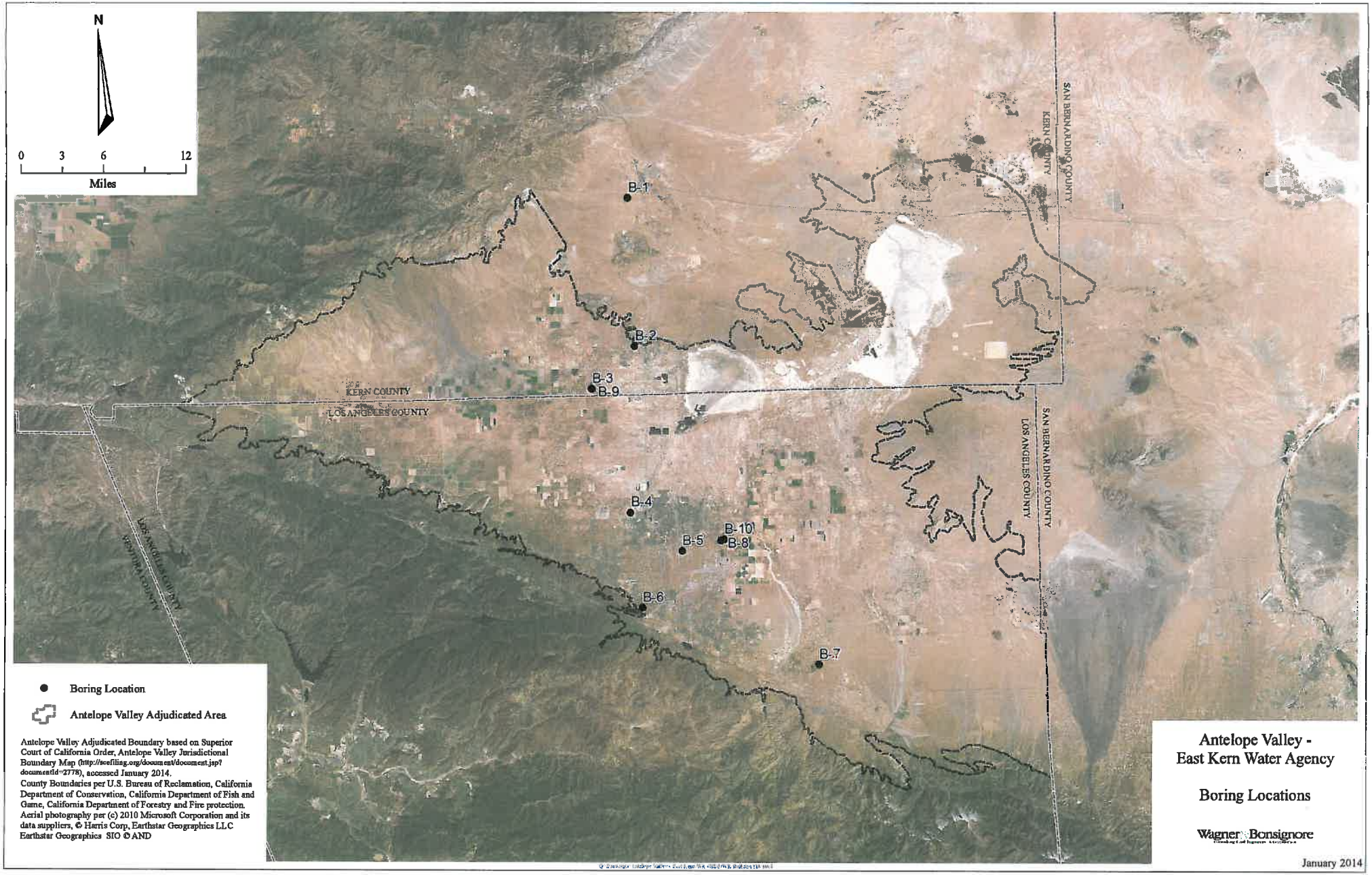
EXHIBIT 46



Antelope Valley Adjudicated Boundary based on Superior Court of California Order, Antelope Valley Jurisdictional Boundary Map (http://scefiling.org/document/document.jsp?documentId=2778), accessed January 2014.
County Boundaries per U.S. Bureau of Reclamation, California Department of Conservation, California Department of Fish and Game, California Department of Forestry and Fire protection.
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Antelope Valley - East Kern Water Agency

