Prepared by J. H. Green

SAMPLE	SPONTANEOUS POTENTIAL	RESISTIVITY	GRAPHIC	G	ENERALIZED LITHOLOGIC DESCRIPTION (From core descriptions, drilling
U.S. Bur. of	- Millivolts +	Ohms m ² /m	FEET LOG		performance, and electric logs)
Reclamation	50 25 0	15 30	0		
23L-91 —	Moran moral a	7~~~		0-320	Silt, clay, and some sand, yellowish-brown
			200		
_	1	3		320-352	Sand, blue
_	3	{		352-379	Clay, plastic, dark-greenish-gray
_	}		400	379-465	Clay, plastic to brittle, massive, dark-greenish-gray (Corcoran Clay Member of the Tulare Formation)
_	}	}	===	465-513	Clay, silty, greenish-gray
_	\leq	}		513-558	Sand, silty, micaceous, greenish-gray
	5	>	==:=	558-568	Clay, silty, plastic to loose, greenish-gray
_	5	3	600 =:=:=:	568-603	Clay and sand, micaceous, gray-green
23L-100 —	3			603-690	Clay, silty, micaceous, grayish-green
_				690-714	Sand, loose, massive, blue-green gray
		2		714-733	Clay, silty, grayish-green, some sand
	3	{	====	733-752	Clay, silty, plastic to firm, massive, grayish-green
_	- 5			752-776	Silt, sandy, greenish-gray
	- {	3	800 💆 🔎	776-828	Sand and gravel, micaceous, greenish-gray
_	7	15		828-860	Silt, sandy and clayey, massive, greenish-gray
_	E S	3	0-0	860-931	Sand, fine to coarse, greenish-gray; gravel and silt streaks. Conglomerate, hard, greenish-gray, below 905 feet
	>> 		1000	931-1000	Sand, poorly sorted, micaceous, greenish-black

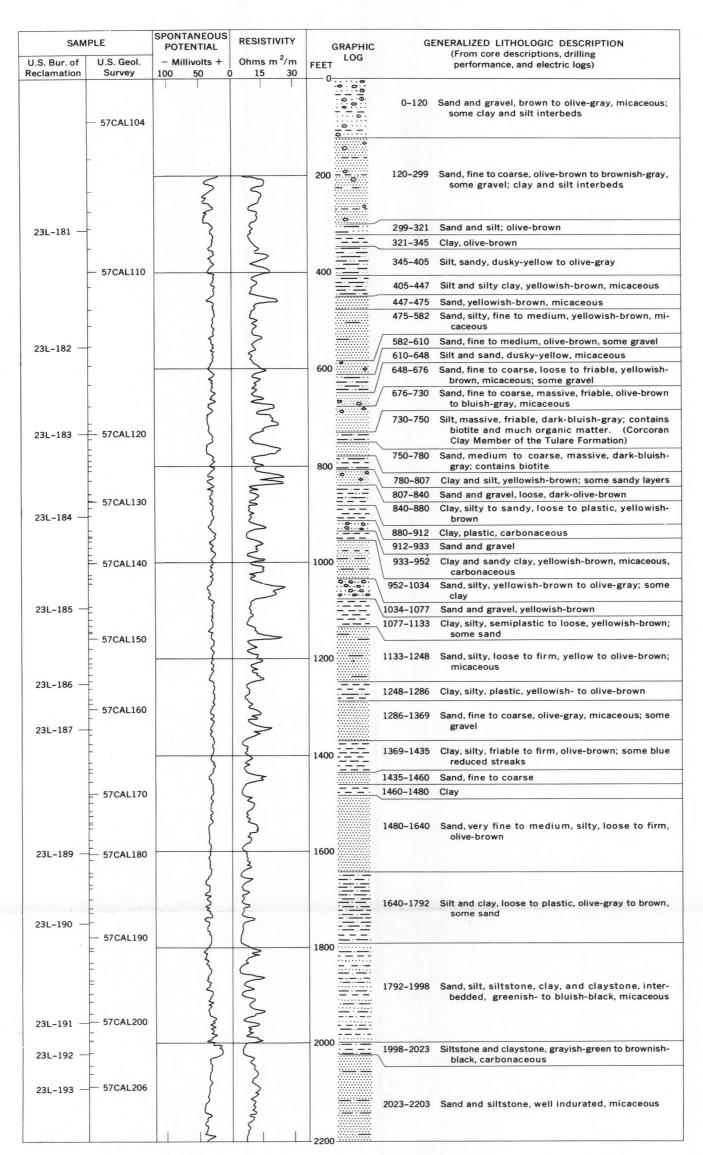
A. CORE HOLE 12/12-16H1, LOS BANOS-KETTLEMAN CITY AREA

