BW TRUSTS' MAY 22, 2006
RESPONSE TO CERCLA 104(e) INFORMATION REQUEST – NHOU

CONTINUED – VOLUME 3 OF 4

L-5 CONT'D.

Site Investigations: Evaluation of PCE Impacts to Shallow Soils at 11310 Sherman Way, Sun Valley, CA

Volume II: Appendices

March 25, 1996

Prepared for:

Hawker Pacific, Inc.
and
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and
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Prepared by:

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Appendix A

Boring Logs

GERAGHTY & MILLER, INC.

STRATIGRAPHIC LOG – SOIL BORING

PROJECT Hawker Pacific
LOCATION 11310 Sherman Way, N. Hollywood
DRILL METHOD Sonic Advancement
SAMPLING METHOD Continuous Core
BOREHOLE DIAMETER 4 inches

PROJECT NO. CA0228.001.004
LOGGED BY Steve Frambach
DRILL CO. Water Development
RIG TYPE Sonicating Rig
DRILLER Mike/Doyle/Dave

BORING/WELL G-1
DATE STARTED 1/11/94
DATE COMPLETED 1/13/94
BORING DEPTH 86 ft.

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLONS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
						SP		Coarse to very coarse SAND, poorly sorted, sub-round to angular, some pebbles of igneous origin (1-3cm), and some fines (5%); dry, dense. APPEARS TO BE FILL MATERIAL. (2.5Y 7/4, pale yellow)	
								← Slight cohesion of some grains (2")	
	27"			9					
5					7			← Medium to very coarse SAND, as before, more fines (8-10%), and micaceous.	5
	18"		*	*	8				
					8				
								← Becoming finer grained, poorly sorted. Fines ~10% here, less pebbles	
	22"								
10					9	GP			10
	18"		*	*	10			← SAND, some pebbles approach 5-7mm, though fewer in number than previous. loose to medium dense, slightly damp.	
					14				
								(FILL MATERIAL)	
								(NATURAL MATERIAL)	
								← SAND, some silt, still with large (1-2 cm) pebbles (~20%). Appears to be natural fill.	
	22"			9					
15					7			← Fine to coarse SAND, large cobbles of granitic and quartzose material in spoon, loose, damp.	15
	18"			*	8				
					8				
								← Iron staining, moist and med. dense w/ fines.	
	40"		*			GP		← Dark grey zone with cobbles (mafic, gabbroic, phaneritic. Obvious igneous). Sample for TPH quant. Fine SAND with silt below cobble. Medium coarse, stratified (laminate). Trace fines and pebbles.	
						SP			
20									20

GERAGHTY & MILLER, INC. STRATIGRAPHIC LOG - SOIL BORING

(continuation)

PROJECT Hawker Pacific PROJECT NO CA0228.001.004 BORING/WELL NO. G-1

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
	18"		*	*	9 8 10	SP		Top 2" of sample dark brown (7.5 YR 4/4), SAND with silt and large coarse sand grains and pebbles (~ 5%), moist to damp.	
	48"							Becoming fine to medium SAND with larger grains (15-20%), light grey, loose, moist.	
								(light yellow/brown, 10 YR 4/4)	
								3" continuous core. medium SAND. with coarse fractions (10%). some large (>5cm) cobbles in core, mildly stratified in areas. angular to sub-round, very dense, damp.	
25						GP			25
	12"			*	5 8	SP		Fine SAND with coarse grains (20%), trace pebbles (5%). some fines (8-10%), light brown/grey (2.5Y 8/2). damp.	
								Fine (50%) to coarse (40%) SAND. 10% other. greyish brown (2.5Y 5/2). loose. moist.	
	40"			9				Medium coarse SAND. light olive brown (2.5Y 5/4-5/8), angular to subrounded grains. poorly sorted, medium dense. damp.	
30								Dipping strata, sub-round. poorly sorted. damp.	30
	18"		*	*	8 15 19			Fine to very fine SAND with pebbles at top and coarse sand grains (15-20%), medium to medium coarse at bottom, damp, loose.	
	23"					GP		Fine SAND with pebbles, some silt (10%). pale olive (2.5Y 5/4), damp at top, slightly damp at bottom.	
35									35
								No drive sample - large cobble in hole.	
	60"			9		SM		Fine to very fine SAND, with silt (20-25%) and pebbles. pebbles and cobbles on occasion, stongly dipping sediments in the bottom of the sample (apparent dip: 28 deg SW), poorly sorted, angular to sub-angular at top (36'-37'), silt content turning sandy (fine), medium dense to dense. damp.	
						SP			
40									40

GERAGHTY & MILLER, INC. STRATIGRAPHIC LOG - SOIL BORING

(continuation)

PROJECT Hawker Pacific PROJECT NO CA0228.001.004 BORING/WELL NO. G-1

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
	80"					SP		RECOVERY CONTINUOUS TO DEPTH	
				*	10 20 20			Fluvial gradational deposits - seasonal. Generally proceeds from fine grained to coarse to fine again. Top of sample (41'-42.5'), fine SAND, with angular pebbles (igneous), strata dipping 20-25 deg SW, moist.	
	80"							Becomes coarse SAND at 43' - 43.5', then large cobbles to 44'	
						GP		Becomes large cobbles, with fine sand matrix to 44'.	
						SP			
45									45
								Back to fine SAND. three depositional pos.	
								Fine to very coarse SAND, cobbles to 48', angular to sub-rounded, poorly sorted.	
	80"								
50									50
						SM		Very coarse SAND, with fines (10%) and cobbles (15%), dense to very dense, slightly damp to damp.	
			*	*	11	GP		Very coarse SAND, fine gravel mixture, with fines (30-35%), mainly fine to medium sand, loose at top, damp.	
					20				
				9	17				
	80"					SP		Becoming finer grained at 53' to 54'. Then large cobbles in poorly sorted, fine to very coarse SAND some silt (10%). Some cobbles fill entire sample (3").	
						GP			
55									55
						SP		Very coarse SAND at top, dense, damp. Finer here, medium dense, damp.	
	80"								
						GP		Cobble layer at 59'. (2.5cm to 5 cm, 1' thick).	
						SP			
60									60

GERAGHTY & MILLER, INC.

STRATIGRAPHIC LOG - SOIL BORING

(continuation)

PROJECT Hawker Pacific PROJECT NO CA0228.001.004 BORING/WELL NO. G-1

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
	80"					SP			
				*	10 22 24	GP		Some cobbles in very coarse poorly sorted at top.	
						SW		Changes to fine SAND, some silt content, homogenous, damp to moist.	
				9					
65						SP			65
								Changes back to coarse with cobble at bottom.	
					5	SW		Fine SAND with silt, dense at top, moist.	
			*	*	30 60	SP		Medium SAND, less silt, poor sorting, damp.	
						GP		Large cobbles present throughout the core - some the whole diameter of the core.	
70						SP		Mainly medium coarse SAND, some fine sand (~10%), no apparent dip in this sample.	70
				*	48 80/4			Mainly fine to medium SAND, some fines (~10-15%), poorly sorted matrix.	
						GP		Large cobbles all the way through section, medium dense, slightly damp to damp.	
75						SP		Becomes coarse SAND matrix, loose.	75
								Very fine SAND, fine (25%) and cobbles/pebbles (20%), medium dense, damp.	
						GP		Cobble layer - 70% cobbles most fill core, some larger but broken in core.	
								Fine to medium, poorly sorted SAND, dense, slightly damp.	
80									80

GERAGHTY & MILLER, INC.

STRATIGRAPHIC LOG - SOIL BORING

(continuation)

PROJECT Hawker Pacific PROJECT NO CA0228.001.004 BORING/WELL NO. G-1

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
						GP		← Coarse Sand, some cobbles, open, slightly damp.	
			*	*	3 20 120			Core is very hot - hard to remove from hole, broken shoe, crimped sampler.	
	60"							Course SAND matrix, some cobbles, dense, slightly damp.	
85									85
								End of boring at 86 feet. Refusal on dense layer.	
90									90
95									95
100									100

GERAGHTY & MILLER, INC.

STRATIGRAPHIC LOG - SOIL BORING

PROJECT Hawker Pacific
LOCATION 11310 Sherman Way, N. Hollywood
DRILL METHOD Sonic Advancement
SAMPLING METHOD Continuous Core
BOREHOLE DIAMETER 4 Inches

PROJECT NO. CA0228.001.004
LOGGED BY Steve Frambach
DRILL CO. Water Development
RIG TYPE Sonicating Rig
DRILLER Mike/Doyle/Dave

BORING/WELL G-2
DATE STARTED 1/15/94
DATE COMPLETED 1/15/94
BORING DEPTH 40.7 ft.

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
						SP			
	24"							← SAND and fill, some asphalt pieces, light grey (2.5Y 7/2), loose.	
								← Becoming coarse and stratified, light brown/grey (2.5Y 6/2), poorly sorted, loose, slighlty damp.	
5	18"		*	*	12 13 13			← Medium to coarse SAND, trace fines, poorly sorted, micaceous, loose, damp.	5
	24"							← Medium SAND, poorly sorted, dense, damp. ← 30% coarse"+" grains, some pebbles ~5-10% throughout. ← Becoming medium dense at bottom, metal shard in bottom of sample.	
10	18"		*	*	8 12 12				10
	36"				9			← Medium grained, poorly sorted as before, medium dense to loose in drive sample, damp. ← Fine SAND, with fines ~15%. ← Very coarse grained, loose, 40% pebble size. Coarse SAND, poorly sorted, damp.	
15								← Medium SAND, 5% pebbles, poorly sorted, medium dense to loose, damp.	15

GERAGHTY & MILLER, INC. STRATIGRAPHIC LOG - SOIL BORING

(continuation)

PROJECT Hawker Pacific PROJECT NO CA0228.001.004 BORING/WELL NO. G-2

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
	18"			*	3 3 5	SP		← Same as above. ← Becoming fine SAND matrix, 20% coarse and large cobbles in bottom.	
	41"					GP		← Large cobbles (~3cm) in medium matrix, poorly sorted, dense, damp. ← Medium grained, matrix, 20% pebbles, 30% coarse (very coarse grains), dense, damp, (2.5 Y 6/4). ← Coarse grained matrix, some large pebbles, 2-4 cm, dense, striated (no dip), becoming medium to fine at bottom.	
20	18"		*	*	18 27 27			← Pebbles (~15%), some coarse grians (20%), coarse at bottom, olive brown (2.5Y 5/4), firm at top, dense, damp.	20
	41"							← Medium to coarse grained matrix, 10% pebbles, dense, slightly damp, (2.5Y 5/4). ← Medium grrained, poorly sorted, darker in color (2.5Y 5/2), weathering features, slightly damp. ← Broken cobbles and rocks in coarse grained matrix, dense, slightly damp, (2.5Y 6/2).	
25	18"			*	23 40 31 9	SP		← Sample becomes fine grained at bottom, trace pebbles, trace fines (5%), still, poorly sorted, but nearly homogenous grain size, (2.5Y 6/2).	25
	41"							← Coarse to very coarse grained matrix, dense, angular/broken angular cobbles (20%) to 3cm. slightly damp, (2.5Y 6/2). ← Medium coarse grained, poorly sorted matrix with some angular cobbles, looser toward bottom, slightly damp, (2.5Y 6/4).	
30						GP			30

GERAGHTY & MILLER, INC. STRATIGRAPHIC LOG - SOIL BORING

(continuation)

PROJECT Hawker Pacific PROJECT NO CA0228.001.004 BORING/WELL NO. G-2

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
	18"		*	*	7 11 20	GP		Medium to very coarse SAND with cobbles at top, (2.5Y 7/4).	
	40"		*			SP		Becoming finer grained at bottom (no fines), medium SAND matrix, trace pebbles (~4%), poor sorting, medium dense, damp, (2.5Y 7/4). Coarse grained matrix, very dense SAND, angular, slightly damp, (high energy environment), (2.5Y 5/4). Finer grained, angular, very damp, (2.5Y 5/4). Becoming coarse grained, (2.5Y 5/4). Finer grained here, (2.5Y 7/4) Coarse grained at bottom, (2.5Y 7/4)	
35	18"		*	*	12 22 22	GP		Medium coarse grained matrix, angular fractions (pebbles, very coarse sand), dense, (2.5Y 8/4). Damp (good physical sample), (2.5Y 8/4).	35
	36"			9		SP		Same lithology as surrounding, but with fines (~20% or more in places), weathering feature/depositional feature, (2.5Y 5/2). Medium coarse grained matrix, some fine layers <1", dense, damp, (2.5Y 7/1). Striated, but as above, medium dense, damp, (2.5Y 7/2).	
40			*	*				Medium coarse grained matrix, medium dense, damp, (2.5Y 7/2).	40
								End of boring at 40.7 feet.	
45									45

GERAGHTY & MILLER, INC. — STRATIGRAPHIC LOG – SOIL BORING

PROJECT Hawker Pacific
LOCATION 11310 Sherman Way, N. Hollywood
DRILL METHOD Sonic Advancement
SAMPLING METHOD Continuous Core
BOREHOLE DIAMETER 4 inches

PROJECT NO. CA0228.001.004
LOGGED BY Steve Frambach
DRILL CO. Water Development
RIG TYPE Sonicating Rig
DRILLER Mike/Doyle/Dave

BORING/WELL G-3
DATE STARTED 1/14/94
DATE COMPLETED 1/14/94
BORING DEPTH 25 ft.

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
						SP			
	42"							Medium to very coarse SAND, medium dense at top, some pebbles (~10%), (2.5Y 6/4).	
								Becoming medium to coarse grained, loose, (2.5Y 6/4).	
				9				3" fine to medium SAND, some coarse grains (~8%), moist (2.5Y 6/4).	
								Back to medium to very coarse SAND, pebbles (~10%) 1-2cm, medium dense, damp, (2.5Y 5/4).	
5	18"		*	*	10 9 11			Medium SAND, with coarse to very coarse grains, some pebbles as before, medium dense, damp to very damp.	5
						GP		Medium SAND matrix at top (6.5-8), poorly sorted, (2.5Y 6/2).	
	42"							Coarse to very coarse medium SAND, with cobbles and pebbles (20-30%), as big as 4 cm, dense, damp, (2.5Y 6/6).	
								Becoming fine sandy matrix.	
						SP			
				9				Some coarse sand (~10%), medium dense, very damp, (2.5Y 6/6).	
10	18"		*	*	9 10 8			Medium to very coarse SAND, poorly sorted with pebbles and fewer cobbles, medium dense, damp.	10
	42"							Medium to coarse grained, poorly sorted, some pebbles ~15%, discolorative clast noticed, or little finer than outside, (2.5Y 6/2).	
								Becoming coarse to very coarse SAND, loose, poorly sorted, (2.5Y 6/6).	
				9				Fine SAND, trace silt, medium dense, moist, (2.5Y 4/4).	
15	18"			*	9 12 10			Becomes poorly sorted fine to coarse SAND, pebbles, damp.	15
								Fine to coarse SAND, little or no fines, medium dense to loose, damp.	
	38"					GP		Same as above, some pebbles .5-1 cm and trace cobbles 3-4 cm and few weathering features (darker seds).	
						SP		Coarse to very coarse SAND, striations at 19' no dip.	
20									20

GERAGHTY & MILLER, INC. STRATIGRAPHIC LOG - SOIL BORING

(continuation)

PROJECT Hawker Pacific PROJECT NO CA0228.001.004 BORING/WELL NO. G-3

DEPTH (ft)	RECOVERY %	SAMP.RANGE	Chem.Analy	Phys.Analy	BLOWS/FT*	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION OF MATERIAL	DEPTH (ft)
	18"		*	*	10 14 22	SP			
								← Medium coarse poorly sorted SAND, some fines at top, medium dense, damp.	
	38"					GP		← SAND as above, more coarse grains (~55%) to medium grains (20%), pebbles (5-8%) .5-1.5cm, medium dense to dense, damp.	
25	6"		*					Drive sampler on rock, will no go down, retrieve one ring for analysis. End boring at 25 feet. Put on locking well cap.	25
30									30
35									35
40									40

Appendix B

BC Laboratory
Analytical Data

BC LABORATORIES

RECEIVED MAY 11 1994 GERAGHTY & MILLER

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-1

Sample Description: CA0228.001.004 G-1 (5-6.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

California D.O.H.S. Cert. #1186

Stuart S. Buttram
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-1

Sample Description: CA0228.001.004 G-1 (5-6.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-1

Sample Description: CA0228.001.004 G-1 (5-6.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

California D.O.H.S. Cert. #1186

Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-2

Sample Description: CA0228.001.004 G-1 (10-11.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

California D.O.H.S. Cert. #1186

Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

4100 Atlas Ct. • Bakersfield, CA 93308 • (805) 327-4911 • FAX (805) 327-1918

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-2

Sample Description: CA0228.001.004 G-1 (10-11.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-2

Sample Description: CA0228.001.004 G-1 (10-11.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

California D.O.H.S. Cert. #1186

Stuart S. Buttram
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-4

Sample Description: CA0228.001.004 G-1 (20'-21.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

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Stuart S. Sullivan
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-4

Sample Description: CA0228.001.004 G-1 (20'-21.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-4

Sample Description: CA0228.001.004 G-1 (20'-21.5) SAMPLED ON 1-11-94 BY S. FRAMBACH

California D.O.H.S. Cert. #1186

Stuart S. Nutham
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-6

Sample Description: CA0228.001.004 G-1 (31'-32.5') SAMPLED ON 1-11-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

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Stuart S. Putnam
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-6

Sample Description: CA0228.001.004 G-1 (31'-32.5') SAMPLED ON 1-11-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-6

Sample Description: CA0228.001.004 G-1 (31'-32.5') SAMPLED ON 1-11-94 BY S. FRAMBACH

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Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-8

Sample Description: CA0228.001.004 G-1 (51'-52.5') SAMPLED ON 1-11-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

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Department Supervisor

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-8

Sample Description: CA0228.001.004 G-1 (51'-52.5') SAMPLED ON 1-11-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-8

Sample Description: CA0228.001.004 G-1 (51'-52.5') SAMPLED ON 1-11-94 BY S. FRAMBACH

California D.O.H.S. Cert. #1186

Department Supervisor

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BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-10

Sample Description: CA0228.001.004 G-1 (66'-67.5') SAMPLED ON 1-12-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/12/94	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

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Stuart S. Putman
Department Supervisor

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-10

Sample Description: CA0228.001.004 G-1 (66'-67.5') SAMPLED ON 1-12-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/12/94	01/13/94	01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-10

Sample Description: CA0228.001.004 G-1 (66'-67.5') SAMPLED ON 1-12-94 BY S. FRAMBACH

California D.O.H.S. Cert. #1186

Steven S. Putnam
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-12

Sample Description: CA0228.001.004 G-1 (81'-82.5') SAMPLED ON 1-12-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/12/94	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	12.	mg/kg	10.

Note: Sample chromatogram not typical of diesel.

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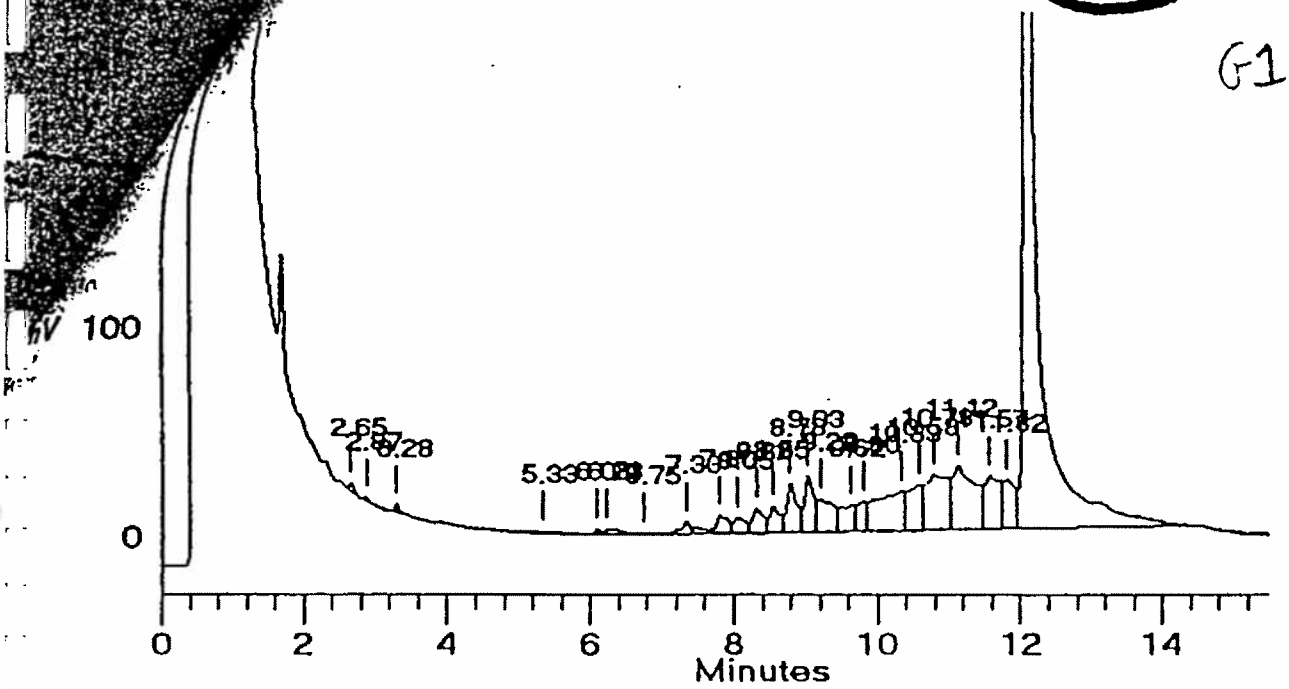
C:\DX\DATA\JAN14941.D23 Sample: 443-12 443-20

G1 (81'-82.5')



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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-12

Sample Description: CA0228.001.004 G-1 (81'-82.5') SAMPLED ON 1-12-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/12/94	01/13/94	01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-12

Sample Description: CA0228.001.004 G-1 (81'-82.5') SAMPLED ON 1-12-94 BY S. FRAMBACH

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Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

BC LABORATORIES

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date Reported: 01/21/94
Date Received: 01/13/94
Laboratory No.: 94-00443-13

Sample Description: CA0228.001.004 G-1 (4') SAMPLED ON 1-11-94 BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	3.7	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

Department Supervisor

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BC LABORATORIES

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date Reported: 01/21/94 Page 1
Date Received: 01/13/94
Laboratory No.: 94-00443-14

Sample Description: CA0228.001.004 G-1 (14') SAMPLED ON 1-11-94 BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	4.0	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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BC LABORATORIES

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date Reported: 01/21/94
Date Received: 01/13/94
Laboratory No.: 94-00443-15

Sample Description: CA0228.001.004 G-1 (28') SAMPLED ON 1-11-94 BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	3.7	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

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BC LABORATORIES

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date Reported: 01/21/94 Page 1
Date Received: 01/13/94
Laboratory No.: 94-00443-16

Sample Description: CA0228.001.004 G-1 (37') SAMPLED ON 1-11-94 BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	3.9	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

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GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date Reported: 01/21/94 Page 1
Date Received: 01/13/94
Laboratory No.: 94-00443-17

Sample Description: CA0228.001.004 G-1 (53') SAMPLED ON 1-11-94 BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	2.3	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

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GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date Reported: 01/21/94 Page 1
Date Received: 01/13/94
Laboratory No.: 94-00443-18

Sample Description: CA0228.001.004 G-1 (64') SAMPLED ON 1-11-94 BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	9.5	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

Department Superviser

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BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-19

Sample Description: CA0228.001.004 G-1 (18') SAMPLED ON 1-11-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected: 01/11/94

Date Sample Received @ Lab: 01/13/94

Date Analysis Completed: 01/17/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	35.	mg/kg	10.

Note: Sample chromatogram not typical of diesel.

California D.O.H.S. Cert. #1186

Department Supervisor

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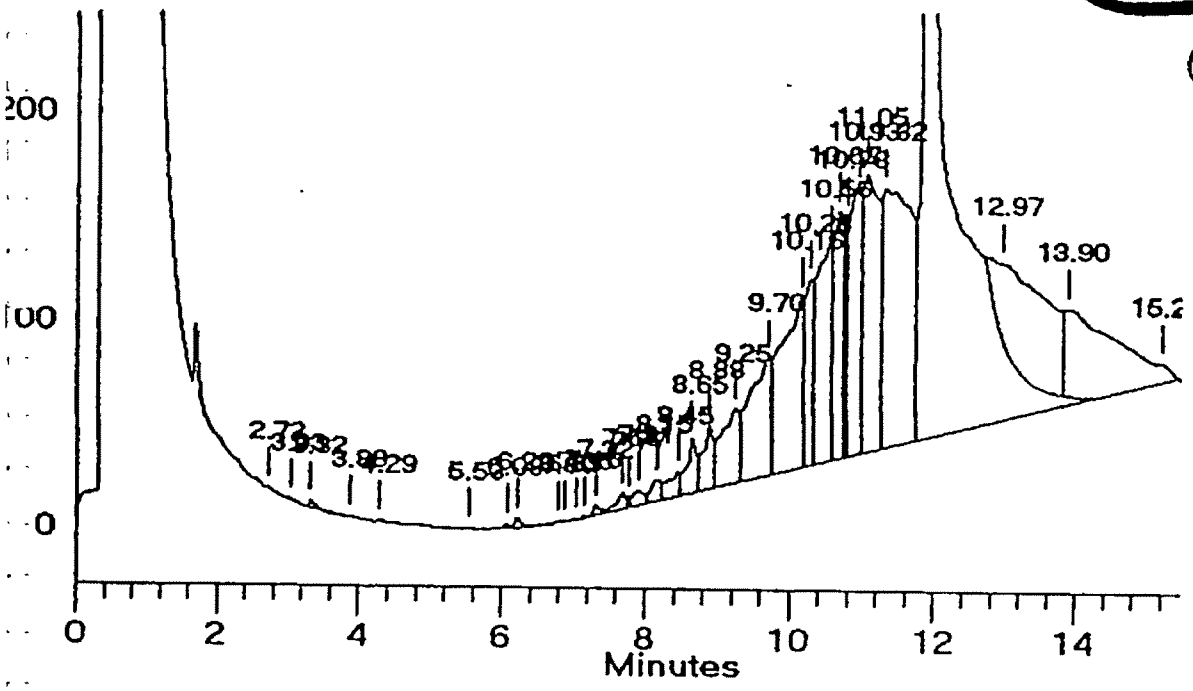
File: C:\DX\DATA\JAN17942.D08 Sample: 415-7443-19

G1-(18')



BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-20

Sample Description: CA0228.001.004 G-1 (81'-86') SAMPLED ON 1-12-94 BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/12/94	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	20.	mg/kg	10.

Note: Sample chromatogram not typical of diesel.

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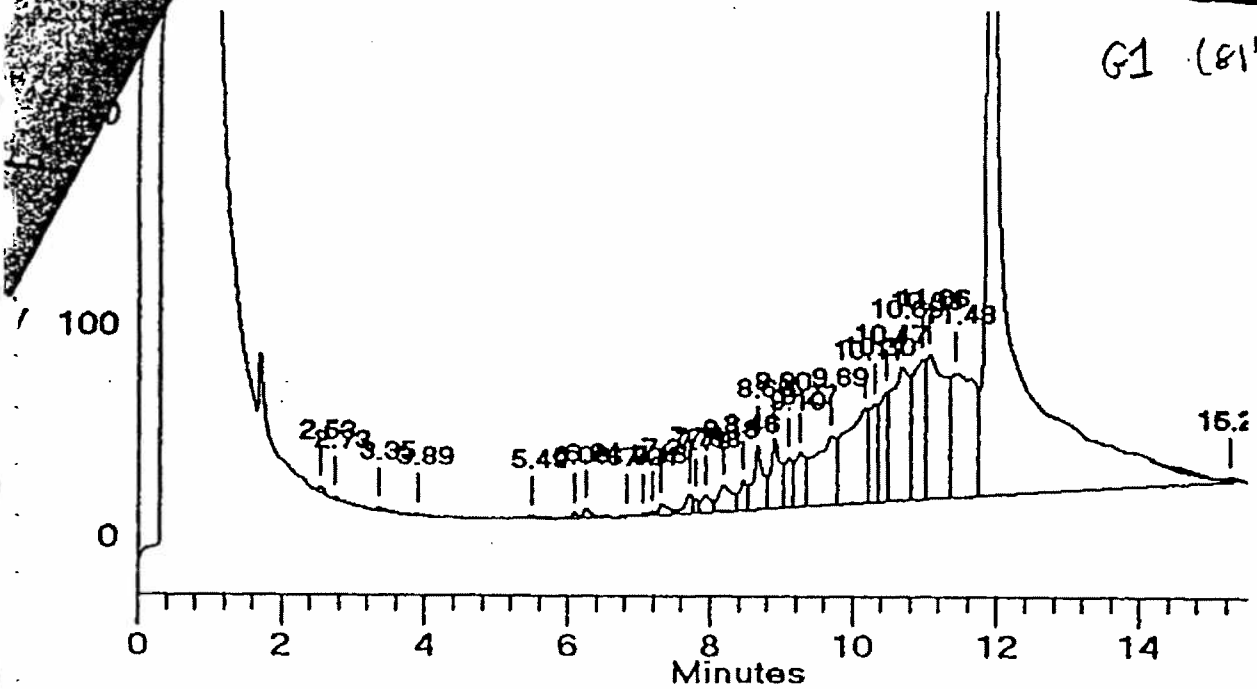
le: C:\DX\DATA\JAN14942.D23 Sample: 443-12, 443-20

G1 (81'-86')



BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-20

Sample Description: CA0228.001.004 G-1 (81'-86') SAMPLED ON 1-12-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected: 01/12/94

Date Sample Received @ Lab: 01/13/94

Date Analysis Completed: 01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-20

Sample Description: CA0228.001.004 G-1 (81'-86') SAMPLED ON 1-12-94 BY S. FRAMBACH

California D.O.H.S. Cert. #1186

Stuart S. Putnam
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-21

Sample Description: CA0228.001.004 RINSATE (BRASS TUBE) SAMPLED ON 1-12-94 BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: WATER

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/11/94	01/13/94	01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	µg/L	0.005
Bromodichloromethane	None Detected	µg/L	0.005
Bromoform	None Detected	µg/L	0.005
Bromomethane	None Detected	µg/L	0.005
Carbon tetrachloride	None Detected	µg/L	0.005
Chlorobenzene	None Detected	µg/L	0.005
Chloroethane	None Detected	µg/L	0.005
Chloroform	None Detected	µg/L	0.005
Chloromethane	None Detected	µg/L	0.005
Dibromochloromethane	None Detected	µg/L	0.005
1,2-Dichlorobenzene	None Detected	µg/L	0.005
1,3-Dichlorobenzene	None Detected	µg/L	0.005
1,4-Dichlorobenzene	None Detected	µg/L	0.005
Dichlorodifluoromethane	None Detected	µg/L	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	µg/L	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	µg/L	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	µg/L	0.005
Total 1,2-Dichloroethene	None Detected	µg/L	0.005
1,2-Dichloropropane	None Detected	µg/L	0.005
cis-1,3-Dichloropropene	None Detected	µg/L	0.005
trans-1,3-Dichloropropene	None Detected	µg/L	0.005
Ethyl Benzene	None Detected	µg/L	0.005
Methylene chloride	None Detected	µg/L	0.005
1,1,2,2-Tetrachloroethane	None Detected	µg/L	0.005
Tetrachloroethene (PCE)	None Detected	µg/L	0.005
Toluene	None Detected	µg/L	0.005
1,1,1 Trichloroethane	None Detected	µg/L	0.005
1,1,2 Trichloroethane	None Detected	µg/L	0.005
Trichloroethene	None Detected	µg/L	0.005
Trichlorofluoromethane	None Detected	µg/L	0.005
Vinyl chloride	None Detected	µg/L	0.005

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-21

Sample Description: CA0228.001.004 RINSATE (BRASS TUBE) SAMPLED ON 1-12-94 BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	µg/L	0.01
Total Trihalomethanes	None Detected	µg/L	0.02

California D.O.H.S. Cert. #1186

Stuart S. Rattiam
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-22

Sample Description: CA0228.001.004 TRIP BLANK S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: WATER

Date Sample Collected:

Date Sample Received @ Lab: 01/13/94

Date Analysis Completed: 01-14-94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	µg/L	0.005
Bromodichloromethane	None Detected	µg/L	0.005
Bromoform	None Detected	µg/L	0.005
Bromomethane	None Detected	µg/L	0.005
Carbon tetrachloride	None Detected	µg/L	0.005
Chlorobenzene	None Detected	µg/L	0.005
Chloroethane	None Detected	µg/L	0.005
Chloroform	None Detected	µg/L	0.005
Chloromethane	None Detected	µg/L	0.005
Dibromochloromethane	None Detected	µg/L	0.005
1,2-Dichlorobenzene	None Detected	µg/L	0.005
1,3-Dichlorobenzene	None Detected	µg/L	0.005
1,4-Dichlorobenzene	None Detected	µg/L	0.005
Dichlorodifluoromethane	None Detected	µg/L	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	µg/L	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	µg/L	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	µg/L	0.005
Total 1,2-Dichloroethene	None Detected	µg/L	0.005
1,2-Dichloropropane	None Detected	µg/L	0.005
cis-1,3-Dichloropropene	None Detected	µg/L	0.005
trans-1,3-Dichloropropene	None Detected	µg/L	0.005
Ethyl Benzene	None Detected	µg/L	0.005
Methylene chloride	None Detected	µg/L	0.005
1,1,2,2-Tetrachloroethane	None Detected	µg/L	0.005
Tetrachloroethene (PCE)	None Detected	µg/L	0.005
Toluene	None Detected	µg/L	0.005
1,1,1 Trichloroethane	None Detected	µg/L	0.005
1,1,2 Trichloroethane	None Detected	µg/L	0.005
Trichloroethene	None Detected	µg/L	0.005
Trichlorofluoromethane	None Detected	µg/L	0.005
Vinyl chloride	None Detected	µg/L	0.005
Total Xylenes	None Detected	µg/L	0.01
Total Trihalomethanes	None Detected	µg/L	0.02

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 01/17/94
Lab #: 94-00443-22

Sample Description: CA0228.001.004 TRIP BLANK S. FRAMBACH

California D.O.H.S. Cert. #1186

Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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B C LABORATORIES

B.C. LABORATORIES
QUALITY CONTROL REPORT
(Preparation & Analysis Information)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00443-1, 94-00443-2, 94-00443-4, 94-00443-6, 94-00443-8, 94-00443-10, 94-00443-12, 94-00443-20

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Method 8010/8020 compounds	5030	01/14/94	RL	8010/8020	01/14/94	RL

MS and MSD values have been truncated.

Quality Control Officer

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 02/07/94
Lab #: 94-00443-2MB

Sample Description: CA0228.001.004 METHOD BLANK ANALYSIS

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:

Date Sample Received @ Lab: 01/13/94

Date Analysis Completed: 01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

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BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 02/07/94
Lab #: 94-00443-2MB

Sample Description: CA0228.001.004 METHOD BLANK ANALYSIS

California D.O.H.S. Cert. #1186

Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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1/3/94 12:44

INITIAL CALIBRATION

EPA 8010/8020/601/602 V469

ANALYST: RRL

INSTRUMENT: V3400 GCVI

COMPOUND	RF(1)	RF(2)	RF(3)	RF(4)	RF(5)	RF(AVE)	%RSD
	ppb	ppb	ppb	ppb	ppb		
CH3Cl	189004	160552	155490	145968	123116	154826	13.81
	5.3	13.3	26.7	40.0	53.3		
CH3Br	79032	82645	85681	91803	95112	86855	6.77
	5.3	13.3	26.7	40.0	53.3		
VCL\FREON 12	208923	212664	201617	201758	179715	200935	5.69
	5.3	13.3	26.7	40.0	53.3		
C2H5CL	139929	212603	200605	205281	210667	193817	14.07
	5.3	13.3	26.7	40.0	53.3		
MeCl2	497103	476420	454218	458460	449512	467142	3.75
	2.0	5.0	10.0	15.0	20.0		
CCL3F	336536	332230	306424	316735	332965	324978	3.54
	2.0	5.0	10.0	15.0	20.0		
1.1-DCE	305255	346756	319895	332089	352536	331306	5.23
	2.0	5.0	10.0	15.0	20.0		
MeBrCl (ELCD S	273907	282210	265722	272731	283432	275600	2.37
	6	15	30	45	60		
1.1-DCA	493332	454480	412279	422229	429325	442329	6.57
	2.0	5.0	10.0	15.0	20.0		
C/T-1.2-DCE	377106	367669	339961	353009	366656	360880	3.60
	3.0	7.5	15.0	22.5	30.0		
CHCl3	601114	590943	531374	542649	533977	560011	5.32
	2.0	5.0	10.0	15.0	20.0		
1.2-DCA	380466	384604	359095	365225	374481	372774	2.53
	2.0	5.0	10.0	15.0	20.0		
1.1.1-TCA	400848	433581	413311	406824	432185	417350	3.18
	2.0	5.0	10.0	15.0	20.0		
CCL4	501475	544916	495769	488747	509947	508171	3.87
	2.0	5.0	10.0	15.0	20.0		
CHBrCL2	304546	352280	332832	325252	360252	335032	5.91
	2.0	5.0	10.0	15.0	20.0		
1.2-DCPA	262038	312541	302724	304016	324587	301181	7.00
	2.0	5.0	10.0	15.0	20.0		
C-1.3-DCPE		250123	263628	277520	308595	274966	7.69
	2.0	5.0	10.0	15.0	20.0		
TCE	529107	567563	529048	544826	560949	546299	2.91
	2.0	5.0	10.0	15.0	20.0		
CO-3		254995	249182	258121	268541	257710	2.73

	6.0	15.0	30.0	45.0	60.0		
2-CEVE		62764	73922	70813	83732	*72808*	*10.31*
	6.0	15.0	30.0	45.0	60.0		
CHBr3		124967	117479	123695	130009	*124037*	*3.60*
	4.0	10.0	20.0	30.0	40.0		
1,1,2,2-TCA/PC	196587	267964	213858	254959	255988	237871	11.60
	4.0	10.0	20.0	30.0	40.0		
CHLOROBENZENE	169502	171681	151146	169037	171385	166550	4.67
	2.0	5.0	10.0	15.0	20.0		
1,3-DCB		204318	198197	208653	183912	*198770*	*4.70*
	2.0	5.0	10.0	15.0	20.0		
1,2-DCB		220775	215774	211325	179236	*206777*	*7.86*
	2.0	5.0	10.0	15.0	20.0		
1,4-DCB	257049	263546	250582	270932	268164	262055	2.83
	2.0	5.0	10.0	15.0	20.0		
BENZENE	60762	53382	51843	53715	55374	55015	5.61
	2.0	5.0	10.0	15.0	20.0		
TFT (PID S-1)	*14662*	*14812*	*13580*	*14274*	*14801*	*14426*	*3.23*
	6	15	30	45	60		
TOLUENE	46892	42229	40016	41154	42603	42579	5.49
	2.0	5.0	10.0	15.0	20.0		
CHLOROBENZENE	48604	43536	41240	42747	44440	44114	5.62
	2.0	5.0	10.0	15.0	20.0		
ETHYL BENZENE	35221	36832	34550	36630	37659	36178	3.13
	2.0	5.0	10.0	15.0	20.0		
M - XYLENE	47862	52304	41891	43410	44371	45968	8.11
	2.0	5.0	10.0	15.0	20.0		
O + P - XYLENE	43631	51280	39621	41105	41603	43448	9.48
	4.0	10.0	20.0	30.0	40.0		

1/3/94 12:44 RF = Area Counts/(ug/L)

INITIAL CALIBRATION EPA 8010/8020/601/602

INITIAL CALIBRATION VERIFICATION

BEGIN

EPA 8010/8020/601/602

1/3/94 15:38

V478 20uL

ANALYST: BJM

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	146858	5.28
CH3Br	86855	92022	5.78
VCL\FREON 12	200935	216512	7.46
C2H5CL	193817	217100	11.33
MeCl2	467142	446496	4.52
CCL3F	324978	324599	0.12
1.1-DCE	331306	347435	4.75
MeBrCl (ELCD S-1)	275600	278959	1.21
1.1-DCA	442329	427242	3.47
C/T-1.2-DCE	360880	358110	0.77
CHCl3	560011	557693	0.41
1.2-DCA	372774	369627	0.85
1.1.1-TCA	417350	429608	2.89
CCL4	508171	529524	4.12
CHBRCL2	335032	346459	3.35
1.2-DCPA	301181	318614	5.63
C-1.3-DCPE	274966	279822	1.75
TCE	546299	562268	2.88
CO-3	257710	258385	0.26

2-CEVE	72808	79610	8.93
CHBr3	124037	129338	4.18
1,1,2,2-TCA/PCE	237871	294097	21.14
CHLOROBENZENE	166550	177277	6.24
1,3-DCB	198770	209137	5.08
1,2-DCB	206777	227444	9.52
1,4-DCB	262055	264222	0.82
BENZENE	55015	53479	2.83
TFT (PID S-1)	14426	14422	*0.03*
TOLUENE	42579	41166	3.38
CHLOROBENZENE	44114	42482	3.77
ETHYL BENZENE	36178	36267	0.24
M XYLENE	45968	42439	7.98
O + P XYLENES	43448	40247	7.65

1/14/94 21:55 CONTINUING CALIBRATION VERIFICATION MID CHK STD

CONTINUING CALIBRATION VERIFICATION

END CHK STD

EPA 8010/8020/601/602

1/15/94 1:41

V470 20uL

ANALYST: RRL

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	135863	13.05
CH3Br	86855	89209	2.67
VCL\FREON 12	200935	211635	5.19
C2H5CL	193817	211213	8.59
MeCl2	467142	499421	6.68
CCL3F	324978	332918	2.41
1,1-DCE	331306	353928	6.60
MeBrCl (ELCD S-1)	275600	295219	*6.94*
1,1-DCA	442329	458897	3.68
C/T-1,2-DCE	360880	382467	5.81
CHCl3	560011	598955	6.72
1,2-DCA	372774	389640	4.42
1,1,1-TCA	417350	456743	9.01
CCL4	508171	545733	7.13
CHBRCL2	335032	360222	7.25
1,2-DCPA	301181	325933	7.89
C-1,3-DCPE	274966	300637	8.92
TCE	546299	529623	3.10
CO-3	257710	269375	4.43

2-CEVE	72808	78222	7.17
CHBr3	124037	122421	1.31
1,1,2,2-TCA/PCE	237871	276429	14.99
CHLOROBENZENE	166550	171598	2.99
1,3-DCB	198770	217761	9.12
1,2-DCB	206777	231471	11.27
1,4-DCB	262055	286654	8.97
BENZENE	55015	53801	2.23
TFT (PID S-1)	14426	14350	*0.53*
TOLUENE	42579	40703	4.51
CHLOROBENZENE	44114	42197	4.44
ETHYL BENZENE	36178	36071	0.30
M XYLENE	45968	42399	8.08
O + P XYLENES	43448	40268	7.60

1/15/94 1:41 CONTINUING CALIBRATION VERIFICATION END CHK STD

B C LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00443-1, 94-00443-2, 94-00443-4, 94-00443-6, 94-00443-8, 94-00443-10, 94-00443-12, 94-00443-20

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Benzene	443-1	< 0.5	0.030	0.031	0.032	0.032	mg/kg	3.	10	93.	96.	76 - 128
Bromodichloromethane	443-1	< 0.5	0.032	0.033	0.032	0.032	mg/kg	4.	16	100.	104.	77 - 127
Bromoform	443-1	< 0.5	0.062	0.069	0.064	0.064	mg/kg	11.	13	96.	108.	66 - 126
Bromomethane	443-1	< 0.5	0.085	0.087	0.090	0.090	mg/kg	2.	14	99.	102.	69 - 126
Carbon Tetrachloride	443-1	< 0.5	0.032	0.033	0.032	0.032	mg/kg	3.	13	101.	104.	79 - 130
Chlorobenzene	443-1	< 0.5	0.030	0.030	0.032	0.032	mg/kg	0.	12	92.	93.	72 - 126
Chloroethane	443-1	< 0.5	0.089	0.087	0.090	0.090	mg/kg	2.	18	104.	102.	71 - 123
Chloroform	443-1	< 0.5	0.032	0.033	0.032	0.032	mg/kg	3.	13	99.	102.	82 - 124
Chloromethane	443-1	< 0.5	0.084	0.077	0.090	0.090	mg/kg	10.	20	99.	90.	15 - 195
1,2-Dichlorobenzene	443-1	< 0.5	0.032	0.034	0.032	0.032	mg/kg	6.	20	101.	107.	53 - 136
1,3-Dichlorobenzene	443-1	< 0.5	0.032	0.035	0.032	0.032	mg/kg	9.	19	99.	108.	55 - 136
1,4-Dichlorobenzene	443-1	< 0.5	0.033	0.036	0.032	0.032	mg/kg	9.	17	104.	114.	58 - 137
1,1-Dichloroethane	443-1	< 0.5	0.032	0.032	0.032	0.032	mg/kg	1.	10	100.	101.	79 - 119
1,2-Dichloroethane	443-1	< 0.5	0.031	0.032	0.032	0.032	mg/kg	5.	20	96.	101.	66 - 127
1,1-Dichloroethene	443-1	< 0.5	0.032	0.034	0.032	0.032	mg/kg	5.	17	101.	107.	79 - 126
Total 1,2-Dichloroethene	443-1	< 0.5	0.048	0.048	0.048	0.048	mg/kg	1.	14	100.	101.	79 - 131
1,2-Dichloropropane	443-1	< 0.5	0.033	0.034	0.032	0.032	mg/kg	5.	13	102.	107.	82 - 123
cis-1,3-Dichloropropene	443-1	< 0.5	0.032	0.034	0.032	0.032	mg/kg	8.	12	99.	107.	75 - 130
Ethyl benzene	443-1	< 0.5	0.031	0.032	0.032	0.032	mg/kg	2.	10	96.	99.	63 - 128
Methylene Chloride	443-1	< 0.5	0.032	0.032	0.032	0.032	mg/kg	1.	20	101.	100.	76 - 132
1,1,2,2-TCA	443-1	< 0.5	0.075	0.076	0.064	0.064	mg/kg	2.	16	117.	119.	64 - 124
Toluene	443-1	< 0.5	0.030	0.030	0.032	0.032	mg/kg	2.	10	93.	95.	70 - 131
1,1,1-Trichloroethane	443-1	< 0.5	0.033	0.033	0.032	0.032	mg/kg	0.	17	104.	104.	77 - 128
Trichloroethene	443-1	< 0.5	0.030	0.031	0.032	0.032	mg/kg	6.	10	93.	98.	78 - 138
Vinyl Chloride/Freon 12	443-1	< 0.5	0.088	0.086	0.090	0.090	mg/kg	3.	12	103.	100.	64 - 127
m-Xylene	443-1	< 0.5	0.029	0.029	0.032	0.032	mg/kg	1.	12	90.	91.	68 - 128
o&p-Xylenes	443-1	< 0.5	0.058	0.058	0.064	0.064	mg/kg	0.	10	90.	90.	68 - 129
TFT	443-1									102.		70 - 130

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

B C LABORATORIES

QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00443-1, 94-00443-2, 94-00443-4, 94-00443-6, 94-00443-8, 94-00443-10, 94-00443-12, 94-00443-20

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
BrClMeth	443-1									106.		70 - 130
TFT	443-2									94.		
BrClMeth	443-2									103.		
TFT	443-4									102.		
BrClMeth	443-4									112.		
TFT	443-6									97.		
BrClMeth	443-6									103.		
TFT	443-8									98.		
BrClMeth	443-8									104.		
TFT	443-10									100.		
BrClMeth	443-10									103.		
TFT	443-12									94.		
BrClMeth	443-12									97.		
TFT	443-20									91.		
BrClMeth	443-20									100.		

