P Ramsey 94

GEO AUDIT

Geological Audit Services, Inc.

Hydrogeology • Environmental Services • Geotechnical Services

Geological Audit Services, Inc.
3345 E. Miraloma, Suite 135 • Anaheim, CA 92806 • (714) 993-2991 • FAX (714) 993-4009

17 November 1989
(GeoAudit LA 98C3.49)

Ms. Lisa Newcombe-Dierl
Terra Tech Laboratories
16371 Gothard Street, Suite G
Huntington Beach, CA 92647

Subject: Monitoring Well Installation and Water Sample Analysis - Graham Printing And Lithograph
17475 Gale Avenue, City of Industry, California

Dear Ms. Newcombe-Dierl:

In accordance with your request, we have supervised the installation of a ground water monitoring well and obtained a water sample at Graham Printing and Lithograph, 17475 Gale Avenue, City of Industry, California.

BACKGROUND

The site is located in a generally level area (Figure 1 - Location Map, 7.5 minute La Habra Quadrangle, USGS Topographic Series, 1981). The estimated depth to ground water is 24 feet based on information from the Los Angeles County Department of Public Works (DPW), Hydrologic Section, well # 3079-S, measured in April 1989.

The detection of several volatile organic constituents (VOC) during a subsurface investigation at the referenced facility indicated that a discharge had occurred. Acetone, 2-butanone (MEK), 1,1,1-trichloroethane, and 4-methyl-2 pentanone were detected at levels ranging from 19 to 50 ug/kg at a depth of 10 feet below the drum storage area (Terra Tech Labs report dated 26 December 1988).

The Los Angeles Region - California Regional Water Quality Control Board (RWQCB), in a letter dated 6 June 1989, indicated that the impact of the discharge on the ground water needed to be assessed. The RWQCB required the installation of a single ground water monitoring well down-gradient from the impacted area.

The prevailing hydraulic gradient at the site is assumed to be to the northwest, based on information supplied by Mr. Phillip Ramsey and Mr. Dainis Kleinbergs of the RWQCB on 14 July 1989. Mr. Ramsey and Mr. Kleinbergs recommended establishing the monitoring well approximately 30 to 40 feet northwest of the chemical waste storage area.

PROCEDURES

To meet the objectives, a work plan was submitted to the RWQCB on 20 July 1989. Upon the submittal of several addenda on 22 August 1989 the work plan was approved by Mr. Ramsey. All field procedures were observed by Mr. Ramsey.

A pilot boring was drilled using truck mounted 8-inch, precleaned, hollow stem augers on 27 September 1989 (Figure 2 - Site Plan). The drill rig and a two-man crew were supplied by West Hazmat Drilling Corporation.

The boring was drilled to a total depth of 59.5 feet. Continuous cores were retrieved through the vadose zone using an 18 inch sampler. Each core was visually inspected, described, and screened for the presence of organic vapors using a portable photo-ionization detector (PID: Thermo Environmental 580A - Lamp energy 10.0 eV, calibrated to isobutylene).

Discrete soil samples were collected ahead of the drill bit using a split tube sampler loaded with 3 precleaned 2.5 by 6 inch brass tubes. The samples were obtained at depths of 1, 5, 10, 15, 20, 25, 30, 35, and 41.5 feet. Each sample was immediately covered with aluminum sheets in its respective brass tube, capped, and sealed with tape.

After preserving the first brass tube sample, soil from the second brass tube was extruded into a plastic bag and screened for the presence of organic vapors using the PID. Encountered soil was described in accordance with the Unified Soil Classification System.

One soil sample was collected from the aquifer at a depth of 45 feet and placed in a plastic bag. Samples were not collected from the remaining depth of the aquifer as a result of heaving sands.

The sampling equipment was thoroughly washed in tri-sodium-phosphate (TSP) solution and rinsed twice with water prior to each sampling run. Distilled water was used for the second rinsing.

Auger returns were transferred into 55 gallon hazardous waste drums and stored temporarily on site pending the results of the laboratory analysis.

The soil samples were placed in a chilled container and transported by a representative of Terra Tech Labs to West Coast Analytical Services, Inc (WCAS). Samples B1-D1 and B1-D41.5 were analyzed for

volatile organics in accordance with EPA method 8240. The remaining samples were archived pending analytical results.

The sample obtained from the aquifer (B1-D45) was transported to NorCal Engineering for sieve analysis.

The boring was converted to a two-inch diameter monitoring well (MW-1). The bottom of the well casing was set in a clay layer at a depth of 59.5 feet. The monitoring well was constructed of 30 feet of slotted 0.010 inch PVC screen and 29.5 feet of flush threaded, blank PVC casing. The monitoring well design is depicted in Figure 3. The County of Los Angeles - Department of Health Services approved the well design and installation (permit attached).

The well was surged and purged using a well development rig on 10 and 19 October 1989. Approximately 540 gallons of water were removed from the well. The well development rig was supplied by West Hazmat Drilling Corporation.

The purged water from the well was transferred into 55 gallon hazardous waste drums and stored temporarily on site pending the results of the laboratory analysis.

The top of the monitoring well casing was surveyed relative to a bench mark and two monuments on 14 October 1989 (Figure 1). The location of the monitoring well was subsequently converted to California Coordinates. The surveying was performed by Mr. Steve Richardson, Licensed Surveyor # 5500. The water level was measured relative to the casing top on 30 October 1989. The piezometric level was determined from these data.

A water sample was obtained from the monitoring well on 30 October 1989. The sample was collected from the bottom of the well utilizing a stainless-steel point source bailer after the temperature, pH, and conductivity of the water had reached stability. The temperature, pH, and conductivity was measured at 1 gallon intervals using a Cambridge Scientific Industries Hydac Monitor.

The sample was placed in two 8-ounce screw-capped glass jars and three EPA-vials, capped with teflon-faced silicone septum, and transported in a chilled container from the site to WCAS for analysis. The water sample was analyzed for volatile organics (EPA methods 601 and 602), for settable solids (EPA method 160.5), for total suspended solids (EPA method 160.2) and for turbidity (EPA method 180.1).

FINDINGS

The soil profile consists of stiff to very stiff silty clay from the surface to 10 feet, medium dense fine to coarse sand with some gravel from 10 to 11.5 feet, hard silty clay from 11.5 to 39 feet, hard clayey silt from 39 to 42 feet, medium dense, medium to coarse sand from 42 to 57 feet, and clay from 57 feet to the bottom of the boring (boring log attached). Saturated conditions were encountered in the sand unit at a depth of 42 feet. Upon penetrating the sand unit, the water level rose approximately 6 feet to the piezometric surface.

Organic vapors were not detected during the drilling of the pilot boring (boring log attached).

The sieve analysis indicated that the aquifer material is composed of 6.2% fine gravel, 6.1% coarse sand, 59.1% medium sand, 26.3% fine sand, and 2.3% silt/mud (NorCal Engineering report dated 3 October 1989 attached).

Surveying data indicated that the monitoring well is located at North - 4,112,321.042 and E - 4,310,816.432 with an elevation of 404.00 feet (monument, bench mark, and survey data attached). The piezometric surface is at an elevation of 368.12 feet.

The analytical results for the soil samples indicated that no volatile organics were detected. The laboratory hazardous waste testing certification list, analysis results (WCAS Job # 13790), a letter explaining the detection limits, and the chain of custody form are attached.

Prior to sampling of ground water, stabilized temperature, pH and conductivity conditions were reached after evacuating 3 to 5 gallons of water (Table 1).