SAMPLE		SPONTANEOUS POTENTIAL RESISTIVITY		GRAPHIC	GENERALIZED LITHOLOGIC DESCRIPTION (From core descriptions, drilling			
U.S. Bur. of Reclamation	U.S. Geol. Survey	- Millivolts + 50 25 0	Ohms m 2 /m 15 30	FEET LOG	performance, and electric logs)			
	— 57CAL1			9:35 6:00 6:00 6:00 6:00 6:00	0-110	Sand and gravel, olive-brown		
	-	-			110-200	Sand, fine to very fine, dusky-yellow; silt and clay interbeds		
	-	4	}	200	200-270	Clay, plastic; sand, fine; olive-brown		
23L-80 —	-	J. J. Jany			270-400	Sand, fine to medium; some clay; olive-brown		
23L-194 —	- 57CAL10	A Complex	1 m	400	400-534	Silt and sand, fine, olive-brown		
23L-81 -	_	}	5		534-565	Silt, sandy, olive-gray to greenish-gray		
251-01		}	{		565-625	Clay, plastic, dark-greenish-gray		
		3	}	600	625-675	Clay, massive, plastic, dark- greenish-gray (Corcoran Clay Member of		
23L-83 —	57CAL20	2	>		675-700	Clay, silty, dark-blue- green		
23L-84		7	5	·· ····	700-783	Silt, sandy, greenish-gray, micaceous		
	57CAL30	3		800	783-795	Clay		
23L-196 —		>	3		795-874	Sand, fine, silty, dark-green, wood fragments		
	57CAL40	}	3		874-899	Clay, silty, micaceous, dark-greenish-gray		
`	-	*	5		899-920	Sand, medium to fine, silty, greenish-gray to olive brown		
	=	3	[920-946	Clay, well-indurated, grayish-olive-green		
	57CAL50	ξ		====	946-973	Silt, clayey and sandy, olive-gray		
23L-85 —	=	3	->	1000 ====	973-1001	Clay, silty to silt, massive, micaceous, olive-gra		
	=	3	· \left \	====	1001-1041	Silt, sandy, and sand, olive-brown		
23L-86 —	57CAL60	7	5	====	1041-1056	Clay, olive-gray		
232-00	=	{	3	==:==	1056-1127	Silt, sandy, and sand, olive-gray		
	57CAL70	\{\bar{\}}		.00	1127-1204	Sand, coarse, loose, and gravel, dark-gray t greenish-gray		
		5	3	1200	1204-1250	Sand, medium, loose, olive-brown		
	57CAL80	M			1250-1348	Sand, silty, loose to well-indurated, micaceous olive-brown		
23L-88 — 23L-89 —	57CAL90	3	}		1348-1455	Clay, silty with occasional beds of silt and silt sand, mostly hard and brittle, olive-gray t greenish-gray		
23L-90 —	57CAL100 57CAL103	لحم ا	>	===	1455-1480	Sand, fine to medium, loose, dark-greenish-gray		