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

MS and MSD values have been truncated.

Quality Control Officer

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B C LABORATORIES

QUALITY CONTROL REPORT
(Preparation & Analysis Information)
METHOD 8015M TPH DIESEL

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00443-1, 94-00443-2, 94-00443-4, 94-00443-6, 94-00443-8, 94-00443-10, 94-00443-12, 94-00443-19 94-00443-20

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
TPH Diesel	3550	01/14/94	KS	8015M	01/14/94	SB

Quality Control Officer

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BC LABORATORIES

Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 02/07/94
Lab #: 94-00443-1MB

Sample Description: CA0228.001.004 METHOD BLANK ANALYSIS

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
	01/13/94	01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

California D.O.H.S. Cert. #1186

Stuart S. Auttum
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

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B C LABORATORIES

QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)
METHOD 8015M TPH DIESEL

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00443-1, 94-00443-2, 94-00443-4, 94-00443-6, 94-00443-8, 94-00443-10, 94-00443-12, 94-00443-19 94-00443-20

Constituents	ICV % Found	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	Units	CCB Readings After	Units	Method Blank Readings	Units
TPH Diesel	88.	91.	98.	85 - 115	<50.	mg/L	<50.	mg/L	<10.	mg/kg

ICV = Initial Calibration Verification; CCV = Continuing Calibration Verification; CCB = Continuing Calibration Blank

Quality Control Officer

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B C LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8015M TPH DIESEL

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00443-1, 94-00443-2, 94-00443-4, 94-00443-6, 94-00443-8, 94-00443-10, 94-00443-12, 94-00443-19 94-00443-20

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
TPH Diesel	443-1	< 10.	493.	519.	500.	500.	mg/kg	5.	15	99.	104.	79 - 123
Surrogate	443-1									101.		76 - 125
Surrogate	443-2									101.		
Surrogate	443-4									98.		
Surrogate	443-6									102.		
Surrogate	443-8									104.		
Surrogate	443-10									88.		
Surrogate	443-12									115.		
Surrogate	443-19									88.		
Surrogate	443-20									118.		

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

Quality Control Officer

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B C LABORATORIES

QUALITY CONTROL REPORT
(Laboratory Control Sample)
METHOD 8015M TPH DIESEL

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00443-1, 94-00443-2, 94-00443-4, 94-00443-6, 94-00443-8, 94-00443-10, 94-00443-12, 94-00443-19 94-00443-20

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
TPH Diesel	LCSS	500.36	500.00	mg/kg	100.	70 - 130

Quality Control Officer

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B C LABORATORIES

QUALITY CONTROL REPORT
(Preparation & Analysis Information)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: WATER

Samples Affected: 94-00443-21, 94-00443-22

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
Method 8010/8020 compounds	5030	01/14/94	RL	8010/8020	01/14/94	RL

MS and MSD results are truncated values.

Quality Control Officer

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BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 02/07/94
Lab #: 94-00443-1MB

Sample Description: CA0228.001.004 METHOD BLANK ANALYSIS

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:

Date Sample Received @ Lab: 01/13/94

Date Analysis Completed: 01/14/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: STEVE FRAMBACH 818-332-8010

Date of Report: 02/07/94
Lab #: 94-00443-1MB

Sample Description: CA0228.001.004 METHOD BLANK ANALYSIS

California D.O.H.S. Cert. #1186

Stuart S. Putman
Department Supervisor

cc: HAWKER PACIFIC - PETE JALAJAS

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

1/3/94 12:44

INITIAL CALIBRATION

EPA 8010/8020/601/602 V469

ANALYST: RRL

INSTRUMENT: V3400 GCVI

COMPOUND	RF(1)	RF(2)	RF(3)	RF(4)	RF(5)	RF(AVE)	%RSD
	ppb	ppb	ppb	ppb	ppb		
CH3Cl	189004	160552	155490	145968	123116	154826	13.81
	5.3	13.3	26.7	40.0	53.3		
CH3Br	79032	82645	85681	91803	95112	86855	6.77
	5.3	13.3	26.7	40.0	53.3		
VCL\FREON 12	208923	212664	201617	201758	179715	200935	5.69
	5.3	13.3	26.7	40.0	53.3		
C2H5CL	139929	212603	200605	205281	210667	193817	14.07
	5.3	13.3	26.7	40.0	53.3		
MeCl2	497103	476420	454218	458460	449512	467142	3.75
	2.0	5.0	10.0	15.0	20.0		
CCL3F	336536	332230	306424	316735	332965	324978	3.54
	2.0	5.0	10.0	15.0	20.0		
1.1-DCE	305255	346756	319895	332089	352536	331306	5.23
	2.0	5.0	10.0	15.0	20.0		
MeBrCl (ELCD S	*273907*	*282210*	*265722*	*272731*	*283432*	*275600*	*2.37*
	6	15	30	45	60		
1.1-DCA	493332	454480	412279	422229	429325	442329	6.57
	2.0	5.0	10.0	15.0	20.0		
C/T-1.2-DCE	377106	367669	339961	353009	366656	360880	3.60
	3.0	7.5	15.0	22.5	30.0		
CHCl3	601114	590943	531374	542649	533977	560011	5.32
	2.0	5.0	10.0	15.0	20.0		
1.2-DCA	380466	384604	359095	365225	374481	372774	2.53
	2.0	5.0	10.0	15.0	20.0		
1.1.1-TCA	400848	433581	413311	406824	432185	417350	3.18
	2.0	5.0	10.0	15.0	20.0		
CCL4	501475	544916	495769	488747	509947	508171	3.87
	2.0	5.0	10.0	15.0	20.0		
CHBrCL2	304546	352280	332832	325252	360252	335032	5.91
	2.0	5.0	10.0	15.0	20.0		
1,2-DCPA	262038	312541	302724	304016	324587	301181	7.00
	2.0	5.0	10.0	15.0	20.0		
C-1,3-DCPE		250123	263628	277520	308595	*274966*	*7.89*
	2.0	5.0	10.0	15.0	20.0		
TCE	529107	567563	529048	544826	560949	546299	2.91
	2.0	5.0	10.0	15.0	20.0		
CO-3		254995	249182	258121	268541	*257710*	*2.73*

	6.0	15.0	30.0	45.0	60.0		
2-CEVE		62764	73922	70813	83732	*72608*	*10.31*
	6.0	15.0	30.0	45.0	60.0		
CHBr3		124967	117479	123695	130009	*124037*	*3.60*
	4.0	10.0	20.0	30.0	40.0		
1.1.2.2-TCA/PC	196587	267964	213858	254959	255988	237871	11.60
	4.0	10.0	20.0	30.0	40.0		
CHLOROBENZENE	169502	171681	151146	169037	171385	166550	4.67
	2.0	5.0	10.0	15.0	20.0		
1.3-DCB		204318	198197	208653	183912	*198770*	*4.70*
	2.0	5.0	10.0	15.0	20.0		
1.2-DCB		220775	215774	211325	179236	*206777*	*7.86*
	2.0	5.0	10.0	15.0	20.0		
1.4-DCB	257049	263546	250582	270932	268164	262055	2.83
	2.0	5.0	10.0	15.0	20.0		
BENZENE	60762	53382	51843	53715	55374	55015	5.61
	2.0	5.0	10.0	15.0	20.0		
TFT (PID S-1)	*14662*	*14812*	*13580*	*14274*	*14801*	*14426*	*3.23*
	6	15	30	45	60		
TOLUENE	46892	42229	40016	41154	42603	42579	5.49
	2.0	5.0	10.0	15.0	20.0		
CHLOROBENZENE	48604	43536	41240	42747	44440	44114	5.62
	2.0	5.0	10.0	15.0	20.0		
ETHYL BENZENE	35221	36832	34550	36630	37659	36178	3.13
	2.0	5.0	10.0	15.0	20.0		
M - XYLENE	47862	52304	41891	43410	44371	45968	8.11
	2.0	5.0	10.0	15.0	20.0		
O + P - XYLENE	43631	51280	39621	41105	41603	43448	9.48
	4.0	10.0	20.0	30.0	40.0		

1/3/94 12:44 RF = Area Counts/(ug/L)

INITIAL CALIBRATION EPA 8010/8020/601/602

INITIAL CALIBRATION VERIFICATION

BEGIN

EPA 8010/8020/601/602

1/3/94 15:38

V478 20uL

ANALYST: BJM

INSTRUMENT: V3400 GCVI

COMPOUNDS	1/3/94 12:44 RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	146858	5.28
CH3Br	86855	92022	5.78
VCL\FREON 12	200935	216512	7.46
C2H5CL	193817	217100	11.33
MeCl2	467142	446496	4.52
CCL3F	324978	324599	0.12
1,1-DCE	331306	347435	4.75
MeBrCl (ELCD S-1)	275600	278959	1.21
1,1-DCA	442329	427242	3.47
C/T-1,2-DCE	360880	358110	0.77
CHCl3	560011	557693	0.41
1,2-DCA	372774	369627	0.85
1,1,1-TCA	417350	429608	2.89
CCL4	508171	529524	4.12
CHBRCL2	335032	346459	3.35
1,2-DCPA	301181	318614	5.63
C-1,3-DCPE	274966	279822	1.75
TCE	546299	562268	2.88
CO-3	257710	258385	0.26

2-CEVE	72808	76287	4.67
CHBr3	124037	124210	0.14
1,1,2,2-TCA/PCE	237871	256900	7.69
CHLOROBENZENE	166550	166790	0.14
1,3-DCB	198770	200241	0.74
1,2-DCB	206777	205267	0.73
1,4-DCB	262055	278060	5.93
BENZENE	55015	54558	0.84
TFT (PID S-1)	14426	14864	2.99
TOLUENE	42579	42504	0.18
CHLOROBENZENE	44114	43727	0.88
ETHYL BENZENE	36178	37048	2.38
M XYLENE	45968	44236	3.84
O + P XYLENES	43448	41880	3.67

1/3/94 15:38 EPA 8010/8020/601/602

INITIAL CALIBRATION VERIFICATION BEGIN

CONTINUING CALIBRATION VERIFICATION

BEGIN

EPA 8010/8020/601/602

1/14/94 9:58

V470 20uL

ANALYST: RRL

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	169268	8.91
CH3Br	86855	85324	1.78
VCL\FREON 12	200935	205014	2.01
C2H5CL	193817	208188	7.15
MeCl2	467142	488338	4.44
CCL3F	324978	344251	5.76
1,1-DCE	331306	356482	7.32
MeBrCl (ELCD S-1)	275600	287978	4.39
1,1-DCA	442329	442776	0.10
C/T-1,2-DCE	360880	372678	3.22
CHCl3	560011	575090	2.66
1,2-DCA	372774	366116	1.80
1,1,1-TCA	417350	426509	2.17
CCL4	508171	530122	4.23
CHBRCL2	335032	334856	0.05
1,2-DCPA	301181	315502	4.64
C-1,3-DCPE	274966	254321	7.80
TCE	546299	531231	2.80
CO-3	257710	234734	9.33

2-CEVE	72808	56630	25.00
CHBr3	124037	112747	9.54
1.1.2.2-TCA/PCE	237871	266154	11.22
CHLOROBENZENE	166550	183836	9.87
1.3-DCB	198770	233702	16.15
1.2-DCB	206777	226040	8.90
1.4-DCB	262055	285226	8.47
BENZENE	55015	53452	2.88
TFT (PID S-1)	14426	14927	3.42
TOLUENE	42579	42297	0.67
CHLOROBENZENE	44114	43472	1.47
ETHYL BENZENE	36178	38315	5.74
M XYLENE	45968	43695	5.07
O + P XYLENES	43448	41138	5.46

1/14/94 9:58 EPA 8010/8020/601/602

CONTINUING CALIBRATION VERIFICATION BEGIN

CONTINUING CALIBRATION VERIFICATION

MID CHK STD

EPA 8010/8020/601/602

1/14/94 21:55

V470 20uL

ANALYST: BJM

INSTRUMENT: V3400 GCVI

COMPOUNDS	1/3/94 12:44 RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	137235	12.05
CH3Br	86855	81657	6.17
VCL\FREON 12	200935	210314	4.56
C2H5CL	193817	206384	6.28
MeCl2	467142	524898	11.64
CCL3F	324978	345196	6.03
1,1-DCE	331306	360477	8.43
MeBrCl (ELCD S-1)	275600	293401	*6.26*
1,1-DCA	442329	439966	0.54
C/T-1,2-DCE	360880	365520	1.28
CHCl3	560011	573764	2.43
1,2-DCA	372774	373121	0.09
1,1,1-TCA	417350	444442	6.29
CCL4	508171	529211	4.06
CHBRCL2	335032	349576	4.25
1,2-DCPA	301181	319347	5.85
C-1,3-DCPE	274966	281675	2.41
TCE	546299	522920	4.37
CO-3	257710	265287	2.90

2-CEVE	72808	79610	8.93
CHBr3	124037	129338	4.18
1,1,2,2-TCA/PCE	237871	294097	21.14
CHLOROBENZENE	166550	177277	6.24
1,3-DCB	198770	209137	5.08
1,2-DCB	206777	227444	9.52
1,4-DCB	262055	264222	0.82
BENZENE	55015	53479	2.83
TFT (PID S-1)	14426	14422	*0.03*
TOLUENE	42579	41166	3.38
CHLOROBENZENE	44114	42482	3.77
ETHYL BENZENE	36178	36267	0.24
M XYLENE	45968	42439	7.98
O + P XYLENES	43448	40247	7.65

1/14/94 21:55 CONTINUING CALIBRATION VERIFICATION MID CHK STD

CONTINUING CALIBRATION VERIFICATION

END CHK STD

EPA 8010/8020/601/602

1/15/94 1:41

V470 20uL

ANALYST: RRL

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	135863	13.05
CH3Br	86855	89209	2.67
VCL\FREON 12	200935	211635	5.19
C2H5CL	193817	211213	8.59
MeCl2	467142	499421	6.68
CCL3F	324978	332918	2.41
1,1-DCE	331306	353928	6.60
MeBrCl (ELCD S-1)	275600	295219	*6.94*
1,1-DCA	442329	458897	3.68
C/T-1,2-DCE	360880	382467	5.81
CHCl3	560011	598955	6.72
1,2-DCA	372774	389640	4.42
1,1,1-TCA	417350	456743	9.01
CCL4	508171	545733	7.13
CHBRCL2	335032	360222	7.25
1,2-DCPA	301181	325933	7.89
C-1,3-DCPE	274966	300637	8.92
TCE	546299	529623	3.10
CO-3	257710	269375	4.43

2-CEVE	72808	78222	7.17
CHBr3	124037	122421	1.31
1,1,2,2-TCA/PCE	237871	276429	14.99
CHLOROBENZENE	166550	171598	2.99
1,3-DCB	198770	217761	9.12
1,2-DCB	206777	231471	11.27
1,4-DCB	262055	286654	8.97
BENZENE	55015	53801	2.23
TFT (PID S-1)	14426	14350	*0.53*
TOLUENE	42579	40703	4.51
CHLOROBENZENE	44114	42197	4.44
ETHYL BENZENE	36178	36071	0.30
M XYLENE	45968	42399	8.08
O + P XYLENES	43448	40268	7.60

1/15/94 1:41 CONTINUING CALIBRATION VERIFICATION END CHK STD

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: WATER

Samples Affected: 94-00443-21, 94-00443-22

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Benzene	443-21	< 0.5	9.77	9.69	10.00	10.00	µg/L	1.	13	98.	97.	71 - 114
Bromodichloromethane	443-21	< 0.5	10.82	10.68	10.00	10.00	µg/L	1.	20	108.	107.	71 - 128
Bromoform	443-21	< 0.5	21.74	20.83	20.00	20.00	µg/L	4.	20	109.	104.	72 - 127
Bromomethane	443-21	< 0.5	27.5	28.9	26.7	26.7	µg/L	5.	17	103.	108.	76 - 121
Carbon Tetrachloride	443-21	< 0.5	10.66	10.47	10.00	10.00	µg/L	2.	13	107.	105.	75 - 125
Chlorobenzene	443-21	< 0.5	9.52	9.40	10.00	10.00	µg/L	1.	17	95.	94.	76 - 118
Chloroethane	443-21	< 0.5	27.5	28.2	26.7	26.7	µg/L	2.	14	103.	106.	77 - 122
Chloroform	443-21	< 0.5	10.89	10.55	10.00	10.00	µg/L	3.	18	109.	106.	66 - 132
Chloromethane	443-21	< 0.5	22.4	23.8	26.7	26.7	µg/L	6.	25	84.	89.	70 - 130
1,2-Dichlorobenzene	443-21	< 0.5	11.55	11.38	10.00	10.00	µg/L	1.	25	116.	114.	72 - 123
1,3-Dichlorobenzene	443-21	< 0.5	10.03	11.04	10.00	10.00	µg/L	10.	17	100.	110.	78 - 116
1,4-Dichlorobenzene	443-21	< 0.5	9.92	11.24	10.00	10.00	µg/L	12.	23	99.	112.	75 - 118
1,1-Dichloroethane	443-21	< 0.5	10.25	10.18	10.00	10.00	µg/L	1.	15	102.	102.	79 - 116
1,2-Dichloroethane	443-21	< 0.5	10.82	10.17	10.00	10.00	µg/L	6.	15	108.	102.	75 - 120
1,1-Dichloroethene	443-21	< 0.5	10.56	10.69	10.00	10.00	µg/L	1.	16	106.	107.	79 - 119
Total 1,2-Dichloroethene	443-21	< 0.5	15.55	15.47	15.00	15.00	µg/L	1.	15	104.	103.	77 - 124
1,2-Dichloropropane	443-21	< 0.5	10.92	10.10	10.00	10.00	µg/L	8.	15	109.	101.	79 - 115
cis-1,3-Dichloropropene	443-21	< 0.5	10.51	10.34	10.00	10.00	µg/L	2.	18	105.	103.	80 - 116
Ethyl benzene	443-21	< 0.5	10.00	9.84	10.00	10.00	µg/L	2.	12	100.	98.	74 - 116
Methylene Chloride	443-21	4.18	13.85	13.86	10.00	10.00	µg/L	0.	20	97.	97.	71 - 128
1,1,2,2-TCA	443-21	< 0.5	24.3	23.7	20.0	20.0	µg/L	3.	15	122.	118.	70 - 130
Toluene	443-21	< 0.5	9.77	9.69	10.00	10.00	µg/L	1.	14	98.	97.	75 - 116
1,1,1-Trichloroethane	443-21	< 0.5	11.18	10.87	10.00	10.00	µg/L	3.	19	112.	109.	76 - 122
Trichloroethene	443-21	< 0.5	9.60	9.45	10.00	10.00	µg/L	2.	15	96.	94.	80 - 113
Vinyl Chloride/Freon 12	443-21	< 0.5	27.6	27.6	26.7	26.7	µg/L	0.	17	103.	103.	82 - 113
m-Xylene	443-21	< 0.5	9.23	9.18	10.00	10.00	µg/L	1.	20	92.	92.	81 - 109
o&p-Xylenes	443-21	< 0.5	18.4	18.4	20.0	20.0	µg/L	0.	20	92.	92.	77 - 110
TFT	443-21									98.		70 - 130
BrClMeth	443-21									103.		70 - 130
TFT	443-22									99.		

BC LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
STEVE FRAMBACH

Date of Report: 02/07/94
Sample Matrix: WATER

Samples Affected: 94-00443-21, 94-00443-22

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
BrClMeth	443-22									105.		

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

MS and MSD results are truncated values.

Quality Control Officer

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

CHAIN OF CUSTODY

BC LABORATORIES, INC.
4100 Atlas Court
Bakersfield, California 93308

Report To: PETE JALAJAS	GERAGHTY & MILLER
Name: HANKER PROJECT	Project: CA0228.001.004
Address: 11310 SHOEMAN WAY	Project #:
City: SUN VALLEY	Sampler Name: S. Frambach
State: CA Zip:	Other:
Attn:	
Phone:	

Lab#	Sample Description	Date & Time Sampled	Matrix (S) Soil / (W) Water (SL) Sludge (Other)	8010/8020	8015M	Grain size											Samples rec. cold (y/n)	Custody Seals (y/n)	Results Needed by: Date & Time	Number and Container Type (Brass Rings)
X1	G-1 (5'-6.5')	1-11-94	S														y	y		2
X2	G-1 (10'-11.5')	↓	S														↓	↓		2
3	G-1 (15'-16.5')		S																	2
X4	G-1 (20'-21.5')		S																	2
5	G-1 (26'-27.5')		S																	2
X6	G-1 (31'-32.5')		S																	2
7	G-1 (41'-42.5')		S																	1
X8	G-1 (51'-52.5')		S																	2
X9	G-1 (61'-62.5')	↓	S																	2
X10	G-1 (66'-67.5')	1-12-94	S	X																2
11	G-1 (71'-72.5')	↓	S																	2
X12	G-1 (81'-82.5')	↓	S																	2
13	G-1 (4')	1-11-94	S			X														Glass Jars 1
14	G-1 (14')		S			X														1
15	G-1 (28')		S			X														1

Analysis Requested

Comment:

Billing Info:

Name: GERAGHTY & MILLER INC
Address 100 N. Barranca, Suite 500
City West Covina State CA 91791
Attention:
Time:
Miles:
P.O.#

Sample Disposal
☐ BC Disposal @ 5.00 ea.
☐ Return to client

Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
[signature]	[signature]	1/13/94 1600
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
[signature]	[signature]	1/13/94 8:45
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:

CHAIN OF CUSTODY

BC LABORATORIES, INC.
4100 Atlas Court
Bakersfield, California 93308

Report To: Pete Sakayes	Geraghty & Miller
Name: Hawker Pacific	Project:
Address: 11310 Sherman Way	Project #: CA0228.001.004
City: Sun Valley	Sampler Name: S. Frankenbach
State: CA Zip:	Other:
Attn:	
Phone:	

Lab#	Sample Description	Date & Time Sampled	Matrix (S) Soil (SL) Sludge (W) Water (Other)	8010/8020	8015M (Diesel)	Gravimetry	Samples rec. cold (y/n)	Custody Seals (y/n)	Results Needed by: Date & Time	Number and Container Type
16	G-1 (37')	1-11-94				X	Y	Y		1
17	G-1 (53')	1-11-94				X				1
18	G-1 (64')	1-12-94				X				1
19	G-1 (18')	1-11-94			X					1
20	G-1 (81'-86')	1-12-94		X						1
21	Rinsate (Brass Tube)	1-12-94		X					(VOA)	4
22	Trip Blank	1-12-94		X					(VOA)	3

Analysis Requested

FULL ANALYTICAL LIST TO FOLLOW

1/14/94

Comment: Received sample w/ custody seal intact at 5.0°C temp. [signature] 1/13/94 8:45 pm

Sample Disposal
☐ BC Disposal @ 5.00 ea.
☐ Return to client

Billing Info:
Name: Geraghty & Miller Inc
Address: 100 N. Barranca Ste 500
City: West Covina State: CA 91791
Attention:
Time:
Miles:
P.O.#

Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
[signature]	[signature]	1/13/94
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
[signature]	[signature]	1/13/94 8:45 pm
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:

CHAIN OF CUSTODY

BC LABORATORIES, INC.
4100 Atlas Court
Bakersfield, California 93308

Report To: PETE JALMONS	GERAGHTY & MILLER
Name: HANKER PACIFIC	Project: CA0228.001.004
Address: 11310 SHERMAN WAY	Project #:
City: SUN VALLEY	Sampler Name: S. Frambach
State: CA Zip:	Other:
Attn:	
Phone:	

Analysis Requested: 8010/8020; 8015M Diesel; Gravimetry (MPS)

Lab#	Sample Description	Date & Time Sampled	Matrix (S) Soil (SL) Sludge (W) Water (Other)	8010/8020	8015M Diesel	Gravimetry (MPS)	Samples rec. cold (y/n)	Custody Seals (y/n)	Results Needed by: Date & Time	Number and Container Type
										Brass Rings
X	G-1 (5-6.5)	1.11.94	S	X	X		Y	Y		2
X	G-1 (10-11.5')		S	X	X					2
	G-1 (15-16.5')		S							2
X	G-1 (20-21.5')		S	X	X					2
	G-1 (26-27.5')		S							1
X	G-1 (31'-32.5')		S	X	X					2
	G-1 (41'-42.5')		S							2
X	G-1 (51'-52.5')		S	X	X					2
	G-1 (61'-62.5')		S							2
X	G-1 (66'-67.5')	1.12.94	S	X	X					2
	G-1 (71'-72.5')		S							2
X	G-1 (81'-82.5')		S	X	X					2
	G-1 (4')	1-11-94	S			X				Glass Jars 1
	G-1 (14')		S			X				1
	G-1 (28')		S			X				1

Comment:

Billing Info:
Name: GERAGHTY & MILLER INC
Address: 100 N. Barranca, Suite 500
City: West Covina State: CA 91791
Attention:
Time:
Miles:
P.O.#

Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
[signature]	[signature]	1/13/94 1600
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:

Sample Disposal
☐ BC Disposal @ 5.00 ea.
☐ Return to client

CHAIN OF CUSTODY

BC LABORATORIES, INC.
4100 Atlas Court
Bakersfield, California 93308

Report To: Pete Sakiyes	Geraghty & Miller
Name: Harbor Pacific	Project:
Address: 11310 Sherman Way	Project #: CA0128.001.004
City: Sun Valley	Sampler Name: S. Frankel
State: CA Zip:	Other:
Attn:	
Phone:	

Lab#	Sample Description	Date & Time Sampled	Matrix (S) Soil (W) Water (SL) Sludge (Other)	8010/8020	8015 (M) (Dir)	Gravimetry MTBE											Samples rec. cold (y/n)	Custody Seals (y/n)	Results Needed by: Date & Time	Number and Container Type
16	G-1 (37')	1-11-94				X											Y	Y		1
17	G-1 (53')	1-11-94				X														1
18	G-1 (64')	1-12-94				X														1
19	G-1 (18')	1-11-94			X															1
~~20~~	G-1 (81'-86')	1-12-94	W	X	X															1
21	Rinsate (Brass Tube)	1-12-94		X															(VOA)	4
22	Trip Blank	1-12-94		X															(VOA)	3

FULL ANALYTICAL LIST TO FOLLOW

1/14/94

Comment:

Billing Info:

Name:	Geraghty & Miller Inc
Address	100 N. Barranca Ste 500
City	West Covina State CA 91791
Attention:	
Time:	
Miles:	
P.O.#	

Sample Disposal
☐ BC Disposal @ 5.00 ea.
☐ Return to client

Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
	1/13/94	
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: Time:

BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/27/94
Lab #: 94-00553-1

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (5'-6.5') 01-14-94 SAMPLED BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/14/94	01/18/94	01/25/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

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Department Supervisor

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BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-1

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (5'-6.5') 01-14-94 SAMPLED BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/14/94	01/18/94	01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-1

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (5'-6.5') 01-14-94 SAMPLED BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

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Sample Name: 6 8 553-1 1.85G Date: Thu Jan 20 15:07:09 1994
Data File : C:\DX\DATA\00553-11.D08
Method : C:\DX\METHOD\606-601C.MET
ACI Address: 1 System : 2 Inject#: 8 Detector: PID

********** PEAKS NOT FOUND IN THIS RUN **********

Name	Adjusted Ret Time	Reference Peak
BENZENE	22.27	0
CLBENZENE	28.22	0
O&P XYLENE	31.61	0

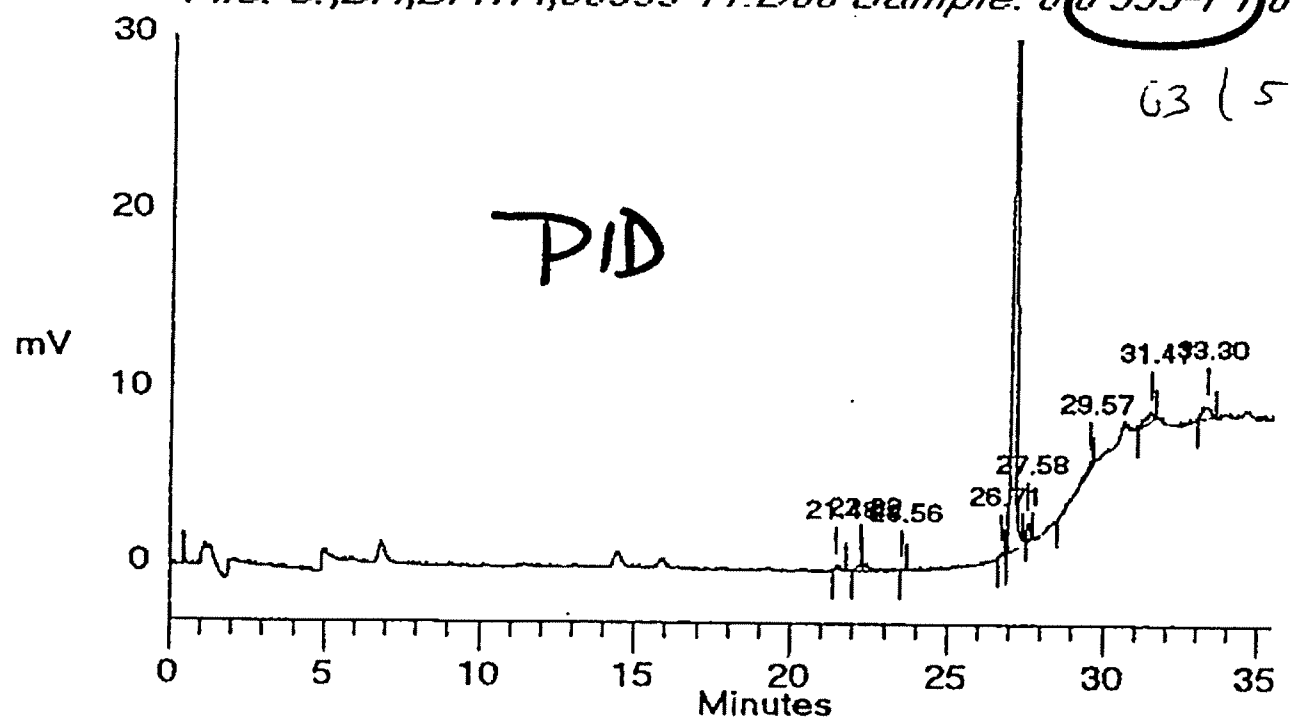
REPORT	VOLUME	DILUTION	POINTS	RATE	START	STOP	AREA REJ
External	1	1	10650	5Hz	0.00	35.50	5000

Pk. Num	Ret Time	Component Name	Concentration %	Height	Area	Bl. Code	%Delta
5	27.08	aaa-TFT (PID S-2)	100.672	553.31	448143	3	0.11
6	27.58	TOLUENE	0.000	388	6788	4	0.15
7	29.57	ETHYLBENZENE	0.000	403	6348	1	0.92
8	31.47	M XYLENE	0.000	574	10235	1	0.00
9	33.30		0.000	664	14155	1	
		Totals	100.672	53959	485669		

6 8 553-1 1.85G

File: C:\DX\DATA\00553-11.D08 Sample: 6 8 553-1 1.85G

63 (5-6.5')



All BDLR

Sample Name: 6.8 553-1 .850 Date: Thu Jan 20 15:07:09 1994
Data File : C:\DX\DATA\00553-12.D08
Method : C:\DX\METHOD\OC6-601C.ME2
ACI Address: 1 System : 2 Inject#: 8 Detector: COND

********** PEAKS NOT FOUND IN THIS RUN **********

Name	Adjusted Ret Time	Reference Peak
CH3Br	1.95	0
VC1/ FREON 12	2.52	0
1,1-DCA	11.32	0
C/T-1,2-DCE	12.55	0
1,2-DCA	14.38	0
CCl4	16.58	0
CHBrCl2	17.58	0
1,2-DCPA	19.88	0
C-1,3-DCPE	20.58	0
TCE	21.65	0
CO-3	22.52	0
2-CEVE	23.75	0
CLBENZENE	28.26	0
1,3-DCB	33.17	0
1,2-DCB	33.56	0
1,4-DCB	33.82	0

G3 (5-6.5')

ELCD

REPORT	VOLUME	DILUTION	POINTS	RATE	START	STOP	AREA REJ
External	1	1	10650	5Hz	0.00	35.50	5000

Pk. Num	Ret Time	Component Name	Concentration %	Height	Area	Bl. Code	%Delta
1	0.52		0.000	1271	17026	1	
2	1.15	CH3Cl	0.000	1570	13370	1	0.00
3	1.65		0.000	1083	13151	1	
4	3.58	C2H5Cl	0.000	3730	63587	1	2.97
5	5.95	MeCl2 DPOC	0.000	24257	523937	3	1.19
6	8.58	CCl3F	0.000	1115	24345	4	0.74
7	9.18		0.000	1183	25791	4	
8	9.58	1,1-DCE	0.000	1354	31998	4	-0.38
9	10.25	BrClMe (ELCD S-1)	112.973	442275	9863751	3	0.29
10	13.65	CHCl3	0.000	3175	106510	4	2.79
11	14.88		0.000	2142	140221	4	
12	16.08	1,1,1-TCA	0.000	1699	123128	4	0.40
18	24.49	BROMOFORM	0.000	672	5134	1	-1.83
19	26.76	1,1,2,2TCA/PCE/S2	0.000	1307	14612	2	0.14
20	27.12		0.000	6893	69036	3	
		Totals	112.973	493732	10566648		

BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/27/94
Lab #: 94-00553-2

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (10'-11.5') 01-14-94 SAMPLED BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/14/94	01/18/94	01/25/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

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Department Supervisor

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BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-2

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (10'-11.5') 01-14-94 SAMPLED BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/14/94	01/18/94	01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-2

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (10'-11.5') 01-14-94 SAMPLED BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

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Stuart S. Putnam
Department Supervisor

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BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/27/94
Lab #: 94-00553-4

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (20'-21.5') 01-14-94 SAMPLED BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/14/94	01/18/94	01/25/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

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Department Supervisor

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BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-4

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (20'-21.5') 01-14-94 SAMPLED BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected: 01/14/94

Date Sample Received @ Lab: 01/18/94

Date Analysis Completed: 01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-4

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (20'-21.5') 01-14-94 SAMPLED BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

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Department Supervisor

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BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/27/94
Lab #: 94-00553-5

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (25'-26.5') 01-14-94 SAMPLED BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/14/94	01/18/94	01/27/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	56.	mg/kg	20.

Note: High reported PQL's due to high concentration of non-target analytes.
Sample chromatogram not typical of diesel.

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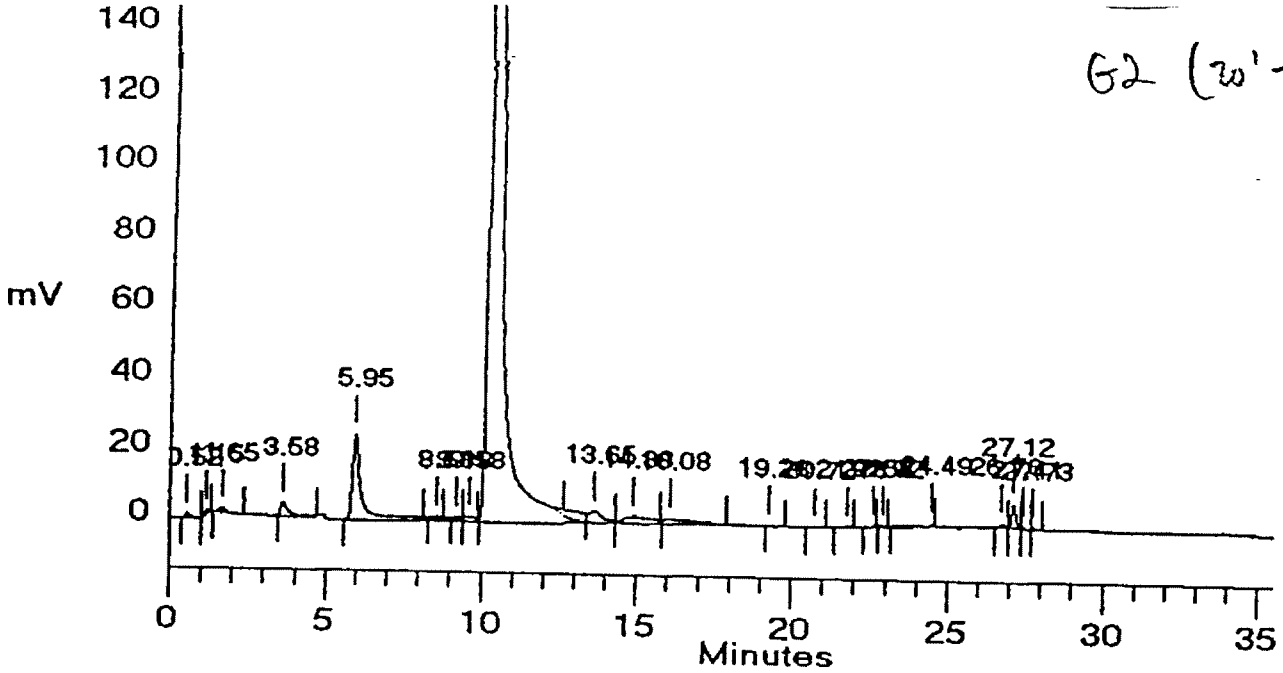
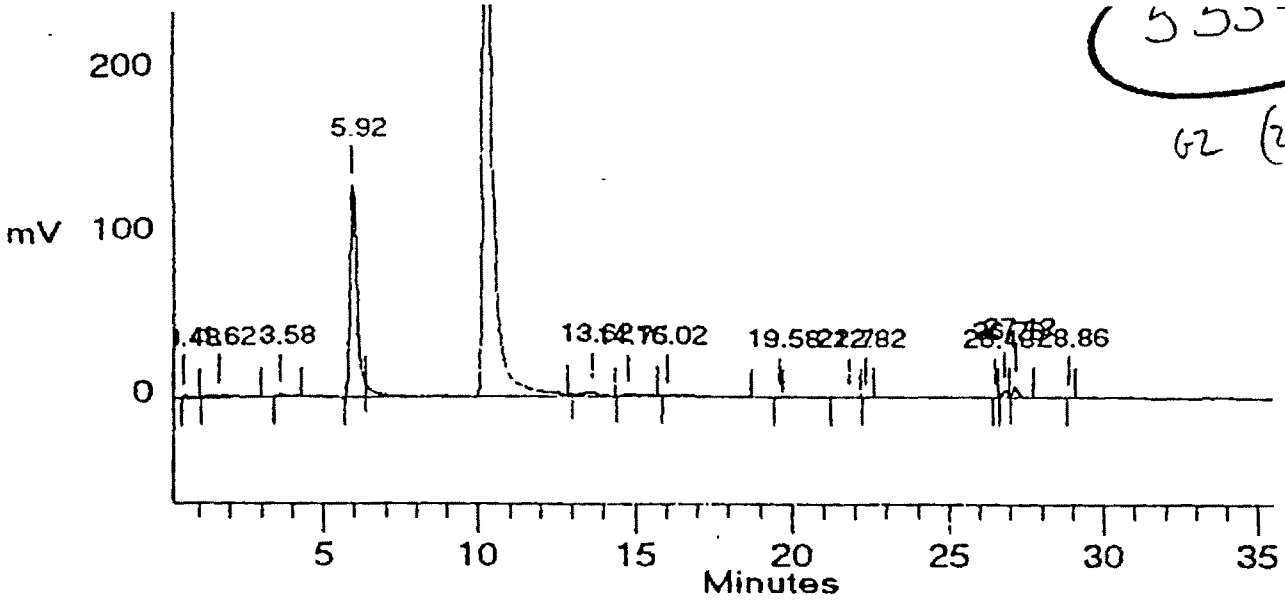
G2 (20'-21.5')



ELCD

(5 55-11)

G2 (20'-21.5')



ELCD

BC ORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/27/94
Lab #: 94-00553-11

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (20'-21.5') 01-15-94 SAMPLED BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/15/94	01/18/94	01/25/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	20.	mg/kg	10.