All volatile organics in the water sample were not detected. Total suspended solids, settable solids, and turbidity were detected in the water samples at 920 mg/l, 6.4 ml/l, and 400 NTU, respectively. The laboratory results (WCAS Job # 14034) and chain of custody form are attached.

CONCLUSIONS

Based on the result of the sieve analysis, the slot size and filter pack used, the well design should have provided good filtration. A confined aquifer exists at a depth of 42 feet at the site. We believe that the elevated levels of total suspended solids,

settable solids, and turbidity in the water sample is a direct result of the water level rising 6 feet into the overlying silty clay layer to the piezometric surface.

Previous investigation indicated the presence of low levels of VOC's at a depth of 10 feet. It appears highly unlikely that contaminants at the concentrations detected would migrate 32 feet through predominantly very stiff to hard silty clay, impacting the ground water.

LIMITATIONS

Our professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar localities. The findings were mainly based upon analytical results provided by independent laboratories. No other warranty, expressed or implied, is made as to the professional recommendations contained in this report.

The opportunity to prepare this report is greatly appreciated. Please call our office if you have any questions.

Sincerely,

GEOLOGICAL AUDIT SERVICES, INC.

Robert D. Loeffler
Project Geologist

Keith E. Green
Senior Project Geologist
Registered Geologist #1413

Enclosures

cc: (3) addressee
(1) Mr. Phillip Ramsey, RWQCB

TABLE 1
GROUND WATER STABILITY
17475 E. GALE AVENUE

Gallons purged	Temp. (F)	pH	Conductivity (uS/cm)
0	81.0	7.60	1,340
1	76.3	7.57	1,583
2	75.2	7.54	1,780
3	76.9	7.43	1,774
4	76.4	7.42	1,780
5	76.6	7.43	1,779

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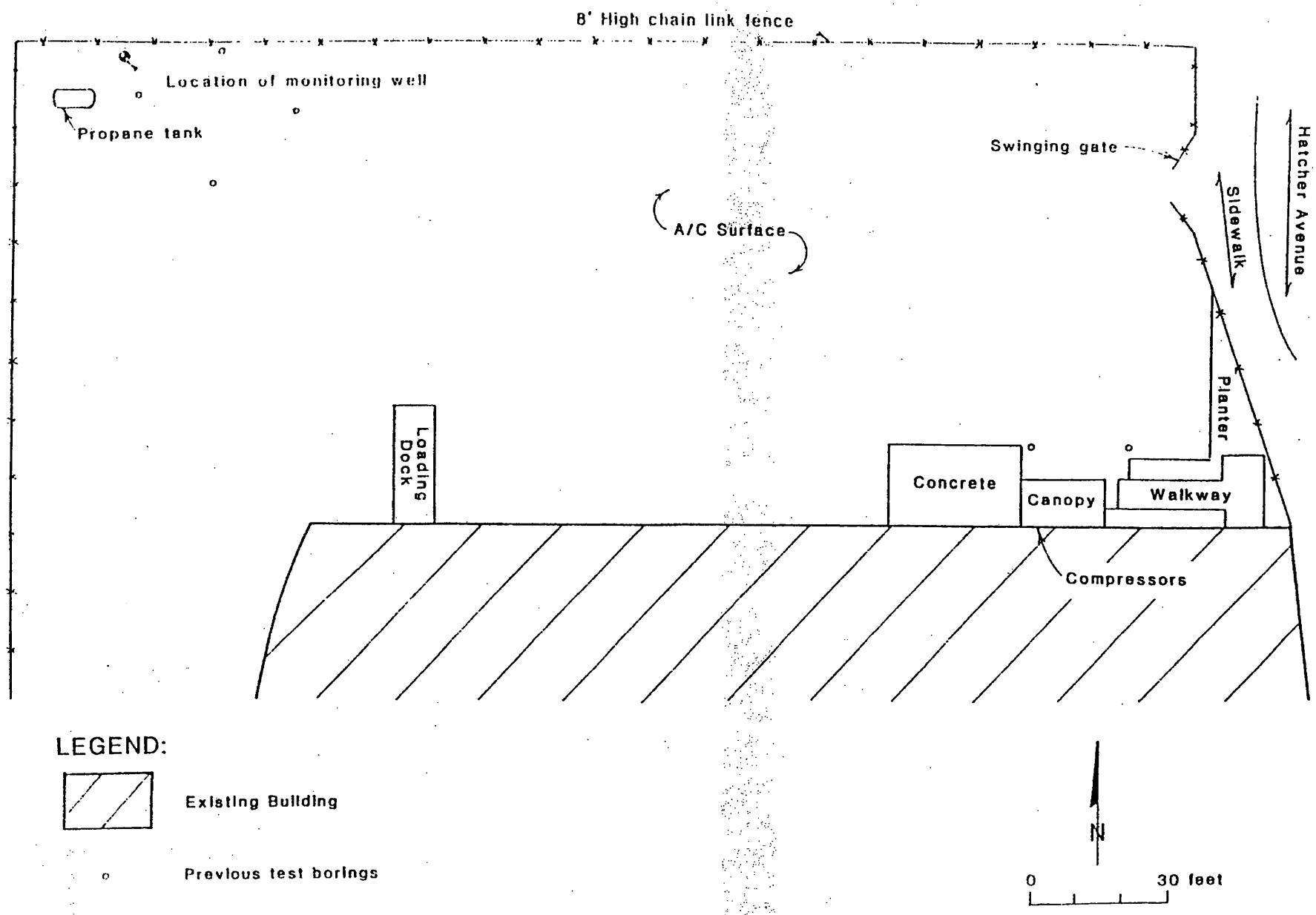
3345 E. Miraloma Suite 135
Anaheim CA 92806

FIGURE 1 - LOCATION MAP

Baldwin Park and La Habra
7.5 Minute Quadrangles
USGS Topographic Series, 1981

Project ✦
LA 98C3.49

17 Nov. 1989



LEGEND:

Existing Building

Previous test borings

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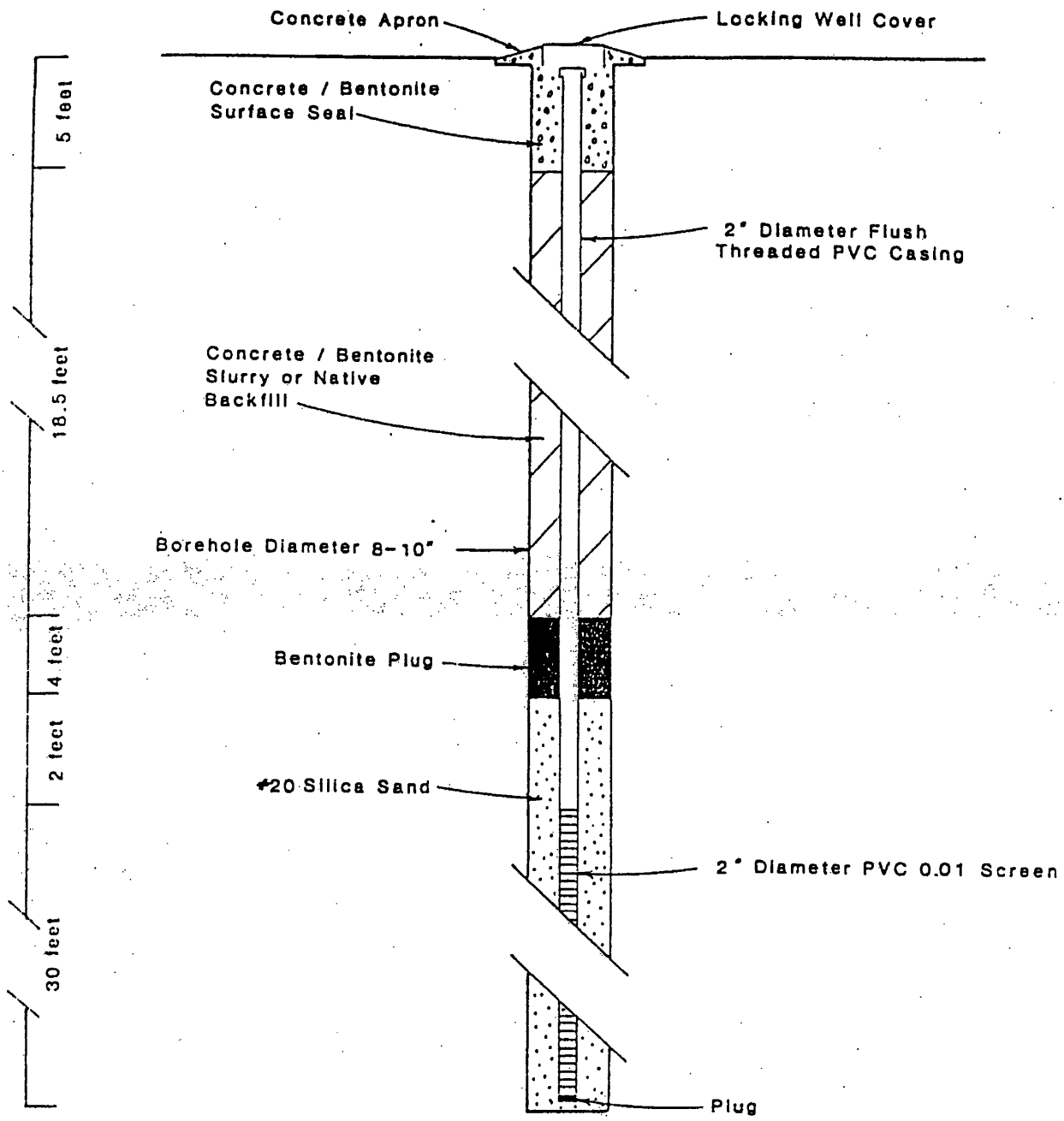
FIGURE 2 - SITE PLAN
Graham Printing and Lithograph Company
17475 E. Gale Avenue
City of Industry, California

Project #
LA 98C3.49

17 Nov. 1989



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Anaheim, CA 92806

FIGURE 3 - WELL DESIGN

Project #
LA 98C3.49

17 Nov. 1989

CATION FOR WELL PERMIT

MENTAL MANAGEMENT - 2615 S GRAND AVENUE, LOS ANGELES, CA 90007, ROOM 604
OF LOS ANGELES DEPARTMENT OF HEALTH SERVICES

DATE
29 September 1989

[X] NEW WELL CONSTRUCTION (1 Well)
[ ] RECONSTRUCTION OR RENOVATION
[ ] DESTRUCTION

TYPE OF WELL
[ ] PRIVATE DOMESTIC
[ ] PUBLIC DOMESTIC
[ ] IRRIGATION
[X] OBSERVATION/MONITORING
[ ] CATHODIC
[ ] INDUSTRIAL
[ ] GRAVEL PACK
[ ] TEST

TYPE OF CASING
see attached well design

METHOD OF SEALING OF CASING
see attached well design

METHOD OF DESTRUCTION

17475 E. Gale Avenue | Gale and Hatcher | City of Industry

(NAME SHOW PROPERTY LINES STREET ADDRESS, WELL SITE SEWERS AND PRIVATE SEWAGE DISPOSAL SYSTEMS ALONG WITH LABELS AND DIMENSIONS)

see attached site plan

NAME OF WELL DRILLER (PRINT)
West Hazmat Drilling Corp.

NAME OF WELL OWNER (PRINT)
Graham Printing and Lithograph Co.

TRADE NAME
same

MAILING ADDRESS
17475 E. Gale Avenue

BUSINESS ADDRESS | CITY
305 State College Blvd. Ste 141 Anaheim

CITY
City of Industry, CA 91745

I hereby agree to comply in every respect with all regulations of the County Preventive/Public Health Services and with all ordinances and laws of the County of Los Angeles and of the State of California pertaining to [illegible] construction, reconstruction and destruction. Upon completion of well and within ten days thereafter, I will furnish the County Preventive Public Health Services with a complete log of the well giving date drilled, depth of well, all perforations in casing, and any other data deemed necessary by such County Preventive/Public Health Services.

Applicant's Signature

DISPOSITION OF APPLICATION: (For Sanitarians Use Only)

[X] APPROVED
[ ] DENIED
[ ] APPROVED WITH CONDITIONS

If denied or approved with conditions report reason or conditions here.

DATE 10/17/89 | SANITARIAN

DATE 10-17-89 | SECTION CHIEF

When signed by Section Chief, this application is a permit

BORING LOG

PILOT BORING — 27 SEPTEMBER 1989

Depth (feet)	Sample #	OV reading (ppm)	Group Symbol	
	[illegible]	0	CL	Brown, damp, stiff, silty clay
	B1-D5	0		with some gravel upto ¼"
	B1-D10	0	SW	Brown, damp, medium dense, fine to coarse sand with gravel upto ¼"
			CL	Brown, damp, hard, silty clay
	B1-D15	0		
		0		
		0		
	B1-D20	0		
		0		moist, with increase in silt content
	B1-D25	0		
		0		
		0	CL	Brown, moist, hard, silt with some clay
		0	CL	Brown, moist, hard, silty clay
30	B1-D30	0		
		0		
		0		
	B1-D35	0		
		0		with 1" thick medium to coarse sand interbed
40	B1-D40		ML	Brown, moist, hard, clayey silt

Geological Audit Services, Inc.

Graham Printing and Lithograph
17475 E. Gale Avenue
City of Industry, California

Project # LA 9803.40

BORING LOG

PILOT BORING — 27 SEPTEMBER 1989

Depth (feet)	Sample #	OV reading (ppm)	Group Symbol	
40				
	B1-D41.5	0	ML	Brown, moist, hard, clayey silt
	B1-D45	0	SP	Brown, saturated, medium dense, medium to coarse sand with gravel upto ¼"
50				
			CL	Green and brown, moist, stiff, clay
60				BOTTOM OF BORING, 59.5'

Geological Audit Services, Inc.

Graham Printing and Lithograph
17475 E. Gale Avenue
City of Industry, California

Project #
LA 98C3.49

NorCal Engineering

SOILS AND GEOTECHNICAL CONSULTANTS
10571 CALLE LEE SUITE 155 LOS ALAMITOS, CA 90720
(714) 826-4231 (213) 267-0125
FAX (714) 826-2514

October 03, 1989

Project Number 2194-89

Terra Tech Labs, Inc.
16371 Gothand Street, Suite G
Huntington Beach, California 91311

Re: Laboratory Tests - Graham Printing - Located at 17475 Gale Avenue, in the City of Industry, California

Dear Sirs:

Pursuant to the request of Mr. Brian Kato, the following laboratory test was performed on a sample of the soils which were transported to this firm.

LABORATORY TESTS

A. A gradation analysis was performed on the sample and results are attached.

We appreciate this opportunity to be of service to you. If you have any further questions, please do not hesitate to contact the undersigned.