Boring Locations

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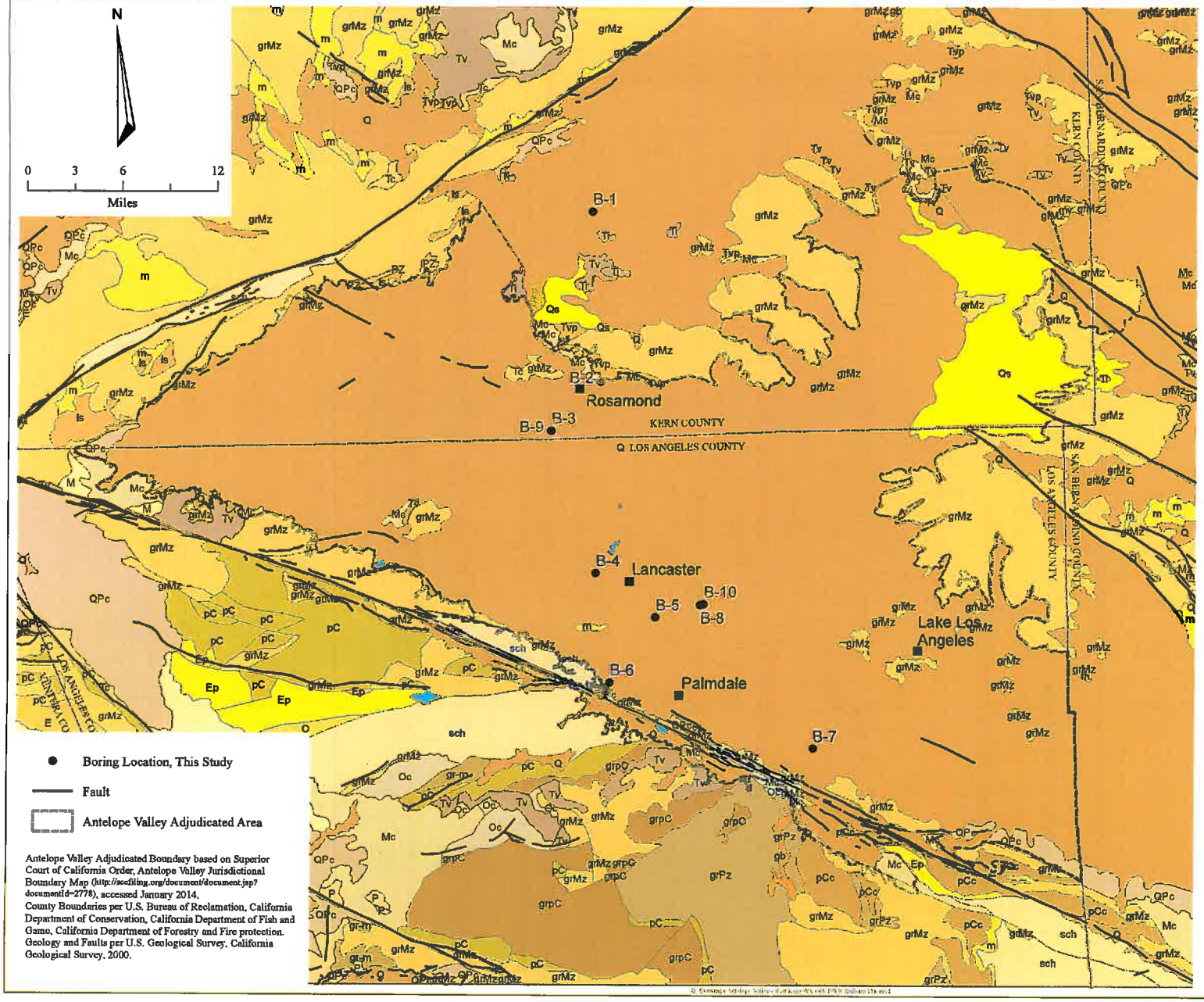
January 2014