Note: Sample chromatogram not typical of diesel.

California D.O.H.S. Cert. #1186

Department Supervisor

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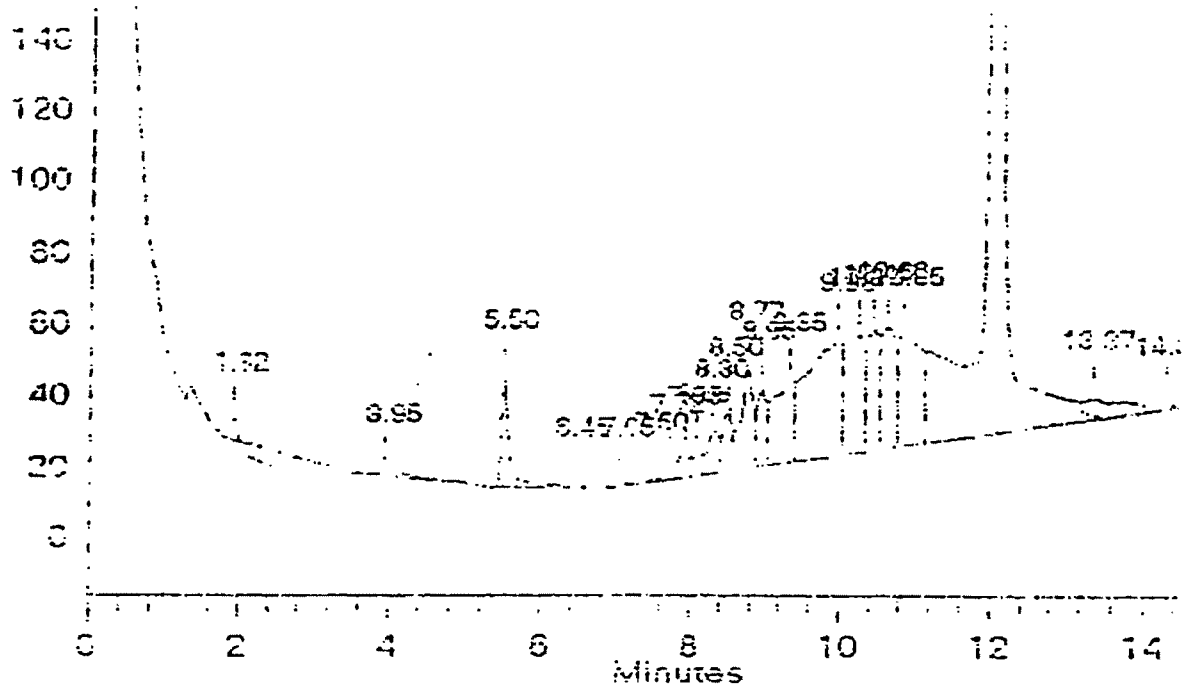
File: C:\DX\DATA\553-1101.d01 Sample: 553-11



BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-11

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (20'-21.5') 01-15-94 SAMPLED BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/15/94	01/18/94	01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-11

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (20'-21.5') 01-15-94 SAMPLED BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

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Stuart S. Patham
Department Supervisor

BC LABORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/27/94
Lab #: 94-00553-13

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (30'-31.5') 01-15-94 SAMPLED BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/15/94	01/18/94	01/25/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	48.	mg/kg	10.

Note: Sample chromatogram not typical of diesel.

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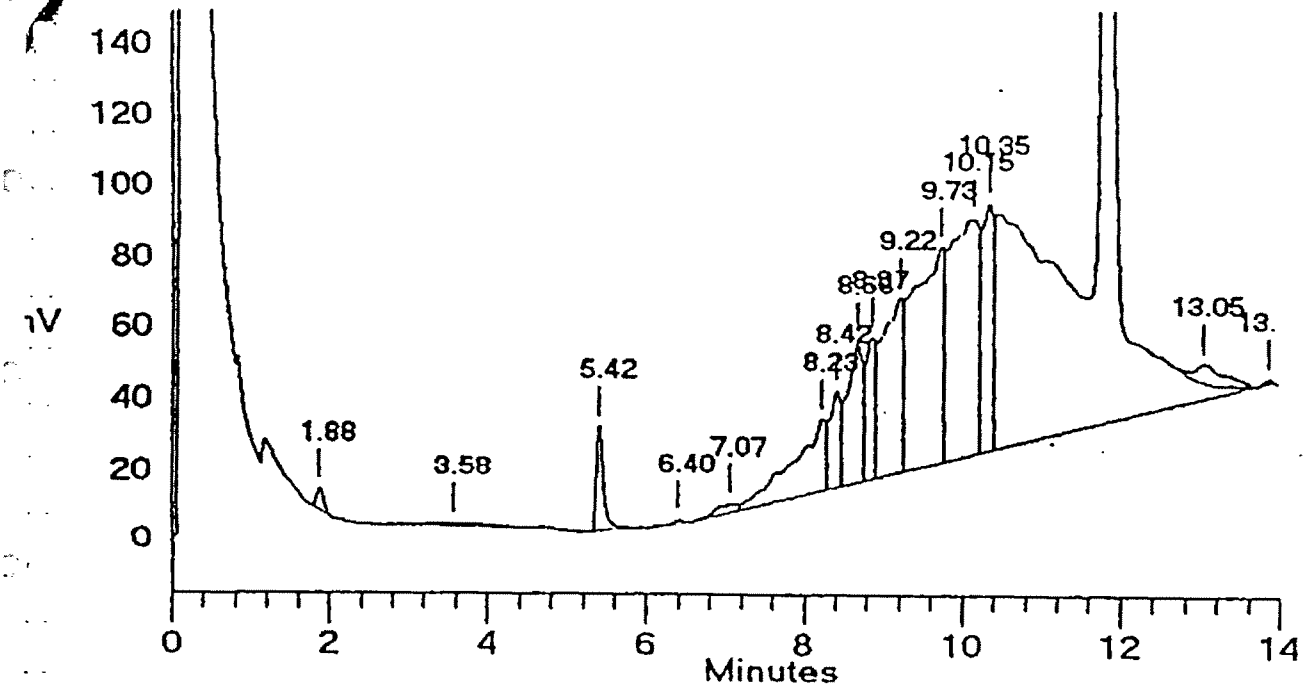
File: C:\DX\DATA\553-1301.D01 Sample: 553-13



ORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-13

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (30'-31.5') 01-15-94 SAMPLED BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected: 01/15/94

Date Sample Received @ Lab: 01/18/94

Date Analysis Completed: 01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.01
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-13

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (30'-31.5') 01-15-94 SAMPLED BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

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Purgeable Aromatics and Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/27/94
Lab #: 94-00553-14

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (35'-36.5') 01-15-94 SAMPLED BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/15/94	01/18/94	01/25/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	34.	mg/kg	10.

Note: Sample chromatogram not typical of diesel.

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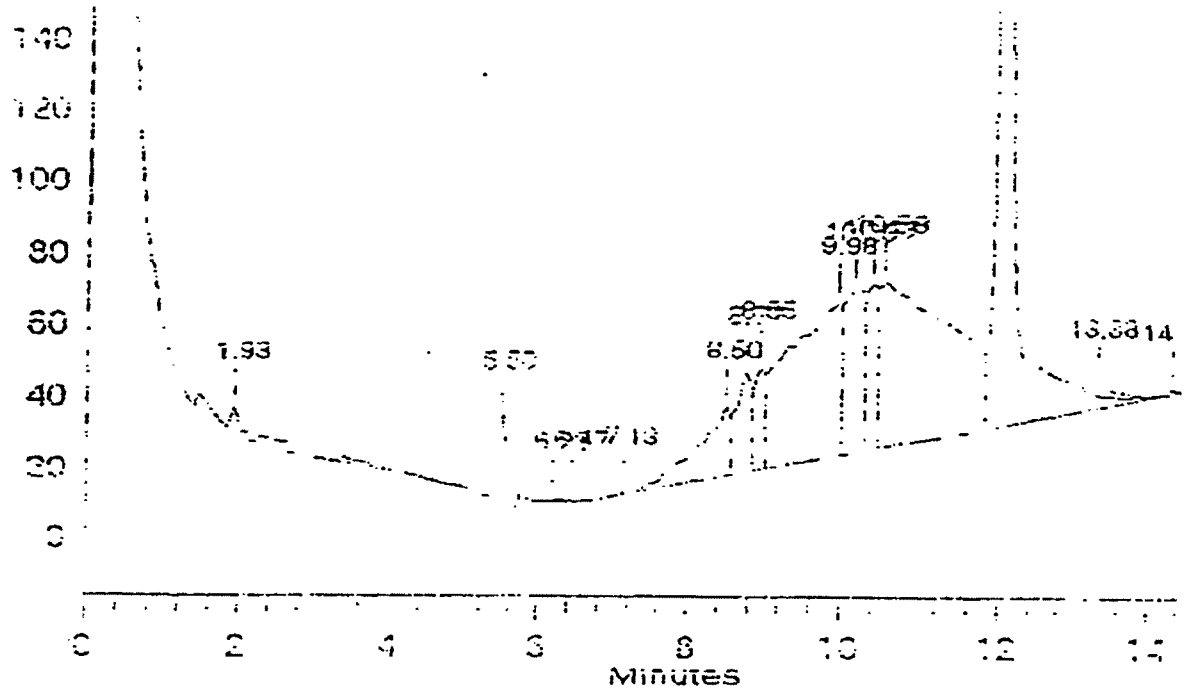
File: C:\DX\DATA\553-1401.d\1 Sample: 553-14



BC
ORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-14

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (35'-36.5') 01-15-94 SAMPLED BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected: 01/15/94

Date Sample Received @ Lab: 01/18/94

Date Analysis Completed: 01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.01
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-14

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (35'-36.5') 01-15-94 SAMPLED BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

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Sample Name: [illegible] Date: [illegible]

Data File : C:\DX\DATA\0553-141.D21

Method : C:\DX\METHOD\GCS-601C.MET

ACI Address: 1 System : 2 Inject#: 21 Detector: PID

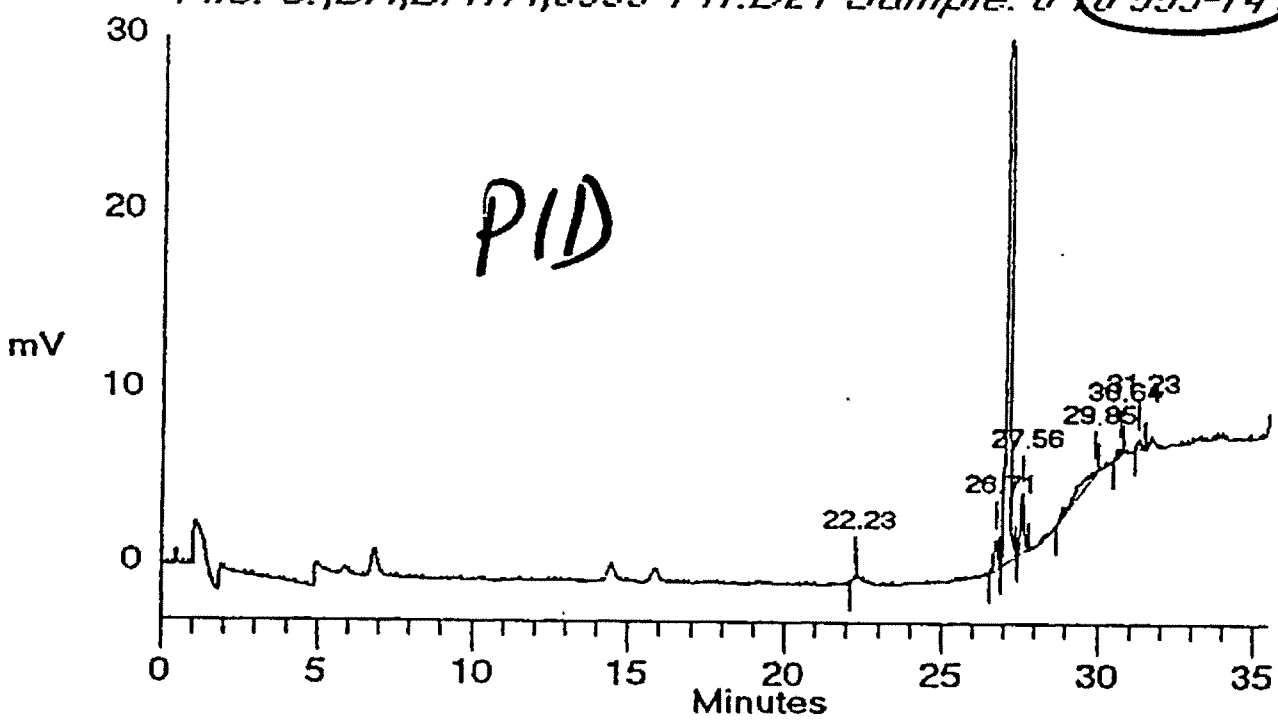
********************** PEAKS NOT FOUND IN THIS RUN ************************

ame	Adjusted Ret Time	Reference Peak
NZENE	22.27	0
LBENZENE	28.22	0
XYLENE	31.19	0
P XYLENE	31.61	0

PORT	VOLUME	DILUTION	POINTS	RATE	START	STOP	AREA REJ
xternal	1	1	10650	5Hz	0.00	35.50	5000

k. Num	Ret Time	Component Name	Concentration %	Height	Area	Bl. Code	%Delta
2	26.71		0.000	1714	14722	2	
3	27.07	aaa-TFT (PID S-2)	91.846	50957	395379	2	0.07
4	27.56	TOLUENE	0.000	3432	27627	2	0.07
5	29.85	ETHYLBENZENE	0.000	316	27310	1	1.88
		Totals	91.846	56421	465637		

File: C:\DX\DATA\0553-141.D21 Sample: 6 (0553-143.18G



CCl_2 0.007 mg/kg

Data File : C:\DX\DATA\0553-142.D21
Method : C:\DX\METHOD\CC6-601C.ME2
ACI Address: 1 System : 2 Inject#: 21 Detector: COND

********** PEAKS NOT FOUND IN THIS RUN **********

..me	Adjusted Ret Time	Reference Peak
3Cl	1.15	0
3Br	1.95	0
1/ FREON 12	2.52	0
1-DCA	11.32	0
3rCl2	17.58	0
2-DCPA	19.88	0
-1,3-DCPE	20.58	0
EVE	23.75	0
OMOFORM	24.96	0
BENZENE	28.26	0
3-DCB	33.17	0
-DCB	33.56	0
4-DCB	[illegible]	0

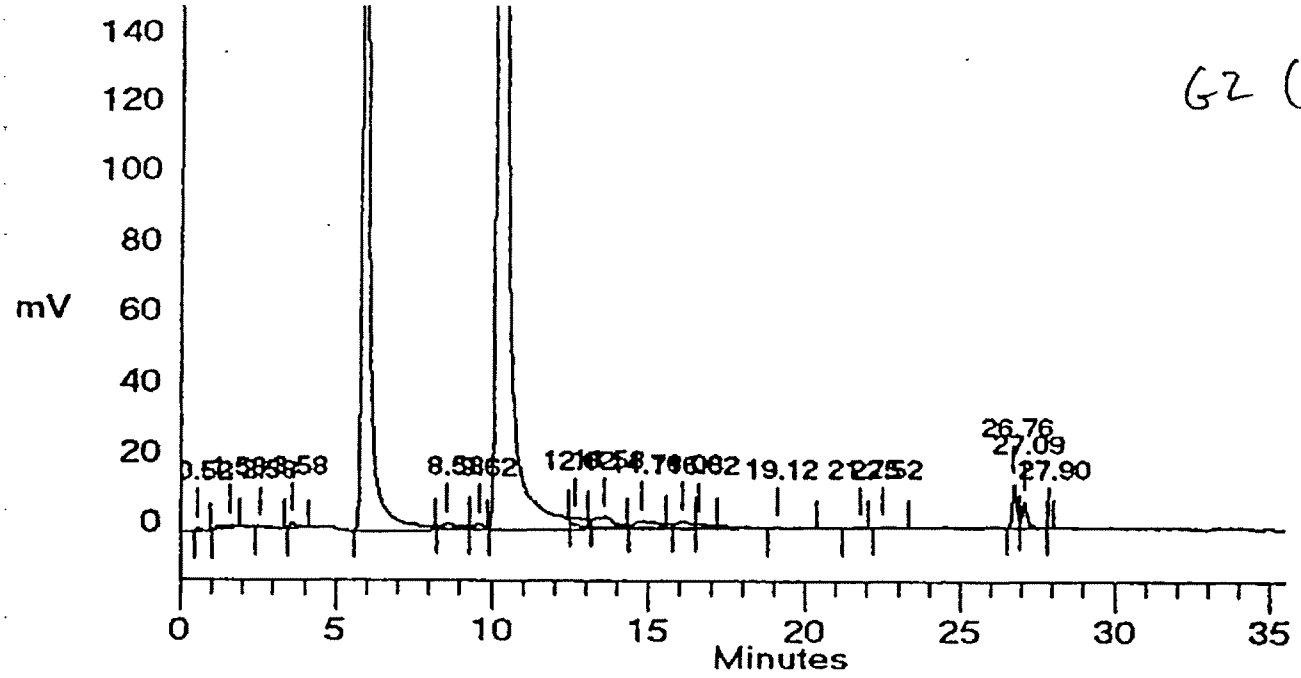
G2 (35'-36.5')

ELCD

EPORT	VOLUME	DILUTION	POINTS	RATE	START	STOP	AREA REJ
ernal	1	1	10650	5Hz	0.00	35.50	5000

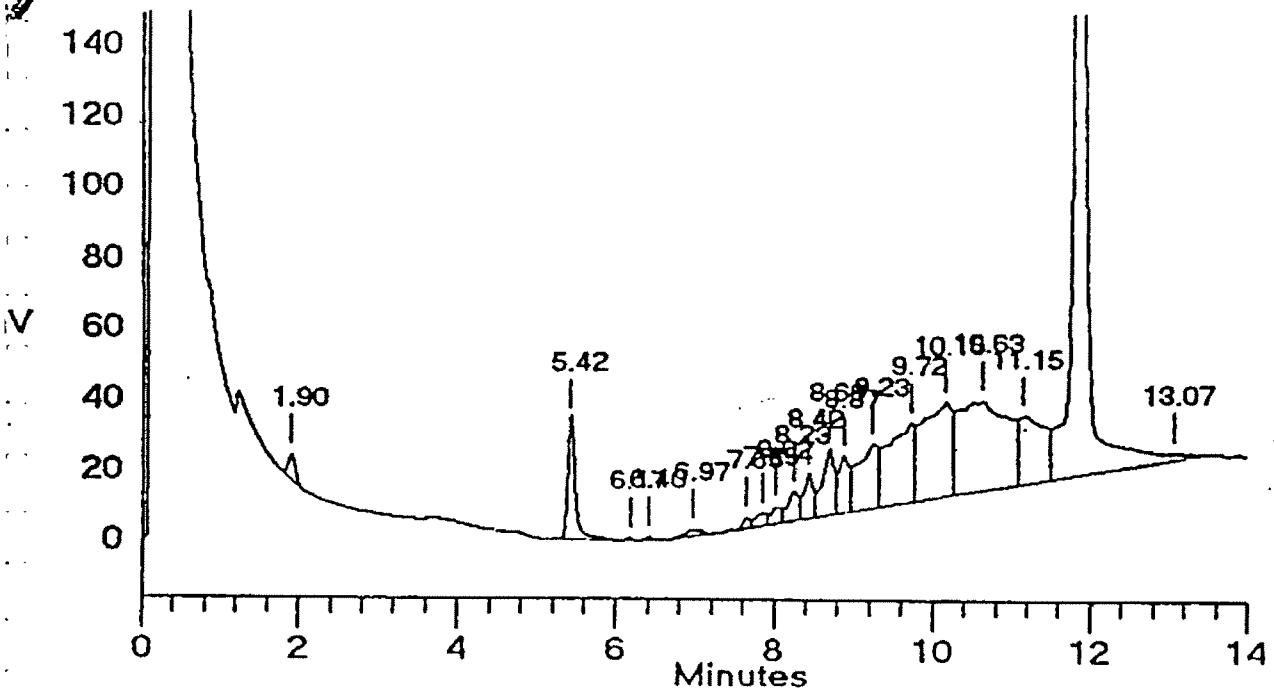
Pk. m	Ret Time	Component Name	Concentration %	Height	Area	Dl. Code	%Delta
1	0.52		0.000	864	10100	1	
2	1.58		0.000	940	40033	1	
4	3.58	C2H5Cl	0.000	1468	23942	1	2.97
5	5.92	MeCl2	0.000	228604	3798539	3	0.62
6	8.58	CCl3F	0.000	1688	74893	4	0.74
7	9.02	1,1-DCE	0.000	1575	42379	4	-0.03
8	10.25	BrClMe (ELCD S-1)	100.219	389089	8305689	3	0.29
9	12.62	C/T-1,2-DCE	0.000	1895	67187	4	0.53
0	13.58	CHCl3	0.000	2861	131762	4	2.28
1	14.78	1,2-DCA	0.000	2128	117383	4	2.80
12	16.08	1,1,1-TCA	0.000	2011	64909	4	0.40
3	16.62	CCl4	0.000	1417	43230	4	0.22
4	19.12		0.000	369	13430	4	
15	21.75	TCE	0.000	537	12840	2	0.46
16	22.52	CO-3	0.000	400	13233	2	-0.01
7	26.76	1,1,2,2TCA/PCE/S2	0.000	12123	113502	2	0.14
8	27.09		0.000	7346	86369	2	
		Totals	100.219	655265	12959620		

G2 (35'-36.5')



ELCD

File: C:\DX\DATA\553-1501.D01 Sample: 553-15



BC ORATORIES

Purgeable Aromatics
and
Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/27/94
Lab #: 94-00553-15

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (40'-41.5') 01-15-94 SAMPLED BY S. FRAMBACH

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015
Individual constituents by EPA Method 5030/8020.

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/15/94	01/18/94	01/25/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	18.	mg/kg	10.

California D.O.H.S. Cert. #1186

Department Supervisor

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-15

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (40'-41.5') 01-15-94 SAMPLED BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected: 01/15/94

Date Sample Received @ Lab: 01/18/94

Date Analysis Completed: 01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.01
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-15

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (40'-41.5') 01-15-94 SAMPLED BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	mg/kg	0.01
Total Trihalomethanes	None Detected	mg/kg	0.02

California D.O.H.S. Cert. #1186

Stuart S. Sullivan
Department Supervisor

BC LABORATORIES

ERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
EST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date Reported: 01/27/94 Page 1
Date Received: 01/18/94
Laboratory No.: 94-00553-16

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (13') 01-15-94 SAMPLED BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	4.0	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

D Schultz
Department Supervisor

BC
ORATORIES

BRAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
EST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date Reported: 01/27/94 Page 1
Date Received: 01/18/94
Laboratory No.: 94-00553-17

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-2 (26') 01-15-94 SAMPLED BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	5.8	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

Department Supervisor

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BC LABORATORIES

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date Reported: 01/27/94
Date Received: 01/18/94
Laboratory No.: 94-00553-19

Sample Description: #CA0228.001.004 HAWKER PACIFIC: G-3 (4') 01-14-94 SAMPLED BY S. FRAMBACH

CHEMICAL ANALYSIS

Constituents	Sample Results	Units	Method P.Q.L.	Method
Moisture	5.1	%	0.05	ASTM-E871

P.Q.L. = Practical Quantitation Limit (refers to the least amount of analyte detectable based on sample size used and analytical technique employed).

REFERENCES:
ASTM = "American Society for Testing and Materials"

Department Supervisor

4100 Atlas Ct. • Bakersfield, CA 93308 • (805) 327-4911 • FAX (805) 327-1918

ORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-20

Sample Description: #CA0228.001.004 HAWKER PACIFIC: RINSATE (END CAPS) 01-15-94 SAMPLED BY S. FRAMBACH

Test Method: EPA Method 8010/8020

Sample Matrix: Water

Date Sample Collected: 01/15/94

Date Sample Received @ Lab: 01/18/94

Date Analysis Completed: 01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	µg/L	0.5
Bromodichloromethane	None Detected	µg/L	0.5
Bromoform	None Detected	µg/L	0.5
Bromomethane	None Detected	µg/L	0.5
Carbon tetrachloride	None Detected	µg/L	0.5
Chlorobenzene	None Detected	µg/L	0.5
Chloroethane	None Detected	µg/L	0.5
Chloroform	None Detected	µg/L	0.5
Chloromethane	None Detected	µg/L	0.5
Dibromochloromethane	None Detected	µg/L	0.5
1,2-Dichlorobenzene	None Detected	µg/L	0.5
1,3-Dichlorobenzene	None Detected	µg/L	0.5
1,4-Dichlorobenzene	None Detected	µg/L	0.5
Dichlorodifluoromethane	None Detected	µg/L	0.5
1,1-Dichloroethane (1,1-DCA)	None Detected	µg/L	0.5
1,2-Dichloroethane (1,2-DCA)	None Detected	µg/L	0.5
1,1-Dichloroethene (1,1-DCE)	None Detected	µg/L	0.5
Total 1,2-Dichloroethene	None Detected	µg/L	0.5
1,2-Dichloropropane	None Detected	µg/L	0.5
cis-1,3-Dichloropropene	None Detected	µg/L	0.5
trans-1,3-Dichloropropene	None Detected	µg/L	0.5
Ethyl Benzene	None Detected	µg/L	0.5
Methylene chloride	None Detected	µg/L	0.5
1,1,2,2-Tetrachloroethane	None Detected	µg/L	0.5
Tetrachloroethene (PCE)	None Detected	µg/L	0.5
Toluene	None Detected	µg/L	0.5
1,1,1 Trichloroethane	None Detected	µg/L	0.5
1,1,2 Trichloroethane	None Detected	µg/L	0.5
Trichloroethene	None Detected	µg/L	0.5
Trichlorofluoromethane	None Detected	µg/L	0.5
Vinyl chloride	None Detected	µg/L	0.5

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

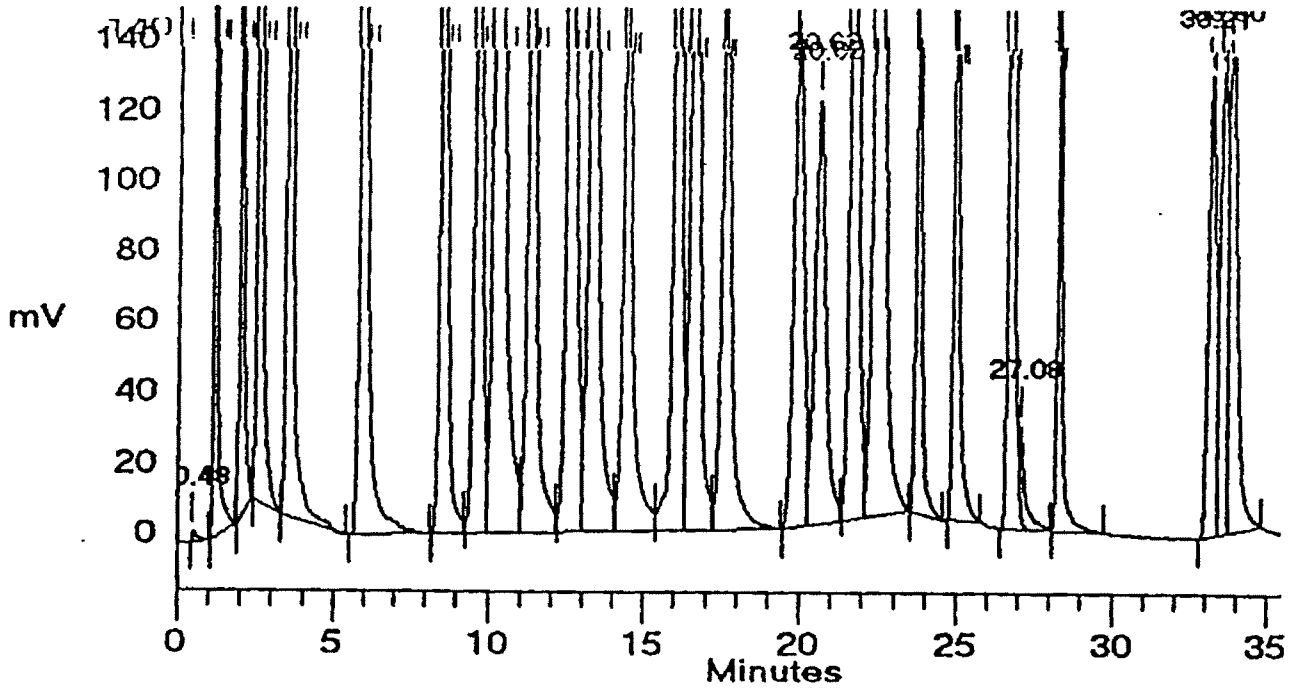
Date of Report: 01/24/94
Lab #: 94-00553-20

Sample Description: #CA0228.001.004 HAWKER PACIFIC: RINSATE (END CAPS) 01-15-94 SAMPLED BY S. FRAMBACH

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	µg/L	1.
Total Trihalomethanes	None Detected	µg/L	2.

California D.O.H.S. Cert. #1186

Department Supervisor


mV
140
120
100
80
60
40
20
0
0.48
20.62
27.08
0
5
10
15
20
25
30
35
Minutes

ELCD

STD

Sample Name: 6 1 CCV 20ULV470 Date: Thu Jan 20 09:15:21 1994
Data File : C:\DX\DATA\6CCV1202.D01
Method . : C:\DX\METHOD\GC6-601C.ME2
ACI Address: 1 System : 2 Inject#: 1 Detector: COND

PORT	VOLUME	DILUTION	POINTS	RATE	START	STOP	AREA REJ
ternal	1	1	10650	5Hz	0.00	35.50	5000

Pk. Num	Ret Time	Component Name	Concentration %	Height	Area	Bl. Code	%Delta
1	0.48		0.000	2416	33103	1	
2	1.12	CH3Cl	0.000	282219	2657118	1	-2.90
3	1.95	CH3Br	0.000	252931	2331075	1	0.00
4	2.52	VCl/ FREON 12	0.000	582521	5485874	1	-0.13
5	3.52	C2H5Cl	0.000	490862	5359898	1	1.05
6	5.92	MeCl2	0.000	299143	4907314	2	0.62
7	8.55	CCl3F	0.000	216332	3544324	2	0.35
8	9.65	1,1-DCE	0.000	226041	3637389	2	0.31
9	10.25	BrClMe (ELCD S-1)	101.460	418474	8410742	2	0.29
10	11.35	1,1-DCA	0.000	242138	4429353	2	0.27
11	12.58	C/T-1,2-DCE	0.000	297109	5552303	2	0.27
12	13.32	CHCl3	0.000	301757	5772181	2	0.28
13	14.42	1,2-DCA	0.000	177040	3649117	2	0.25
14	16.05	1,1,1-TCA	0.000	254940	4640914	2	0.19
15	16.62	CCl4	0.000	298400	5454191	2	0.22
16	17.62	CHBrCl2	0.000	168553	3519924	2	0.21
17	19.95	1,2-DCPA	0.000	145914	3170644	2	0.35
18	20.62	C-1,3-DCPE	0.000	119369	2841359	2	0.18
19	21.68	TCE	0.000	292696	5125580	2	0.15
20	22.52	CO-3	0.000	339736	7506764	2	-0.01
21	23.78	2-CEVE	0.000	163248	2004492	1	0.14
22	24.98	BROMOFORM	0.000	182108	2286114	1	0.09
23	26.74	1,1,2,2TCA/PCE/S2	0.000	577533	5500267	2	0.09
24	28.29	CLBENZENE	0.000	102958	2004627	2	0.11
25	33.21	1,3-DCB	0.000	130405	2110110	2	0.12
26	33.60	1,2-DCB	0.000	131399	2068708	2	0.11
27	33.88	1,4-DCB	0.000	138253	2693461	2	0.17
		Totals	101.460	6895045	106697444		

ELCD

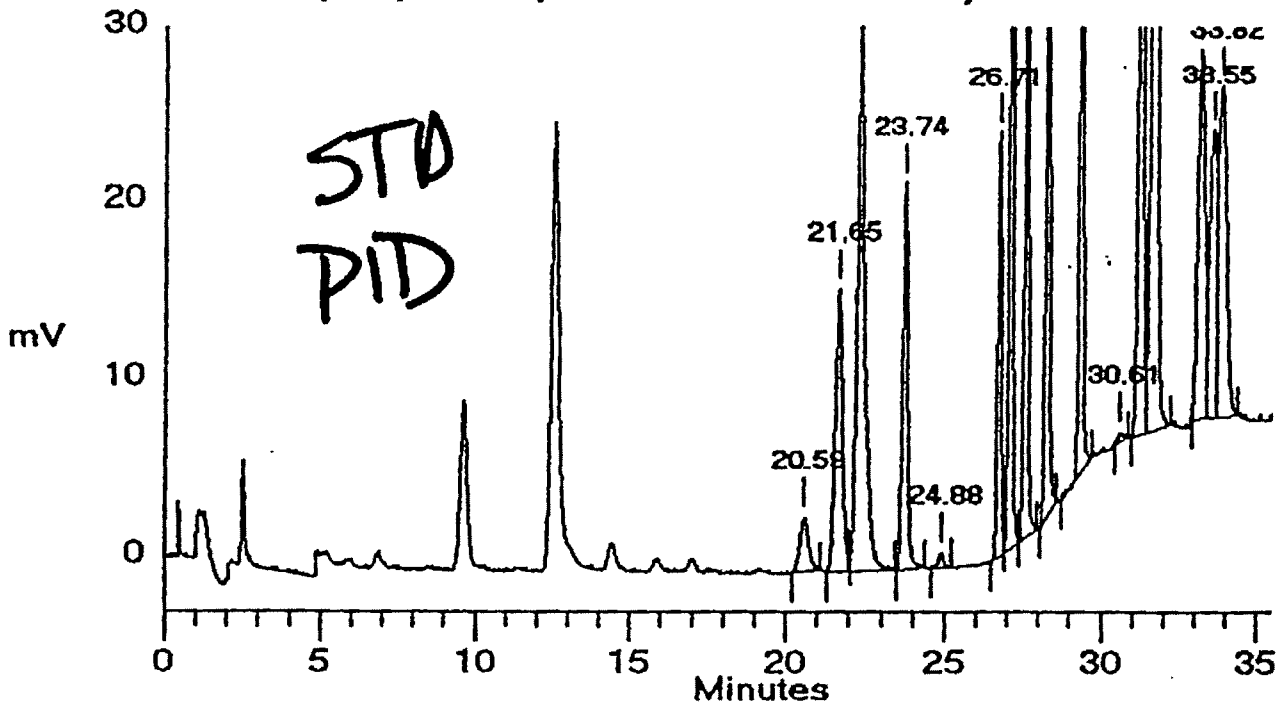
Sample: 6 1 CCV 20ULV478 Date: Thu Jan 20 09:15:21 1994

Data File : C:\DX\DATA\6CCV1201.D01
Method : C:\DX\METHOD\GC6-601C.MET
ACI Address: 1 System : 2 Inject#: 1 Detector: PID

REPORT	VOLUME	DILUTION	POINTS	RATE	START	STOP	AREA REJ
External	1	1	10650	5Hz	0.00	35.50	5000

Pk. Num	Ret Time	Component Name	Concentration %	Height	Area	Bl. Code	%Delta
1	20.59		0.000	3008	59417	1	
2	21.65		0.000	15889	252342	2	
3	22.32	BENZENE	0.000	30306	524093	2	0.22
4	23.74		0.000	21771	235160	1	
5	24.88		0.000	814	9808	1	
6	26.71		0.000	23915	188869	2	
7	27.08	aaa-TFT (PID S-2)	100.552	55628	434382	2	0.11
8	27.56	TOLUENE	0.000	53052	418420	2	0.07
9	28.25	CLBENZENE	0.000	52136	411664	1	0.11
10	29.33	ETHYLBENZENE	0.000	44437	361231	1	0.10
11	30.61		0.000	576	6544	1	
12	31.22	M XYLENE	0.000	38574	428429	2	0.10
13	31.65	O&P XYLENE	0.000	61976	799636	2	0.13
14	33.16		0.000	20937	329189	2	
15	33.55		0.000	16224	238107	2	
16	33.82		0.000	18777	337291	2	
		Totals	100.552	458519	5034582		

File: C:\DX\DATA\6CCV1201.D01 Sample: 6 1 CCV 20ULV478



BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-TB

Sample Description: #CA0228.001.004 HAWKER PACIFIC: TRIP BLANK

Test Method: EPA Method 8010/8020

Sample Matrix: Water

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/15/94	01/18/94	01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	µg/L	0.5
Bromodichloromethane	None Detected	µg/L	0.5
Bromoform	None Detected	µg/L	0.5
Bromomethane	None Detected	µg/L	0.5
Carbon tetrachloride	None Detected	µg/L	0.5
Chlorobenzene	None Detected	µg/L	0.5
Chloroethane	None Detected	µg/L	0.5
Chloroform	None Detected	µg/L	0.5
Chloromethane	None Detected	µg/L	0.5
Dibromochloromethane	None Detected	µg/L	0.5
1,2-Dichlorobenzene	None Detected	µg/L	0.5
1,3-Dichlorobenzene	None Detected	µg/L	0.5
1,4-Dichlorobenzene	None Detected	µg/L	0.5
Dichlorodifluoromethane	None Detected	µg/L	0.5
1,1-Dichloroethane (1,1-DCA)	None Detected	µg/L	0.5
1,2-Dichloroethane (1,2-DCA)	None Detected	µg/L	0.5
1,1-Dichloroethene (1,1-DCE)	None Detected	µg/L	0.5
Total 1,2-Dichloroethene	None Detected	µg/L	0.5
1,2-Dichloropropane	None Detected	µg/L	0.5
cis-1,3-Dichloropropene	None Detected	µg/L	0.5
trans-1,3-Dichloropropene	None Detected	µg/L	0.5
Ethyl Benzene	None Detected	µg/L	0.5
Methylene chloride	None Detected	µg/L	1.
1,1,2,2-Tetrachloroethane	None Detected	µg/L	0.5
Tetrachloroethene (PCE)	None Detected	µg/L	0.5
Toluene	None Detected	µg/L	0.5
1,1,1 Trichloroethane	None Detected	µg/L	0.5
1,1,2 Trichloroethane	None Detected	µg/L	0.5
Trichloroethene	None Detected	µg/L	0.5
Trichlorofluoromethane	None Detected	µg/L	0.5
Vinyl chloride	None Detected	µg/L	0.5
Total Xylenes	None Detected	µg/L	1.
Total Trihalomethanes	None Detected	µg/L	2.

