UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Ground Water Branch

AQUIFER-TEST COMPILATION FOR THE SAN JOAQUIN VALLEY, CALIFORNIA

By

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Prepared in cooperation with the
California Department of Water Resources

OPEN-FILE DATA REPORT

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CONTENTS

ILLUSTRATIONS

1. Tests analyzed but not included in this compilation because the results were not considered valid.

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PURPOSE AND SCOPE OF THIS REPORT

This report is the first of a series the purpose of which is to make available in standard tabular form the results of aquifer tests that have been made by various private and public agencies in California. The scope of the compilation is to describe systematically, in a form agreed upon by the California Department of Water Resources and the Geological Survey, the (1) test location, (2) pumping data, (3) well data, and (4) summary of results. The results of these tests sometimes have been published but most frequently have been used only as a step in obtaining other information, consequently the results and even the location of aquifer tests have not been readily available.

This report has been prepared by the Geological Survey under the immediate supervision of Fred Kunkel, district geologist for California, in cooperation with the California Department of Water Resources, and tabulates through October 1962 all tests analyzed by the Geological Survey for the San Joaquin Valley. The report is designed to be expanded when additional tests are analyzed or new tests are made.

DESCRIPTION OF AQUIFER-TEST COMPILATION FORM

Location

Well number.--The test is identified by the number assigned to the pumped well by the California Department of Water Resources and the Geological Survey. The well-numbering system identifies wells according to the rectangular system for the subdivision of public land. That part of the number preceding the slash (as in 19S/18E-35E1) indicates the township (T. 19 S.); the number following the slash is the range (R. 18 E.); the digit following the hyphen is the section (sec. 35); and the letter following the section number indicates the 40-acre subdivision of the section according to the accompanying diagram.

D	C	B	A
E	F	G	H
M	L	K	J
N	P	Q	R

Within each 40-acre tract the wells are numbered serially, as indicated by the final digit. Following the well number, the appropriate base and meridian are indicated as follows: H - Humboldt; M - Mt. Diablo; S - San Bernardino.

Quadrangle.--The name of the U.S. Geological Survey map covering the area of the test with scale and date of issue is given.

Location.--The site of the test is identified by street names, streams and rivers, cities and county. In some cases, the landowner's name or name of tenant is included. The site of each test is shown on figure 1.

Ground-water basin.--The ground-water basin in which the test was run is identified by name and number of basin and subbasin as assigned by the California Department of Water Resources.

Geologic formation.--Where sufficient data are available geologic formation, formation members, and named aquifers are identified.

Date of test.--The date given is the date at the start of test followed by duration of pumping in minutes, or hours as indicated.

Agency conducting test.--The agency, subdivision of agency, and person in charge of field test are identified.

Source of test data.--The physical location of the basic data and name of office or published report containing data or results of test are given.

Pumping Data

Pump type, power source and rating.--Name of manufacturer of pump, power source, and rating of pump are given.

Use.--Identified as: domestic; irrigation; minicipal; industrial; injection or recharge; drainage; domestic and irrigation; test, monitor or measurement; stock; unused; or unknown.

Discharge.--Pumped well discharge in gallons per minute during the test.

Maximum drawdown.--Total maximum drawdown in feet after "X" minutes of pumping.

Other data.--All conditions which might affect the accuracy of the test, such as: changes in the pumping rates, changes in methods of measuring discharge, influence by other pumping wells, barometric or recharge effects, or other pertinent items.

Well Data

Well number.--The pumped well is shown on the first line, with observation wells shown on subsequent lines.

Depth.--Total depth in feet.

Perforations.--Depth intervals in feet, if known.

r.--Distance from pumped well to observation well in feet.

Log.--Types of logs, i.e., driller's, electric, etc.

Analysis.--Availability of chemical analysis of well water indicated by "yes," or "no."

Water-level measurements.--The availability of water-level measurements prior or subsequent to the test is indicated as "yes," or "no."

Other data and remarks.--Physical factors which might affect test results and other information not included in the data table.

Summary

Purpose of test.--Purpose as related to determination of aquifer coefficients, ground-water movement, storage capacity, underflow conditions, foundation design, and related items.

Aquifer thickness.--Thickness in feet.

Aquifer saturated thickness.--Thickness in feet.

Specific capacity.--Rate of yield of the well in gallons per minute per foot of drawdown.

U.S. Geological Survey formation yield factor.--

$$\text{Formation yield factor} = \frac{\text{Specific capacity} \times 100}{\text{Aquifer saturated thickness}}$$

Method of analysis.--Indicates solution utilized such as: Theis nonequilibrium type-curve; Cooper-Jacob straight-line plot; Chow point method; Slug test; etc.

Coefficient of transmissibility.--Expressed as the rate of flow of water, in gallons per day, at the prevailing water temperature through each vertical strip of the aquifer one foot wide, having a height equal to the saturated thickness of the aquifer and under a unit hydraulic gradient.

Coefficient of permeability.--Expressed as the rate of flow of water in gallons per day through a cross section of one square foot under a unit hydraulic gradient.

Coefficient of storage.--The volume of water released from storage in each vertical column of the aquifer having a base of one foot square when the water table or other piezometric surface declines one foot. This is approximately equal to the specific yield for nonartesian aquifers.