- Boring Location, This Study
- Fault
- Antelope Valley Adjudicated Area

Antelope Valley Adjudicated Boundary based on Superior Court of California Order, Antelope Valley Jurisdictional Boundary Map (http://scefiling.org/document/document.jsp?documentId=2778), accessed January 2014.
County Boundaries per U.S. Bureau of Reclamation, California Department of Conservation, California Department of Fish and Game, California Department of Forestry and Fire protection.
Geology and Faults per U.S. Geological Survey, California Geological Survey, 2000.

Geology Legend

- Water
- Q - Alluvium, Terrace
- QPc - Sandstone, Conglomerate
- Qs - Dune Sand, Lake Or Marine Deposit (Non-Glacial)
- Tc - Conglomerate, Sandstone
- Ti - Rhyolite, Basalt
- Tv - Rhyolite, Basalt
- Tvp - Rhyolite, Dacite
- P - Sandstone, Mudstone
- M - Sandstone, Mudstone
- Mc - Sandstone, Conglomerate
- E - Mudstone, Sandstone
- Ep - Sandstone, Mudstone
- O - Sandstone, Mudstone
- Oc - Sandstone, Conglomerate
- gb - Gabbro, Diorite
- grMz - Granodiorite, Quartz Monzonite
- Mzv - Felsic Volcanic Rock, Intermediate Volcanic Rock
- gr-m - Plutonic Rock (Phaneritic), Gneiss
- mv - Intermediate Volcanic Rock, Mafic Volcanic Rock
- PZ - Limestone, Sandstone
- grPz - Quartz Monzonite, Quartz Monzodiorite
- ls - Limestone, Marble
- m - Schist, Gneiss
- sch - Mica Schist, Mica Schist
- grpC - Anorthosite, Gabbro
- pC - Gneiss, Granitoid
- pCc - Gneiss, Granitoid

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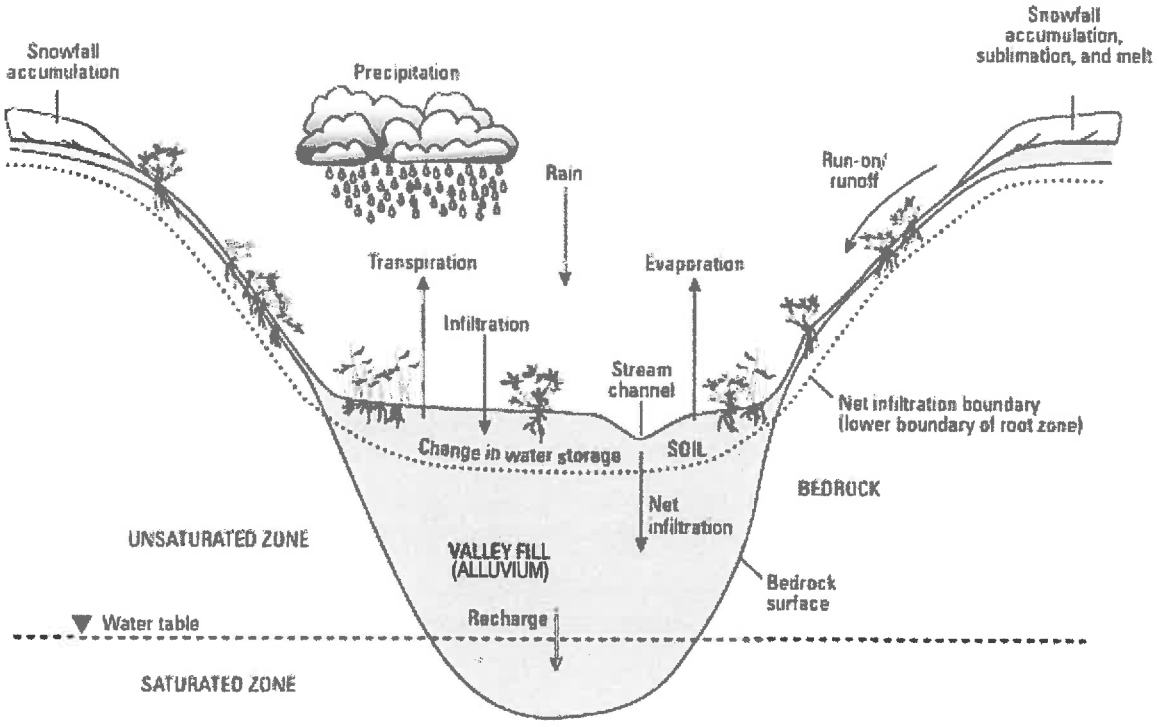
Vicinity Geologic Map