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Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 01/24/94
Lab #: 94-00553-TB

Sample Description: #CA0228.001.004 HAWKER PACIFIC: TRIP BLANK

California D.O.H.S. Cert. #1186

Stuart S. Buttram
Department Supervisor

B C LABORATORIES

QUALITY CONTROL REPORT
(Preparation & Analysis Information)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: WATER

MS & MSD RESULTS ARE TRUNCATED VALUES.
Samples Affected: 94-00553-20 & 94-00553-TB

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
METHOD 8010/8020 COMPOUNDS	5030	01/21/94	RL	8010/8020	01/21/94	RL

Quality Control Officer

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

1/3/94 12:44

INITIAL CALIBRATION

EPA 8010/8020/601/602 V469

ANALYST: RRL

INSTRUMENT: V3400 GCVI

COMPOUND	RF(1)	RF(2)	RF(3)	RF(4)	RF(5)	RF(AVE)	%RSD
	ppb	ppb	ppb	ppb	ppb		
CH3Cl	189004	160552	155490	145968	123116	154826	13.81
	5.3	13.3	26.7	40.0	53.3		
CH3Br	79032	82645	85681	91803	95112	86855	6.77
	5.3	13.3	26.7	40.0	53.3		
VCL\FREON 12	208923	212664	201617	201758	179715	200935	5.69
	5.3	13.3	26.7	40.0	53.3		
C2H5CL	139929	212603	200605	205281	210667	193817	14.07
	5.3	13.3	26.7	40.0	53.3		
MeCl2	497103	476420	454218	458460	449512	467142	3.75
	2.0	5.0	10.0	15.0	20.0		
CCL3F	336536	332230	306424	316735	332965	324978	3.54
	2.0	5.0	10.0	15.0	20.0		
1.1-DCE	305255	346756	319895	332089	352536	331306	5.23
	2.0	5.0	10.0	15.0	20.0		
MeBrCl (ELCD S	*273907*	*282210*	*265722*	*272731*	*283432*	*275600*	*2.37*
	6	15	30	45	60		
1.1-DCA	493332	454480	412279	422229	429325	442329	6.57
	2.0	5.0	10.0	15.0	20.0		
C/T-1.2-DCE	377106	367669	339961	353009	366656	360880	3.60
	3.0	7.5	15.0	22.5	30.0		
CHCl3	601114	590943	531374	542649	533977	560011	5.32
	2.0	5.0	10.0	15.0	20.0		
1.2-DCA	380466	384604	359095	365225	374481	372774	2.53
	2.0	5.0	10.0	15.0	20.0		
1.1.1-TCA	400848	433581	413311	406824	432185	417350	3.18
	2.0	5.0	10.0	15.0	20.0		
CCL4	501475	544916	495769	488747	509947	508171	3.87
	2.0	5.0	10.0	15.0	20.0		
CHBrCL2	304546	352280	332832	325252	360252	335032	5.91
	2.0	5.0	10.0	15.0	20.0		
1.2-DCPA	262038	312541	302724	304016	324587	301181	7.00
	2.0	5.0	10.0	15.0	20.0		
C-1.3-DCPE		250123	263628	277520	308595	*274966*	*7.89*
	2.0	5.0	10.0	15.0	20.0		
TCE	529107	567563	529048	544826	560949	546299	2.91
	2.0	5.0	10.0	15.0	20.0		
CO-3		254995	249182	258121	268541	*257710*	*2.73*

	6.0	15.0	30.0	45.0	60.0		
2-CEVE		62764	73922	70813	83732	*72808*	*10.31*
	6.0	15.0	30.0	45.0	60.0		
CHBr3		124967	117479	123695	130009	*124037*	*3.60*
	4.0	10.0	20.0	30.0	40.0		
1,1,2,2-TCA/PC	196587	267964	213858	254959	255988	237871	11.60
	4.0	10.0	20.0	30.0	40.0		
CHLOROBENZENE	169502	171681	151146	169037	171385	166550	4.67
	2.0	5.0	10.0	15.0	20.0		
1,3-DCB		204318	198197	208653	183912	*198770*	*4.70*
	2.0	5.0	10.0	15.0	20.0		
1,2-DCB		220775	215774	211325	179236	*206777*	*7.86*
	2.0	5.0	10.0	15.0	20.0		
1,4-DCB	257049	263546	250582	270932	268164	262055	2.83
	2.0	5.0	10.0	15.0	20.0		
BENZENE	60762	53382	51843	53715	55374	55015	5.61
	2.0	5.0	10.0	15.0	20.0		
TFT (PID S-1)	*14662*	*14812*	*13580*	*14274*	*14801*	*14426*	*3.23*
	6	15	30	45	60		
TOLUENE	46892	42229	40016	41154	42603	42579	5.49
	2.0	5.0	10.0	15.0	20.0		
CHLOROBENZENE	48604	43536	41240	42747	44440	44114	5.62
	2.0	5.0	10.0	15.0	20.0		
ETHYL BENZENE	35221	36832	34550	36630	37659	36178	3.13
	2.0	5.0	10.0	15.0	20.0		
M - XYLENE	47862	52304	41891	43410	44371	45968	8.11
	2.0	5.0	10.0	15.0	20.0		
O + P - XYLENE	43631	51280	39621	41105	41603	43448	9.48
	4.0	10.0	20.0	30.0	40.0		

1/3/94 12:44 RF = Area Counts/(ug/L)

INITIAL CALIBRATION EPA 8010/8020/601/602

2-CEVE	72808	76287	4.67
CHBr3	124037	124210	0.14
1.1.2.2-TCA/PCE	237871	256900	7.69
CHLOROBENZENE	166550	166790	0.14
1.3-DCB	198770	200241	0.74
1.2-DCB	206777	205267	0.73
1.4-DCB	262055	278060	5.93
BENZENE	55015	54558	0.84
TFT (PID S-1)	14426	14864	2.99
TOLUENE	42979	42504	0.18
CHLOROBENZENE	44114	43727	0.88
ETHYL BENZENE	36178	37048	2.38
M XYLENE	45968	44236	3.84
O + P XYLENES	43448	41880	3.67

1/3/94 15:38 EPA 8010/8020/601/602

INITIAL CALIBRATION VERIFICATION BEGIN

CONTINUING CALIBRATION VERIFICATION

BEGIN

EPA 8010/8020/601/602

1/21/94 9:51

V478 20uL

ANALYST: RRL

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	99077	43.91
CH3Br	86855	84891	2.29
VCL\FREON 12	200935	198934	1.00
C2H5CL	193817	197711	1.99
MeCl2	467142	477149	2.12
CCL3F	324978	340411	4.64
1,1-DCE	331306	354044	6.64
MeBrCl (ELCD S-1)	275600	286934	4.03
1,1-DCA	442329	452384	2.25
C/T-1,2-DCE	360880	374737	3.77
CHCl3	560011	586397	4.60
1,2-DCA	372774	382061	2.46
1,1,1-TCA	417350	451591	7.88
CCL4	508171	548998	7.72
CHBRCL2	335032	355657	5.97
1,2-DCPA	301101	320762	6.30
C-1,3-DCPE	274966	299180	8.43
TCE	546299	517863	5.34
CO-3	257710	257722	0.00

2-CEVE	72808	77228	5.89
CHBr3	124037	122045	1.62
1.1.2.2-TCA/PCE	237871	275970	14.83
CHLOROBENZENE	166550	172755	3.66
1.3-DCB	198770	212972	6.90
1.2-DCB	206777	228366	9.92
1.4-DCB	262055	247275	5.80
BENZENE	55015	51648	6.31
TFT (PID S-1)	14426	14007	2.95
TOLUENE	42579	40921	3.97
CHLOROBENZENE	44114	40592	8.32
ETHYL BENZENE	36178	35459	2.01
M XYLENE	45968	41745	9.63
O + P XYLENES	43448	39274	10.09

1/21/94 9:51 EPA 8010/8020/601/602

CONTINUING CALIBRATION VERIFICATION BEGIN

CONTINUING CALIBRATION VERIFICATION

END CHK STD

EPA 8010/8020/601/602

1/21/94 22:30

V478 20uL

ANALYST: BJM

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	89666	53.30
CH3Br	86855	97472	11.52
VCL\FREON 12	200935	202051	0.55
C2H5CL	193817	185668	4.29
MeCl2	467142	469322	0.47
CCL3F	324978	343895	5.66
1,1-DCE	331306	359682	8.21
MeBrCl (ELCD S-1)	275600	301769	*9.06*
1,1-DCA	442329	468764	5.80
C/T-1,2-DCE	360880	384915	6.45
CHCl3	560011	593401	5.79
1,2-DCA	372774	399304	6.87
1,1,1-TCA	417350	464660	10.73
CCL4	508171	551663	8.21
CHBRCL2	335032	367202	9.16
1,2-DCPA	301181	330750	9.36
C-1,3-DCPE	274966	300058	8.73
TCE	546299	555451	1.66
CO-3	257710	284158	9.76

2-CEVE	72808	84683	15.08
CHBr3	124037	136005	9.20
1.1.2.2-TCA/PCE	237871	294124	21.15
CHLOROBENZENE	166550	173340	4.00
1.3-DCB	198770	221292	10.72
1.2-DCB	206777	223159	7.62
1.4-DCB	262055	297443	12.65
BENZENE	55015	50906	7.76
TFT (PID S-1)	14426	13750	*4.80*
TOLUENE	42579	39402	7.75
CHLOROBENZENE	44114	40022	9.73
ETHYL BENZENE	36178	34645	4.33
M XYLENE	45968	40693	12.17
O + P XYLENES	43448	38285	12.63

1/21/94 22:30 CONTINUING CALIBRATION VERIFICATION END CHK STD

BC LABORATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 02/02/94
Lab #: 94-00553-20MB

Sample Description: #CA0228.001.004 HAWKER PACIFIC: METHOD BLANK FOR LAB # 94-00553-20 & TB

Test Method: EPA Method 8010/8020

Sample Matrix: Water

Date Sample Collected: 01/15/94

Date Sample Received @ Lab: 01/18/94

Date Analysis Completed: 01/21/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	µg/L	0.5
Bromodichloromethane	None Detected	µg/L	0.5
Bromoform	None Detected	µg/L	0.5
Bromomethane	None Detected	µg/L	0.5
Carbon tetrachloride	None Detected	µg/L	0.5
Chlorobenzene	None Detected	µg/L	0.5
Chloroethane	None Detected	µg/L	0.5
Chloroform	None Detected	µg/L	0.5
Chloromethane	None Detected	µg/L	0.5
Dibromochloromethane	None Detected	µg/L	0.5
1,2-Dichlorobenzene	None Detected	µg/L	0.5
1,3-Dichlorobenzene	None Detected	µg/L	0.5
1,4-Dichlorobenzene	None Detected	µg/L	0.5
Dichlorodifluoromethane	None Detected	µg/L	0.5
1,1-Dichloroethane (1,1-DCA)	None Detected	µg/L	0.5
1,2-Dichloroethane (1,2-DCA)	None Detected	µg/L	0.5
1,1-Dichloroethene (1,1-DCE)	None Detected	µg/L	0.5
Total 1,2-Dichloroethene	None Detected	µg/L	0.5
1,2-Dichloropropane	None Detected	µg/L	0.5
cis-1,3-Dichloropropene	None Detected	µg/L	0.5
trans-1,3-Dichloropropene	None Detected	µg/L	0.5
Ethyl Benzene	None Detected	µg/L	0.5
Methylene chloride	None Detected	µg/L	0.5
1,1,2,2-Tetrachloroethane	None Detected	µg/L	0.5
Tetrachloroethene (PCE)	None Detected	µg/L	0.5
Toluene	None Detected	µg/L	0.5
1,1,1 Trichloroethane	None Detected	µg/L	0.5
1,1,2 Trichloroethane	None Detected	µg/L	0.5
Trichloroethene	None Detected	µg/L	0.5
Trichlorofluoromethane	None Detected	µg/L	0.5
Vinyl chloride	None Detected	µg/L	0.5

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 02/02/94
Lab #: 94-00553-20MB

Sample Description: #CA0228.001.004 HAWKER PACIFIC: METHOD BLANK FOR LAB # 94-00553-20 & TB

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	µg/L	0.5
Total Trihalomethanes	None Detected	µg/L	0.5

California D.O.H.S. Cert. #1186

Department Supervisor

BC LABORATORIES

R C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: WATER

MS & MSD RESULTS ARE TRUNCATED VALUES.
Samples Affected: 94-00553-20 & 94-00553-TB

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Benzene	553-20	< 0.5	9.65	9.54	10.00	10.00	µg/L	1.	13	97.	95.	71 - 114
Bromodichloromethane	553-20	< 0.5	10.66	10.69	10.00	10.00	µg/L	0.	20	107.	107.	71 - 128
Bromoform	553-20	< 0.5	19.41	20.61	20.00	20.00	µg/L	6.	20	97.	103.	72 - 127
Bromomethane	553-20	< 0.5	28.4	30.6	26.7	26.7	µg/L	7.	17	107.	115.	76 - 121
Carbon Tetrachloride	553-20	< 0.5	10.96	10.77	10.00	10.00	µg/L	2.	13	110.	108.	75 - 125
Chlorobenzene	553-20	< 0.5	10.78	10.41	10.00	10.00	µg/L	4.	17	108.	104.	76 - 118
Chloroethane	553-20	< 0.5	26.2	25.7	26.7	26.7	µg/L	2.	14	98.	96.	77 - 122
Chloroform	553-20	< 0.5	10.68	10.65	10.00	10.00	µg/L	0.	18	107.	107.	66 - 132
Chloromethane	553-20	< 0.5	16.8	17.5	26.7	26.7	µg/L	4.	25	63.	66.	70 - 130
1,2-Dichlorobenzene	553-20	< 0.5	11.42	10.76	10.00	10.00	µg/L	6.	25	114.	108.	72 - 123
1,3-Dichlorobenzene	553-20	< 0.5	10.78	10.81	10.00	10.00	µg/L	0.	17	108.	108.	78 - 116
1,4-Dichlorobenzene	553-20	< 0.5	10.63	10.86	10.00	10.00	µg/L	2.	23	106.	109.	75 - 118
1,1-Dichloroethane	553-20	< 0.5	10.24	10.53	10.00	10.00	µg/L	3.	15	102.	105.	79 - 116
1,2-Dichloroethane	553-20	< 0.5	9.93	10.66	10.00	10.00	µg/L	7.	15	99.	107.	75 - 120
1,1-Dichloroethene	553-20	< 0.5	11.02	10.89	10.00	10.00	µg/L	1.	16	110.	109.	79 - 119
Total 1,2-Dichloroethene	553-20	< 0.5	15.95	16.11	15.00	15.00	µg/L	1.	15	106.	108.	77 - 124
1,2-Dichloropropane	553-20	< 0.5	10.79	10.65	10.00	10.00	µg/L	1.	15	108.	107.	79 - 115
cis-1,3-Dichloropropene	553-20	< 0.5	10.59	10.73	10.00	10.00	µg/L	1.	18	106.	107.	80 - 116
Ethyl benzene	553-20	< 0.5	9.99	9.701	10.00	10.00	µg/L	3.	12	100.	97.	74 - 116
Methylene Chloride	553-20	< 0.5	10.11	10.14	10.00	10.00	µg/L	0.	20	101.	101.	71 - 128
1,1,2,2-TCA	553-20	< 0.5	23.8	20.0	20.0	20.0	µg/L	18.	15	119.	100.	70 - 130
Toluene	553-20	< 0.5	9.78	9.53	10.00	10.00	µg/L	3.	14	98.	95.	75 - 116
1,1,1-Trichloroethane	553-20	< 0.5	11.87	11.33	10.00	10.00	µg/L	5.	19	119.	113.	76 - 122
Trichloroethene	553-20	< 0.5	11.12	14.25	10.00	10.00	µg/L	25.	15	111.	143.	80 - 113
Vinyl Chloride/Freon 12	553-20	< 0.5	26.7	26.9	26.7	26.7	µg/L	1.	17	100.	101.	82 - 113
m-Xylene	553-20	< 0.5	9.14	8.96	10.00	10.00	µg/L	2.	20	91.	90.	81 - 109
o&p-Xylenes	553-20	< 0.5	18.0	17.7	20.0	20.0	µg/L	2.	20	90.	89.	77 - 110
TFT	553-20									98.		70 - 130
BrClMeth	553-20									104.		70 - 130

LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: WATER

MS & MSD RESULTS ARE TRUNCATED VALUES.
Samples Affected: 94-00553-20 & 94-00553-TB

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
TFT	553-TB									98.		
BrClMeth	553-TB									113.		

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

Quality Control Officer

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

QUALITY CONTROL REPORT
(Preparation & Analysis Information)
METHOD 8015M TPH-DIESEL

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00553-1, 94-00553-2, 94-00553-4, 94-00553-5, 94-00553-8, 94-00553-9, 94-00553-11, 94-00553-13 - 94-00553-15

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
TPH Diesel	3550	01/20/94	MT	8015M	01/25/94	SB

Surrogate recovery for 93-00553-5 was high due to contribution from the hydrocarbon background of sample matrix.

Quality Control Officer

BC
ORATORIES

Total Petroleum Hydrocarbons

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 02/01/94
Lab #: 94-00553-1MB

Sample Description: #CA0228.001.004 HAWKER PACIFIC: METHOD BLANK FOR LAB # 94-00553-1, -2, -4, -5, -8, -9, -11, -13, -14, & -15

TEST METHOD: TPH by D.O.H.S. / L.U.F.T. Manual Method - Modified EPA 8015

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/14/94	01/18/94	01/25/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Petroleum Hydrocarbons (diesel)	None Detected	mg/kg	10.

California D.O.H.S. Cert. #1186

Department Supervisor

4100 Atlas Ct. • Bakersfield, CA 93308 • (805) 327-4911 • FAX (805) 327-1918

LABORATORIES

B C LABORATORIES

QUALITY CONTROL REPORT
(Instrumental & Blank Parameters)
METHOD 8015M TPH-DIESEL

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00553-1, 94-00553-2, 94-00553-4, 94-00553-5, 94-00553-8, 94-00553-9, 94-00553-11, 94-00553-13 - 94-00553-15

Constituents	ICV % Found	CCV % Found Before	CCV % Found After	% Found Control Limits	CCB Readings Before	Units	CCB Readings After	Units	Method Blank Readings	Units
TPH-Diesel	94.	99.	99.	85 - 115	<50.	mg/L	<50.	mg/L	<10.	mg/kg
TPH-Diesel for 553-2, 553-9	104.	99.	87.	85 - 115	<50.	mg/L	<50.	mg/L	<10.	mg/kg

ICV = Initial Calibration Verification; CCV = Continuing Calibration Verification; CCB = Continuing Calibration Blank

Surrogate recovery for 93-00553-5 was high due to contribution from the hydrocarbon background of sample matrix.

Quality Control Officer

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

LABORATORIES

B C LABORATORIES
QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8015M TPH-DIESEL

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00553-1, 94-00553-2, 94-00553-4, 94-00553-5, 94-00553-8, 94-00553-9, 94-00553-11, 94-00553-13 - 94-00553-15

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
TPH Diesel	553-1	< 10.	437.	504.	500.	500.	mg/kg	14.	15	87.	101.	79 - 123
Surrogate	553-1									89.		76 - 125
Surrogate	553-2									114.		
Surrogate	553-4									103.		
Surrogate	553-5									220.		
Surrogate	553-8									91.		
Surrogate	553-9									85.		
Surrogate	553-11									109.		
Surrogate	553-13									91.		
Surrogate	553-14									100.		
Surrogate	553-15									102.		

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

Surrogate recovery for 93-00553-5 was high due to contribution from the hydrocarbon background of sample matrix.

Quality Control Officer

4100 Atlas Ct. • Bakersfield, CA 93308 • (805) 327-4911 • FAX (805) 327-1918

B C LABORATORIES

QUALITY CONTROL REPORT
(Laboratory Control Sample)
METHOD 8015M TPH-DIESEL

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: SOIL

Samples Affected: 94-00553-1, 94-00553-2, 94-00553-4, 94-00553-5, 94-00553-8, 94-00553-9, 94-00553-11, 94-00553-13 - 94-00553-15

Constituents	QC Sample ID	Sample Result	Spike Level	Units	% Rec	Accuracy Control Limits
TPH-Diesel	LCSS	564.53	500.00	mg/kg	113.	70 - 130

Surrogate recovery for 93-00553-5 was high due to contribution from the hydrocarbon background of sample matrix.

Quality Control Officer

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

LABORATORIES

QUALITY CONTROL REPORT
(Preparation & Analysis Information)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: SOIL

MS & MSD RESULTS ARE TRUNCATED VALUES.
Samples Affected: 94-00553-1, 94-00553-2, 94-00553-4, 94-00553-5, 94-00553-8, 94-00553-9, 94-00553-11, 94-00553-13 - 94-00553-15

Constituents	Preparation Method	Preparation Date	Preparation Technician	Analytical Method	Run Date	Analyst
METHOD 8010/8020 COMPOUNDS	5030	01/20/94	BM	8010/8020	01/20/94	BM

Quality Control Officer

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

1/3/94 12:44

INITIAL CALIBRATION

EPA 8010/8020/601/602 V469

ANALYST: RRL

INSTRUMENT: V3400 GCVI

COMPOUND	RF(1)	RF(2)	RF(3)	RF(4)	RF(5)	RF(AVE)	%RSD
	ppb	ppb	ppb	ppb	ppb		
CH3Cl	189004	160552	155490	145968	123116	154826	13.81
	5.3	13.3	26.7	40.0	53.3		
CH3Br	79032	82645	85681	91803	95112	86855	6.77
	5.3	13.3	26.7	40.0	53.3		
VCL\FREON 12	208923	212664	201617	201758	179715	200935	5.69
	5.3	13.3	26.7	40.0	53.3		
C2H5CL	139929	212603	200605	205281	210667	193817	14.07
	5.3	13.3	26.7	40.0	53.3		
MeCl2	497103	476420	454218	458460	449512	467142	3.75
	2.0	5.0	10.0	15.0	20.0		
CCL3F	336536	332230	306424	316735	332965	324978	3.54
	2.0	5.0	10.0	15.0	20.0		
1.1-DCE	305255	346756	319895	332089	352536	331306	5.23
	2.0	5.0	10.0	15.0	20.0		
MeBrCl (ELCD S	*273907*	*282210*	*265722*	*272731*	*283432*	*275600*	*2.37*
	6	15	30	45	60		
1.1-DCA	493332	454480	412279	422229	429325	442329	6.57
	2.0	5.0	10.0	15.0	20.0		
C/T-1.2-DCE	377106	367669	339961	353009	366656	360880	3.60
	3.0	7.5	15.0	22.5	30.0		
CHCl3	601114	590943	531374	542649	533977	560011	5.32
	2.0	5.0	10.0	15.0	20.0		
1.2-DCA	380466	384604	359095	365225	374481	372774	2.53
	2.0	5.0	10.0	15.0	20.0		
1.1.1-TCA	400848	433581	413311	406824	432185	417350	3.18
	2.0	5.0	10.0	15.0	20.0		
CCL4	501475	544916	495769	488747	509947	508171	3.87
	2.0	5.0	10.0	15.0	20.0		
CHBrCL2	304546	352280	332832	325252	360252	335032	5.91
	2.0	5.0	10.0	15.0	20.0		
1.2-DCPA	262030	312541	302724	304016	324587	301181	7.00
	2.0	5.0	10.0	15.0	20.0		
C-1.3-DCPE		250123	263628	277520	308595	*274966*	*7.89*
	2.0	5.0	10.0	15.0	20.0		
TCE	529107	567563	529048	544826	560949	546299	2.91
	2.0	5.0	10.0	15.0	20.0		
CO-3		254995	249182	258121	268541	*257710*	*2.73*

	6.0	15.0	30.0	45.0	60.0		
2-CEVE		62764	73922	70813	83732	*72608*	*10.31*
	6.0	15.0	30.0	45.0	60.0		
CHBr3		124967	117479	123695	130009	*124037*	*3.60*
	4.0	10.0	20.0	30.0	40.0		
1,1,2,2-TCA/PC	196587	267964	213858	254959	255988	237871	11.60
	4.0	10.0	20.0	30.0	40.0		
CHLOROBENZENE	169502	171681	151146	169037	171385	166550	4.67
	2.0	5.0	10.0	15.0	20.0		
1,3-DCB		204318	198197	208653	183912	*198770*	*4.70*
	2.0	5.0	10.0	15.0	20.0		
1,2-DCB		220775	215774	211325	179236	*206777*	*7.86*
	2.0	5.0	10.0	15.0	20.0		
1,4-DCB	257049	263546	250582	270932	268164	262055	2.83
	2.0	5.0	10.0	15.0	20.0		
BENZENE	60762	53382	51843	53715	55374	55015	5.61
	2.0	5.0	10.0	15.0	20.0		
TFT (PID S-1)	*14662*	*14812*	*13580*	*14274*	*14801*	*14426*	*3.23*
	6	15	30	45	60		
TOLUENE	46892	42229	40016	41154	42603	42579	5.49
	2.0	5.0	10.0	15.0	20.0		
CHLOROBENZENE	48604	43536	41240	42747	44440	44114	5.62
	2.0	5.0	10.0	15.0	20.0		
ETHYL BENZENE	35221	36832	34550	36630	37659	36178	3.13
	2.0	5.0	10.0	15.0	20.0		
M - XYLENE	47862	52304	41891	43410	44371	45968	8.11
	2.0	5.0	10.0	15.0	20.0		
O + P - XYLENE	43631	51280	39621	41105	41603	43448	9.48
	4.0	10.0	20.0	30.0	40.0		

1/3/94 12:44 RF = Area Counts/(ug/L)

INITIAL CALIBRATION EPA 8010/8020/601/602

INITIAL CALIBRATION VERIFICATION

BEGIN

EPA 8010/8020/601/602

1/3/94 15:38

V478 20uL

ANALYST: BJM

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	146858	5.28
CH3Br	86855	92022	5.78
VCL\FREON 12	200935	216512	7.46
C2H5CL	193817	217100	11.33
MeCl2	467142	446496	4.52
CCL3F	324978	324599	0.12
1,1-DCE	331306	347435	4.75
MeBrCl (ELCD S-1)	275600	278959	1.21
1,1-DCA	442329	427242	3.47
C/T-1,2-DCE	360880	358110	0.77
CHCl3	560011	557693	0.41
1,2-DCA	372774	369627	0.85
1,1,1-TCA	417350	429608	2.89
CCL4	508171	529524	4.12
CHBRCL2	335032	346459	3.35
1,2-DCPA	301181	318614	5.63
C-1,3-DCPE	274966	279822	1.75
TCE	546299	562268	2.88
CO-3	257710	258385	0.26

2-CEVE	72808	76287	4.67
CHBr3	124037	124210	0.14
1.1.2.2-TCA/PCE	237871	256900	7.69
CHLOROBENZENE	166550	166790	0.14
1.3-DCB	198770	200241	0.74
1.2-DCB	206777	205267	0.73
1.4-DCB	262055	278060	5.93
BENZENE	55015	54558	0.84
TFT (PID S-1)	14426	14864	2.99
TOLUENE	42579	42504	0.18
CHLOROBENZENE	44114	43727	0.88
ETHYL BENZENE	36178	37048	2.38
M XYLENE	45968	44236	3.84
O + P XYLENES	43448	41880	3.67

1/3/94 15:38 EPA 8010/8020/601/602

INITIAL CALIBRATION VERIFICATION BEGIN

CONTINUING CALIBRATION VERIFICATION

BEGIN
END 1/19/94

EPA 8010/8020/601/602

1/20/94 9:15

V478 20uL

ANALYST: RRL

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	99667	43.35
CH3Br	86855	87437	0.67
VCL\FREON 12	200935	205772	2.38
C2H5CL	193817	201046	3.66
MeCl2	467142	490731	4.93
CCL3F	324978	354432	8.67
1,1-DCE	331306	363734	9.33
MeBrCl (ELCD S-1)	275600	280364	1.71
1,1-DCA	442329	442981	0.15
C/T-1,2-DCE	360880	370400	2.60
CHCl3	560011	577218	3.03
1,2-DCA	372774	364912	2.13
1,1,1-TCA	417350	464140	10.62
CCL4	508171	545414	7.07
CHBRCL2	335032	351992	4.94
1,2-DCPA	301181	317064	5.14
C-1,3-DCPE	274966	284136	3.28
TCE	546299	512557	6.37
CO-3	257710	250225	2.95

2-CEVE	72606	66816	8.58
CHBr3	124037	114306	8.17
1.1.2.2-TCA/PCE	237871	275013	14.48
CHLOROBENZENE	166550	166338	0.13
1.3-DCB	198770	211137	6.03
1.2-DCB	206777	206951	0.08
1.4-DCB	262055	269328	2.74
BENZENE	55015	52409	4.85
TFT (PID S-1)	14426	14479	0.37
TOLUENE	42579	41842	1.75
CHLOROBENZENE	44114	41166	6.91
ETHYL BENZENE	36178	36123	0.15
M XYLENE	45968	42843	7.04
O + P XYLENES	43448	39982	8.31

1/20/94 9:15 EPA 8010/8020/601/602

CONTINUING CALIBRATION VERIFICATION BEGIN

CONTINUING CALIBRATION VERIFICATION

MID CHK STD

EPA 8010/8020/601/602

1/20/94 19:20

V478 20uL

ANALYST: BJM

INSTRUMENT: V3400 GCVI

1/3/94 12:44

COMPOUNDS	RF(AVE)	RF(DAILY)	% RPD
CH3Cl	154826	127199	19.59
CH3Br	86855	87565	0.81
VCL\FREON 12	200935	197161	1.90
C2H5CL	193817	195128	0.67
MeCl2	467142	467464	0.07
CCL3F	324978	337359	3.74
1,1-DCE	331306	350437	5.61
MeBrCl (ELCD S-1)	275600	274246	*0.49*
1,1-DCA	442329	443758	0.32
C/T-1,2-DCE	360880	356386	1.25
CHCl3	560011	559686	0.06
1,2-DCA	372774	349104	6.56
1,1,1-TCA	417350	439193	5.10
CCL4	508171	514363	1.21
CHBRCL2	335032	338399	1.00
1,2-DCPA	301101	315917	4.78
C-1,3-DCPE	274966	288990	4.97
TCE	546299	505315	7.79
CO-3	257710	248784	3.52

2-CEVE	72808	69893	4.08
CHBr3	124037	109593	12.36
1,1,2,2-TCA/PCE	237871	272673	13.63
CHLOROBENZENE	166550	169855	1.96
1,3-DCB	198770	212355	6.61
1,2-DCB	206777	208949	1.04
1,4-DCB	262055	271833	3.66
BENZENE	55015	51819	5.98
TFT (PID S-1)	14426	14352	*0.51*
TOLUENE	42579	41279	3.10
CHLOROBENZENE	44114	41042	7.22
ETHYL BENZENE	36178	35169	2.83
M XYLENE	45968	43020	6.62
O + P XYLENES	43448	40118	7.97

1/20/94 19:20 CONTINUING CALIBRATION VERIFICATION MID CHK STD

BC
RATORIES

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 02/01/94
Lab #: 94-00553-1MB

Sample Description: #CA0228.001.004 HAWKER PACIFIC: METHOD BLANK FOR LAB # 94-00553-1, -2, -4, -5, -8, -9, -11, -13, -14, & -15

Test Method: EPA Method 8010/8020

Sample Matrix: Soil

Date Sample Collected:	Date Sample Received @ Lab:	Date Analysis Completed:
01/14/94	01/18/94	01/20/94

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Benzene	None Detected	mg/kg	0.005
Bromodichloromethane	None Detected	mg/kg	0.005
Bromoform	None Detected	mg/kg	0.005
Bromomethane	None Detected	mg/kg	0.005
Carbon tetrachloride	None Detected	mg/kg	0.005
Chlorobenzene	None Detected	mg/kg	0.005
Chloroethane	None Detected	mg/kg	0.005
Chloroform	None Detected	mg/kg	0.005
Chloromethane	None Detected	mg/kg	0.005
Dibromochloromethane	None Detected	mg/kg	0.005
1,2-Dichlorobenzene	None Detected	mg/kg	0.005
1,3-Dichlorobenzene	None Detected	mg/kg	0.005
1,4-Dichlorobenzene	None Detected	mg/kg	0.005
Dichlorodifluoromethane	None Detected	mg/kg	0.005
1,1-Dichloroethane (1,1-DCA)	None Detected	mg/kg	0.005
1,2-Dichloroethane (1,2-DCA)	None Detected	mg/kg	0.005
1,1-Dichloroethene (1,1-DCE)	None Detected	mg/kg	0.005
Total 1,2-Dichloroethene	None Detected	mg/kg	0.005
1,2-Dichloropropane	None Detected	mg/kg	0.005
cis-1,3-Dichloropropene	None Detected	mg/kg	0.005
trans-1,3-Dichloropropene	None Detected	mg/kg	0.005
Ethyl Benzene	None Detected	mg/kg	0.005
Methylene chloride	None Detected	mg/kg	0.005
1,1,2,2-Tetrachloroethane	None Detected	mg/kg	0.005
Tetrachloroethene (PCE)	None Detected	mg/kg	0.005
Toluene	None Detected	mg/kg	0.005
1,1,1 Trichloroethane	None Detected	mg/kg	0.005
1,1,2 Trichloroethane	None Detected	mg/kg	0.005
Trichloroethene	None Detected	mg/kg	0.005
Trichlorofluoromethane	None Detected	mg/kg	0.005
Vinyl chloride	None Detected	mg/kg	0.005

Purgeable Organic Analysis

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
Attn.: PETE JALAJAS 818-332-8010

Date of Report: 02/01/94
Lab #: 94-00553-1MB

Sample Description: #CA0228.001.004 HAWKER PACIFIC: METHOD BLANK FOR LAB # 94-00553-1, -2, -4, -5, -8, -9, -11, -13, -14, & -15

Constituents	Analysis Results	Reporting Units	Minimum Reporting Level
Total Xylenes	None Detected	mg/kg	0.005
Total Trihalomethanes	None Detected	mg/kg	0.005

California D.O.H.S. Cert. #1186

Department Supervisor

LABORATORIES

QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: SOIL

MS & MSD RESULTS ARE TRUNCATED VALUES.
Samples Affected: 94-00553-1, 94-00553-2, 94-00553-4, 94-00553-5, 94-00553-8, 94-00553-9, 94-00553-11, 94-00553-13 - 94-00553-15

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
Benzene	553-1	< 0.005	0.024	0.024	0.026	0.026	mg/kg	1.	10	94.	95.	76 - 128
Bromodichloromethane	553-1	< 0.005	0.028	0.027	0.026	0.026	mg/kg	4.	16	109.	104.	77 - 127
Bromoform	553-1	< 0.005	0.046	0.049	0.052	0.052	mg/kg	7.	13	90.	96.	66 - 126
Bromomethane	553-1	< 0.005	0.073	0.074	0.070	0.070	mg/kg	0.	14	107.	107.	69 - 126
Carbon Tetrachloride	553-1	< 0.005	0.028	0.027	0.026	0.026	mg/kg	4.	13	109.	104.	79 - 130
Chlorobenzene	553-1	< 0.005	0.025	0.026	0.026	0.026	mg/kg	4.	12	98.	102.	72 - 126
Chloroethane	553-1	< 0.005	0.075	0.074	0.070	0.070	mg/kg	1.	18	109.	107.	71 - 123
Chloroform	553-1	< 0.005	0.027	0.027	0.026	0.026	mg/kg	1.	13	104.	103.	82 - 124
Chloromethane	553-1	< 0.005	0.058	0.051	0.070	0.070	mg/kg	14.	20	85.	74.	15 - 195
1,2-Dichlorobenzene	553-1	< 0.005	0.025	0.027	0.026	0.026	mg/kg	7.	20	98.	104.	53 - 136
1,3-Dichlorobenzene	553-1	< 0.005	0.027	0.026	0.026	0.026	mg/kg	4.	19	106.	102.	55 - 136
1,4-Dichlorobenzene	553-1	< 0.005	0.029	0.026	0.026	0.026	mg/kg	14.	17	114.	99.	58 - 137
1,1-Dichloroethane	553-1	< 0.005	0.027	0.026	0.026	0.026	mg/kg	1.	10	104.	103.	79 - 119
1,2-Dichloroethane	553-1	< 0.005	0.026	0.026	0.026	0.026	mg/kg	2.	20	102.	99.	66 - 127
1,1-Dichloroethene	553-1	< 0.005	0.028	0.027	0.026	0.026	mg/kg	0.	17	107.	106.	79 - 126
Total 1,2-Dichloroethene	553-1	< 0.005	0.040	0.040	0.039	0.039	mg/kg	0.	14	104.	104.	79 - 131
1,2-Dichloropropane	553-1	< 0.005	0.028	0.027	0.028	0.028	mg/kg	4.	13	110.	106.	82 - 123
cis-1,3-Dichloropropene	553-1	< 0.005	0.027	0.028	0.026	0.026	mg/kg	2.	12	105.	107.	75 - 130
Ethyl benzene	553-1	< 0.005	0.025	0.025	0.026	0.026	mg/kg	1.	10	98.	97.	63 - 128
Methylene Chloride	553-1	< 0.005	0.028	0.028	0.026	0.026	mg/kg	2.	20	110.	108.	76 - 132
1,1,2,2-TCA	553-1	< 0.005	0.060	0.064	0.052	0.052	mg/kg	7.	16	117.	125.	64 - 124
Toluene	553-1	< 0.005	0.024	0.024	0.026	0.026	mg/kg	1.	10	94.	94.	70 - 131
1,1,1-Trichloroethane	553-1	< 0.005	0.029	0.027	0.026	0.026	mg/kg	6.	17	111.	105.	77 - 128
Trichloroethene	553-1	< 0.005	0.025	0.024	0.026	0.026	mg/kg	3.	10	97.	94.	78 - 138
Vinyl Chloride/Freon 12	553-1	< 0.005	0.073	0.074	0.070	0.070	mg/kg	3.	12	102.	99.	64 - 127
m-Xylene	553-1	< 0.005	0.023	0.023	0.026	0.026	mg/kg	0.	12	90.	89.	68 - 128
o&p-Xylenes	553-1	< 0.01	0.046	0.046	0.052	0.052	mg/kg	0.	10	90.	89.	68 - 129
TFT	553-1									104.		70 - 130

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

B C LABORATORIES

QUALITY CONTROL REPORT
(Precision & Accuracy)
METHOD 8010/8020

GERAGHTY & MILLER, INC.
100 N. BARRANCA AVENUE
SUITE 500
WEST COVINA, CA 91791-1600
PETE JALAJAS

Date of Report: 02/07/94
Sample Matrix: SOIL

MS & MSD RESULTS ARE TRUNCATED VALUES.
Samples Affected: 94-00553-1, 94-00553-2, 94-00553-4, 94-00553-5, 94-00553-8, 94-00553-9, 94-00553-11, 94-00553-13 - 94-00553-15

Constituents	QC Sample ID	Sample Result	MS Result	MSD Result	MS Spike Level	MSD Spike Level	Units	Spike R.P.D.	Precision Control Limits	MS % Rec	MSD % Rec	Accuracy Control Limits
BrClMeth	553-1									113.		70 - 130
TFT	553-2									97.		
BrClMeth	553-2									105.		
TFT	553-4									90.		
BrClMeth	553-4									104.		
TFT	553-5									92.		
BrClMeth	553-5									102.		
TFT	553-8									89.		
BrClMeth	553-8									102.		
TFT	553-9									87.		
BrClMeth	553-9									102.		
TFT	553-11									92.		
BrClMeth	553-11									101.		
TFT	553-13									96.		
BrClMeth	553-13									106.		
TFT	553-14									92.		
BrClMeth	553-14									100.		
TFT	553-15									88.		
BrClMeth	553-15									103.		