B. CORE HOLE 14/13-11D1, LOS BANOS-KETTLEMAN CITY AREA

SAM	PLE	SPONTANEOUS POTENTIAL RESISTIVITY		(GRAPHIC	G	ENERALIZED LITHOLOGIC DESCRIPTION (From core descriptions, drilling	
U.S. Bur. of Reclamation	U.S. Geol.	- Millivolts +	Ohms m ² /m	FEET	LOG	OG performance, and electric logs)		
23L-197 —	Survey — 58CAL1 -	100 50 0	15 30	- 200		200-415	Sand, fine to very coarse; interbedded clay and silt; yellowish-brown	
23L-198 —	-	3	~	400		415-565	Clay, silty, micaceous, noncalcareous, pale-to dark-yellowish-brown;some interbedded sand and silt	
23L-200 — 23L-235 —	58CAL10	2	Www.			565-575	Clay, slightly silty, medium-bluish-gray to dark- greenish-gray (Corcoran Clay Member of the Tulare Formation)	
23L-201				600			Sand, fine to coarse, well-sorted, greenish-gray to dark-gray	
23L-202 —	58CAL20	3	5			637-700	very fine to very coarse sand	
23L-204 —		3	3		/	700-750	Sand, silty to medium-coarse; some interbedded clay and silt; moderate-yellowish-brown	
23L-204	58CAL30	{	3		/	750-772	Clay, silty; some mica; yellowish-brown to olive- brown	
		<u> </u>	\geq	800		772-795	Sand, fine to coarse, moderate-yellowish-brown	
	58CAL40	\{\}	2				Clay, firm; some silty to sandy; yellowish-brown	
23L-206 —		{	3			842-895	Sand, fine to medium, yellowish-brown; some clay and silt	
23L-207 —		3	3			895-907	Clay, firm, dark-yellowish-brown	
23L-208 —	= 58CAL50	{	\$		===:\	907-940	Sand, silty to very coarse, subangular, dusky- yellow to olive-brown	
232-200	-	\		1000	•••••	940-980	Clay, plastic to firm, micaceous, yellowish-brown to dark-bluish-gray	
, 1	=	W. A.				980-1130	Sand, fine to coarse; gravelly near top; grains angular to subangular; light-gray to grayish yellow-green; some thin hard interbedded clay and silt	
23L-210 —	- - 58CAL60	\	1	1200		1130-1200	Siltstone, sandstone, calcite cemented; some in- terbedded sand, silt, and clay; greenish-gray to brownish-black	
23L-212 — 23L-214 —	= - - - 58CAL70	\$\frac{1}{2}	MMM			1200-1375	Silt, clayey to sandy; thin sand and clay inter- bedded; greenish-gray to dark-gray	
23L-215 —	500AL70		M.	1400		1375-1465	Sand, silty to gravelly; some silt and clay; firm to hard, interbedded; greenish-gray to dark-gray	
23L-217 —	58CAL80		A STATE OF THE STA			1465-1549	Clay, firm to very firm; some fine to medium inter- bedded micaceous sand; dark-greenish-gray	
23L-219 —	- - - - 58CAL90	2000	Monthout	1600		1549-1720	Clay, firm to hard; some sand and silt; interbedded, micaceous; greenish-gray to dark-gray	
23L-221 —	_			- 1800		1720-2000	Clay and some claystone, friable to firm, dark-	
23L-222 — 23L-223 —	-	www	>		簽		greenish-gray	
23L-223 —	58CAL98			2000	===			

