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Appendix A

Logs of Exploratory Investigations

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Appendix A
Logs of Exploratory Investigations

Bulk and relatively undisturbed drive samples were obtained in the field during KFMg's subsurface evaluation. The samples were tagged in the field and transported to KFMg's laboratory for observation and testing. The drive samples were obtained using the California Modified Split Barrel Drive sampler as described below.

California Modified Split Barrel Drive Sampler

The split barrel drive sampler was driven with Kelly bars of variable weight as noted on the borehole logs. The number of blows per foot recorded during sampling is presented in the logs of exploratory borings. The sampler has external and internal diameters of approximately 3.0 and 2.4 inches, respectively, and the inside of the sampler is lined with 1-inch-long brass rings. The relatively undisturbed soil sample within the rings is removed, sealed, and transported to the laboratory for observation and testing.

Project: Site "D" Project Location: Diamond Bar Project Number: TRG 07-02E	Log of Boring B-1 Sheet 1 of 2

Date(s) Drilled	9/25/2007	Logged By	AHM/EHS	Checked By	EHS
Drilling Method	Bucket Auger	Drill Bit Size/Type	24 inch	Total Depth of Borehole	44 feet bgs
Drill Rig Type	EarthDrill 70	Drilling Contractor	Al-Roy	Approximate Surface Elevation	765 feet MSL
Groundwater Level and Date Measured	37 feet ATD	Sampling Method(s)	California Modified Sampler	Borehole Backfill	Cuttings, Tamped
Drive Weights and Comments	0- 2' - 2400 lbs : 24-42' - 1550 lbs				

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
765	0				B:N35E 7W		[BEDROCK] Puente Formation, La Vida Member (Tpl) Siltstone, yellow brown, moist, weak, weathered, calicum staining along joints and bedding, occasional Sandstone interbeds	Max 111pcf@15.5%
			SK-1		B:N15E 12W B:N33E 16W		Sandstone interbed, dark brown, damp, 3 inches thick Siltstone, orange brown, damp, soft, fine grained, minor clay Sandstone with minor interbeds of Siltstone, olive brown, dry, slightly indurated, fine grained, irregular contact between Siltstone and Sandstone	
760	5						Siltstone, with interbeds of Sandstone, orange brown, moist, weak	
					B:N4W 9W			
			GB-1		B:N10W 10W B:N11W 7W B:N43E 10W		Siltstone with interbeds of Claystone, dilatated softened zoneat base Interbedded Siltstone and Sandstone, Sandstone interbeds are moderately indurated, beds range from 3 to 5 inches thick	
755	10		R-2 GB-2	7	B:N48E 9W		Sandstone, grayish brown, moderately strong Clayey Siltstone, gray brown, damp, slightly sheared, soft, 2" thick	DD109.4pcf, MC9.6%
					B:N60E 10W J:N16E 77E J:N81W 83E		Silty Sandstone, yellow brown, indurated, very hard, closely fractured, slightly fractured, weathered Extremely strong, cemented	Driller had to use coring bucket
750	15				B:N23E 14W		Interbedded Siltstone and Sandstone, gray to yellow brown, moist, moderately strong, fine grained, iron staining	
					B:N42E 10W		Sandstone, dark gray, indurated, moderately strong	
745	20							

Figure

L:\02 - PROJECTS\2007 Projects\TRG 07-02E WVUSD Site D Geo Evaluation - Diamond Bar\04 Lab, Logs & Testing\Boring Logs.bgs [Bucket Auger.tpl]

Project: Site "D"
Project Location: Diamond Bar
Project Number: TRG 07-02E

Log of Boring B-1

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
745	20		R-3	7/5"			Sandstone, dark gray, indurated, moderately strong (cont.)	
					B:N22E 14W		Interbedded Siltstone, olive brown and Sandstone, brown, minor claystone beds 2 to 4 inches thick	
			GB-3		B/S:N49E 12W		Clay seam approximately 1 inch thick, orange brown, moist, minor silt, slightly sheared	Grain Size % 0/7/93, LL=64, PL=26, PI=38, DS
					B:N50E 9W			
740	25						Becomes unoxidized, fresh and very hard	
							Sandstone, gray brown, hard	
					B/S:N20W 12W		Silty Claystone, gray brown, polished surfaces near base	
					B:N19E 14W		Siltstone, gray brown, unoxidized, fresh, very hard. Sandstone, very indurated, extremely hard	
							Silty Sandstone, dark gray, unoxidized, fresh, extremley hard	
735	30		R-4	15/6"				DD94.1pcf, MC16.8%
					B:N42E 7W			
730	35							
							Seepage from Sandstone (ATD)	At the time of subsurface observation, water level had risen approximately 2 above the seep ATD.
							Becomes very hard and cemented	
725	40		R-5	50/6"				DS
							Bottom of Boring at 44 feet bgs	
720	45							

Figure

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Project: Site "D" Project Location: Diamond Bar Project Number: TRG 07-02E	**Log of Boring B-2** Sheet 1 of 2

Date(s) Drilled	**September 26, 2007**	Logged By	**AHM/EHS**	Checked By	**EHS**
Drilling Method	**Bucket Auger**	Drill Bit Size/Type	**24 inch**	Total Depth of Borehole	**43 feet bgs**
Drill Rig Type	**EZ Bore 120**	Drilling Contractor	**Al-Roy**	Approximate Surface Elevation	**790 feet MSL**
Groundwater Level and Date Measured	**Not Encountered ATD**	Sampling Method(s)	**California Modified Sampler**	Borehole Backfill	**Cuttings, Tamped**
Drive Weights and Comments	**0-29' - 4,800 lbs ; 30-58' - 3,350 lbs**				

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
790	0						[BEDROCK] Puente Formation, La Vida Member (Tpl) Interbedded Sandstone, yellow and Siltstone, brow, weathered, iron staining along bedding, dry, hard	
					B:N82E 7W		Diatomaceous silt interbed, approximately 3 inches thick	
					B:N33E 15W			
					B:N42E 10W			
785	5						Sandstone bed, gray brown, slightly indurated, hard	
					B:N57E 10W		Siltstone, yellow brown, with small 1/2-inch lenses of Sandstone, brown, slightly weathered, hard Moderate fracture approximately 1/4-inch wide, extends vertically into Sandstone bed below, calcium carbonate staining along fracture surface	
780	10		R-1	2			Sandstone, brown with 2-inch interbeds of Siltstone, yellow brown, Sandstone beds are extremely indurated, fresh, very hard	DD80.8pcf, WC16.4%
					B:N55E 12W		Massive Siltstone, yellow to orange brown	
					J:N48W 87E		Diatomaceous interbed 2-inches thick, light brown	
					J:N25E 81W		Siltstone becomes fracture and jointed	Max107.5pcf@17.5% DS, EI 17, Sulfate=.0062%
775	15		SK-2				Small Sandstone lense, 3-inches thick, very indurated, extremely hard	
					B:N63E 10W		Visible fish scales within bedding	
					F:N50W 60-80W		Small wavy fault, minor clay gouge, observed 2-inch offset of Sandstone bed, fault plane slightly cemented and iron stained where clay gouge is not present	
					B:N69E 14W		Sandstone, gray brown, damp, hard, medium grained	
770	20							

Figure

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Project: Site "D"
Project Location: Diamond Bar
Project Number: TRG 07-02E

Log of Boring B-2

Sheet 2 of 2

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
770	20		R-3	2	B:N37E 12W		Sandstone, gray brown, damp, hard, medium grained (cont.)	DD95.6pcf, WC25.9%
							Claystone, gray, dry, low plasticity, abundant fish scals between bedding, iron staining above and below claystone lense	
							Interbedded Siltstone, yellow to orange brown and Sandstone, gray, and minor Claystone lenses, on the order of 1 to 6-inches thick	
					C:N72E 9W		Sandstone, gray brown, fines upward, minor interbeds of Claystone, yellow brown, fresh, unoxidized, very hard	
765	25							
					B:N63E 12W		Siltstone, yellow brown, slightly indurated, hard	
760	30		R-4	3				DD98.1pcf, WC26.7%
							fractured, extremely hard, iron staining along jointed surfaces	
					B:N52E 13W		Sandstone, yellow brown, very indurated, extremely hard, medium to coarse grained, slight cross-bedding, fractured at contact with above siltstone	
755	35						Siltstone, gray brown, becomes extremely hard, unoxidized, fresh	
					B:20E 9W			
750	40				B:N42E 10W			
							Bottom of Boring at 43 feet bgs	
745	45							

Figure

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Project: Site "D" Project Location: Diamond Bar Project Number: TRG 07-02E	Log of Boring B-3 Sheet 1 of 2

Date(s) Drilled	September 26, 2007	Logged By	AHM/EHS	Checked By	EHS
Drilling Method	Bucket Auger	Drill Bit Size/Type	24 inch	Total Depth of Borehole	34 feet bgs
Drill Rig Type	EZ Bore 120	Drilling Contractor	Al-Roy	Approximate Surface Elevation	790 feet MSL
Groundwater Level and Date Measured	Not Encountered ATD	Sampling Method(s)	California Modified Sampler	Borehole Backfill	Cuttings, Tamped
Drive Weights and Comments	0-29' - 4,800 lbs ; 30-58' - 3,350 lbs				