MS = Matrix Spike; MSD = Matrix Spike Duplicate; RPD = Relative Percent Difference

Quality Control Officer

4100 Atlas Ct. · Bakersfield, CA 93308 · (805) 327-4911 · FAX (805) 327-1918

CHAIN OF CUSTODY

BC LABORATORIES, INC.
4100 Atlas Court
Bakersfield, California 93308

Name: [illegible]
Address: 100 N. Barranca #500
City: West Covina
State: CA Zip: 91791-1600
Attn: PETE JALAJAS
Phone: (818) 332-8010

Project: HAWKER PACIFIC
Project #: CA0228.001.004
Sampler Name: S. Frumbach
Other:

Lab#	Sample Description	Date & Time Sampled	Matrix (S) Soil (SL) Sl (W) Water (Other)	8010/8020	8015M (Diesel)	Gravimetry (TDS)	Physical Samples (to DB. Stevens)	Samples rec. cold (y/n)	Custody Seals (y/n)	Results Needed by: Date & Time	Number and Container Type
1	G-3 (5'-6.5')	1.14.93		X	X			Y	Y		Brass Tu 2
2	G-3 (10'-11.5')			X	X		X				2
3	G-3 (15'-16.5')										2
4	G-3 (20-21.5')			X	X		X				2
5	G-3 (25'-26.5')			X	X						1
6	G-3-10'					X					Glass Ja 1
7	G-3-14'					X					1
8	G-2 (5-6.5')	1.15.93		X	X						Brass Tu 2
9	G-2 (10-11.5')			X	X						2
10	G-2 (15-16.5')						X				2
11	G-2 (20-21.5')			X	X		X				2
12	G-2 (25 26.5')										2
13	G-2 (30 31.5')			X	X		X				2
14	G-2 (35 36.5')			X	X						2
15	G-2 (40 41.5')			X	X						2

Cooler Temp 4°C

(run analyses marked)

OK (run analyses marked)

Comment:
G-2 (20'-21.5') PLEASE RUN ALL "X" MARKED AREAS (8010/8020, 8015M & PHYSICAL)

Sample Disposal
☐ BC Disposal @ 5.00 ea.
☐ Return to client

Billing Info:
Name: Geraghty & Miller Inc
Address: 100 N. Barranca St, Suite 500
City: West Covina State: CA 91791-1600
Attention: PETE JALAJAS
Time:
Miles:
P.O.#

Relinquished by: (Signature)	Received by: (Signature)	Date: Time
[signature]	FEDEX	1/17/94 4
Relinquished by: (Signature)	Received by: (Signature)	Date: Time
	Louise Maxwell	1-18-94 11:1
Relinquished by: (Signature)	Received by: (Signature)	Date: Time
Relinquished by: (Signature)	Received by: (Signature)	Date: Time
Relinquished by: (Signature)	Received by: (Signature)	Date: Time
Relinquished by: (Signature)	Received by: (Signature)	Date: Time

CHAIN OF CUSTODY

BC LABORATORIES, INC.
4100 Atlas Court
Bakersfield, California 93308

Name: Geraghty & Miller
Address: 100 N. Barranca, #500
City: West Covina
State: CA Zip: 91791-1660
Attn: PETE JALIJAS
Phone: (818) 332-8010

Project: HAWKER PACIFIC
Project #: CA0228601.004
Sampler Name: S. Frambach
Other:

Lab#	Sample Description	Date & Time Sampled	Matrix (S) Soil (SL) Slu (W) Water (Other)	8010 / 8020	8015M (Diesel)	Gravimetry	Samples rec. cold (y/n)	Custody Seals (y/n)	Results Needed by: Date & Time	Number and Container Type
16	G-2 (13')	1.15.94				X	Y	Y		Glass 1
17	G-2 (26')	↓				X		↓		1
18	G-2 (37')	↓				X				1
19	G-3 (4')	1.14.94				X				1
20	Rinsate (Endcaps)	1.15.94		X						2 VOA
~~21~~ TB	Trip Blank			X						VOA 3

Cooler Temp 4°C

Comment:

Billing Info:
Name: Same as above
Address
City State
Attention:
Time:
Miles:
P.O.#

Sample Disposal
☐ BC Disposal @ 5.00 ea.
☐ Return to client

Relinquished by: (Signature)	Received by: (Signature)	Date: Time
(SF)	FEDEX	1.17.94 4
Relinquished by: (Signature)	Received by: (Signature)	Date: Time
	Julie Maxwell	1-18-94 1
Relinquished by: (Signature)	Received by: (Signature)	Date: Time
Relinquished by: (Signature)	Received by: (Signature)	Date: Time
Relinquished by: (Signature)	Received by: (Signature)	Date: Time
Relinquished by: (Signature)	Received by: (Signature)	Date: Time

Appendix C

Daniel B. Stephens Inc.
Analytical Data

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(5.0-6.5)
RING NUMBER: G-1(5.0-6.5)
DEPTH: 5.0-6.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 459.77 (g)
TARE WEIGHT, RING: 94.31 (g)
TARE WEIGHT, CAP: 86.78 (g)
SAMPLE VOLUME: 152.42 (cc)
DATE AND TIME INTO OVEN: 03/31 @ 1200
DATE AND TIME OUT OF OVEN: 04/01 @ 1200

DRY WEIGHT OF SAMPLE: 264.84 (g)
DRY BULK DENSITY: 1.74 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 34.4 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 9.1 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 5.2 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/M. Trenchik
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(10-11.5)
RING NUMBER: G-1(10-11.5)
DEPTH: 10-11.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 882.92 (g)
TARE WEIGHT, RING: 179.36 (g)
TARE WEIGHT, CAP: 288.25 (g)
SAMPLE VOLUME: 240.58 (cc)
DATE AND TIME INTO OVEN: 02/14 @ 1330
DATE AND TIME OUT OF OVEN: 02/18 @ 1400

DRY WEIGHT OF SAMPLE: 395.01 (g)
DRY BULK DENSITY: 1.64 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 38.0 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 8.4 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 5.1 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/J. Kelsey
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(5-6.5)
RING NUMBER: G-1(5-6.5)
DEPTH: 5-6.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 619.03 (g)
TARE WEIGHT, RING: 84.81 (g)
TARE WEIGHT, CAP: 296.98 (g)
SAMPLE VOLUME: 127.04 (cc)
DATE AND TIME INTO OVEN: 02/14 @ 1322
DATE AND TIME OUT OF OVEN: 02/18 @ 1400

DRY WEIGHT OF SAMPLE: 223.44 (g)
DRY BULK DENSITY: 1.76 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 33.6 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 10.9 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 6.2 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/J. Kelsey
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(15-16.5)
RING NUMBER: G-1(15-16.5)
DEPTH: 15-16.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 388.50 (g)
TARE WEIGHT, RING: 85.35 (g)
TARE WEIGHT, CAP: 52.85 (g)
SAMPLE VOLUME: 136.53 (cc)
DATE AND TIME INTO OVEN: 04/01 @ 1510
DATE AND TIME OUT OF OVEN: 04/05 @ 1310

DRY WEIGHT OF SAMPLE: 242.89 (g)
DRY BULK DENSITY: 1.78 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 32.9 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 5.4 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 3.1 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(20-21.5)
RING NUMBER: G-1(20-21.5)
DEPTH: 20.0-21.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 445.35 (g)
TARE WEIGHT, RING: 98.87 (g)
TARE WEIGHT, CAP: 86.73 (g)
SAMPLE VOLUME: 158.67 (cc)
DATE AND TIME INTO OVEN: 03/28 @ 1100
DATE AND TIME OUT OF OVEN: 03/29 @ 1100

DRY WEIGHT OF SAMPLE: 247.49 (g)
DRY BULK DENSITY: 1.56 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 41.1 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 7.7 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 5.0 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/J. Kelsey
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(15-16.5)
RING NUMBER: G-1(15-16.5)
DEPTH: 15-16.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 664.09 (g)
TARE WEIGHT, RING: 94.39 (g)
TARE WEIGHT, CAP: 290.39 (g)
SAMPLE VOLUME: 150.86 (cc)
DATE AND TIME INTO OVEN: 02/14 @ 1330
DATE AND TIME OUT OF OVEN: 02/18 @ 1400

DRY WEIGHT OF SAMPLE: 263.48 (g)
DRY BULK DENSITY: 1.75 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 34.1 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 10.5 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 6.0 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/J. Kelsey
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(20-21.5)
RING NUMBER: G-1(20-21.5)
DEPTH: 20-21.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 586.16 (g)
TARE WEIGHT, RING: 80.62 (g)
TARE WEIGHT, CAP: 295.43 (g)
SAMPLE VOLUME: 124.65 (cc)
DATE AND TIME INTO OVEN: 02/16 @ 1645
DATE AND TIME OUT OF OVEN: 02/18 @ 1400

DRY WEIGHT OF SAMPLE: 201.21 (g)
DRY BULK DENSITY: 1.61 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 39.1 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 7.1 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 4.4 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/M. Trenchik
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-1(31.0-32.5)
RING NUMBER:	G-1(31.0-32.5)
DEPTH:	31.0-32.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	480.52 (g)
TARE WEIGHT, RING:	92.54 (g)
TARE WEIGHT, CAP:	115.91 (g)
SAMPLE VOLUME:	145.62 (cc)
DATE AND TIME INTO OVEN:	03/22 @ 0915
DATE AND TIME OUT OF OVEN:	03/23 @ 0915
DRY WEIGHT OF SAMPLE:	261.26 (g)
DRY BULK DENSITY:	1.79 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	32.3 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	7.4 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	4.1 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(31-32.5)
RING NUMBER: G-1(31-32.5)
DEPTH: 31-32.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 607.18 (g)
TARE WEIGHT, RING: 86.90 (g)
TARE WEIGHT, CAP: 292.73 (g)
SAMPLE VOLUME: 133.51 (cc)
DATE AND TIME INTO OVEN: 02/17 @ 0930
DATE AND TIME OUT OF OVEN: 02/18 @ 1400

DRY WEIGHT OF SAMPLE: 220.39 (g)
DRY BULK DENSITY: 1.65 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 37.7 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 5.4 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 3.2 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/M. Trenchik
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-1(41-42.5)
RING NUMBER:	G-1(41-42.5)
DEPTH:	41-42.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	403.04 (g)
TARE WEIGHT, RING:	70.66 (g)
TARE WEIGHT, CAP:	115.96 (g)
SAMPLE VOLUME:	114.84 (cc)
DATE AND TIME INTO OVEN:	04/01 @ 1200
DATE AND TIME OUT OF OVEN:	04/05 @ 1310
DRY WEIGHT OF SAMPLE:	206.35 (g)
DRY BULK DENSITY:	1.80 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	32.2 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	8.8 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	4.9 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	M. Trenchik/J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-1(41-42.5)
RING NUMBER:	G-1(41-42.5)
DEPTH:	41-42.5 FT.
FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	520.33 (g)
TARE WEIGHT, RING:	54.84 (g)
TARE WEIGHT, CAP:	298.98 (g)
SAMPLE VOLUME:	89.01 (cc)
DATE AND TIME INTO OVEN:	02/17 @ 1000
DATE AND TIME OUT OF OVEN:	02/18 @ 1400
DRY WEIGHT OF SAMPLE:	159.83 (g)
DRY BULK DENSITY:	1.80 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))	
CALCULATED POROSITY:	32.2 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	7.5 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	4.2 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	J. Ritts/M. Trenchik
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(51-52.5)
RING NUMBER: G-1(51-52.5)
DEPTH: 51-52.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 961.79 (g)
TARE WEIGHT, RING: 178.97 (g)
TARE WEIGHT, CAP: 291.62 (g)
SAMPLE VOLUME: 274.88 (cc)
DATE AND TIME INTO OVEN: 02/17 @ 1030
DATE AND TIME OUT OF OVEN: 02/18 @ 1400

DRY WEIGHT OF SAMPLE: 472.61 (g)
DRY BULK DENSITY: 1.72 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 35.1 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 6.8 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 3.9 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/M. Trenchik
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-1(61-62.5)
RING NUMBER:	G-1(61-62.5)
DEPTH:	61-62.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	659.92 (g)
TARE WEIGHT, RING:	92.54 (g)
TARE WEIGHT, CAP:	293.30 (g)
SAMPLE VOLUME:	149.49 (cc)
DATE AND TIME INTO OVEN:	02/17 @ 1100
DATE AND TIME OUT OF OVEN:	02/18 @ 1400
DRY WEIGHT OF SAMPLE:	266.12 (g)
DRY BULK DENSITY:	1.78 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	32.8 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	5.3 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	3.0 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	J. Ritts/M. Trenchik
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-1(66-67.5)
RING NUMBER:	G-1(66-67.5)
DEPTH:	66-67.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	437.90 (g)
TARE WEIGHT, RING:	72.28 (g)
TARE WEIGHT, CAP:	116.04 (g)
SAMPLE VOLUME:	114.27 (cc)
DATE AND TIME INTO OVEN:	04/01 @ 1310
DATE AND TIME OUT OF OVEN:	04/05 @ 1310
DRY WEIGHT OF SAMPLE:	217.35 (g)
DRY BULK DENSITY:	1.90 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	28.2 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	28.2 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	14.8 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	M. Trenchik/J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(66-67.5)
RING NUMBER: G-1(66-67.5)
DEPTH: 66-67.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 492.14 (g)
TARE WEIGHT, RING: 47.77 (g)
TARE WEIGHT, CAP: 290.51 (g)
SAMPLE VOLUME: 72.79 (cc)
DATE AND TIME INTO OVEN: 02/17 @ 1630
DATE AND TIME OUT OF OVEN: 02/23 @ 1030

DRY WEIGHT OF SAMPLE: 134.62 (g)
DRY BULK DENSITY: 1.85 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 30.2 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 26.4 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 14.3 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-1(71-72.5)
RING NUMBER:	G-1(71-72.5)
DEPTH:	71-72.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	514.49 (g)
TARE WEIGHT, RING:	72.81 (g)
TARE WEIGHT, CAP:	294.41 (g)
SAMPLE VOLUME:	103.90 (cc)
DATE AND TIME INTO OVEN:	02/17 @ 1700
DATE AND TIME OUT OF OVEN:	02/23 @ 1030
DRY WEIGHT OF SAMPLE:	142.04 (g)
DRY BULK DENSITY:	1.37 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	48.4 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	5.0 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	3.7 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-1(81-82.5)
RING NUMBER:	G-1(81-82.5)
DEPTH:	81-82.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	450.61 (g)
TARE WEIGHT, RING:	93.47 (g)
TARE WEIGHT, CAP:	86.76 (g)
SAMPLE VOLUME:	151.10 (cc)
DATE AND TIME INTO OVEN:	04/01 @ 1510
DATE AND TIME OUT OF OVEN:	04/05 @ 1310
DRY WEIGHT OF SAMPLE:	258.87 (g)
DRY BULK DENSITY:	1.71 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	35.3 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	7.6 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	4.4 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	M. Trenchik/J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(81-82.5)
RING NUMBER: G-1(81-82.5)
DEPTH: 81-82.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 617.07 (g)
TARE WEIGHT, RING: 85.70 (g)
TARE WEIGHT, CAP: 287.07 (g)
SAMPLE VOLUME: 136.53 (cc)
DATE AND TIME INTO OVEN: 02/18 @ 0900
DATE AND TIME OUT OF OVEN: 02/23 @ 1030

DRY WEIGHT OF SAMPLE: 235.56 (g)
DRY BULK DENSITY: 1.73 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY: 34.9 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 6.4 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 3.7 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(5.0-6.5)
RING NUMBER: G-2(5.0-6.5)
DEPTH: 5.0-6.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 917.00 (g)
TARE WEIGHT, RING: 180.05 (g)
TARE WEIGHT, CAP: 289.77 (g)
SAMPLE VOLUME: 270.66 (cc)
DATE AND TIME INTO OVEN: 03/11 @ 1400
DATE AND TIME OUT OF OVEN: 03/14 @ 0900

DRY WEIGHT OF SAMPLE: 431.29 (g)
722DRY BULK DENSITY: 1.59 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 39.9 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 5.9 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 3.7 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(10-11.5)
RING NUMBER: G-2(10-11.5)
DEPTH: 10-11.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 826.30 (g)
TARE WEIGHT, RING: 180.30 (g)
TARE WEIGHT, CAP: 289.64 (g)
SAMPLE VOLUME: 233.37 (cc)
DATE AND TIME INTO OVEN: 03/11 @ 1330
DATE AND TIME OUT OF OVEN: 03/14 @ 0900

DRY WEIGHT OF SAMPLE: 342.49 (g)
DRY BULK DENSITY: 1.47 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 44.6 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 5.9 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 4.0 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(15-16.5)
RING NUMBER: G-2(15-16.5)
DEPTH: 15-16.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 831.77 (g)
TARE WEIGHT, RING: 179.50 (g)
TARE WEIGHT, CAP: 289.84 (g)
SAMPLE VOLUME: 270.63 (cc)
DATE AND TIME INTO OVEN: 02/18 @ 1430
DATE AND TIME OUT OF OVEN: 02/23 @ 1000

DRY WEIGHT OF SAMPLE: 345.57 (g)
DRY BULK DENSITY: 1.28 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 51.8 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 6.2 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 4.9 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-2(20-21.5)
RING NUMBER:	G-2(20-21.5)
DEPTH:	20-21.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	309.32 (g)
TARE WEIGHT, RING:	56.34 (g)
TARE WEIGHT, CAP:	86.75 (g)
SAMPLE VOLUME:	90.33 (cc)
DATE AND TIME INTO OVEN:	03/28 @ 1100
DATE AND TIME OUT OF OVEN:	03/29 @ 1100
DRY WEIGHT OF SAMPLE:	159.91 (g)
DRY BULK DENSITY:	1.77 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	33.2 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	7.0 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	4.0 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(20-21.5)
RING NUMBER: G-2(20-21.5)
DEPTH: 20-21.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 522.30 (g)
TARE WEIGHT, RING: 67.48 (g)
TARE WEIGHT, CAP: 296.58 (g)
SAMPLE VOLUME: 92.01 (cc)
DATE AND TIME INTO OVEN: 02/18 @ 1100
DATE AND TIME OUT OF OVEN: 02/23 @ 1030

DRY WEIGHT OF SAMPLE: 149.07 (g)
DRY BULK DENSITY: 1.62 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 38.9 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 10.0 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 6.2 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(25-26.5)
RING NUMBER: G-2(25-26.5)
DEPTH: 25-26.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 272.73 (g)
TARE WEIGHT, RING: 55.62 (g)
TARE WEIGHT, CAP: 52.85 (g)
SAMPLE VOLUME: 92.21 (cc)
DATE AND TIME INTO OVEN: 04/01 @ 1310
DATE AND TIME OUT OF OVEN: 04/05 @ 1310

DRY WEIGHT OF SAMPLE: 156.88 (g)
DRY BULK DENSITY: 1.70 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 35.8 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 8.0 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 4.7 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-2(25.0-26.5)
RING NUMBER:	G-2(25.0-26.5)
DEPTH:	25.0-26.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	279.45 (g)
TARE WEIGHT, RING:	66.85 (g)
TARE WEIGHT, CAP:	0.00 (g)
SAMPLE VOLUME:	105.24 (cc)
DATE AND TIME INTO OVEN:	02/18 @ 1200
DATE AND TIME OUT OF OVEN:	02/23 @ 1030
DRY WEIGHT OF SAMPLE:	204.55 (g)
DRY BULK DENSITY:	1.94 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	26.7 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	7.6 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	3.9 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(30.0-31.5)
RING NUMBER: G-2(30.0-31.5)
DEPTH: 30.0-31.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 918.40 (g)
TARE WEIGHT, RING: 178.46 (g)
TARE WEIGHT, CAP: 299.09 (g)
SAMPLE VOLUME: 260.22 (cc)
DATE AND TIME INTO OVEN: 03/11 @ 1415
DATE AND TIME OUT OF OVEN: 03/14 @ 0900

DRY WEIGHT OF SAMPLE: 428.36 (g)
DRY BULK DENSITY: 1.65 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 37.9 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 4.8 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 2.9 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-2(35-36.5)
RING NUMBER:	G-2(35-36.5)
DEPTH:	35-36.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	451.42 (g)
TARE WEIGHT, RING:	92.33 (g)
TARE WEIGHT, CAP:	86.77 (g)
SAMPLE VOLUME:	148.03 (cc)
DATE AND TIME INTO OVEN:	04/06 @ 1510
DATE AND TIME OUT OF OVEN:	04/07 @ 1500
DRY WEIGHT OF SAMPLE:	259.90 (g)
DRY BULK DENSITY:	1.76 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))	
CALCULATED POROSITY:	33.7 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	8.4 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	4.8 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	M. Trenchik/J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(35-36.5)
RING NUMBER: G-2(35-36.5)
DEPTH: 35-36.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 619.74 (g)
TARE WEIGHT, RING: 87.09 (g)
TARE WEIGHT, CAP: 289.64 (g)
SAMPLE VOLUME: 139.54 (cc)
DATE AND TIME INTO OVEN: 02/18 @ 1300
DATE AND TIME OUT OF OVEN: 02/23 @ 1030

DRY WEIGHT OF SAMPLE: 236.20 (g)
DRY BULK DENSITY: 1.69 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 36.1 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 4.9 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 2.9 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(40.0-41.5)
RING NUMBER: G-2(40.0-41.5)
DEPTH: 40.0-41.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 476.74 (g)
TARE WEIGHT, RING: 94.76 (g)
TARE WEIGHT, CAP: 86.78 (g)
SAMPLE VOLUME: 152.25 (cc)
DATE AND TIME INTO OVEN: 03/29 @ 1010
DATE AND TIME OUT OF OVEN: 04/01 @ 1010

DRY WEIGHT OF SAMPLE: 257.74 (g)
DRY BULK DENSITY: 1.69 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 36.1 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 24.6 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 14.5 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/M. Trenchik
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(40-41.5)
RING NUMBER: G-2(40-41.5)
DEPTH: 40-41.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 618.02 (g)
TARE WEIGHT, RING: 83.31 (g)
TARE WEIGHT, CAP: 298.00 (g)
SAMPLE VOLUME: 133.91 (cc)
DATE AND TIME INTO OVEN: 02/23 @ 1100
DATE AND TIME OUT OF OVEN: 02/25 @ 1100

DRY WEIGHT OF SAMPLE: 226.80 (g)
DRY BULK DENSITY: 1.69 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 36.1 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 7.4 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 4.4 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-3(5.0-6.5)
RING NUMBER: G-3(5.0-6.5)
DEPTH: 5.0-6.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 815.80 (g)
TARE WEIGHT, RING: 178.84 (g)
TARE WEIGHT, CAP: 301.41 (g)
SAMPLE VOLUME: 205.27 (cc)
DATE AND TIME INTO OVEN: 03/11 @ 1210
DATE AND TIME OUT OF OVEN: 03/14 @ 0900

DRY WEIGHT OF SAMPLE: 316.61 (g)
DRY BULK DENSITY: 1.54 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 41.8 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 9.2 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 6.0 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-3(10-11.5)
RING NUMBER: G-3(10-11.5)
DEPTH: 10-11.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 424.28 (g)
TARE WEIGHT, RING: 87.91 (g)
TARE WEIGHT, CAP: 86.77 (g)
SAMPLE VOLUME: 141.05 (cc)
DATE AND TIME INTO OVEN: 03/31 @ 1200
DATE AND TIME OUT OF OVEN: 04/04 @ 1200

DRY WEIGHT OF SAMPLE: 232.16 (g)
DRY BULK DENSITY: 1.65 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 37.9 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 12.4 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 7.5 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts/M. Trenchik
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G-3(10-11.5)
RING NUMBER:	G-3(10-11.5)
DEPTH:	10-11.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING):	621.76 (g)
TARE WEIGHT, RING:	91.33 (g)
TARE WEIGHT, CAP:	292.91 (g)
SAMPLE VOLUME:	139.54 (cc)
DATE AND TIME INTO OVEN:	02/18 @ 0930
DATE AND TIME OUT OF OVEN:	02/23 @ 1030
DRY WEIGHT OF SAMPLE:	226.06 (g)
DRY BULK DENSITY:	1.62 (g/cc)
PARTICLE DENSITY:	2.65 (g/cc)

(METHOD: ASSUME MEAN PARTICLE DENSITY = 2.65 (g/cc))

CALCULATED POROSITY:	38.9 (% vol)
INITIAL MOISTURE CONTENT (VOLUMETRIC):	8.2 (% vol)
INITIAL MOISTURE CONTENT (GRAVIMETRIC):	5.1 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY:	J. Ritts
CALCULATIONS MADE BY:	R. Hill
CHECKED BY:	M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: WEBCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-3(15.0-16.5)
RING NUMBER: G-3(15.0-16.5)
DEPTH: 15.0-16.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 779.06 (g)
TARE WEIGHT, RING: 179.06 (g)
TARE WEIGHT, CAP: 300.19 (g)
SAMPLE VOLUME: 205.74 (cc)
DATE AND TIME INTO OVEN: 03/11 @ 1145
DATE AND TIME OUT OF OVEN: 03/14 @ 0900

DRY WEIGHT OF SAMPLE: 284.99 (g)
DRY BULK DENSITY: 1.39 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 47.7 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 7.2 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 5.2 (% g/g)

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DATA FOR INITIAL MOISTURE CONTENT,
BULK DENSITY, AND POROSITY

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-3(20-21.5)
RING NUMBER: G-3(20-21.5)
DEPTH: 20-21.5 FT.

FIELD WEIGHT OF SAMPLE (W/PAN AND RING): 901.13 (g)
TARE WEIGHT, RING: 179.86 (g)
TARE WEIGHT, CAP: 300.02 (g)
SAMPLE VOLUME: 282.88 (cc)
DATE AND TIME INTO OVEN: 02/18 @ 1330
DATE AND TIME OUT OF OVEN: 02/23 @ 1030

DRY WEIGHT OF SAMPLE: 408.29 (g)
DRY BULK DENSITY: 1.44 (g/cc)
PARTICLE DENSITY: 2.65 (g/cc)
(METHOD: ASSUME MEAN PARTICLE DENSITY
= 2.65 (g/cc))

CALCULATED POROSITY: 45.5 (% vol)

INITIAL MOISTURE CONTENT (VOLUMETRIC): 4.6 (% vol)

INITIAL MOISTURE CONTENT (GRAVIMETRIC): 3.2 (% g/g)

COMMENTS: A portion of the sample catcher was contained in the sample.

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1 (5-6.5)
RING NUMBER: G-1 (5-6.5)
DEPTH: 5-6.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 8.05 (cm)
SAMPLE DIAMETER: 4.91 (cm)
SAMPLE X-SECTIONAL AREA: 18.93 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
15-Feb-94	17:02:40	18.5	2.0	18.4	233	1.7E-02	1.7E-02
15-Feb-94	17:06:33						
16-Feb-94	10:02:16	19.0	2.1	19.0	244	1.6E-02	1.6E-02
16-Feb-94	10:06:20						
16-Feb-94	13:04:09	19.0	2.3	23.7	285	1.5E-02	1.6E-02
16-Feb-94	13:08:54						

AVERAGE K SAT: 1.6E-02 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1 (15-16.5)
RING NUMBER: G-1 (15-16.5)
DEPTH: 15-16.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 7.24 (cm)
SAMPLE DIAMETER: 4.90 (cm)
SAMPLE X-SECTIONAL AREA: 18.86 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
16-Feb-94	10:03:00	19.0	3.1	20.9	83	3.1E-02	3.2E-02
16-Feb-94	10:04:23						
16-Feb-94	13:05:00	19.0	3.2	44.3	158	3.4E-02	3.4E-02
16-Feb-94	13:07:38						
17-Feb-94	11:39:37	19.0	3.2	20.9	90	2.8E-02	2.8E-02
17-Feb-94	11:41:07						

AVERAGE K SAT: 3.1E-02 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts
CALCULATIONS MADE BY: R. Nill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1 (20.0-21.5)
RING NUMBER: G-1 (20.0-21.5)
DEPTH: 20.0-21.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 8.38 (cm)
SAMPLE DIAMETER: 4.91 (cm)
SAMPLE X-SECTIONAL AREA: 18.93 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
21-Feb-94	14:01:50	19.0	2.5	43.1	170	4.5E-02	4.6E-02
21-Feb-94	14:04:40						
22-Feb-94	10:02:15	19.0	2.7	34.0	120	4.6E-02	4.7E-02
22-Feb-94	10:04:15						
22-Feb-94	13:30:47	19.0	2.8	20.3	73	4.4E-02	4.5E-02
22-Feb-94	13:32:00						

AVERAGE K SAT: 4.6E-02 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1 (31.0-32.5)
RING NUMBER: G-1 (31.0-32.5)
DEPTH: 31.0-32.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 7.85 (cm)
SAMPLE DIAMETER: 4.86 (cm)
SAMPLE X-SECTIONAL AREA: 18.55 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
21-Feb-94	07:39:23	18.0	2.3	24.5	382	1.2E-02	1.2E-02
21-Feb-94	07:45:45						
21-Feb-94	14:01:00	19.0	2.5	33.1	505	1.1E-02	1.1E-02
21-Feb-94	14:09:25						
22-Feb-94	13:26:30	19.0	2.3	28.5	405	1.3E-02	1.3E-02
22-Feb-94	13:33:15						

AVERAGE K SAT: 1.2E-02 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

FALLING HEAD TEST DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G2-25-26.5
RING NUMBER: G2-25-26.5
DEPTH: 25.0-26.5 FT.
TYPE OF WATER USED: TAP
SAMPLE X-SECTION AREA: 19.01 (sq. cm)
STANDPIPE X-SECTION AREA: 0.70 (sq. cm)
SAMPLE LENGTH: 4.85 (cm)

DATE	TIME	DEL T (SEC)	TEMP (C)	RESERVOIR HEAD(CM)	SAMPLE HEAD(CM)	K SAT (CM/SEC)	K SAT @ 20 C (CM/SEC)
TEST # 1:							
02-Mar-94	09:48:49		19.0	71.0	0.0		
02-Mar-94	09:59:38	649	19.0	15.0	0.0	4.3E-04	4.4E-04
TEST # 2:							
07-Mar-94	11:53:38		20.0	68.0	0.0		
07-Mar-94	12:01:29	471	20.0	20.0	0.0	4.6E-04	4.6E-04
TEST # 3:							
07-Mar-94	14:55:09		20.0	74.0	0.0		
07-Mar-94	15:01:40	391	20.0	27.0	0.0	4.6E-04	4.6E-04

AVERAGE K SAT: 4.5E-04 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Vinson
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1 (41.0-42.5)
RING NUMBER: G-1 (41.0-42.5)
DEPTH: 41.0-42.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 6.09 (cm)
SAMPLE DIAMETER: 4.90 (cm)
SAMPLE X-SECTIONAL AREA: 18.86 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
22-Feb-94	09:31:13	19.0	4.3	11.3	6057	1.4E-04	1.4E-04
22-Feb-94	11:12:10						
22-Feb-94	13:25:30	19.0	4.3	22.2	10559	1.6E-04	1.6E-04
22-Feb-94	16:21:29						
23-Feb-94	08:22:33	18.5	4.4	14.5	6157	1.7E-04	1.8E-04
23-Feb-94	10:05:10						

AVERAGE K SAT: 1.6E-04 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

FALLING HEAD TEST DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G1-66-67.5
RING NUMBER: G1-66-67.5
DEPTH: 66.0-67.5 FT.
TYPE OF WATER USED: TAP
SAMPLE X-SECTION AREA: 18.55 (sq. cm)
STANDPIPE X-SECTION AREA: 0.70 (sq. cm)
SAMPLE LENGTH: 6.16 (cm)

DATE	TIME	DEL T (SEC)	TEMP (C)	RESERVOIR HEAD(CM)	SAMPLE HEAD(CM)	K SAT (CM/SEC)	K SAT @ 20 C (CM/SEC)
TEST # 1:							
07-Mar-94	11:50:45		20.0	75.9	0.0		
08-Mar-94	06:27:05	66980	20.0	53.5	0.0	1.2E-06	1.2E-06
TEST # 2:							
08-Mar-94	06:27:05		20.0	53.5	0.0		
09-Mar-94	10:01:30	99265	20.0	33.0	0.0	1.1E-06	1.1E-06
TEST # 3:							
09-Mar-94	10:01:30		20.0	33.0	0.0		
10-Mar-94	12:13:03	94293	20.0	21.0	0.0	1.1E-06	1.1E-06

AVERAGE K SAT: 1.2E-06 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Vinson/J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1 (81.0-82.5)
RING NUMBER: G-1 (81.0-82.5)
DEPTH: 81.0-82.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 7.98 (cm)
SAMPLE DIAMETER: 4.91 (cm)
SAMPLE X-SECTIONAL AREA: 18.93 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
22-Feb-94	14:18:35	19.0	2.0	7.2	7260	2.1E-04	2.1E-04
22-Feb-94	16:19:35						
23-Feb-94	08:15:25	18.5	2.0	13.6	12251	2.3E-04	2.4E-04
23-Feb-94	11:39:36						
23-Feb-94	13:28:16	19.0	2.1	13.1	11000	2.4E-04	2.4E-04
23-Feb-94	16:31:36						

AVERAGE K SAT: 2.3E-04 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2 (20.0-21.5)
RING NUMBER: G-2 (20.0-21.5)
DEPTH: 20.0-21.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 4.79 (cm)
SAMPLE DIAMETER: 4.90 (cm)
SAMPLE X-SECTIONAL AREA: 18.86 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
22-Feb-94	09:17:48	19.0	5.7	29.4	473	2.8E-03	2.8E-03
22-Feb-94	09:25:41						
22-Feb-94	14:39:50	19.0	5.5	31.4	485	3.0E-03	3.0E-03
22-Feb-94	14:47:55						

AVERAGE K SAT: 2.9E-03 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts/R. Hill
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

FALLING HEAD TEST DATA

JOB NAME:	BCL
JOB NUMBER:	4806
SAMPLE NUMBER:	G2-25-26.5
RING NUMBER:	G2-25-26.5
DEPTH:	25.0-26.5 FT.
TYPE OF WATER USED:	TAP
SAMPLE X-SECTION AREA:	19.01 (sq. cm)
STANDPIPE X-SECTION AREA:	0.70 (sq. cm)
SAMPLE LENGTH:	4.85 (cm)

DATE	TIME	DEL T (SEC)	TEMP (C)	RESERVOIR HEAD(CM)	SAMPLE HEAD(CM)	K SAT (CM/SEC)	K SAT @ 20 C (CM/SEC)
TEST # 1:							
02-Mar-94	09:48:49		19.0	71.0	0.0		
02-Mar-94	09:59:38	649	19.0	15.0	0.0	4.3E-04	4.4E-04
TEST # 2:							
07-Mar-94	11:53:38		20.0	68.0	0.0		
07-Mar-94	12:01:29	471	20.0	20.0	0.0	4.6E-04	4.6E-04
TEST # 3:							
07-Mar-94	14:55:09		20.0	74.0	0.0		
07-Mar-94	15:01:40	391	20.0	27.0	0.0	4.6E-04	4.6E-04

AVERAGE K SAT: 4.5E-04 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Vinson
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2 (35-36.5)
RING NUMBER: G-2 (35-36.5)
DEPTH: 35-36.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 7.85 (cm)
SAMPLE DIAMETER: 4.90 (cm)
SAMPLE X-SECTIONAL AREA: 18.86 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
28-Feb-94	11:41:40	18.0	1.8	20.1	2630	1.8E-03	1.8E-03
28-Feb-94	12:25:30						
28-Feb-94	16:59:30	18.0	1.8	21.6	2750	1.8E-03	1.9E-03
28-Feb-94	17:45:20						
01-Mar-94	09:36:21	18.0	1.8	5.6	747	1.7E-03	1.8E-03
01-Mar-94	09:48:48						

AVERAGE K SAT: 1.8E-03 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts/R. Hill
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2 (40-41.5)
RING NUMBER: G-2 (40-41.5)
DEPTH: 40-41.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 8.14 (cm)
SAMPLE DIAMETER: 4.88 (cm)
SAMPLE X-SECTIONAL AREA: 18.70 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
24-Feb-94	08:08:22	19.0	1.0	13.0	3918	1.4E-03	1.5E-03
24-Feb-94	09:13:40						
25-Feb-94	14:13:25	18.5	1.1	5.7	1697	1.3E-03	1.4E-03
25-Feb-94	14:41:42						
25-Feb-94	17:57:28	18.5	1.0	3.8	1152	1.4E-03	1.5E-03
25-Feb-94	18:16:40						

AVERAGE K SAT: 1.4E-03 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts/R. Hill
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

CONSTANT HEAD PERMEAMETER DATA

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-3 (10-11.5)
RING NUMBER: G-3 (10-11.5)
DEPTH: 10-11.5 FT.
TYPE OF WATER USED: TAP
SAMPLE LENGTH: 7.48 (cm)
SAMPLE DIAMETER: 4.90 (cm)
SAMPLE X-SECTIONAL AREA: 18.86 (sq. cm)

DATE	TIME	TEMP (C)	HEAD (CM)	FLOW VOL(CC)	ELAPSED TIME(SEC)	K SAT (CM/SEC)	K SAT @ 20 (CM/SEC)
22-Feb-94	14:39:25	19.0	1.9	26.4	445	1.2E-02	1.3E-02
22-Feb-94	14:46:50						
23-Feb-94	08:12:25	18.5	1.8	20.8	285	1.6E-02	1.7E-02
23-Feb-94	08:17:10						
23-Feb-94	13:15:23	19.0	2.1	39.6	468	1.6E-02	1.6E-02
23-Feb-94	13:23:11						

AVERAGE K SAT: 1.5E-02 (CM/SEC)

COMMENTS:

LABORATORY ANALYSIS BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

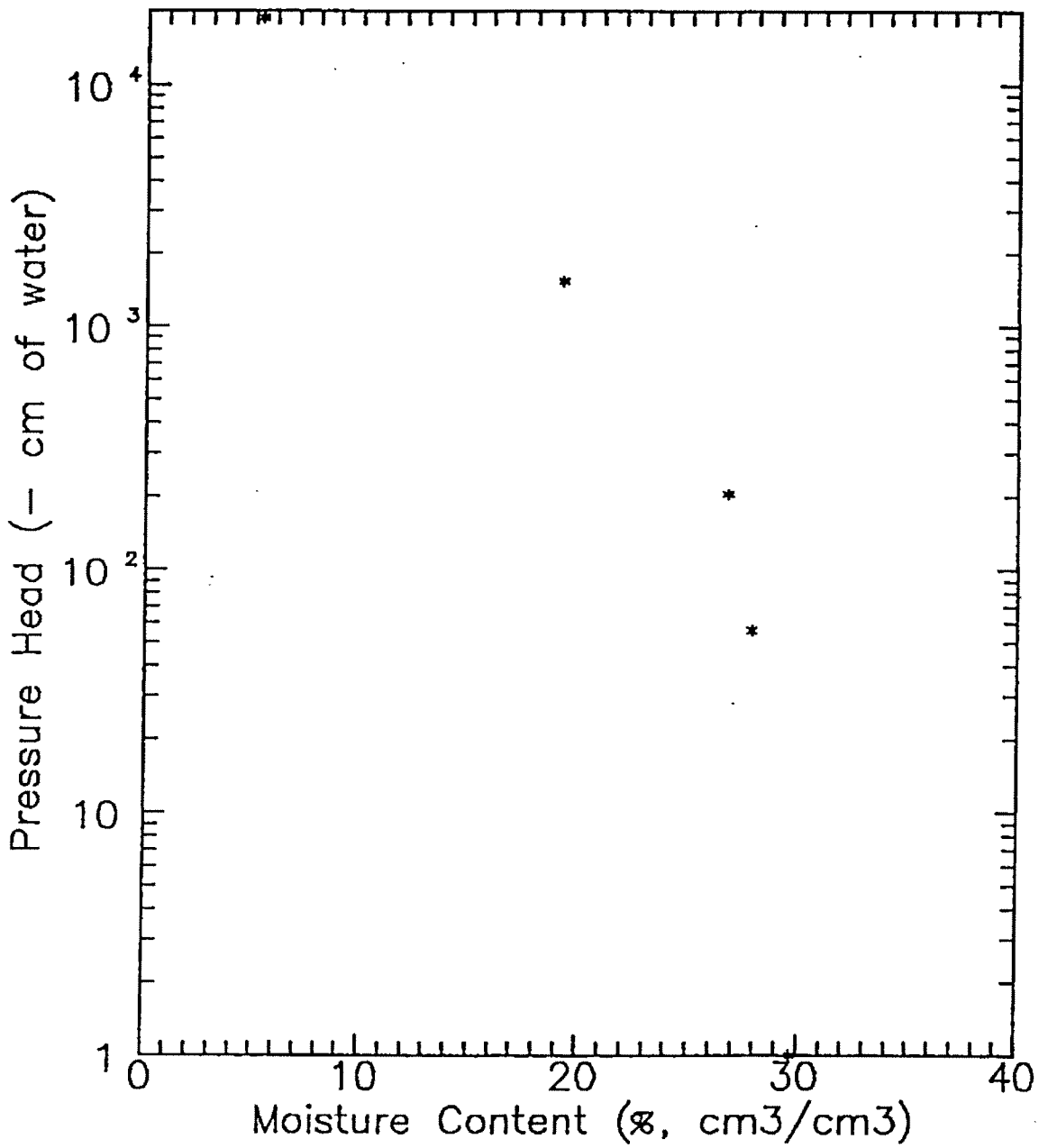
MOISTURE RETENTION DATA - HANGING COLUMN/15 BAR PRESSURE PLATE
(PORE SIZE DISTRIBUTION)

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(66-67.5)
RING NUMBER: G-1(66-67.5)
DEPTH: 66-67.5 FT.
SAMPLE VOLUME: 114.27 (cc)
SATURATED WEIGHT AT 0 CM TENSION (WITH CAP AND RING): 346.83 (g)
TARE RING: 72.28 (g)
TARE CAP: 0.00 (g)
TARE WEIGHT OF SCREEN AND CLAMP: 23.21 (g)
DRY WEIGHT OF SAMPLE: 217.35 (g)
SATURATED MOISTURE CONTENT: 29.75 (% vol)
VOLUME OF WATER IN SATURATED SAMPLE: 33.99 (cc)

DATE (1994)	TIME	HANGING COLUMN SUCTION (CM)	PRESSURE PLATE PRESSURE (BAR)	THERMO COUPLE POTENTIAL (BAR)	WEIGHT W/RING (G)	WEIGHT CHANGE (G)	TOTAL WEIGHT CHANGE (G)	MOISTURE CONTENT (% VOL)
03/16	1620	--	0.0	--	346.83	--	--	29.7
03/18	1430	--	0.1	--	344.55	2.28	2.28	27.8
03/22	1530	--	0.2	--	343.31	1.24	3.52	26.7
03/25	1500	--	1.5	--	334.75	8.56	12.08	19.2
04/01	1245	--	--	18.3	318.89	15.86	27.94	5.3

COMMENTS: Assume density of water is 1.0 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATION MADE BY: R. Hill
CHECKED BY: M. Ankeny



Pressure Head vs. Moisture Content,
Sample No. G-1 66-67.5

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

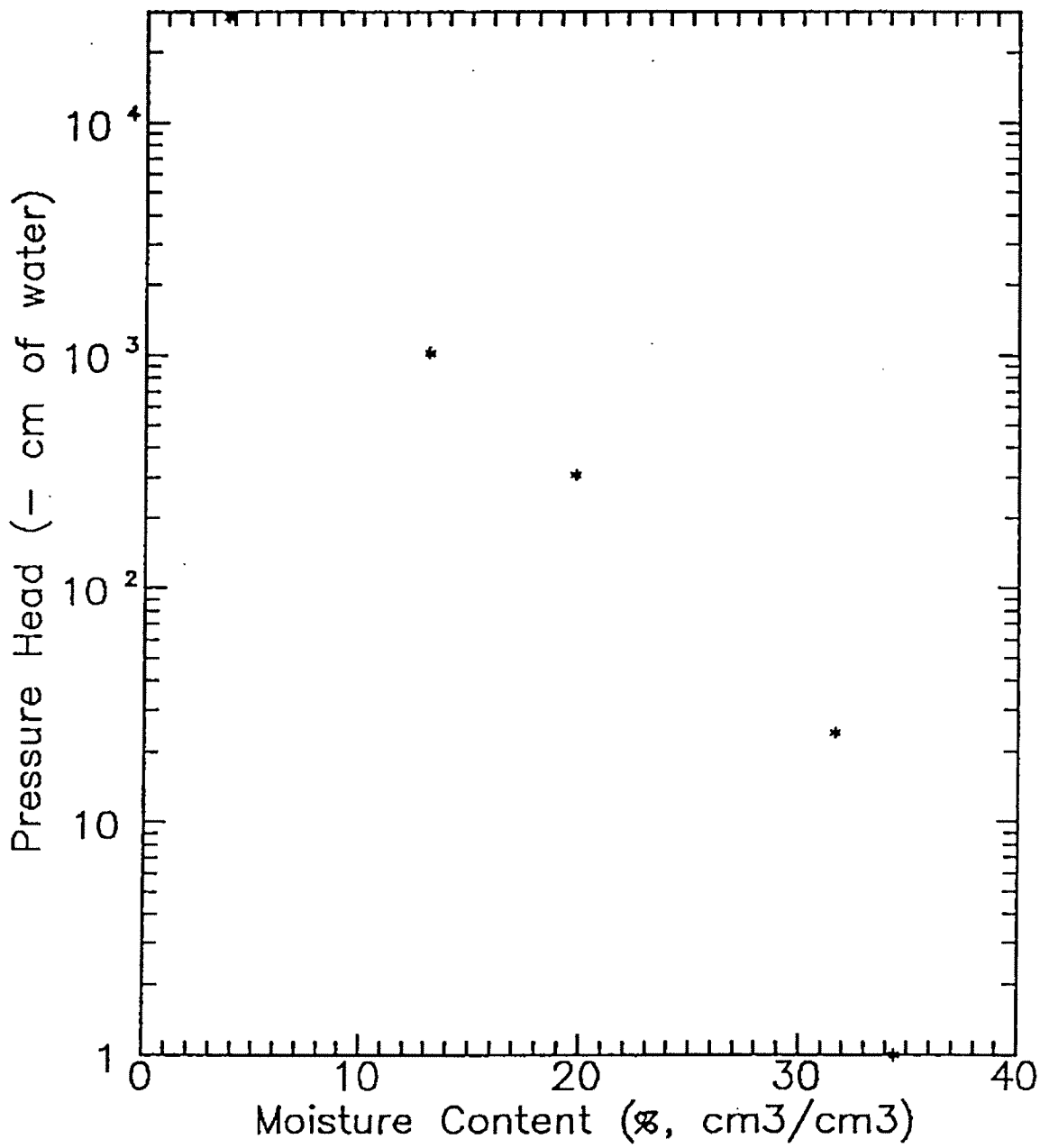
MOISTURE RETENTION DATA - HANGING COLUMN/15 BAR PRESSURE PLATE
(PORE SIZE DISTRIBUTION)

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-1(81-82.5)
RING NUMBER: G-1(81-82.5)
DEPTH: 81-82.5 FT.
SAMPLE VOLUME: 151.10 (cc)
SATURATED WEIGHT AT 0 CM TENSION (WITH CAP AND RING): 427.35 (g)
TARE RING: 93.47 (g)
TARE CAP: 0.00 (g)
TARE WEIGHT OF SCREEN AND CLAMP: 23.05 (g)
DRY WEIGHT OF SAMPLE: 258.87 (g)
SATURATED MOISTURE CONTENT: 34.39 (% vol)
VOLUME OF WATER IN SATURATED SAMPLE: 51.96 (cc)

