V817 Aquifer Test <u>Testing Plan</u>

Rose Valley, CA

June 5. 2024

The City of Los Angeles Department of Water and Power (LADWP) plans to conduct an aquifer test of the existing Well V817 in Rose Valley as part of the Rose Valley water storage and recovery project feasibility evaluation.

Purpose

The planned aquifer testing of well V817 is necessary to evaluate the site's hydrogeology, including aquifer characteristics (vertical and horizontal hydraulic conductivity, storage coefficient, and transmissivity), pumping capacity, the effect of pumping on groundwater levels in nearby monitoring wells, and the potential location of any fault splays in the area. These hydrogeologic factors will help determine whether Rose Valley is a suitable location for a water storage and recovery project.

Background

Well V817 is an existing well that LADWP acquired as part of the purchase of a 162-acre property (**Figure 1**) in northern Rose Valley, adjacent to the Los Angeles Aqueduct (LAA). This property is an abandoned farmland that includes two production wells, V817 and V816. Well V817 was drilled in 1981 and was used to supply water to the farm. A copy of the driller's report is attached. Well V816 has a damaged casing and is used as a monitoring well. The expected pumping capacity of Well V817 is approximately 1.5 to 1.7 cfs. The pumping capacity will be verified during the planned aquifer testing.

In 2015, LADWP installed a pipeline connecting Well V817 to the LAA but didn't conduct a long-term pumping test. The groundwater levels in the nearby monitoring wells range between 80 and 230 feet below the ground surface (ft-bgs.) **Table 1** below lists the groundwater level in Well V817 and the nearby monitoring wells as of April 2024. **Figure 2** presents a hydrograph of groundwater levels in the wells since January 2010. The map in **Figure 1** shows the locations of Well V817 and nearby monitoring wells to be measured during the aquifer testing.

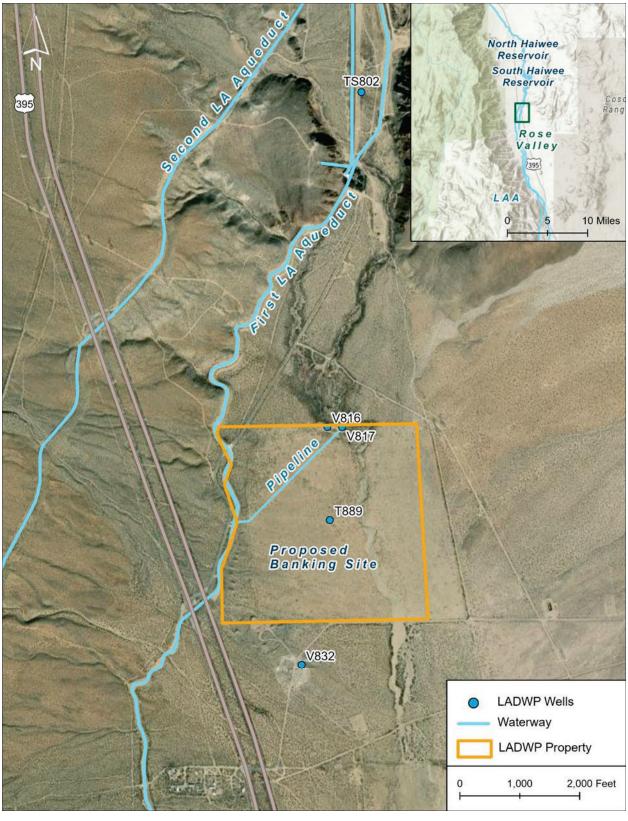


Figure 1. Location of Well V817 and nearby monitoring wells in Rose Valley

Table 1. Northern Rose Valley Well Information in April 2024

Well Number (depth in feet)	Depth to groundwater (ft-bgs)				
V816 (200+)	70.5				
V817 (464)	72.9				
T889 (340)	134.3				
V832 (230)*	210.0				