Test evaluation.--Indicates overall validity of test, i.e., excellent, good, fair, or poor, along with summary of reasons. In general poor tests are all tests for which the pumping cycle was 100 minutes or less, or tests in which the response of observation wells was poor. A poor test does not imply poor field technique. Fair tests are tests for which the pumping cycle was 100 to 500 minutes and test results are judged better than poor. All tests involving a pumped well only are graded poor or fair unless the pumped-well data are exceptionally detailed, accurate, and involves both the drawdown and recovery cycle. Good tests are tests for which the pumping cycle was 500 minutes or more and pumped-well data supported by observation well data, or excellent pumped-well data as referred to above. Excellent tests are tests for which the pumping cycle was 500 minutes or more with two or more observation wells properly spaced, detailed and accurate pumped-well data, and results of wells support each other.

It is not uncommon for an aquifer test to yield results that are not considered valid. As with poor tests, the failure of the test does not necessarily imply poor field technique. For example a pump motor may fail, the well may be sluggish, nearby pumping or barometric changes may be so great as to destroy the validity of the test, or subsequent analysis may show geologic conditions that preclude a valid analysis. However, in order that the record may be complete the sites of these tests are shown in the table of contents but results are not given in the compilation.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 19S/18E-35E1 M Quadrangle Westhaven, 7.5 min., 1956

Location About ½ mile north of Westhaven, Kings County

Ground Water Basin San Joaquin Valley, Mendota-Huron area, 5-22.47

Geologic Formation Tulare Formation beneath the Corcoran Clay Member

Date of Test June 10, 1954 24 hr. Agency Conducting Test USGS, G. H. Davis

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Peerless, electric motor, 200 hp

Use Irrigation Discharge 1413 gpm Maximum Drawdown - ft. after - min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
19/18-35E1	2117	699-2117	-	Drillers	no	no	no	no
19/18-24N1	2114	700-2114	8800	Drillers	no	yes	no	yes
19/18-26E2	2002	705-2002	4225	Electric Drillers	no	yes	no	yes
19/18-27M1	2105	730-2105	6450	Drillers	no	yes	no	yes
19/18-36N1	2110	726-2110	6300	Drillers	yes	yes	no	yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks

SUMMARY
Purpose of Test Determination of aquifer coefficients

Aquifer Thickness Approx. 1400 ft Aquifer Saturated Thickness

Specific Capacity - USGS Formation Yield Factor -

Method of Analysis Theis nonequilibrium formula

Coefficient of Transmissibility 100,000-150,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Poor, observation wells too far from pumped well, other wells pumping.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 20S/19E-25Q1 M Quadrangle Stratford, 7.5 min., 1954

Location Approx. 3 miles southwest of Stratford, Kings County

Ground Water Basin San Joaquin Valley, Mendota-Huron area, 5-22.47

Geologic Formation Tulare Formation beneath the Corcoran Clay Member

Date of Test Nov. 15, 1961 250 min. Agency Conducting Test USGS, E. J. McClelland

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Peerless, electric motor, 150 hp approx.1/

Use Irrigation Discharge 1500 gpm Maximum Drawdown 16.84 ft. after 250 min.

Other data 1. Well pumps sand and gas.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
20/19-25Q1	2023	1018-2023	-	-	no	yes	yes	yes
20/19-25J1	630	510-630	1600	-	yes	yes2/	no	no
20/19-36C1	2211	1000-2211	2625	Electric	no	yes2/	no	yes
20/20-31D1	2008	1004-2008	1850	-	yes	yes	yes	yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 2. No measurable response, measurements discontinued after 3 hours.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 1000 ft Aquifer Saturated Thickness Approx. 1000 ft

Specific Capacity 89 USGS Formation Yield Factor 8.9

Method of Analysis Modified Theis, Theis recovery, Hantush leaky aquifer

Coefficient of Transmissibility 70,000 gpd/ft3/ Permeability 70 gpd/ft3/ Coefficient of Storage 0.0003

Test Evaluation Fair, test too short, poor observation well spacing.

3. Average value.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 20S/22E-10H2 M Quadrangle Waukena, 7.5 min., 1954

Location About 7½ miles north of Corcoran, Kings County

Ground Water Basin San Joaquin Valley, Corcoran Irrigation District, 5-22.46

Geologic Formation Tulare Formation beneath the Corcoran Clay Member

Date of Test Jan. 6, 1961 309 min. Agency Conducting Test Corcoran Irrigation District and USGS, E. J. McClelland

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Climax diesel engine

Use Irrigation Discharge 800 gpm Maximum Drawdown _____ ft. after _____ min.

Other data _____

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
20/22-10H2	1384	600-1384	-	Electric	Yes	No	Yes	Yes
20/22-10H1	350	12-350	904	-	No	Yes	No	Yes
20/22-10J2	1600	300-1600	1066	-	No	Yes	Yes	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks An extensive clay is found about 450 ft below land surface in this locality, consequently neither observation well reflects water levels in the pumped aquifer.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 800 ft. Aquifer Saturated Thickness _____

Specific Capacity _____ USGS Formation Yield Factor _____

Method of Analysis Theis recovery

Coefficient of Transmissibility 26,000 gpd/ft[1/] Permeability _____ Coefficient of Storage _____

Test Evaluation Fair, observation well data not usable.

1. Pumped well recovery. 13

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 23S/25E-17Q2 M Quadrangle Pixley, 7.5 min., 1954

Location Three miles south of Pixley, Tulare County

Ground Water Basin San Joaquin Valley, Pixley Irrigation District, 5-22.33

Geologic Formation

Date of Test Feb. 15, 1961 Total time 144 hr Agency Conducting Test USGS, F. S. Riley

Source of Test Data USGS (GW) Sacramento. This test in conjunction with tiltmeter test.