DATE (1994)	TIME	HANGING COLUMN SUCTION (CM)	PRESSURE PLATE PRESSURE (BAR)	THERMO COUPLE POTENTIAL (BAR)	WEIGHT W/RING (G)	WEIGHT CHANGE (G)	TOTAL WEIGHT CHANGE (G)	MOISTURE CONTENT (% VOL)
02/25	1400	0.0	--	--	427.35	--	--	34.4
03/04	1600	24.0	--	--	423.17	4.18	4.18	31.6
03/08	1630	--	0.3	--	405.11	18.06	22.24	19.7
03/15	1330	--	1.0	--	395.15	9.96	32.20	13.1
04/01	1430	--	--	27.9	380.98	14.17	46.37	3.7

COMMENTS: Assume density of water is 1.0 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATION MADE BY: R. Hill
CHECKED BY: M. Ankeny



Pressure Head vs. Moisture Content,
Sample No. G-1 81-82.5

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

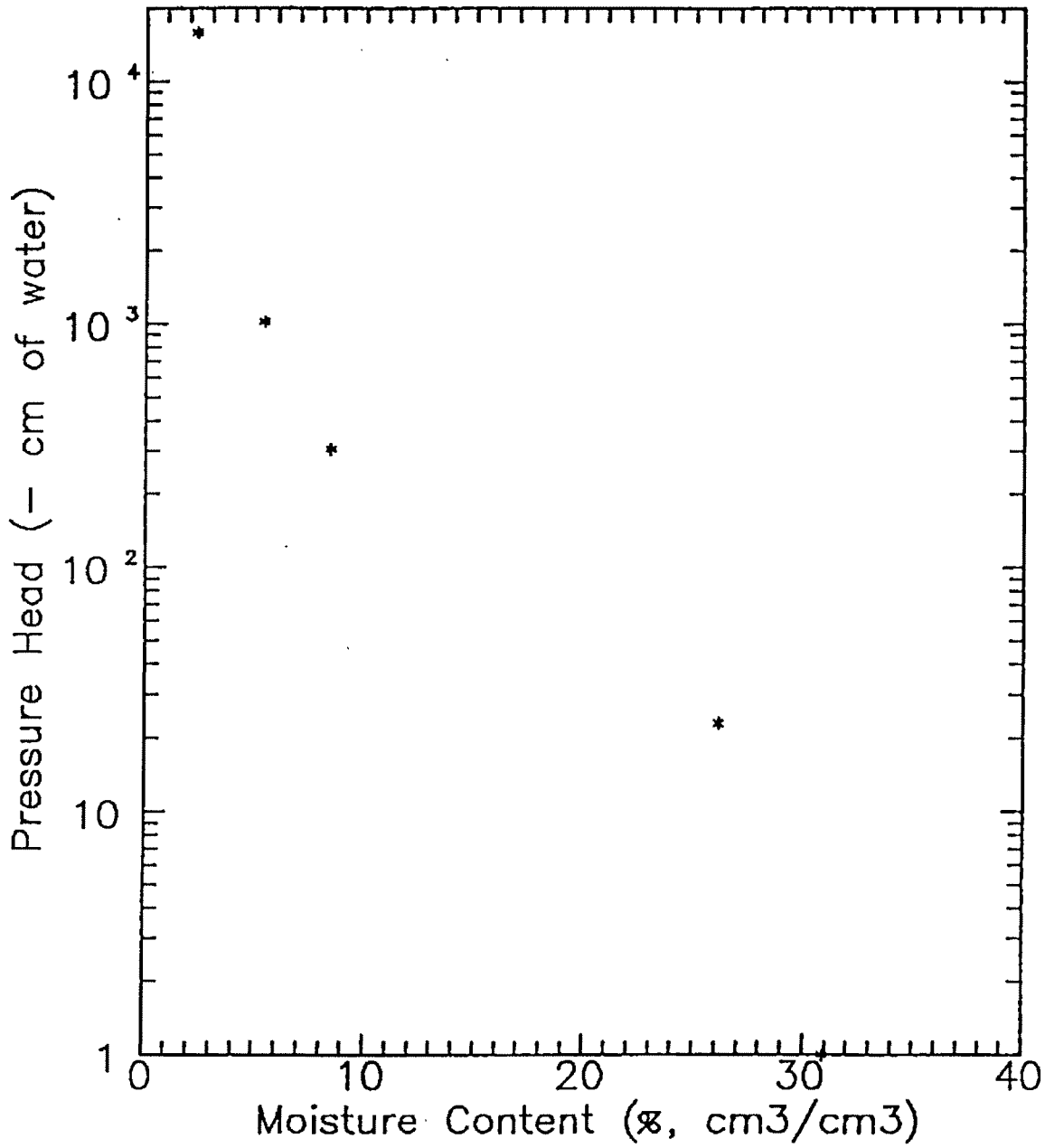
MOISTURE RETENTION DATA - HANGING COLUMN/15 BAR PRESSURE PLATE
(PORE SIZE DISTRIBUTION)

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(20-21.5)
RING NUMBER: G-2(20-21.5)
DEPTH: 20-21.5 FT.
SAMPLE VOLUME: 90.33 (cc)
SATURATED WEIGHT AT 0 CM TENSION (WITH CAP AND RING): 268.14 (g)
TARE RING: 56.34 (g)
TARE CAP: 0.00 (g)
TARE WEIGHT OF SCREEN AND CLAMP: 23.96 (g)
DRY WEIGHT OF SAMPLE: 159.91 (g)
SATURATED MOISTURE CONTENT: 30.92 (% vol)
VOLUME OF WATER IN SATURATED SAMPLE: 27.93 (cc)

DATE (1994)	TIME	HANGING COLUMN SUCTION (CM)	PRESSURE PLATE PRESSURE (BAR)	THERMO COUPLE POTENTIAL (BAR)	WEIGHT W/RING (G)	WEIGHT CHANGE (G)	TOTAL WEIGHT CHANGE (G)	MOISTURE CONTENT (% VOL)
02/25	1415	0.0	--	--	268.14	--	--	30.9
03/04	1600	23.0	--	--	263.83	4.31	4.31	26.1
03/08	1630	--	0.3	--	247.76	16.07	20.38	8.4
03/15	1330	--	1.0	--	245.10	2.66	23.04	5.4
03/28	1100	--	--	15.5	242.29	2.81	25.85	2.3

COMMENTS: Assume density of water is 1.0 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATION MADE BY: R. Hill
CHECKED BY: M. Ankeny



Pressure Head vs. Moisture Content,
Sample No. G-2 20-21.5

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

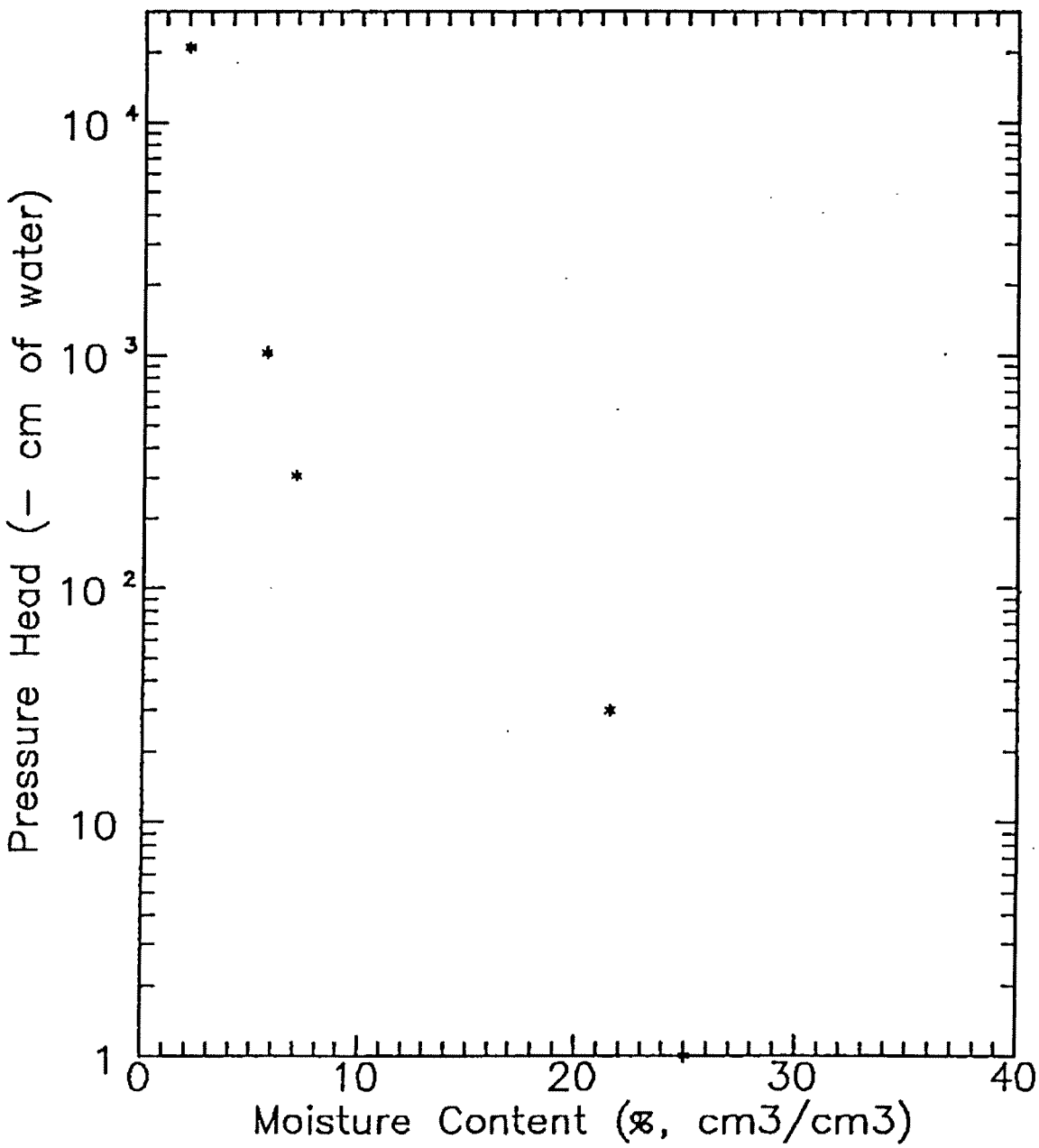
MOISTURE RETENTION DATA - HANGING COLUMN/15 BAR PRESSURE PLATE
(PORE SIZE DISTRIBUTION)

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(25-26.5)
RING NUMBER: G-2(25-26.5)
DEPTH: 25-26.5 FT.
SAMPLE VOLUME: 92.21 (cc)
SATURATED WEIGHT AT 0 CM TENSION
(WITH CAP AND RING): 258.77 (g)
TARE RING: 55.62 (g)
TARE CAP: 0.00 (g)
TARE WEIGHT OF SCREEN AND CLAMP: 23.26 (g)
DRY WEIGHT OF SAMPLE: 156.88 (g)
SATURATED MOISTURE CONTENT: 24.95 (% vol)
VOLUME OF WATER IN SATURATED SAMPLE: 23.01 (cc)

DATE (1994)	TIME	HANGING COLUMN SUCTION (CM)	PRESSURE PLATE PRESSURE (BAR)	THERMO COUPLE POTENTIAL (BAR)	WEIGHT W/RING (G)	WEIGHT CHANGE (G)	TOTAL WEIGHT CHANGE (G)	MOISTURE CONTENT (% VOL)
03/11	1600	0.0	--	--	258.77	--	--	25.0
03/16	1610	30.0	--	--	255.59	3.18	3.18	21.5
03/22	1500	--	0.3	--	242.20	13.39	16.57	7.0
03/25	1430	--	1.0	--	240.91	1.29	17.86	5.6
04/01	1245	--	--	20.6	237.57	3.34	21.20	2.0

COMMENTS: Assume density of water is 1.0 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATION MADE BY: R. Hill
CHECKED BY: M. Ankeny



Pressure Head vs. Moisture Content,
Sample No. G-2 25-26.5

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

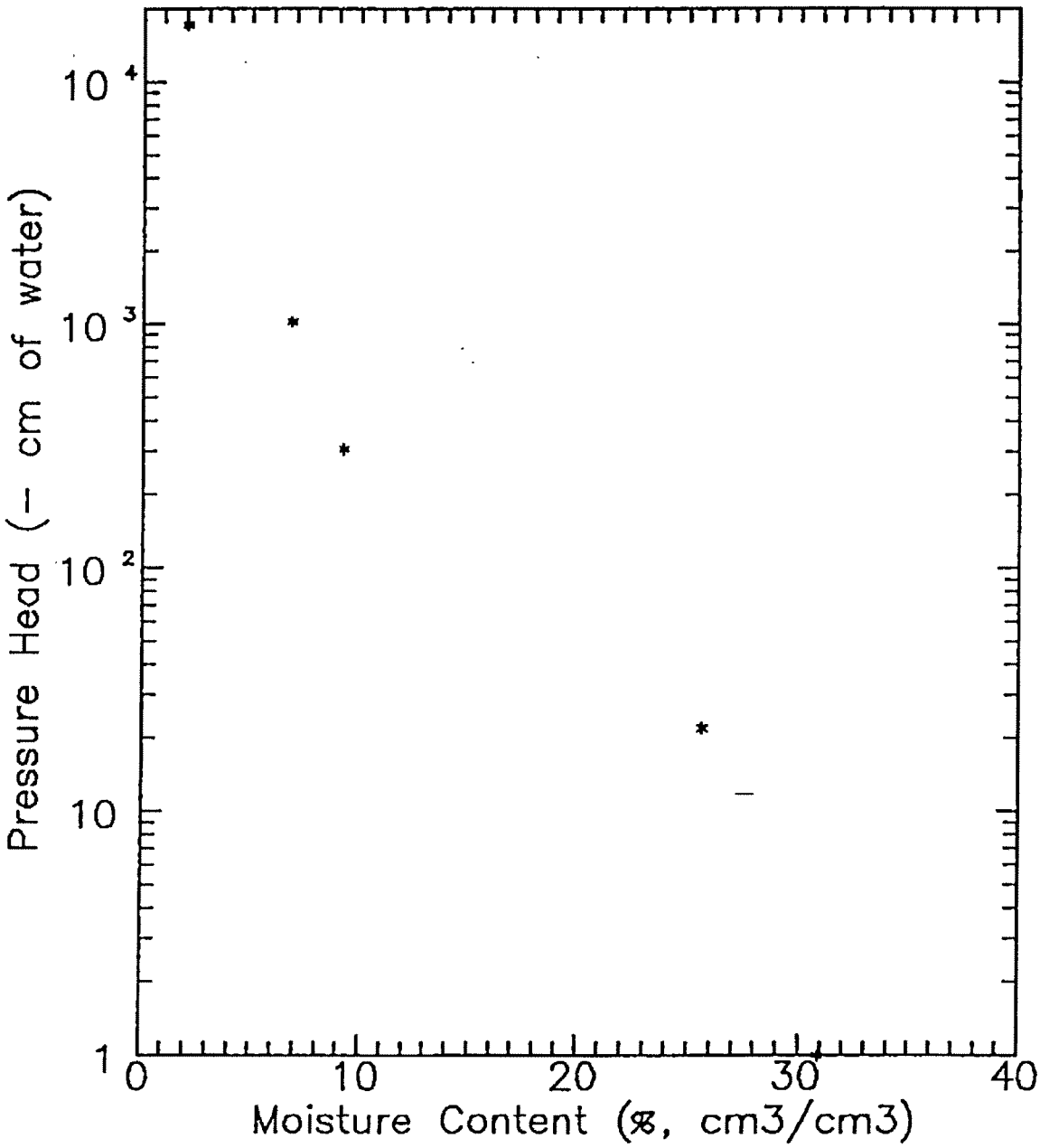
MOISTURE RETENTION DATA - HANGING COLUMN/15 BAR PRESSURE PLATE
(PORE SIZE DISTRIBUTION)

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(35-36.5)
RING NUMBER: G-2(35-36.5)
DEPTH: 35-36.5 FT.
SAMPLE VOLUME: 148.03 (cc)
SATURATED WEIGHT AT 0 CM TENSION (WITH CAP AND RING): 425.11 (g)
TARE RING: 92.33 (g)
TARE CAP: 0.00 (g)
TARE WEIGHT OF SCREEN AND CLAMP: 27.09 (g)
DRY WEIGHT OF SAMPLE: 259.90 (g)
SATURATED MOISTURE CONTENT: 30.93 (% vol)
VOLUME OF WATER IN SATURATED SAMPLE: 45.79 (cc)

DATE (1994)	TIME	HANGING COLUMN SUCTION (CM)	PRESSURE PLATE PRESSURE (BAR)	THERMO COUPLE POTENTIAL (BAR)	WEIGHT W/RING (G)	WEIGHT CHANGE (G)	TOTAL WEIGHT CHANGE (G)	MOISTURE CONTENT (% VOL)
03/02	1000	0.0	--	--	425.11	--	--	30.9
03/04	1600	22.0	--	--	417.24	7.87	7.87	25.6
03/08	1420	--	0.3	--	392.96	24.28	32.15	9.2
03/15	1330	--	1.0	--	389.43	3.53	35.68	6.8
04/06	1030	--	--	16.8	382.35	7.08	42.76	2.0

COMMENTS: Assume density of water is 1.0 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Vinson
CALCULATION MADE BY: R. Hill
CHECKED BY: M. Ankeny



Pressure Head vs. Moisture Content,
Sample No. G-2 35-36.5

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

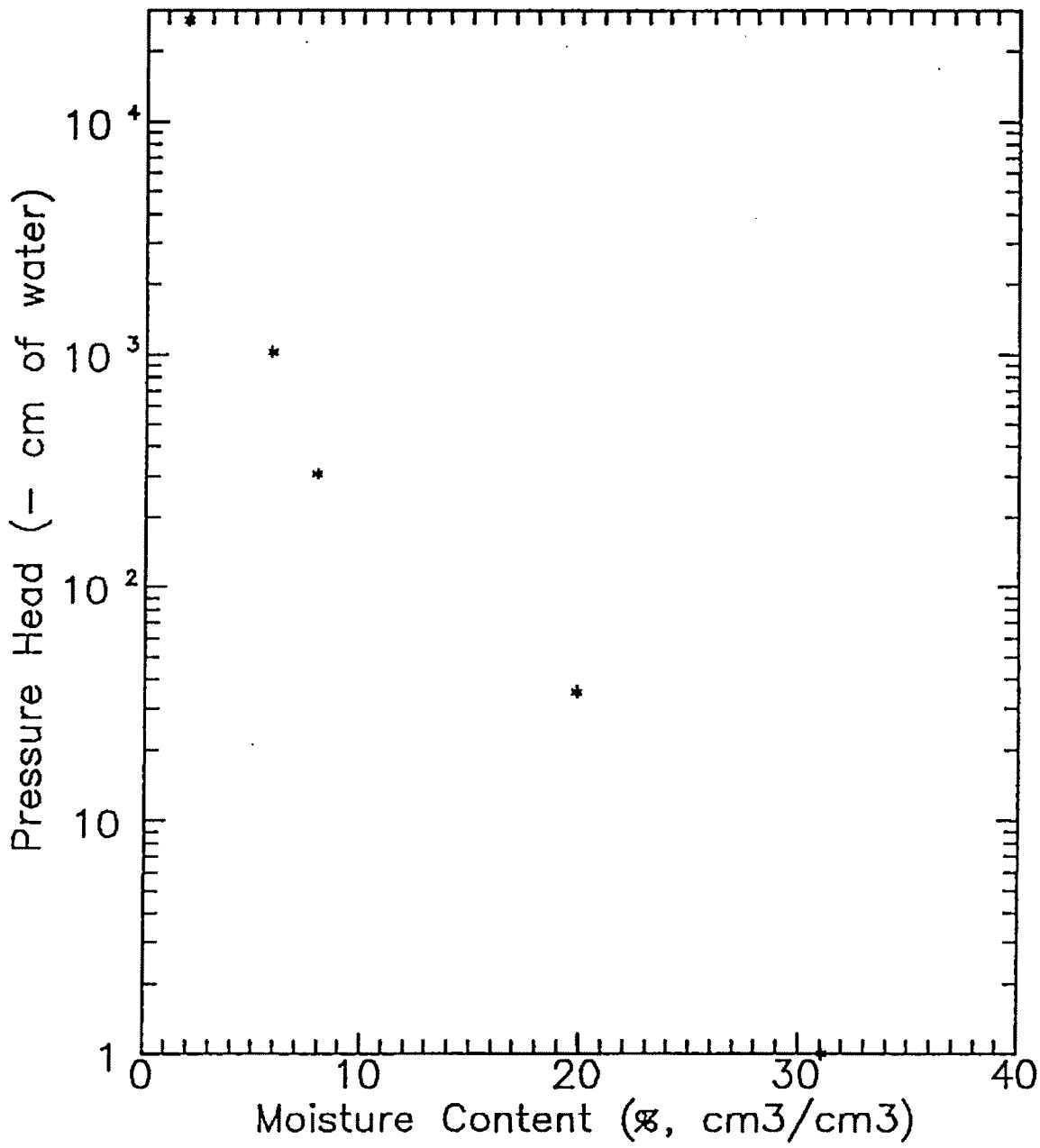
MOISTURE RETENTION DATA - HANGING COLUMN/15 BAR PRESSURE PLATE
(PORE SIZE DISTRIBUTION)

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-2(40-41.5)
RING NUMBER: G-2(40-41.5)
DEPTH: 40-41.5 FT.
SAMPLE VOLUME: 152.25 (cc)
SATURATED WEIGHT AT 0 CM TENSION
(WITH CAP AND RING): 424.76 (g)
TARE RING: 94.76 (g)
TARE CAP: 0.00 (g)
TARE WEIGHT OF SCREEN AND CLAMP: 24.94 (g)
DRY WEIGHT OF SAMPLE: 257.74 (g)
SATURATED MOISTURE CONTENT: 31.08 (% vol)
VOLUME OF WATER IN SATURATED SAMPLE: 47.32 (cc)

DATE (1994)	TIME	HANGING COLUMN SUCTION (CM)	PRESSURE PLATE PRESSURE (BAR)	THERMO COUPLE POTENTIAL (BAR)	WEIGHT W/RING (G)	WEIGHT CHANGE (G)	TOTAL WEIGHT CHANGE (G)	MOISTURE CONTENT (% VOL)
03/02	1000	0.0	--	--	424.76	--	--	31.1
03/04	1530	35.5	--	--	407.62	17.14	17.14	19.8
03/08	1620	--	0.3	--	389.46	18.16	35.30	7.9
03/15	1330	--	1.0	--	386.23	3.23	38.53	5.8
03/29	900	--	--	26.6	380.30	5.93	44.46	1.9

COMMENTS: Assume density of water is 1.0 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATION MADE BY: R. Hill
CHECKED BY: M. Ankeny



Pressure Head vs. Moisture Content,
Sample No. G-2 40-41.5

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

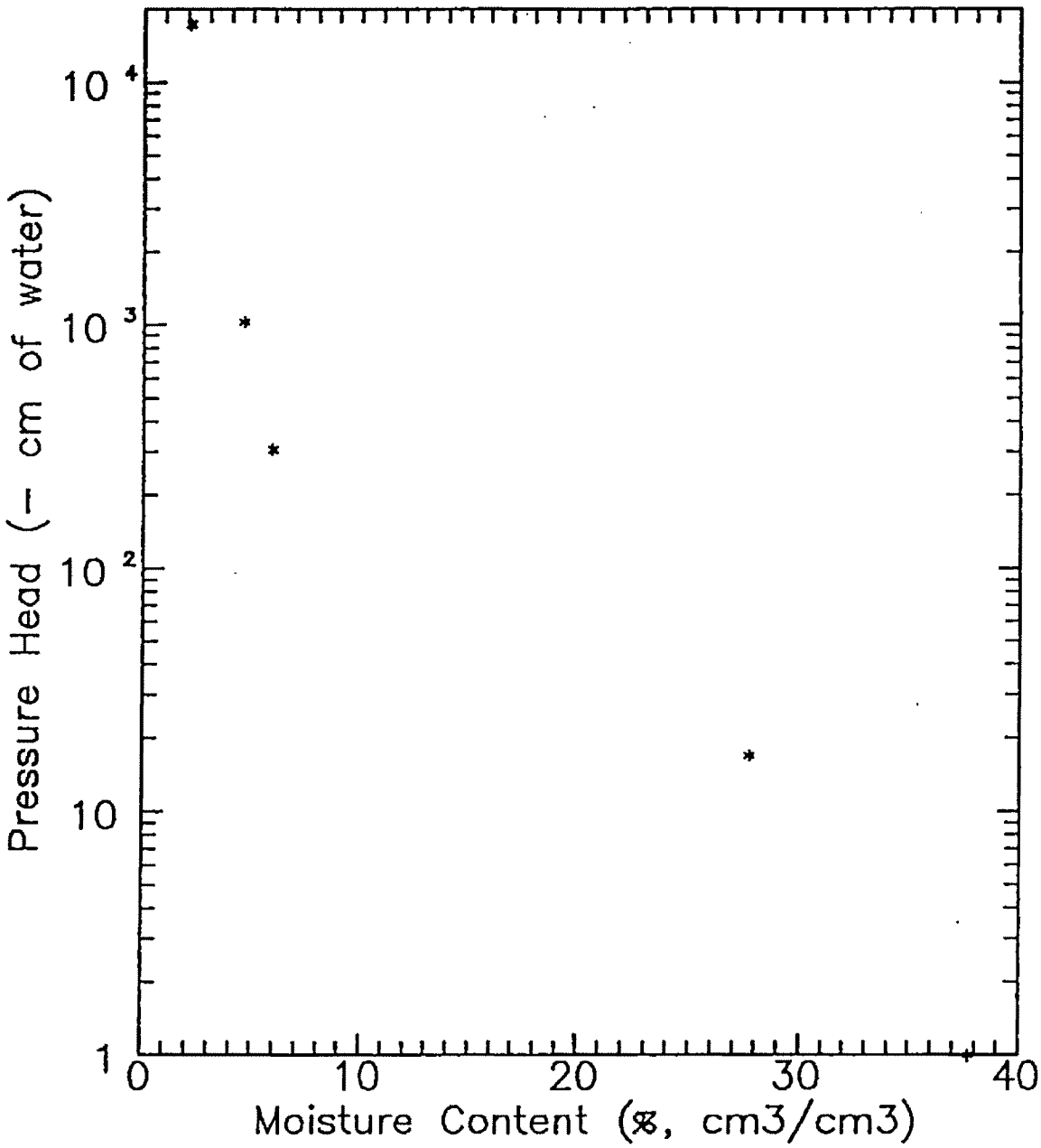
MOISTURE RETENTION DATA - HANGING COLUMN/15 BAR PRESSURE PLATE
(PORE SIZE DISTRIBUTION)

JOB NAME: BCL
JOB NUMBER: 4806
SAMPLE NUMBER: G-3(10-11.5)
RING NUMBER: G-3(10-11.5)
DEPTH: 10.0-11.5 FT.
SAMPLE VOLUME: 141.05 (cc)
SATURATED WEIGHT AT 0 CM TENSION
(WITH CAP AND RING): 396.52 (g)
TARE RING: 87.91 (g)
TARE CAP: 0.00 (g)
TARE WEIGHT OF SCREEN AND CLAMP: 23.25 (g)
DRY WEIGHT OF SAMPLE: 232.16 (g)
SATURATED MOISTURE CONTENT: 37.72 (% vol)
VOLUME OF WATER IN SATURATED SAMPLE: 53.20 (cc)

DATE (1994)	TIME	HANGING COLUMN SUCTION (CM)	PRESSURE PLATE PRESSURE (BAR)	THERMO COUPLE POTENTIAL (BAR)	WEIGHT W/RING (G)	WEIGHT CHANGE (G)	TOTAL WEIGHT CHANGE (G)	MOISTURE CONTENT (% VOL)
02/25	1420	0.0	--	--	396.52	--	--	37.7
03/04	1600	17.0	--	--	382.40	14.12	14.12	27.7
03/08	1630	--	0.3	--	351.59	30.81	44.93	5.9
03/15	1330	--	1.0	--	349.75	1.84	46.77	4.6
03/31	1140	--	--	16.9	346.29	3.46	50.23	2.1

COMMENTS: Assume density of water is 1.0 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATION MADE BY: R. Hill
CHECKED BY: M. Ankeny



Pressure Head vs. Moisture Content,
Sample No. G-3 10-11.5

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/01/94
SAMPLE NUMBER: G1 5-6.5
DEPTH: 5-6.5 FT.

TOTAL SAMPLE WEIGHT: 223.45 (g)

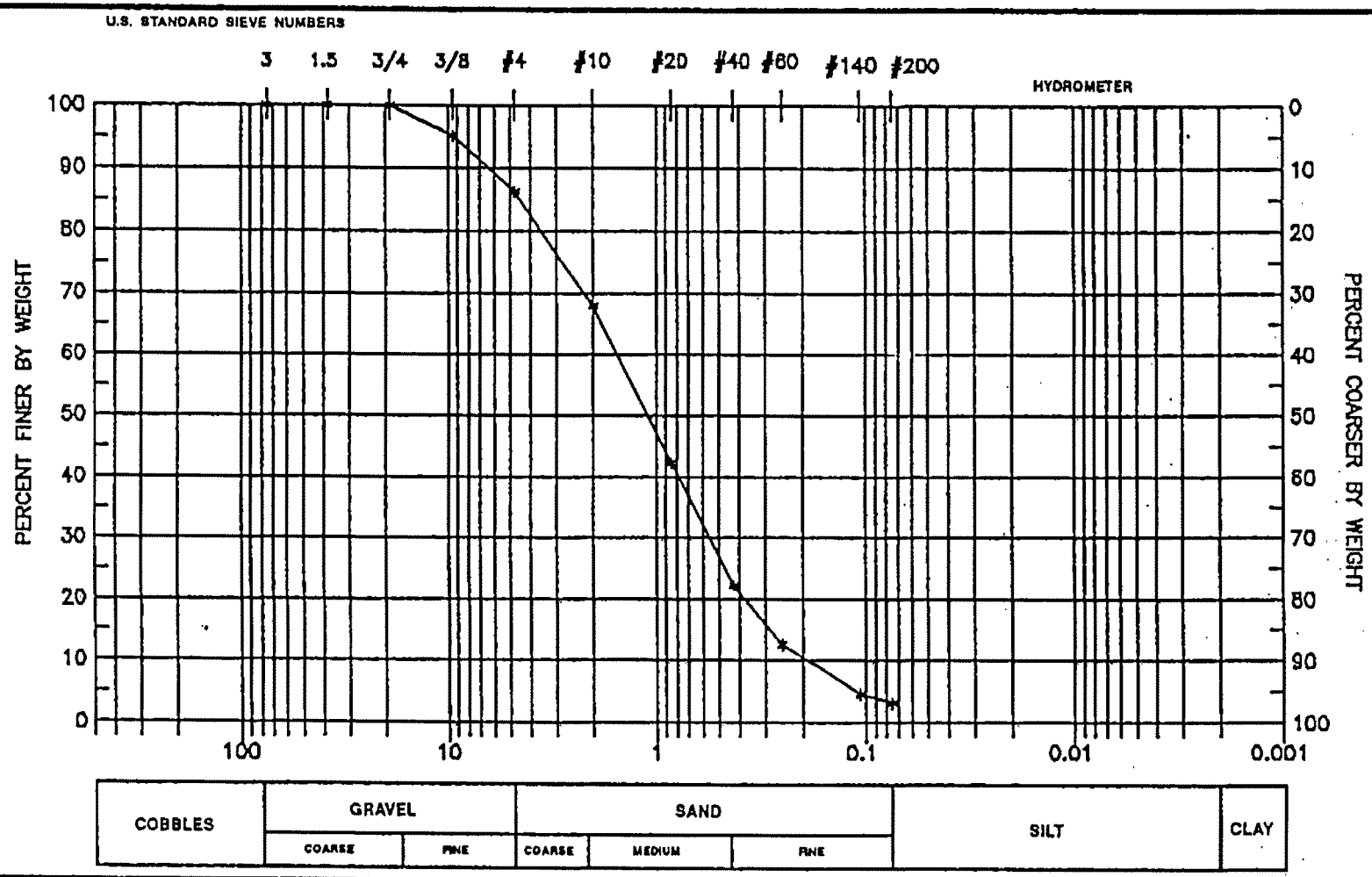
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	223.45	100.00
1.5"	38.100	0.00	0.00	223.45	100.00
3/4"	19.000	0.00	0.00	223.45	100.00
3/8"	9.500	10.94	10.94	212.51	95.10
4	4.750	19.90	30.84	192.61	86.20
10	2.000	40.90	71.74	151.71	67.89
20	0.850	57.31	129.05	94.40	42.25
40	0.425	44.89	173.94	49.51	22.16
60	0.250	21.40	195.34	28.11	12.58
140	0.106	17.72	213.06	10.39	4.65
200	0.075	3.28	216.34	7.11	3.18
pan		6.38	222.72	0.73	

d10:	0.20 (mm)	d50:	1.2 (mm)
d16:	0.31 (mm)	d60:	1.6 (mm)
d30:	0.59 (mm)	d84:	4.4 (mm)

MEDIAN PARTICLE DIAMETER (d50): 1.2
UNIFORMITY COEFFICIENT, Cu (d60/d10): 8.0
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.1
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 2.0

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: R. Hill
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_l = 9.1 (%, vol)	d_{10} = 0.20	d_{50} = 1.2	d_{60} = 1.6	Cu= 8.0	Cc= 1.1

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G1 5–6.5	5–6.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/01/94
SAMPLE NUMBER: G1 15-16.5
DEPTH: 15-16.5 FT.

TOTAL SAMPLE WEIGHT: 263.73 (g)

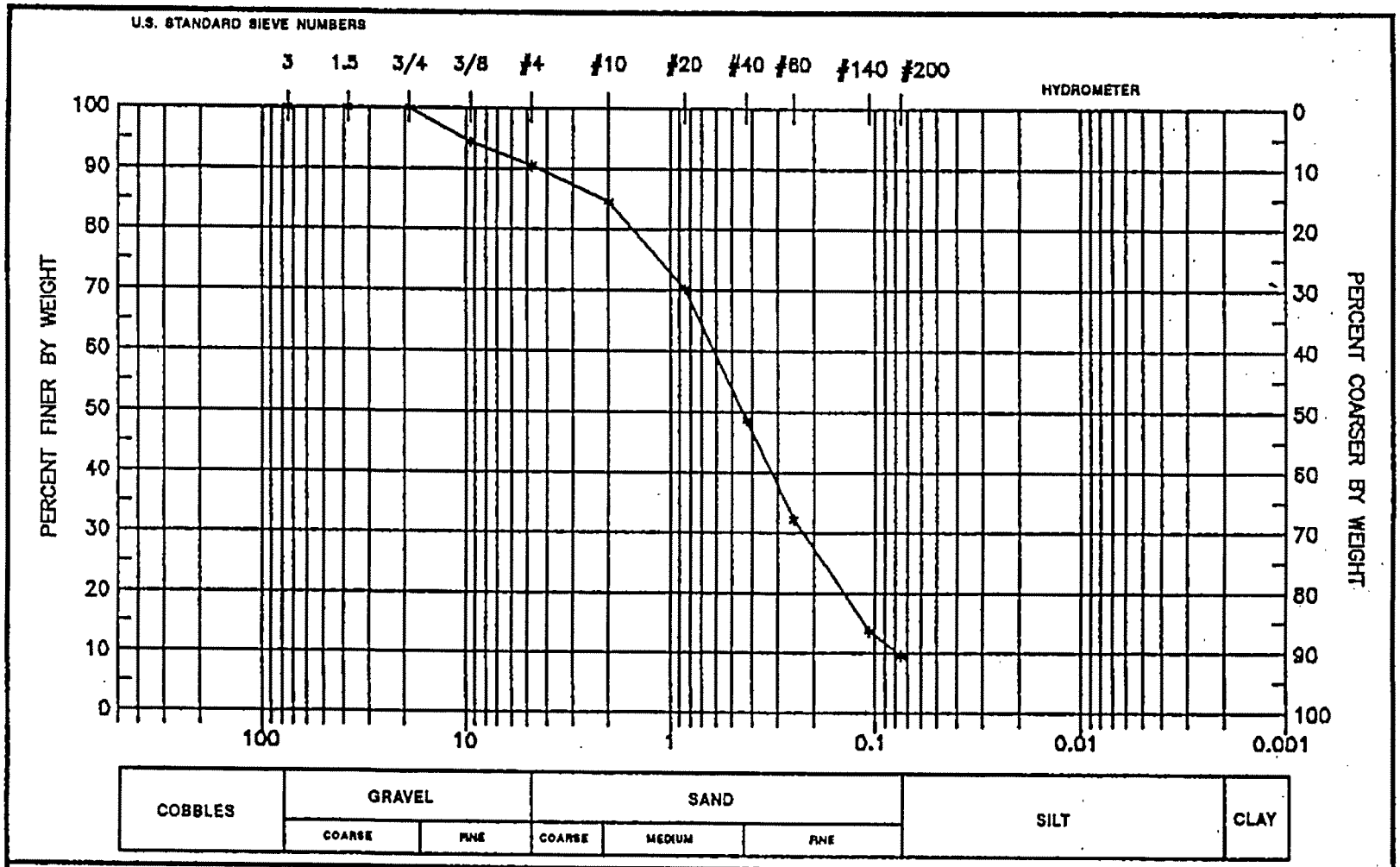
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	263.73	100.00
1.5"	38.100	0.00	0.00	263.73	100.00
3/4"	19.000	0.00	0.00	263.73	100.00
3/8"	9.500	14.69	14.69	249.04	94.43
4	4.750	10.48	25.17	238.56	90.46
10	2.000	15.63	40.80	222.93	84.53
20	0.850	38.05	78.85	184.89	70.10
40	0.425	56.70	135.55	128.19	48.60
60	0.250	43.63	179.18	84.56	32.06
140	0.106	48.28	227.46	36.28	13.75
200	0.075	10.89	238.35	25.38	9.63
pan		24.11	262.46	1.27	

d10:	0.078 (mm)	d50:	0.45 (mm)
d16:	0.12 (mm)	d60:	0.65 (mm)
d30:	0.23 (mm)	d84:	2.0 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.45
UNIFORMITY COEFFICIENT, Cu (d60/d10): 8.3
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.0
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.86

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: R. Hill
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_I = 5.4 (%, vol)	d_{10} = 0.078	d_{50} = 0.45	d_{60} = 0.65	Cu= 8.3	Cc= 1.0

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G1 15–16.5	15–16.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/02/94
SAMPLE NUMBER: G1 20-21.5
DEPTH: 20-21.5 FT.

TOTAL SAMPLE WEIGHT: 201.09 (g)

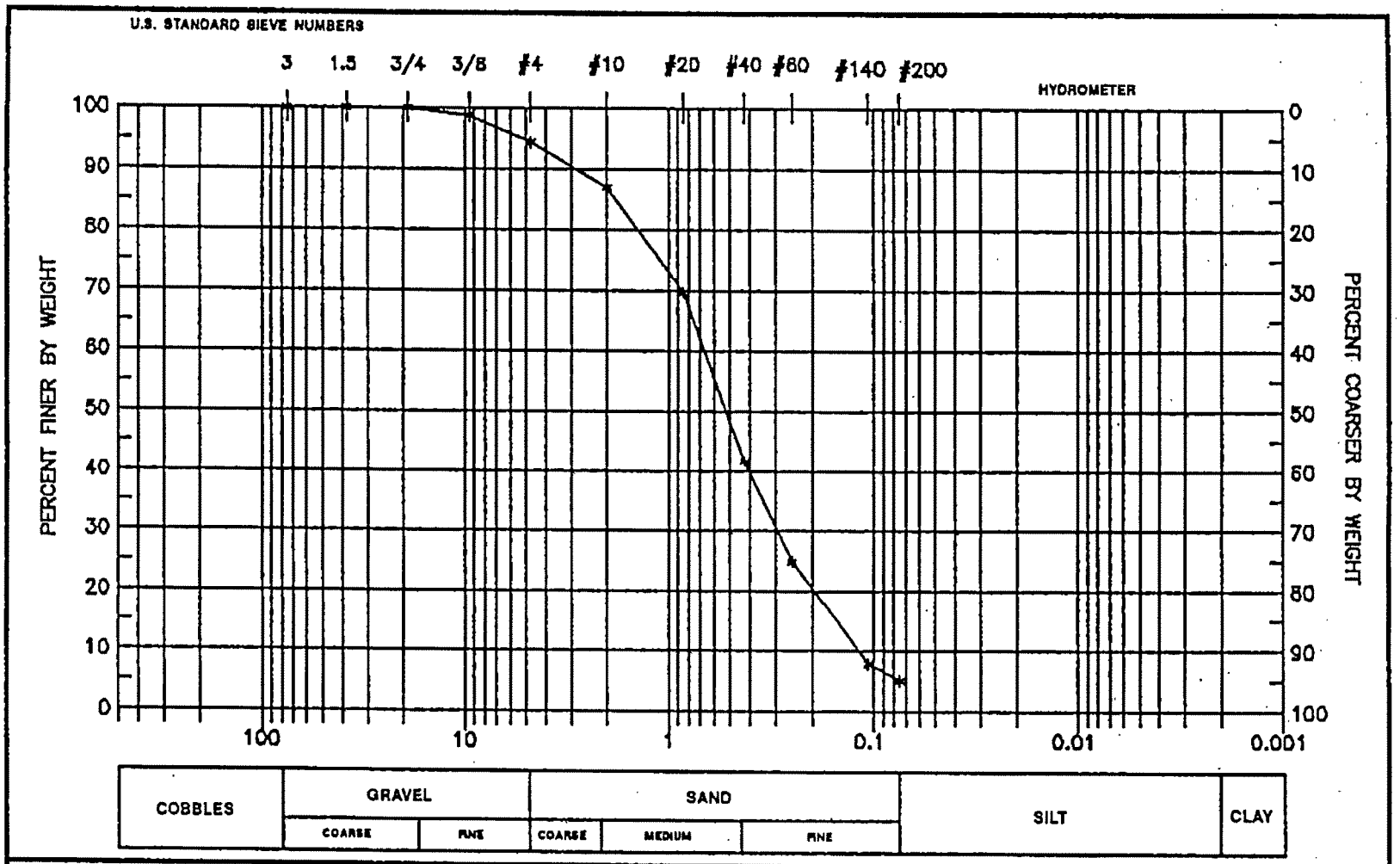
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	201.09	100.00
1.5"	38.100	0.00	0.00	201.09	100.00
3/4"	19.000	0.00	0.00	201.09	100.00
3/8"	9.500	2.53	2.53	198.56	98.74
4	4.750	8.83	11.36	189.73	94.35
10	2.000	14.87	26.23	174.86	86.96
20	0.850	34.73	60.96	140.13	69.69
40	0.425	56.47	117.43	83.66	41.60
60	0.250	33.80	151.23	49.86	24.79
140	0.106	33.82	185.05	16.04	7.98
200	0.075	5.59	190.64	10.45	5.20
pan		9.85	200.49	0.60	

d10:	0.12 (mm)	d50:	0.55 (mm)
d16:	0.17 (mm)	d60:	0.70 (mm)
d30:	0.30 (mm)	d84:	1.8 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.55
UNIFORMITY COEFFICIENT, Cu (d60/d10): 5.8
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.1
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.84

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_I = 7.7 (%, vol)	d_{10} = 0.12	d_{50} = 0.55	d_{60} = 0.70	Cu= 5.8	Cc= 1.1

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G1 20.0–21.5	20–21.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/01/94
SAMPLE NUMBER: G1 31-32.5
DEPTH: 31-32.5 FT.