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
790	0						[BEDROCK] Puente Formation, La Vida Member (Tpl) Interbedded Siltstone, yellow brown and Sandstone, brown, on the order of 4 to 6-inchs, weathered, weak, dry	
					B:N15E 16W		Diatomaceous siltstone lense	
							Sandstone, redish to grayish brown, slightly indurated, weathered, medium grained	
785	5				B:N27E 13W		Claystone, gray, thin layer of diatomaceous silt above claystone	
							Siltstone, yellow brown, damp, slightly weathered, weak	
					B:N33E 15W		Sandstone, dark gray brown, slightly indurated, dry, hard, graded bedding	
					B:N18E 10W			
780	10	■	R-1	3			Siltstone, yellow brown, grades into Claystone at contact with above Sandstone, slightly weathered, iron staining along bedding, occasional 1-inch Sandstone lenses at base	DD106.4pcf, MC15.2%
					B:N10E 13W		Cross bedded Sandstone, extremely hard, slightly indurated	
775	15				B:N85E 15W		Sandstone lense, indurated, wavy bedding	
							Interbedded, Siltstone, yellow brown and Sandstone, gray brown, slightly weathered, extremely hard, indrurated	
							Siltstone becomes olive brown	
770	20							

Figure

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Project: Site "D"
Project Location: Diamond Bar
Project Number: TRG 07-02E

Log of Boring B-3

Sheet 2 of 2

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
770	20		R-2	5/10"			Sandstone, gray brown, unoxidized, fresh, indurated	DD111.5pcf, MC14.7%
					J:N21W 72E			
					B:N27E 12W		Sandstone becomes jointed	
					J:N50E 9W		Interbedded Siltstone and Sandstone, olive to gray brown, damp, unoxidized, extremely hard, pings with hammer, fine grained	
765	25							
					B:N50E 9W		Thin interedded Clayey Siltstone lense	
					B:N21E 13W		Siltstone, very indurated	
760	30							
							Bottom of Boring at 34 feet bgs	
755	35							
750	40							
745	45							

Figure

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Project: Site "D" Project Location: Diamond Bar Project Number: TRG 07-02E	Log of Boring B-4 Sheet 1 of 3

Date(s) Drilled **September 27, 2007**	Logged By **AHM/EHS**	Checked By **EHS**
Drilling Method **Bucket Auger**	Drill Bit Size/Type **24 inch**	Total Depth of Borehole **50 feet bgs**
Drill Rig Type **EZ Bore 120**	Drilling Contractor **Al-Roy**	Approximate Surface Elevation **790 feet MSL**
Groundwater Level and Date Measured **Not Encountered ATD**	Sampling Method(s) **California Modified Sampler**	Borehole Backfill **Cuttings, Tamped**
Drive Weights and Comments **0-29' - 4,800 lbs ; 30-58' - 3,350 lbs**		

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
790	0						[BEDROCK] Puente Formation, La Vida Member (Tpl) Siltstone, yellow to orange brown with light brown Sandstone interbeds, weathered, iron staining along bedding, dry, moderately strong	
					B:N10E 13W			
785	5							
					J:N55E 79E		Jointed, joints are infilled with calcium carbonate	
					B:N7E 8W		becomes very indurated, grades into sandstone	
							Sandstone, light brown, damp, moderately strong	
780	10		R-1	5			Siltstone	DD113.5pcf, MC5.9%, DS
					B:N3W 9W		Claystone lense, gray, grades upward into Siltstone	
							Interbedded Siltstone medium brown and sandstone, yellow brown, bedding 3 to 5-inches thick, sandstone is medium brown and siltstone is yellow brown, hard, weathered, iron staining along siltstone bedding	
					B:N7E 8W		Claystone layer, gray, hard, 1 inch thick, no shears	
775	15							
					B:N23E 7W			
							Iron staining at base of Siltstone and contact with Sandstone	
							Sandstone, yellow brown, dry, fine grained, graded bedding, iron staining, slightly cross-bedded	
770	20							

Figure

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Project: Site "D"
Project Location: Diamond Bar
Project Number: TRG 07-02E

Log of Boring B-4

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
770	20		R-2	6			Sandstone, yellow brown, dry, fine grained, graded bedding, iron staining, slightly cross-bedded (cont.)	DD111.6pcf, MC 4.3%
					B:N27E 15W		Interbedded Siltstone and Sandstone, yellow to gray brown, hard, fine grained, iron staining along bedding	
765	25				J:N47W 80E J:N60W 69E B:N28E 16W		Fractured and jointed, iron staining along jointed surfaces Clayey Siltstone lense, very hard	
760	30		R-3	6	B:N52E 14W			DD106.2pcf, MC 19.2%
755	35				B:N37E 10W B:N40E 19W		Contorted bedding, soft sediment deformation becomes unoxidized	
							Sandstone, dark gray, slightly indurated, hard, damp to moist	
750	40		GB-1 R-4	10	B:N27E 12W		Weak clay, gray, damp, plastic, no visiable shearing, 2-inches thick	DD106.2pcf, MC 19.2%, LL=80, PL=29, PI=51, DS
							Siltstone, olive to gray brown, unoxidized, extremely hard, indurated Minor seep at contact with sandstone and siltstone	
745	45						extremely hard, massive	

Figure

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Project: Site "D"
Project Location: Diamond Bar
Project Number: TRG 07-02E

Log of Boring B-4

Elevation, feet	Depth, feet	Sample Type	Sample Number	Penetration Resistance, Blows/6 in.	Orientation Data	Graphic Log	MATERIAL DESCRIPTION	FIELD NOTES AND OTHER LAB TESTS
745	45						Siltstone, olive to gray brown, unoxidized, extremely hard, indurated (cont.)	
740	50						Bottom of Boring at 50 feet bgs	
735	55							
730	60							
725	65							
720	70							

Figure

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KFM GEOSCIENCE

Project No.: TRG 07-02E

Project Name: WVUSD Site "D"

Address: Site "D"

Date Excavated: 9/24/2007 time: 8:15

Location sketch

TP LOG 1

hand auger, core, test pit — designation

Location: Near cut fill transition and site entrance

Ground cover:

Logged by: AHM

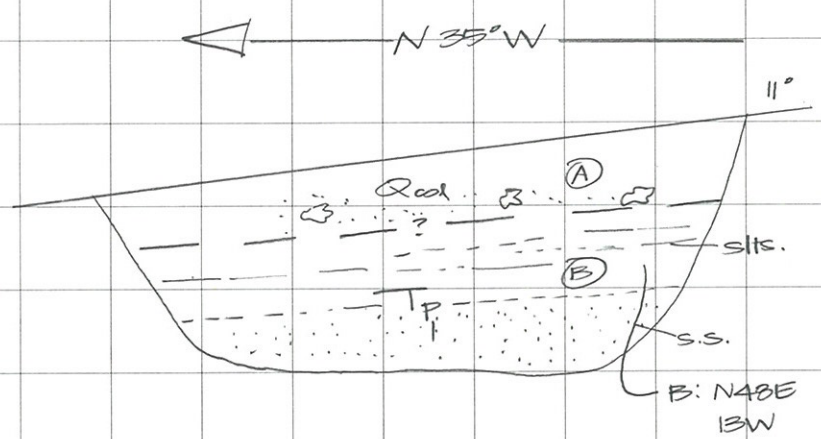
Photo:

Excavation method: Back-hoe

Weather:

Note:

SKETCH ~ 1" = 4' H and V



DEPTH	SAMPLES Bulk	SAMPLES Driven	SOIL CLASSIFICATION	MOISTURE (%)	DRY DENSITY (pcf)	DESCRIPTION
						(A) [COLLUVIUM] Sandy clay, dark brown, damp, stiff, rootlets, contact with bedrock dips to northwest at 8 degrees (B) [BEDROCK] Puente Formation, La Vida Member (Tpl) Interbedded yellow brown siltstone and reddish gray brown sandstone, very hard, weathered at contact with Qcol, Sandstone is slightly indurated

Termination depth:

KFM GEOSCIENCE

Project No.: TRG 07-02E

Project Name: WVUSD Site "D"

Address: Site "D"

Date Excavated: 9/24/2007 time: 8:15

Location sketch

TP LOG 2

hand auger, core, test pit

Location: Near Brea Canyon Rd and Brea Canyon Channel

Ground cover:

Logged by: AHM

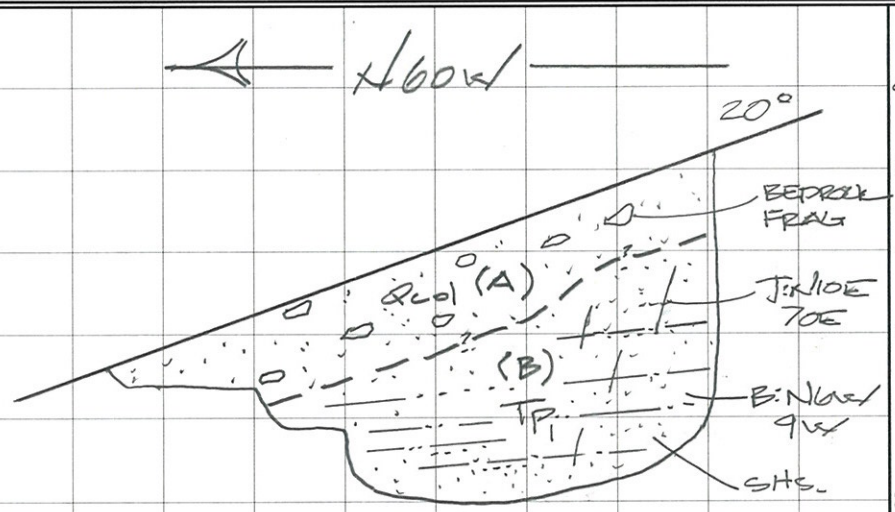
Photo:

Excavation method: Back-hoe

Weather:

Note:

SKETCH ~ 1" = 4' H and V



DEPTH	SAMPLES Bulk	SAMPLES Driven	SOIL CLASSIFICATION	MOISTURE (%)	DRY DENSITY (pcf)	DESCRIPTION
0	SK-1					(A) [COLLUVIUM] Sandy clay, yellow to medium brown, damp, stiff, rootlets, bedrock fragments through out
2	R-2	■	15 20/6"	20	94.1	(B) [BEDROCK] Puente Formation, La Vida Member (Tpl) Siltstone, yellow to orange brown, hard, dry, fractured, weathered near contact, iron staining along joints
4						
6						
8						
10						Bottom of test pit at 7 feet bgs

Termination depth:

KFM GEOSCIENCE

Project No.: TRG 07-02E

Project Name: WVUSD Site "D"

Address: Site "D"

Date Excavated: 9/24/2007 time: 8:15

Location sketch

TP LOG 3

hand auger, core, test pit

Location: Center portion of site

Ground cover:

Logged by: AHM

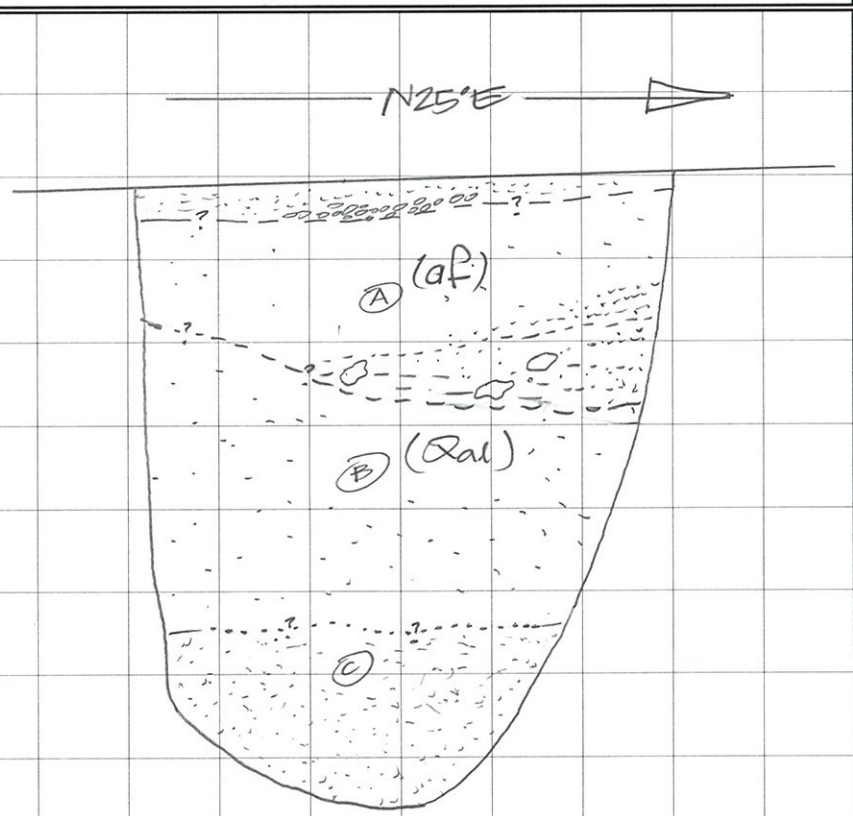
Photo:

Excavation method: Back-hoe

Weather:

Note:

SKETCH ~ 1" = 4' H and V



DEPTH	SAMPLES Bulk	SAMPLES Driven	SOIL CLASSIFICATION	MOISTURE (%)	DRY DENSITY (pcf)	DESCRIPTION
						(A) [UNDOCUMENTED FILL] Silty clay, medium brown, damp, soft, rootlets, pebble lens at 1-foot, at base bedrock siltstone fragments in a sandy matrix, possible debris flow, fragments up to 12-inches
						(B) [COLLUVIUM] Silty clay, dark to orange brown, damp, firm, decaying rootlets, organic smell
						C) Silty clay, dark brown, firm, minor sand, caliche staining
						Bottom of test pit at 15 feet bgs

Termination depth:

KFM GEOSCIENCE

Project No.: TRG 07-02E

Project Name: WVUSD Site "D"

Address: Site "D"

Date Excavated: 9/24/2007 time: 11:00

Location sketch

TP LOG 4

hand auger, core, test pit

Location: Center portion of the site

Ground cover:

Logged by: AHM

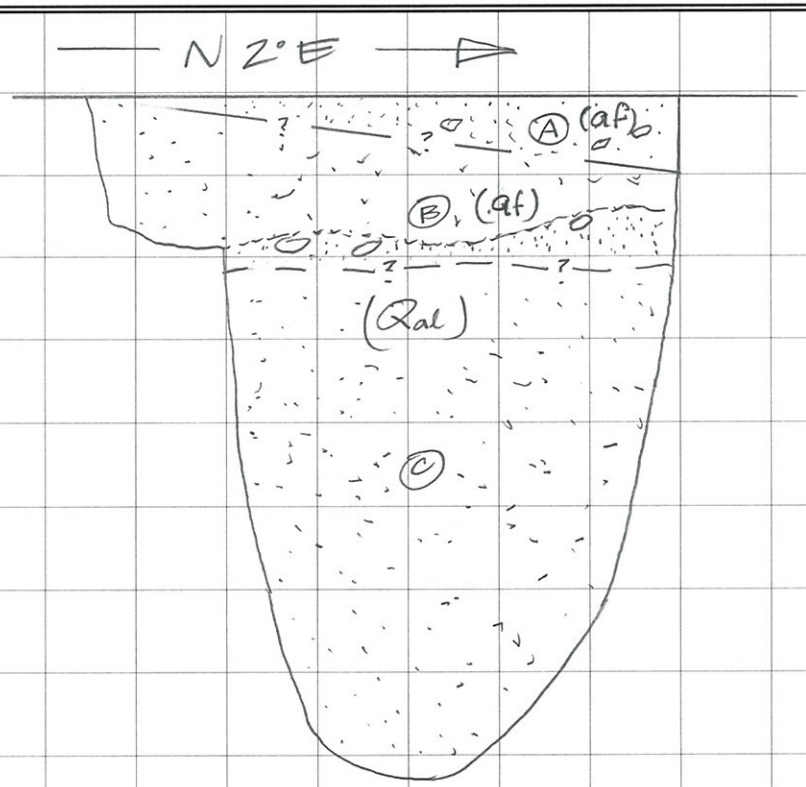
Photo:

Excavation method: Back-hoe

Weather:

Note:

SKETCH ~ 1" = 4' H and V



DEPTH	SAMPLES Bulk	SAMPLES Driven	SOIL CLASSIFICATION	MOISTURE (%)	DRY DENSITY (pcf)	DESCRIPTION
						(A) [UNDOCUMENTED FILL] Sandy clay, yellow brown, damp, firm, abundent bedrock siltstone fragments, possible debris flow, fragments up to 12-inches
						(B) Silty clay, orange brown, damp, stiff, bedrock siltstone fragments in a sandy matrix
						C) [ALLUVIUM] Sandy clay, dark orange brown, stiff, slightly porous, caliche staining
						Bottom of test pit at 15 feet bgs

Termination depth:

KFM GEOSCIENCE

Project No.: TRG 07-02E

Project Name: WVUSD Site "D"

Address: Site "D"

Date Excavated: 9/24/2007 time: 11:25

Location sketch

TP LOG 5

hand auger, core, test pit

Location: Center portions of the site

Ground cover:

Logged by: AHM

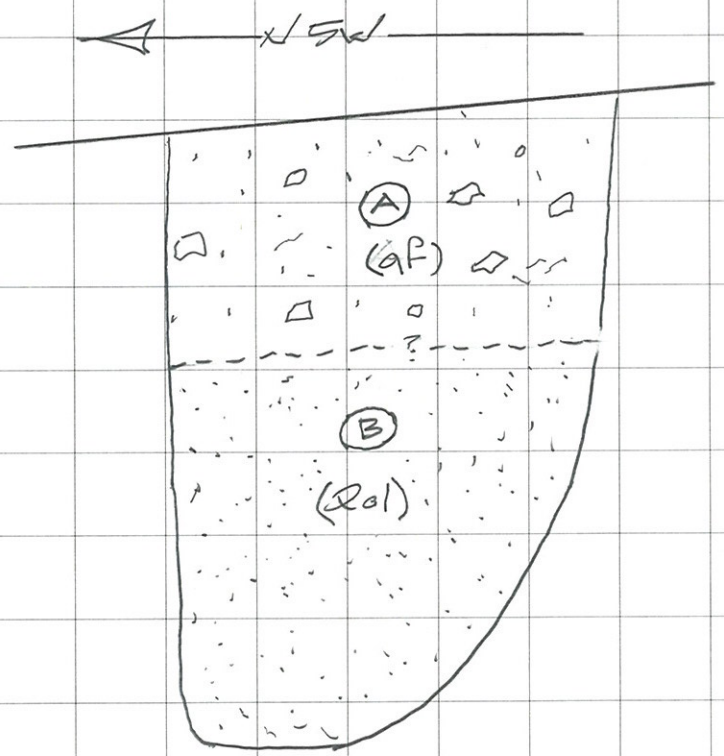
Photo:

