H = Horizontal; V = Vertical
 (2) 0.9986 gm/cc used for calculation
 (3) 0.7500 gm/cc used for calculation
 ND = Not Detected

V_b = Bulk Volume, cc
 P_v = Pore Volume, cc
 ND = Not Detected

PARTICLE SIZE SUMMARY

(METHODOLOGY: ASTM D4464)

PROJECT NAME: Sears 1039 Oakland

PROJECT NO: 106479.030503

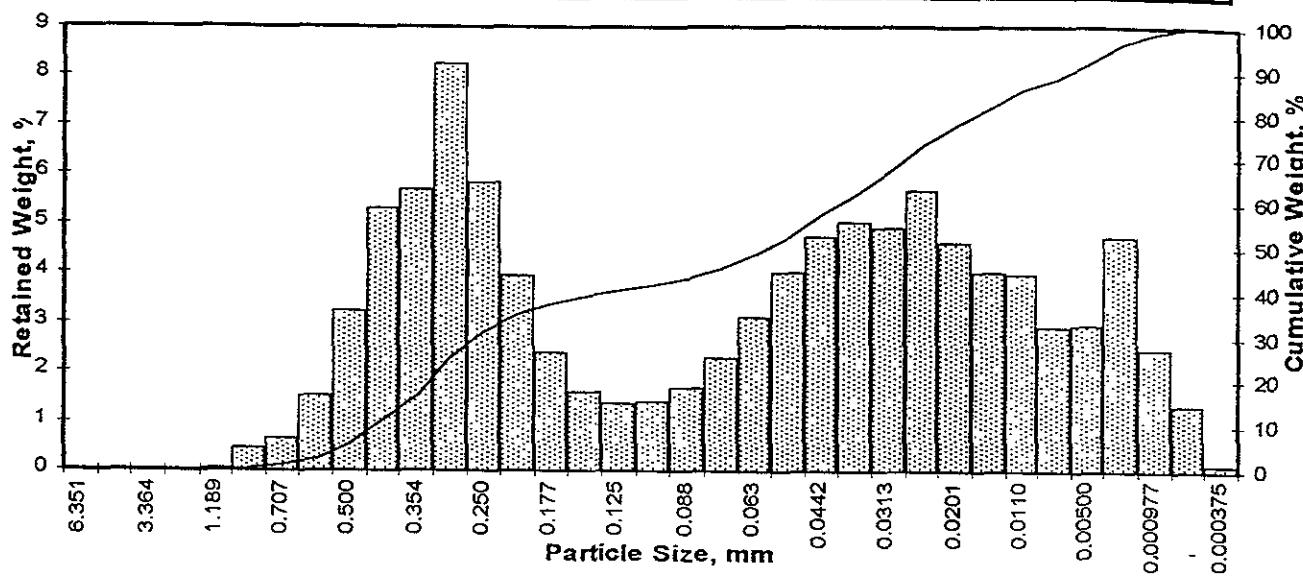
Sample ID	Depth, ft.	Description USCS/ASTM (1)	Median Grain Size mm	Particle Size Distribution, wt. percent						Silt & Clay	
				Gravel	Sand Size			Silt	Clay		
					Coarse	Medium	Fine				
GP-4-20-GT	20.0	Fine sand	0.271	0.00	0.00	11.10	74.18	12.48	2.24	14.72	
GP-4-15-GT	15.0	Fine sand	0.261	0.00	0.00	12.97	73.68	10.59	2.76	13.35	
GP-4-10-GT	10.0	Fine sand	0.271	0.00	0.00	17.01	64.86	15.11	3.02	18.13	
GP-4-5-GT	5.0	Fine sand	0.059	0.00	0.00	11.16	34.41	45.82	8.61	54.43	
GP-3-10-GT	10.0	Fine sand	0.285	0.00	0.00	16.67	76.88	5.12	1.32	6.45	
GP-2-16-GT	16.0	Fine sand	0.238	0.00	0.00	9.31	72.12	13.60	4.97	18.57	
GP-2-10-GT	10.0	Fine sand	0.234	0.00	0.00	10.84	64.02	20.73	4.41	25.14	
GP-2-5-GT	5.0	Fine sand	0.058	0.00	0.00	8.64	35.29	47.43	8.64	56.07	
GP-1-20-GT	20.0	Fine sand	0.242	0.00	0.00	2.64	89.88	4.87	2.61	7.48	
GP-1-15-GT	15.0	Fine sand	0.246	0.00	0.00	3.69	84.43	8.96	2.93	11.89	
GP-1-10-GT	10.0	Fine sand	0.202	0.00	0.00	7.89	64.33	23.60	4.18	27.78	
GP-1-5-GT	5.0	Fine sand	0.060	0.00	0.00	9.05	37.01	44.77	9.17	53.93	

(1) based on Mean from Trask

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-4-5-GT
 Depth, ft: 5.0

Grv	Sand Size			Silt	Clay
	crs	medium	fine		



Opening		Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.05	0.05	0.05
0.0331	0.841	0.25	20	0.45	0.45	0.49
0.0278	0.707	0.50	25	0.66	0.66	1.15
0.0234	0.595	0.75	30	1.51	1.51	2.66
0.0197	0.500	1.00	35	3.20	3.20	5.86
0.0166	0.420	1.25	40	5.30	5.30	11.16
0.0139	0.354	1.50	45	5.69	5.69	16.85
0.0117	0.297	1.75	50	8.26	8.26	25.11
0.0098	0.250	2.00	60	5.82	5.82	30.93
0.0083	0.210	2.25	70	3.95	3.95	34.88
0.0070	0.177	2.50	80	2.39	2.39	37.27
0.0059	0.149	2.75	100	1.60	1.60	38.87
0.0049	0.125	3.00	120	1.36	1.36	40.23
0.0041	0.105	3.25	140	1.40	1.40	41.63
0.0035	0.088	3.50	170	1.68	1.68	43.31
0.0029	0.074	3.75	200	2.26	2.26	45.57
0.0025	0.063	4.00	230	3.09	3.09	48.66
0.0021	0.053	4.25	270	3.99	3.99	52.65
0.00174	0.0442	4.50	325	4.71	4.71	57.36
0.00146	0.0372	4.75	400	5.02	5.02	62.38
0.00123	0.0313	5.00	450	4.90	4.90	67.28
0.000986	0.0250	5.32	500	5.66	5.66	72.94
0.000790	0.0201	5.64	635	4.61	4.61	77.55
0.000615	0.0156	6.00		4.02	4.02	81.57
0.000435	0.0110	6.50		3.96	3.96	85.53
0.000308	0.00781	7.00		2.90	2.90	88.43
0.000197	0.00500	7.65		2.96	2.96	91.39
0.000077	0.00195	9.00		4.71	4.71	96.10
0.000038	0.000977	10.00		2.46	2.46	98.56
0.000019	0.000488	11.00		1.31	1.31	99.87
0.000015	0.000375	11.38		0.13	0.13	100.00
TOTALS				100.00	100.00	100.00

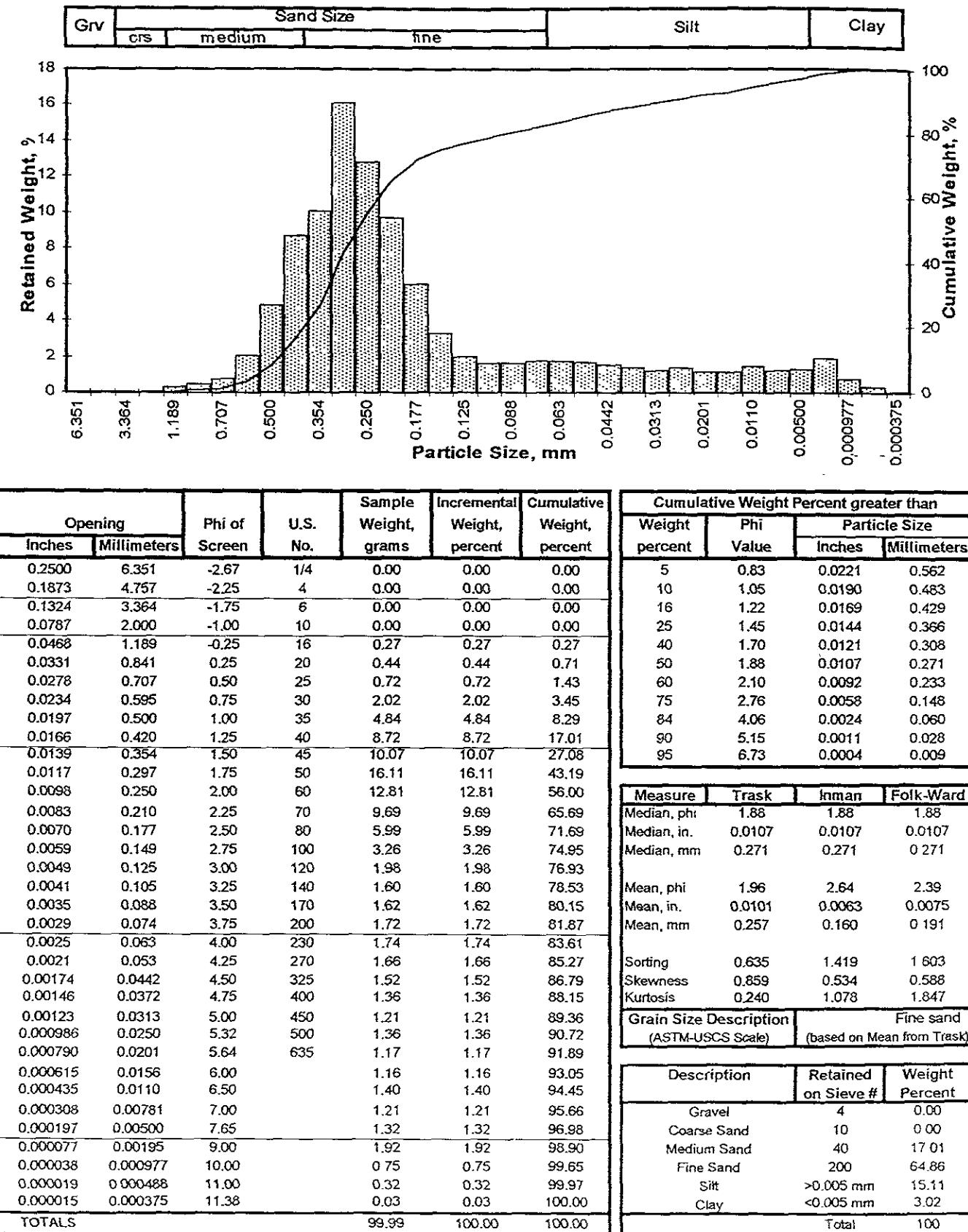
Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	0.93	0.0206	0.524
10	1.20	0.0172	0.437
16	1.46	0.0143	0.363
25	1.75	0.0117	0.298
40	2.96	0.0051	0.129
50	4.08	0.0023	0.059
60	4.63	0.0016	0.040
75	5.46	0.0009	0.023
84	6.31	0.0005	0.013
90	7.34	0.0002	0.006
95	8.68	0.0001	0.002

Measure	Trask	Inman	Folk-Ward
Median, phi	4.08	4.08	4.08
Median, in.	0.0023	0.0023	0.0023
Median, mm	0.059	0.059	0.059
Mean, phi	2.64	3.88	3.95
Mean, in.	0.0063	0.0027	0.0025
Mean, mm	0.160	0.068	0.065
Sorting	0.276	2.422	2.385
Skewness	1.394	-0.082	0.052
Kurtosis	0.320	0.600	0.855
Grain Size Description (ASTM-USCS Scale)	Fine sand (based on Mean from Trask)		

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	11.16
Fine Sand	200	34.41
Silt	>0.005 mm	45.82
Clay	<0.005 mm	8.61
Total		100