TOTAL SAMPLE WEIGHT: 220.22 (g)

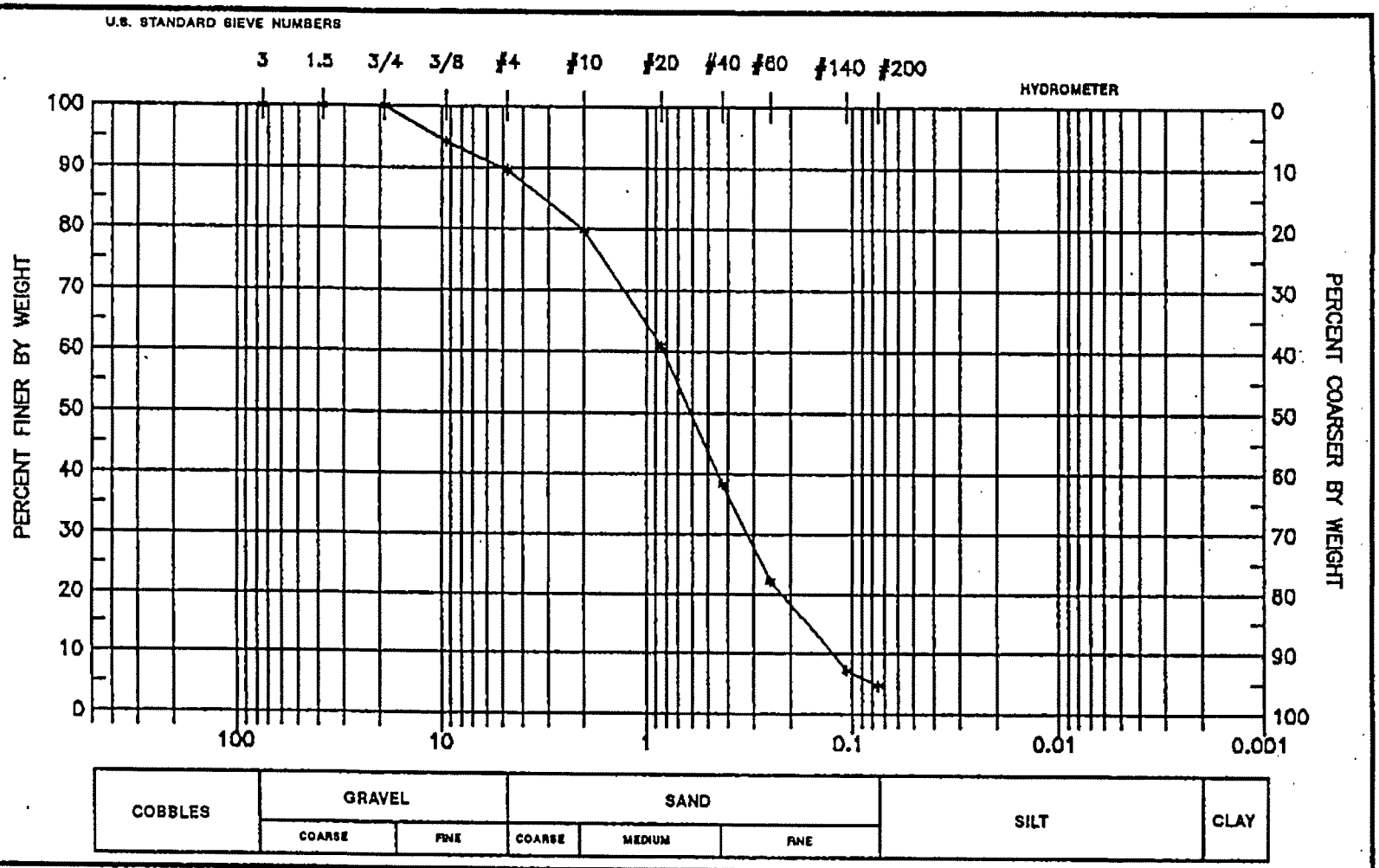
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	220.22	100.00
1.5"	38.100	0.00	0.00	220.22	100.00
3/4"	19.000	0.00	0.00	220.22	100.00
3/8"	9.500	12.63	12.63	207.59	94.26
4	4.750	10.10	22.73	197.49	89.68
10	2.000	21.69	44.42	175.80	79.83
20	0.850	41.96	86.38	133.84	60.78
40	0.425	49.65	136.03	84.19	38.23
60	0.250	35.50	171.53	48.69	22.11
140	0.106	32.63	204.16	16.06	7.29
200	0.075	5.41	209.57	10.65	4.84
pan		9.91	219.48	0.74	

d10:	0.13 (mm)	d50:	0.65 (mm)
d16:	0.19 (mm)	d60:	0.84 (mm)
d30:	0.34 (mm)	d84:	3.2 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.65
UNIFORMITY COEFFICIENT, Cu (d60/d10): 6.5
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.1
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 1.3

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: R. Hill
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_I = 7.4 (%, vol)	d_{10} = 0.13	d_{50} = 0.65	d_{60} = 0.84	Cu= 6.5	Cc= 1.1

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G1 31–32.5	31–32.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 04/11/94
SAMPLE NUMBER: G1 41.0-42.5
DEPTH: 41.0-42.5 FT.

TOTAL SAMPLE WEIGHT: 365.63 (g)

SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	365.63	100.00
1.5"	38.100	0.00	0.00	365.63	100.00
3/4"	19.000	0.00	0.00	365.63	100.00
3/8"	9.500	11.90	11.90	353.73	96.75
4	4.750	8.31	20.21	345.42	94.47
10	2.000	18.52	38.73	326.90	89.41
20	0.850	49.35	88.08	277.55	75.91
40	0.425	71.77	159.85	205.78	56.28
60	0.250	61.57	221.42	144.21	39.44
140	0.106	72.93	294.35	71.28	19.50
200	0.075	19.07	313.42	52.21	14.28
pan		50.66	364.08	1.55	

d10:	0.038 (mm)	d50:	0.36 (mm)
d16:	0.085 (mm)	d60:	0.51 (mm)
d30:	0.18 (mm)	d84:	1.5 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.36
UNIFORMITY COEFFICIENT, Cu (d60/d10): 13
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.7
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.65

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

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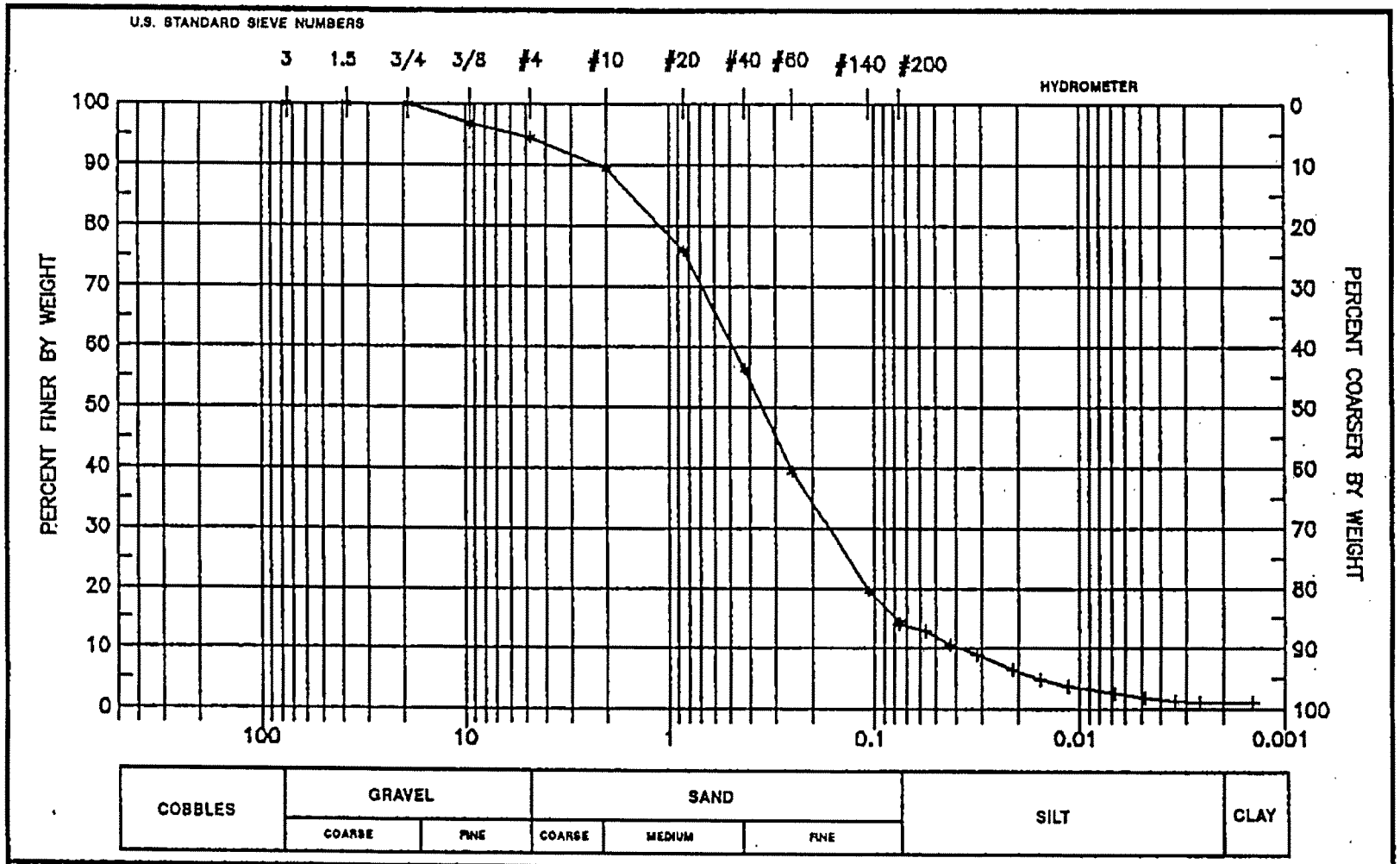
HYDROMETER DATA

JOB NAME:	BCL	TEST DATE:	04/11/94
JOB NUMBER:	4806	DEPTH:	41.0-42.5 FT.FT.
SAMPLE NUMBER:	G1 41.0-42.5	INITIAL WT:	50.66 (g)
TYPE OF WATER USED:	DISTILLED	TOTAL SAMPLE WT:	365.63 (g)
REACTION WITH H202:	NONE	WT PASSING #200:	52.21 (g)
DISPERSANT:	(NaPO3)6	START TIME:	939

DATE	TIME (MIN)	TEMP (C)	R (g/l)	Rl (g/l)	Rcorr (g/l)	L (CM)	D (MM)	P (%)	%FINER
04/12	0.25	20.0	52.0	2.5	49.5	7.8	0.07635	97.71023	13.95
	0.50	20.0	48.0	2.5	45.5	8.4	0.05622	89.81445	12.83
	1.00	20.0	40.5	2.5	38.0	9.7	0.04255	75.00987	10.71
	2.00	20.0	34.5	2.5	32.0	10.6	0.03158	63.16621	9.02
	5.00	20.0	26.0	2.5	23.5	12.0	0.02124	46.38768	6.62
	10	20.0	20.0	2.5	17.5	13.0	0.01562	34.54402	4.93
	20	20.0	16.0	2.5	13.5	13.7	0.01132	26.64824	3.81
	60	20.0	12.0	2.5	9.5	14.3	0.00669	18.75247	2.68
	120	20.0	10.0	3.0	7.0	14.7	0.00479	13.81761	1.97
	240	20.0	8.0	3.0	5.0	15.0	0.00342	9.86972	1.41
	430	19.0	7.5	3.0	4.5	15.1	0.00259	8.88275	1.27
04/13	1415	19.0	6.5	2.5	4.0	15.2	0.00144	7.89578	1.13

COMMENTS: Assume mean particle density is 2.65 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_l = 8.8 (%, vol)	d_{10} = 0.038	d_{50} = 0.36	d_{60} = 0.51	Cu= 13	Cc= 1.7

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G1 41.0–42.5	41.0–42.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 04/11/94
SAMPLE NUMBER: G1 66.0-67.5
DEPTH: 66.0-67.5 FT.

TOTAL SAMPLE WEIGHT: 352.69 (g)

SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	352.69	100.00
1.5"	38.100	0.00	0.00	352.69	100.00
3/4"	19.000	0.00	0.00	352.69	100.00
3/8"	9.500	0.00	0.00	352.69	100.00
4	4.750	2.49	2.49	350.20	99.29
10	2.000	15.63	18.12	334.57	94.86
20	0.850	37.98	56.10	296.59	84.09
40	0.425	46.49	102.59	250.10	70.91
60	0.250	45.54	148.13	204.56	58.00
140	0.106	89.63	237.76	114.93	32.59
200	0.075	30.47	268.23	84.46	23.95
pan		83.09	351.32	1.37	

d10:	0.017 (mm)	d50:	0.20 (mm)
d16:	0.033 (mm)	d60:	0.28 (mm)
d30:	0.097 (mm)	d84:	0.85 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.20
UNIFORMITY COEFFICIENT, Cu (d60/d10): 16
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 2.0
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.36

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

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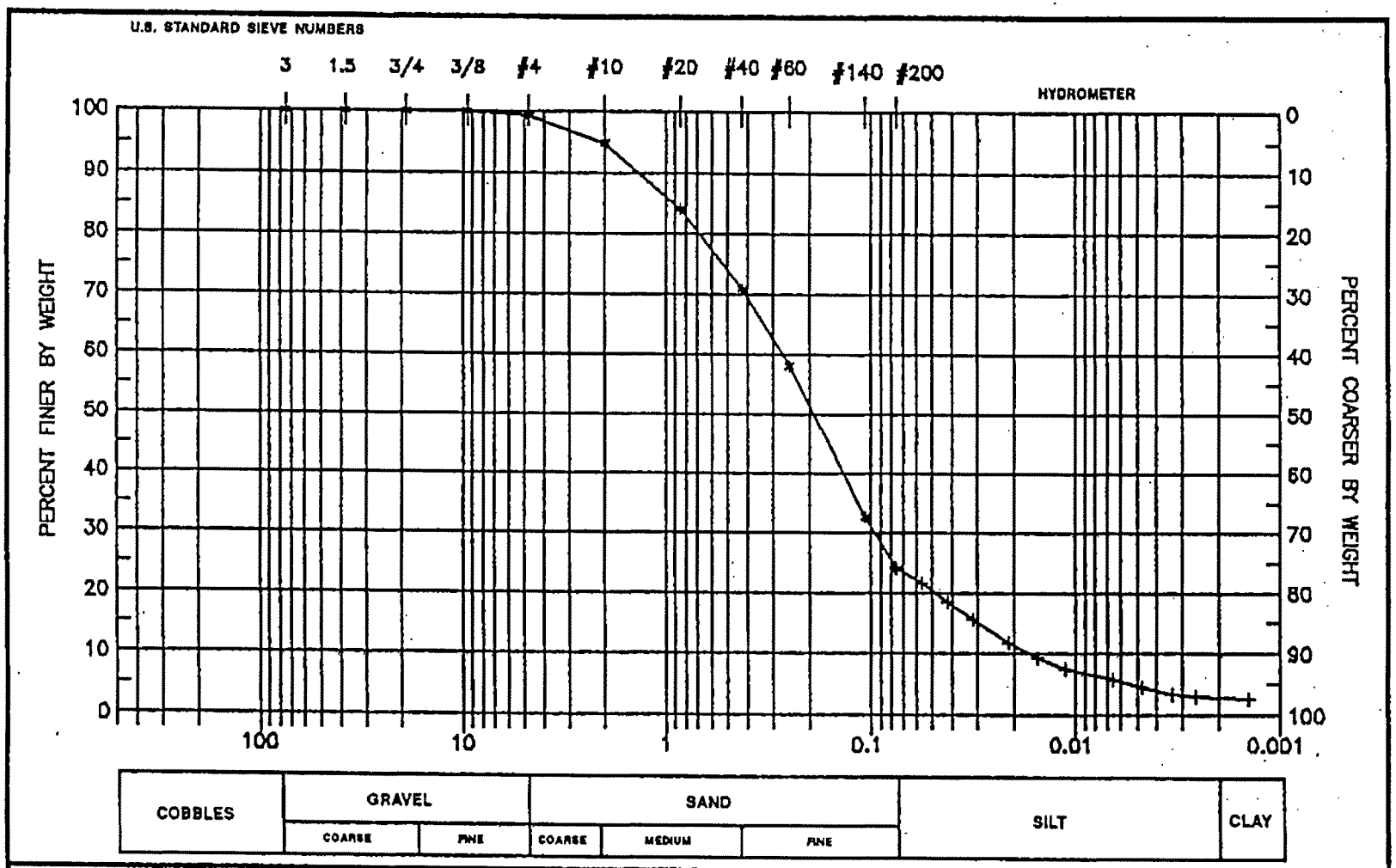
HYDROMETER DATA

JOB NAME:	BCL	TEST DATE:	04/11/94
JOB NUMBER:	4806	DEPTH:	66.0-67.5 FT.FT.
SAMPLE NUMBER:	G1 66.0-67.5	INITIAL WT:	50.00 (g)
TYPE OF WATER USED:	DISTILLED	TOTAL SAMPLE WT:	352.69 (g)
REACTION WITH H202:	NONE	WT PASSING #200:	84.46 (g)
DISPERSANT:	(NaPO3)6	START TIME:	945

DATE	TIME (MIN)	TEMP (C)	R (g/l)	Rl (g/l)	Rcorr (g/l)	L (CM)	D (MM)	P (%)	%FINER
04/12	0.25	20.0	53.0	2.5	50.5	7.6	0.07554	101.00000	24.19
	0.50	20.0	47.5	2.5	45.0	8.5	0.05649	90.00000	21.55
	1.00	20.0	41.0	2.5	38.5	9.6	0.04237	77.00000	18.44
	2.00	20.0	35.0	2.5	32.5	10.6	0.03146	65.00000	15.57
	5.00	20.0	27.0	2.5	24.5	11.9	0.02110	49.00000	11.73
	10	20.0	22.0	2.5	19.5	12.7	0.01542	39.00000	9.34
	20	20.0	18.0	2.5	15.5	13.3	0.01118	31.00000	7.42
	60	20.0	14.5	2.5	12.0	13.9	0.00659	24.00000	5.75
	120	20.0	12.5	3.0	9.5	14.3	0.00472	19.00000	4.55
	240	20.0	10.0	3.0	7.0	14.7	0.00338	14.00000	3.35
	425	19.0	9.5	3.0	6.5	14.7	0.00258	13.00000	3.11
04/13	1410	19.0	8.0	2.5	5.5	15.0	0.00143	11.00000	2.63

COMMENTS: Assume mean particle density is 2.65 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_1 = 28.2 (%, vol)	d_{10} = 0.017	d_{50} = 0.20	d_{60} = 0.28	Cu= 16	Cc= 2.0

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G1· 66.0–67.5	66.0–67.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/02/94
SAMPLE NUMBER: G1 71.0-72.5
DEPTH: 71.0-72.5 FT.

TOTAL SAMPLE WEIGHT: 141.70 (g)

SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	141.70	100.00
1.5"	38.100	0.00	0.00	141.70	100.00
3/4"	19.000	0.00	0.00	141.70	100.00
3/8"	9.500	0.00	0.00	141.70	100.00
4	4.750	0.79	0.79	140.91	99.44
10	2.000	8.18	8.97	132.73	93.67
20	0.850	17.92	26.89	114.81	81.02
40	0.425	21.87	48.76	92.94	65.59
60	0.250	18.60	67.36	74.34	52.46
140	0.106	30.87	98.23	43.47	30.68
200	0.075	9.83	108.06	33.64	23.74
pan		32.51	140.57	1.13	

d10:	0.017 (mm)	d50:	0.23 (mm)
d16:	0.031 (mm)	d60:	0.35 (mm)
d30:	0.10 (mm)	d84:	1.1 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.23
UNIFORMITY COEFFICIENT, Cu (d60/d10): 21
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.7
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.45

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

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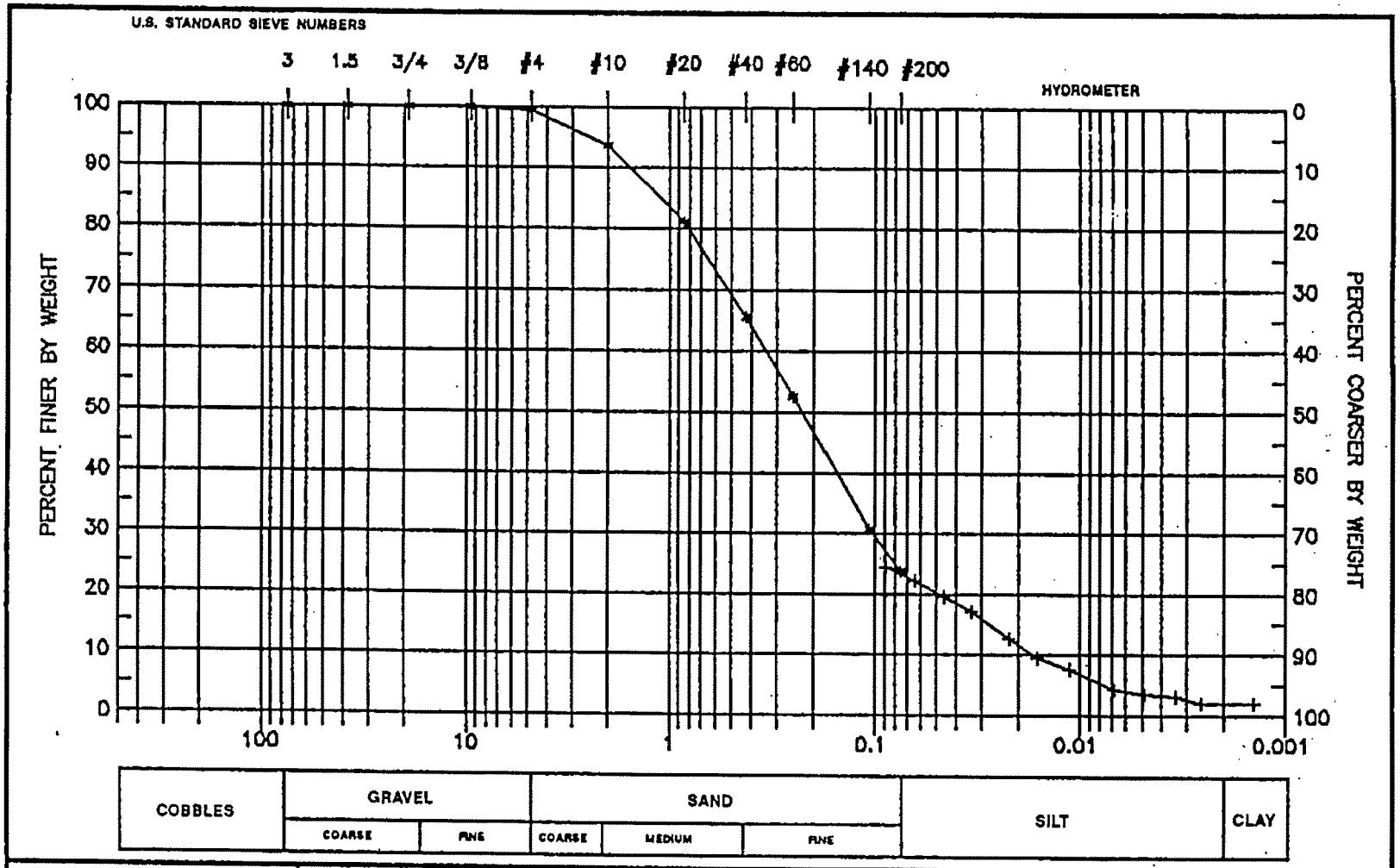
HYDROMETER DATA

JOB NAME:	BCL	TEST DATE:	04/11/94
JOB NUMBER:	4806	DEPTH:	71.0-72.5 FT.FT.
SAMPLE NUMBER:	G1 71.0-72.5	INITIAL WT:	32.71 (g)
TYPE OF WATER USED:	DISTILLED	TOTAL SAMPLE WT:	141.70 (g)
REACTION WITH H2O2:	NONE	WT PASSING #200:	33.64 (g)
DISPERSANT:	(NaPO3)6	START TIME:	915

DATE	TIME (MIN)	TEMP (C)	R (g/l)	Rl (g/l)	Rcorr (g/l)	L (CM)	D (MM)	P (%)	%FINER
04/12	0.25	20.0	36.0	2.5	33.5	10.4	0.08829	102.41516	24.31
	0.50	20.0	33.0	2.5	30.5	10.9	0.06389	93.24366	22.14
	1.00	20.0	29.5	2.5	27.0	11.5	0.04635	82.54356	19.60
	2.00	20.0	26.0	2.5	23.5	12.0	0.03359	71.84347	17.06
	5.00	20.0	20.0	2.5	17.5	13.0	0.02209	53.50046	12.70
	10	20.0	15.5	2.5	13.0	13.8	0.01606	39.74320	9.44
	21	20.0	13.0	2.5	10.5	14.2	0.01125	32.10028	7.62
	60	20.0	9.0	3.0	6.0	14.8	0.00680	18.34301	4.35
	120	20.0	8.0	3.0	5.0	15.0	0.00484	15.28585	3.63
	240	20.0	7.5	3.0	4.5	15.1	0.00343	13.75726	3.27
	450	19.0	6.0	3.0	3.0	15.3	0.00256	9.17151	2.18
04/13	1435	19.0	5.5	2.5	3.0	15.4	0.00143	9.17151	2.18

COMMENTS: Assume mean particle density is 2.65 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_I = 5.0 (%, vol)	d_{10} = 0.017	d_{50} = 0.23	d_{60} = 0.35	Cu= 21	Cc= 1.7

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G1 71.0–72.5	71.0–72.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 02/24/94
SAMPLE NUMBER: G1 81.0-82.5
DEPTH: 81.0-82.5 FT.

TOTAL SAMPLE WEIGHT: 234.79 (g)

SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	234.79	100.00
1.5"	38.100	0.00	0.00	234.79	100.00
3/4"	19.000	0.00	0.00	234.79	100.00
3/8"	9.500	1.32	1.32	233.47	99.44
4	4.750	16.13	17.45	217.34	92.57
10	2.000	26.87	44.32	190.47	81.12
20	0.850	35.03	79.35	155.44	66.20
40	0.425	36.54	115.89	118.90	50.64
60	0.250	26.31	142.20	92.59	39.44
140	0.106	40.27	182.47	52.32	22.28
200	0.075	13.27	195.74	39.05	16.63
pan		38.85	234.59	0.20	

d10:	0.027 (mm)	d50:	0.41 (mm)
d16:	0.063 (mm)	d60:	0.68 (mm)
d30:	0.17 (mm)	d84:	2.7 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.41
UNIFORMITY COEFFICIENT, Cu (d60/d10): 25
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.6
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 1.1

COMMENTS: Hydrometer is needed.

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

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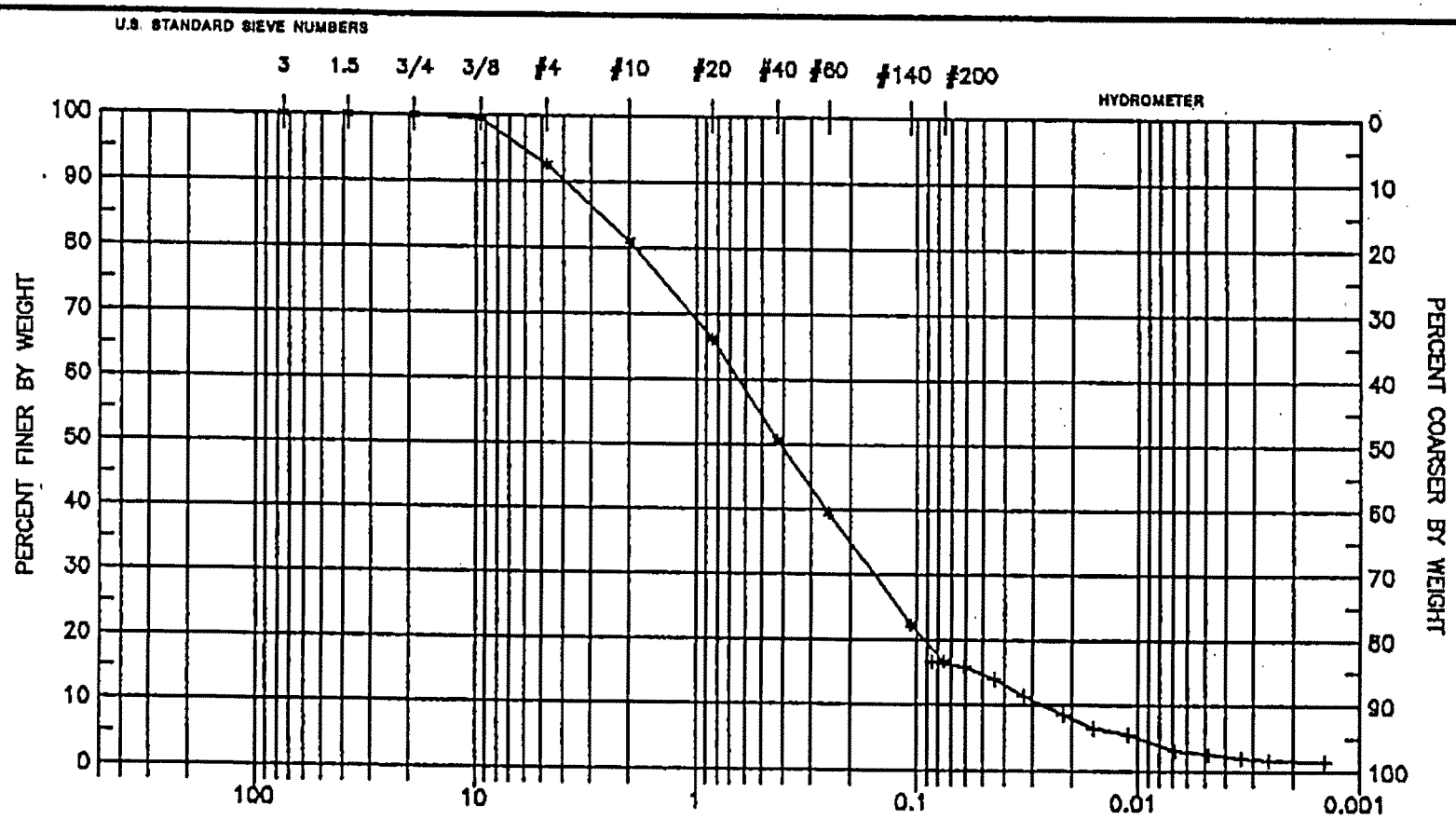
HYDROMETER DATA

JOB NAME:	BCL	TEST DATE:	04/11/94
JOB NUMBER:	4806	DEPTH:	81.0-82.5 FT.FT.
SAMPLE NUMBER:	G1 81.0-82.5	INITIAL WT:	38.75 (g)
TYPE OF WATER USED:	DISTILLED	TOTAL SAMPLE WT:	234.79 (g)
REACTION WITH H202:	NONE	WT PASSING #200:	39.05 (g)
DISPERSANT:	(NaPO3)6	START TIME:	927

DATE	TIME (MIN)	TEMP (C)	R (g/l)	Rl (g/l)	Rcorr (g/l)	L (CM)	D (MM)	P (%)	%FINER
04/12	0.25	20.0	41.0	2.5	38.5	9.6	0.08474	99.35484	16.52
	0.50	20.0	39.5	2.5	37.0	9.8	0.06068	95.48387	15.88
	1.00	20.0	35.0	2.5	32.5	10.6	0.04449	83.87097	13.95
	2.00	20.0	29.0	2.5	26.5	11.5	0.03289	68.38710	11.37
	5.00	20.0	22.5	2.5	20.0	12.6	0.02174	51.61290	8.58
	10	20.0	18.0	2.5	15.5	13.3	0.01582	40.00000	6.65
	21	20.0	15.5	2.5	13.0	13.8	0.01108	33.54839	5.58
	60	20.0	10.0	2.5	7.5	14.7	0.00677	19.35484	3.22
	120	20.0	9.0	3.0	6.0	14.8	0.00481	15.48387	2.58
	240	20.0	8.0	3.0	5.0	15.0	0.00342	12.90323	2.15
	440	19.0	7.0	3.0	4.0	15.2	0.00257	10.32258	1.72
04/13	1425	19.0	6.0	2.5	3.5	15.3	0.00144	9.03226	1.50

COMMENTS: Assume mean particle density is 2.65 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



COBBLES	GRAVEL		SAND			SILT	CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE		

θ_l = 7.6 (%, vol)	d_{10} = 0.027	d_{50} = 0.41	d_{60} = 0.68	Cu= 25	Cc= 1.6

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G1 81.0–82.5	81.0–82.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/02/94
SAMPLE NUMBER: G2 15-16.5
DEPTH: 15-16.5 FT.

TOTAL SAMPLE WEIGHT: 345.31 (g)

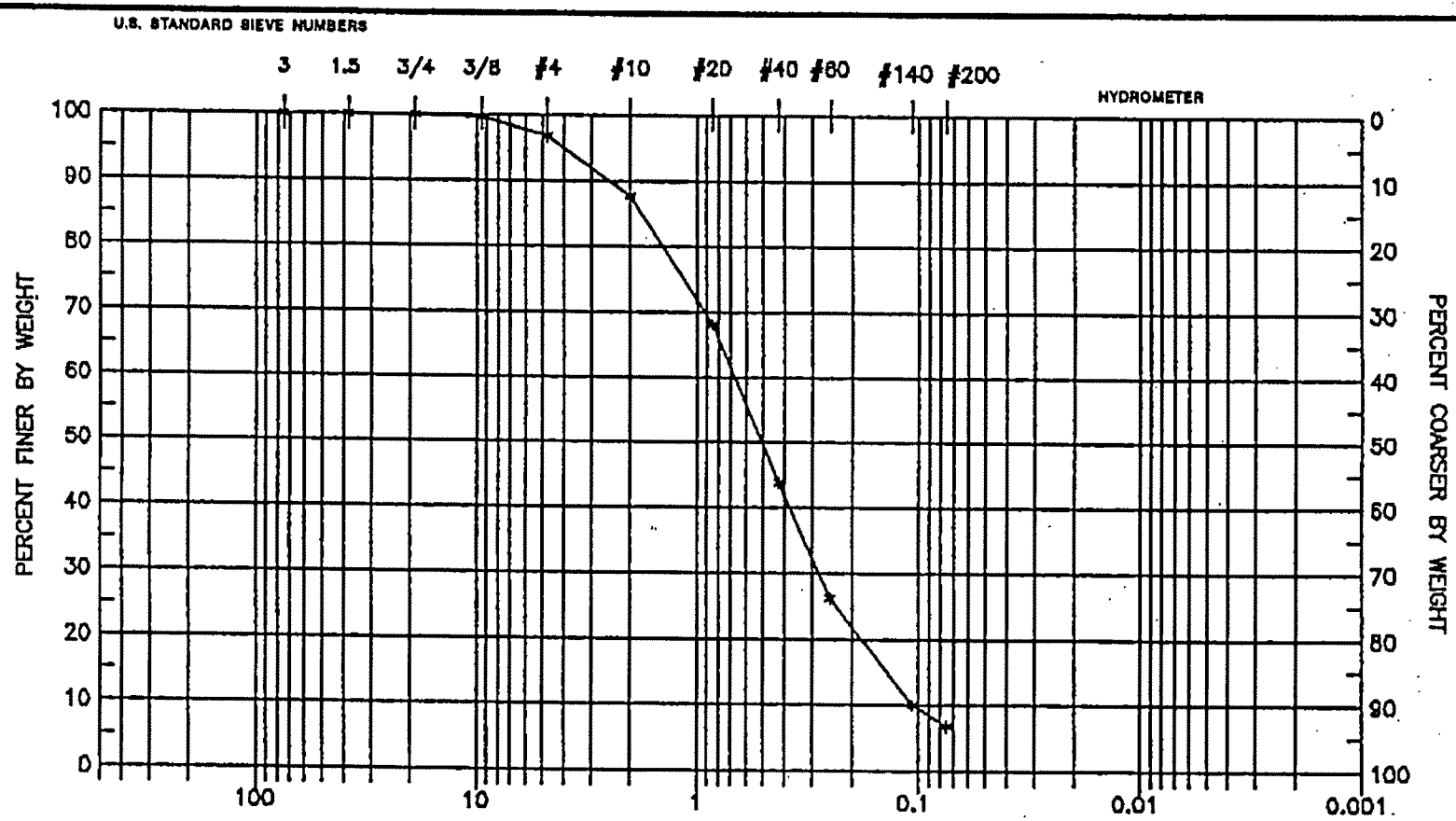
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	345.31	100.00
1.5"	38.100	0.00	0.00	345.31	100.00
3/4"	19.000	0.00	0.00	345.31	100.00
3/8"	9.500	1.40	1.40	343.91	99.59
4	4.750	9.69	11.09	334.22	96.79
10	2.000	31.08	42.17	303.14	87.79
20	0.850	67.99	110.16	235.15	68.10
40	0.425	84.12	194.28	151.03	43.74
60	0.250	60.90	255.18	90.13	26.10
140	0.106	55.32	310.50	34.81	10.08
200	0.075	11.05	321.55	23.76	6.88
pan		22.80	344.35	0.96	

d10:	0.11 (mm)	d50:	0.53 (mm)
d16:	0.16 (mm)	d60:	0.71 (mm)
d30:	0.29 (mm)	d84:	1.8 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.53
UNIFORMITY COEFFICIENT, Cu (d60/d10): 6.5
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.1
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.83

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



COBBLES	GRAVEL		SAND			SILT	CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE		

θ_1 = 6.2 (%, vol)	d_{10} = 0.11	d_{50} = 0.53	d_{60} = 0.71	Cu= 6.5	Cc= 1.1

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G2 15.0–16.5	15.0–16.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 02/24/94
SAMPLE NUMBER: G2 20.0-21.5
DEPTH: 20.0-21.5 FT.

TOTAL SAMPLE WEIGHT: 150.83 (g)

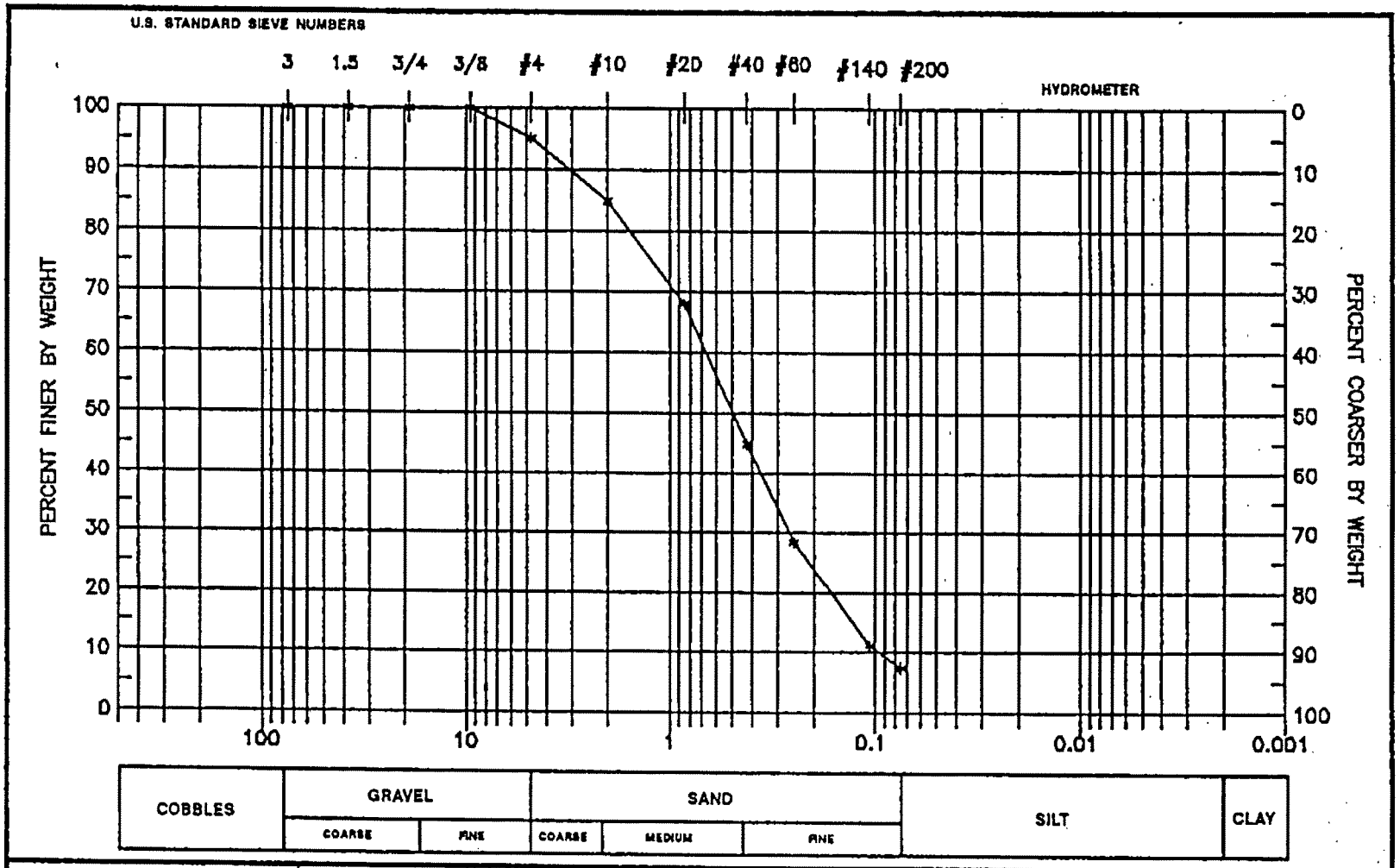
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	150.83	100.00
1.5"	38.100	0.00	0.00	150.83	100.00
3/4"	19.000	0.00	0.00	150.83	100.00
3/8"	9.500	0.00	0.00	150.83	100.00
4	4.750	7.33	7.33	143.50	95.14
10	2.000	15.48	22.81	128.02	84.88
20	0.850	25.58	48.39	102.44	67.92
40	0.425	34.76	83.15	67.68	44.87
60	0.250	25.02	108.17	42.66	28.28
140	0.106	25.75	133.92	16.91	11.21
200	0.075	5.50	139.42	11.41	7.56
pan		10.86	150.28	0.55	

d10:	0.096 (mm)	d50:	0.52 (mm)
d16:	0.15 (mm)	d60:	0.70 (mm)
d30:	0.27 (mm)	d84:	1.9 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.52
UNIFORMITY COEFFICIENT, Cu (d60/d10): 7.3
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.1
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.86

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_l = 7.7 (%, vol)	d_{10} = 0.096	d_{50} = 0.52	d_{60} = 0.70	Cu= 7.3	Cc= 1.1

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G2 20.0–21.5	20.0–21.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 02/24/94
SAMPLE NUMBER: 62 25.0-26.5
DEPTH: 25.0-26.5 FT.