^{*} Current depth

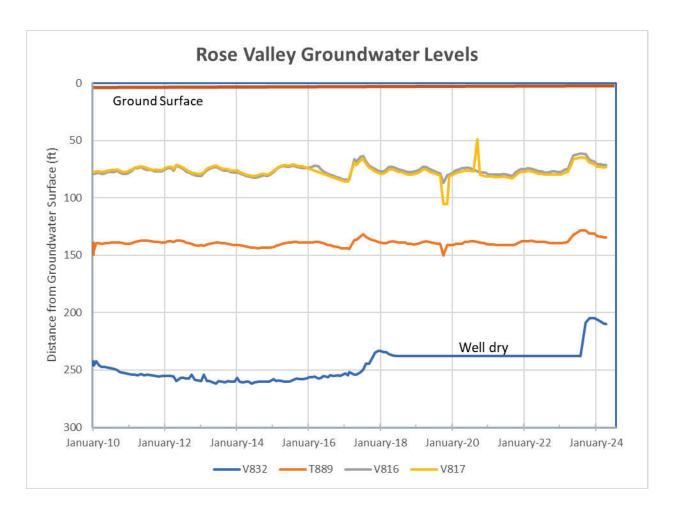


Figure 2. Historic groundwater levels in V817 and nearby monitoring wells

In extreme runoff years, such as 2017 and 2023, LADWP releases water from the LAA to Rose Valley as needed. LADWP released approximately 4,000 acre-feet in 2017 and 9,000 acre-feet to Rose Valley in 2023. The releases in 2023, which occurred between April and September, resulted in groundwater rises of up to 15 feet in the aquifer in the northern part of the basin.

Aquifer Testing

The aquifer testing of production Well V817 includes operating the pump at capacity for approximately 7 days. Testing is estimated to withdraw less than 30 acre-feet of water, and groundwater levels are estimated to recover fully within a few weeks. Groundwater levels will be measured manually and automatically using pressure transducers in the pumping wells and in nearby monitoring wells, V816, T889, and V832, before, during, and after the completion of the pumping phase of the test, starting at a minimum of one week before the start of the test. The pumping rate and total pumping volume will be measured using a flow meter and totalizer. The goal is to measure a clear response of groundwater levels in the nearby monitoring wells. At the end of the pumping phase, groundwater levels will continue to be measured in the pumping and monitoring wells until groundwater levels have recovered.

The analysis of the collected data will include the preparation of hydrographs showing the water level in each monitoring well during the test. A comparison of groundwater response to pumping may indicate the potential location of the fault splays in the area. The collected data will also be used with pumping test data analysis software AQTESOLV to estimate aquifer characteristics including the storage coefficient, vertical and horizontal hydraulic conductivity, and transmissivity of the aquifer. Also, data will be used to estimate the well efficiency and potential need to replace Well V817 with a well that utilizes current well installation methods, including the use of prefabricated well casing and screen and placing engineered gravel envelopes.

California Environmental Quality Act Compliance

With groundwater levels in northern Rose Valley deeper than 80 feet and far below the root zone of any vegetation, no impact on vegetation or any other groundwater-dependent resources are expected from the aquifer testing of Well V817. Rose Spring, located at the mountain-front, northwest of Rose Valley, flows only during the extreme runoff years. Any seep from this spring is used by the on-site vegetation. The spring is located over 200 feet above the groundwater aquifer and is clearly separated from the aquifer system. Any groundwater-related activity in Rose Valley will have no effect on the spring flow.

There is an existing road on LADWP-owned property from Highway 395 to Well V817, therefore site access is already established.

As the planned aquifer testing of Well V817 is for data gathering, LADWP has filed a Class 6 notice of exemption for the test with the Inyo County Clerk. If LADWP evaluation shows that this property is a feasible location for water storage and recovery, it will prepare appropriate California Environmental Quality Act documentation for that project.

Long-Term Water Agreement (LTWA)

Well V817 was already in existence when LADWP purchased the property 40 years ago, and LADWP will not modify the well as part of the planned aquifer testing. Therefore, it does not qualify as a "new well" under the LTWA or Green Book.

If the site investigation, including aquifer testing of Well V817, indicates that the site is suitable for a water storage and recovery project, LADWP will submit a project plan and scope to the Technical Group, which will comply with applicable provisions of the LTWA and Green Book.