Wagner Bonsignore

January 2014

Development of Computer Program INFIL3.0
(Scientific Investigations Report 2008-5006)



Processes Controlling Net Infiltration

Sample Weighing, Logging and Preparation; upper photo using triple beam balance, lower photo, using electronic scale.

AVEK WSSP-1 Farmland (Avenue A and 60th St. West, Rosamond) – above, drilling in June, 2013; below, drilling in October 2013.

Top: Highland High School, Palmdale. Bottom: Lancaster High School

Top: Lancaster Soccer Center. Bottom: Residential Lawn, Lear St., Mojave.

Log of Boring 1

Job Number 1910 **Date Completed** 6-12-13
Drilling Method 3.5" Hand Auger **Depth** 10.9 ft.
Logged by DHP **Elevation** Ex. Grade

Laboratory Data	Moisture Weight (%)	Dry Density	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
(Note: Boring located in front yard at 14312 Lear Street, Mojave, CA)						LIGHT BROWN SAND (SP-SM); poorly graded with silt, medium dense, slightly moist, fine to medium grained sand, approx. 5-8% fines; increasing moisture content at 1.0 ft, decreasing fines.
						BROWN SAND (SP) medium dense, slightly moist, incr. moisture at 2.4 ft. Fine grained, decreased moisture at 3.1 ft. Occasional gravel to 1.5-inch diam, slight increase in moisture at 4.2 ft. becoming clayey at 4.3 ft.
	10.4					
	13.2		46	5		BROWN CLAYEY SAND (SC) moist, clayey, carbonate inclusions at 6.8 ft
	12.2					decreasing fines content at 7.9 ft, moist, slightly clayey
	7.5					BROWN SAND (SP-SC); poorly graded with clay, decreasing moisture (nearly dry)
	3.9					
	3.4		7	10		BROWN SAND (SP) medium dense, slightly moist, with gravels to 1-inch diam. Nearly dry at 10.4 ft.
						No free water encountered (NFWE)
				15		

Log of Boring 2

Job Number 1910 **Date Completed** 6-12-13
Drilling Method 3.5" Hand Auger **Depth** 5.2 ft
Logged by DHP **Elevation** Ex. Grade

Laboratory Data	Moisture Weight (%)	Dry Density	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
(Note: Boring located in front yard (lawn area) of 2856 Owens Way, Rosamond, CA)						BROWN GRAVELLY SAND (SP) moist, medium to coarse grained slightly clayey (fill in upper portion?)
	14.3					wet at 2.6 ft;
	15.9					wet at 3.3 ft color change, wet at interface
	16.5			5		YELLOW-BROWN CLAYEY SAND (SC) moist to wet, fine grained sand; harder drilling at bottom.
						NFWE
				10		
				15		

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Log of Borings 1 and 2
AVEK Soil Moisture Evaluation
Mojave - Lancaster Area, California