PUMPING DATA
Pump Type, Power Source and Rating Peerless, electric motor, 75 hp

Use Irrigation Discharge 1150 gpm[1/] Maximum Drawdown - ft. after - min.

Other data 1. 23/25-17R1 pumping 825 gpm during last 84 hrs of test.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
23/25-17Q2	600		-	-	no	no	yes	yes
23/25-17Q1	578		415	-	yes	yes	yes	yes
23/25-17R		280-603	1400	-	no	yes	yes	yes
23/25-16N3	430	360-420	1450	Drillers	no	yes	yes	yes[2/]

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 2. -16N3 equipped with water-level recorder and subsidence recorder.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Aquifer Saturated Thickness

Specific Capacity - USGS Formation Yield Factor -

Method of Analysis Theis recovery, Hantush modified leaky aquifer.

Coefficient of Transmissibility Approx. 15,000gpd/ft Permeability Coefficient of Storage Approx. 10^{-5}

Test Evaluation Good, pumped well drawdown data not taken.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 24S/22E-28A2 M Quadrangle Hacienda Ranch, 7.5 min., 1954

Location La Hacienda Ranch in Kings County, about 8 miles southwest of Alpaugh.

Ground Water Basin San Joaquin Valley, Tulare Lake-Lost Hills area, 5-22.45

Geologic Formation Tulare Formation beneath the Corcoran Clay Member

Date of Test May 4, 1960 24 hr Agency Conducting Test USGS, F. S. Riley

Source of Test Data USGS (GW) Sacramento. This test in conjunction with tiltmeter test.

PUMPING DATA
Pump Type, Power Source and Rating 1/, electric motor, 40 hp

Use Irrigation Discharge Approx. 750 gpm Maximum Drawdown 45 ft. after 1428 min.

Other data 1. Turbine-type pump, make not known.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
24/22-28A2	1028	575-947	-	Drillers	no	no	yes	yes
24/22-27D1	1042	626-966	1650	Drillers	yes	yes	no	yes
24/22-27D2	1001	830-905	709	Drillers	no	yes	yes	yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 375 ft. Aquifer Saturated Thickness Approx 375 ft.

Specific Capacity 16.6 USGS Formation Yield Factor 4.5

Method of Analysis Theis nonequilibrium, Theis recovery

Coefficient of Transmissibility 45,000-65,000 gpd/ft Permeability Coefficient of Storage 0.0005

Test Evaluation Fair, poor early data, leaky aquifer conditions.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 24S/25E-36J1 M Quadrangle Delano East, 7.5 min., 1953

Location Schenley Ranch, about 2 miles northeast of Delano, Tulare County

Ground Water Basin San Joaquin Valley, Delano-Earlimart Irrigation District 5-22.35

Geologic Formation

Date of Test Feb. 19, 1961 Total time 144 hr Agency Conducting Test USGS, F. S. Riley

Source of Test Data USGS (GW) Sacramento. This test in conjunction with tiltmeter test.

PUMPING DATA
Pump Type, Power Source and Rating Layne Bowler, electric motor, 100 hp

Use Irrigation Discharge 990 gpm Maximum Drawdown 79.4 ft. after 1545 min.

Other data Pump was started and stopped several times. Measurements made on one drawdown and two recovery cycles.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
24/25-36J1	1398	437-1398	-	Drillers	Yes	Yes	Yes	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks Potential observation wells 24/26-31L2 (r = 3000 ft), 25/26-6D1 (r = 2300 ft) and 25/26-6G1 (r = 4100 ft) did not respond to pumping by 24/25-36J1.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 960 ft Aquifer Saturated Thickness Approx. 960 ft

Specific Capacity 12.5 USGS Formation Yield Factor 1.3

Method of Analysis Modified Theis, Theis recovery

Coefficient of Transmissibility 15,000 gpd/ft Permeability Coefficient of Storage -

Test Evaluation Good, data excellent but limited to pumped well.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 26S/24E-4H1 M[1/] Quadrangle Wasco NW, 7.5 min., 1953

Location Approx. 9 miles west of McFarland, Kern County

Ground Water Basin San Joaquin Valley, Semitropic Water Storage District, 5-22.4

Geologic Formation

Date of Test Mar. 26, 1958 165 min Agency Conducting Test Kern County Land Co.

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating

Use Irrigation Discharge 1960 gpm Maximum Drawdown 4.1 ft. after 165 min.

Other data 1. Observation well number, pumped well identified as Kern County Land Co. No. 2C4-4.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
KCL 2C4-4								
26/24-4H1	502	148-502[2/]	152	Drillers	Yes	Yes	Yes	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 2. Compression break at 271 ft, and at 385 ft, casing collapse from 342 ft to 344 ft and at 479 ft.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 350 ft Aquifer Saturated Thickness

Specific Capacity 480 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium

Coefficient of Transmissibility Average 350,000 gpd/ft Permeability Coefficient of Storage 2×10^{-3}

Test Evaluation Poor, insufficient data.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 26S/25E-26N1 M Quadrangle Pond, 7.5 min., 1953

Location Approx. 4 miles southwest of McFarland, Kern County

Ground Water Basin San Joaquin Valley, North Kern Water Storage District, 5-22.37

Geologic Formation

Date of Test March 12 and 18, 1958 Agency Conducting Test Kern County Land Co. and USGS (GW)

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Johnson, electric motor, 150 hp

Use Irrigation Discharge 1/ Maximum Drawdown 45.3 ft. after 90 2/ min.