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-4-10-GT
 Depth, ft: 10.0



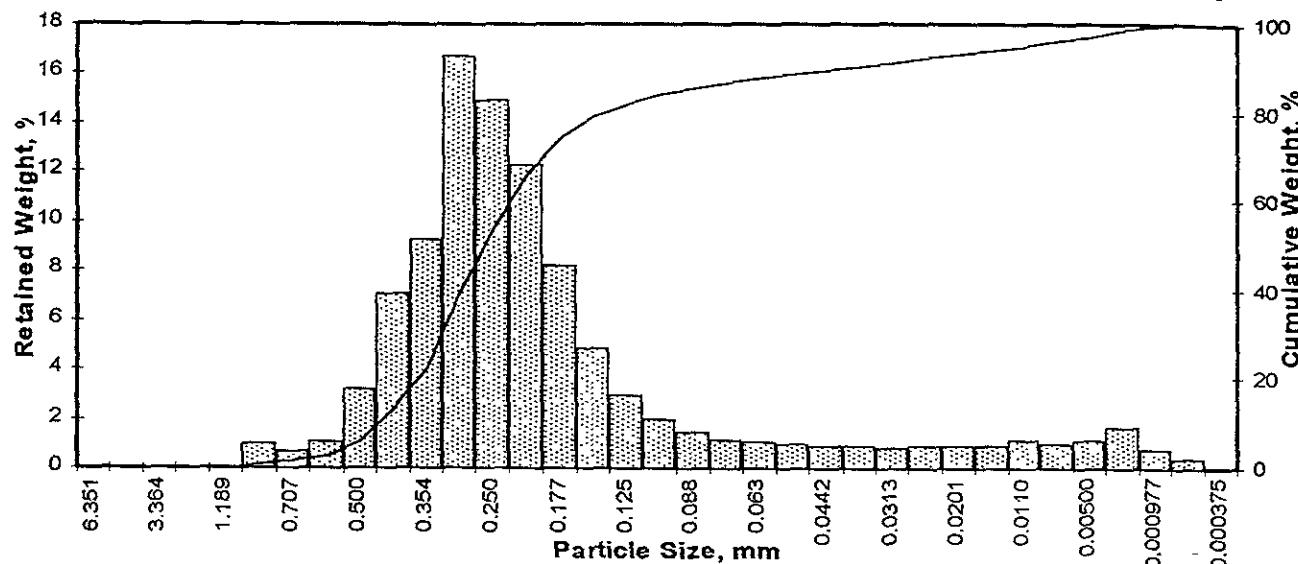
PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-4-15-GT
 Depth, ft: 15.0

Grv	Sand Size			Silt	Clay
	crs	medium	fine		



Opening		Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters	Screen				
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.04	0.03	0.03
0.0331	0.841	0.25	20	0.98	0.98	1.02
0.0278	0.707	0.50	25	0.65	0.65	1.67
0.0234	0.595	0.75	30	1.06	1.06	2.73
0.0197	0.500	1.00	35	3.17	3.17	5.90
0.0166	0.420	1.25	40	7.07	7.07	12.97
0.0139	0.354	1.50	45	9.25	9.25	22.22
0.0117	0.297	1.75	50	16.69	16.69	38.90
0.0098	0.250	2.00	60	14.89	14.89	53.79
0.0083	0.210	2.25	70	12.27	12.27	66.06
0.0070	0.177	2.50	80	8.16	8.16	74.22
0.0059	0.149	2.75	100	4.85	4.85	79.07
0.0049	0.125	3.00	120	2.98	2.98	82.05
0.0041	0.105	3.25	140	1.99	1.99	84.04
0.0035	0.088	3.50	170	1.44	1.44	85.48
0.0029	0.074	3.75	200	1.17	1.17	86.65
0.0025	0.063	4.00	230	1.07	1.07	87.72
0.0021	0.053	4.25	270	0.99	0.99	88.71
0.00174	0.0442	4.50	325	0.93	0.93	89.64
0.00146	0.0372	4.75	400	0.88	0.88	90.52
0.00123	0.0313	5.00	450	0.80	0.80	91.32
0.000986	0.0250	5.32	500	0.95	0.94	92.27
0.000790	0.0201	5.64	635	0.88	0.88	93.15
0.000615	0.0156	6.00		0.90	0.90	94.06
0.000435	0.0110	6.50		1.10	1.10	95.16
0.000308	0.00781	7.00		0.98	0.98	96.14
0.000197	0.00500	7.65		1.10	1.10	97.24
0.000077	0.00195	9.00		1.65	1.65	98.89
0.000038	0.000977	10.00		0.73	0.73	99.62
0.000019	0.000488	11.00		0.35	0.35	99.97
0.000015	0.000375	11.38		0.03	0.03	100.00
TOTALS				100.01	100.00	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	0.93	0.0207	0.525
10	1.15	0.0178	0.452
16	1.33	0.0156	0.397
25	1.54	0.0135	0.343
40	1.77	0.0116	0.294
50	1.94	0.0103	0.261
60	2.13	0.0090	0.229
75	2.54	0.0068	0.172
84	3.25	0.0042	0.105
90	4.60	0.0016	0.041
95	6.43	0.0005	0.012

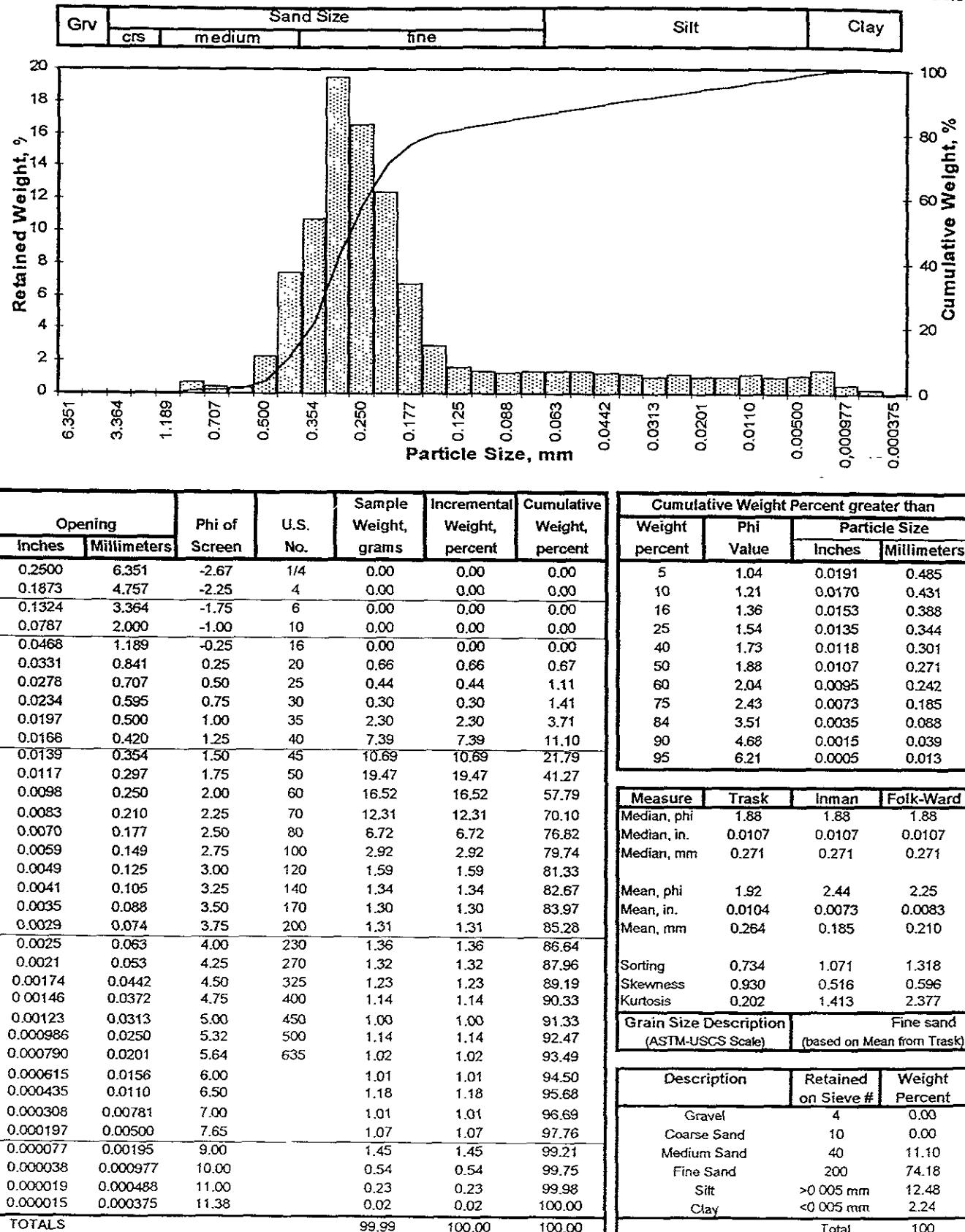
Measure	Trask	Inman	Folk-Ward
Median, phi	1.94	1.94	1.94
Median, in.	0.0103	0.0103	0.0103
Median, mm	0.261	0.261	0.261
Mean, phi	1.96	2.29	2.17
Mean, in.	0.0101	0.0081	0.0087
Mean, mm	0.258	0.205	0.222
Sorting	0.707	0.957	1.312
Skewness	0.930	0.368	0.501
Kurtosis	0.209	1.875	2.258

Grain Size Description (ASTM-USCS Scale)	(based on Mean from Trask)
--	----------------------------

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	12.97
Fine Sand	200	73.68
Silt	>0.005 mm	10.59
Clay	<0.005 mm	2.76
Total		100

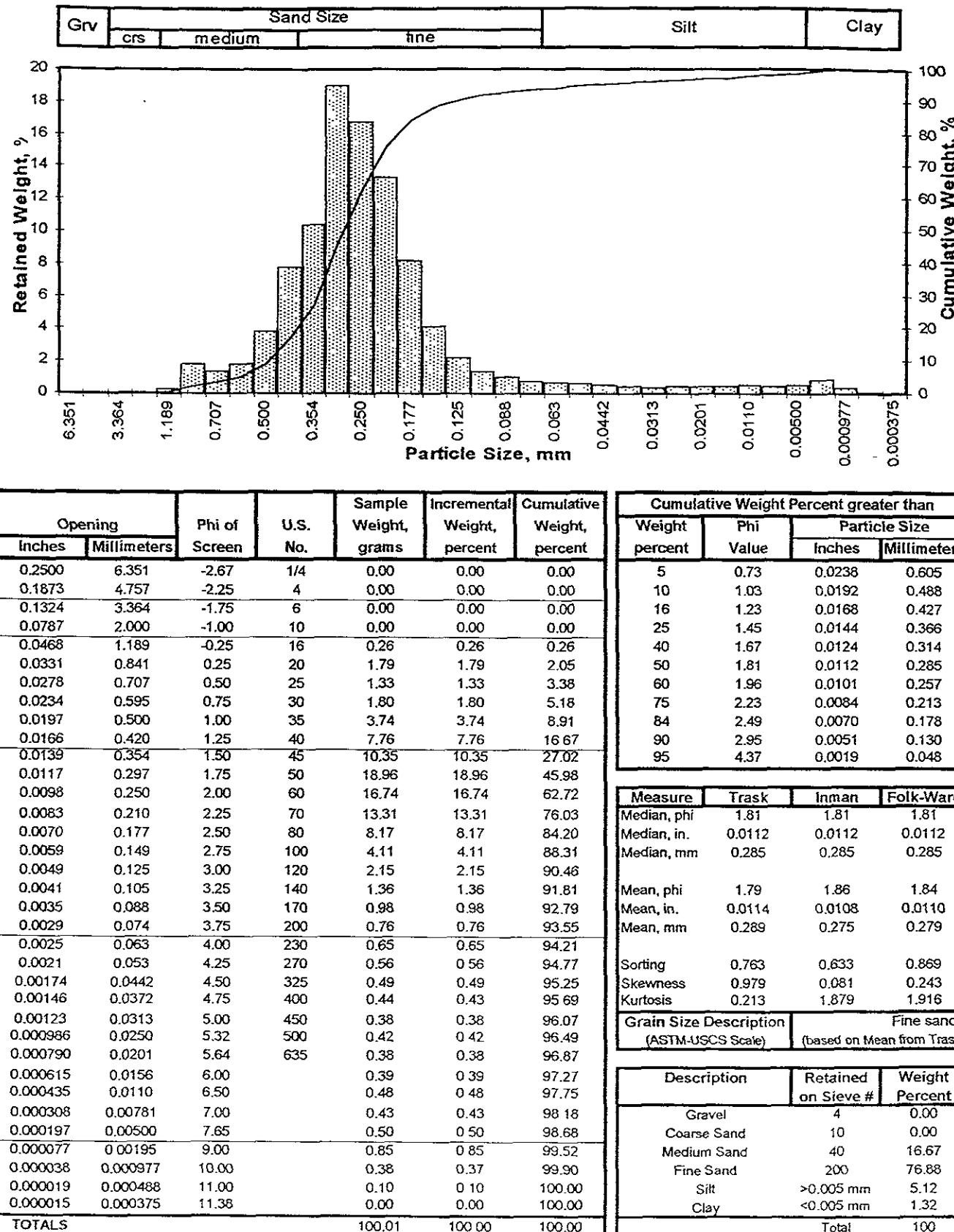
Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-4-20-GT
 Depth, ft: 20.0



Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-3-10-GT
 Depth, ft: 10.0



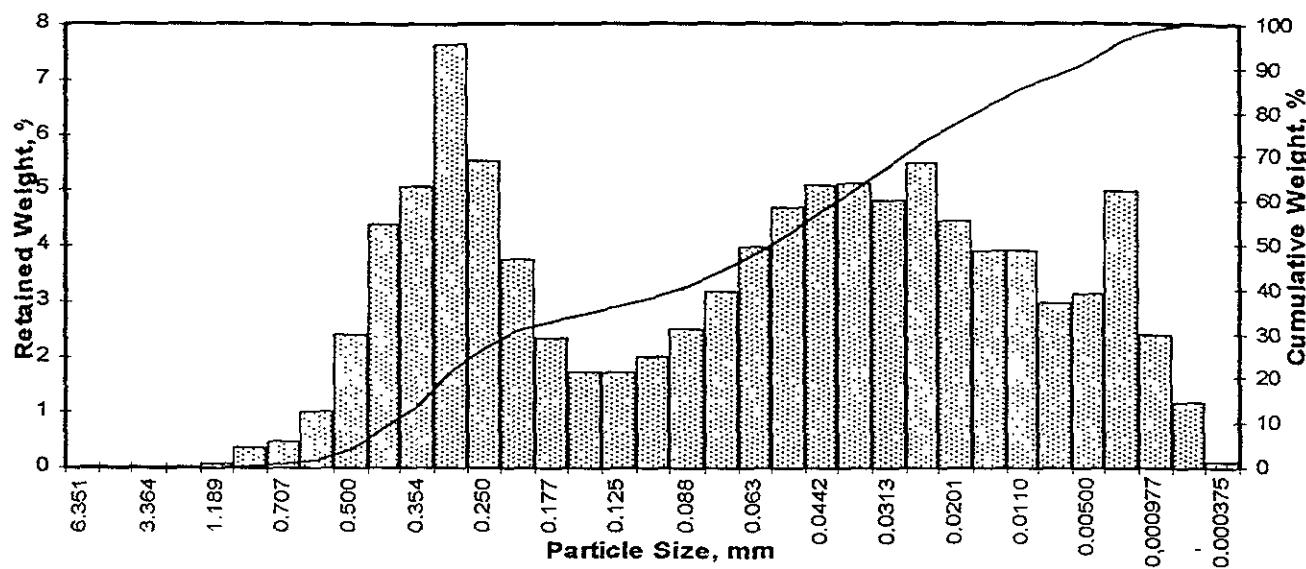
PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-2-5-GT
 Depth, ft: 5.0

Grv	Sand Size			Silt	Clay
	crs	medium	fine		



Opening		Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.07	0.07	0.07
0.0331	0.841	0.25	20	0.36	0.36	0.42
0.0278	0.707	0.50	25	0.46	0.46	0.88
0.0234	0.595	0.75	30	1.01	1.01	1.89
0.0197	0.500	1.00	35	2.37	2.37	4.26
0.0166	0.420	1.25	40	4.38	4.38	8.64
0.0139	0.354	1.50	45	5.03	5.03	13.67
0.0117	0.297	1.75	50	7.64	7.64	21.31
0.0098	0.250	2.00	60	5.50	5.50	26.81
0.0083	0.210	2.25	70	3.74	3.74	30.55
0.0070	0.177	2.50	80	2.31	2.31	32.86
0.0059	0.149	2.75	100	1.72	1.72	34.58
0.0049	0.125	3.00	120	1.71	1.71	36.29
0.0041	0.105	3.25	140	1.99	1.99	38.28
0.0035	0.088	3.50	170	2.48	2.48	40.76
0.0029	0.074	3.75	200	3.17	3.17	43.93
0.0025	0.063	4.00	230	3.96	3.96	47.89
0.0021	0.053	4.25	270	4.66	4.66	52.55
0.00174	0.0442	4.50	325	5.07	5.07	57.62
0.00146	0.0372	4.75	400	5.11	5.11	62.73
0.00123	0.0313	5.00	450	4.82	4.82	67.55
0.000986	0.0250	5.32	500	5.47	5.47	73.02
0.000790	0.0201	5.64	635	4.45	4.45	77.47
0.000615	0.0156	6.00		3.90	3.90	81.37
0.000435	0.0110	6.50		3.91	3.91	85.28
0.000308	0.00781	7.00		2.96	2.96	88.24
0.000197	0.00500	7.65		3.12	3.12	91.36
0.000077	0.00195	9.00		4.99	4.99	96.35
0.000038	0.000977	10.00		2.38	2.38	98.73
0.000019	0.000488	11.00		1.16	1.16	99.89
0.000015	0.000375	11.38		0.11	0.11	100.00
TOTALS				100.00	100.00	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	1.04	0.0191	0.485
10	1.32	0.0158	0.401
16	1.58	0.0132	0.335
25	1.92	0.0104	0.265
40	3.42	0.0037	0.093
50	4.11	0.0023	0.058
60	4.62	0.0016	0.041
75	5.46	0.0009	0.023
84	6.34	0.0005	0.012
90	7.36	0.0002	0.006
95	8.63	0.0001	0.003

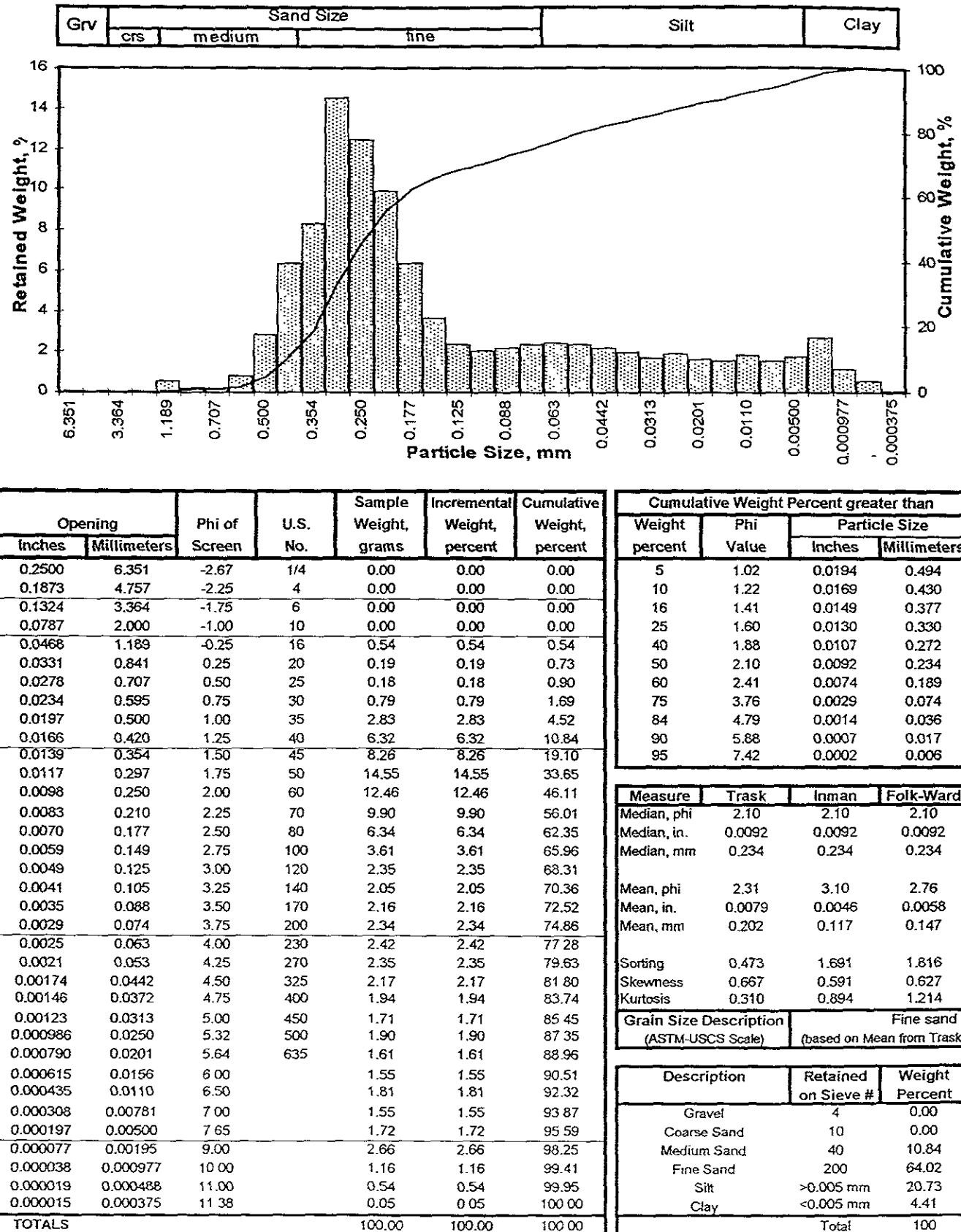
Measure	Trask	Inman	Folk-Ward
Median, phi	4.11	4.11	4.11
Median, in.	0.0023	0.0023	0.0023
Median, mm	0.058	0.058	0.058
Mean, phi	2.80	3.96	4.01
Mean, in.	0.0057	0.0025	0.0024
Mean, mm	0.144	0.064	0.062
Sorting	0.293	2.380	2.340
Skewness	1.341	-0.066	0.063
Kurtosis	0.306	0.595	0.878

Grain Size Description	(ASTM-USCS Scale)	Fine sand
		(based on Mean from Trask)

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	8.64
Fine Sand	200	35.29
Silt	>0.005 mm	47.43
Clay	<0.005 mm	8.64
	Total	100

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

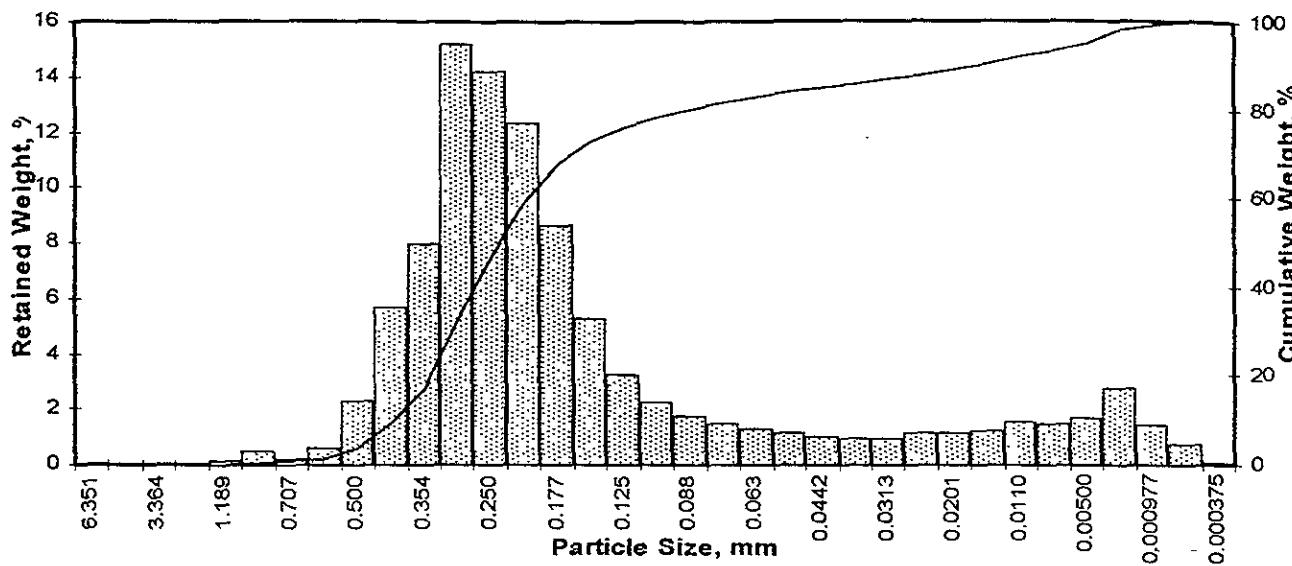
PTS File No: 28355
 Sample ID: GP-2-10-GT
 Depth, ft: 10.0



Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-2-165-GT
 Depth, ft: 16.0

Grv	Sand Size			Silt	Clay
	crs	medium	fine		



Opening		Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.14	0.14	0.14
0.0331	0.841	0.25	20	0.47	0.46	0.60
0.0278	0.707	0.50	25	0.21	0.21	0.81
0.0234	0.595	0.75	30	0.60	0.59	1.41
0.0197	0.500	1.00	35	2.28	2.28	3.69
0.0166	0.420	1.25	40	5.62	5.62	9.31
0.0139	0.354	1.50	45	7.93	7.93	17.24
0.0117	0.297	1.75	50	15.18	15.18	32.41
0.0098	0.250	2.00	60	14.19	14.19	46.60
0.0083	0.210	2.25	70	12.29	12.29	58.89
0.0070	0.177	2.50	80	8.62	8.62	67.50
0.0059	0.149	2.75	100	5.23	5.23	72.73
0.0049	0.125	3.00	120	3.20	3.20	75.93
0.0041	0.105	3.25	140	2.22	2.22	78.15
0.0035	0.088	3.50	170	1.77	1.77	79.92
0.0029	0.074	3.75	200	1.51	1.51	81.43
0.0025	0.063	4.00	230	1.31	1.31	82.74
0.0021	0.053	4.25	270	1.14	1.14	83.88
0.00174	0.0442	4.50	325	1.02	1.02	84.90
0.00146	0.0372	4.75	400	0.97	0.97	85.87
0.00123	0.0313	5.00	450	0.93	0.93	86.80
0.000986	0.0250	5.32	500	1.17	1.17	87.97
0.000790	0.0201	5.64	635	1.13	1.13	89.10
0.000615	0.0156	6.00		1.21	1.21	90.31
0.000435	0.0110	6.50		1.57	1.57	91.88
0.000308	0.00781	7.00		1.46	1.46	93.34
0.000197	0.00500	7.65		1.69	1.69	95.03
0.000077	0.00195	9.00		2.77	2.77	97.80
0.000038	0.000977	10.00		1.40	1.40	99.20
0.000019	0.000488	11.00		0.73	0.73	99.93
0.000015	0.000375	11.38		0.07	0.07	100.00
TOTALS				100.03	100.00	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	1.06	0.0189	0.480
10	1.27	0.0163	0.414
16	1.46	0.0143	0.363
25	1.63	0.0127	0.324
40	1.88	0.0107	0.271
50	2.07	0.0094	0.238
60	2.28	0.0081	0.206
75	2.93	0.0052	0.131
84	4.28	0.0020	0.051
90	5.91	0.0007	0.017
95	7.63	0.0002	0.005