FIGURE
11

Job Number: 146.17.01 Drawn: DP Approved: Date: 10/13

Log of Boring 3

Job Number 1910 | Date Completed 6-12-13
Drilling Method 3.5" Hand Auger | Depth 6.9 ft.
Logged by DHP | Elevation Ex. Grade

Laboratory Data	Moisture Weight (%)	Dry Density	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
						BROWN SILTY SAND (SM) medium dense, slightly moist, fine grained sand
						becoming clayey at 1.5 ft.
	11.9		36			BROWN CLAYEY SAND (SC-SP) poorly graded with clay, medium dense, slightly moist, fine grained sand
						BROWN SAND (SP) medium dense, slightly moist, medium grained.
	3.3		12	5		calcareous (contains calcium carbonate)at 4.0 ft.
						Slightly clayey at 4.3 ft.
	3.6					Decreasing moisture at 5.6 ft, little/no fines
						No free water encountered (NFWE)
				10		
				15		

(Note: Boring located in agricultural field; AVEK WSSP-1 Farmland, Avenue A and 60th St. West, Rosamond)

Log of Boring 4

Job Number 1910 | Date Completed 6-12-13
Drilling Method 3.5" Hand Auger | Depth 10.7 ft
Logged by DHP | Elevation Ex. Grade

Laboratory Data	Moisture Weight (%)	Dry Density	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
(Note: Boring located in lawn area west of bleachers,) Lancaster High School, Lancaster)						LIGHT BROWN CALCAREOUS CLAY (CL) soft, wet
	32.4					wet at 2.3 ft.
						hard calcareous/caliche layer at 2.9 ft.
	27.1					BROWN CLAYEY SILT (ML) moist to wet, fine grained, low plasticity
				5		
	25.1		92			same at 5.8 ft., wet
						BROWN SANDY SILT (ML) stiff, moist, with fine grained sand
	19.1		59			
				10		
	22.8		57			moist
						NFWE
				15		

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Log of Borings 3 and 4
AVEK Soil Moisture Evaluation
Mojave - Lancaster Area, California

FIGURE
12

Job Number: 1910 | Drawn: DP | Approved: | Date: 10/13

Log of Boring 5

Job Number 1910 **Date Completed** 6-12-13
Drilling Method 3.5" Hand Auger **Depth** 7.2 ft.
Logged by DHP **Elevation** Ex. Grade

Laboratory Data	Moisture (Weight %)	Dry Density	Moisture (Volume %)	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
	4.3						BROWN SILTY SAND (SP-SM); poorly graded with silt, medium dense, slightly moist, fine grained sand, approx. 5-10% fines becoming clayey at 1.5 ft.
	5.3						moist, fine grained, decreasing fines
					5		BROWN SAND (SP) loose, slightly moist, less than 5% fines
	4.3						coarse grained, with 3-5% gravel, nearly dry
	4.5						
							No free water encountered (NFWE)
					10		
					15		

(Note: Boring located in front lawn at 42407 3rd East Street, Lancaster, CA)

Log of Boring 6

Job Number 1910 **Date Completed** 10-9-13
Drilling Method 3.5" Hand Auger **Depth** 12.0 ft
Logged by DHP **Elevation** Ex. Grade

Laboratory Data	Moisture (Weight %)	Dry Density	Moisture (Volume %)	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
	12.5			30			SOD/ROOTS in upper 0.4 ft. BROWN SILTY/CLAYEY SAND (SC/SM) medium dense, moist, fine to medium grained
	13.8	118.6	26.1	32			slightly clayey
	13.1			32	5		
	12.9	121.1	25.0				moist, slightly clayey, medium grained
							BROWN SILTY SAND (SM) medium dense, slightly moist medium grained
	11.6			25			
	11.1	116.3	20.7		10		decreasing moisture
	9.5			24			
	9.2	118.4	17.5				slightly moist, medium grained, borderline to clean sand (SP)
							NFWE
					15		

(Note: Boring located in lawn area at north end of) Highland High School, Palmdale, CA)

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Log of Borings 5 and 6
AVEK Soil Moisture Evaluation
Mojave - Lancaster Area, California