Other data Total pumping time 135 min. March 12, 1958, 105 min. March 18, 1958.

1. 2190 gpm March 12, 1958, 2345 gpm March 18, 1958. 2. March 18, 1958.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
26/25-26N1	813	340-800		Driller	yes	yes	yes	yes 3/
26/25-27J1	806	340-800	1459	Driller	yes	yes	yes	no 3,4/
26/25-35B1	808	348-804	3056	Driller	yes	yes	yes	no 4/
26/25-35E1	834	340-796	2955	Driller	yes	yes	yes	no 3/

r* = distance from pumped well to observation well in feet.

Other Data and Remarks No pre-test data available. 3. Water-level measurements, Mar. 12, 1958. 4. Water-level measurements, March 18, 1958. 26/25-26N1 = KCL 2D26-1

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 460 ft. Aquifer Saturated Thickness

Specific Capacity 52 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, modified Theis

Coefficient of Transmissibility 125,000-350,000 gpd/ft Permeability Coefficient of Storage 0.0004-0.001

Test Evaluation Poor, test too short, leaky aquifer conditions.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 27S/24E-35K1 M Quadrangle Wasco, 7.5 min., 1953

Location Approx. 4 miles south of Wasco, Kern County

Ground Water Basin San Joaquin Valley, North Kern Water Storage District, 5-22.37

Geologic Formation

Date of Test Apr. 9, 1958 90 min. Agency Conducting Test Kern County Land Co. and USGS

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 100 hp

Use Irrigation Discharge 1900 gpm Maximum Drawdown 10.0 ft. after 90 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
27/24-35K1	590	270-558	-	Drillers	Yes			Yes
27/24-35J1	357	100-357	1412	-	Yes	Yes	Yes	Yes
27/24-35C1	704	200-688	1906	Drillers	No	Yes	Yes	

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 27/24-35K1 = KCL 3C35-3

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 300 ft Aquifer Saturated Thickness

Specific Capacity 190 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, modified Theis

Coefficient of Transmissibility 230,000-460,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Poor, too short, leaky aquifer conditions.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 27S/25E-3J2 M Quadrangle Wasco, 7.5 min., 1953

Location At Poso Ranch, approx. 3 miles west of Famoso, Kern County

Ground Water Basin San Joaquin Valley, North Kern Water Storage District, 5-22.37

Geologic Formation

Date of Test Mar. 21, 1958 120 min. Agency Conducting Test Kern County Land Co. and USGS (GW) Clayborn and LeBlanc

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 150 hp

Use Irrigation Discharge 2105 gpm Maximum Drawdown 25.3 ft. after 120 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
27/25-3J2	832	260-816	-	Driller	yes	yes	yes	yes
27/25-3J1	304	197-300	841	Driller	yes	yes	yes	yes
27/25-3H1	810	362-805	1818	Driller	yes	yes	yes	no

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 27/25-3J2 = KCL 3D3-3

SUMMARY
Purpose of Test Determination of aquifer coefficients

Aquifer Thickness Approx. 550 ft. Aquifer Saturated Thickness

Specific Capacity 83.5 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, modified Theis

Coefficient of Transmissibility 150,000-250,000 gpd/ft 1/ Permeability Coefficient of Storage 0.001

Test Evaluation Poor.

1. 150,000 gpd/ft well -3J2, 250,000 gpd/ft well -3H1.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 27S/26E-30F1 M Quadrangle Famoso, 7.5 min., 1953

Location Approx. 3½ miles south of Famoso, Kern County

Ground Water Basin San Joaquin Valley, North Kern Water Storage District, 5-22.37

Geologic Formation

Date of Test Mar. 24, 1958 90 min Agency Conducting Test Kern County Land Co.

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Peerless, electric motor, 150 hp

Use Irrigation Discharge 1928 gpm Maximum Drawdown 19 ft. after 90 min.

Other data Drawdown in pumped well reached equilibrium 30 min. after pumping started.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
27/26-30F1	700	292-700	-	-	Yes	Yes	Yes	No
27/26-30L1	650	198-650	1230	Driller	No	Yes	Yes	No
27/26-30C1	866	300-854	2088	Driller	Yes	Yes	Yes	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks No pre-test measurements available. -30L1 measured by air line. 27/26-30F1 = KCL 3E30-7

SUMMARY
Purpose of Test Determination of aquifer coefficients, Terra Bella-Lost Hills area investigation.

Aquifer Thickness Approx. 400 ft Aquifer Saturated Thickness

Specific Capacity Approx. 100 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, modified Theis, Theis recovery

Coefficient of Transmissibility 250,000-470,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Poor, test too short, leaky aquifer conditions.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 27S/26E-32G1 M Quadrangle Famoso, 7.5 min., 1953

Location About 4 miles south of Famoso, Kern County

Ground Water Basin San Joaquin Valley, North Kern Water Storage District, 5-22.37

Geologic Formation

Date of Test June 5, 1958 115 min Agency Conducting Test Kern County Land Co., and USGS

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 150 hp

Use Irrigation Discharge 1640 gpm Maximum Drawdown ____ ft. after ____ min.