Coso Geothermal Activity

LADWP entered into an agreement with Coso Geothermal in 2009 to avoid impacting its activities and Conditional Use Permit with Inyo County. The agreement references LADWP's potential plan to store and recover water in Rose Valley. If the water storage and recovery project proceeds, LADWP will ensure that it meets the terms of the agreement.

Well V817 in Rose Valley Driller's Report

ORIGINAL File with DWR diction of Latest No. 159679 WATER WELL DRILLERS REPORT DEPARTMENT OF WATER RESOURCES WATER WELL DRILLERS REPORT CO. ORIGINAL THE RESOURCES WATER WELL DRILLERS REPORT DO NO. 23682 WATER WELL DRILLERS REPORT CO. ORIGINAL THE RESOURCES WATER WELL DRILLERS REPORT CO. ORIGINAL (13) WELL LOC: Transi days 5.35 fo. Dough of sempleted weil\$82 fo. hough of sempleted weil\$83 fo. hough of sempleted we		Jan-05-10 12:22pm From-WATER RESOU	RCES SD		8185434604	T-450	P.07/07	F-567	
THE WITH DATE RESOURCES WATER WELL DRILLERS REPORT DWG. With No. 23682 WATER WELL DRILLERS REPORT DWG. With No. 23682 WATER WELL DRILLERS REPORT DWG. With No. 23682 13 OCCUPATION OF WELL (Sea Instructions): County 17V0 County 17V0 County 17V0 County 17V0 County 17V0 Delivers in different from above ROSE Valley Ranch Co. 2-5 fries Sand Without Sand County 17V0 Different count different from above ROSE Valley Ranch Co. 2-5 fries Sand-Wisomer, with 4 fail in Online Of 2-5 fries Sand-Wisomer Gray Different count different from above ROSE Valley Ranch Co. 2-5 fries Sand-Wisomer Gray Different county 17V0 Different county 17V0 ACCOUNTY 17V0 Different county 17V0 Different county 17V0 ACCOUNTY 17V0 ACCOUNTY 17V0 Different county 17V0 ACCOUNTY 17V0 ACCOUNTY 17V0 Different county 17V0 ACCOUNTY 17V0 ACC		ODIGINAL . A	STATE OF G	ALIPORNIA				Do not fill in	
### Class		med				Ma 221			
Common		, ,				-	302 1/21		
(19) WEEL LOCK: Town depth 5.35. In. Dupth of completed world2. In the first term 1.		Notice of Intent No. 159679			TOWNER WOLL	No	VOI		
Address. P. O. BOX 8 1 min. the to fix Remittion (Describe by educ, character, size of materials) 10 min. the to fix Remittion (Describe by educ, character, size of materials) 10 min. the to fix Remittion (Describe by educ, character, size of materials) 10 min. the to fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ		Logd Fermit No. or Date			00	Other Wel	l No	***************************************	
Address. P. O. BOX 8 1 min. the to fix Remittion (Describe by educ, character, size of materials) 10 min. the to fix Remittion (Describe by educ, character, size of materials) 10 min. the to fix Remittion (Describe by educ, character, size of materials) 10 min. the to fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, character, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ, size of materials) 10 min. the fix Remittion (Describe by educ		Dhil Hannig		/12\ WE	TI. TOCH-	525		000	
City. OTANCHA. CA. I State Instructions): (2) LOCATION OF WILL (See Instructions): (3) LOCATION OF WILL (See Instructions): (4) Covey. I State of Covey.		D A B A4	/	to it. formation (Describe by color, character, size or material)					
(5) ROUNDERNY. (6) ROUNDERNY. (7) ROUNDERNY. (8) ROUNDERNY. (9) ROUNDERNY. (9) ROUNDERNY. (10) ROUNDERNY. (11) ROUNDERNY. (12) ROUNDERNY. (13) ROUNDERNY. (14) ROUNDERNY. (15) ROUNDERNY. (16) ROUNDERNY. (17) ROUNDERNY. (18) ROUNDER			210 93549						
County INV Woll addraw little sandy Missing from clays Roll 10c		(2) LOCATION OF WELL (See instructions):			10 - 44 Gravel & Boulders				