TOTAL SAMPLE WEIGHT: 203.81 (g)

SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	203.81	100.00
1.5"	38.100	0.00	0.00	203.81	100.00
3/4"	19.000	34.41	34.41	169.40	83.12
3/8"	9.500	3.64	38.05	165.76	81.33
4	4.750	13.20	51.25	152.56	74.85
10	2.000	22.68	73.93	129.88	63.73
20	0.850	29.03	102.96	100.85	49.48
40	0.425	26.06	129.02	74.79	36.70
60	0.250	18.56	147.58	56.23	27.59
140	0.106	26.60	174.18	29.63	14.54
200	0.075	8.26	182.44	21.37	10.49
pan		20.66	203.10	0.71	

d10:	0.072 (mm)	d50:	0.89 (mm)
d16:	0.12 (mm)	d60:	1.7 (mm)
d30:	0.30 (mm)	d84:	20 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.89
UNIFORMITY COEFFICIENT, Cu (d60/d10): 24
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 0.74
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 7.0

COMMENTS: Hydrometer is needed.

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

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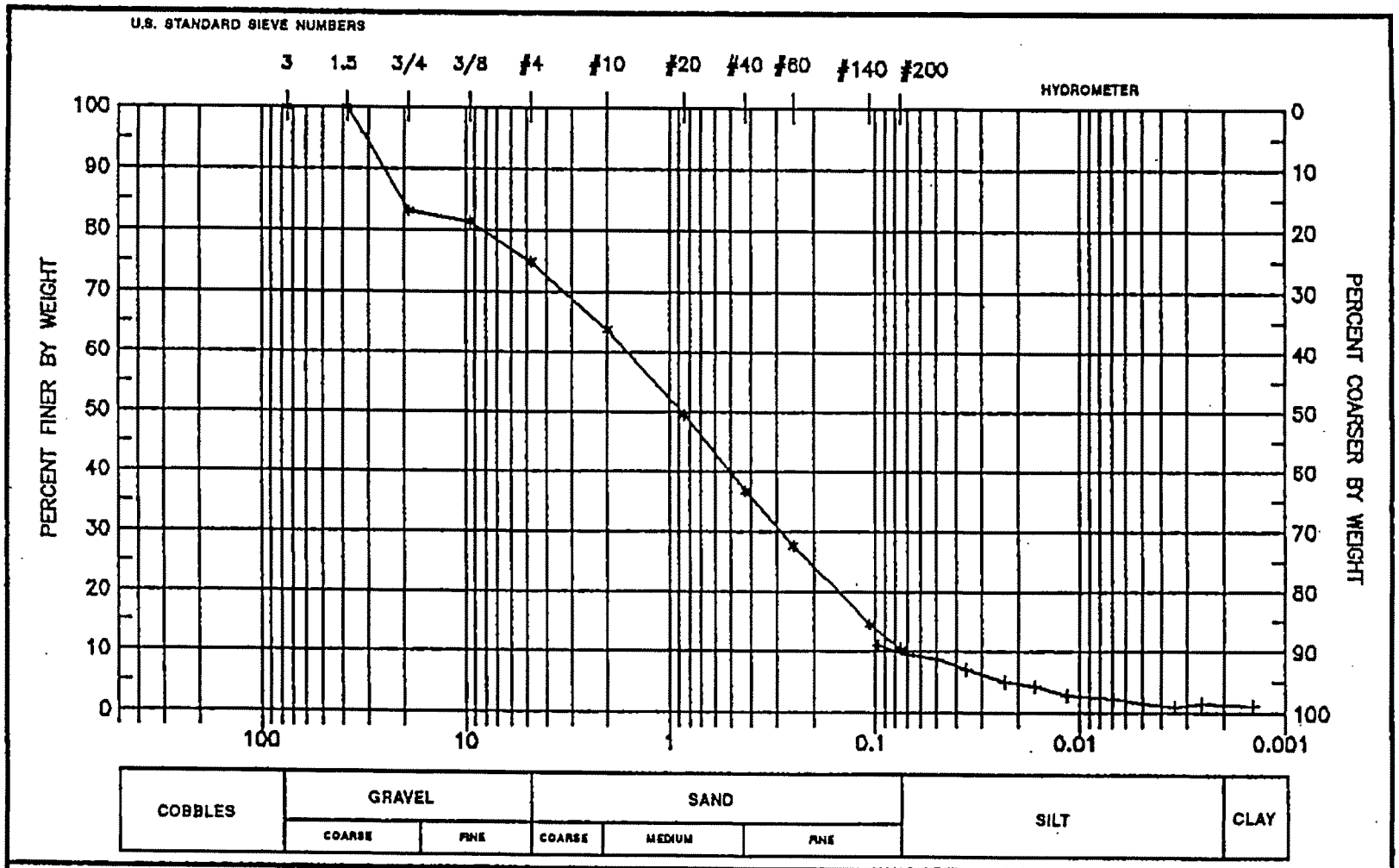
HYDROMETER DATA

JOB NAME:	BCL	TEST DATE:	04/11/94
JOB NUMBER:	4806	DEPTH:	25.0-26.5 FT.FT.
SAMPLE NUMBER:	G2 25.0-26.5	INITIAL WT:	20.46 (g)
TYPE OF WATER USED:	DISTILLED	TOTAL SAMPLE WT:	203.81 (g)
REACTION WITH H202:	NONE	WT PASSING #200:	21.37 (g)
DISPERSANT:	(NaPO3)6	START TIME:	921

DATE	TIME (MIN)	TEMP (C)	R (g/l)	Rl (g/l)	Rcorr (g/l)	L (CM)	D (MM)	P (%)	%FINER
04/12	0.25	20.0	24.0	2.5	21.5	12.4	0.09628	105.08309	11.02
	0.50	20.0	21.0	2.5	18.5	12.9	0.06942	90.42033	9.48
	1.00	20.0	19.5	2.5	17.0	13.1	0.04956	83.08895	8.71
	2.00	20.0	16.5	2.5	14.0	13.6	0.03569	68.42620	7.17
	5.00	20.0	12.5	2.5	10.0	14.3	0.02311	48.87586	5.12
	10	20.0	11.0	2.5	8.5	14.5	0.01648	41.54448	4.36
	21	20.0	8.0	2.5	5.5	15.0	0.01157	26.88172	2.82
	60	20.0	7.0	2.5	4.5	15.2	0.00688	21.99413	2.31
	120	20.0	6.0	3.0	3.0	15.3	0.00489	14.66276	1.54
	240	20.0	5.0	3.0	2.0	15.5	0.00348	9.77517	1.02
	445	19.0	6.0	3.0	3.0	15.3	0.00257	14.66276	1.54
04/13	1430	19.0	5.0	2.5	2.5	15.5	0.00144	12.21896	1.28

COMMENTS: Assume mean particle density is 2.65 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_I = 8.0 (%, vol)	d_{10} = 0.072	d_{50} = 0.89	d_{60} = 1.7	Cu= 24	Cc= 24

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G2 25.0–26.5	25.0–26.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 02/24/94
SAMPLE NUMBER: G2 35.0-36.5
DEPTH: 35.0-36.5 FT.

TOTAL SAMPLE WEIGHT: 234.80 (g)

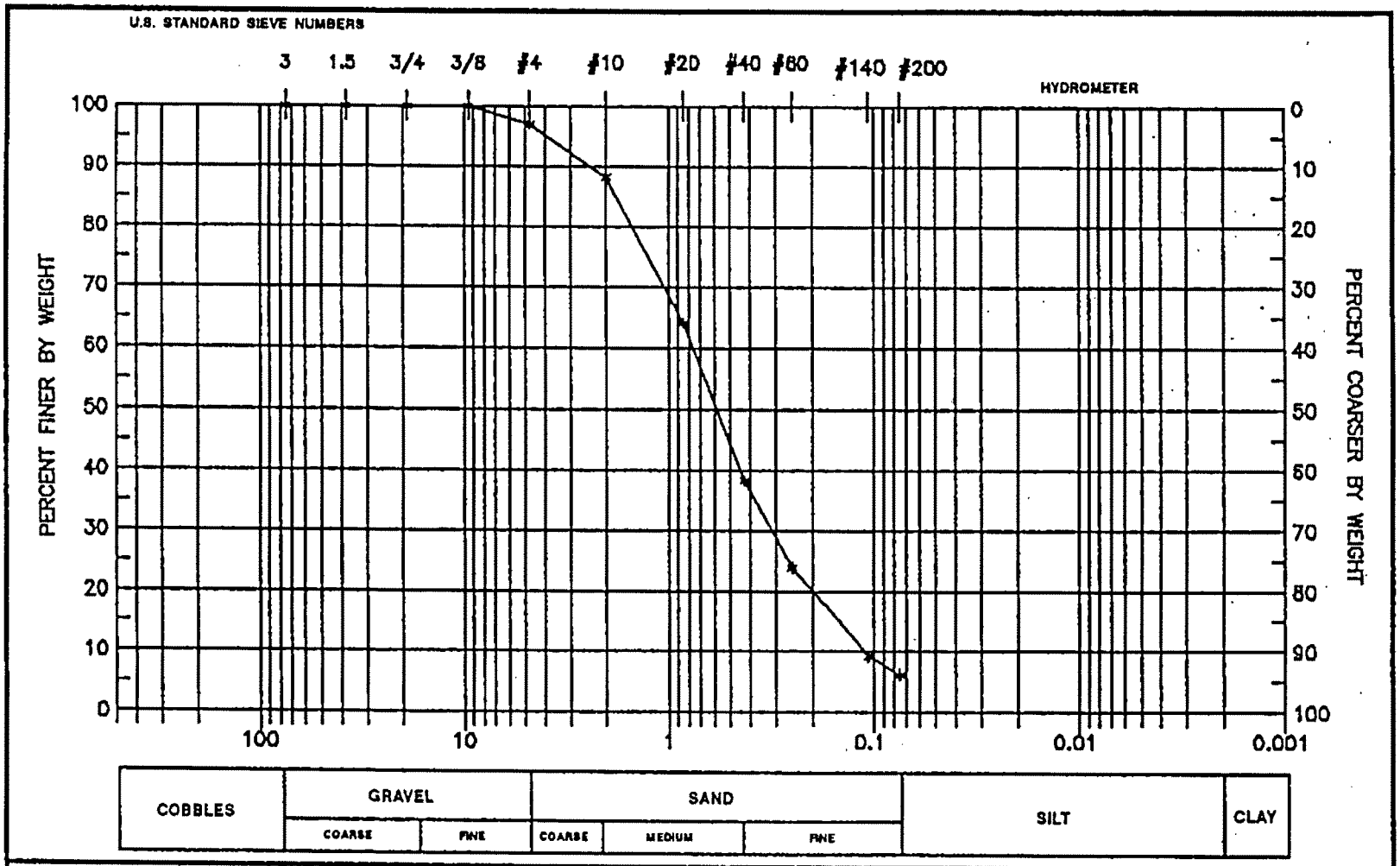
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	234.80	100.00
1.5"	38.100	0.00	0.00	234.80	100.00
3/4"	19.000	0.00	0.00	234.80	100.00
3/8"	9.500	0.00	0.00	234.80	100.00
4	4.750	7.04	7.04	227.76	97.00
10	2.000	20.70	27.74	207.06	88.19
20	0.850	56.67	84.41	150.39	64.05
40	0.425	60.65	145.06	89.74	38.22
60	0.250	33.73	178.79	56.01	23.85
140	0.106	34.20	212.99	21.81	9.29
200	0.075	7.17	220.16	14.64	6.24
pan		14.30	234.46	0.34	

d10:	0.11 (mm)	d50:	0.62 (mm)
d16:	0.17 (mm)	d60:	0.78 (mm)
d30:	0.32 (mm)	d84:	1.8 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.62
UNIFORMITY COEFFICIENT, Cu (d60/d10): 7.1
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.2
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.86

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_l = 8.4 (%, vol)	d_{10} = 0.11	d_{50} = 0.62	d_{60} = 0.78	Cu= 7.1	Cc= 1.2

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G2 35.0–36.5	35.0–36.5 FT.	ATTERBERGS REQUIRED

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SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/01/94
SAMPLE NUMBER: G2 40-41.5
DEPTH: 40-41.5 FT.

TOTAL SAMPLE WEIGHT: 226.29 (g)

SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	226.29	100.00
1.5"	38.100	0.00	0.00	226.29	100.00
3/4"	19.000	0.00	0.00	226.29	100.00
3/8"	9.500	0.00	0.00	226.29	100.00
4	4.750	2.72	2.72	223.57	98.80
10	2.000	14.34	17.06	209.23	92.46
20	0.850	33.64	50.70	175.59	77.60
40	0.425	48.46	99.16	127.13	56.18
60	0.250	38.52	137.68	88.61	39.16
140	0.106	46.88	184.56	41.73	18.44
200	0.075	12.87	197.43	28.86	12.75
pan		27.77	225.20	1.09	

d10:	0.046 (mm)	d50:	0.36 (mm)
d16:	0.093 (mm)	d60:	0.50 (mm)
d30:	0.19 (mm)	d84:	1.3 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.36
UNIFORMITY COEFFICIENT, Cu (d60/d10): 11
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 1.6
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 0.58

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: R. Hill
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny

DANIEL B. STEPHENS & ASSOCIATES, INC.

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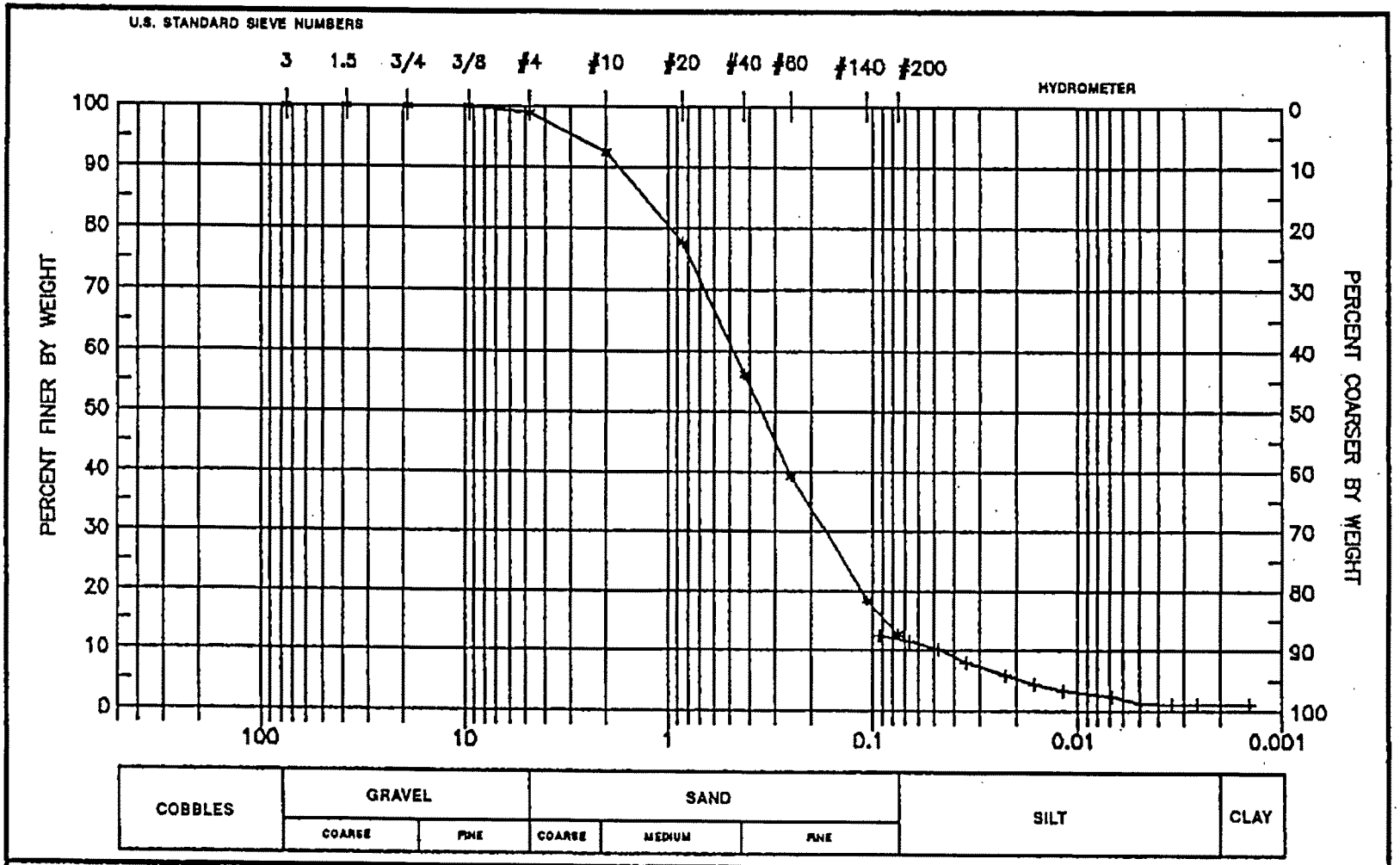
HYDROMETER DATA

JOB NAME:	BCL	TEST DATE:	04/11/94
JOB NUMBER:	4806	DEPTH:	40-41.5 FT. FT.
SAMPLE NUMBER:	G2 40-41.5	INITIAL WT:	28.04 (g)
TYPE OF WATER USED:	DISTILLED	TOTAL SAMPLE WT:	226.29 (g)
REACTION WITH H202:	NONE	WT PASSING #200:	28.86 (g)
DISPERSANT:	(NaPO3)6	START TIME:	933

DATE	TIME (MIN)	TEMP (C)	R (g/l)	Rl (g/l)	Rcorr (g/l)	L (CM)	D (MM)	P (%)	%FINER
04/12	0.25	20.0	30.0	2.5	27.5	11.4	0.09237	98.07418	12.51
	0.50	20.0	28.0	2.5	25.5	11.7	0.06625	90.94151	11.60
	1.00	20.0	25.0	2.5	22.5	12.2	0.04782	80.24251	10.23
	2.00	20.0	20.0	2.5	17.5	13.0	0.03493	62.41084	7.96
	5.00	20.0	15.5	2.5	13.0	13.8	0.02271	46.36234	5.91
	10	20.0	12.5	2.5	10.0	14.3	0.01634	35.66334	4.55
	20	20.0	10.0	2.5	7.5	14.7	0.01172	26.74750	3.41
	60	20.0	8.0	2.5	5.5	15.0	0.00684	19.61484	2.50
	120	20.0	6.0	3.0	3.0	15.3	0.00489	10.69900	1.36
	240	20.0	5.5	3.0	2.5	15.4	0.00347	8.91583	1.14
	435	19.0	5.5	3.0	2.5	15.4	0.00261	8.91583	1.14
04/13	1420	19.0	5.0	2.5	2.5	15.5	0.00145	8.91583	1.14

COMMENTS: Assume mean particle density is 2.65 g/cc

LABORATORY ANALYSIS PERFORMED BY: M. Trenchik/J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_1 = 24.6 (%, vol)	d_{10} = 0.046	d_{50} = 0.36	d_{60} = 0.50	Cu= 11	Cc= 1.6

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G2 40–41.5	40–41.5 FT.	ATTERBERGS REQUIRED

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DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/01/94
SAMPLE NUMBER: G3 10.0-11.5
DEPTH: 10.0-11.5 FT.

TOTAL SAMPLE WEIGHT: 225.90 (g)

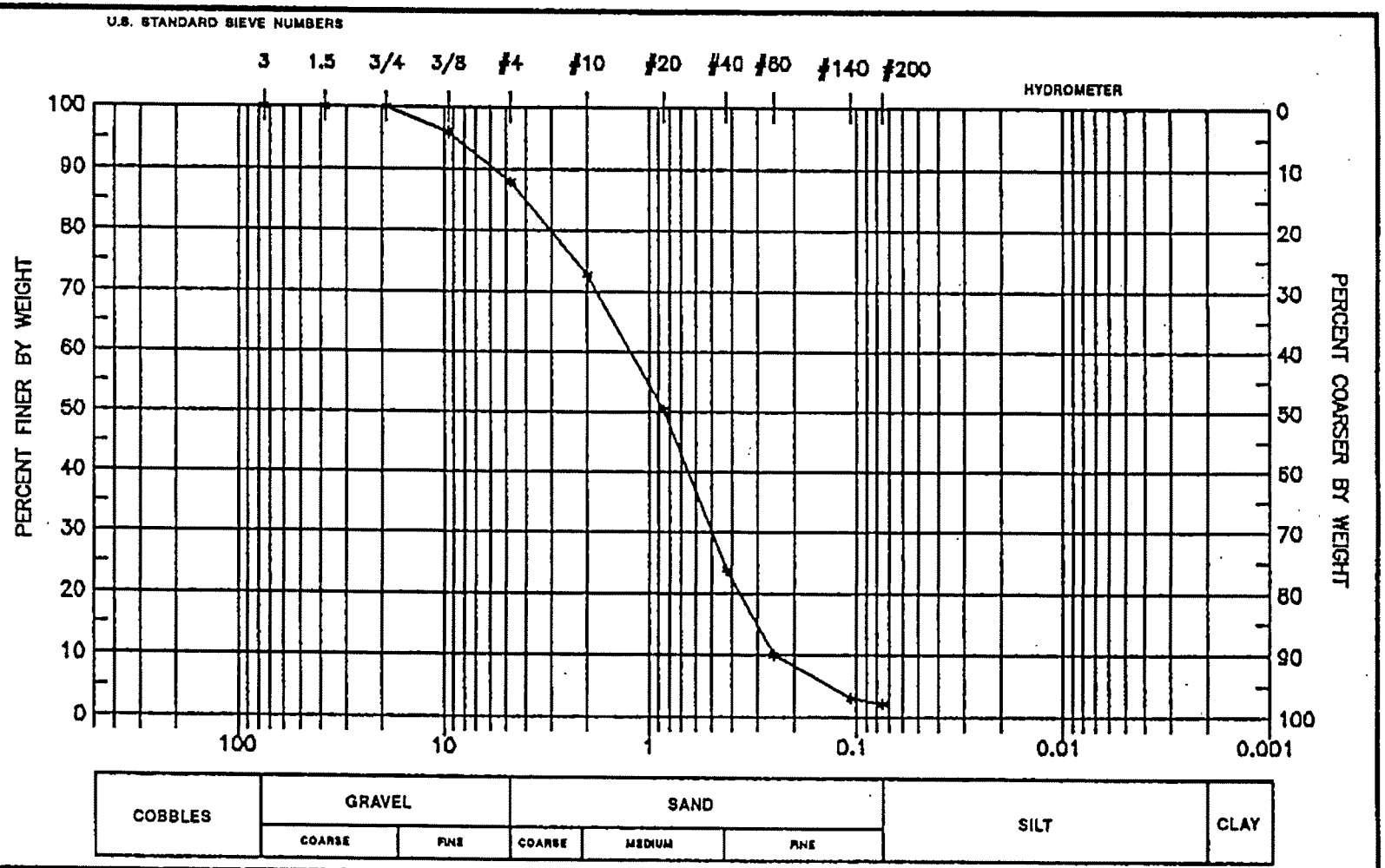
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	225.90	100.00
1.5"	38.100	0.00	0.00	225.90	100.00
3/4"	19.000	0.00	0.00	225.90	100.00
3/8"	9.500	9.08	9.08	216.82	95.98
4	4.750	18.18	27.26	198.64	87.93
10	2.000	34.44	61.70	164.20	72.69
20	0.850	50.82	112.52	113.38	50.19
40	0.425	59.72	172.24	53.66	23.75
60	0.250	30.79	203.03	22.87	10.12
140	0.106	15.50	218.53	7.37	3.26
200	0.075	2.21	220.74	5.16	2.28
pan		4.69	225.43	0.47	

d10:	0.25 (mm)	d50:	0.85 (mm)
d16:	0.33 (mm)	d60:	1.4 (mm)
d30:	0.53 (mm)	d84:	4.0 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.85
UNIFORMITY COEFFICIENT, Cu (d60/d10): 5.6
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 0.80
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 1.7

COMMENTS: Small plastic pieces were found retained on the No. 10 sieve.

LABORATORY ANALYSIS PERFORMED BY: R. Hill
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_I = 12.4 (%, vol)	d_{10} = 0.25	d_{50} = 0.85	d_{60} = 1.4	Cu= 5.6	Cc= 0.80

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G3 10.0–11.5	10.0–11.5 FT.	ATTERBERGS REQUIRED

DANIEL B. STEPHENS & ASSOCIATES, INC.
ENVIRONMENTAL SCIENTISTS AND ENGINEERS

DANIEL B. STEPHENS & ASSOCIATES, INC.

ENVIRONMENTAL SCIENTISTS AND ENGINEERS

SIEVE ANALYSIS DATA

JOB NAME: BCL
JOB NUMBER: 4806
TEST DATE: 03/02/94
SAMPLE NUMBER: G3 20-21.5
DEPTH: 20-21.5 FT.

TOTAL SAMPLE WEIGHT: 408.10 (g)

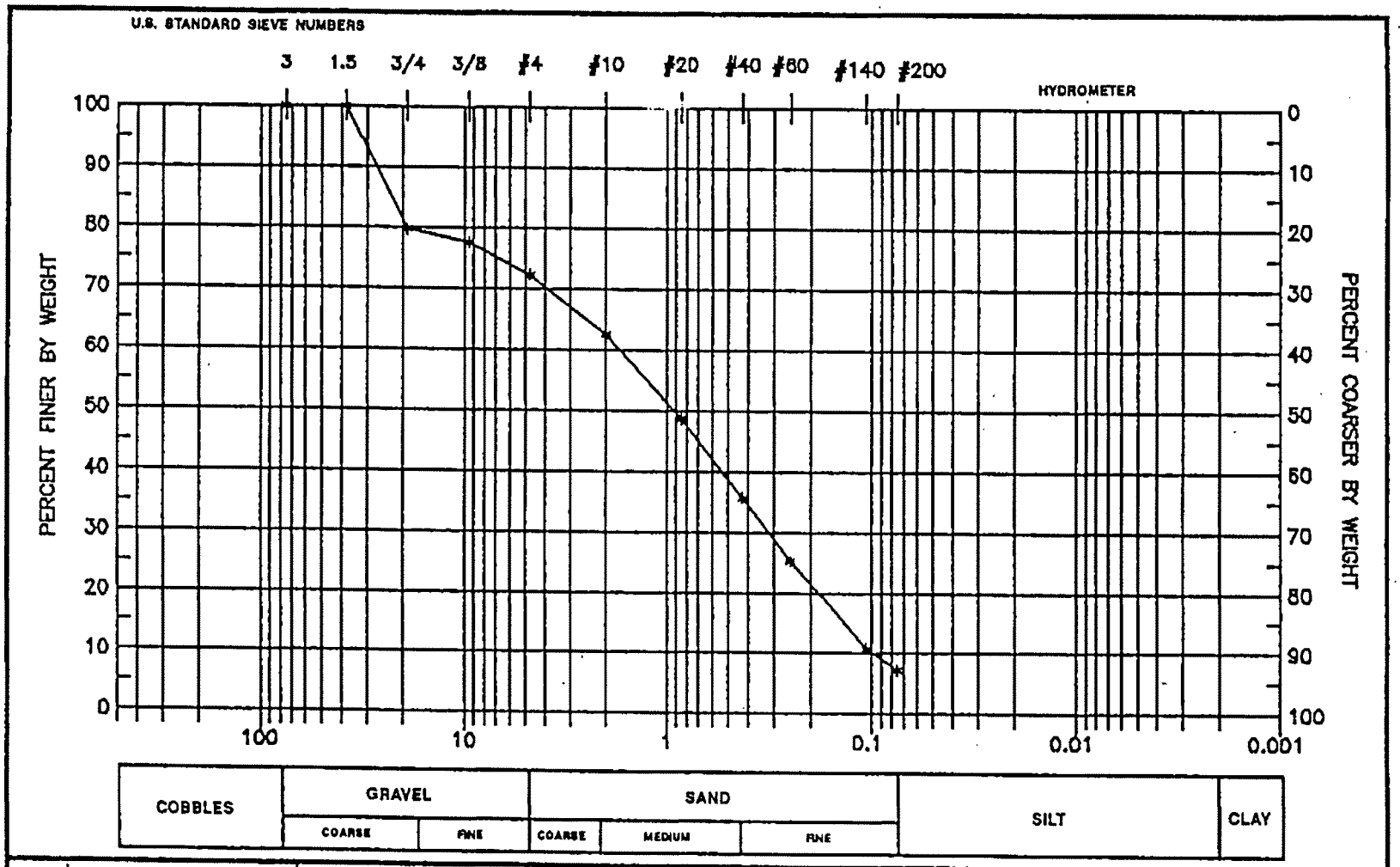
SIEVE NUMBER	DIAMETER (mm)	WT. RETAINED	CUM WT. RETAINED	WT. PASSING	% PASSING
3.0"	75.000	0.00	0.00	408.10	100.00
1.5"	38.100	0.00	0.00	408.10	100.00
3/4"	19.000	82.77	82.77	325.33	79.72
3/8"	9.500	8.62	91.39	316.71	77.61
4	4.750	22.04	113.43	294.67	72.21
10	2.000	39.57	153.00	255.10	62.51
20	0.850	56.89	209.89	198.21	48.57
40	0.425	52.48	262.37	145.73	35.71
60	0.250	42.55	304.92	103.18	25.28
140	0.106	58.71	363.63	44.47	10.90
200	0.075	15.01	378.64	29.46	7.22
pan		29.26	407.90	0.20	

d10:	0.098 (mm)	d50:	0.97 (mm)
d16:	0.16 (mm)	d60:	1.8 (mm)
d30:	0.33 (mm)	d84:	23 (mm)

MEDIAN PARTICLE DIAMETER (d50): 0.97
UNIFORMITY COEFFICIENT, Cu (d60/d10): 18
COEFFICIENT OF CURVATURE, Cc, [(d30)**2/(d10*d60)]: 0.62
MEAN PARTICLE DIAMETER, [(d16+d50+d84)/3]: 8.0

COMMENTS:

LABORATORY ANALYSIS PERFORMED BY: J. Ritts
CALCULATIONS MADE BY: R. Hill
CHECKED BY: M. Ankeny



θ_l = 4.6 (%, vol)	d_{10} = 0.098	d_{50} = 0.97	d_{60} = 1.8	Cu= 18	Cc= 0.62

SAMPLE NUMBER	DEPTH	USCS CLASSIFICATION
G3 20.0–21.5	20.0–21.5 FT.	ATTERBERGS REQUIRED

DANIEL B. STEPHENS & ASSOCIATES, INC.
ENVIRONMENTAL SCIENTISTS AND ENGINEERS

Appendix D

Calscience Environmental Laboratories, Inc.
Analytical Data

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Geraghty & Miller, Inc.		Date Sampled:	02/03/94
100 North Barranca, Suite 500		Date Received:	02/03/94
West Covina, CA 91791-1600		Date Analyzed:	02/03/94
		Work Order No.:	94-02-056
Attn: Steve Frambach		Method: EPA TO-14 (Target Compounds)	
RE: Hawker-Pacific		Page 1 of 2	

All concentrations are reported in ppb (v/v).

Analyte	Concentration	Reportable Limit
Sample Number: G-1 (D002)		
Benzene	6.94	2.24
Tetrachloroethene	1180	2.24
Toluene	12.6	2.24
Sample Number: G-2 (D028)		
Benzene	2.35	2.24
Tetrachloroethene	1260	2.24
Toluene	9.3	2.24
Sample Number: G-3 (D017)		
Benzene	1.01	0.85
Tetrachloroethene	386	0.85
Toluene	6.93	0.85
Sample Number: Method Blank		
Benzene	ND	0.2
Tetrachloroethene	ND	0.2
Toluene	ND	0.2

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Geraghty & Miller, Inc.	Date Sampled:	02/03/94
100 North Barranca, Suite 500	Date Received:	02/03/94
West Covina, CA 91791-1600	Date Analyzed:	02/03/94
	Work Order No.:	94-02-056
Attn: Steve Frambach	Method: EPA TO-14 (Target Compounds)	
RE: Hawker-Pacific	Page 2 of 2	

All concentrations are reported in ppb (v/v).

QA/QC

Analyte	Sample Conc.	Dup. Conc.	RPD%	Control Limits (%)
Sample Number: G-2 (Duplicate)				
Benzene	2.35	2.28	3.03	0-30
Tetrachloroethene	1260	1420	11.9	0-30
Toluene	9.3	8.71	6.55	0-30

Reviewed and Approved William H. Christensen on 02/10/1994
William H. Christensen
Deliverables Manager

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL intact and with chain-of-custody attached.

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
11631 SEABOARD CIRCLE
STANTON, CA 90680
TEL: (714) 895-5494 • FAX: (714) 894-7501

(056)

CHAIN OF CUSTODY RECORD

Date 2·3·94

Page 1 of 1

LABORATORY CLIENT: GERAGHTY & MILLER, INC

ADDRESS: 100 N. Barranca St

CITY: West Covina STATE: CA ZIP: 91791

TEL: (818) 331-8410 FAX: (818) 331-1224

CLIENT PROJECT NAME / NUMBER: HAWKER PACIFIC

PROJECT CONTACT: STEVE FERNANDEZ

SAMPLER(S): (SIGNATURE)

TURNAROUND TIME[1]

☒ SAME DAY (≤6 HR)[2], 100% ☐ 24 HOURS, 50% ☐ 48 HOURS, 25% ☐ 5 DAYS[3] ☐ 10 DAYS ☐ RUSH WRITTEN REPORT, 10%

1. All turnaround times are based on working hours of 8 a.m. - 5 p.m., M - F. 2. Prior confirmation is strongly recommended. 3. 3 days for Tedlar bag air samples.

SPECIAL INSTRUCTIONS/REQUIREMENTS: DO NOT DILUTE SAMPLE
PVC tubing giving lots of phthalate odors → ignore

WRITTEN QC REPORT REQUIRED?
☐ ROUTINE QC — Spike, Spike Duplicate Results, %REC, %RPD Results and Associated Control Limits
☐ RWQCB QC — NORMAL QC Plus Method blanks, Laboratory Control Standards, Extraction Logs

SAMPLE ID	LOCATION/DESCRIPTION (CANISTER #)	SAMPLING DATE	SAMPLING TIME	WATER Comp.	WATER Grab	AIR Intg.	AIR Grab	SOLID/ SOIL/ FILTER	No. of Containers	ANALYSES REQUIRED
	G-1 (CEL D002)	2·3·94					X			PCE, Benzene, Toluene
	G-2 (CEL D028)						X			PCE, Benzene, Toluene
	G-3 (CEL D017)						X			PCE, Benzene, Toluene

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
2·3·94 12:35.		02/03/94	12:40
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 02/03/94	Time: 14:50

Unless otherwise requested, all samples will be disposed of 30 days after receipt.

DISTRIBUTION: White with report, Yellow to CEL, Pink to Client

Q&Q Graphic (714) 898-9702

Calscience
Environmental
Laboratories, Inc.

December 28, 1993

From: Laboratory Director

To: Calscience Valued Clients

Subject: **SW-846 Method Reporting**

SW-846 is EPA's Test Methods for Evaluating Solid Waste - Physical /Chemical Methods, the approved methods which Calscience adheres to during analytic processing of samples. Earlier this year, the Final Update I Package to SW-846, was officially promulgated in the Federal Register and incorporated into SW-846. In addition to several new methods being included, many of the original methods were revised. Each revised original method carries the same method number with the addition of an "A" designation. The following is a quotation from SW-846.

> "Revision I methods (methods which have been revised in the promulgated Update 1 package) are designated by the letter "A" in the method number. In order to properly document the method revision used, the entire method number, including the letter designation, must be identified by the method user."

Effective for all analytical reports generated on or after January 01, 1994, Calscience will list the "A" designations where applicable. For your reference, the following are the SW-846 revised methods.

Volume 1A	Volume 1B		Volume 1C	Volume 2
3005A	3500A	3650A	9010A	None
3010A	3510A	3660A	9020A	
3020A	3520A	8000A	9030A	
3050A	3540A	8010A	1330A	
6010A	3580A	8015A	9041A	
7000A	5030A	8030A	9045A	
7061A	3600A	8040A	9090A	
7196A	3610A	8150A	1020A	
7760A	3611A	8240A	1310A	
	3620A	8270A		
	3630A			

It should be noted that all revised methods remain substantially unchanged. That is, original methods that were GC, GC/MS, Colorimetric, etc. remain so under revision. It should also be noted that many of the revised methods are sample preparation and cleanup methods which may not be routinely listed on analytical reports.

Please do not hesitate to contact the undersigned should you require additional information or clarification regarding the revised methods or their reporting.

Sincerely,

Steven L. Lane

11631 Seaboard Circle, Stanton, CA 90680 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Geraghty & Miller, Inc.	Date Sampled:	02/04/94
100 North Barranca, Suite 500	Date Received:	02/05/94
West Covina, CA 91791-1600	Date Analyzed:	02/05/94
	Work Order No.:	94-02-095
Attn: Steve Frambach	Method: EPA TO-14 (Target Compounds)	
RE: Hawker-Pacific	Page 1 of 3	

All concentrations are reported in ppb (v/v).

Analyte	Concentration	Reportable Limit
Sample Number: Summa Blank (S008)		
Benzene	2.02	0.36
Tetrachloroethene	1.66	0.36
Toluene	3.17	0.36
Sample Number: PVC Tubing (D007)		
Benzene	2.77	0.34
Tetrachloroethene	124	0.34
Toluene	18.8	0.34
Sample Number: Old Packer (S003)		
Benzene	18.1	0.36
Tetrachloroethene	4.59	0.36
Toluene	54.2	0.36
Sample Number: G-1 (S004)		
Benzene	3.31	1.35
Tetrachloroethene	733	1.35
Toluene	118	1.35

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Geraghty & Miller, Inc.		Date Sampled:	02/04/94
100 North Barranca, Suite 500		Date Received:	02/05/94
West Covina, CA 91791-1600		Date Analyzed:	02/05/94
		Work Order No.:	94-02-095
Attn: Steve Frambach		Method: EPA TO-14 (Target Compounds)	
RE: Hawker-Pacific		Page 2 of 3	

All concentrations are reported in ppb (v/v).

Analyte	Concentration	Reportable Limit
Sample Number: G-1-Dup. (S005)		
Benzene	3.38	1.35
Tetrachloroethene	785	1.35
Toluene	103	1.35
Sample Number: G-2 (D029)		
Benzene	ND	1.35
Tetrachloroethene	412	1.35
Toluene	45.8	1.35
Sample Number: G-3 (D027)		
Benzene	1.37	0.36
Tetrachloroethene	158	0.36
Toluene	106	0.36
Sample Number: Above Packer G-1 (D012)		
Benzene	10.4	0.36
Tetrachloroethene	52.2	0.36
Toluene	44.5	0.36

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Geraghty & Miller, Inc.	Date Sampled:	02/04/94
100 North Barranca, Suite 500	Date Received:	02/05/94
West Covina, CA 91791-1600	Date Analyzed:	02/05/94
	Work Order No.:	94-02-095
Attn: Steve Frambach	Method: EPA TO-14 (Target Compounds)	
RE: Hawker-Pacific	Page 3 of 3	

All concentrations are reported in ppb (v/v).

Analyte	Concentration	Reportable Limit
Sample Number: Compressed Air (Tedlar)		
Benzene	1.22	0.36
Tetrachloroethene	14.5	0.36
Toluene	22.5	0.36
Sample Number: Method Blank		
Benzene	ND	0.2
Tetrachloroethene	0.34	0.2
Toluene	ND	0.2

QA/QC

Analyte	Sample Conc.	Dup. Conc.	RPD%	Control Limits (%)
Sample Number: Above Packer G-1 (D012) Duplicate				
Benzene	10.4	10.2	1.94	0-30
Tetrachloroethene	52.2	56.9	8.62	0-30
Toluene	44.5	47.8	7.1	0-30

Reviewed and Approved William H. Christensen on 02/10/1994
William H. Christensen
Deliverables Manager

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL intact and with chain-of-custody attached.

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CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
11631 SEABOARD CIRCLE
STANTON, CA 90680
TEL: (714) 895-5494 • FAX: (714) 894-7501

(095)

CHAIN OF CUSTODY RECORD

Date 02/05/94

Page 1 of 1

LABORATORY CLIENT: GERAGHTY & MILLER INC

ADDRESS: 100 N. Barranca St

CITY: West Covina STATE: CA ZIP: 91791

TEL: (818) 332/8010 FAX: (818) 337-1224

CLIENT PROJECT NAME / NUMBER: HAWKER - PACIFIC

PROJECT CONTACT: STEVE [illegible] / PETE SALAJAS

SAMPLER(S): (SIGNATURE)

TURNAROUND TIME[1]

☒ SAME DAY (≤6 HR)[2], 100% ☐ 24 HOURS, 50% ☐ 48 HOURS, 25% ☐ 5 DAYS[3] ☐ 10 DAYS ☐ RUSH WRITTEN REPORT, 10%

1. All turnaround times are based on working hours of 8 a.m. - 5 p.m., M - F. 2. Prior confirmation is strongly recommended. 3. 3 days for Tedlar bag air samples.

SPECIAL INSTRUCTIONS/REQUIREMENTS:

FAX RESULTS TO PETE SALAJAS (310) 828-2090

WRITTEN QC REPORT REQUIRED?

☐ ROUTINE QC — Spike, Spike Duplicate Results %REC, %RPD Results and Associated Control Limits

☐ RWQCB QC — NORMAL QC Plus Method blanks Laboratory Control Standards Extraction Logs

SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	WATER Comp.	WATER Grab	AIR Intg.	AIR Grab	SOLID/ SOIL/ FILTER	No. of Contnrs	ANALYSES REQUIRED
CEL S008	SUMMA BLANK	2-4-94					X			PCE, B, T.
CEL D007	PVC TUBING									
CEL S003	OLD PACKER									
CEL S004	G-1									
CEL S005	G-1-Dup									
CEL D029	G2									
CEL D027	G3									
CEL D012	ABOVE PACKER G-1									
TEDLAR	COMPRESSED AIR									

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
2-5-94 9:45 am			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 02/05/94	Time: 9:45 am

Unless otherwise requested, all samples will be disposed of 30 days after receipt.

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