Respectfully submitted,
NORCAL ENGINEERING

REGISTERED PROFESSIONAL ENGINEER
KEITH D. TUCKER
No. 841
Exp. 12-31-92
GEOTECHNICAL
STATE OF CALIFORNIA

Keith D. Tucker
Project Engineer
R.G.E. 841

Troy D. Norrell
President

SIEVE ANALYSIS
DATA AND COMPUTATION SHEET

SIEVE MESH	WEIGHT RETAINED IN GRAMS	PERCENT RETAINED	CUMULATIVE PERCENT FINER	SPECS*
2"				
1 1/2"				
1"				
3/4"	20	1.2	98.8	
1/2"				
3/8"	104	6.2	93.7	
4	207	12.3	87.7	
8				
10				
12				
14				
16				
30				
40	1200	71.4	28.6	
50				
60				
100	1590	94.6	5.4	
200	1643	97.7	2.3	
PAN	1681			

*None Provided

PROJECT NO. 2194-89 DATE 10/2/89 WEIGHT OF SAMPLE 1681 GM.

SAMPLE NO 1 TESTED BY S.V.

Client: [illegible] Inc.

Client Project #

Project Name: [illegible]

Site Address: [illegible]

Sampler's Signature: [illegible]

Analysis Requested

Project # 10371

Date 9/29 Page 1 of 1

SAMPLE CONDITION
Rec'd on ice yes/no
Sealed Container yes/no

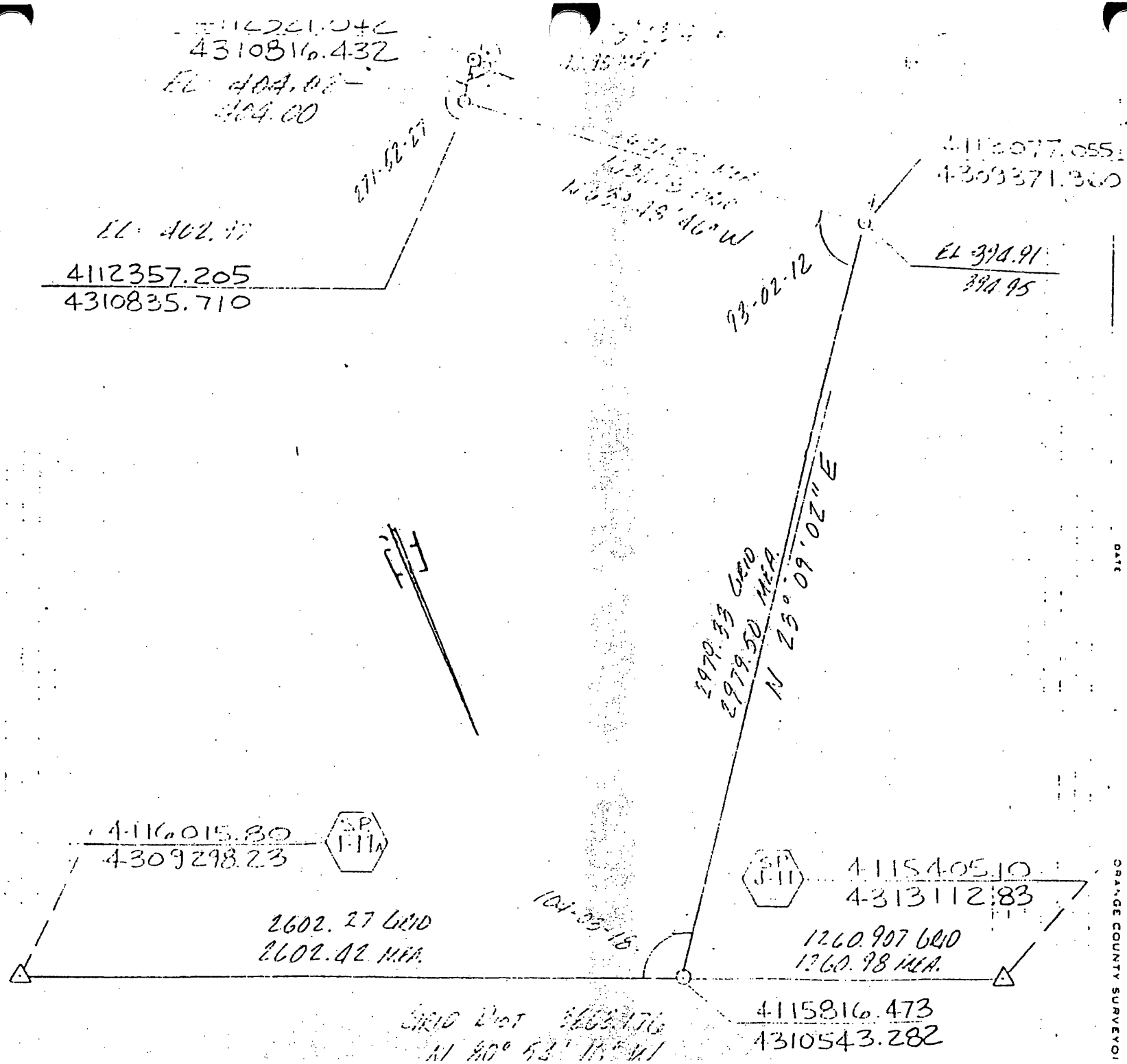
TURNAROUND REQUESTED:
☐ 8 Hours ☐ 24 Hours
☐ 72 Hours ☒ 7 Days

Sample ID	Sample Location	Date	Time	Modified EPA Method 8015 (TPH)	EPA Method 8020 (BTXE)	EPA Method 418.1 (TPH)	SIEVE ANALYSIS				Number of Containers	SAMPLE TYPE/CONTAINER
1.1 [illegible]	Boring 1 @ 45' below grade	9/27	11 00				X					

Relinquished by: (Signature)	Date	Received by: (Signature)	Date
[illegible]	9/29/89	[illegible]	9/29/89
Company: [illegible] Inc	Time 10:35	Company: NORCAL ENGINEERING	Time 10:35
Relinquished by: (Signature)	Date	Received by Laboratory: (Signature)	Date
Company	Time	Company:	Time

Total Number of Containers

TERRA TECH LABS, INC.
16371 Gothard St., Suite G
Huntington Beach, CA 92647
Tel. (714) 842 6077