Other data Well pumped for 115 min.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
27/26-32G1	780	220-765	-	Drillers	Yes	No	Yes	Yes
27/26-32E1	640	210-592	2150	Drillers	Yes	Yes	No	Yes
27/26-32K1	1/		750	-	No	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 1. Probably much different depth zone than pumped well, data does not correlate with other wells.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 550 ft. Aquifer Saturated Thickness

Specific Capacity USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, Theis recovery

Coefficient of Transmissibility 260,000-450,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Poor, test too short, leaky aquifer conditions.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 28S/22E-15N3 M Quadrangle Lokern, 7.5 min., 1954

Location Houchin Ranch 11, about 9 miles northwest of Buttonwillow, Kern County

Ground Water Basin San Joaquin Valley, Buena Vista Water Storage District, 5-22.42

Geologic Formation

Date of Test Dec. 14, 1960 286 min Agency Conducting Test B.V.W.S.D. and USGS E. J. McClelland

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Johnson, electric motor, 75 hp

Use Irrigation Discharge 2140 gpm Maximum Drawdown 70 ft. after 280 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
28/22-15N3	600	204-600	-	Drillers	Yes	No	Yes	Yes
28/22-15N2	800	180-800	659	-	Yes	Yes	Yes	Yes
28/22-22D1	700	336-642	666	Electric Drillers	Yes	Yes	Yes	Yes
28/22-22D2	315		608	-	No	Yes	Yes	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks

SUMMARY
Purpose of Test Determination of aquifer coefficients

Aquifer Thickness Aquifer Saturated Thickness

Specific Capacity 30.6 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, Theis recovery

Coefficient of Transmissibility 100,000-350,000 gpd/ft Permeability Coefficient of Storage

Test Evaluation Poor, geologic setting not valid for testing.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 29S/26E-4D1 M Quadrangle Rosedale, 7.5 min., 1954

Location Approx. 6 miles southeast of Shafter, Kern County

Ground Water Basin San Joaquin Valley, Semitropic Water Storage District, 5-22.43.

Geologic Formation

Date of Test Apr. 2, 1958 126 min Agency Conducting Test Kern County Land Co.

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 75 hp

Use Irrigation Discharge 1826 gpm Maximum Drawdown 19.8 ft. after 50 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
29/26-4D1	527	165-527	-	Driller	Yes	Yes	Yes	Yes
29/26-4L1	526	172-526	1700	Driller	Yes	Yes	Yes	No
29/26-5J1	510		1900	Driller	No	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 29/26-4D1 = KCL 5E4-2

SUMMARY
Purpose of Test Determination of aquifer coefficients

Aquifer Thickness Approx. 350 ft Aquifer Saturated Thickness

Specific Capacity 92.3 USGS Formation Yield Factor

Method of Analysis Theis-nonequilibrium, modified Theis, Hantush modified leaky aquifer.

Coefficient of Transmissibility 160,000 460,000 gpd/ft 1/ Permeability Coefficient of Storage 0.0005

Test Evaluation Fair, too short.

1. Leaky aquifer analysis indicates T = 200,000 gpd/ft.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 30S/23E-1C2 M Quadrangle East Elk Hills, 7.5 min., 1954

Location Davini Ranch, about 3½ miles south of Buttonwillow, Kern County

Ground Water Basin San Joaquin Valley, Buena Vista Water Storage District, 5-22.42

Geologic Formation

Date of Test Dec. 13, 1960 302 min Agency Conducting Test B.V.W.S. and USGS E. J. McClelland

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Peerless, electric motor, 75 hp

Use Irrigation Discharge 1840 gpm Maximum Drawdown 18.8 ft. after 246 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
30/23-1C2	192		-	-	Yes	No	Yes	Yes
30/23-1C1 1/	195		310	Drillers	No	Yes	Yes	Yes
30/23-1C3 2/	305		350	-	Yes	Yes	Yes	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 1. Domestic well with pressure system, pumped intermittently during test. 2. Recorder, erratic fluctuations due in part to frogs in well.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Aquifer Saturated Thickness

Specific Capacity 98.4 USGS Formation Yield Factor

Method of Analysis Theis recovery

Coefficient of Transmissibility 235,000 gpd/ft 3/ Permeability Coefficient of Storage

Test Evaluation Poor

3. Pumped well recovery. 25

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 30S/25E-3Q1 M Quadrangle Tupman, 7.5 min., 1954

Location About 16 miles west of Bakersfield, Kern County

Ground Water Basin San Joaquin Valley, Kern River Delta area, 5-22.40

Geologic Formation

Date of Test Mar. 24, 1960 269 min Agency Conducting Test USGS, R. H. Dale

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 100 hp

Use Irrigation Discharge 2350 gpm Maximum Drawdown - ft. after - min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
30/25-3Q1		119-702	-	-			Yes	No
30/25-3L1	716	119-702	1760	Drillers	Yes	Yes	Yes	No
30/25-10A1	711	119-700	1820	Drillers	Yes	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 30/25-3Q1 = KCL 6D3-3

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 580 ft Aquifer Saturated Thickness

Specific Capacity USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, Theis recovery

Coefficient of Transmissibility 150,000-400,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Poor, interference from other wells pumping.

GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 30S/25E-28C3 M Quadrangle Tupman, 7.5 min., 1954

Location About 17 miles west of Bakersfield and 2 miles north of Highway 399, Kern County.