FIGURE
13

Job Number: 1910 Drawn: DP Approved: Date: 10/13

Log of Boring 7

Job Number 1910 | Date Completed 10-9-13
Drilling Method 3.5" Hand Auger | Depth 2.7 ft.
Logged by DHP | Elevation Ex. Grade

Laboratory Data	Moisture (Weight %)	Dry Density	Moisture (Volume %)	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
	1.8						LIGHT BROWN SAND (SP) with silt, loose, dry, fine to medium
	1.4	115.8	2.6	9			loose to medium dense, dry
							(Can't advance hole below 2.7ft; caves in uncemented loose sand -three attempts made)
(Note: Boring located at AVEK Eastside Banking Site, 9801 East Ave. U, Littlerock)					5		No free water encountered (NFWE)
					10		
					15		

Log of Boring 8

Job Number 1910 | Date Completed 10-9-13
Drilling Method 3.5" Hand Auger | Depth 11.3
Logged by DHP | Elevation Ex. Grade

Laboratory Data	Moisture (Weight %)	Dry Density	Moisture (Volume %)	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
							SOD/TURF
	9.1			31			BROWN SILTY SAND (SM) medium dense, moist, fine to medium grained
	9.5	79.2	12.0	45			medium dense, slightly moist, fine grained sand
	12.9	97.6	20.1	60	5		BROWN SANDY SILT (ML) medium stiff, with fine grained sand, slightly moist
							BROWN SAND (SP) loose, fine grained, slightly moist
	3.4			7			
					10		
	3.3	99.1	5.3	10			fine grained, slightly moist, uncemented
							NFWE
(Note: Boring located adjacent to irrigated soccer field, Lancaster Soccer Center, 43000 30th St E, Lancaster)							
					15		

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Log of Borings 7 and 8
AVEK Soil Moisture Evaluation
Mojave - Lancaster Area, California

FIGURE
14

Job Number: 1910 | Drawn: DP | Approved: | Date: 10/13

Log of Boring 9

Job Number 1910 | Date Completed 10-9-13
Drilling Method 3.5" Hand Auger | Depth 2.7 ft.
Logged by DHP | Elevation Ex. Grade

Laboratory Data	Moisture (Weight %)	Dry Density	Moisture (Volume %)	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
	8.1			35			BROWN SILTY SAND (SM) loose, slightly moist, fine grained
	7.0	113.7	12.8	47			slightly clayey, carbonate inclusions (slightly cemented?)
							BROWN SAND (SP-SM) with silt, loose, dry to slightly moist, fine
	3.3			13	5		loose, dry to slightly moist, fine grained coarse grained at 5.7 ft.
							BROWN SAND (SP) loose, dry to slightly moist
	2.6			5			
	3.4	105.4	5.6		10		No free water encountered (NFWE)
					15		

(Note: Boring located at AVEK WSSP-1 Farmland, Avenue A and 60th St West, Rosamond)

Log of Boring 10

Job Number 1910 | Date Completed 10-10-13
Drilling Method 3.5" Hand Auger | Depth 11.3
Logged by DHP | Elevation Ex. Grade

Laboratory Data	Moisture (Weight %)	Dry Density	Moisture (Volume %)	% Passing #200 Sieve	Depth Feet	Graphic Log	Description
	3.7			51			BROWN SANDY SILT (ML) stiff, slightly moist (appears reworked and rolled/compacted in upper 0.5 ft) possible slight increase in moisture at 2.0 ft
							BROWN SILTY SAND (SM) loose, dry to slightly moist
	1.9	101.4	3.0	22	5		loose to medium dense, fine grained, decreasing fines (caving/sloughing at 5 ft)
	1.6						ORANGE-BROWN GRAVELLY SAND (SP) loose to medium dense, dry to slightly moist
	1.5			7			(continues to slough below 7.5 ft; can't advance hole - generally appears loose and dry)
					10		NFWE
					15		