C. CORE HOLE 16/15-34N1, LOS BANOS-KETTLEMAN CITY AREA



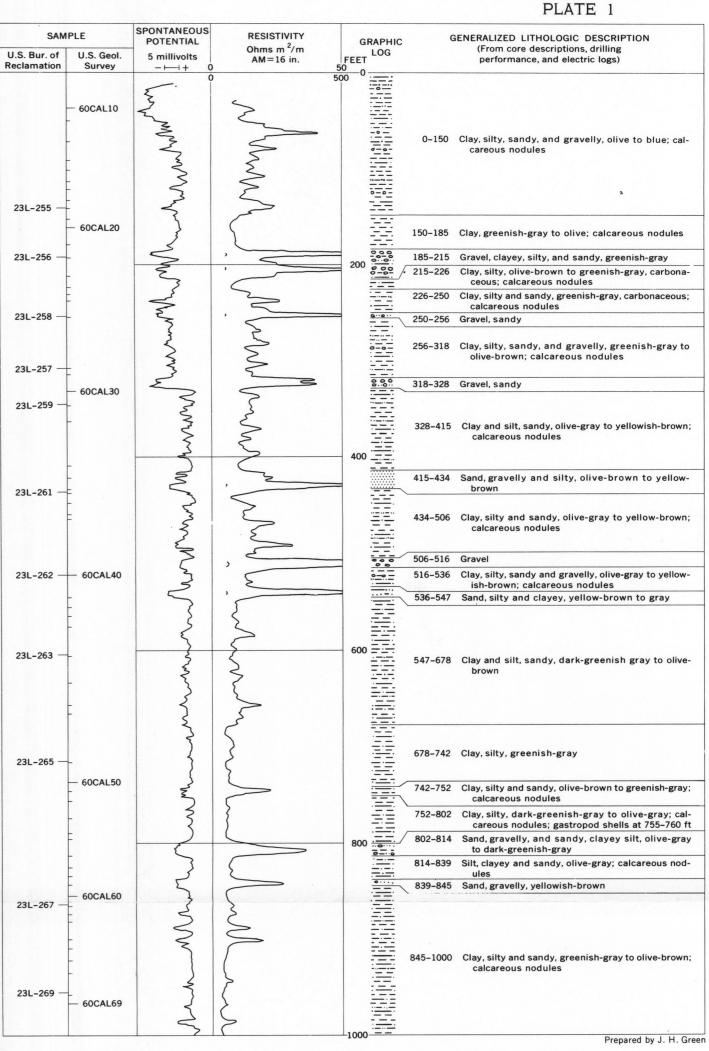
D. CORE HOLE 19/17-22J1, 2, LOS BANOS-KETTLEMAN CITY AREA

SAMPLE		SPONTANEOUS RESISTIVITY POTENTIAL 16-in. normal		GRAPHIC	GENERALIZED LITHOLOGIC DESCRIPTION		
U.S. Bur. of Reclamation	U.S. Geol. Survey	Millivolts -10+0	Ohms m ² /m 20 40	FEET LOG		(From core descriptions and electric logs)	
	- 58CAL99			/	30-80	Silt, sandy, loose to plastic, micaceous, yellowish- brown	
		MAndrew			80-115	Sand, silty, loose to plastic, fine to coarse, yellow- ish-brown	
		2	, =		115-138	Silt, sandy, loose to plastic, gravelly, calcareous, micaceous, yellowish-brown	
		M	, 1	200	138-258	Sand, silty, loose to plastic, fine to coarse, micaceous, yellowish-brown	
		3	, S	200	258-280	Sand, silty, clayey, fine; some coarse; calcareous near bottom; micaceous, yellowish-brown	
23L-226 — 23L-227 — 23L-228 —	- - - - 58CAL110	7			280-296	Clay, plastic, silty, micaceous, pale brown to blu- ish-gray, diatoms (Corcoran Clay Member of the Tulare Formation)	
		}			296-330	Sand, silty, loose to plastic, fine to coarse, mica- ceous, pale-olive to yellowish-brown	
		3	3	400	330-360	Clay, sandy, silty, plastic, micaceous, calcareous streaks, yellowish-brown; thin sand interbeds	
23L-229	58CAL120	{	3		360-420	Sand, silty, fine to coarse, gravelly, micaceous, yellowish-brown; thin clay interbeds	
		}			420-520	Sand, silty, clayey, fine to coarse, some gravel, calcareous streaks, micaceous, yellowish-brown; clay, silt interbeds	
	58CAL130	}		600	520-560	Clay, sandy, silty, plastic, gravelly, micaceous, yellowish-brown; calcareous streaks; carbonaceous material; thin sand interbeds	
23L-232 —	58CAL140	}			560-620	Sand, silty, loose to friable, fine to coarse, grav- elly yellowish-brown; some biotite; clay inter- beds	
23L-234 —	58CAL145	}	, 5	750	620-660	Silt, sandy, loose to plastic, micaceous, yellowish- brown; some carbonaceous material; calcareous nodules; thin sand and clay interbeds	
					660-680	Sand, silty, clayey, loose, fine to coarse, brown to olive; carbonaceous material	
					680-710	Clay, plastic, massive, micaceous, yellowish-brown; calcareous nodules	
					710-752	Sand, loose, friable, massive, fine to coarse, micaceous	