Excavation method: Back-hoe

Weather:

Note:

SKETCH ~ 1" = 4' H and V



DEPTH	SAMPLES Bulk	SAMPLES Driven	SOIL CLASSIFICATION	MOISTURE (%)	DRY DENSITY (pcf)	DESCRIPTION
						(A) [UNDOCUMENTED FILL] Silty clay, light brown, dry to damp, soft to stiff, rootlets, minor bedrock fragments through up to 6-inches
0						(B) [ALLUVIUM] Silty to sandy clay, dark brown, moist, soft, pine hole porous, rootlets
SK-1 1	X					
3 R-2	■		4 7/12"	13	107.0	
5						
7						Bottom of test pit at 15 feet bgs
R-3	■		3 5/12"			
9						
11						
13						
15						
17						

Termination depth:

KFM GEOSCIENCE

Project No.: TRG 07-02E

Project Name: WVUSD Site "D"

Address: Site "D"

Date Excavated: 9/24/2007 time: 1:00

Location sketch

TP LOG 6

hand auger, core, test pit

Location: North side of Brea Canyon Channel

Ground cover:

Logged by: AHM

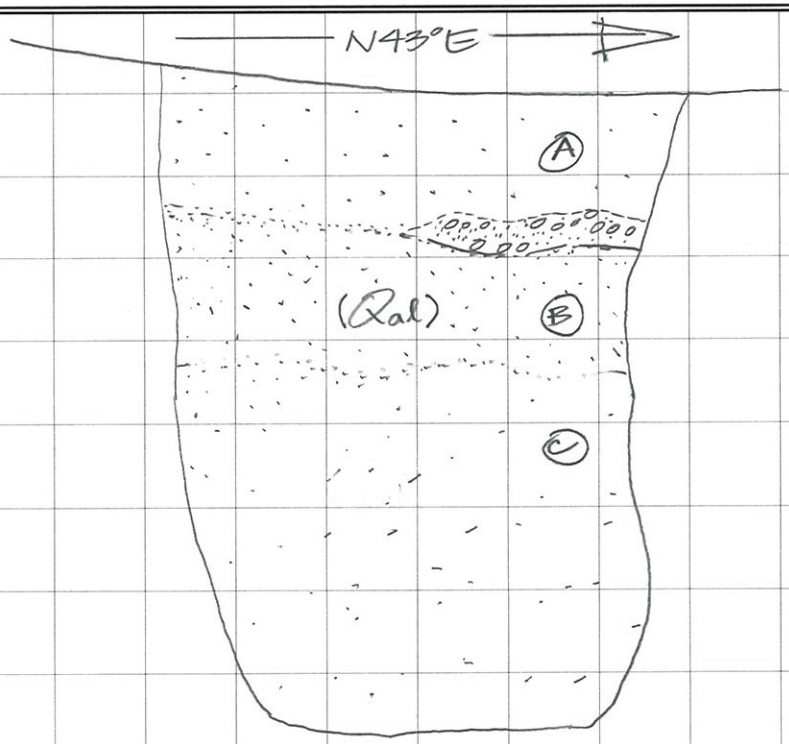
Photo:

Excavation method: Back-hoe

Weather:

Note:

SKETCH ~ 1" = 4' H and V



DEPTH	SAMPLES Bulk	SAMPLES Driven	SOIL CLASSIFICATION	MOISTURE (%)	DRY DENSITY (pcf)	DESCRIPTION
						(A) [ALLUVIUM] Silty clay, medium to yellow brown, dry, firm, porous, rootlets, minor well rounded cobbles
						(B) Silty to sandy clay, dark brown, moist, firm
						C) Sandy clay, red brown, firm, moist, caliche staining, porous
						Bottom of test pit at 15 feet bgs

Termination depth:

KFM GEOSCIENCE

Project No.: TRG 07-02E

Project Name: WVUSD Site "D"

Address: Site "D"

Date Excavated: 9/24/2007 time: 8:15

Location sketch

TP LOG 7

hand auger, core, test pit

Location: South of B-4

Ground cover:

Logged by: AHM

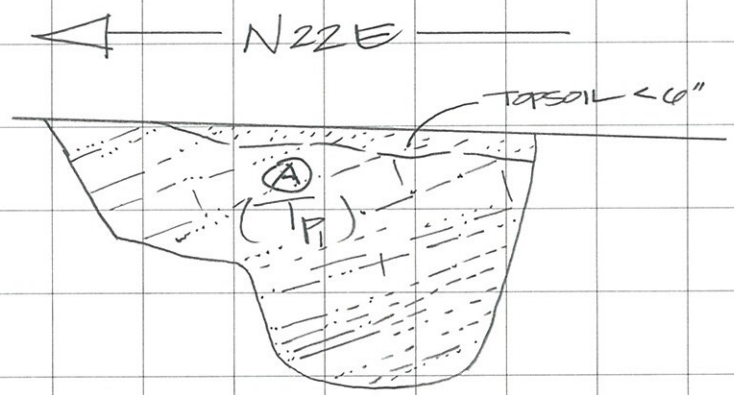
Photo:

Excavation method: Back-hoe

Weather:

Note:

SKETCH ~ 1" = 4' H and V



DEPTH	SAMPLES Bulk	SAMPLES Driven	SOIL CLASSIFICATION	MOISTURE (%)	DRY DENSITY (pcf)	DESCRIPTION
						(A) [BEDROCK] Puente Formation, La Vida Member (Tpl) Siltstone, yellow to orange brown, calcium staining along jointed and bedding surfaces, moderately fractured, graded bedding, hard, dry @2' B:N50E 23W @3' B:N44E 9W J:N50E 77E @5' B:N40E 10W J:N37W 89E
						Bottom of boring at 6 feet bgs

Termination depth:

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Appendix B

Logs of Test Pits by BYA (2002)

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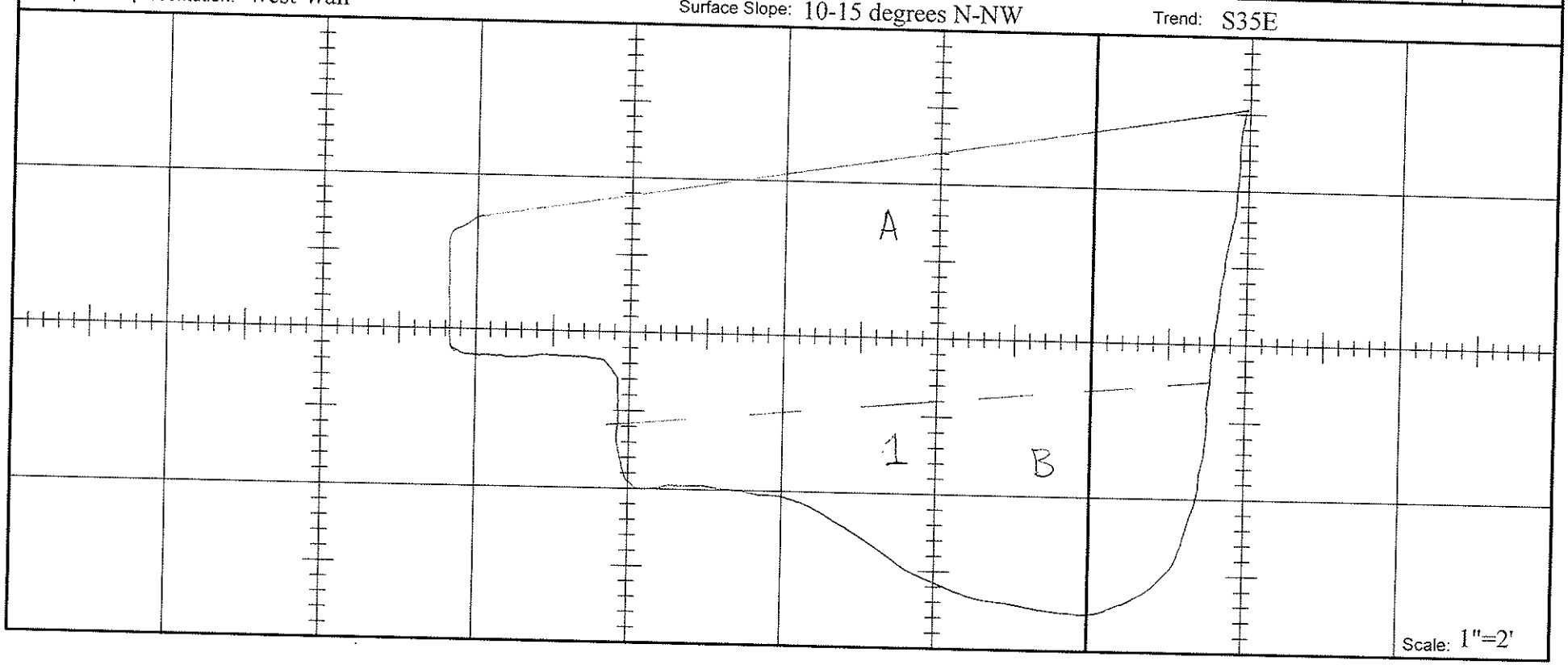
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: Entrance Rd, north of Pasada
Equipment: J.D. 310C
Elevation: 727 ft