Measure	Trask	Inman	Folk-Ward
Median, phi	2.07	2.07	2.07
Median, in.	0.0094	0.0094	0.0094
Median, mm	0.238	0.238	0.238
Mean, phi	2.14	2.87	2.60
Mean, in.	0.0090	0.0054	0.0065
Mean, mm	0.228	0.137	0.165
Sorting	0.637	1.409	1.701
Skewness	0.866	0.568	0.631
Kurtosis	0.242	1.333	2.074

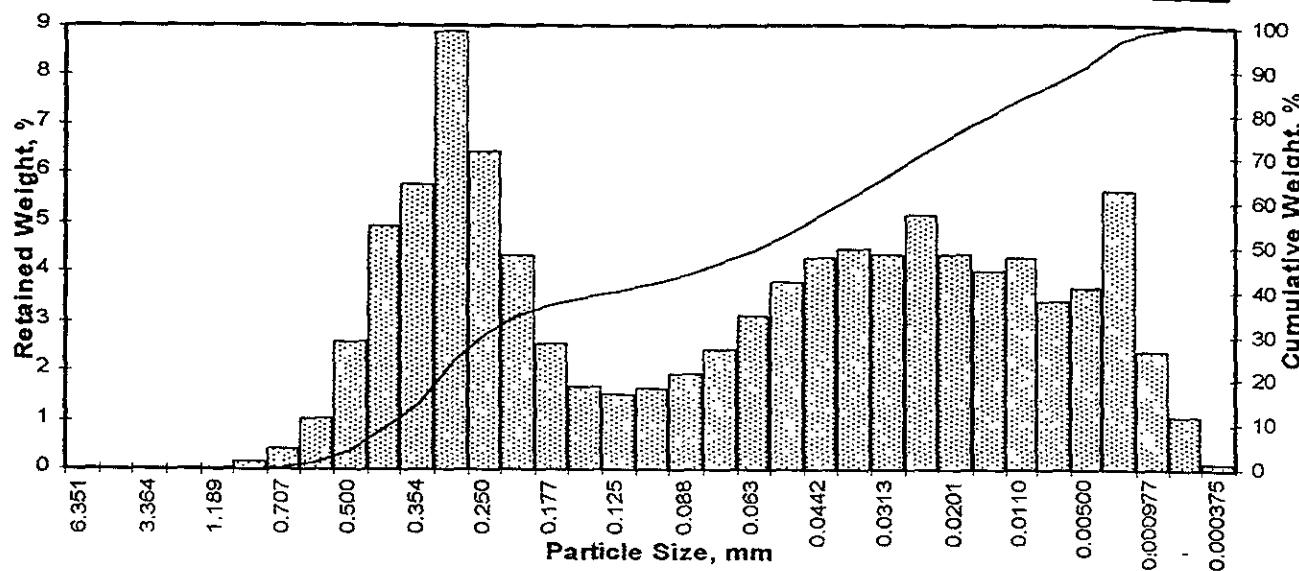
Grain Size Description (ASTM-USCS Scale)	Fine sand (based on Mean from Trask)
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Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	9.31
Fine Sand	200	72.12
Silt	>0.005 mm	13.60
Clay	<0.005 mm	4.97
Total		100

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-1-5-GT
 Depth, ft: 5.0

Grv	Sand Size			Silt	Clay
	crs	medium	fine		



Opening		Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.00	0.00	0.00
0.0331	0.841	0.25	20	0.16	0.16	0.16
0.0278	0.707	0.50	25	0.41	0.41	0.57
0.0234	0.595	0.75	30	1.02	1.02	1.59
0.0197	0.500	1.00	35	2.56	2.56	4.15
0.0166	0.420	1.25	40	4.90	4.90	9.05
0.0139	0.354	1.50	45	5.76	5.76	14.81
0.0117	0.297	1.75	50	8.87	8.87	23.68
0.0098	0.250	2.00	60	6.41	6.41	30.09
0.0083	0.210	2.25	70	4.30	4.30	34.40
0.0070	0.177	2.50	80	2.52	2.52	36.92
0.0059	0.149	2.75	100	1.68	1.68	38.60
0.0049	0.125	3.00	120	1.51	1.51	40.11
0.0041	0.105	3.25	140	1.62	1.62	41.73
0.0035	0.088	3.50	170	1.91	1.91	43.64
0.0029	0.074	3.75	200	2.43	2.43	46.07
0.0025	0.063	4.00	230	3.10	3.10	49.17
0.0021	0.053	4.25	270	3.77	3.77	52.94
0.00174	0.0442	4.50	325	4.26	4.26	57.20
0.00146	0.0372	4.75	400	4.46	4.46	61.66
0.00123	0.0313	5.00	450	4.36	4.36	66.02
0.000986	0.0250	5.32	500	5.14	5.14	71.16
0.000790	0.0201	5.64	635	4.36	4.36	75.52
0.000615	0.0156	6.00		4.00	4.00	79.52
0.000435	0.0110	6.50		4.26	4.26	83.78
0.000308	0.00781	7.00		3.39	3.39	87.17
0.000197	0.00500	7.65		3.66	3.66	90.83
0.000077	0.00195	9.00		5.65	5.65	96.48
0.000038	0.000977	10.00		2.38	2.38	98.86
0.000019	0.000488	11.00		1.04	1.04	99.90
0.000015	0.000375	11.38		0.10	0.10	100.00
TOTALS				99.99	100.00	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi	Particle Size	
		Inches	Millimeters
5	1.04	0.0191	0.485
10	1.29	0.0161	0.409
16	1.53	0.0136	0.345
25	1.80	0.0113	0.287
40	2.98	0.0050	0.127
50	4.06	0.0024	0.060
60	4.66	0.0016	0.040
75	5.60	0.0008	0.021
84	6.53	0.0004	0.011
90	7.50	0.0002	0.006
95	8.64	0.0001	0.002

Measure	Trask	Inman	Folk-Ward
Median, phi	4.06	4.06	4.06
Median, in.	0.0024	0.0024	0.0024
Median, mm	0.060	0.060	0.060
Mean, phi	2.70	4.03	4.04
Mean, in.	0.0061	0.0024	0.0024
Mean, mm	0.154	0.061	0.061
Sorting	0.268	2.499	2.401
Skewness	1.278	-0.009	0.099
Kurtosis	0.330	0.521	0.820

Grain Size Description	(ASTM-USCS Scale)	Fine sand (based on Mean from Trask)
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Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	9.05
Fine Sand	200	37.01
Silt	>0.005 mm	44.77
Clay	<0.005 mm	9.17
Total		100

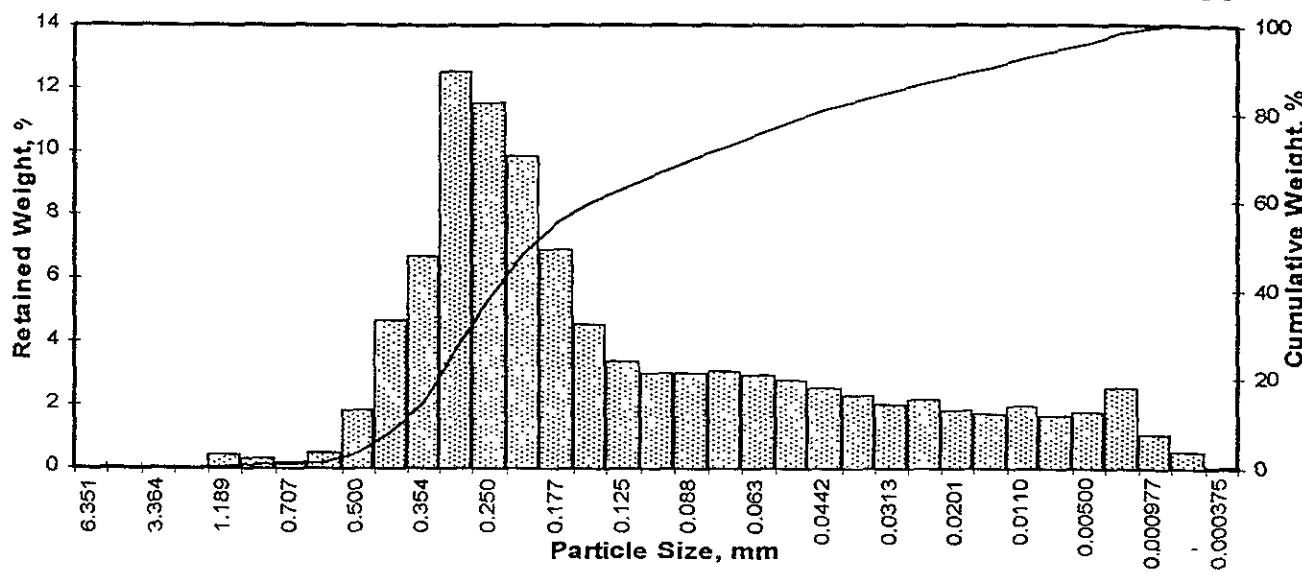
PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-1-10-GT
 Depth, ft: 10.0

Grv	Sand Size			Silt	Clay
	crs	medium	fine		



Opening		Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.43	0.43	0.43
0.0331	0.841	0.25	20	0.31	0.31	0.74
0.0278	0.707	0.50	25	0.15	0.15	0.89
0.0234	0.595	0.75	30	0.47	0.47	1.37
0.0197	0.500	1.00	35	1.85	1.85	3.22
0.0166	0.420	1.25	40	4.67	4.67	7.89
0.0139	0.354	1.50	45	6.63	6.63	14.52
0.0117	0.297	1.75	50	12.55	12.55	27.07
0.0098	0.250	2.00	60	11.51	11.51	38.58
0.0083	0.210	2.25	70	9.80	9.80	48.38
0.0070	0.177	2.50	80	6.91	6.91	55.29
0.0059	0.149	2.75	100	4.53	4.53	59.82
0.0049	0.125	3.00	120	3.35	3.35	63.17
0.0041	0.105	3.25	140	3.01	3.01	66.18
0.0035	0.088	3.50	170	3.00	3.00	69.19
0.0029	0.074	3.75	200	3.03	3.03	72.22
0.0025	0.063	4.00	230	2.95	2.95	75.17
0.0021	0.053	4.25	270	2.78	2.78	77.95
0.00174	0.0442	4.50	325	2.54	2.54	80.49
0.00146	0.0372	4.75	400	2.28	2.28	82.77
0.00123	0.0313	5.00	450	2.00	2.00	84.77
0.000986	0.0250	5.32	500	2.19	2.19	86.96
0.000790	0.0201	5.64	635	1.82	1.82	88.78
0.000615	0.0156	6.00		1.71	1.71	90.49
0.000435	0.0110	6.50		1.95	1.95	92.44
0.000308	0.00781	7.00		1.63	1.63	94.07
0.000197	0.00500	7.65		1.75	1.75	95.82
0.000077	0.00195	9.00		2.55	2.55	98.37
0.000038	0.000977	10.00		1.08	1.08	99.45
0.000019	0.000488	11.00		0.50	0.50	99.95
0.000015	0.000375	11.38		0.05	0.05	100.00
TOTALS				99.99	100.00	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	1.10	0.0184	0.468
10	1.33	0.0157	0.398
16	1.53	0.0136	0.346
25	1.71	0.0120	0.306
40	2.04	0.0096	0.244
50	2.31	0.0079	0.202
60	2.76	0.0058	0.147
75	3.99	0.0025	0.063
84	4.90	0.0013	0.033
90	5.90	0.0007	0.017
95	7.34	0.0002	0.006