(Note: Boring located in non-irrigated area in NW corner of Lancaster Soccer Center, 43000 30th St E, Lancaster)

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Log of Borings 9 and 10
AVEK Soil Moisture Evaluation
Mojave - Lancaster Area, California

FIGURE
15

Job Number: 1910 | Drawn: DP | Approved: | Date: 10/13

MAJOR DIVISIONS					TYPICAL NAMES
COARSE–GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	CLEAN GRAVELS WITH LITTLE TO NO FINES	GW		WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
			GP		POORLY GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM		SILTY GRAVELS, SILTY GRAVELS WITH SAND
			GC		CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN No. 4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW		WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
			SP		POORLY GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE–GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SANDS AND GRAVELS
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
			OL		ORGANIC SILTS OR CLAYS WITH LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH		ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS			Pt		PEAT AND OTHER HIGHLY ORGANIC SOILS

UNIFIED SOIL CLASSIFICATION - ASTM D2487-85

Perm	–	Permeability
Consol	–	Consolidation
LL	–	Liquid Limit (%)
PI	–	Plastic Index (%)
G_s	–	Specific Gravity
MA	–	Particle Size Analysis
■	–	"Undisturbed" Sample
⊠	–	Bulk or Classification Sample

Shear Strength (psf) ↓		Confining Pressure ↓	
TxUU (FM) or (S)	3200	(2600)	– Unconsolidated Undrained Triaxial Shear (field moisture or saturated)
TxCU (P)	3200	(2600)	– Consolidated Undrained Triaxial Shear (with or without pore pressure measurement)
TxCD	3200	(2600)	– Consolidated Drained Triaxial Shear
SSCU (P)	3200	(2600)	– Simple Shear Consolidated Undrained (with or without pore pressure measurement)
SSCD	3200	(2600)	– Simple Shear Consolidated Drained
DSCD	2700	(2000)	– Consolidated Drained Direct Shear
UC	470		– Unconfined Compression
LVS	700		– Laboratory Vane Shear