Distance from sellow, seeds, shorth, fewer, shorth of 78 = 80 SOUTGATS Little Lake, CA, I mi, east of Hwy 395 80 - 82 Rock Alegave 8 Sand ### Chapter of Hwy 395 80 - 82 Rock Alegave ### Chapter of Hwy 395 80 - 82 Rock Alegave ### Chapter of Hwy 395 80 - 82 Rock Alegave ### Chapter of Hwy 395 80 - 82 Rock Alegave ### Chapter of Hwy 395 80 - 82 Rock Alegave ### Chapter of Hwy 395 80 - 82 Rock Alegave ### Chapter of Hwy 395 82 - 90 Sout delta ### Chap									
Distriction from either, result, sulfavoid, ference, ab. 14 ml north of 78 - 80 Soul dets		Woll address if different from above Rose Valley			- 76 Fine	Sand W/some	clay		
Little Lake, CA. I mi. east of flavy 395 80 - 82 Rock Negave1 82 - 90 Equilders 90 - 100 Rock & Grave1 100 - 118 Rose & Grave1 100 Rose & Grave1 100 - 118 Rose Rose & Grave1 100 - 118 Rose Rose & Grave1 100 - 118 Rose Rose & Grave1 100 Rose & Grave1 100 - 118 Rose Rose & Grave1 100 - 118 Rose Rose & Grave1 100 - 118 Rose Rose Rose Rose Rose Rose Rose Rose		Township S Rungo 3 7 E					gravel a	sand	
Second Company Seco		little lake CA 1 mi east of	F Hwy 395						
SOLYMONA (3) TYPE OF WORK, New York 100		E. OBJE BERGY ON P. IMP CROS OF	1111,9 000		- 90 ABOUT	iers		-	
DAT RO DIAT RO DIAT RO DIAT RO DIAT RO DIAT RO DIAT RO I Maccountriction 125 - 127 Rock & & & & & & & & & & & & & & & & & & &		N .,							
DAT RO DAT RO Description		1 1 1		100	#18 Rock	& Gravel			
DIRT RO MEL Metall Meta		1 1					2]		
DATE RO		, , ,						-	
Destruction Describe Destruction Describe Destruction Describe De					-141 Sanor	CO PLENE! MI	some cray		
Proceeds Proposed				THE THE			gravel		
The property of the property		I HE WALL	destruction materials and procedures in Hom	170	-228 Sma F	boulders?	skavel &	sand	
Industrial Ind	w	1	, , , , , , , , , , , , , , , , , , , ,	The state of the s	-235\\cRock	& graye			
Industrial Test Well Soft 3-318 Grave & sand & sa		1 1 1			-846 \ Rock	w/semal grave	2]		
THE WEST STORY OF THE PROPERTY		518 g	1111	246	-29% Grave	cl. V sand & si	me clay		
WELL LOCATION SERTCH Other Oth		₹ 6 Z	() ()	100 A	318 CAPAC	7. gravel & s	ana	Tdown	
WELL LOCACION SKETCH WELL LOCACION SKETCH (5) EQUIPMENT: Kotay Roverse K Rotay Roverse K Roverse Clay Roverse R Roverse Clay Ro			() .	31811	-348 Boist	Pars & Brown	sandy c	lav	
Well loaying sketch Other 1352				348	-352 Grave	al & sand	Dunio O	140	
South England Reverse Start St			· · · · · · · · · · · · · · · · · · ·	352	-388 Sma 17	boulders.	gravel &	sand	
Cable		(5) EQUIPMENT: (6) GRAVEA		388 🚜					
Cition: Bucket Bucket				405	307 Brown	& Blue Clay	/		
Steat K Finite Copyright Type of pertination of size of stateony 188 470 Course Sand & grayed			0 482	MAXIII)	415 Gray	clay			
From To Dia Charles Type of perfection as ize of success of the control of the co					-428 Small	L houlders,	ravel &	_fine_sand_	
From To Dia Captor From the first size of the first water of the first water, if known the first size of the first water, if known the first water of the water of the first water			(1	1	7/70 Cours	ed cand & an	ava1		
ft. ii. iii. Wall fib. ft. size 510 520 Sandy blue-gray clay 0 290 16 1/4 290 246 3/32 530 Blue clay 464 482 16 1/4 (9) Well Sealt War surface semitary seal provided? Yes IX No I if yes, to depth 45 ft. Work starta senied against peal provided? Yes IX No I interval ft. Method of sealing Neat cement			The state of the s	-	510	dray.	~lav		