DATE

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PAGE

ORANGE COUNTY SURVEYOR

D-YEAR	ELEV	DESCRIPTION (INCLUDE QUAD AND YEAR IN DESCRIPTION)	BM NUMBER
TTRBEIN (1980)	677.885	RDBM TAG IN CB 2FT W BCR 32FT N'LY & 55FT E'LY C/L INT SUNSET CROSSING RD & OLD TRAIL RD	CG 3927
TTRBEIN (1980)	674.964	RDBM TAG IN CB 4FT W BCR OF ALLEY 32FT S'LY & 28FT W'LY C/L INT SUNSET CROSSING RD & OLD TRAIL ROAD	CG 3928
TTRBEIN (1980)	650.493	L & LS TAG NO 2825 IN CB 32FT N'LY & 26FT W'LY C/L INT SUNSET CROSSING RD & BIG FALLS DR	CG 3929
TTRBEIN (1980)	647.922	L & LS TAG NO 2825 IN CB 3FT E BCR OF ALLEY 32FT S'LY & 153FT W'LY C/L INT SUNSET CROSSING RD & BIG FALLS DR	CG 3930
TTRBEIN (1980)	652.029	L & BR IN S CB SERVICE RD 1FT E BCR OF ISLAND 52FT N 34FT E C/L INT PATHFINDER RD & EVERGREEN SPRINGS DR	CG 3931
TTRBEIN (1980)	656.354	L & BR 1FT W BCR 36FT N & 51FT E C/L INT FERN HOLLOW DR & PATHFINDER RD	CG 3932
TTRBEIN (1980)	653.552	L & BR IN CB 5FT N BCR @ C B 71FT N & 18FT W C/L FERN HOLLOW DR & PATHFINDER RD	CG 3933
TTRBEIN (1980)	397.145	CITY OF INDUSTRY BR MON IN CB 4FT W BCR 32FT S & 78FT W C/1 INT AZUSA AVE & GALE AVE MKD (G-10A BM)	CG 4035
TTRBEIN (1980)	436.808	LGT CTR CB RET 60FT E & 46FT S/O INT AZUSA AVE & POMONA FRWY EAST BOUND OFF RAMP	CG 4037
TTRBEIN (1980)	455.856	RD BM TAG 6FT S/O BCR @ NW COR AZUSA AVE & COLIMA RD 88FT N & 42FT W/O C/L INT	CG 4038
TTRBEIN (1980)	456.383	RD BM TAG 4FT N/O BCR @ NE COR AZUSA AVE & COLIMA RD 109FT N & 60FT E/O C/L INT	CG 4039
TTRBEIN (1980)	454.442	RD BM TAG 7FT W/O BCR @ NE COR COLIMA RD & ENT TO ROBINSONS PARKING LOT (LA PUENTE SHOPING CTR) 2FT S/O ST LITE NO 2026462E 55FT E & 43FT N/O C/L INT 0.1 MI E/O AZUSA AVE	CG 4040
TTRBEIN (1980)	454.195	CITY OF INDUSTRY MON @ SE COR C B 14FT E & 46FT S/O C/L INT COLIMA RD & ALBATROSS ST MKD (BM CO-2)	CG 4041
TTRBEIN (1980)	455.316	RD MON IN WELL 6IN DN ON C/L COLIMA RD 254FT E/O C/L INT ALBATROSS ST MKD (1974)	CG 4042

COUNTY SURVEYOR 1962

SURVEY CONTROL STATION

COUNTY OF LOS ANGELES, CALIFORNIA

CARD 1 OF 3 CARDS

NAME Puente I - 11A

ESTABLISHED BY L.A. Co. Engineer DATE 1958

ELEV. OF STATION MARK 115 METERS

TYPE: TRAVERSE

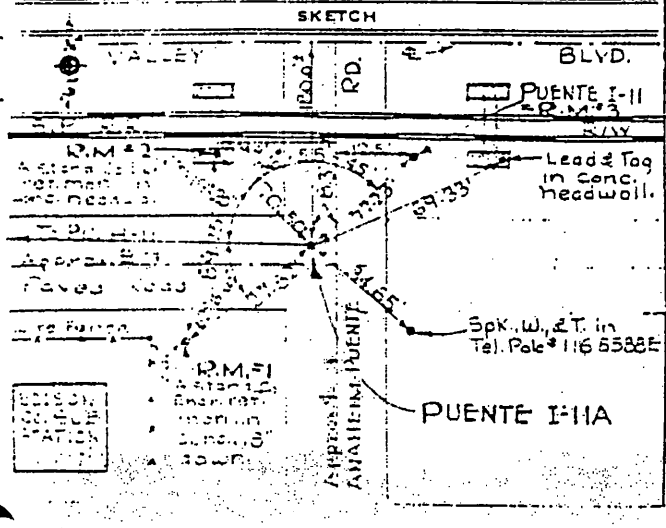
GEOGRAPHIC POSITIONS: LAT. 34° 00' 33.3102"
LONG. 117° 55' 43.6337"

GEODETIC DATUM: NORTH AMERICAN, 1927

PLANE COORDINATES, ZONE 7, CALIFORNIA COORDINATE SYSTEM

NORTH 4,116,015.80
EAST 4,309,298.23

SKETCH



DESCRIPTION

This station is located in the Puente area, i the intersection of Anaheim-Puente Rd. and a paved road, 180.0 ft. southerly from the center line of Valley Blvd., and 8.3 ft. westerly from the approximate center line of Anaheim-Puente Rd., and in a well cut through the pavement and protected b a cast iron cover marked: "County Engineer monume

Station Mark: A standard 4 inch brass tablet inscribed: "L.A. County Survey Control System Traverse Station Puente I-11A R.E. 5869 set by Cou Engineer 1958," was set in concrete 10 inches belo ground surface.

No sub-surface mark.

Reference Mark #1 is a standard 4 inch County Engineer reference monument, set in concrete 18 inches below the surface, and is S 38° 23' 55"W, 27.82 ft. from the station.

Reference Mark #2 is a standard 4 inch County Engineer reference monument, set flush in a concre headwall, and is N 15° 25' 45"W, 70.50 ft. from th station. This mark is also R.M. #2 for Station Puente I-11.

Reference: F.B. 946-121,12

COUNTY SURVEYOR 1962

SURVEY CONTROL STATION

COUNTY OF LOS ANGELES, CALIFORNIA

CARD 2 OF 2 CARDS

NAME Puente I-11

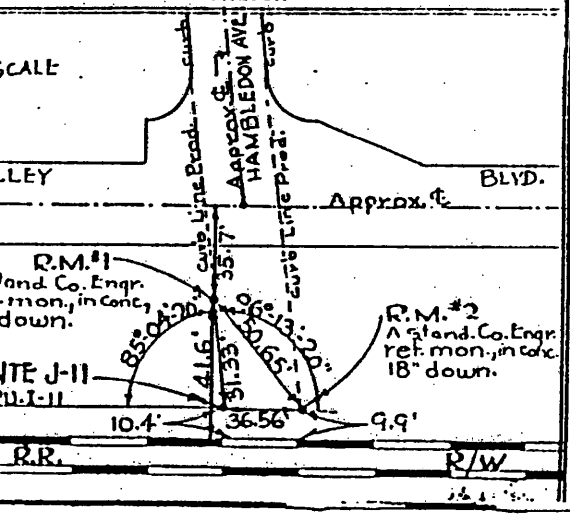
DIRECTIONS AND DISTANCES TO OTHER STATIONS AND PROMINENT OBJECTS

TO	GEODETIC AZIMUTH	GRID BEARING	GEODETIC DISTANCE		GRID DISTANCE
			LOG METERS	FEET	FEET
	° ' "	° ' "			
Reference Mark #2		S 85 15 40 W		47.22	
Reference Mark #3		N 31 01 40 E		35.50	
Puente H-11		N 80 43 01.24 W			2,215
Puente I-11A		S 21 29 53.87 W			77
Puente J-11		S 79 46 52.09 E			3,847

L. A. County
B. M. No. [illegible]

ME Puente J-11
ABLISHED BY L.A. Co. Engineer DATE 1958
EV. OF STATION MARK 123 METERS
E. [redacted] TRAVERSE
OGRAPHIC POSITIONS: LAT. 34°00'27.1168"
LONG. 117°54'58.3522"
ODETIC DATUM: NORTH AMERICAN, 1927
ANE COORDINATES: ZONE 7, CALIFORNIA COORDINATE SYSTEM
NORTH 4,115,405.10
EAST 4,313,112.83

SKETCH



DESCRIPTION

This station is located in the Puente area southerly of the intersection of Valley Blvd. and Hambledon Ave., in the Southern Pacific Railroad right of way; on the southerly projection of the westerly curb line of Hambledon Ave., and 10.4 ft. northerly from the most northerly rail of the S.P. Railroad.