Ground Water Basin San Joaquin Valley, Kern River Delta area, 5-22.40

Geologic Formation

Date of Test Dec. 10, 1959 285 min Agency Conducting Test Western Water Co., USGS, and DWR, J. Poole

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Layne Bowler, electric motor, 75 hp

Use Irrigation Discharge 3100 gpm Maximum Drawdown 21.0 ft. after 280 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
30/25-28C3	675	71-617	-	Drillers	Yes	Yes	Yes	Yes
30/25-28C1	250	120-250	900	Drillers	Yes	Yes	Yes	Yes
30/25-21L2	452	105-429	1700	Drillers	No	Yes	Yes	Yes
30/25-21L4	390	90-369	2400	Drillers	Yes	Yes	Yes	Yes
30/25-21P3	272	80-249	888	Drillers	Yes	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 30/25-28C3 = Western Water Co. 7

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 530 ft. Aquifer Saturated Thickness

Specific Capacity 147 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, modified Theis, Theis recovery

Coefficient of Transmissibility 200,000-300,000 gpd/ft Permeability Coefficient of Storage 0.001-0.002

Test Evaluation Fair, evidence of interference and/or leaky aquifer conditions.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 30S/26E-26G1 M Quadrangle Stevens, 7.5 min., 1954

Location About 10⅔ miles southwest of Bakersfield, Kern County

Ground Water Basin San Joaquin Valley, Kern River Delta Area, 5-22.40

Geologic Formation

Date of Test Mar. 20, 1958 90 min Agency Conducting Test Kern County Land Co.

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 75 hp

Use Irrigation Discharge 2510 gpm Maximum Drawdown 12.3 ft. after 70 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
30/26-26G1	708	101-701	-	Drillers	Yes	Yes	No	No
30/26-26J1	700	102-700	1890	Drillers	Yes	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 30/26-26G1 = KCL 6E26-4

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 600 ft. Aquifer Saturated Thickness

Specific Capacity 204 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, modified Theis

Coefficient of Transmissibility 360,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Poor, too short, other wells pumping during test.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 30S/26E-35K1 M Quadrangle Stevens, 7.5 min., 1954

Location 11 miles southwest of Bakersfield, Kern County

Ground Water Basin San Joaquin Valley, Kern River Delta Area, 5-22.40

Geologic Formation

Date of Test Dec. 8, 1959 300 min Agency Conducting Test Kern County Land Co., USGS, and DWR, H. D. Wilson, Jr.

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 100 hp

Use Irrigation Discharge 4970 gpm Maximum Drawdown - ft. after - min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
30/26-35K1	700	100-700	-	Drillers	Yes	No	Yes	Yes
30/26-35B1	710	100-700	2625	Drillers	Yes	Yes	Yes	Yes
30/26-34J1	707	100-700	3675	Drillers	Yes	Yes	Yes	Yes
31/26- 2A1	640	240-640	3175	Electric Drillers	No	Yes	Yes	Yes 1/
31/26- 3A1	600	200-600	4650	Electric Drillers	No	Yes	Yes	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 30/26-35K1 = KCL 6E35-1

1. Water-level recorder installed for this test.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 600 ft. Aquifer Saturated Thickness

Specific Capacity USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, Theis recovery

Coefficient of Transmissibility 322,000-490,000 gpd/ft 2/ Permeability Coefficient of Storage 0.002

Test Evaluation Fair, local interference from other wells pumping.

2. Composite indicates 490,000 gpd/ft.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 31S/26E-31A1 M Quadrangle Millux, 7.5 min., 1954

Location Approx. 18 miles southwest of Bakersfield, Kern County

Ground Water Basin San Joaquin Valley, Kern River Delta area, 5-22.40

Geologic Formation

Date of Test Dec. 16, 1957 25 hr Agency Conducting Test Kern County Land Co., USGS, P. R. Wood

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Layne Bowler, electric motor, 75 hp

Use Irrigation Discharge 1750 gpm Maximum Drawdown 78.9 ft. after 1524 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
31/26-31A1	410	108-398	-	Drillers	Yes	Yes	Yes	Yes
31/26-32C1	410	120-410	2092	Drillers	Yes	Yes	Yes	Yes
31/26-32E1	413	138-413	1259	Drillers	Yes	Yes	Yes	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 31/26-31A1 = KCL 7E31-3

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 300 ft Aquifer Saturated Thickness

Specific Capacity 22 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium

Coefficient of Transmissibility 50,000-105,000 gpd/ft Permeability Coefficient of Storage

Test Evaluation Fair, interference due to other wells pumping.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 31S/28E-31N1 M Quadrangle Conner, 7.5 min., 1954

Location Approx. 14 miles south of Bakersfield, Kern County

Ground Water Basin San Joaquin Valley, Kern River Delta Area, 5-22.40

Geologic Formation

Date of Test Mar. 19, 1958 105 min. Agency Conducting Test Kern County Land Co., and USGS (GW)

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 100 hp

Use Irrigation Discharge 2660 gpm Maximum Drawdown 75.7 ft. after 95 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
31/28-31N1	815	198-798	-	Drillers	Yes	Yes	No	Yes
31/28-31M1	815	186-810	2100	Drillers	Yes	Yes	No	No
32/28- 6C1	1070	192-1065	2400	-	No	Yes	No	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 31/28-31N1 = KCL 7G31-3

SUMMARY
Purpose of Test Determination of aquifer coefficients,

Aquifer Thickness Approx 600 ft. Aquifer Saturated Thickness

Specific Capacity 35.2 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium

Coefficient of Transmissibility 64,000-290,000 gpd/ft Permeability Coefficient of Storage 0.002

Test Evaluation Poor, too short, possible interference and/or leaky aquifer conditions.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 31S/30E-20J1 M Quadrangle Arvin, 7.5 min., 1955

Location Angus Ranch, about 3 miles east of Arvin, Kern County

Ground Water Basin San Joaquin Valley, Edison-Maricopa area, 5-22.41

Geologic Formation

Date of Test Nov. 7, 1957 318 min Agency Conducting Test USGS, P. R. Wood

Source of Test Data USGS (GW) Sacramento NOTE: See test using pumped well 31/30-20R1.