Measure	Trask	Inman	Folk-Ward
Median, phi	2.31	2.31	2.31
Median, in.	0.0079	0.0079	0.0079
Median, mm	0.202	0.202	0.202
Mean, phi	2.44	3.22	2.91
Mean, in.	0.0073	0.0042	0.0052
Mean, mm	0.185	0.108	0.133
Sorting	0.454	1.687	1.790
Skewness	0.688	0.538	0.575
Kurtosis	0.319	0.851	1.124

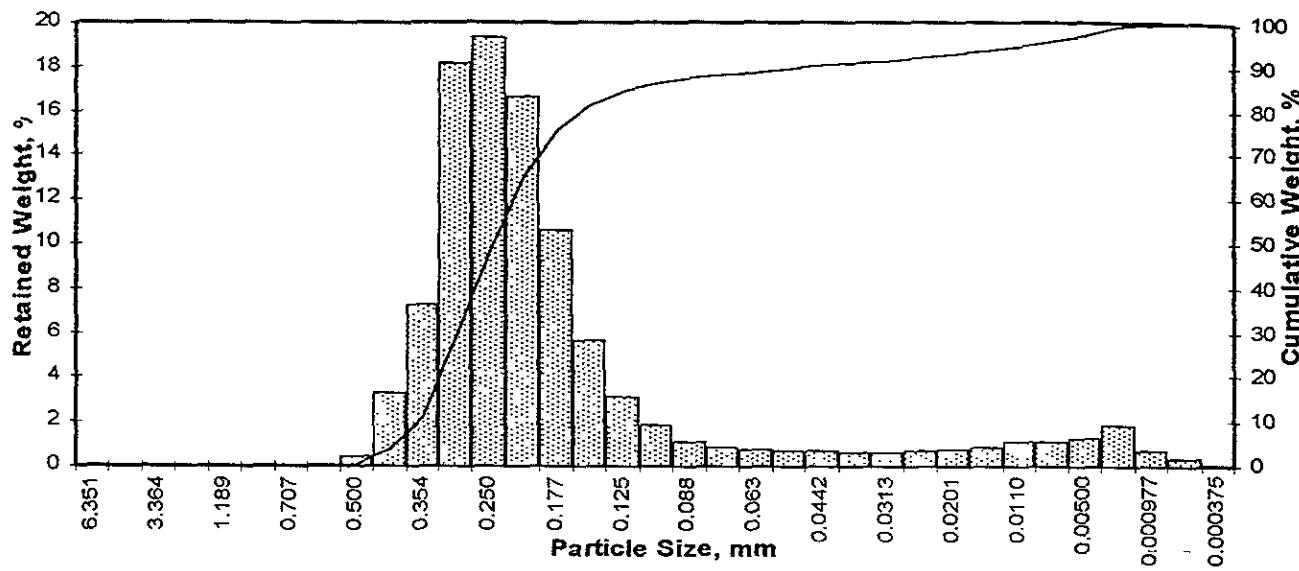
Grain Size Description (ASTM-USCS Scale) Fine sand (based on Mean from Trask)

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	7.89
Fine Sand	200	64.33
Silt	>0.005 mm	23.60
Clay	<0.005 mm	4.18
Total		100

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-1-15-GT
 Depth, ft: 15.0

Grv	Sand Size			Silt	Clay
	crs	medium	fine		



Opening		Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.00	0.00	0.00
0.0331	0.841	0.25	20	0.00	0.00	0.00
0.0278	0.707	0.50	25	0.00	0.00	0.00
0.0234	0.595	0.75	30	0.00	0.00	0.00
0.0197	0.500	1.00	35	0.42	0.42	0.43
0.0166	0.420	1.25	40	3.26	3.26	3.69
0.0139	0.354	1.50	45	7.20	7.20	10.89
0.0117	0.297	1.75	50	18.17	18.17	29.06
0.0098	0.250	2.00	60	19.31	19.31	48.37
0.0083	0.210	2.25	70	16.67	16.67	65.05
0.0070	0.177	2.50	80	10.59	10.59	75.64
0.0059	0.149	2.75	100	5.59	5.59	81.23
0.0049	0.125	3.00	120	3.09	3.09	84.32
0.0041	0.105	3.25	140	1.84	1.84	86.16
0.0035	0.088	3.50	170	1.13	1.13	87.29
0.0029	0.074	3.75	200	0.82	0.82	88.11
0.0025	0.063	4.00	230	0.73	0.73	88.84
0.0021	0.053	4.25	270	0.66	0.66	89.50
0.00174	0.0442	4.50	325	0.64	0.64	90.14
0.00146	0.0372	4.75	400	0.62	0.62	90.76
0.00123	0.0313	5.00	450	0.58	0.58	91.34
0.000986	0.0250	5.32	500	0.71	0.71	92.06
0.000790	0.0201	5.64	635	0.73	0.73	92.78
0.000615	0.0156	6.00		0.81	0.81	93.59
0.000435	0.0110	6.50		1.09	1.09	94.68
0.000308	0.00781	7.00		1.09	1.09	95.77
0.000197	0.00500	7.65		1.30	1.30	97.07
0.000077	0.00195	9.00		1.89	1.89	98.96
0.000038	0.000977	10.00		0.71	0.71	99.67
0.000019	0.000488	11.00		0.30	0.30	99.97
0.000015	0.000375	11.38		0.03	0.03	100.00
TOTALS				99.99	100.00	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	1.30	0.0160	0.407
10	1.47	0.0142	0.361
16	1.57	0.0133	0.337
25	1.69	0.0122	0.309
40	1.89	0.0106	0.270
50	2.02	0.0097	0.246
60	2.17	0.0087	0.222
75	2.48	0.0070	0.179
84	2.97	0.0050	0.127
90	4.44	0.0018	0.046
95	6.65	0.0004	0.010

Measure	Trask	Inman	Folk-Ward
Median, phi	2.02	2.02	2.02
Median, in.	0.0097	0.0097	0.0097
Median, mm	0.246	0.246	0.246
Mean, phi	2.04	2.27	2.19
Mean, in.	0.0096	0.0081	0.0086
Mean, mm	0.244	0.207	0.219
Sorting	0.760	0.702	1.162
Skewness	0.956	0.353	0.540
Kurtosis	0.207	2.811	2.773

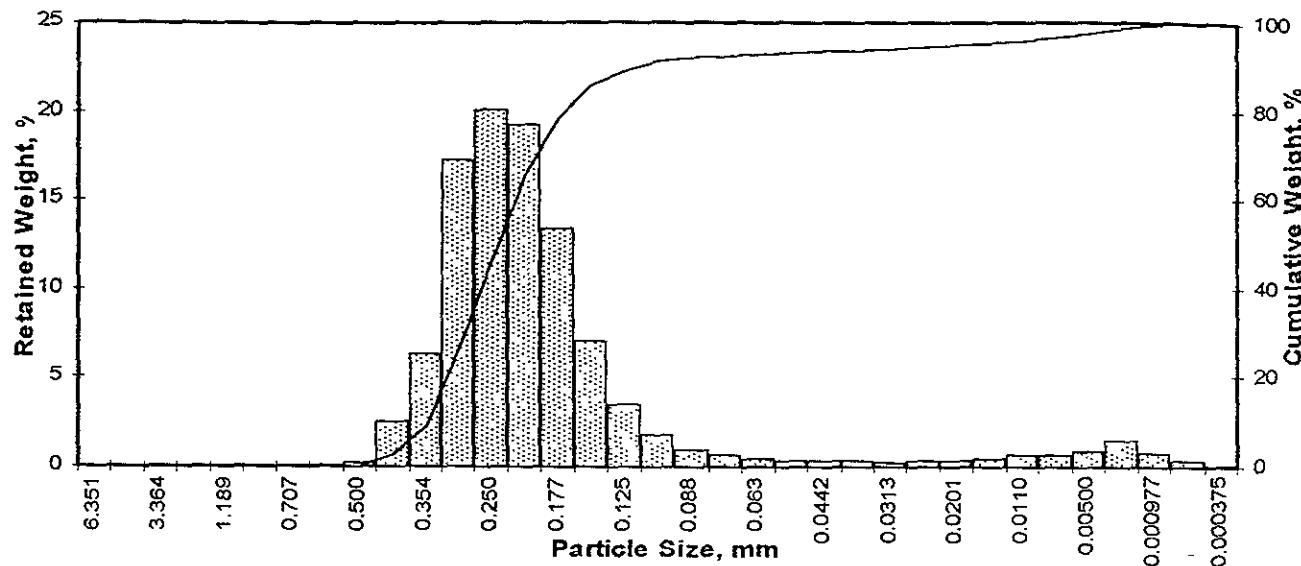
Grain Size Description (ASTM-USCS Scale)	(based on Mean from Trask)
--	----------------------------

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	3.69
Fine Sand	200	84.43
Silt	>0.005 mm	8.96
Clay	<0.005 mm	2.93
Total		100

Client: Fluor Daniel GTI
 Project: Sears 1039 Oakland
 Project No: 106479.030503

PTS File No: 28355
 Sample ID: GP-1-20-GT
 Depth, ft: 20.0

Grv	Sand Size			Silt	Clay
	crs	medium	fine		



Opening		Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
Inches	Millimeters					
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.00	0.00	0.00
0.0331	0.841	0.25	20	0.00	0.00	0.00
0.0278	0.707	0.50	25	0.00	0.00	0.00
0.0234	0.595	0.75	30	0.00	0.00	0.00
0.0197	0.500	1.00	35	0.17	0.17	0.17
0.0166	0.420	1.25	40	2.47	2.47	2.64
0.0139	0.354	1.50	45	6.25	6.25	8.89
0.0117	0.297	1.75	50	17.23	17.23	26.12
0.0098	0.250	2.00	60	20.11	20.11	46.23
0.0083	0.210	2.25	70	19.17	19.17	65.40
0.0070	0.177	2.50	80	13.33	13.33	78.74
0.0059	0.149	2.75	100	7.08	7.08	85.82
0.0049	0.125	3.00	120	3.42	3.42	89.24
0.0041	0.105	3.25	140	1.74	1.74	90.98
0.0035	0.088	3.50	170	0.96	0.96	91.93
0.0029	0.074	3.75	200	0.59	0.59	92.52
0.0025	0.063	4.00	230	0.45	0.45	92.97
0.0021	0.053	4.25	270	0.36	0.36	93.32
0.00174	0.0442	4.50	325	0.30	0.30	93.62
0.00146	0.0372	4.75	400	0.28	0.28	93.90
0.00123	0.0313	5.00	450	0.26	0.26	94.16
0.000986	0.0250	5.32	500	0.33	0.33	94.49
0.000790	0.0201	5.64	635	0.36	0.36	94.85
0.000615	0.0156	6.00		0.42	0.42	95.26
0.000435	0.0110	6.50		0.61	0.61	95.87
0.000308	0.00781	7.00		0.66	0.66	96.53
0.000197	0.00500	7.65		0.86	0.86	97.39
0.000077	0.00195	9.00		1.52	1.52	98.91
0.000038	0.000977	10.00		0.72	0.72	99.63
0.000019	0.000488	11.00		0.34	0.34	99.97
0.000015	0.000375	11.38		0.03	0.03	100.00
TOTALS				100.00	100.00	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size	
		Inches	Millimeters
5	1.34	0.0155	0.394
10	1.52	0.0138	0.350
16	1.60	0.0130	0.329
25	1.73	0.0118	0.301
40	1.92	0.0104	0.264
50	2.05	0.0095	0.242
60	2.18	0.0087	0.221
75	2.43	0.0073	0.186
84	2.69	0.0061	0.155
90	3.11	0.0046	0.116
95	5.77	0.0007	0.018

Measure	Trask	Inman	Folk-Ward
Median, phi	2.05	2.05	2.05
Median, in	0.0095	0.0095	0.0095
Median, mm	0.242	0.242	0.242
Mean, phi	2.04	2.14	2.11
Mean, in.	0.0096	0.0089	0.0091
Mean, mm	0.243	0.226	0.231
Sorting	0.786	0.541	0.942
Skewness	0.978	0.176	0.429
Kurtosis	0.246	3.091	2.607

Grain Size Description (ASTM-USCS Scale)	(based on Mean from Trask)
--	----------------------------

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	2.64
Fine Sand	200	89.86
Silt	>0.005 mm	4.87
Clay	<0.005 mm	2.61
Total		100

DATE

PTS FILE #

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

PTS Laboratories, Inc.