Station Mark: A standard 4 inch bronze tablet inscribed: "L.A. County Survey Control System Traverse Station Puente J-11 R.E. 5869 set by County Engineer 1958," was set in concrete flush with the ground surface.

No sub-surface mark.

Reference Mark #1 is a standard 4 inch County Engineer reference monument, set in concrete, 18 inches below the surface, and is N 5° 17' 30"E, 31.33 ft. from the station.

Reference Mark #2 is a standard 4 inch County Engineer reference monument, set in concrete, 18 inches below the surface, and is S 78° 29' 10"E, 36.56 ft. from the station.

Reference: F.B. 748-123,124

3-11-65. L.V. CROWE REPORTED THAT THE STATION IS IN GOOD CONDITION.

07C CE 376 Cdb 9-67

TY ENGINEER

SURVEY CONTROL STATION

COUNTY OF LOS ANGELES, CALIFORNIA

CARD 2 OF 3 CARDS

PUENTE J-11

LISHED BY DATE
OF STATION MARK METERS
TRIANGULATION
TRAVERSE
APHIC POSITIONS: LAT.
LONG.
TIC DATUM: NORTH AMERICAN, 1927
COORDINATES: ZONE 7, CALIFORNIA COORDINATE SYSTEM
NORTH
EAST

SKETCH

DESCRIPTION

Recovered - Date [illegible]

[illegible] Date 1-30-75 STA. MARKED "PUENTE J-11 RE 5869 1958" FOUND IN GOOD CONDITION. FOUND RM #1, DOWN 8" IN " " . " RM #2 " 13" " " " BY JOHN PAZEN.

3847.33

...17 B&E 316 1-54
...NTY SURVEYOR

~~(64)~~ 1962 SURVEY CONTROL STATION
COUNTY OF LOS ANGELES, CALIFORNIA

CARD 3 OF 3 CARDS

...e Puente J-11

ZONE 7, CALIFORNIA COORDINATE SYSTEM

DIRECTIONS AND DISTANCES TO OTHER STATIONS AND PROMINENT OBJECTS

TO	GEODETIC AZIMUTH ° ′ ″	GRID BEARING ° ′ ″	GEODETIC DISTANCE LOG METERS	GEODETIC DISTANCE FEET	GRID DISTANCE FEET
...erence Mark #1		N 5 17 30 E		31.33	
...erence Mark #2		S 78 29 10 E		36.56	
...nte I-11		N 79 46 52.09 W			3,847.33
...nte L-12		S 78 32 21.51 E			3,032.78

STATE OF CALIFORNIA

DEPARTMENT OF HEALTH SERVICES

HAZARDOUS WASTE TESTING LABORATORY CERTIFICATE

is hereby granted to

WEST COAST ANALYTICAL SERVICES, INC.

to conduct analysis of hazardous waste in the following test categories:

As specified in the Hazardous Waste Testing Laboratory Certification List

This Certificate is granted in accordance with provisions of Article 8.5, Chapter 6.5, Division 20 of the Health and Safety Code.

Certificate No. 123

Expiration Date April 3, 1990

Issued at Berkeley, on April 3, 1988

by

Chief, Hazardous Materials Laboratory Section

Hazardous Materials Laboratory [illegible]tion, California Department of Health S[illegible]es, 2151 Berkeley Way, Berkeley, CA 94[illegible]

Coast Analytical Service, Inc.
[illegible]0 Alburtis Avenue
[illegible]a Fe Springs, CA 90670

PHONE: (213)948-2225

LABORATORY CATEGORY: Commercial
CERTIFICATE NUMBER: 123

ORGANIC CHEMICAL TESTING	METHOD NUMBER (DATE CERTIFIED)	(Y = CERTIFIED; N = NOT CERTIFIED)
1 Halogenated Volatile Organics		8010(04-04-85)
2 Non-Halogenated Volatile Organics		8015(04-04-85)
3 Aromatic Volatile Organics		8020(04-04-85)
4 Acrolein, Acrylonitrile, Acetonitrile		8030(04-04-85)
5 Phenols		8040(04-29-88)
6 Phthalate Esters		8060(04-04-85)
7 Organochlorine Pesticides		8080(04-04-85)
8 Polychlorinated Biphenyls (PCBs)		8080(04-04-85)
9 Nitroaromatics and Cyclic Ketones		8090(04-04-85)
10 Polynuclear Aromatic Hydrocarbons		8100(04-04-85)
11 Chlorinated Hydrocarbons		8120(04-04-85)
12 Organophosporus Pesticides		8140(04-04-85)
13 Chlorinated Herbicides		8150(04-04-85)
14 Carbamates	632(04-29-88)	
15 GC/MS Method for Volatile Organics		8240(04-04-85)
16 GC/MS Method for Semivolatile Organics		8270(04-04-85)

INORGANIC CHEMICAL TESTING	METHOD NUMBER (DATE CERTIFIED)	(Y = CERTIFIED; N = NOT CERTIFIED)
Antimony	6010(04-04-85)	
2 Arsenic	6010(04-04-85)	
3 Barium	6010(04-04-85)	
4 Beryllium	6010(04-04-85)	
5 Cadmium	6010(04-04-85)	
6 Chromium(VI)		7197(04-04-85)
7 Chromium(total)	6010(04-04-85)	
8 Cobalt	6010(04-04-85)	
9 Copper	6010(04-04-85)	
10 Lead	6010(04-04-85)	
11 Mercury	6010(04-29-88)	7470(04-04-85) 7471(04-04-87)
12 Molybdenum	6010(04-04-85)	
13 Nickel	6010(04-04-85)	
14 Selenium		
15 Silver	6010(04-04-85)	
16 Thallium	6010(04-04-85)	
17 Vanadium	6010(04-04-85)	
18 Zinc	6010(04-04-85)	
19 Cyanide		9010(04-04-85)
20 Fluoride	300(04-29-88)	
21 Sulfide		9030(04-29-88)

OTHER

[illegible]lifornia Waste Extraction Test	(04-04-85)	Y
[illegible]hysical Property Testing	(04-29-88)	Y
[illegible] Aquatic Toxicity Testing		N
[illegible] Bulk Asbestos Testing		N
[illegible] Total Petroleum Hydrocarbon	(04-29-88)	Y
[illegible] Total Organic Lead	(04-29-88)	Y

October 11, 1989

WCAS
WEST COAST ANALYTICAL SERVICE, INC.
ANALYTICAL CHEMISTS

TERRA TECH LABS, INC.
16371 Gothard Street, Suite G
Huntington Beach, CA 92647

Attn: Jeff Freewan

JOB NO. 13790

LABORATORY REPORT

Samples Received: Two (2) soil samples
Date Received: 9-27-89
Purchase Order No: Proj#: 1037-1/Graham Printing

The samples were analyzed as follows:

Samples Analyzed	Analysis	Results
Two (2) soils	Volatile Organics by EPA 8240	Data Sheets

B. Michael Hovanec
Senior Staff Chemist

D. J. Northington, Ph.D.
Technical Director

12840 Alburtis Avenue • Santa Fe Springs, California 90670 • 213.948-2225 • FAX 213.948-5852

CLIENT: TERRA TECH LABS
WCAS JOB #: 13790

SAMPLE: B1-D1

DATE RECEIVED: 09/27/89
DATE EXTRACTED: 10/10/89
DATE ANALYZED: 10/10/89

RUN NUMBER: 13790V1
SAMPLE AMOUNT: 1.0G
MATRIX: SOIL

VOLATILE ORGANICS (EPA 624/8240)