E. CORE HOLE 23/25-16N1, TULARE-WASCO AREA

SAMPLE		SPONTANEOUS POTENTIAL Millipolts		GRAPHIC	GENERALIZED ENTINCES GIO DESCRITTUON		
U.S. Bur. of Reclamation	U.S. Geol. Survey	Millivolts −H+ (Ohms m ² /m 0 20 40	FEET LOG	(From core descriptions and electric logs)		
23L-236 — 23L-237 —	59CAL310 	harmon words		200	0-230	Sand, clean to silty, yellowish-brown; silt an sandy silt interbeds; several gravelly layers	
	59CAL330	MM	Muram		230-412	Sand, silty and clayey, fine to coarse, yellowish brown; calcareous toward bottom; carbonaceou material	
23L-239 —	= - - - - - - 59CAL350	Morra	A	400	412-429	Sand, clean to silty, medium, loose, dark-yellowish brown	
23L-240 —		Mary	2		429-535	Silt, sandy, fine to coarse, moderate yellowish brown; some gravel, calcareous zones	
	59CAL360	2		600	535-620	Sand, silty and clayey, fine to coarse, yellowish brown to olive-gray	
23L-241 —	= = = = 59CAL370	Mary	5		620-637	Clay and silt, sandy, firm to lithified, brownish- to live-gray	
23L-242 —		A-4-7-20	2		637-744	Sand, silty, greenish- to bluish-gray; thin interbed of silt, clay, and claystone; some cementatio	
256-242	59CAL380	***	5		744-779	Claystone, siltstone, and silty sand, dark-bluist greenish gray; calcareous streaks	
23L-243 —	_	}		800	779-841	Claystone and clay, silty, contains sandy layer greenish-gray	
23L-244.— 23L-246.—	= - 	on Munch Mand		1000	841-1176	Claystone, silty, to sandy, dark-greenish- to blustering ish-gray; thin interbeds of clay, silt, and loos sand; plant remains; rhyolitic ash zone at 1058	
23L-247 —				1200	1176-1206	Sand, silty, clayey, fine to medium, dark-gree ish- to bluish-gray	
23L-248 —		-Janary	}		1206-1369	Claystone, silty, sandy, dark-greenish- to bluisl gray; thin interbeds of diatomaceous silt, san and fine gravel containing plant remains	
23L-249 —	=	2	3	1400 ====	1369-1384	Sand, silty, clayey, fine to medium, bluish-gray	
23L-250 —	59CAL400	- Jan Jan	}	1400	1384-1500	Claystone and sand interbedded, firm to loos dark-bluish- to greenish-gray; 10-ft diatoma ceous sand layer at base	
23L-251 —	-	Manney Ma		1600	1500-1745	Claystone, silty, sandy, bluish- to greenish-gray interbeds of silt, sand, and fine gravel; mor sand toward bottom; carbonaceous materia mollusk shells, crab remains; diatomaceou above 1641 ft	
23L-252 —	-	Monthe		1800	1745-1818	Sand, silty, clayey, bluish-gray; claystone interbed containing mollusk shells and fish remains	
23L-253· —	59CAL410 	J. W.			1818-1900	Claystone, sandy, silty, bluish-gray; sand inte beds containing mollusk shells, fish scales an teeth, carbonaceous material	
	-	I Marak Marakan	M. M. M.	- 2000	1900-2200	Sand, slightly clayey, some gravel, fine to coarse greenish-gray; carbonaceous material, she fragments	
	— 59CAL419	}	}	2200			