KEY TO TEST DATA

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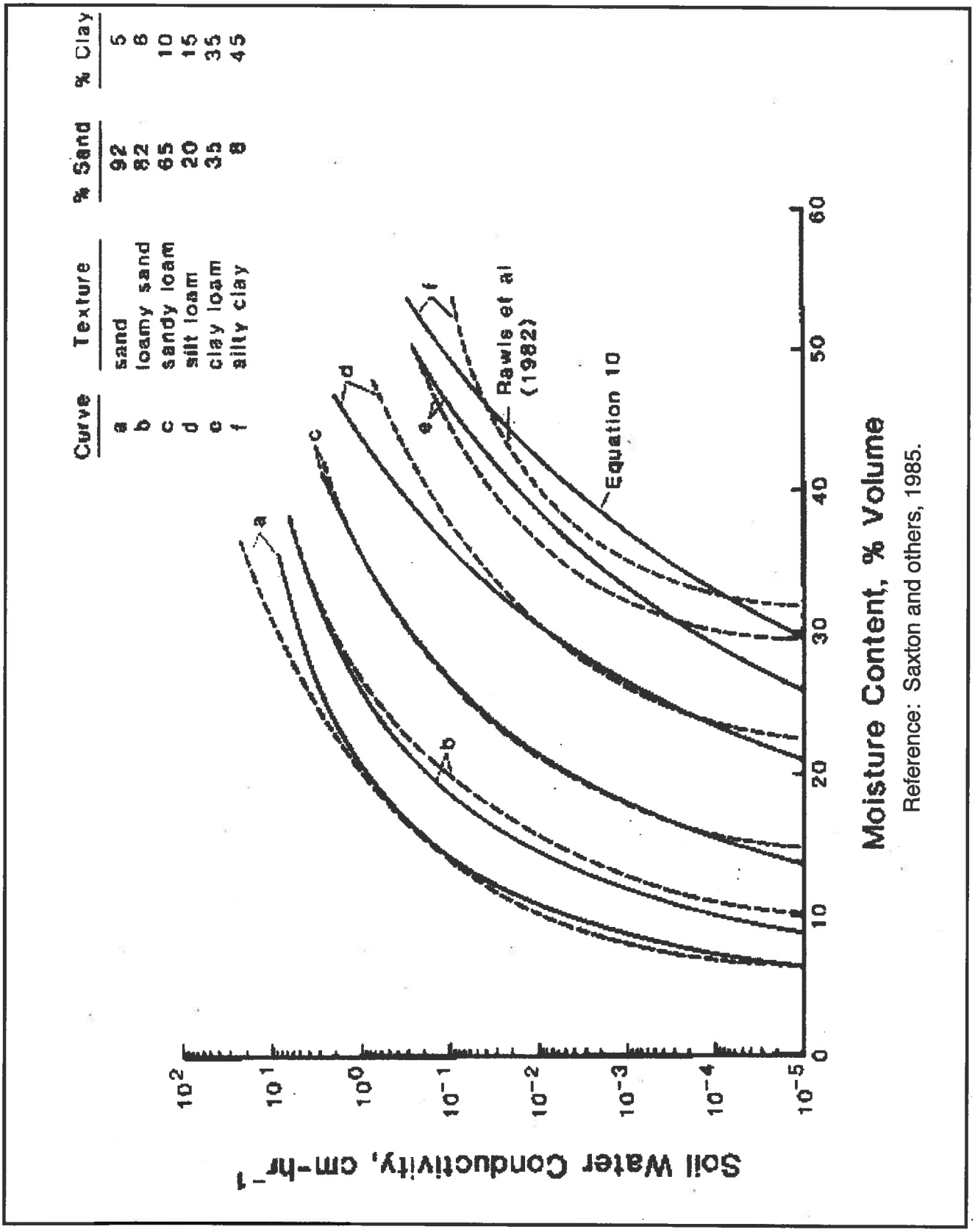
Soil Classification Chart and Key to Test Data
AVEK Soil Moisture Evaluation
Mojave - LancasterArea, California

FIGURE
8

Job Number: 1910 | Drawn: DP | Approved: | Date: 10/13



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Comparison of Unsaturated Hydraulic Conductivity and Soil Texture
AVEK Soil Moisture Evaluation
Mojave - Lancaster Area, California

PLATE

Job Number: 1910 | Drawn: DP | Approved: | Date: 1/14

Summary of Sample Data in Comparison to Type Curves Relating Texture and Moisture Content to Unsaturated Hydraulic Conductivity (by Saxton and others, 1985)

Samples from Bottom of Borings

Boring /Depth	Sample Type	% Sand (and minor gravel)	% Fines	Moisture Content by Volume (%)	Unsaturated Hydraulic Conductivity, ft/yr	Curve Used*	Estimated Infiltration, inches per year**	Estimated Infiltration, as % of Reference ETo (66.5" - CIMIS)
1 @ 10.8	B	93	7	5	<0.003	B	--	--
3 @ 6.0	B	88	12	5	<0.003	C	--	--
4 @ 10.5	B	43	57	34	0.3	E	1.2	1.8
6 @ 11.5	C	76	24	17.5	0.3	C/D	0.6	0.9
7 @ 2.2	C	91	9	2.6	<0.003	C	--	--
8 @ 10.8	C	90	10	5.3	<0.003	B/C	--	--
9 @ 9.5	C	95	5	5.6	<0.003	A	--	--
10 @ 4.0	C	78	22	3.0	<0.003	C	--	--

* Type curves presented in Saxton and others, 1985.

** Volumetric moisture content x Unsat. Hydraulic conductivity (ft/yr)/12 inches per ft.

B – loose bulk sample from auger

C – relatively undisturbed core sample

Notes: 1) Volumetric moisture content in bulk samples (B) estimated from comparison to densities of core samples and assumed to be about 1.5 times the gravimetric water content.

2) Lab testing of fines content not performed for Borings 2 or 5; appropriate type curve could not be selected.