8100 Secura Way

Santa Fe Springs, CA 90670 5622
Ph (310) 907-3607 • Fax: (310) 907-3610

COMPANY

FDET

PROJECT MANAGER

TM21:554 0058411

PROJECT NAME

SEARS 10854 OAKLAND

FAX NUMBER

9751570-3991

PROJECT NUMBER

1066473, 080503

PHONE NUMBER

9751570-3990

SITE LOCATION

OAKLAND

ADDRESS

941 Tele 94614 AVE

SAMPLER SIGNATURE

John Kellam

ANALYSIS REQUEST

SAMPLE ID NUMBER	DATE	TIME	DEPTH, FT	TESTS REQUESTED												NUMBER OF SAMPLES	COMMENTS
				PHYSICAL PROPERTIES PACKAGE, API RP4C	MOISTURE CONTENT, ASTM D2216	POROSITY, API RP4C	GRAIN DENSITY, API RP4C	BULK DENSITY, API RP4C	AIR PERMEABILITY, API RP4C	SPECIFIC RETENTION INDEX, ASTM D225	CATION EXCHANGE CAPACITY, EPA 9040	SOIL PH, EPA 9046	GRAIN SIZE: DRY, 400 MESH	GRAIN SIZE: WET/DRY, 25 MICRON	HYDRAULIC CONDUCTIVITY, EPA 9100 API RP4C	TOC, EPA 9060	
GP-1-3-6T	4/19/98	0845	5'	X						X			X				DO NOT GRIND RUN TEST
GP-1-10-6T		0902	10'	X						X			X				
GP-1-15-6T		0920	15'	X						X			X				
GP-1-20-6T		0945	20'	X						X			X				
GP-2-5-6T		1135	5'	X						X			X				
GP-2-10-6T		1145	10'	X						X			X				
GP-2-15-6T		1205	15'	X						X			X				
GP-3-10-6T		1350	10'	X						X			X				
GP-4-5-6T		1515	5'	X						X			X				
GP-4-10-6T		1530	10' (OK)	X						X			X				Vadose sample 9/22/98
GP-4-15-6T	4/19/98	1545	15'	X						X			X				DO not run 9/22/98 after

1. RELINQUISHED BY

John Kellam

2. RECEIVED BY

3. RELINQUISHED BY

4. RECEIVED BY

COMPANY

FDET

COMPANY

COMPANY

COMPANY

DATE

4/16/98

TIME

1500

DATE

TIME

DATE

TIME

DATE

TIME

DATE

PTS FILE #

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2

APPENDIX D

LABORATORY REPORT - CHEMICAL ANALYSES
(Soil and Water)



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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossel

Client Proj. ID: 106479.030510 SEARS 1039 Oak.

Received: 09/09/98

Lab Proj. ID: 9809641

Reported: 09/23/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 51 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

David A. Pichette
Project Manager





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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Lab Proj. ID: 9809641

Sampled: 09/09/98
Received: 09/09/98
Analyzed: see below

Attention: Melissa Gossell

Reported: 09/23/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9809641-08 Sample Desc : SOLID,GP-3-5				
Total Oil & Grease (413.2)	MG/Kg	09/17/98	15	31
Lab No: 9809641-09 Sample Desc : SOLID,GP-3-10				
Total Oil & Grease (413.2)	MG/Kg	09/17/98	15	16
Lab No: 9809641-10 Sample Desc : LIQUID,GP-3-W				
Total Oil & Grease (413.2)	mg/L	09/18/98	5.0	N.D.
Lab No: 9809641-11 Sample Desc : LIQUID,GP-2-W				
Total Oil & Grease (413.2)	mg/L	09/18/98	5.0	N.D.
Lab No: 9809641-13 Sample Desc : SOLID,GP-4-5				
Total Oil & Grease (413.2)	MG/Kg	09/17/98	15	37
Lab No: 9809641-14 Sample Desc : SOLID,GP-4-10				
Total Oil & Grease (413.2)	MG/Kg	09/17/98	15	N.D.
Lab No: 9809641-15 Sample Desc : SOLID,GP-4-15				
Total Oil & Grease (413.2)	MG/Kg	09/17/98	15	39

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

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette
Project Manager



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Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Lab Proj. ID: 9809641

Sampled: 09/09/98
Received: 09/09/98
Analyzed: see below

Attention: Melissa Gossell

Reported: 09/23/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9809641-16 Sample Desc : SOLID,GP-4-20				
Total Oil & Grease (413.2)	MG/Kg	09/17/98	15	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
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Fluor Daniel GTI
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Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-1-5
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-01

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/16/98
Reported: 09/23/98

Attention: Melissa Gossell
QC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

Detection Limit
mg/Kg

Sample Results
mg/Kg

TPPH as Gas
Methyl t-Butyl Ether
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:

1.0
0.025
0.0050
0.0050
0.0050
0.0050
N.D.
N.D.
N.D.
N.D.
N.D.
N.D.

Surrogates

Trifluorotoluene
4-Bromofluorobenzene

Control Limits %

70 130
60 140

% Recovery

102
99

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
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Page:

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Fluor Daniel GTI
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Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-1-10
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-02

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/16/98
Reported: 09/23/98

QC Batch Number: GC091698BTEXXB
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	0.042
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette
Project Manager

Page:

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Sequoia Analytical

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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-1-15
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-03

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/16/98
Reported: 09/23/98

IC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
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Fluor Daniel GTI
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Attention: Melissa Gossell

QC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP22

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-1-20
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-04

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/16/98
Reported: 09/23/98

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager

Page

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Fluor Daniel GTI
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Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-2-5
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-05

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/17/98
Reported: 09/23/98

GC Batch Number: GC091698BTEXXB
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager





**Sequoia
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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-2-10
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-06

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/16/98
Reported: 09/23/98

QC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

Detection Limit
mg/Kg

Sample Results
mg/Kg

TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		N.D.

Surrogates

Trifluorotoluene
4-Bromofluorobenzene

Control Limits %

70	130	89
60	140	87

% Recovery

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager

Page:

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**Sequoia
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Fluor Daniel GTI
757 Arnold Dr., Suite D
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Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-2-16
Matrix: SQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-07

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/16/98
Reported: 09/23/98

QC Batch Number: GC091698BTEXXB
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

Detection Limit
mg/Kg

Sample Results
mg/Kg

TPPH as Gas
Methyl t-Butyl Ether
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:

1.0
0.025
0.0050
0.0050
0.0050
0.0050
N.D.
N.D.
N.D.
N.D.
N.D.
N.D.

Surrogates

Trifluorotoluene
4-Bromofluorobenzene

Control Limits %

70 130
60 140

% Recovery
81
94

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

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette
Project Manager





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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-3-5
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-08

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/21/98
Reported: 09/23/98

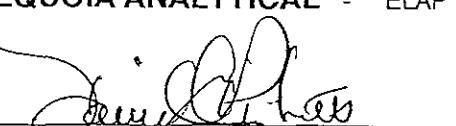
GC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager

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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

QC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP01

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-3-10
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-09

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/17/98
Reported: 09/23/98

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager





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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-3-W
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-10

Sampled: 09/09/98
Received: 09/09/98
Analyzed: 09/21/98
Reported: 09/23/98

Attention: Melissa Gossell
QC Batch Number: GC092198BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager

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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-3-W
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9809641-10

Sampled: 09/09/98
Received: 09/09/98
Analyzed: 09/17/98
Reported: 09/23/98

GC Batch Number: GC091698OVOA29B
Instrument ID: GCHP29

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	0.50	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.

Surrogates	Control Limits %	% Recovery
1-Chloro-3-fluorobenzene	70 130	112

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

EQUOIA ANALYTICAL - ELAP #1210

David A. Pichette
Project Manager



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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-2-W
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-11

Sampled: 09/09/98
Received: 09/09/98
Analyzed: 09/21/98
Reported: 09/23/98

GC Batch Number: GC092198BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	89

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

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette
Project Manager

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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

QC Batch Number: GC091898OVOA24A
Instrument ID: GCHP24_2

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-2-W
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9809641-11

Sampled: 09/09/98
Received: 09/09/98
Analyzed: 09/18/98
Reported: 09/23/98

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Freon 113	1.0	N.D.
Surrogates		
4-Bromofluorobenzene	Control Limits % 70 130	% Recovery 76

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

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette
Project Manager



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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: TB-1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-12

Sampled: 09/09/98
Received: 09/09/98
Analyzed: 09/21/98
Reported: 09/23/98

QC Batch Number: GC092198BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	84

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

EQUOIA ANALYTICAL - ELAP #1210

David A. Pichette
Project Manager

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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-4-5
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-13

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/17/98
Reported: 09/23/98

QC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

Detection Limit
mg/Kg

Sample Results
mg/Kg

TPPH as Gas
Methyl t-Butyl Ether
Benzene
Toluene
Ethyl Benzene
Xylenes (Total)
Chromatogram Pattern:

1.0
0.025
0.0050
0.0050
0.0050
0.0050
N.D.
N.D.
N.D.
N.D.
N.D.
N.D.

Surrogates

Trifluorotoluene
4-Bromofluorobenzene

Control Limits %

70 130
60 140

% Recovery

100
108

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

SEQUOIA ANALYTICAL - ELAP #1210

David A. Pichette
Project Manager



**Sequoia
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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-4-10
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-14

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/17/98
Reported: 09/23/98

C Batch Number: GC091698BTEXEXB
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager



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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-4-15
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-15

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/17/98
Reported: 09/23/98

QC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Attention: Melissa Gossell

Client Proj. ID: 106479.030510 SEARS 1039 Oak.
Sample Descript: GP-4-20
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9809641-16

Sampled: 09/09/98
Received: 09/09/98
Extracted: 09/16/98
Analyzed: 09/17/98
Reported: 09/23/98

QC Batch Number: GC091698BTEXEXB
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager



**Sequoia
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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossel

Client Project ID: 106479.030510 SEARA Oak.

QC Sample Group: 9809641

Reported: Sep 25, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8010/8020, 601/602
Analyst: C. Medina

ANALYTE	1,1-DCE	TCE	Chlorobenzene	Benzene	Toluene	Chlorobenzene
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QC Batch #: GC0918980VOA24A

Sample No.: 9809864-05

Date Prepared:	9/17/98	9/17/98	9/17/98	9/17/98	9/17/98	9/17/98
Date Analyzed:	9/18/98	9/18/98	9/18/98	9/18/98	9/18/98	9/18/98
Instrument I.D.#:	gchp24_2	gchp24_2	gchp24_2	gchp24_2	gchp24_2	gchp24_2

Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	500	500	500	500	500	500

Matrix Spike, ug/L:	500	510	540	490	480	480
% Recovery:	100	102	108	98	96	96

Matrix						
Spike Duplicate, ug/L:	520	510	570	510	490	500
% Recovery:	104	102	114	102	98	100

Relative % Difference:	3.9	0.0	5.4	4.0	2.1	4.1
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RPD Control Limits:	0-50	0-50	0-50	0-50	0-50	0-50
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LCS Batch#: VWLCS091898A

Date Prepared:	9/18/98	9/18/98	9/18/98	9/18/98	9/18/98	9/18/98
Date Analyzed:	9/18/98	9/18/98	9/18/98	9/18/98	9/18/98	9/18/98
Instrument I.D.#:	gchp24_2	gchp24_2	gchp24_2	gchp24_2	gchp24_2	gchp24_2

Conc. Spiked, ug/L:	25	25	25	25	25	25
---------------------	----	----	----	----	----	----

Recovery, ug/L:	26	23	27	26	26	26
LCS % Recovery:	104	92	108	104	104	104

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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

SEQUOIA ANALYTICAL

David A. Pichette
Project Manager





**Sequoia
Analytical**

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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossel

Client Project ID: 106479.030510 SEARA Oak.

QC Sample Group: 9809641

Reported: Sep 25, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8010/8020, 601/602
Analyst: L. Kim

ANALYTE	1,1-DCE	TCE	Chlorobenzene	Benzene	Toluene	Chlorobenzene
---------	---------	-----	---------------	---------	---------	---------------

QC Batch #: GC0916980VOA29A

Sample No.: 9809703-01

Date Prepared:	9/15/98	9/15/98	9/15/98	9/15/98	9/15/98	9/15/98
Date Analyzed:	9/15/98	9/15/98	9/15/98	9/15/98	9/15/98	9/15/98
Instrument I.D. #:	gchp29	gchp29	gchp29	gchp29	gchp29	gchp29

Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.	N.D.	0.6
Conc. Spiked, ug/L:	25	25	25	25	25	25

Matrix Spike, ug/L:	26	22	25	27	27	27
% Recovery:	104	88	100	108	108	105

Matrix						
Spike Duplicate, ug/L:	22	16	16	23	22	23
% Recovery:	88	64	64	92	88	89

Relative % Difference:	17	32	44	16	20	16
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RPD Control Limits:	0-50	0-50	0-50	0-50	0-50	0-50
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LCS Batch #: VWLCS091698A

Date Prepared:	9/16/98	9/16/98	9/16/98	9/16/98	9/16/98	9/16/98
Date Analyzed:	9/16/98	9/16/98	9/16/98	9/16/98	9/16/98	9/16/98
Instrument I.D. #:	gchp29	gchp29	gchp29	gchp29	gchp29	gchp29

Conc. Spiked, ug/L:	25	25	25	25	25	25
---------------------	----	----	----	----	----	----

Recovery, ug/L:	20	20	20	26	26	27
LCS % Recovery:	80	80	80	104	104	108

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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

SEQUOIA ANALYTICAL

David A. Pichette
Project Manager





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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossel

Client Project ID: 106479.030510 SEARA Oak.