F. CORE HOLE 24/26-36A2, TULARE-WASCO AREA



G. CORE HOLE 6S/2W-24C7, SANTA CLARA VALLEY

SAMPLE		SPONTANEOUS RESISTIVITY POTENTIAL		GRAPHIC	0	GENERALIZED LITHOLOGIC DESCRIPTION		
I.S. Bur. of	U.S. Geol. Survey	5 millivolts	Ohms m ² /m AM=16 in.	FEET		(From core descriptions, drilling performance, and electric logs)		
Sciamation	Guivey	0		00000	0-70	Clay and silt		
				00 0 00	70-75	Clay, gravelly and sandy, greenish-gray to yellow ish-brown; wood at 73 ft		
		Man	· ·		75–148	Gravel, sandy and clayey		
	— 60CAL70	Month	,	200	148-214	Clay and silt, sandy, greenish-gray to olive-brown gravel at 172–174 ft		
23L-271 —		E A			214-246	Clay, silty and sandy, greenish-gray to yellowish brown; plant remains at 230-231 ft, gravel a 240-241 ft		
		The state of the s		000000000000000000000000000000000000000	246-290	Gravel, sandy and clayey; rock fragments as larg as 3 in.		
23L-272 —		1		0 -0	290-303 303-326	Clay, silty, sandy, and gravelly, light-olive-gray Sand, clayey and gravelly, moderate-brown to dark yellowish-brown		
3L-273 —		Www		0-0	326-390	Clay, silty, sandy, and gravelly, greenish-gray to olive-gray, calcareous		
		£ 1	3	400	390-426	Sand and gravel, calcareous. Sand is pale olive yellowish-brown		
3L-275 —	- 60CAL80	3		· :	426-438	Clay and silt, sandy, yellowish-brown calcareous		
		3	}	0.0.0 -0-0- 0-0 -0-0	438-473	Gravel, sandy and silty, moderate-brown		
077		2	5		473-512	Silt and clay, sandy, grayish-red to moderate-olive brown; carbonaceous, calcareous		
23L-277 —		Z-35	7	0000	512-528	Gravel; rock fragments as large as 2.5 in.		
23L-279 —		Myray	, 52		528-583	Silt and clay, sandy, bluish-gray to yellowisl brown, calcareous; carbonaceous at 530-531 f gravel at 546-550 ft		
		MMINNMAM		600	583-670	Cemented gravel, gravel, and sand		
3L-280 —		A STATE OF THE STA	The state of the s		670-706	Silt, clayey, sandy, and gravelly, olive-brown to yellowish-brown, calcareous		
		*	5	89	706-722	Clay and gravel, yellowish-brown		
		}	3		722-748	Silt, clayey and sandy, yellowish-brown		
	— 60CAL90	a Naman	}	0.0.0	748-785	Gravel, sandy and silty; silt at 756-759 ft		
23L-282 —		M	5	800	785-817	Silt and clay, sandy and gravelly, dark-bluish-grato yellowish-brown		
31 - 393		3	}	-0-0	817-834	Gravel and sand, silty and clayey		
23L-283 —		3	5	-::=	834-855	Silt and sand, clayey and gravelly, olive-gray to olive-brown		
		3	>	2000	855-865	Gravel		
		2	2		865-897	Silt and clay		
	-	My	?	0.00	897-929	Gravel and sand, green to yellowish-brown; roof fragments as large as 2 in.; silt at 903-906 ft		
23L-284 —	— 60CAL96	May May My May			929-973	or gravelly sand at 964-967 ft		
		5	,		973-981	Sand		
		3	5	1000 = =-	981-1000	Silt and clay		

H. CORE HOLE 7S/1E-16C6, SANTA CLARA VALLEY