UNITS: UG/KG (PPB)

CAS #	COMPOUND	CONCENTRATION	DET LIMIT
67-64-1	ACETONE	ND	30.
71-43-2	BENZENE	ND	5.
75-27-4	BROMODICHLOROMETHANE	ND	5.
75-25-2	BROMOFORM	ND	5.
74-83-9	BROMOMETHANE	ND	30.
78-93-3	2-BUTANONE (MEK)	ND	30.
75-15-0	CARBON DISULFIDE	ND	5.
56-23-5	CARBON TETRACHLORIDE	ND	5.
108-90-7	CHLOROBENZENE	ND	5.
75-00-3	CHLOROETHANE	ND	30.
110-75-8	2-CHLOROETHYLVINYL ETHER	ND	50.
67-66-3	CHLOROFORM	ND	5.
74-87-3	CHLOROMETHANE	ND	30.
108-41-8	CHLOROTOLUENE	ND	5.
124-48-1	DIBROMOCHLOROMETHANE	ND	5.
95-50-1	1,2-DICHLOROBENZENE	ND	5.
541-73-1	1,3-DICHLOROBENZENE	ND	5.
106-46-7	1,4-DICHLOROBENZENE	ND	5.
75-34-3	1,1-DICHLOROETHANE	ND	5.
107-06-2	1,2-DICHLOROETHANE	ND	5.
75-35-4	1,1-DICHLOROETHYLENE	ND	5.
156-59-4	CIS-1,2-DICHLOROETHYLENE	ND	5.
156-60-5	TRANS-1,2-DICHLOROETHYLENE	ND	5.
78-87-5	1,2-DICHLOROPROPANE	ND	5.
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5.
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5.
100-41-4	ETHYLBENZENE	ND	5.
106-93-4	ETHYLENE DIBROMIDE	ND	5.
76-13-1	FREON-TF	ND	5.
110-78-6	2-HEXANONE	ND	30.
75-09-2	METHYLENE CHLORIDE	ND	30.
108-10-1	4-METHYL-2-PENTANONE (MIBK)	ND	30.
100-42-5	STYRENE	ND	5.
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	5.
127-18-4	TETRACHLOROETHYLENE	ND	5.
109-99-9	TETRAHYDROFURAN	ND	30.
108-88-3	TOLUENE	ND	5.
71-55-6	1,1,1-TRICHLOROETHANE	ND	5.
79-00-5	1,1,2-TRICHLOROETHANE	ND	5.
79-01-6	TRICHLOROETHYLENE	ND	5.
75-69-4	TRICHLOROFLUOROMETHANE	ND	5.
108-05-4	VINYL ACETATE	ND	30.
75-01-4	VINYL CHLORIDE	ND	30.
[illegible]-47-6	TOTAL XYLENES	ND	5.

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT: TERRA TECH LABS
WCAS JOB #: 13790

SAMPLE: B1-D1

UNITS: UG/KG (PPB)

	COMPOUND NAME	FRACTION	APPROXIMATE CONCENTRATION
1	NONE FOUND	VOA	

CLIENT: TERRA TECH LABS
WCAS JOB #: 13790

SAMPLE: B1-D41.5

DATE RECEIVED: 09/27/89
DATE EXTRACTED: 10/10/89
DATE ANALYZED: 10/10/89

RUN NUMBER: 13790V2
SAMPLE AMOUNT: 1.0G
MATRIX: SOIL

VOLATILE ORGANICS (EPA 624/8240)

UNITS: UG/KG (PPB)

CAS #	COMPOUND	CONCENTRATION	DET LIMIT
67-64-1	ACETONE	ND	30.
71-43-2	BENZENE	ND	5.
75-27-4	BROMODICHLOROMETHANE	ND	5.
75-25-2	BROMOFORM	ND	5.
74-83-9	BROMOMETHANE	ND	30.
78-93-3	2-BUTANONE (MEK)	ND	30.
75-15-0	CARBON DISULFIDE	ND	5.
56-23-5	CARBON TETRACHLORIDE	ND	5.
108-90-7	CHLOROBENZENE	ND	5.
75-00-3	CHLOROETHANE	ND	30.
110-75-8	2-CHLOROETHYLVINYL ETHER	ND	50.
67-66-3	CHLOROFORM	ND	5.
74-87-3	CHLOROMETHANE	ND	30.
108-41-8	CHLOROTOLUENE	ND	5.
124-48-1	DIBROMOCHLOROMETHANE	ND	5.
95-50-1	1,2-DICHLOROBENZENE	ND	5.
541-73-1	1,3-DICHLOROBENZENE	ND	5.
106-46-7	1,4-DICHLOROBENZENE	ND	5.
75-34-3	1,1-DICHLOROETHANE	ND	5.
107-06-2	1,2-DICHLOROETHANE	ND	5.
75-35-4	1,1-DICHLOROETHYLENE	ND	5.
156-59-4	CIS-1,2-DICHLOROETHYLENE	ND	5.
156-60-5	TRANS-1,2-DICHLOROETHYLENE	ND	5.
78-87-5	1,2-DICHLOROPROPANE	ND	5.
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	5.
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	5.
100-41-4	ETHYLBENZENE	ND	5.
106-93-4	ETHYLENE DIBROMIDE	ND	5.
76-13-1	FREON-TF	ND	5.
119-78-6	2-HEXANONE	ND	30.
75-09-2	METHYLENE CHLORIDE	ND	30.
108-10-1	4-METHYL-2-PENTANONE (MIBK)	ND	30.
100-42-5	STYRENE	ND	5.
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	5.
127-18-4	TETRACHLOROETHYLENE	ND	5.
109-99-9	TETRAHYDROFURAN	ND	30.
108-88-3	TOLUENE	ND	5.
71-55-6	1,1,1-TRICHLOROETHANE	ND	5.
79-00-5	1,1,2-TRICHLOROETHANE	ND	5.
79-01-6	TRICHLOROETHYLENE	ND	5.
75-69-4	TRICHLOROFLUOROMETHANE	ND	5.
108-05-4	VINYL ACETATE	ND	30.
75-01-4	VINYL CHLORIDE	ND	30.
95-47-6	TOTAL XYLENES	ND	5.

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT: TERRA TECH LABS
WCAS JOB #: 13790

SAMPLE: B1-D41.5

UNITS: UG/KG (PPB)

	COMPOUND NAME	FRACTION	APPROXIMATE CONCENTRATION
1	NONE FOUND	VOA	

WCAS
WEST COAST
ANALYTICAL
SERVICE, INC.
ANALYTICAL CHEMISTS

November 13, 1989

TERRA-TECH LABS
16371 Gothard Street, Suite G
Huntington Beach, CA 92647

Dear Ms. Dierl:

We understand that another laboratory found traces of Acetone and MIBK in two soils which we also analyzed (WSAC JN13790, samples: B1-D1 & B1-D41.5). We did not find any Acetone or MIBK in either of these samples. Even though we reported a detection limit of 30ppb, there was not even a trace of any ions from these components.

There are several possible explanations for this. Components present at such low levels may be observed sometimes but not others due to sample non-homogeneity or natural sampling and analytical error. Have you checked with the other lab to make sure that (1) the observed peaks met some minimum MS indentification criteria, (2) that the components were not present in their blank, and (3) that the components were not due to carry-over from samples previously analyzed. We do not doubt the validity of their results, however confirmation of components such as these at ppb levels is very difficult for reasons stated above.

Sincerely,
WEST COAST ANALYTICAL SERVICE, INC.