O 290 16 1/4 290 2460 3/32 530 Blue Clay 464 482 16 1/4 (9) WELL SEAL: Was surface semitary seal provided? Yes IX No I if yes, to depth 45 ft. Were strate senied against pollution? Yes IN No I interval ft. Method of sealing Neat cement (10) WATER LEVELS: Depth of first water, if known. Standing level after well completion. 136 ft. WELL DRILLER'S STATEMENT; This well was deflect under my includetion and this sepert is true to the bast of my knowledge and belies. Scened Avenual Completion (Well Dellow) Type of toot. Pample Beller II. Air lift I Discharge 1500 gal/min after 3 hours Water temporature 640 F Chemical analysis made? Yes IN No IX if yes, by wishing: Chemical analysis made? Yes IN No IX if yes, by wishing: Chemical analysis made? Yes IN No IX if yes, by wishing: Chemical analysis made? Yes IN No IX if yes, by wishing: Chemical analysis made? Yes IN No IX if yes, by wishing: Chemical analysis made? Yes IN No IX if yes, thach copy to this report. License No. 402409 133 Date of this report. 9-28-81				-	520 Sandi	hlue-gray	lay	۵.	
464 482 16 1/4 (9) WELL SEAL: Were strate sented engainst provided? Yes IX No I if yes, to death 45 is. Were strate sented engainst pollution? Yes II No I interval it. Method of senting Neat cement Well completion is the More of first water, if known it. Standing level after well completion 136 is. (11) WELL TESTS: Was well test made? Yes XI No I if yes, by whome a wine-Mestern Type of too: Pamp 8		0 290 76 1/4	W/V		-530 Blue	clay		-	
(9) WELL SEAL: Were strate souled eightest pollution? Yes No If yes, to depth 45 ft. Were strate souled eightest pollution? Yes No Interval ft. Method of souling Neat competition 136 well to the best of my Standing level after well completion 136 ft. (11) WELL TESTS: Was well test made? Yes No If yes, by whome agric—Mestern Type of tot Pamp 1 yes, by whome agric—Mestern Type of tot Pamp 1 yes, by whome agric—Mestern Type of tot Pamp 1 yes, by whome agric—Mestern Type of tot Pamp 1 yes, by whome agric—Mestern Address 1500 gal/min after 3 hours whether temperature for the standard or printed) Address 1500 gal/min after 3 hours whether temperature for the standard or printed 1 yes, ediach copy to this report 1 yes, ediach copy to the yes, yes 1 yes, y	`		3/32	530	·535 Grav	clay			
War surface samilary seal provided? Yes IX No I if yes, to depth 45 ft. Were strate souled cyclost pollution? Yes No I if yes, to depth 45 ft. Work strated 9-1 10.81 Completed 9-20 1881 (10) WATER LEVELS: Useful of first water, if known Standing level after wall completion. 136 ft. (11) WELL TESTS: Was well tart made? Yes Yes Yes No I if yes, by whome agric—Mestern Type of tot. Pamp 1			dillin.	-					
Were strate sented engainst pollution? Yes No Interval 16. Method of senting Neat cement Work stanted 9-1 19.81 Completed 9-20 1981 (10) WATER LEVELS: Depth of first water, it known Standing level after well completion 136 15. (11) WELL DRILLER'S STATEMENT: This well was well test made? Yes No If yes, by whom? and per level of the best of my knowledge and beller. Since 136 Well Deliver No 10. Depth to water at start of feet 125 15. Discharge 1500 gal/min after 3 hours Water temperature 640 F Chemical analysis made? Yes No 1. If yes, whom? when temperature 640 F Chemical analysis made? Yes No 1. If yes, whom? when temperature for the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to this report 1. If yes, when the copy to the yes the copy to this report 1. If yes, when the copy to the yes the copy to this report 1. If yes, when the copy to the yes the copy to the yes, when the copy to the yes, when the copy to the yes, when the copy to the yes the copy to the yes, when the copy to the yes the ye			If yes, to slenth 45 ft.						