QC Sample Group: 9809641

Reported: Sep 25, 1998

QUALITY CONTROL DATA REPORT

Matrix: Solid
Method: EPA 8020
Analyst: G.PESHINA

ANALYTE	Benzene	Toluene	Ethylbenzene	Xylenes
---------	---------	---------	--------------	---------

QC Batch #: GC091698BTEXEXB

Sample No.: 9809740-1

Date Prepared:	9/16/98	9/16/98	9/16/98	9/16/98
Date Analyzed:	9/17/98	9/17/98	9/17/98	9/17/98
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7

Sample Conc., mg/Kg:	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, mg/Kg:	0.20	0.20	0.20	0.60

Matrix Spike, mg/Kg:	0.18	0.18	0.17	0.54
% Recovery:	90	90	85	90

Matrix Spike Duplicate, mg/Kg:	0.17	0.17	0.17	0.52
% Recovery:	85	85	85	87

Relative % Difference:	5.7	5.7	0.0	3.4
------------------------	-----	-----	-----	-----

RPD Control Limits:	0-25	0-25	0-25	0-25
---------------------	------	------	------	------

LCS Batch#: GC091698BTEXEXB

Date Prepared:	9/16/98	9/16/98	9/16/98	9/16/98
Date Analyzed:	9/17/98	9/17/98	9/17/98	9/17/98
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7

Conc. Spiked, mg/Kg:	0.20	0.20	0.20	0.60
----------------------	------	------	------	------

Recovery, mg/Kg:	0.19	0.19	0.18	0.55
LCS % Recovery:	95	95	90	92

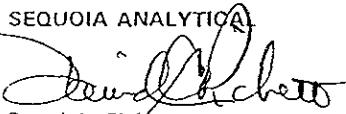
Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note

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

SEQUOIA ANALYTICAL

David A. Pichette
Project Manager



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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossel

Client Project ID: 106479.030510 SEARA Oak.

QC Sample Group: 9809641

Reported: Sep 25, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8015
Analyst: NC/MM

ANALYTE Gasoline

QC Batch #: GC092198BTEX03A

Sample No.: GW9809552-2
Date Prepared: 9/21/98
Date Analyzed: 9/21/98
Instrument I.D.#: GCHP03

Sample Conc., ug/L: N.D.
Conc. Spiked, ug/L: 250

Matrix Spike, ug/L: 260
% Recovery: 104

Matrix
Spike Duplicate, ug/L: 120
% Recovery: 48

Relative % Difference: 74

RPD Control Limits: 0-25

LCS Batch#: GWLCS092198A

Date Prepared: 9/21/98
Date Analyzed: 9/21/98
Instrument I.D.#: GCHP03

Conc. Spiked, ug/L: 250

LCS Recovery, ug/L: 260
LCS % Recovery: 104

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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SEQUOIA ANALYTICAL

David A. Pichette
Project Manager





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Fluor Daniel GTI
757 Arnold Dr., Suite D
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Attention: Melissa Gossel

Client Project ID: 106479.030510 SEARA Oak.

QC Sample Group: 9809641

Reported: Sep 25, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 413.2
Analyst: B ANDERSON

ANALYTE Total Oil and Grease

QC Batch #: IN091598413200A

Sample No.: LCS091598
Date Prepared: 9/15/98
Date Analyzed: 9/16/98

Sample Conc., mg/L: N.D.
Conc. Spiked, mg/Kg: 200.0

Matrix Spike, mg/Kg: 240
% Recovery: 120

Matrix
Spike Duplicate, mg/Kg: 240
% Recovery: 120

Relative % Difference: 0.0

RPD Control Limits: 0-20

LCS Batch#: LCS091598

Date Prepared: 9/15/98
Date Analyzed: 9/16/98

Conc. Spiked, mg/Kg: 200.0

LCS Recovery, mg/Kg: 240
LCS % Recovery: 120

Percent Recovery Control Limits:

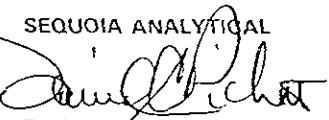
LCS/LCSD 60-140

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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SEQUOIA ANALYTICAL


David A. Pichette
Project Manager





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Fluor Daniel GTI
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Martinez, CA 94553
Attention: Melissa Gossel

Client Project ID: 106479.030510 SEARA Oak.

QC Sample Group: 9809641

Reported: Sep 25, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 413.2
Analyst: B ANDERSON

ANALYTE Total Oil and Grease

QC Batch #: IN091698413200A

Sample No.: LCS091598
Date Prepared: 9/15/98
Date Analyzed: 9/16/98

Sample Conc., mg/L: N.D.
Conc. Spiked, mg/Kg: 200.0

LCS Spike, mg/Kg: 240
% Recovery: 120

Matrix
LCS Duplicate, mg/Kg: 240
% Recovery: 120

Relative % Difference: 0.0

RPD Control Limits: 0-20

LCS Batch#: LCS091698

Date Prepared: 9/16/98
Date Analyzed: 9/17/98

Conc. Spiked, mg/Kg: 200.0

LCS Recovery, mg/Kg: 280
LCS % Recovery: 140

Percent Recovery Control Limits:
LCS/LCSD 60-140

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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SEQUOIA ANALYTICAL

David A. Pichette
Project Manager



**Sequoia
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Fluor Daniel GTI
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Attention: Melissa Gossel

Client Project ID: 106479.030510 SEARA Oak.

QC Sample Group: 9809641

Reported: Sep 25, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 413.2
Analyst: B ANDERSON

ANALYTE Total Oil and Grease

QC Batch #: IN091798413200A

Sample No.: LCS091798
Date Prepared: 9/17/98
Date Analyzed: 9/18/98

Sample Conc., mg/L: N.D.
Conc. Spiked, mg/L: 3.9

Matrix Spike, mg/L: 4.7
% Recovery: 121

Matrix
Spike Duplicate, mg/L: 4.2
% Recovery: 108

Relative % Difference: 11

RPD Control Limits: 0-20

LCS Batch#: LCS091798

Date Prepared: 9/17/98
Date Analyzed: 9/18/98

Conc. Spiked, mg/L: 3.9

LCS Recovery, mg/L: 4.7
LCS % Recovery: 121

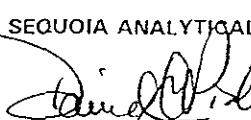
Percent Recovery Control Limits:

LCS/LCSD 60-140

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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SEQUOIA ANALYTICAL

David A. Pichette
Project Manager





SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

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 □ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

Company Name: FLUOR DANIEL GTI				Project Name: 106479.030510 <i>SEARS 1039 OAKLANDSA</i>			
Address: 757 Arnold DRIVE, Suite D				Billing Address (if different):			
City: Martinez	State: CA	Zip Code: 94553					
Telephone: 925-370-3990		FAX #:	925-370-3991	P.O. #:			
Report To: Melissa Gossell		Sampler: <i>B. P. Ruskalla</i>		QC Data: <input checked="" type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A			
Turnaround	<input type="checkbox"/> 10 Working Days		<input type="checkbox"/> 3 Working Days	<input type="checkbox"/> 2 - 8 Hours	<input type="checkbox"/> Drinking Water		Analyses Requested
Time:	<input type="checkbox"/> 7 Working Days		<input type="checkbox"/> 2 Working Days	<input type="checkbox"/> Waste Water			
	<input type="checkbox"/> 5 Working Days		<input type="checkbox"/> 24 Hours	<input type="checkbox"/> Other			

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TOTAL	BTEX	MTBE	PCP	Oil/Grease	431	Comments
1. GP-1-5	9/19/98 0845	SOIL	1	2"X6" ACET	01	X	X	C				
2. GP-1-10	0902			2"X6" ACET	02	X	X	X				
3. GP-1-15	0920			1"X6" ACET	03	X	X	X				
4. GP-1-20	0945				04	X	X	X				
5. GP-2-5	1135				05	X	X	X				
6. GP-2-10	1145				06	X	X	X				
7. GP-2-16	9/19/98 1205				07	X	X	X				
8. GP-3-5	1345				08	X	X	X				
9. GP-3-10	1350	SOIL	1	1"X6" ACET	09	X	X	X				
10. GP-3-W	9/19/98 1400	WATER	1	LAMP/L	10			X				

Received By:	<i>B. P. Ruskalla</i>	Date: 9/9/98	Time: 1650	Received By:	<i>J. S. S.</i>	Date: 9/9/98	Time: 1650
Entered By:	<i>E. G. - Z</i>	Date: 9/9/98	Time:	Received By:		Date:	Time:
Released By:		Date:	Time:	Received By Lab:	<i>Z. J.</i>	Date: 9/9/98	Time: 17:49

In Good Condition? Yes No

Samples on Ice? Yes No Method of Shipment *SEQUOIA*



**SEQUOIA ANALYTICAL
CHAIN OF CUSTODY**

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 SO □ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673
 DS

Company Name: FLUOR DANIEL GTI			Project Name: 106479.030510 <i>Seems 1037 OAKLAND SA</i>		
Address: 757 Arnold Drive, Suite D			Billing Address (if different):		
City: Martinez	State: CA	Zip Code: 94553			
Telephone: 925-370-3990		FAX #: 925-370-3991	P.O. #:		
Report To: Melissa Gossell		Sampler: <i>B.Perschall</i>	QC Data: <input checked="" type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A		

Turnaround 10 Working Days 3 Working Days 2 - 8 Hours
 Time: 7 Working Days 2 Working Days *9809641*
 5 Working Days 24 Hours

Drinking Water
 Waste Water
 Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Comments
1. GP-3-W	9/9/98 1400	WTR	6	40 ml VOA	X X X	
2. GP-2-W	9/9/98 1435	WTR	1	LAMBR	11	X
3. GP-2-W	9/9/98 1435	WTR	6	40 ml VOA	X X X	
4. TB-1	9/9/98 1500	WTR	2	40 ml VOA	12	X X
5. GP-4-5	9/9/98 1515	Soil	1	1 X 6" ACET	13	X X X
6. GP-4-10	1530		1		14	X X X
7. GP-4-15	1545		1		15	X X X
8. GP-4-20	1605	Soil	1	1 X 6" ACET	16	X X X
9. GP-4-W	1615	WTR	1	1 L AMBR		X SP 9/9/98
10. GP-4-W	9/9/98 1615	WTR	6	40 ml VOA	X X X	SP 9/9/98

Relinquished By: <i>B.Perschall</i>	Date: 9/9/98	Time: 1650	Received By: <i>J. Gallo</i>	Date: 9/9/98	Time: 1650
Relinquished By: <i>J. Gallo</i>	Date: 9/9/98	Time:	Received By:	Date:	Time:
Received By Lab: <i>ZD</i>	Date: 9/9/98	Time: 17:49	Received By Lab: <i>ZD</i>	Date: 9/9/98	Time: 17:49

in Good Condition? Yes No

Samples on Ice? Yes No Method of Shipment: *Sequoia*

Page 2 of 2

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia
Analytical

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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossel

Client Proj. ID: 106479.030510 SEARS 1039 OAK.

Received: 09/10/98

Lab Proj. ID: 9809668

Reported: 09/24/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 16 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Notes:

The oil & grease analysis could not be performed on this sample due to insufficient volume.

SEQUOIA ANALYTICAL

David A. Pichette
Project Manager





**Sequoia
Analytical**

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Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Client Proj. ID: 106479.030510 SEARS 1039 OAK.
Sample Descript: GP-4-W
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9809668-01

Sampled: 09/09/98
Received: 09/10/98
Extracted: 09/18/98
Analyzed: 09/18/98
Reported: 09/24/98

QC Batch Number: 09V8235

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte

Detection Limit
ug/L

Sample Results
ug/L

TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates

Trifluorotoluene

Control Limits %

70 130

% Recovery

84

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

SEQUOIA ANALYTICAL - ELAP #1849


David A. Pichette
Project Manager

Page.

1





**Sequoia
Analytical**

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FAX (707) 792-0342

Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553

Client Proj. ID: 106479.030510 SEARS 1039 OAK
Sample Descript: GP-4-W
Matrix: LIQUID
Analysis Method: EPA 8010
Lab Number: 9809668-01

Sampled: 09/09/98
Received: 09/10/98

Analyzed: 09/18/98
Reported: 09/24/98

Attention: Melissa Gossel
QC Batch Number: GC091798OVOA29A
Instrument ID: GCHP29

Halogenated Volatile Organics (EPA 8010)

Analyte

Detection Limit
ug/L

Sample Results
ug/L

Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	1.8
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.