PUMPING DATA
Pump Type, Power Source and Rating LeRoi, Diesel engine

Use Irrigation Discharge 1300 gpm Maximum Drawdown ft. after min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
31/30-20J1	1011		-	Drillers Electric	Yes	No	No	No
31/30-20R2	800		1200	Drillers	Yes	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Aquifer Saturated Thickness

Specific Capacity USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium

Coefficient of Transmissibility 300,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Fair, interrupted pumping early in test.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 31S/30E-20R1 M Quadrangle Arvin, 7.5 min., 1955

Location Angus Ranch, about 3 miles east of Arvin, Kern County

Ground Water Basin San Joaquin Valley, Edison-Maricopa area, 5-22.41

Geologic Formation

Date of Test Nov. 8, 1957 151 min Agency Conducting Test USGS, P. R. Wood

Source of Test Data USGS (GW) Sacramento NOTE: See test using pumped well 31/30-20J1.

PUMPING DATA
Pump Type, Power Source and Rating Peerless, electric motor, 200 hp

Use Irrigation Discharge 1700 gpm Maximum Drawdown ft. after min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
31/30-20R1	800	348-800	-	Drillers	No	No	No	No
31/30-20R2	800		1680	Drillers	Yes	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 450 ft Aquifer Saturated Thickness

Specific Capacity USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium

Coefficient of Transmissibility 300,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Fair, timing errors in data.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 32S/25E-30E1 M Quadrangle Pentland, 7.5 min., 1953

Location About 7 miles southeast of Taft, Kern County

Ground Water Basin San Joaquin Valley, Edison-Maricopa area, 5-22.41

Geologic Formation

Date of Test Nov. 28, 1957 8130 min Agency Conducting Test USGS, P. R. Wood

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Layne Bowler, electric motor, 150 hp

Use Irrigation Discharge 900 gpm Maximum Drawdown 41.30 ft. after 8130 min.

Other data No access for water-level measurements in pumped well.

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
32/25-30E1	726		-	-	Yes	No	No	No
32/25-30M1 [1/]	1500	350-1100	407	Drillers	Yes	Yes	No	Yes

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 1. Abandoned oil well 4093 ft deep cemented off at 1500 ft. Water-level measurements from Stevens F recorder chart.

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Aquifer Saturated Thickness

Specific Capacity 24.2 USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, modified Theis

Coefficient of Transmissibility 15,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Poor, interference by outside pumping, partial penetration.

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 32S/26E-2F1 M Quadrangle Millux, 7.5 min., 1954

Location Approx. 16½ miles southwest of Bakersfield, Kern County.

Ground Water Basin San Joaquin Valley, Kern River Delta Area, 5-22.40

Geologic Formation

Date of Test May 16, 1958 100 min. Agency Conducting Test Kern County Land Co., and USGS (GW)

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 75 hp

Use Irrigation Discharge 2640 gpm Maximum Drawdown _____ ft. after _____ min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
32/26-2F1	875	277-850	-	-	No	No	Yes	No
32/26-2L1	704	231-700	1390	Driller	Yes	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 32/26-2F1 = KCL 8E2-4

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 575 ft Aquifer Saturated Thickness

Specific Capacity USGS Formation Yield Factor

Method of Analysis Theis nonequilibrium, Tehis recovery

Coefficient of Transmissibility 56,000-200,000 gpd/ft Permeability Coefficient of Storage 0.001

Test Evaluation Poor, too short, inefficient wells and/or leaky aquifer conditions

U.S. GEOLOGICAL SURVEY
GROUND WATER BRANCH
AQUIFER-TEST COMPILATION

LOCATION
Well no. 11N/21W-11N1 S Quadrangle Coal Oil Canyon, 7.5 min., 1954

Location About 22 miles south and 5½ miles west of Bakersfield, Kern County.

Ground Water Basin San Joaquin Valley, Edison-Maricopa Area, 5-22.43

Geologic Formation

Date of Test Apr. 22, 1958 116 min Agency Conducting Test Kern County Land Co.

Source of Test Data USGS (GW) Sacramento

PUMPING DATA
Pump Type, Power Source and Rating Wintroath, electric motor, 150 hp

Use Irrigation Discharge 865 gpm Maximum Drawdown 25.1 ft. after 116 min.

Other data

WELL DATA

Well No.	Depth	Perforations	r*	Log	Analysis	Water-level measurements		
						Drawdown	Recovery	Historical
11/21-11N1	1205	331-1205	-	Drillers	Yes	Yes	Yes	No

r* = distance from pumped well to observation well in feet.

Other Data and Remarks 11/21-11N1 = KCL 10F11-2

SUMMARY
Purpose of Test Determination of aquifer coefficients.