Shelley Stuart
Senior Chemist

D.J. Northington, Ph.D.
President/Technical Director

JN/mg H:TERTEC.N13

[illegible] Avenue • Santa Fe Springs, California 90670 • 213 948 2225 • FAX 213 948 3850

Client: Graham Printing and Lithograph

Client Project #

Project Name: Graham Printing and Lithograph

Site Address: 1775 Gale Avenue, City of Industry, CA

Sampler's Signature: Brian K. Kato

Project # 1037-1

Date 9/27/04 Page 1 of 1

SAMPLE CONDITION
Rec'd on ice yes/no
Sealed Container yes/no

TURNAROUND REQUESTED
☐ 8 Hours ☐ 24 Hours
☐ 72 Hours ☒ 7 Days

Analysis Requested

Sample ID	Sample Location	Date	Time	Modified EPA Method 8015 (TPH)	EPA Method 8020 (BTXE)	EPA Method 418.1 (TPH)	Other: note 8240 EPA PQL's 5-10			Number of Containers	SAMPLE TYPE/CONTAINER
B1 D1	Boring 1 @ 1' Below Grade	9/27	7:40				X			1	Soil/Brass Sleeve
B1 D5	Boring 1 @ 5' Below Grade		7:48	Archive			Only		Remark	1	Soil/Brass Sleeve
B1 D10	Boring 1 @ 10' Below Grade		7:52	Archive			Only			1	Soil/Brass Sleeve
B1 D15	Boring 1 @ 15' Below Grade		8:14	Archive			Only			1	Soil/Brass Sleeve
B1 D20	Boring 1 @ 20' Below Grade		8:35	Archive			Only			1	Soil/Brass Sleeve
B1 D25	Boring 1 @ 25' Below Grade		8:50	Archive			Only			1	Soil/Brass Sleeve
B1 D30	Boring 1 @ 30' Below Grade		9:30	Archive			Only			1	Soil/Brass Sleeve
B1 D35	Boring 1 @ 35' Below Grade		10:00	Archive			Only			1	Soil/Brass Sleeve
B1 D40	Boring 1 @ 40' Below Grade		10:25				X			1	Soil/Brass Sleeve
B1 D45	Boring 1 @ 45' Below Grade		11:00	For Sleeve			Test			1	Soil/plastic bag
										10	Total Number of Containers

Relinquished by (Signature)	Date	Received by: (Signature)	Date
Brian K. Kato	9/27/04 9/27		
Company: Terra Tech Labs, Inc	Time 17:00	Company:	Time
Relinquished by (Signature)	Date	Received by Laboratory: (Signature)	Date
Company	Time	Company:	Time

TERRA TECH LABS, INC.
16371 Gothard St., Suite G
Huntington Beach, CA 92647
Tel (714) 842 6077

November 8, 1989

WCAS
WEST COAST ANALYTICAL SERVICE, INC.
ANALYTICAL CHEMISTS

TERRA TECH LABS, INC.
16371 Gothard Street, Suite G
Huntington Beach, CA 92647

Attn: Lisa Newcombe Dierl

JOB NO. 14034

LABORATORY REPORT

Samples Received: One (1) liquid in five (5) containers
Date Received: 10-30-89
Purchase Order No: Proj#: 1037-1/Graham Printing

The sample was analyzed as follows:

Samples Analyzed	Analysis	Results
One (1) liquid	Halogenated and Aromatic Volatile Organics by EPA 601/602	Data Sheet
One (1) liquid	Total Suspended Solids by EPA 160.2	Table I
One (1) liquid	Settleable Solids by EPA 160.5	Table I
One (1) liquid	Turbidity by EPA 180.1	Table I

B. Michael Hovanec
Senior Staff Chemist

for Shelley Stuart
D. J. Northington, Ph.D.
Technical Director

1564 Alburtus Avenue • Santa Fe Springs, California 90670 • 213 948-2225 • FAX 213 948-5181

WEST COAST ANALYTICAL SERVICE, INC.

TERRA TECH LABS, INC.
Ms. Nancy Newcombe Dierl

Job # 14034
November 8, 1989

LABORATORY REPORT

TABLE I

	Sample MW-1	Detection Limit
Total Suspended Solids, (mg/L)	920	4
Settleable Solids, (ml/L)	6.4	0.4
Turbidity, NTU	400	0.01

Date Analyzed: 11-6-89

CHAIN OF CUSTODY RECORD

Client	Client Project # GRAHAM PRINTING & LITHOGRAPH
Project Name	GRAHAM PRINTING & LITHOGRAPH
Site Address	17475 GALE AVENUE CITY OF INDUSTRY, CA
Sampler's Signature	[illegible]

Project # 1037-1

Date 10/30/89 Page 1 of 1

SAMPLE CONDITION
Rec'd on ice yes/no
Sealed Container yes/no

TURNAROUND REQUESTED:
☐ 8 Hours ☐ 24 Hours
☐ 72 Hours ☒ 7 Days

Analysis Requested

Sample ID	Sample Location	Date	Time	Modified EPA Method 8015 (TPH)	EPA Method 8020 (BTXE)	EPA Method 418.1 (TPH)	624 *	TOTAL SUSPENDED SOLIDS **	TOTAL SETTABLE SOLIDS **	TURBIDITY (NTU)	Number of Containers	SAMPLE TYPE/CONTAINER
[illegible]	[illegible]	10/30/89	10:35 AM				X	X	X	X	5	GLASS JARS & WATER / EPA VIALS

* PRL ~~DETECTION LIMIT~~ MUST NOT EXCEED 0.5 ppb ~~[illegible]~~

** USE HIGHEST SENSITIVITY

Relinquished by: (Signature)	Date	Received by: (Signature)	Date	Total Number of Containers
[illegible]	[illegible]			5
Company: [illegible]	Time [illegible]	Company: 14034	Time	
Relinquished by: (Signature)	Date	Received by Laboratory: (Signature) [illegible]	Date 10-30-89	
Company:	Time	Company: WCAS	Time 11:25 AM	

TERRA TECH LABS, INC.
16371 Gothard St., Suite G
Huntington Beach, CA 92647
Tel. (714) 842-6077

.ient: TERRA TECH LABS.
Job No: 14034
Date
Analyzed: 30-Oct-89
Analysis: EPA 601/602 (8010/8020)

Sample: MW-1

Matrix: Water
Samp Amt: 5 mL
Dil Fact: 1

Compound	Concentration ug/L	Detection Limits
Chloromethane	ND	1
Bromomethane	ND	1
Vinyl Chloride	ND	0.6
Chloroethane	ND	1
Methylene Chloride	ND	5
1,1-Dichloroethylene	ND	0.6
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethylene	ND	0.3
Trichlorofluoromethane	ND	0.4
Chloroform	ND	0.3
1,2-Dichloroethane	ND	0.4
1,1,1-Trichloroethane	ND	0.3
Carbon Tetrachloride	ND	0.3
Bromodichloromethane	ND	0.3
1,1,2,2-Tetrachloroethane	ND	0.3
1,2-Dichloropropane	ND	0.3
trans-1,3-Dichloropropylene	ND	0.3
Trichloroethylene	ND	0.3
Dibromochloromethane	ND	0.3
1,1,2-Trichloroethane	ND	0.3
Benzene	ND	0.2
cis-1,3-Dichloropropylene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.8
Bromoform	ND	0.5
Tetrachloroethylene	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.3
Ethylbenzene	ND	0.2
Total Xylenes	ND	0.2
1,3-Dichlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

ND-Not Detected. The limit of detection is reported above.