Method of sorting Neat cement (10) WATER LEVELS: Depth of first water, if known Standing level after wall completion 136 (11) WELL DRILLER'S STATEMENT: This well was drilled under my invisidation and this report is true to the best of my knowledge and bellet. (11) WELL TESTS: Was well test minde? Yes STATEMENT: The was well test minde? Yes STATEMENT: The soll was drilled under my invisidation and this report is true to the best of my knowledge and bellet. SECNED 1 200 (Well Deliler) NAMELAYNE-WESTERN COMPANY, INC. Discharge 1500 gal/min after 3 hours Winter temperature 640 F Chemical analysis made? Yes IN No IX if yes, by which is the component of		Were strate souled mustast polintion? Yes No Intervaltt.			-		-		
Doubt of first water, if known Standing loved after well completion (1) WELL TESTS: Was well test made? Yes X: No. If yes, by whome a wine-Mestern Type of toot Depth to water at start of jest 1257. It. Discharge 1500 gal/min after 3 hours Water the model of test 1600 gal/min after 3 hours Chomneal analysis made? Yes I No IX if yes, by whome a wine-model of test 1600 gal/min after 3 hours Chomneal analysis made? Yes I No IX if yes, by whome a water to get 1700 gal/min after 3 hours License No. 1402409 133 Date of this report is true to the best of my knowledge and belief. This well was drilled under my luvisdiction and this ceport is true to the best of my knowledge and belief. Signed Well Delilor NAMELAYNE-WESTERN COMPANY. INC. (Well Delilor) NAMELAYNE-WESTERN COMPANY. INC. (Perrodo, firm, or corpountion) (Typed or printed) Address 1600 East Call if or is a water to get the complete and belief.	Method of sending Neat coment (10) WATER LEVELS:						iploted_9-21	1821	
(11) WELL TESTS: Was well test minde? Yes St. No. H yes, by whome a wise-Mestern Type of took. Pamp N. Beller				WELL D	RILLER'S STA	TEMENT;	la coment de des	- se also boud of mus	
Was well test mide? Per No. If yes, by whome a time-Nestern Type of test Pamp & Western to See 175 Int. At and to See 175 Int. Address 1600 East California Ave. Chemical analysis made? Yes I No I 11 yes, whome to see 175 Int. Address 1600 East California Ave. Chemical analysis made? Yes I No I 11 yes, when the copy to this report. License No. 407409 113 Date of this report. 9-28-81	Standing level after well completion 136 ft. (11) WELL TESTS: Was well tents made? Yes Eller No. I if yes, by whome address term Pamp of test Pamp of test Dopth to water at start of isset 1757 ft. Discharge 1500 gal/min after 3 hours Water temperature 640 F				and bellej.		is tabore m'iii	e to the usit of my	
Type of test Pamp & Beller Air life NAMELAYNE-WESTERN COMPANY, INC. Depth to water at start of jest 12 B. Itt. Discharge 1500 gal/min after 3 hours Water temporature 640 F Chemical analysis made? Yes No 11 yes, by whom? Chemical analysis made? Yes No 11 yes, aftach copy to this report 1. Items No					rounda				
Depth to water at start of feet 12 N. It. Discharge 1500 gal/min after 3 hours Water temperature 640 F Chemical analysis made? Yes No No 1 yes, by whom? Chemical analysis made? Yes No 1 yes, aftech copy to this report License No 407409 ** License No					AYNE-WESTEI	RN COMPANY.	INC.		
Chemical analysis made? Yes No X 11 yes, by which Case Bakers Field CA Zip 9.3307 Selectric los made? Yes No I yes, nitach copy to this report J. frenze No 407.409 13 Date of this report 9-28-81					500 East C	m, or corposition) (T Alifornia Av	yped or printed	1) -	
Control log made? Yes [X No [] - If yes, affach copy to this report License No. 407409 Date of this report 9-28-81					akersfield.	CA.	Zío	9.3307	
			Licenze No	~ 407409 TO	1				
						NUMBERED FOR	OZG.DIALA MF	7-78 20M QUAD ŴY OSF	