Surrogates

Control Limits %

% Recovery

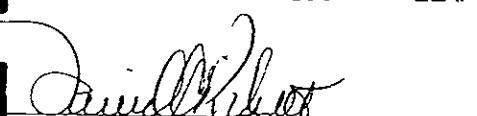
1-Chloro-3-fluorobenzene

70 130

99

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

SEQUOIA ANALYTICAL - ELAP #1210


David A. Pichette
Project Manager

Page:

2



**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8
1455 McDowell Blvd. North, Ste. D

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834
Petaluma, CA 94954

(650) 364-9600
(925) 988-9600
(916) 921-9600
(707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342

Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossell

Client Project ID: 106479.030510 SEARS 1039 OAK.
Matrix: LIQUID

Reported: Sep 28, 1998

QUALITY CONTROL DATA REPORT

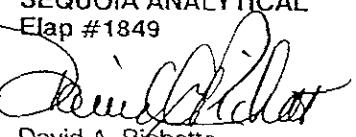
Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	09V8235	09V8235	09V8235	09V8235
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 8015M	EPA 8015M	EPA 8015M	EPA 8015M
Analyst:	L. Hall	L. Hall	L. Hall	L. Hall
LCS/LCSD #:	8090158-01	8090158-01	8090158-01	8090158-01
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/18/98	9/18/98	9/18/98	9/18/98
Analyzed Date:	9/18/98	9/18/98	9/18/98	9/18/98
Instrument I.D. #:	-	-	-	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	20 µg/L
Result:	17	17	17	18
LCS % Recovery:	85	85	85	90
Dup. Result:	17	17	17	18
LCSD % Recov.:	85	85	85	90
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-30	0-30	0-30	0-30

MS/MSD LCS Control Limits	80-120	80-120	80-120	80-120
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Please Note:

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

SEQUOIA ANALYTICAL
Elap #1849


David A. Pichette
Project Manager

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

9809668.FFF <1>



**Sequoia
Analytical**

680 Chesapeake Drive
404 N. Wiger Lane
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FAX (707) 792-0342

Fluor Daniel GTI
757 Arnold Dr., Suite D
Martinez, CA 94553
Attention: Melissa Gossel

Client Project ID: 106479.030510 SEARS Oak.

QC Sample Group: 9809668

Reported: Sep 28, 1998

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8010/8020, 601/602
Analyst: L. Kim

ANALYTE	1,1-DCE	TCE	Chlorobenzene	Benzene	Toluene	Chlorobenzene
---------	---------	-----	---------------	---------	---------	---------------

QC Batch #: GC0917980VOA29A

Sample No.: 9809570-02

Date Prepared:	9/16/98	9/16/98	9/16/98	9/16/98	9/16/98	9/16/98
Date Analyzed:	9/17/98	9/17/98	9/17/98	9/17/98	9/17/98	9/17/98
Instrument I.D.#:	gchp29	gchp29	gchp29	gchp29	gchp29	gchp29

Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.	N.D.	0.6
Conc. Spiked, ug/L:	25	25	25	25	25	25

Matrix Spike, ug/L:	22	20	21	24	24	25
% Recovery:	88	80	84	96	96	97

Matrix						
Spike Duplicate, ug/L:	22	18	19	22	22	23
% Recovery:	88	72	76	88	88	89

Relative % Difference:	0.0	11	10	8.7	8.7	8.6
------------------------	-----	----	----	-----	-----	-----

RPD Control Limits:	0-50	0-50	0-50	0-50	0-50	0-50
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LCS Batch#: VWLCS091798A

Date Prepared:	9/17/98	9/17/98	9/17/98	9/17/98	9/17/98	9/17/98
Date Analyzed:	9/17/98	9/17/98	9/17/98	9/17/98	9/17/98	9/17/98
Instrument I.D.#:	gchp29	gchp29	gchp29	gchp29	gchp29	gchp29

Conc. Spiked, ug/L:	25	25	25	25	25	25
---------------------	----	----	----	----	----	----

Recovery, ug/L:	24	22	21	28	28	29
LCS % Recovery:	96	88	84	112	112	116

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

Please Note:

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

SEQUOIA ANALYTICAL


David A. Pichette
Project Manager





**SEQUOIA ANALYTICAL
CHAIN OF CUSTODY**

680 Chesapeake Drive • Redwood City, CA 94063 • (650) 364-9600 FAX (650) 364-9233

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

404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600 FAX (510) 988-9673

Company Name: FLUOR DANIEL GTI			Project Name: 106479.030510 <i>See 1039 OAKLAND SDI</i>
Address: 757 Arnold Drive, Suite D			Billing Address (if different):
City: Martinez	State: CA	Zip Code: 94553	
Telephone: 925-370-3990		FAX #: 925-370-3991	P.O. #:
Report To: Melissa Gossell	Sampler:		QC Data: <input type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A

Turnaround	<input checked="" type="checkbox"/> 10 Working Days	<input type="checkbox"/> 3 Working Days	<input type="checkbox"/> 2 - 8 Hours	<input type="checkbox"/> Drinking Water	Analyses Requested	
Time:	<input type="checkbox"/> 7 Working Days	<input type="checkbox"/> 2 Working Days	<input type="checkbox"/> 24 Hours	<input type="checkbox"/> Waste Water		
	<input type="checkbox"/> 5 Working Days			<input type="checkbox"/> Other		

98096bf

SP 10 2 2

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TP4G	BTEX MBT	8010	OIL & GREASE	Comments
1. GP-4-W	9/19/98 1615	WTW	6	40 ml VOAS	01	X X	X	X	8/19/98	Complete
2. GP-4-W	9/19/98 1615	WTW	1	1L AMB				X		TP4G, BTEX, MBT
3.										8010, first
4.										O&G it enough
5.										
6.										
7.										
8.										
9.										
10.										

Relinquished By: <i>B. Pritchett</i>	Date: 9/1/98	Time: 2005	Received By: <i>Charles (C) Smith</i>	Date: 9/19/98	Time: 11:05
Relinquished By: <i>Charles (C) Smith</i>	Date: 9/10	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date: 9/10/98	Time: 14:22

APPENDIX E
DRUM INVENTORY FORM

BULK MATERIAL INVENTORY FORM

Page 1 of 1

Store Number 1039 Address/City/State/ZIP 1911 TELEGRAPH AVE
 Sears Facility Contact and Phone # SCOTT DEMUTH - (847)266 5530
 Fluor Daniel GTI Representative MENSA GUNZER
 Accumulation Start Date SEPT 9, 1998 Completion Date SAME
 Exact Bulk Storage Location ON SIDE OF A/C

CONTAMINANTS	SOIL (Cu Yds)	DEBRIS (Cu Yds)	LIQUID (Gallons)
GASOLINE			
FUEL OIL	—	—	
HYDRAULIC FLUID	—	—	
USED OIL			
CHLORINATED SOLVENT:			
NON-CHLORINATED SOLVENT:			
OTHER: <u>SOIL (cu yds)</u>	<u>2 yds³</u>	<u>Analysical Attached</u>	<u>55-gal drum</u>
OTHER:			

SOIL PILE CALCULATIONS

Calculation for a tent shaped soil pile:

Length _____ X Width _____ X Height _____ ÷ 2 ÷ 27 = _____ Yds³

Calculation for a rectangular or square shaped soil pile:

Length _____ X Width _____ X Height _____ ÷ 27 = _____ Yds³

Calculation for a conical (cone) shaped soil pile:

.04 X Radius _____ X Radius _____ X Height _____ = _____ Yds³

Store Number 1039Address/City/State/ZIP 1911 TELEGRAPH AVE
OAKLAND, CASears Facility Contact and Phone # SCOTT DEMUTH - (415) 286 5530Fluor Daniel GTI Representative MELISSA GOSSELLAccumulation Start Date SEPT 9 1998 Completion Date: SAMEExact Drum Storage Location ON SIDE OF A/C

CONTENTS	# OF DRUMS	DRUM ID (A,B,C...) OR (1,2,3...)	LID TYPE (OPEN OR BUNG)	LABEL TYPE: HAZARDOUS, NON-HAZARDOUS, UNCLASSIFIED	DRUM DESCRIPTION: COLOR, CONDITION, MARKINGS
GASOLINE			O or B	H / N / U	
GASOLINE/WATER MIXTURE			O or B	H / N / U	
GASOLINE IMPACTED PURGE WATER			O or B	H / N / U	
GASOLINE BOTTOMS/SLUDGE			O or B	H / N / U	
GASOLINE IMPACTED DEBRIS			O or B	H / N / U	
GASOLINE IMPACTED SOIL			O or B	H / N / U	
FUEL OIL (INC. DIESEL & HEATING OIL)			O or B	H / N / U	
FUEL OIL/WATER MIXTURE			O or B	H / N / U	
FUEL OIL IMPACTED PURGE WATER			O or B	H / N / U	
FUEL OIL TANKS BOTTOMS/SLUDGE			O or B	H / N / U	
FUEL OIL IMPACTED DEBRIS			O or B	H / N / U	
FUEL OIL IMPACTED SOIL			O or B	H / N / U	
HYDRAULIC FLUID			O or B	H / N / U	
HYDRAULIC FLUID/WATER MIXTURE			O or B	H / N / U	
HYDRAULIC FLUID IMPACTED PURGE WATER			O or B	H / N / U	
HYDRAULIC FLUID IMPACTED SLUDGE			O or B	H / N / U	
HYDRAULIC FLUID IMPACTED DEBRIS			O or B	H / N / U	
HYDRAULIC FLUID IMPACTED SOIL			O or B	H / N / U	
USED OIL			O or B	H / N / U	
USED OIL/WATER MIXTURE			O or B	H / N / U	
USED OIL IMPACTED PURGE WATER			O or B	H / N / U	
USED OIL TANK BOTTOMS/SLUDGE			O or B	H / N / U	
USED OIL IMPACTED DEBRIS			O or B	H / N / U	
USED OIL IMPACTED SOIL			O or B	H / N / U	
CHLORINATED SOLVENT:			O or B	H / N / U	
NON-CHLORINATED SOLVENT:			O or B	H / N / U	
OTHER. SOIL (ANALYTICAL) (1)			O or B	H / N / U	Black/white
OTHER. ATTACHED			O or B	H / N / U	
OTHER.			O or B	H / N / U	

NOTE. There should NEVER be 2 drums with the same ID present at a site at the same time!

8/9/98
Yea

DRUMMED MATERIAL INVENTORY FORM

Page 2 of 2

Store Number 1039

City/State Oakland, CA

Fluor Daniel GTI Representative MELISSA GOSSEL

THERE SHOULD NEVER BE 2 DRUMS WITH THE SAME DRUM ID PRESENT AT A SITE AT THE SAME TIME

EXAMPLE

A	6/24/94	diesel(3)/water(8)	diesel lines, flush water	no	11
---	---------	--------------------	---------------------------	----	----

NOTE: There should NEVER be 2 drums with the same ID present at a site at the same time!

APPENDIX F
WASTE DISPOSAL DOCUMENTATION

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California
Information in the shaded areas
is not required by Federal law.

98592417
IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802. WITHIN CALIFORNIA, CALL 1-800-552-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C A L U 0 0 1 7 6 3 2 9	Manifest Document No.	2. Page 1 of 1
3. Generator's Name and Mailing Address Sears #1039 1901 Telegraph Avenue Oakland, CA 94612		98592417		
4. Generator's Phone # 510 26787000		5. US EPA ID Number		
6. Transporter 1 Company Name HITS INC		7. US EPA ID Number LA10071654861313		
8. Designated Facility Name and Site Address DART TRUCKING CO INC 10400 1986158215 Spring Grove Resource Recovery 4879 Spring Grove Avenue Cincinnati, OH 45232		9. US EPA ID Number 104000000816629		
10. US DOT Description (including proper shipping name, hazard class, and ID number) a. Non DOT Regulated Material, Groundwater, Non DOT Hazardous, None, None		11. Facility Phone 513-681-5738		
12. Container No.		13. Total Quantity	14. Unit Wt/Vol	15. Waste Number 135
				EPA/Other NONE
				Size 1000
				EPA/Other NONE
				Size 1000
				EPA/Other NONE
				Size 1000
				EPA/Other NONE
				Size 1000
16. Additional Descriptions for Manifest Preparation 11a. (L)		17. Handwriting Codes for Manifest Preparation		
18. Special Handling Instructions and Additional Information 11a. CR109683		In emergency call CHES 1-800-645-8265 no #D9142488		
19. Generator's Certification: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.				
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable, and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.				
Printed/typed Name HR MCINTYRE		Signature HR McIntyre Jr.		Month 11 Day 12 Year 18
17. Transporter 1 Acknowledgment of Receipt of Materials Printed/typed Name		Signature		Month Day Year
18. Transporter 2 Acknowledgment of Receipt of Materials Printed/typed Name Joseph Baatz		Signature Joseph Baatz		Month 12 Day 08 Year 18
19. Discrepancy Indication Space				
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19 Printed/typed Name Michael Hayes		Signature Michael Hayes		Month 12 Day 08 Year 18

DO NOT WRITE BELOW THIS LINE