Aquifer Thickness Approx. 875 ft. Aquifer Saturated Thickness

Specific Capacity 34.5 USGS Formation Yield Factor

Method of Analysis Modified Theis and Theis recovery

Coefficient of Transmissibility 40,000 gpd/ft Permeability Coefficient of Storage

Test Evaluation Fair.

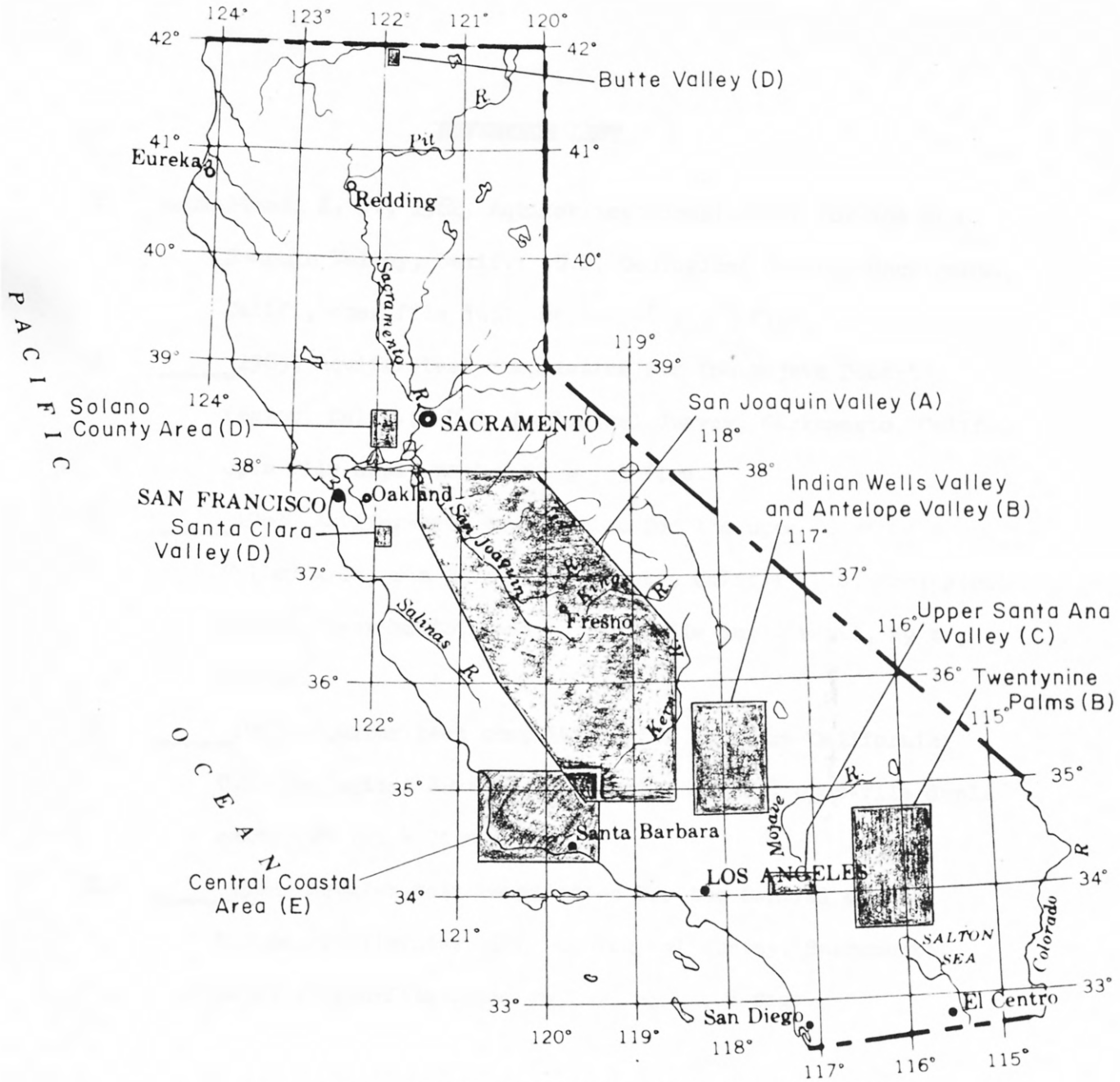

FIGURE 1.- INDEX MAP OF CALIFORNIA SHOWING LOCATION OF TEST AREAS

Letter in parenthesis indicates report in reference list

REFERENCE LIST

A. McClelland, E. J., 1962, Aquifer-test compilation for the San Joaquin Valley, Calif.: U.S. Geological Survey, Sacramento, Calif., open-file dupl. rept., 38 p., 2 figs.

B. _____1963, Aquifer-test compilation for the Mojave Desert region, Calif.: U.S. Geological Survey, Sacramento, Calif., open-file dupl. rept., 29 p., 3 figs.

C. _____1963, Aquifer-test compilation for the upper Santa Ana Valley area, San Bernardino County, Calif.: U.S. Geological Survey, Sacramento, Calif., open-file dupl. rept., 29 p., 2 figs.

D. _____1963, Aquifer-test compilation for northern California: U.S. Geological Survey, Sacramento, Calif., open-file dupl. rept., 24 p., 4 figs.

E. _____1963, Aquifer-test compilation for the Central Coastal Region, California: U.S. Geological Survey, Sacramento, Calif., open-file dupl. rept., 53 p., 2 figs.