TRENCH NO.: TP-1
Logged by: BN/ES
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
Bedding N60E 10 NW	A) Sandy CLAY (CL-CH) dark brown, damp, stiff, contains randomly oriented Tp sandstone and siltstone clasts, basal contact dips ~6 degrees to N-NW [Colluvium]	Col		SK-1 (0-3')		
	B) Interbedded Siltstone, light brown, and Sandstone, reddish gray, moderately strong, slightly weathered, sandstone is moderately cemented [Puente Formation]	Tp		R-2 (3.5') Blows/6" 50 30/2"	17.7	102.7

Graphic Representation: West Wall
Surface Slope: 10-15 degrees N-NW
Trend: S35E



B1

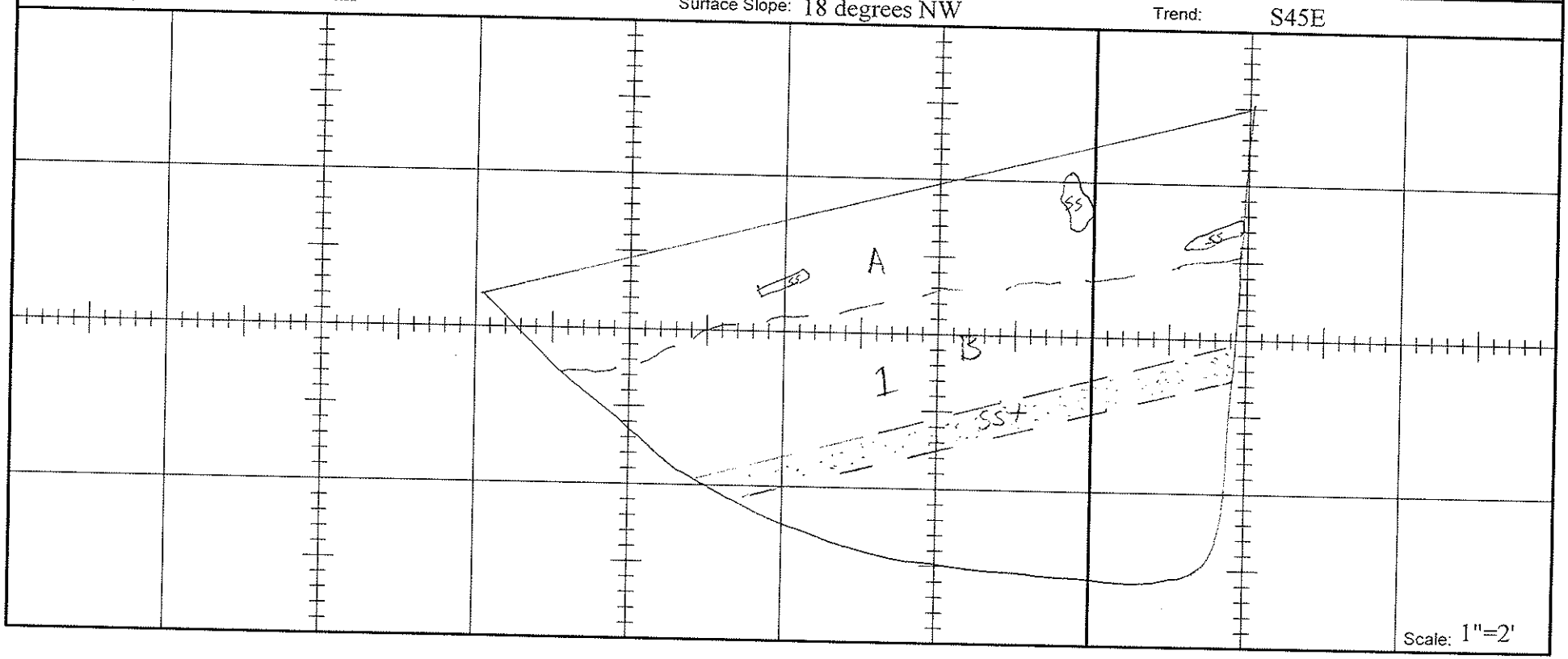
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: north switchback
Equipment: J.D. 310C
Elevation: 729 ft

TRENCH NO.: TP-2
Logged by: BN
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
	A) CLAY with sand (CL-CH) dark brown, moist, stiff, contains numerous randomly oriented sandstone and siltstone clasts [Colluvium]	Col		R-1 (2') Blows/6" 35 41	8.5	113.2
Bedding N30E 10 NW	B) Interbedded Siltstone, light brown, and Sandstone, reddish gray, moderately strong, slightly weathered, some $CaCO_3$ along minor joints and beds [Puente Formation]	Tp		SK-2 (3-5')		

Graphic Representation: West Wall
Surface Slope: 18 degrees NW
Trend: S45E



Scale: 1"=2'

B2

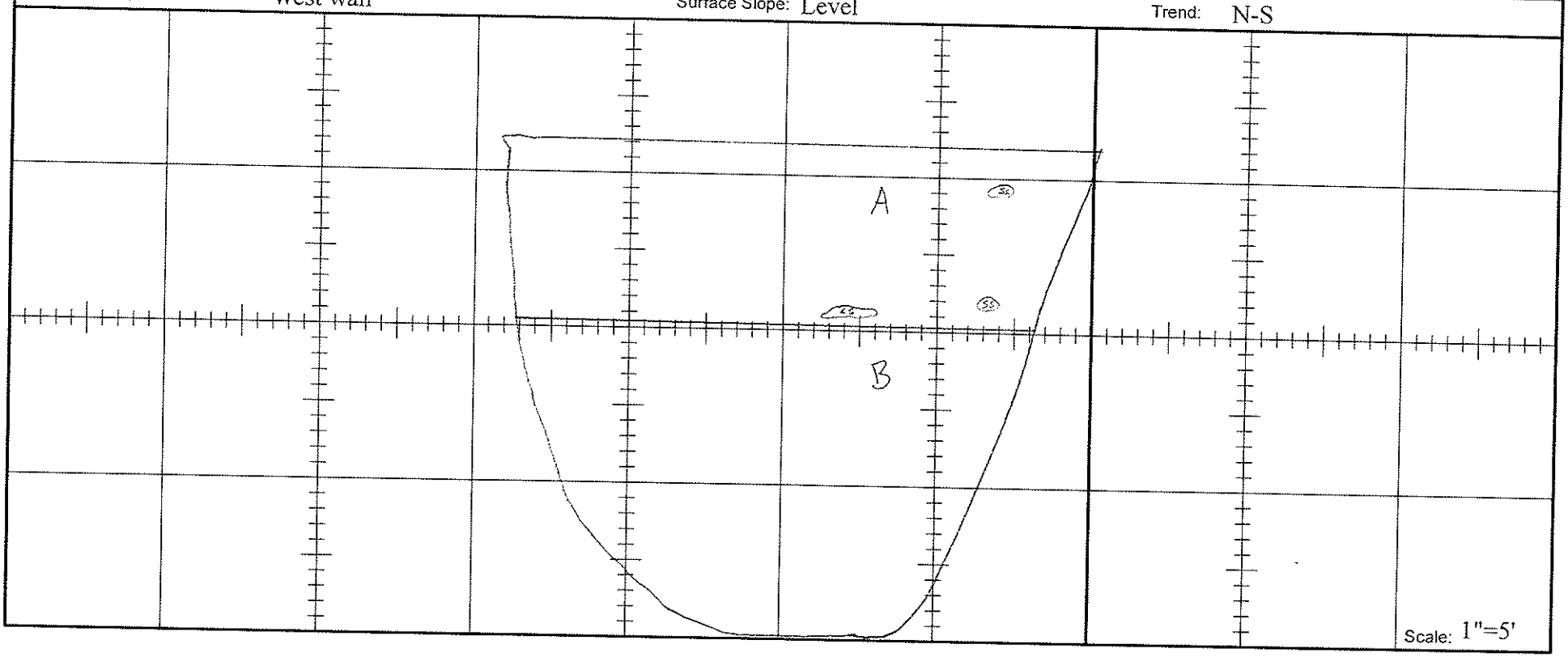
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: in brushy area
Equipment: J.D. 310C
Elevation: 711 ft

TRENCH NO.: TP-3
Logged by: BN
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
	A) Clayey SAND (SC) brown, medium dense, moist, contains angular sandstone and siltstone clasts ranging from 3" to 8" diameter and angular gravel of varying composition [Slope Wash]	Col		SK-1 R-2 (2') Blows/6" 8 20	12.7	123.8
	B) Clayey SAND (SC), dark brown, medium dense, moist, generally homogenous, Contains very small fine white rootlets and other organic debris [Colluvium]	Col		R-3 (5') Blows/6" 7 14	13.3	120.3

Graphic Representation: West wall
Surface Slope: Level
Trend: N-S



B3

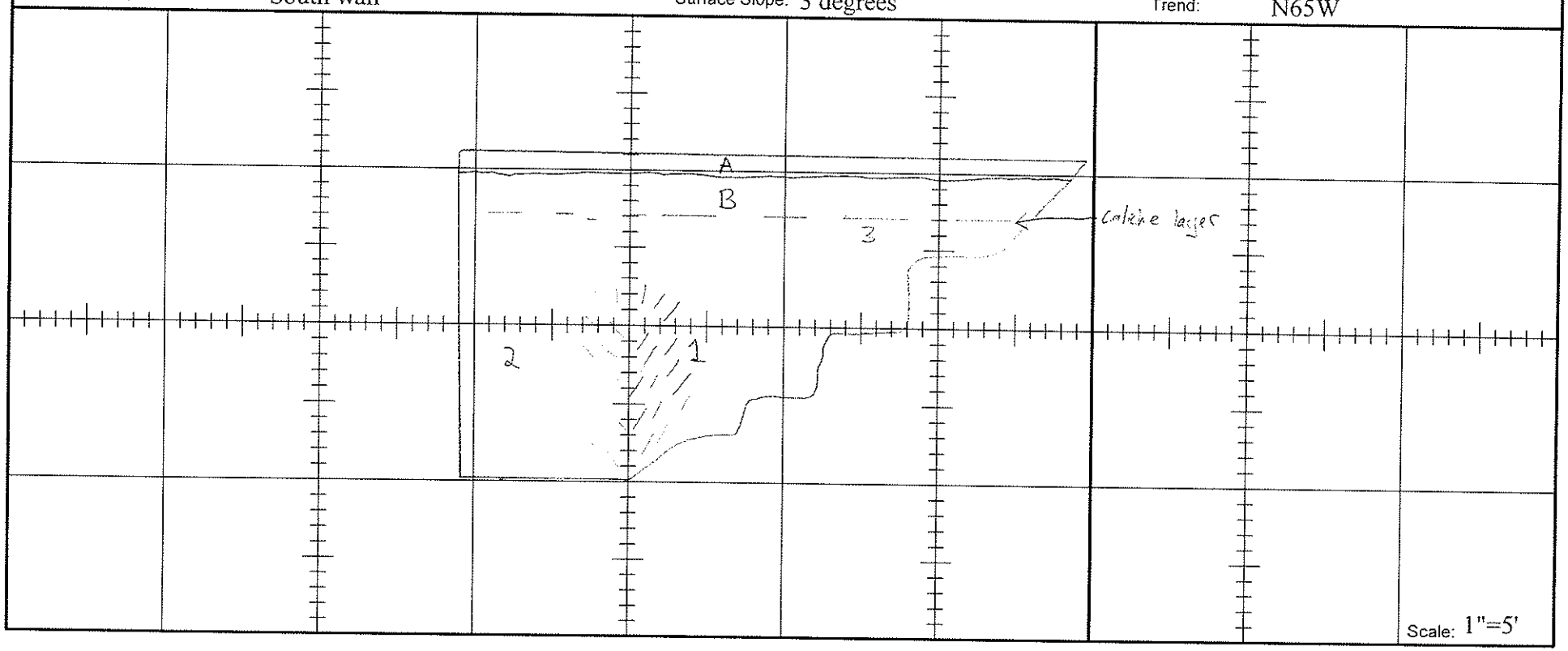
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: field near houses to south
Equipment: J.D. 310C
Elevation: 710 ft

TRENCH NO.: TP-4
Logged by: BN/ES
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
1. Bed E-W 45 S 2. Bed N80W 15 SW 3. Bed N75E 5NW	A) Silty SAND (SM), brown, loose, dry, contains roots [Soil] B) Interbedded Siltstone, light brown, and fine grain Sandstone, gray, fractured and slightly weathered, bedding is ~2"-3"thick [Puente Formation]	Tp				

Graphic Representation: South wall
Surface Slope: 3 degrees
Trend: N65W



B4

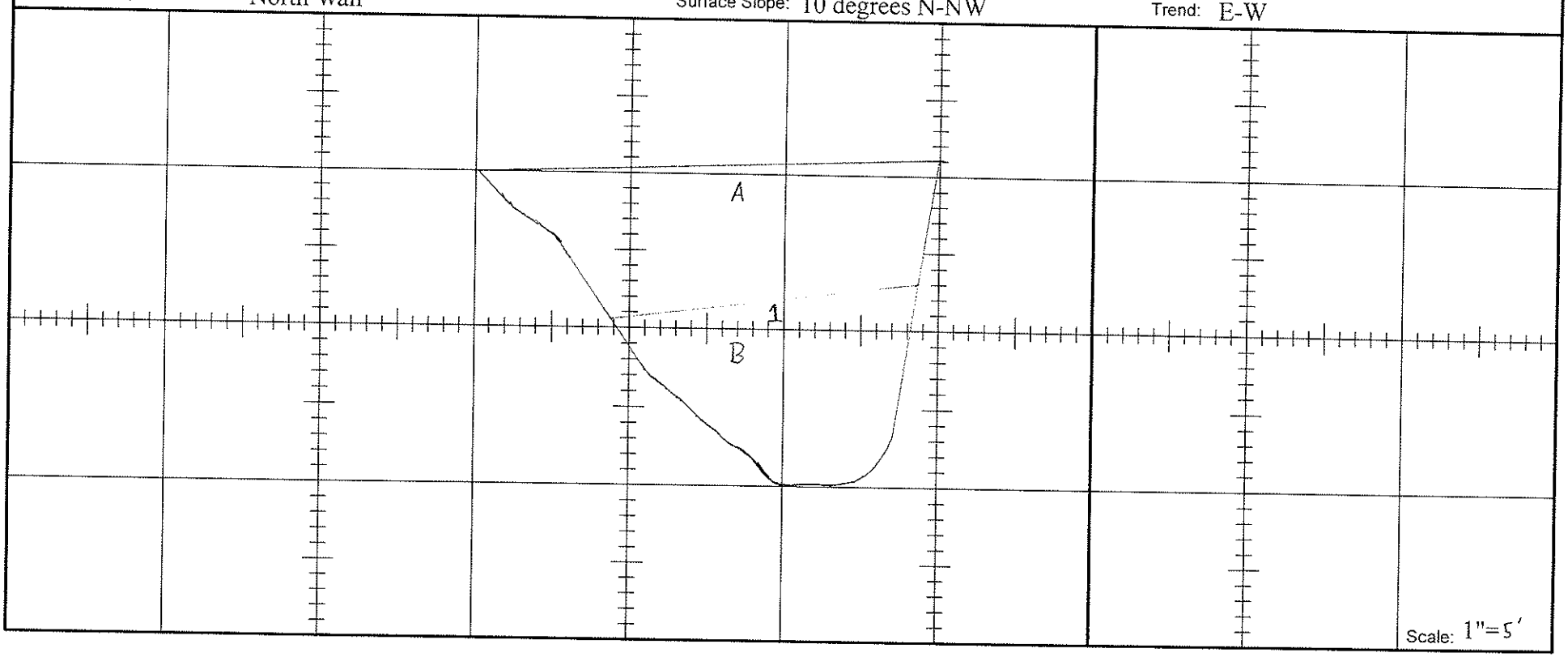
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: base of slope near Brea Canyon Channel
Equipment: J.D. 310C
Elevation: 680 ft

TRENCH NO.: TP-5
Logged by: BN
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
	A) Sandy CLAY (CL) dark brown, moist, stiff [Colluvium]	Col		SK-1 (2')		
Bedding N15W 4 SW	B) Interbedded Siltstone, light brown, and sandstone, reddish gray, moderately strong, slightly weathered, 2" to 6' layering [Puente Formation]	Tp		R-2 (2') Blows/6" 9 16	13.6	81.7

Graphic Representation: North Wall
Surface Slope: 10 degrees N-NW
Trend: E-W



B5

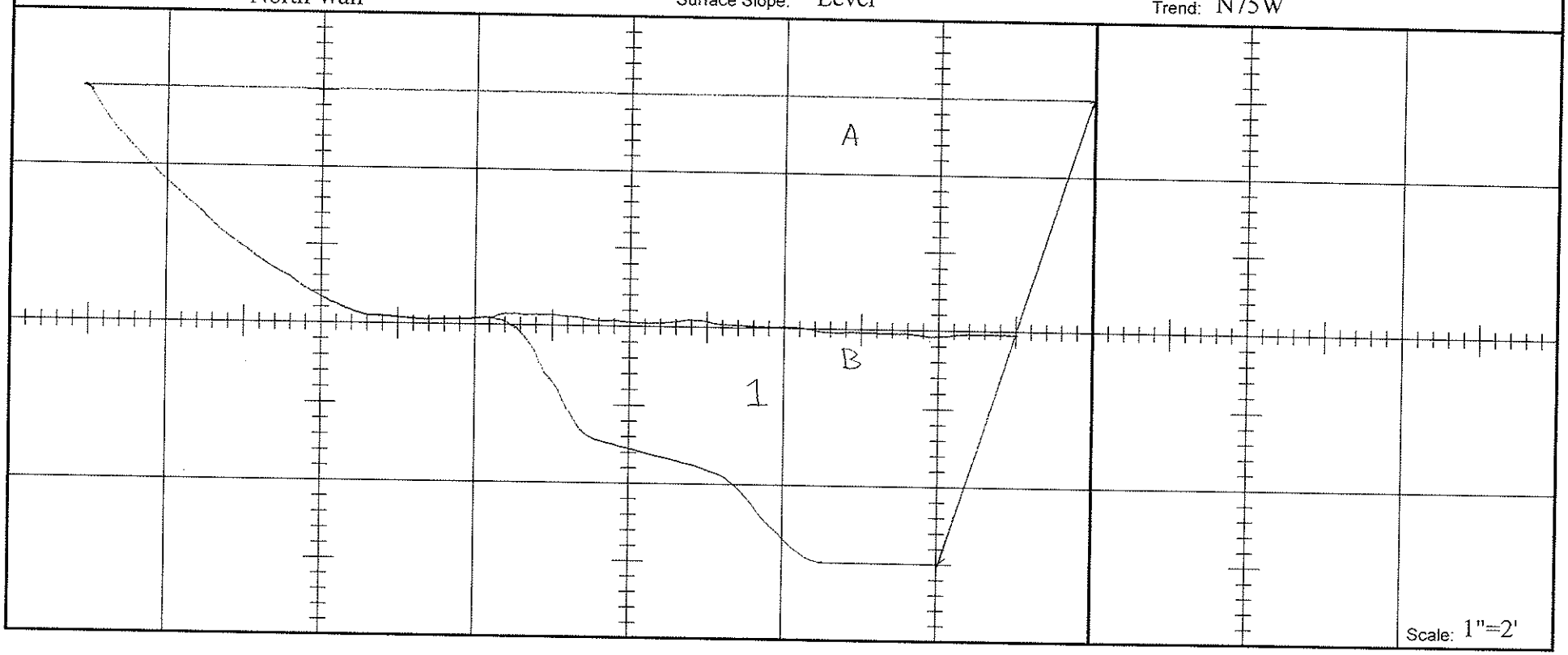
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: Above cut slope adjacent to Diamond Bar Blvd.
Equipment: J.D. 310C
Elevation: 741 ft

TRENCH NO.: TP-6
Logged by: BN
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
N45E 20 NW to N20E 20 NW	A) Sandy CLAY (CL) dark gray-brown, moist, stiff [Colluvium]	Col		SK-1 R-2 (.5') Blows/6" 12 22	12.2	105.7
	B) Interbedded Siltstone, gray, and Sandstone, light brown, dry, moderately weathered, weak, contains some diatomaceaous layers [Puente Formation]	Tp				

Graphic Representation: North Wall
Surface Slope: Level
Trend: N75W



B6

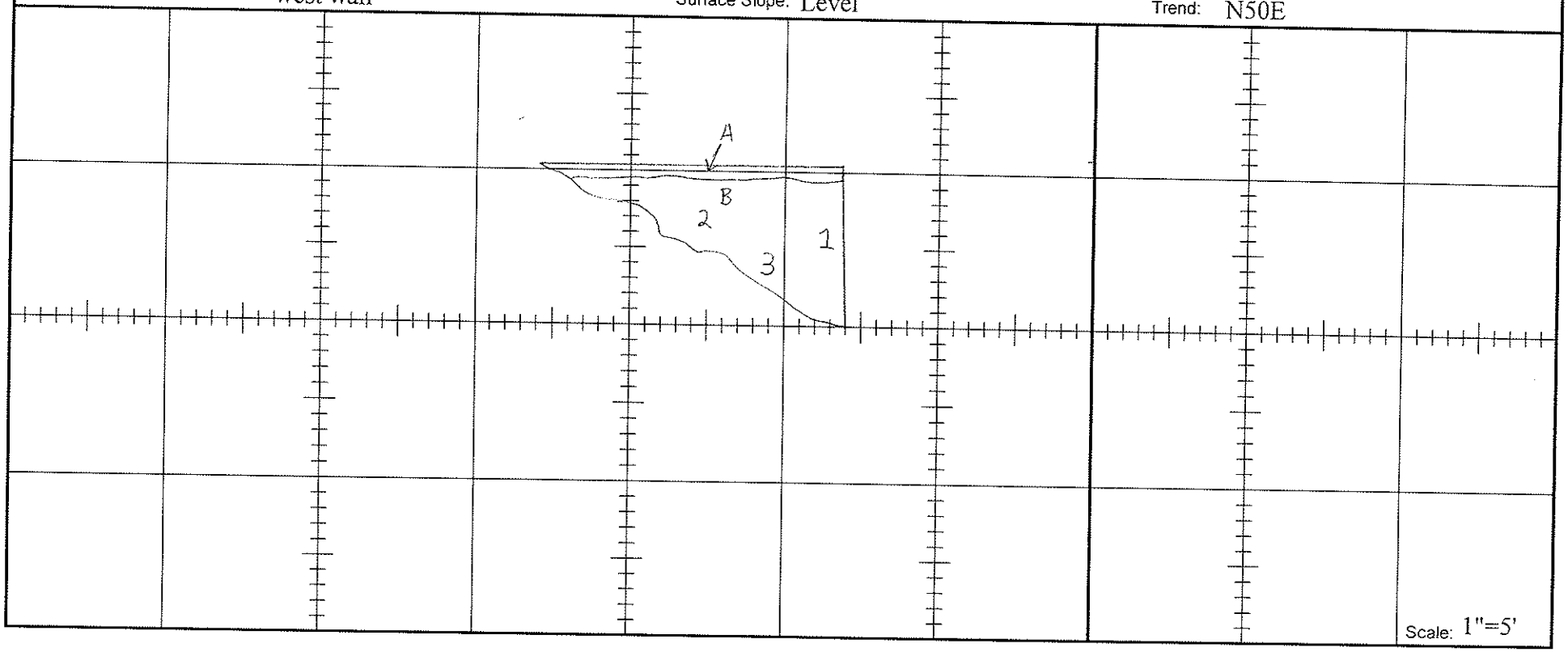
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: flat area-east portion of site
Equipment: J.D. 310C
Elevation: 761 ft

TRENCH NO.: TP-7
Logged by:
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
1. N89E 10 N	A) Silty SAND (SM), brown, loose, dry, roots in upper 6 inches [Soil]					
2. N45E 5 NW	B) Interbedded Siltstone, light brown, and fine grain Sandstone, gray, bedding is ~4" thick, fractured and slightly weathered [Puente Formation]	Tp				
3. N70E 5NW						

Graphic Representation: West wall
Surface Slope: Level
Trend: N50E



B7

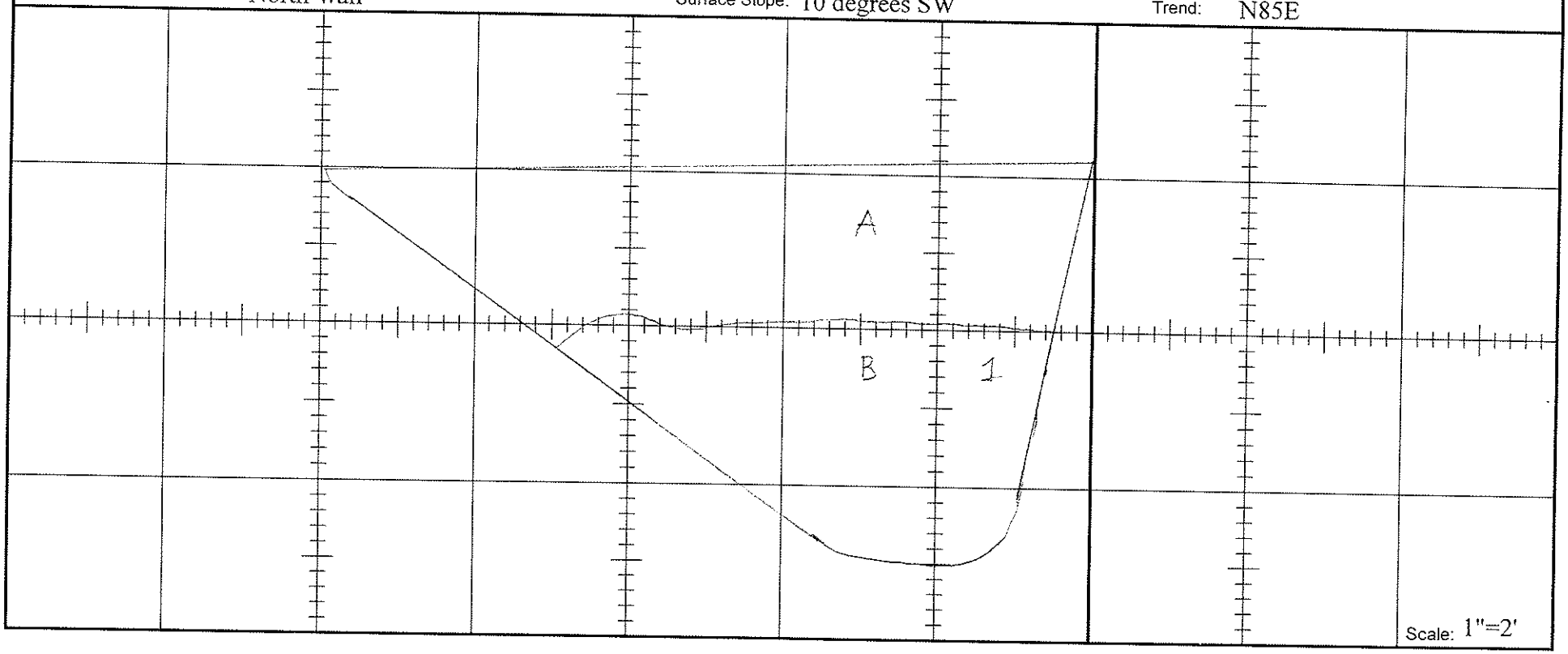
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: NE corner
Equipment: J.D. 310C
Elevation: 786 ft

TRENCH NO.: TP-8
Logged by: BN
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
	A) Silty CLAY (SL) brown, moist, stiff [Colluvium]	Col		SK-1 R-2 (.5') Blow/6" 4 16	11.7	103.0
N40E 23 W	B) Interbedded Diatomacous Siltstone, tan, and Sandstone, dark reddish brown, sandstone is well cemented and has faint bedding, siltstone contains oxidized rootlets, beds are ~12" thick [Puente Formation]	Tp				

Graphic Representation: North Wall
Surface Slope: 10 degrees SW
Trend: N85E



B8

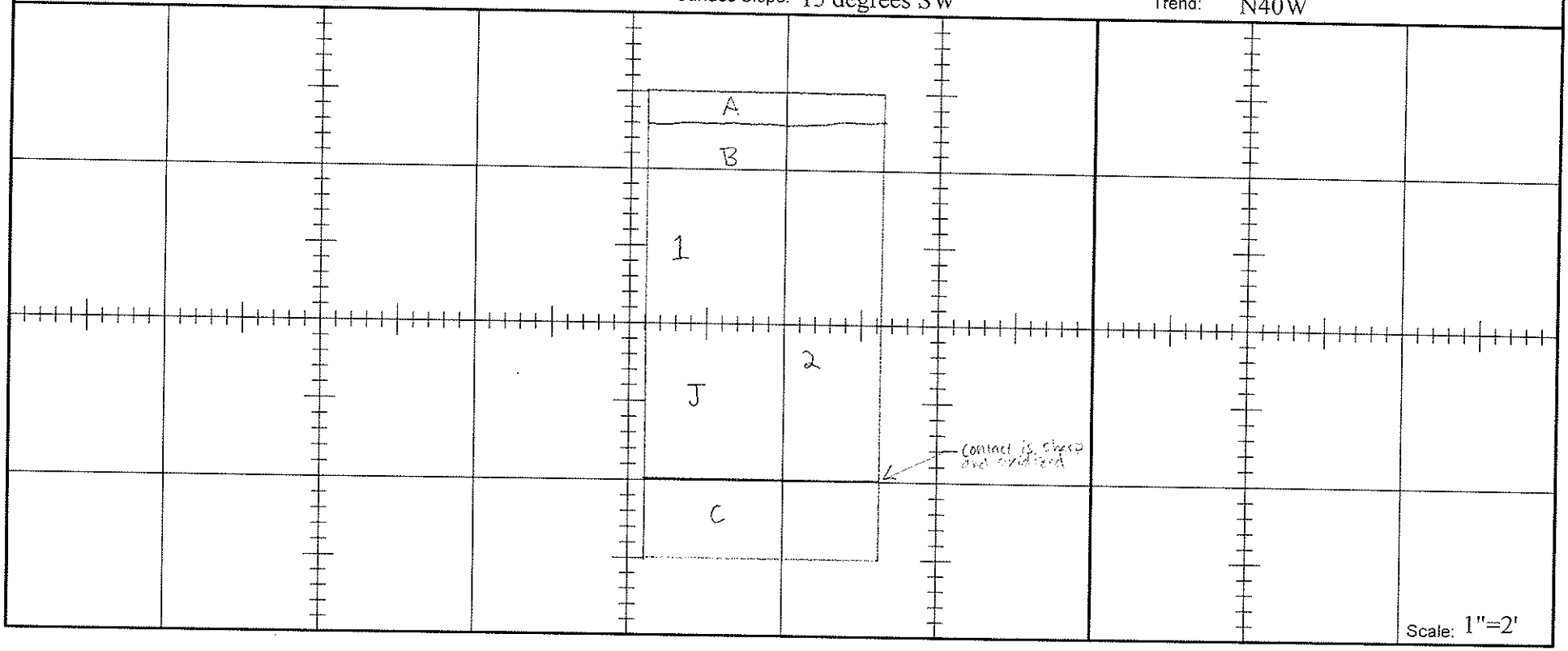
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: eastern slope
Equipment: J.D. 310C
Elevation: 750 ft

TRENCH NO.: TP-9
Logged by: BN
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
1 Bed N30E 8 NW 2 Bed N45E 10 W J N15W 85 NE	A. Clayey SAND (SC) brown, loose, dry [Soil] B. Siltstone, tan, highly fractured, well cemented, ~4" layering, very thin bedding C. Siltstone, green-gray, soft, horizontal ~1/4-inch thick bedding, horizontal layers of oxidation, $CaCO_3$ layer near bottom [Puente Formation]	Tp				

Graphic Representation: East Wall
Surface Slope: 15 degrees SW
Trend: N40W



B9

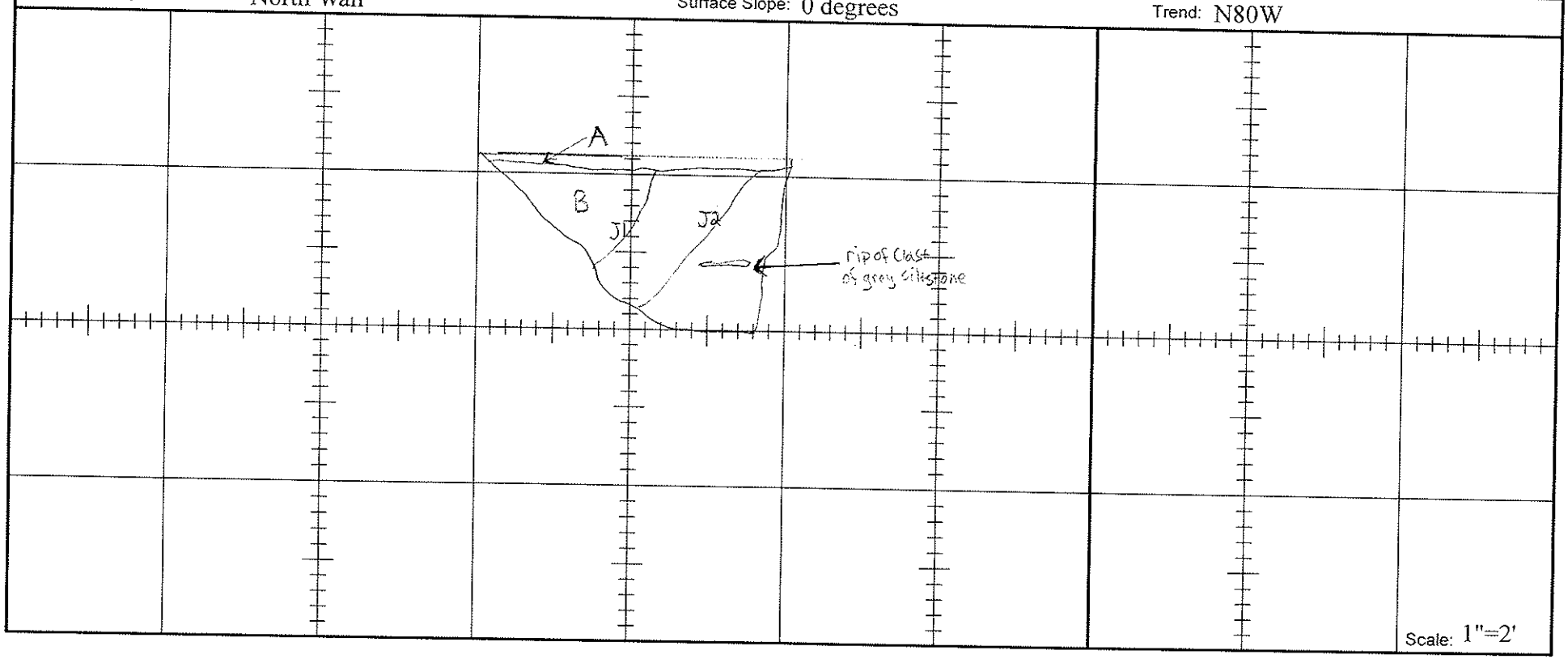
BING YEN & ASSOCIATES, INC.
Geotechnical & Environmental Consultants

Project Name: WVUSD-Site D
Project No.: 42.22428.0001
Location: flat area near BMX track
Equipment: J.D. 310C
Elevation: 730 ft

TRENCH NO.: TP-10
Logged by: BN
Date: 3-4-02

Geologic Attitudes	Description	Geologic Unit	Engineering Properties			
			U.S.C.S.	Sample No.:	Moisture (%)	Density (PCF)
J1 N69E 82 NW J2 N77E 70 NW	A) Silty SAND (SM) brown, loose, dry, roots, upper 4" [Soil] B) Sandstone, light brown, fine grain, near horizontal bedding, slightly weathered in upper 3.5 feet, jointed [Puente Formation]	Tp				

Graphic Representation: North Wall
Surface Slope: 0 degrees
Trend: N80W



Scale: 1"=2'

B10